

LOG NO: 11-22	RD.
ACTION:	
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**KASHUTL PROPERTY**  
**GEOLOGY AND GEOCHEMISTRY**  
**ALBERNI M.D., BRITISH COLUMBIA**

N.T.S. 92L/3

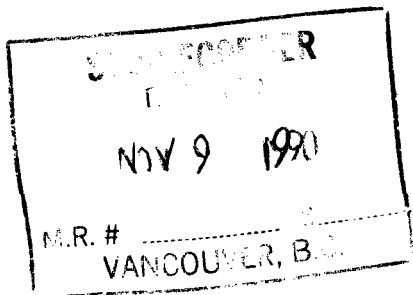
Latitude 50°09'30"

Longitude 127°20'30"

Owner: Taywin Resources Ltd.

Operator: Placer Dome Inc.

Author: Dale A. Sketchley



**GEOLOGICAL BRANCH**  
**ASSESSMENT REPORT**

**20,495**

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## 1.0

## SUMMARY

The Kashutl property is 40 km west-northwest of Zeballos, B.C. An exploration program was conducted from July 22 to July 31, 1990. The purpose of the program was to evaluate the Sin #7 claim, which covers an area where the C Extension zone from the adjacent Electrum property was projected to intersect calcareous rocks of the Quatsino and Parson Bay Formations. This zone contains gold-silver-bearing mineralization in mafic volcanic rocks of Karmutsen Formation. A potential exists at the intersection point for a low-grade high tonnage or high-grade low tonnage epithermal gold deposit. The work consisted of prospecting, geological mapping, and rock and soil sampling. A total of 65 rock and 37 soil samples was taken.

The Kashutl property and surrounding area is underlain by mafic volcanic rocks of Triassic Karmutsen Formation, calcareous sedimentary rocks of Upper Triassic Quatsino and Parson Bay Formations, and mafic to felsic volcanic rocks of Jurassic Bonanza Group. Felsic subvolcanic intrusions related to Bonanza Group are common within Karmutsen, Quatsino and Parson Bay Formations.

Mineralization and alteration within the C Extension zone in the western portion of the property consists of pyritization and clay-alteration with locally common narrow quartz veins. Some of the clay-alteration occurs in narrow intensely-altered zones. Minor zones of silicification are present also. Disseminated and blebby pyrite with traces of galena and sphalerite are present in the quartz veins and silicified zones. No mineralization was observed in calcareous rocks within the C Extension zone. Rock and soil sampling within the C Extension zone did not outline any zones indicative of significant gold-silver mineralization.

In the southeastern portion of the Kashutl property rock and soil sampling did not outline any significant gold-silver mineralization within pyritic clay-altered felsic volcanic rocks.

The option agreement on the Sin #7 claim of Taywin Resources Ltd. should be terminated as the potential for finding significant gold-silver deposit is low.

## 2.0

# INTRODUCTION

## 2.1 Purpose

The purpose of the field work was to evaluate the Sin #7 claim, which was optioned from Taywin Resources Ltd. This claim covers an area where the C Extension zone (Sketchley, 1989) from the adjacent Electrum property was projected to intersect calcareous rocks of the Quatsino and Parson Bay Formations. The C Extension zone contains gold-silver-bearing disseminated and fracture-controlled pyrite associated with clay-altered and locally silicified mafic volcanic rocks of karmutsen Formation. A potential exists at the intersection point for low-grade high tonnage or high-grade low tonnage epithermal gold deposits. In the southeastern portion of the claim, a large rusty-weathering area has a similar potential.

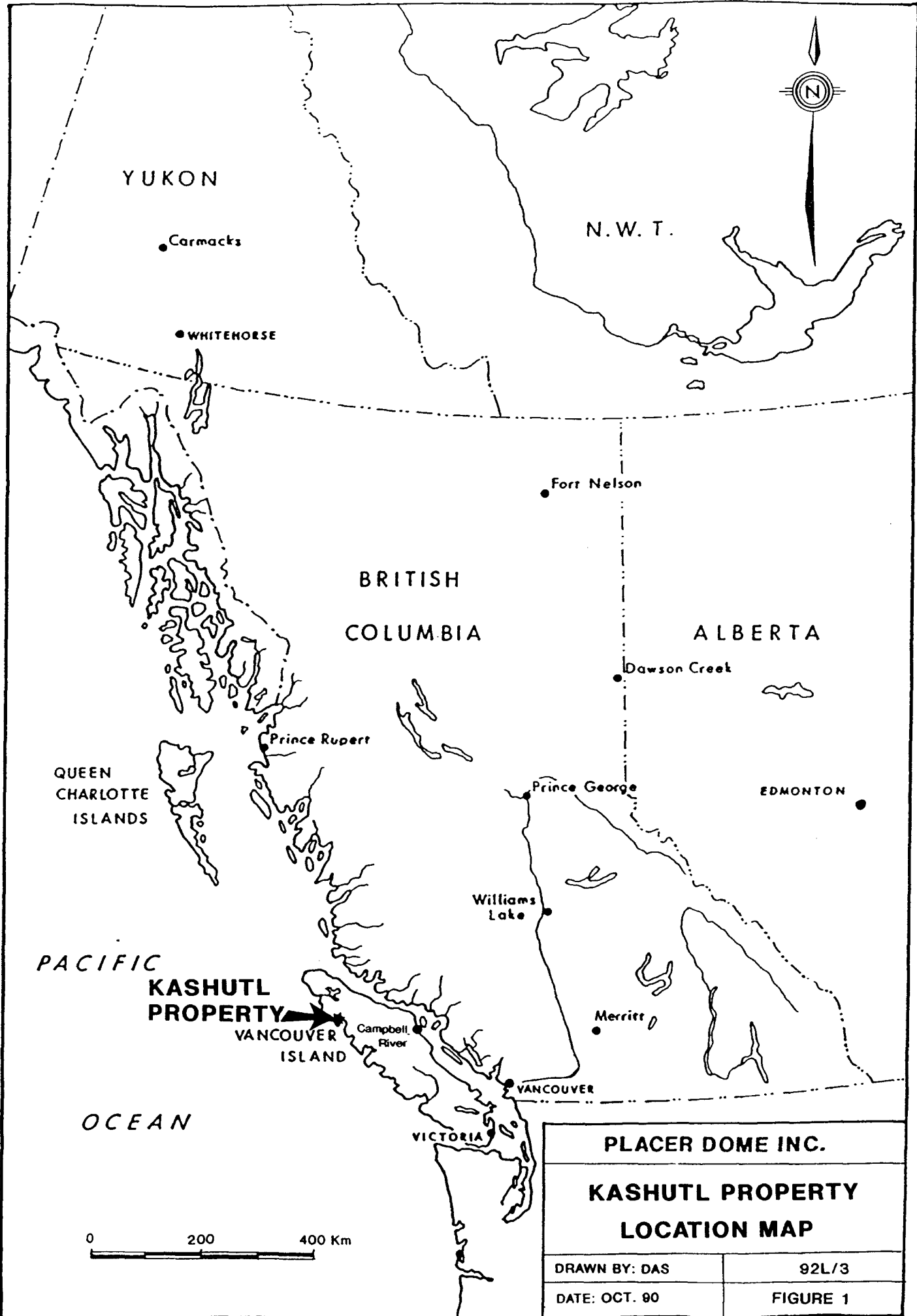
## 2.2 Property Location, Access and Topography

The Kashutl property is 40 km west-northwest of Zeballos, B.C. within the Alberni Mining Division, N.T.S. map sheet 92L/3 (Figure 1). Access is by logging road from Zeballos to Fair Harbour, then by barge to Chamiss Bay, from where logging roads lead to the property (Figure 2).

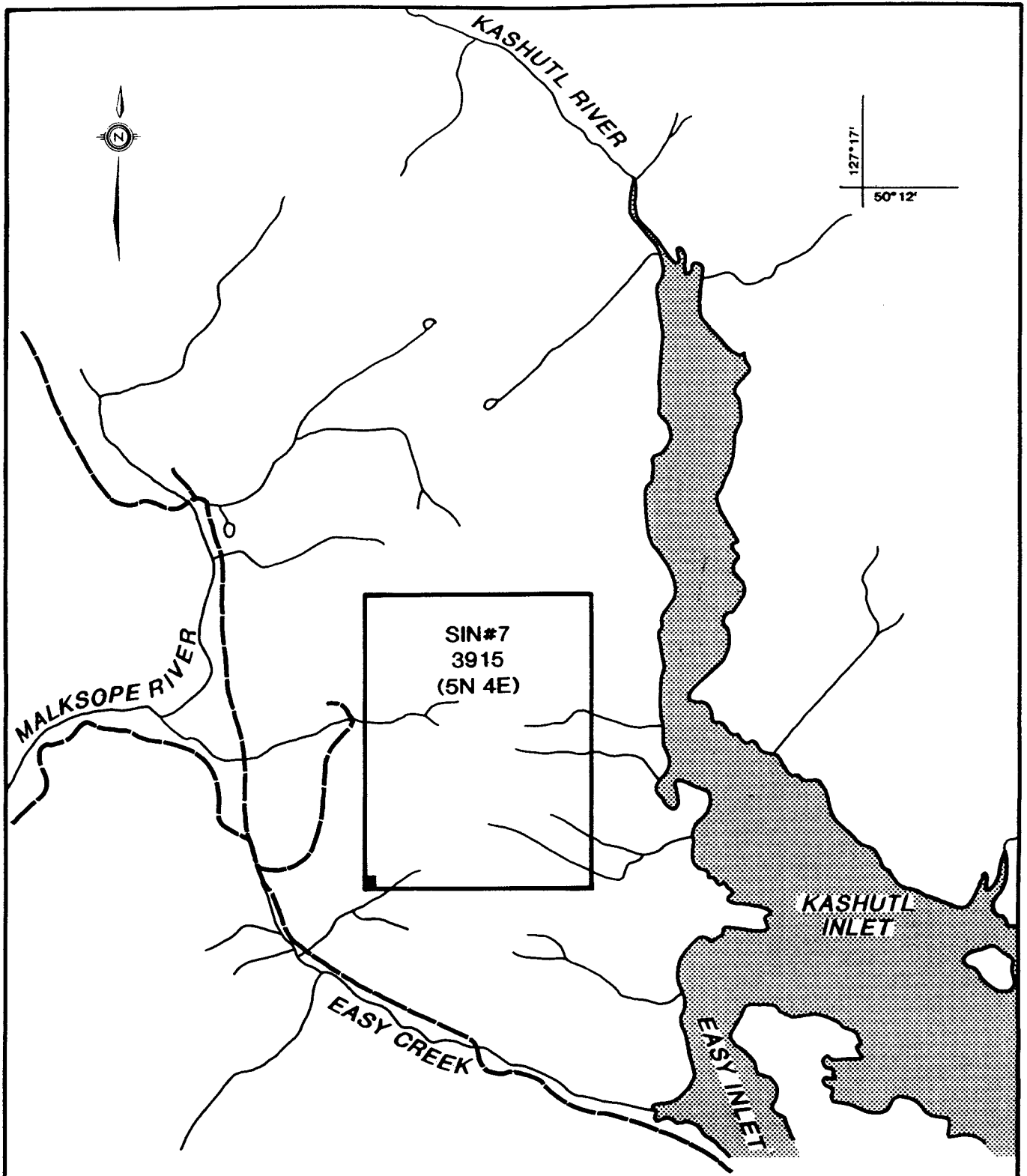
The property straddles a north-trending ridge which is drained east to Kashutl Inlet and west to Easy Creek and Malksope River (Figure 2). Local relief is up to 900 m. Upland areas are precipitous, whereas valley bottoms are less rugged, although some are locally incised.

## 2.3 Claim Status

The Kashutl property comprises the Sin #7 claim, which totals 20 units (Figure 2). The claim is owned by Taywin Resources Ltd. Its status is summarized in Table I.



<b>PLACER DOME INC.</b>	
<b>KASHUTL PROPERTY LOCATION MAP</b>	
DRAWN BY: DAS	92L/3
DATE: OCT. 90	FIGURE 1



**LEGEND**

- CLAIM BOUNDARY
- STREAMS
- LOGGING ROAD
- LEGAL CORNER POST



<b>PLACER DOME INC.</b>	
<b>KASHUTL PROPERTY</b>	
<b>CLAIM LOCATION</b>	
<b>ALBERNI MINING DIVISION</b>	
<b>DRAWN BY: DAS</b>	<b>NTS: 92/L3</b>
<b>DATE: OCT. 1990</b>	<b>FIGURE: 2</b>

**TABLE I**

**Kashutl Property Claim Status**

Claim Name	Record Number	Number of Units	Anniversary Date*
Sin #7	3915	20	Aug. 14, 1994

\*After filing work detailed in this report.

## 5.0

## GEOLOGY

The Kashutl property and surrounding area is underlain by volcanic and sedimentary rocks of Karmutsen, Quatsino and Parson Bay Formations, and Bonanza Group that were intruded by felsic plutons of the Island Intrusions (Muller et al., 1974). The geological setting of northern Vancouver Island is presented in Figure 3.

Mafic volcanic rocks of the Triassic Karmutsen Formation (Unit 1) crop out in the C Extension zone in the western portion of the property (Figure 5). These rocks were previously included in the Jurassic Bonanza Group by Muller et al. (1974); however, their characteristics and stratigraphic position indicate that they belong to the Karmutsen Formation. They comprise massive brown-weathering green basalt to andesite flows with minor tuffs and breccias.

The Karmutsen Formation is conformably overlain by the Upper Triassic Quatsino and Parson Bay Formations (Units 2 - 5). Rocks of these formations occur as lenses in the C Extension zone in the western portion of the property (Figure 5). They comprise argillite (Unit 2), conglomerate with green to maroon volcanic and grey limestone cobbles (Unit 3), grey limestone (Unit 4) and black limestone (Unit 5).

Jurassic Bonanza Group (Unit 6) conformably overlies the Quatsino and Parson Bay Formations and is exposed throughout most of the property (Figures 4 and 5). It is characterized by green to maroon basaltic andesite to rhyodacite flows, breccias and tuffs (Muller et al., 1974). Maroon rocks are more predominant in the upper part of the volcanic pile.

Rhyodacitic subvolcanic intrusions (Unit 7) of the Bonanza Group crop out in the C Extension zone in the western portion of the property (Figure 5). These intrusions are pale green to white, siliceous, and locally have poorly discernable flow-banding. They comprise one large east-southeasterly-trending body and numerous smaller dykes.

The Kashutl Pluton, which is one of the Jurassic Island Intrusions, is exposed in



**LEGEND**

**QUATERNARY**

14 Glacial deposits

**TERTIARY AND QUATERNARY**

13 Miocene-basalt, flows, sills, dykes

12 Eocene-sandstone, shale

11 Early Tertiary-quartz monzonite, quartz diorite

**CRETACEOUS**

10 Nanaimo and Queen Charlotte Groups: siltstone, sandstone, greywacke, conglomerate

9 Andesite, basalt, tuff, breccia, argillite

**JURASSIC AND CRETACEOUS**

8 Pacific Rim Complex: greywacke, argillite

**JURASSIC**

7 Island Intrusions: granodiorite, quartz monzonite, granite, monzonite

6 Bonanza Group: andesite, dacite, rhyolite, argillite, greywacke

**TRIASSIC**

5 Quatsino and Parson Bay Formations: limestone, argillite

4 Karmutsen Formation: basalt, pillow lava

**MESOZOIC**

3 Metasedimentary rocks, schist, greenstone

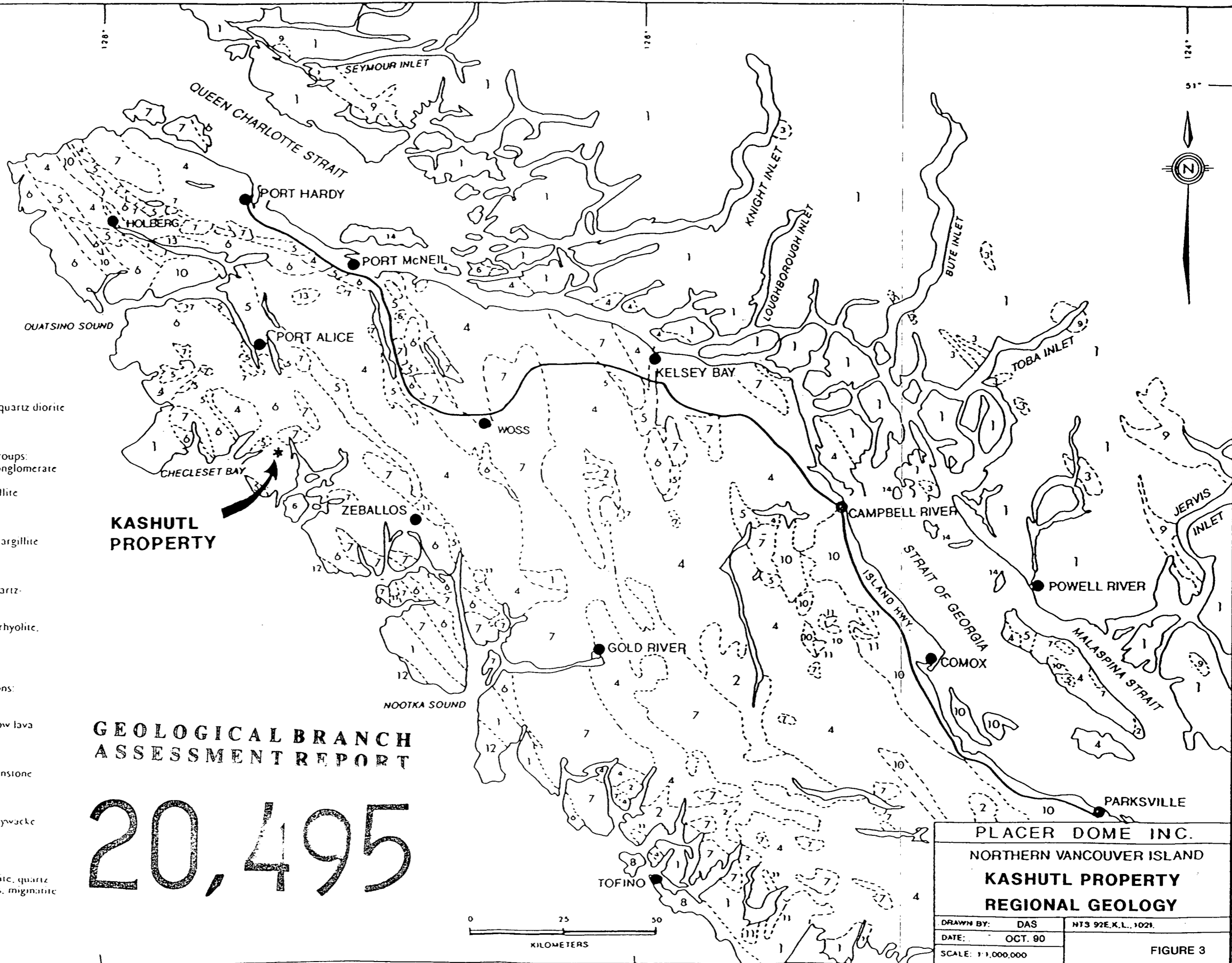
**PENNSYLVANIAN AND PERMIAN**

2 Sicker Group: andesite, diorite, greywacke, argillite

**AGE UNKNOWN**

1 Coast Plutonic Complex: granodiorite, quartz diorite, diorite, gabbro, schist, gneiss, migmatite of amphibolitic grade

\* Geology after GSC Map 1386A



**GEOLOGICAL BRANCH  
ASSESSMENT REPORT**

**20,495**

DRAWN BY: DAS		NTS 92E.K.L. 1021	
DATE: OCT. 90			
SCALE: 1:1,000,000		FIGURE 3	

the northern portion of the property (Muller et al., 1974). It is composed mostly of a quartz feldspar porphyry.

Rocks of the Quatsino and Parson Bay Formations, and Bonanza Group generally strike easterly and dip moderately to the south. On the western margin of the property south of the C Extension zone (Figure 5), a prominent creek valley coincides with an inferred east-southeasterly-trending left-lateral fault, which offsets the lower contact of the Bonanza Group approximately 800 metres. Prominent gullies in the C Extension zone with a similar trend are related to fractures or faults. Northeast and east-northeasterly-trending faults unknown also are present in the C Extension zone.

## 6.0

## MINERALIZATION

Three types of mineralization and alteration are present on the Kashutl property:

1. Narrow zones of silicification;
2. Narrow zones of intense clay-alteration; and
3. Widespread areas of pyritization and clay-alteration with locally common narrow quartz veins.

These types of mineralization and alteration occur in mafic volcanic and rhyodacitic intrusive rocks within the C Extension zone in the western portion of the property. They are generally zoned with a core of silicification that is surrounded by intense clay-alteration within pyritic weakly clay-altered rocks. In the southeastern portion of the property, widespread areas of pyritization and weak clay-alteration are present in felsic volcanic rocks.

Zones of silicification are uncommon and generally less than 50 cm wide. They are pale grey and contain up to 5% disseminated to blebby pyrite with traces of galena and sphalerite.

Zones of intense clay-alteration are more common than the silicified zones. They are composed of a soft pale-grey rock that contains up to 5% disseminated pyrite in zones at least up to two metres in width.

In the C Extension zone, pyritic clay-altered rocks are common. These rock are medium green to pale grey. Pyrite mostly occurs as disseminations and blebs up to 5%, and less commonly as fracture fillings. Quartz veins are generally less than five centimetres wide, although some range up to 20 cm. Some veins are locally vuggy. They are composed mostly of quartz with minor carbonate and up to 5% pyrite with occasional traces of galena and sphalerite.

## 7.0

## GEOCHEMISTRY

### 7.1 Introduction

A total of 65 rock and 37 soil samples was collected during the work program and submitted to Placer Dome Inc. Research Centre for preparation and analysis. Locations and identification of these samples are plotted on Figures 6 and 7. Descriptions of the rock samples are given in Appendix I.

All samples were analyzed for gold, silver, mercury, arsenic, antimony, copper, lead and zinc. Analytical results are given in Appendix II; sampling, sample preparation and analytical procedures in Appendix III. Analytical results, excluding antimony, are plotted on Figure 6 for portions of the property away from the C Extension zone. For the C Extension zone gold and silver are plotted on Figure 8; mercury and arsenic on Figure 9; and copper, lead and zinc on Figure 10. Based on visual inspection of histograms and probability graphs of the analytical results a threshold was selected in order to separate elevated values from background values that occur near detection limit. Only above background values are plotted on the geochemical maps. The histograms and probability graphs are given in Appendix IV.

### 7.2 Kashutl Property

Rock samples from portions of Kashutl property away from C Extension zone returned only two weakly anomalous mercury values, up to 1,030 ppb, from pyritic clay-altered rhyolite. The soil samples did not return any anomalous values.

### 7.3 C Extension Zone

Rock samples collected from mineralized exposures in the C Extension zone returned only a few anomalous values. Pyritic quartz veins hosted by clay-altered mafic volcanic rocks and fault zones in rhyodacitic dykes and conglomerate returned values of up to 80 ppb gold, 5.4 ppm silver, 1,200 ppb mercury, 260 ppm arsenic, 6 ppm antimony, 770 copper, 362 ppm lead and 0.62%

zinc.

Soil samples taken along two contour lines through the C Extension zone also returned only a few anomalous values. These values are up to 170 ppb gold, 7.0 ppm silver, 840 ppb mercury, 1,100 ppm arsenic, 6 ppm antimony, 460 ppm copper, 156 ppm lead and 1,150 ppm zinc. The anomalous values occur singly or as a cluster of two or three samples.

## 8.0

**CONCLUSIONS**

In the western portion of the Kashutl property within the C Extension zone calcareous rocks of Quatsino and Parson Bay Formations occur as lenses that overlie gold-silver-bearing pyritic clay-altered mafic volcanic rocks of Karmutsen Formation and a rhyodacitic subvolcanic intrusion of Jurassic Bonanza Group.

Geological observations and geochemical results do not show any evidence that significant gold-silver deposit is present.

## 9.0

**RECOMMENDATIONS**

The option agreement on the Sin #7 claim of Taywin Resources Ltd. should be terminated as the potential for finding a significant gold-silver deposit is low.

## 10.0

## REFERENCES

- Muller, J.E., Northcote, K.E. and Carlisle, D., 1974. Geology and Mineral Deposits of Alert Bay-Cape Scott Map-Area, Vancouver Island, British Columbia. Geological Survey of Canada, Paper 74-8.
- Sketchley, D.A., 1989. Electrum Property - Geology and Geochemistry. British Columbia Ministry of Energy, Mines and Petroleum Resources, Assessment Report.



**APPENDIX I**  
**ROCK SAMPLE DESCRIPTIONS**

SAMPLE NUMBER	ROCK DESCRIPTION
A5326	Fault zone within argillite; pieces of calcite veins; lightly pyritic
A5234	Zone of fault gouge
A5235	Chocolate-brown to white-weathering quartz-eye feldspar porphyritic rhyolite
A5236	Rusty-weathering blue-green clay-rich fault zone
A5337	Rusty-weathering pale grey clay-altered mafic volcanic
A5338	Black argillite with < 1% disseminated fine-grained pyrite
A5339	Brown-weathering pale green carbonate and clay-altered mafic volcanic with < 1% fine-grained disseminated pyrite
A5240	Green-grey siliceous rock - rhyodacite dyke
A5241	Rusty-weathering grey rhyodacite with 2% fine-grained disseminated pyrite
A5242	Float of rusty-weathering pale grey rhyodacite with 1% pyrite
A5243	White quartz vein with traces of pyrite
A5244	Rusty-weathering pale grey rhyodacite with 1% pyrite in fractures and less so as disseminations
A5245	Rusty-weathering pale grey rhyodacite with 1% pyrite in fractures and less so as disseminations
A5246	White quartz vein with localized patches of fine-grained disseminated pyrite and traces of galena
A5247	Brown-weathering medium green-grey chloritic clay-altered mafic volcanic with up to 4% disseminated and blebby pyrite
A5248	Rusty weathering pale to medium green mafic volcanic with 3% disseminated and blebby pyrite; cut by pyrite and quartz veins
A5249	Float of dark-brown weathering chloritized mafic volcanic with blebby disseminated and fracture-controlled pyrite; veins of quartz/calcite surrounded by bleached rock with selvage of coarse-grained pyrite; traces of sphalerite in bleached rock
A5250	Rusty-weathering pale grey-green altered mafic volcanic with 1% blebby disseminated pyrite and locally much irregular white quartz masses with localized blebs of pyrite

- A5251 Medium grey siliceous volcanic with minor finely-disseminated pyrite
- A5252 Float of siliceous volcanic with pyrite in fractures
- A5253 Float of rhyolitic tuff
- A5270 Green-black weathering medium green mafic volcanic with up to 4% disseminated and blebby pyrite; cut by stockwork of white quartz and pyrite veinlets
- A5271 Rusty-weathering pale grey intensely clay-altered rock with 3% fine-grained to blebby pyrite
- A5272 Rusty-weathering breccia composed of dark blue-grey fine-grained quartz with fragments of white ankerite
- A5273 Float of white to rusty-weathering pale green quartz eye porphyry with irregular white vuggy quartz veinlets; <1% fine-grained pyrite disseminated in host around veins
- A5274 Float of rusty-weathering medium grey clay-altered rock with 5% fine grained disseminated pyrite and occasional blebs of galena and sphalerite
- A5275 Rusty-weathering pale grey clay-altered rock with 1-3% disseminated and fracture-controlled pyrite
- A5276 Silicified and bleached rhyodacite dyke with fine-grained disseminated pyrite
- A5277 Black sandstone with carbonate mainly concentrated along fractures; 1% fine-grained disseminated pyrite
- A5278 Mafic tuff(?) with locally intense pervasive silicification; sheeted quartz stringers up to 3/4 cm in a 15 cm wide zone; comb texture and vugs common in quartz; fine-grained disseminated pyrite is present in the host rock
- A5279 Clay-altered conglomerate with 2-3% disseminated and blebby pyrite
- A5280 Clay-altered rhyodacite with 8% disseminated, blebby and fracture-controlled pyrite
- A5281 Intensely silicified intermediate feldspar porphyry with <1% fine-grained disseminated pyrite; some pyrite and calcite in fractures
- A5282 Fault gouge within conlomerate; 1% disseminated pyrite
- A5283 Mottled purple and green mafic volcanic with a stockwork of quartz stringers up to 1mm wide; 5% disseminated and fracture-

- controlled pyrite
- A5284 Clay-altered mafic volcanic with 5-10% pyrite
- A5285 Medium green mafic volcanic with stockwork of quartz/carbonate stringers up to 1.5 cm wide; up to 5% disseminated, blebby and stringer pyrite
- A5286 Rusty-weathering green mafic volcanic with some pyrite
- A5287 Medium grey intermediate feldspar porphyry dyke with 1-2% fine-grained disseminated pyrite
- A5288 Greenish-grey mafic volcanic with 5% disseminated and fracture-controlled pyrite; minor quartz stringers up to 1 mm wide
- A5289 Mafic volcanic similar to previous sample; quartz/carbonate stringers up to 4 mm with bands of pyrite
- A5290 Clay-altered aphanitic rhyodacite dyke; pyritic quartz stringers up to 1.5 cm wide
- A5291 Rhyodacite dyke similar to previous
- A5292 Rhyodacite dyke same as previous but no quartz stringers; 10-20% disseminated and fracture-controlled pyrite
- A5293 Green and white flow-banded flow-brecciated rhyolite; locally very rusty accompanied by <1% fine-grained disseminated pyrite
- A5294 Light grey-green clay-altered rhyolite with 1% fine grained disseminated pyrite; quartz stringers up to 3.5 cm are rusty but barren
- A5295 Fine-grained mafic volcanic with 1% disseminated pyrite
- A5296 Light grey green siliceous rhyolite with occasional specs of pyrite
- A5297 Limonitic rhyolite with <1% fine-grained disseminated pyrite
- A5298 Green aphanitic mafic volcanic with stockwork of quartz/carbonate stringers up to 2 mm wide; 1-2% fine-grained disseminated pyrite in the wallrock; comb texture within quartz
- A5299 Porphyritic mafic volcanic with <1% disseminated and fracture-controlled pyrite
- A5300 Calcite vein 1.5 to 3.5 cm within lightly pyritic argillite
- A5301 Rusty-weathering medium to pale grey clay-altered rock with 1-5% disseminated and fracture-controlled pyrite

- A5302 Rusty-weathering pale grey rhyolite with <1% fine-grained disseminated and fracture-controlled pyrite
- A5303 Rusty-weathering pale grey weakly clay-altered rhyolite with 1-2% very fine-grained disseminated pyrite
- A5304 Rusty-weathering pale grey weakly clay-altered rhyolite breccia with 1-4% very fine-grained disseminated pyrite
- A5305 Rusty-weathering medium grey feldspar porphyritic rhyolite with <1% very fine grained disseminated pyrite
- A5306 Rusty-weathering pale grey with greenish tinge weakly clay-altered intermediate (?) volcanic; <1% disseminated fine-grained to blebby pyrite
- A5307 Rusty-weathering pale grey maroon mottled rhyolite with 1-2% disseminated fine-grained to blebby pyrite
- A5308 Rusty to white-weathering pale grey flow-banded rhyolite with <1% fine-grained disseminated pyrite
- A5309 Rusty to white weathering dark grey flow-banded rhyolite with <1% fine-grained disseminated pyrite
- A5310 Rusty-weathering pale green to white silicified mafic volcanic with up to 5% fine-grained to blebby pyrite and traces of galena
- A5311 Rusty-weathering clay-altered mafic volcanic with 1-2% fine-grained to blebby pyrite
- A5312 Rusty-brown weathering black argillite with <1% very fine grained disseminated pyrite
- A5313 Float of mottled grey and emerald-green quartz/carbonate rock with 1% blebby pyrite; emerald green is chromium or barium mica

**APPENDIX II**  
**ANALYTICAL RESULTS**

GRID	SAMP	SMP2	PROJ	TYPE	AG	AS	AU1	CU	HG	PB	SB	IN
92L3	A	5234	0489	R	0.10	1.00	2.50	7.00	154.00	2.00	1.00	76.00
92L3	A	5235	0489	R	0.10	4.00	2.50	5.00	150.00	3.00	1.00	21.00
92L3	A	5236	0489	R	0.10	1.00	2.50	30.00	61.00	4.00	1.00	113.00
92L3	A	5237	0489	R	0.10	1.00	10.00	288.00	870.00	20.00	1.00	56.00
92L3	A	5238	0489	R	0.90	1.00	10.00	60.00	440.00	48.00	1.00	1630.00
92L3	A	5239	0489	R	0.10	1.00	2.50	21.00	20.00	6.00	1.00	87.00
92L3	A	5240	0489	R	0.10	1.00	2.50	3.00	8.00	3.00	4.00	37.00
92L3	A	5241	0489	R	0.10	1.00	2.50	10.00	53.00	3.00	1.00	17.00
92L3	A	5242	0489	R	2.00	1.00	30.00	7.00	187.00	4.00	1.00	18.00
92L3	A	5243	0489	R	0.20	1.00	80.00	14.00	24.00	2.00	1.00	26.00
92L3	A	5244	0489	R	0.10	1.00	2.50	5.00	20.00	2.00	1.00	3.00
92L3	A	5245	0489	R	0.60	1.00	15.00	127.00	53.00	15.00	1.00	66.00
92L3	A	5246	0489	R	0.40	1.00	35.00	50.00	81.00	162.00	1.00	288.00
92L3	A	5247	0489	R	0.20	1.00	40.00	156.00	32.00	5.00	1.00	56.00
92L3	A	5248	0489	R	0.20	1.00	2.50	52.00	16.00	8.00	1.00	58.00
92L3	A	5249	0489	R	0.30	1.00	15.00	770.00	45.00	44.00	1.00	88.00
92L3	A	5250	0489	R	0.10	1.00	2.50	146.00	41.00	15.00	1.00	78.00
92L3	A	5270	0489	R	0.10	1.00	2.50	181.00	12.00	10.00	1.00	113.00
92L3	A	5271	0489	R	0.20	1.00	2.50	45.00	28.00	80.00	1.00	180.00
92L3	A	5272	0489	R	0.30	1.00	2.50	7.00	48.00	13.00	1.00	41.00
92L3	A	5273	0489	R	0.10	1.00	2.50	140.00	28.00	3.00	1.00	41.00
92L3	A	5274	0489	R	1.00	1.00	40.00	357.00	940.00	362.00	1.00	6200.00
92L3	A	5275	0489	R	0.20	1.00	5.00	318.00	120.00	20.00	1.00	146.00
92L3	A	5276	0489	R	0.20	1.00	2.50	12.00	37.00	7.00	1.00	34.00
92L3	A	5277	0489	R	0.30	1.00	2.50	54.00	45.00	18.00	1.00	91.00
92L3	A	5278	0489	R	0.10	1.00	2.50	9.00	70.00	73.00	1.00	316.00
92L3	A	5279	0489	R	0.30	2.00	2.50	46.00	114.00	51.00	1.00	390.00
92L3	A	5280	0489	R	0.50	1.00	10.00	95.00	16.00	14.00	1.00	114.00
92L3	A	5281	0489	R	0.20	1.00	2.50	53.00	183.00	3.00	1.00	15.00
92L3	A	5282	0489	R	1.20	1.00	2.50	115.00	1180.00	7.00	1.00	72.00
92L3	A	5283	0489	R	0.10	1.00	2.50	22.00	24.00	4.00	1.00	102.00
92L3	A	5284	0489	R	0.10	1.00	5.00	61.00	20.00	3.00	1.00	55.00
92L3	A	5285	0489	R	0.20	1.00	2.50	89.00	53.00	18.00	1.00	123.00
92L3	A	5286	0489	R	0.50	1.00	2.50	100.00	57.00	34.00	1.00	148.00
92L3	A	5287	0489	R	5.40	1.00	2.50	80.00	1200.00	9.00	1.00	22.00
92L3	A	5288	0489	R	0.10	1.00	2.50	114.00	24.00	8.00	1.00	70.00
92L3	A	5289	0489	R	0.20	6.00	2.50	282.00	8.00	1.00	1.00	68.00
92L3	A	5290	0489	R	0.20	260.00	5.00	42.00	37.00	39.00	2.00	74.00
92L3	A	5291	0489	R	0.30	6.00	2.50	64.00	166.00	6.00	2.00	2230.00
92L3	A	5292	0489	R	1.20	8.00	15.00	193.00	41.00	142.00	1.00	215.00
92L3	A	5293	0489	R	0.10	1.00	2.50	26.00	187.00	6.00	1.00	28.00
92L3	A	5294	0489	R	0.30	1.00	2.50	7.00	48.00	5.00	1.00	11.00
92L3	A	5295	0489	R	0.40	20.00	2.50	29.00	100.00	6.00	1.00	70.00
92L3	A	5296	0489	R	0.10	1.00	2.50	45.00	32.00	50.00	1.00	62.00
92L3	A	5297	0489	R	0.10	1.00	2.50	4.00	8.00	5.00	1.00	14.00
92L3	A	5298	0489	R	0.10	22.00	10.00	50.00	16.00	8.00	1.00	143.00
92L3	A	5299	0489	R	1.00	56.00	5.00	30.00	97.00	19.00	1.00	70.00
92L3	A	5300	0489	R	0.20	50.00	2.50	11.00	70.00	10.00	1.00	57.00
92L3	A	5301	0489	R	0.20	1.00	2.50	9.00	24.00	7.00	1.00	21.00
92L3	A	5302	0489	R	0.10	4.00	2.50	5.00	16.00	5.00	1.00	18.00
92L3	A	5303	0489	R	0.40	20.00	2.50	5.00	93.00	6.00	1.00	40.00
92L3	A	5304	0489	R	0.10	10.00	2.50	30.00	40.00	3.00	1.00	61.00
92L3	A	5305	0489	R	0.10	18.00	2.50	28.00	1030.00	8.00	1.00	71.00
92L3	A	5306	0489	R	0.10	10.00	2.50	7.00	24.00	5.00	1.00	70.00
92L3	A	5307	0489	R	0.10	20.00	2.50	4.00	65.00	2.00	1.00	10.00
92L3	A	5308	0489	R	0.20	2.00	2.50	3.00	36.00	2.00	1.00	1.00
92L3	A	5309	0489	R	0.10	1.00	2.50	3.00	240.00	5.00	2.00	8.00
92L3	A	5310	0489	R	1.60	66.00	30.00	28.00	93.00	136.00	1.00	110.00
92L3	A	5311	0489	R	0.70	8.00	15.00	380.00	380.00	62.00	1.00	195.00
92L3	A	5312	0489	R	0.60	90.00	2.50	47.00	210.00	75.00	1.00	142.00

LIST DATA FILE:

KASHSTAT2

DATE: 90:11:06

PAGE 2

GRID	SAMP	SMP2	PROJ	TYPE	AG	AS	AU1	CU	HG	PB	SB	EM
92L3	A	5313	0489	R	0.30	1.00	2.50	9.00	36.00	55.00	1.00	166.00
92L3	A	5326	0489	R	0.40	240.00	15.00	22.00	200.00	15.00	1.00	350.00
92L3	A	5351	0489	R	0.10	4.00	2.50	5.00	24.00	6.00	1.00	12.00
92L3	A	5352	0489	R	0.20	10.00	2.50	3.00	45.00	9.00	1.00	3.00
92L3	A	5353	0489	R	0.10	1.00	2.50	12.00	500.00	4.00	1.00	14.00

END OF LISTING - 65 RECORDS PRINTED



GRID	SAMP	SMP2	PROJ	TYPE	AG	AS	AUL	CU	HG	PB	SB	ZN
92L3	49+00	49+60E	0490	L	0.10	1.00	2.50	7.00	150.00	7.00	1.00	36.00
92L3	49+00	50+00E	0490	L	0.10	2.00	7.00	11.00	97.00	5.00	1.00	74.00
92L3	49+00	50+40E	0490	L	0.10	1.00	2.50	12.00	85.00	7.00	1.00	63.00
92L3	49+00	50+80E	0490	L	0.20	6.00	2.50	55.00	48.00	24.00	1.00	87.00
92L3	49+00	51+20E	0490	L	0.20	14.00	35.00	92.00	138.00	57.00	1.00	91.00
92L3	49+00	51+60E	0490	L	0.20	4.00	2.50	68.00	134.00	18.00	1.00	50.00
92L3	49+00	52+00E	0490	L	0.10	1.00	2.50	30.00	146.00	15.00	1.00	40.00
92L3	49+00	52+40E	0490	L	0.60	1.00	2.50	90.00	183.00	14.00	1.00	60.00
92L3	49+00	52+80E	0490	L	0.20	2.00	5.00	211.00	187.00	30.00	1.00	86.00
92L3	49+00	53+20E	0490	L	0.20	20.00	40.00	460.00	215.00	56.00	1.00	100.00
92L3	49+00	53+60E	0490	L	0.30	2.00	2.50	67.00	150.00	7.00	1.00	74.00
92L3	49+00	54+00E	0490	L	0.40	8.00	2.50	35.00	610.00	12.00	1.00	64.00
92L3	49+00	54+40E	0490	L	0.20	1.00	2.50	25.00	560.00	15.00	1.00	60.00
92L3	49+00	54+80E	0490	L	0.50	1.00	2.50	20.00	410.00	4.00	1.00	44.00
92L3	49+00	55+20E	0490	L	0.40	10.00	2.50	55.00	146.00	17.00	1.00	134.00
92L3	49+00	55+60E	0490	L	2.80	8.00	2.50	31.00	166.00	11.00	1.00	60.00
92L3	49+00	56+00E	0490	L	7.00	1100.00	170.00	230.00	790.00	62.00	1.00	276.00
92L3	50+00N	49+20E	0490	L	0.70	6.00	2.50	60.00	175.00	52.00	1.00	178.00
92L3	50+00N	49+60E	0490	L	0.40	1.00	2.50	24.00	146.00	7.00	1.00	63.00
92L3	50+00N	50+00E	0490	L	0.10	1.00	2.50	38.00	65.00	6.00	1.00	88.00
92L3	50+00N	50+40E	0490	L	0.30	1.00	2.50	27.00	77.00	16.00	1.00	50.00
92L3	50+00N	50+80E	0490	L	0.30	1.00	2.50	35.00	106.00	17.00	1.00	82.00
92L3	50+00N	51+20E	0490	L	0.20	1.00	2.50	285.00	203.00	156.00	1.00	500.00
92L3	50+00N	51+60E	0490	L	0.60	1.00	2.50	384.00	90.00	114.00	1.00	1150.00
92L3	50+00N	52+00E	0490	L	0.10	1.00	2.50	69.00	48.00	30.00	1.00	80.00
92L3	50+00N	52+40E	0490	L	0.30	1.00	2.50	102.00	106.00	31.00	1.00	77.00
92L3	50+00N	52+80E	0490	L	0.10	1.00	2.50	90.00	73.00	16.00	1.00	87.00
92L3	50+00N	53+20E	0490	L	0.10	1.00	2.50	78.00	250.00	12.00	1.00	66.00
92L3	50+00N	53+60E	0490	L	0.10	1.00	2.50	24.00	158.00	8.00	1.00	45.00
92L3	50+00N	54+00E	0490	L	0.10	6.00	2.50	116.00	255.00	13.00	1.00	120.00
92L3	50+00N	54+30E	0490	L	0.10	2.00	2.50	89.00	170.00	7.00	1.00	88.00
92L3	50+00N	54+80E	0490	L	0.10	120.00	2.50	246.00	110.00	28.00	1.00	115.00
92L3	50+00N	55+20E	0490	L	0.10	2.00	2.50	81.00	93.00	14.00	1.00	204.00
92L3	50+00N	55+60E	0490	L	4.00	14.00	2.50	138.00	840.00	15.00	1.00	91.00
92L3	50+00N	55+80E	0490	L	5.20	80.00	2.50	98.00	120.00	29.00	1.00	181.00
92L3	A	5354	0490	L	0.10	1.00	2.50	16.00	70.00	5.00	1.00	37.00
92L3	A	5355	0490	L	0.10	1.00	2.50	16.00	146.00	6.00	1.00	53.00

**APPENDIX III**

**SAMPLING, SAMPLE PREPARATION AND ANALYTICAL PROCEDURES**

## **SAMPLING PROCEDURES**

Rock samples generally comprised two fist size pieces of material representative of the outcrop or float being sampled. These are referred to as grab samples. One piece was submitted for analysis; the second retained for reference. Chip samples were obtained by taken chips of rock up to three centimetres in diameter as often as possible along a line across the structure being sampled. A rock hammer andmoil were used to obtain the samples, which were described at the time of sampling.

Soil samples were taken mostly from a "B", and to a lesser extent a "C" horizon, at a depth of 10 to 40 cm using a mattock or an auger. Samples from the "B" horizon were generally a reddish-brown mixture of clay and silt with minor sand and organic material. samples from the "C" horizon were composed of a brownish mixture of silt, clay and sand with minor organic material and varying amounts of rock fragments. Descriptions of the sample site and material sampled were recorded at the time of sampling

## **SAMPLE PREPARATION PROCEDURES**

(Placer Dome Inc. Research Centre)

Rock samples were collected in plastic bags. They were dried, then crushed by a jaw crusher followed by a cone crusher. A 250 gram subsample of crushed material was separated using a riffle splitter. This subsample was pulverized by rolling to -100 mesh for analysis.

Soil samples were collected in kraft envelopes. They were dried at approximately 60°C, then screened to obtain the minus 80 mesh fraction for analysis.

**ANALYTICAL PROCEDURES**  
(Placer Dome Inc. Research Centre)

Element	Unit	Weight(g)	Digestion	Range	Instrumentation
Au1	ppb	10.0	Aqua Regia 3 hrs	5 - 4000	A.A. Solvent Ext.
Ag	ppm	0.5	HClO <sub>4</sub> /HNO <sub>3</sub> 4 hrs	0.2 - 20	A.A. Backgd. Cor.
As	ppm	0.5	Aqua Regia 3 hrs	2 - 2000	D.C. Plasma
Sb	ppm	0.5	HCl/HNO <sub>3</sub> 3 hrs	2 - 2000	D.C. Plasma
Hg	ppb	0.25	HNO <sub>3</sub> /HCl 3 hrs	5 - 2000	A.A. C. Vap. Gen.
Cu	ppm	0.5	HClO <sub>4</sub> /HNO <sub>3</sub> 4 hrs	2 - 4000	Atomic Absorption
Pb	ppm	0.5	HClO <sub>4</sub> /HNO <sub>3</sub> 4 hrs	2 - 3000	A.A. Backgd. Cor.
Zn	ppm	0.5	HClO <sub>4</sub> /HNO <sub>3</sub> 4 hrs	2 - 3000	Atomic Absorption

**APPENDIX IV**

**HISTOGRAMS AND PROBABILITY GRAPHS**

P L A C E R     D O M E     I N C .  
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PDI Data Analysis System - STATS

run on 90:11:05 at 15:48:29

Current directory: /placer1\_2f

KASHSTAT2

Summary of data from file : kashstat2

(Rock Samples)

This data file contains an internal header: ( 5 records)  
Data grouped into 13 fields  
with format: (3A8,A4,A2, 8F6.0)

Character ID fields:  
GRID SAMP SMP2 PROJ TYPE

Coordinate fields:

Other data fields:  
AG AS AU1 CU HG PB SB ZN

Missing data indicated by NULL value 99999.0

BASIC STATISTICS OF SELECTED DATA FIELDS:

NAME	N	DATA	NULLS	MINIMUM	MAXIMUM	MEAN	STD. DEV.	GEOM. MEAN
AU1	65		0	2.50000	80.0000	7.76923	12.8781	4.21131
AG	65		0	0.100000	5.40000	0.406154	0.734182	0.226761
HG	65		0	8.00000	1200.00	158.769	277.626	64.6116
AS	65		0	1.00000	260.000	15.0462	45.2740	2.62912
CU	65		0	3.00000	770.000	77.4154	124.581	29.9713
PB	65		0	1.00000	362.000	27.4615	54.0974	10.5211
ZN	65		0	1.00000	6200.00	235.769	822.855	60.9292

HISTO:

KASHSTAT2

RU

File: kashstat2

Field name: AU1

LOG = 1 REPVAL = 0.00100

65 SAMPLES WITH AU1 MINIMUM: 2.50000 MAXIMUM: 80.0000

65 VALUES PLOTTED: 0 NOT IN RANGE 2.50000 to 80.0000

GEOMETRIC MEAN: 4.21131 DISPERSION: 1.67098 10.6136

SCALE OF HISTOGRAM IS 2.00 COUNTS /PRINT POSITION # = 5,50,95%

N	MIDPOINT	PERCENT	0	20	40	60	80
46	2.5000	# 70.77	I*****				I
0	2.7263	0.00	I				I
0	2.9730	0.00	I				I
0	3.2421	0.00	I				I
0	3.5355	0.00	I				I
0	3.8555	0.00	I				I
0	4.2045	0.00	I				I
0	4.5850	0.00	I				I
4	5.0000	6.15	I**				I
0	5.4525	0.00	I				I
0	5.9460	0.00	I				I
0	6.4842	0.00	I				I
0	7.0711	0.00	I				I
0	7.7111	0.00	I				I
0	8.4090	0.00	I				I
0	9.1700	0.00	I				I
4	10.000	6.15	I**				I
0	10.905	0.00	I				I
0	11.892	0.00	I				I
0	12.968	0.00	I				I
0	14.142	0.00	I				I
5	15.422	7.69	I***				I
0	16.818	0.00	I				I
0	18.340	0.00	I				I
0	20.000	0.00	I				I
0	21.810	0.00	I				I
0	23.784	0.00	I				I
0	25.937	0.00	I				I
0	28.284	0.00	I				I
2	30.844	3.08	I*				I
1	33.636	# 1.54	I*				I
0	36.680	0.00	I				I
2	40.000	3.08	I*				I
0	43.620	0.00	I				I
0	47.568	0.00	I				I
0	51.874	0.00	I				I
0	56.569	0.00	I				I
0	61.688	0.00	I				I
0	67.272	0.00	I				I
0	73.360	0.00	I				I
1	80.000	1.54	I*				I

65

0 20 40 60 80

HISTO:

KASHSTAT2

RU

File: kashstat2

Field name: AG

LOG = 1 REPVAL = 0.0010C

65 SAMPLES WITH AG

MINIMUM: 0.100000

MAXIMUM: 5.40000

65 VALUES PLOTTED:

0 NOT IN RANGE 0.100000

to 5.40000

GEOMETRIC MEAN:

0.226761

DISPERSION: 0.897102E-010.573187

SCALE OF HISTOGRAM IS

1.00 COUNTS /PRINT POSITION

# = 5,50,95%

N	MIDPOINT	PERCENT	0	10	20	30	40
27	0.10000E+00#	41.54	I*****				I
0	0.11049	0.00	I				I
0	0.12207	0.00	I				I
0	0.13487	0.00	I				I
0	0.14902	0.00	I				I
0	0.16465	0.00	I				I
0	0.18191	0.00	I				I
14	0.20099	# 21.54	I*****				I
0	0.22206	0.00	I				I
0	0.24535	0.00	I				I
0	0.27108	0.00	I				I
7	0.29951	10.77	I*****				I
0	0.33092	0.00	I				I
0	0.36562	0.00	I				I
4	0.40396	6.15	I****				I
0	0.44632	0.00	I				I
2	0.49313	3.08	I**				I
0	0.54484	0.00	I				I
2	0.60197	3.08	I**				I
0	0.66510	0.00	I				I
1	0.73485	1.54	I*				I
0	0.81191	0.00	I				I
1	0.89705	1.54	I*				I
2	0.99112	3.08	I**				I
0	1.0951	0.00	I				I
2	1.2099	# 3.08	I**				I
0	1.3368	0.00	I				I
0	1.4769	0.00	I				I
1	1.6318	1.54	I*				I
0	1.8030	0.00	I				I
1	1.9920	1.54	I*				I
0	2.2009	0.00	I				I
0	2.4317	0.00	I				I
0	2.6867	0.00	I				I
0	2.9685	0.00	I				I
0	3.2798	0.00	I				I
0	3.6237	0.00	I				I
0	4.0037	0.00	I				I
0	4.4236	0.00	I				I
0	4.8875	0.00	I				I
1	5.4000	1.54	I*				I

65

0 10 20 30 40



HISTO:

KASHSTAT2

RU

File: kashstat2

Field name: HG

LOG = 1 REPVAL = 0.00100

65 SAMPLES WITH HG

MINIMUM: 8.00000

MAXIMUM: 1200.00

65 VALUES PLOTTED:

0 NOT IN RANGE 8.00000

to 1200.00

GEOMETRIC MEAN:

64.6116

DISPERSION: 18.5321

225.266

SCALE OF HISTOGRAM IS

0.20 COUNTS /PRINT POSITION

# = 5,50,95%

N	MIDPOINT	PERCENT	0	2	4	6	8
3	8.0000	4.62	I*****				I
0	9.0676	0.00	I				I
0	10.278	0.00	I				I
1	11.649	# 1.54	I*****				I
0	13.204	0.00	I				I
0	14.966	0.00	I				I
4	16.963	6.15	I*****				I
3	19.227	4.62	I*****				I
0	21.793	0.00	I				I
6	24.701	9.23	I*****				I
2	27.997	3.08	I*****				I
2	31.733	3.08	I*****				I
4	35.968	6.15	I*****				I
3	40.768	4.62	I*****				I
5	46.209	# 7.69	I*****				I
3	52.375	4.62	I*****				I
2	59.364	3.08	I*****				I
3	67.287	4.62	I*****				I
1	76.266	1.54	I*****				I
0	86.444	0.00	I				I
4	97.980	6.15	I*****				I
1	111.05	1.54	I*****				I
1	125.88	1.54	I*****				I
1	142.67	1.54	I*****				I
2	161.71	3.08	I*****				I
3	183.29	4.62	I*****				I
2	207.75	3.08	I*****				I
1	235.48	1.54	I*****				I
0	266.90	0.00	I				I
0	302.52	0.00	I				I
0	342.89	0.00	I				I
1	388.65	1.54	I*****				I
1	440.52	1.54	I*****				I
1	499.30	1.54	I*****				I
0	565.94	0.00	I				I
0	641.46	0.00	I				I
0	727.06	0.00	I				I
1	824.09	1.54	I*****				I
1	934.06	# 1.54	I*****				I
1	1058.7	1.54	I*****				I
2	1200.0	3.08	I*****				I

65

0 2 4 6 8

HISTO:

KASHSTAT2

RU

File: kashstat2 Field name: AS LOG = 1 REPVAL = 0.00100

65 SAMPLES WITH AS MINIMUM: 1.00000 MAXIMUM: 260.000

65 VALUES PLOTTED: 0 NOT IN RANGE 1.00000 to 260.000

GEOMETRIC MEAN: 2.62912 DISPERSION: 0.562829 12.2813

SCALE OF HISTOGRAM IS 2.00 COUNTS /PRINT POSITION # = 5,50,95%

N	MIDPOINT	PERCENT	0	20	40	60	80
42	1.0000	# 64.62	I*****				I
0	1.1491	0.00	I				I
0	1.3205	0.00	I				I
0	1.5175	0.00	I				I
0	1.7438	0.00	I				I
2	2.0039	3.08	I*				I
0	2.3027	0.00	I				I
0	2.6462	0.00	I				I
0	3.0408	0.00	I				I
0	3.4944	0.00	I				I
3	4.0155	4.62	I**				I
0	4.6144	0.00	I				I
0	5.3026	0.00	I				I
2	6.0935	3.08	I*				I
0	7.0023	0.00	I				I
2	8.0466	3.08	I*				I
0	9.2468	0.00	I				I
3	10.626	4.62	I**				I
0	12.211	0.00	I				I
0	14.032	0.00	I				I
0	16.125	0.00	I				I
1	18.529	1.54	I*				I
4	21.293	6.15	I**				I
0	24.469	0.00	I				I
0	28.118	0.00	I				I
0	32.312	0.00	I				I
0	37.131	0.00	I				I
0	42.668	0.00	I				I
1	49.032	1.54	I*				I
1	56.345	1.54	I*				I
1	64.749	# 1.54	I*				I
0	74.405	0.00	I				I
1	85.502	1.54	I*				I
0	98.255	0.00	I				I
0	112.91	0.00	I				I
0	129.75	0.00	I				I
0	149.10	0.00	I				I
0	171.34	0.00	I				I
0	196.89	0.00	I				I
1	226.26	1.54	I*				I
1	260.00	1.54	I*				I

65

I-----I-----I-----I-----I  
0 20 40 60 80

HISTO:

KASHSTAT2

RU

File: kashstat2

Field name: CU

LOG = 1 REPVAL = 0.00100

65 SAMPLES WITH CU MINIMUM: 3.00000 MAXIMUM: 770.000

65 VALUES PLOTTED: 0 NOT IN RANGE 3.00000 to 770.000

GEOMETRIC MEAN: 29.9713 DISPERSION: 7.10049 126.510

SCALE OF HISTOGRAM IS 0.20 COUNTS /PRINT POSITION # = 5,50,95%

N	MIDPOINT	PERCENT	0	2	4	6	8
4	3.0000	# 6.15	I-----I-----I-----I-----I	I*****			I
0	3.4463	0.00	I				I
2	3.9590	3.08	I*****				I
0	4.5480	0.00	I				I
5	5.2247	7.69	I*****				I
0	6.0020	0.00	I				I
5	6.8949	7.69	I*****				I
0	7.9207	0.00	I				I
3	9.0990	4.62	I*****				I
2	10.453	3.08	I*****				I
2	12.008	3.08	I*****				I
1	13.794	1.54	I*****				I
0	15.846	0.00	I				I
0	18.204	0.00	I				I
3	20.912	4.62	I*****				I
0	24.023	0.00	I				I
4	27.597	# 6.15	I*****				I
3	31.703	4.62	I*****				I
0	36.420	0.00	I				I
1	41.838	1.54	I*****				I
6	48.062	9.23	I*****				I
3	55.213	4.62	I*****				I
3	63.427	4.62	I*****				I
0	72.863	0.00	I				I
2	83.703	3.08	I*****				I
2	96.156	3.08	I*****				I
2	110.46	3.08	I*****				I
1	126.90	1.54	I*****				I
3	145.77	4.62	I*****				I
0	167.46	0.00	I				I
2	192.37	3.08	I*****				I
0	221.00	0.00	I				I
0	253.87	0.00	I				I
2	291.64	3.08	I*****				I
2	335.03	# 3.08	I*****				I
1	384.87	1.54	I*****				I
0	442.13	0.00	I				I
0	507.91	0.00	I				I
0	583.48	0.00	I				I
0	670.28	0.00	I				I
1	770.00	1.54	I*****				I
-----			I-----I-----I-----I-----I				
65			0	2	4	6	8

File: kashstat2 Field name: PB LOG = 1 REPVAL = 0.00100

65 SAMPLES WITH PB MINIMUM: 1.00000 MAXIMUM: 362.000

65 VALUES PLOTTED: 0 NOT IN RANGE 1.00000 to 362.000

GEOMETRIC MEAN: 10.5211 DISPERSION: 2.91042 38.0333

SCALE OF HISTOGRAM IS 0.20 COUNTS /PRINT POSITION # = 5,50,95%

N	MIDPOINT	PERCENT	0	2	4	6	8
1	1.0000	1.54	I*****				I
0	1.1587	0.00	I				I
0	1.3426	0.00	I				I
0	1.5556	0.00	I				I
0	1.8025	0.00	I				I
5	2.0885	# 7.69	I*****				I
0	2.4199	0.00	I				I
7	2.8040	10.77	I*****				I
0	3.2489	0.00	I				I
4	3.7645	6.15	I*****				I
0	4.3619	0.00	I				I
6	5.0541	9.23	I*****				I
6	5.8562	9.23	I*****				I
3	6.7855	4.62	I*****				I
4	7.8623	# 6.15	I*****				I
2	9.1099	3.08	I*****				I
2	10.556	3.08	I*****				I
1	12.231	1.54	I*****				I
4	14.172	6.15	I*****				I
0	16.421	0.00	I				I
5	19.026	7.69	I*****				I
0	22.046	0.00	I				I
0	25.544	0.00	I				I
0	29.598	0.00	I				I
1	34.295	1.54	I*****				I
1	39.737	1.54	I*****				I
2	46.043	3.08	I*****				I
3	53.349	4.62	I*****				I
1	61.815	1.54	I*****				I
2	71.625	3.08	I*****				I
1	82.991	1.54	I*****				I
0	96.161	0.00	I				I
0	111.42	0.00	I				I
1	129.10	# 1.54	I*****				I
1	149.59	1.54	I*****				I
1	173.33	1.54	I*****				I
0	200.83	0.00	I				I
0	232.70	0.00	I				I
0	269.63	0.00	I				I
0	312.42	0.00	I				I
1	362.00	1.54	I*****				I

65

0 2 4 6 8

HISTO:

KASHSTAT2

RU

File: kashstat2

Field name: ZN

LOG = 1 REPVAL = 0.00100

65 SAMPLES WITH ZN MINIMUM: 1.00000 MAXIMUM: 6200.00

65 VALUES PLOTTED: 0 NOT IN RANGE 1.00000 to 6200.00

GEOMETRIC MEAN: 60.9292 DISPERSION: 14.4542 256.836

SCALE OF HISTOGRAM IS 0.40 COUNTS /PRINT POSITION # = 5,50,95%

N	MIDPOINT	PERCENT	0	4	8	12	16
			I-----I-----I-----I-----I				
1	1.0000	1.54	I**				I
0	1.2440	0.00	I				I
0	1.5475	0.00	I				I
0	1.9250	0.00	I				I
0	2.3946	0.00	I				I
2	2.9789	3.08	I*****				I
0	3.7056	0.00	I				I
0	4.6097	0.00	I				I
0	5.7343	0.00	I				I
0	7.1333	0.00	I				I
1	8.8736	# 1.54	I**				I
3	11.038	4.62	I*****				I
3	13.731	4.62	I*****				I
3	17.082	4.62	I*****				I
3	21.249	4.62	I*****				I
2	26.433	3.08	I*****				I
1	32.882	1.54	I**				I
4	40.904	6.15	I*****				I
3	50.883	4.62	I*****				I
10	63.297	# 15.38	I*****				I
6	78.740	9.23	I*****				I
3	97.950	4.62	I*****				I
5	121.85	7.69	I*****				I
5	151.57	7.69	I*****				I
2	188.55	3.08	I*****				I
1	234.56	1.54	I**				I
2	291.78	3.08	I*****				I
2	362.96	# 3.08	I*****				I
0	451.52	0.00	I				I
0	561.67	0.00	I				I
0	698.70	0.00	I				I
0	869.17	0.00	I				I
0	1081.2	0.00	I				I
0	1345.0	0.00	I				I
1	1673.1	1.54	I**				I
1	2081.3	1.54	I**				I
0	2589.1	0.00	I				I
0	3220.8	0.00	I				I
0	4006.6	0.00	I				I
0	4984.0	0.00	I				I
1	6200.0	1.54	I**				I
-----			I-----I-----I-----I-----I				
65			0	4	8	12	16

PRBPLT:

KASHSTAT2

F

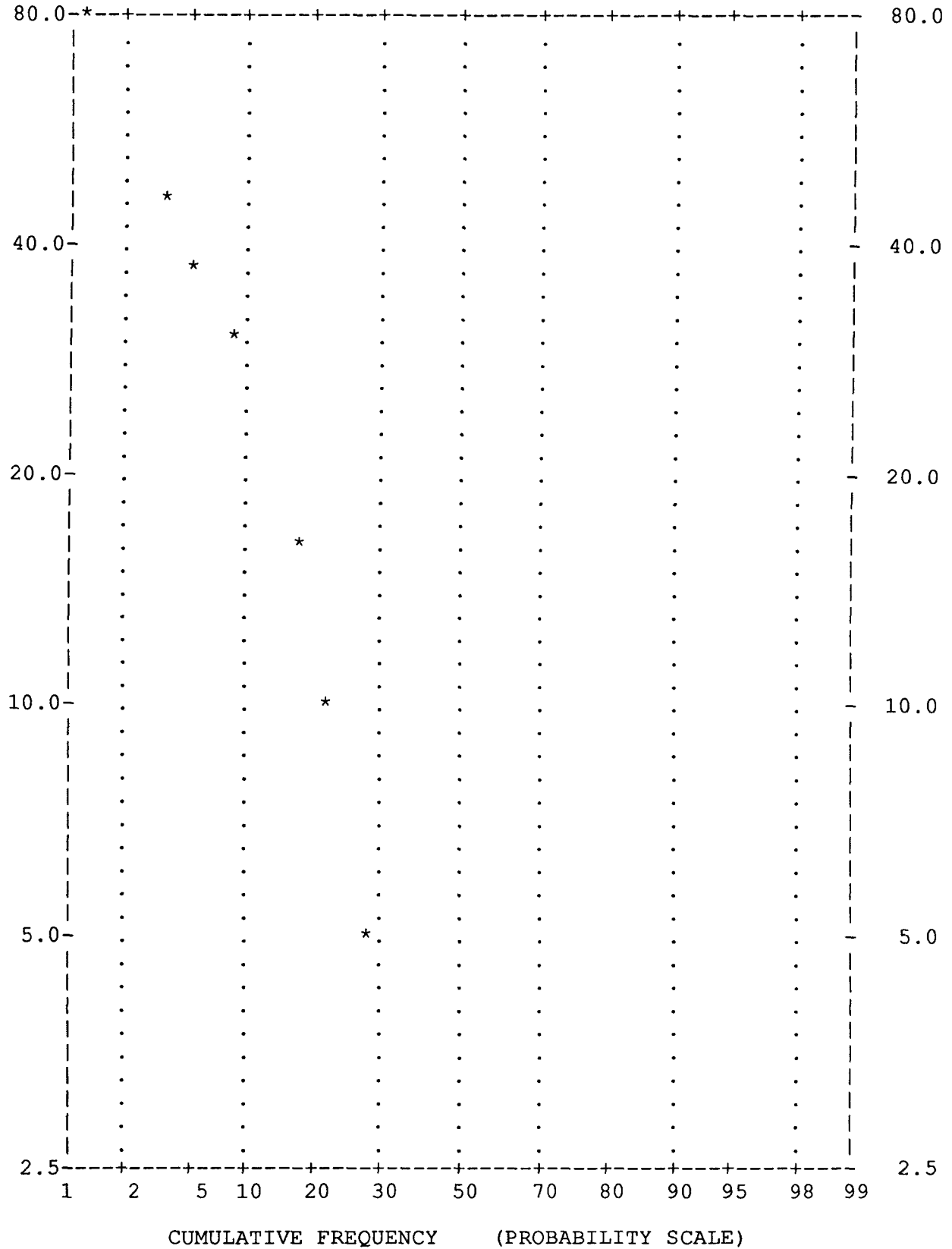
file: kashstat2

Field name: AU1

LOG =1

REPVAL = 0.00100

MIN = 2.5000      MAX = 80.000      MEAN = 7.7692      STD DEV = 12.878  
NUMBER OF DATA PLOTTED = 65 ( 0 NULLS    0 < YMIN    0 > YMAX)



PRBPLT:

KASHSTAT2

F

file: kashstat2

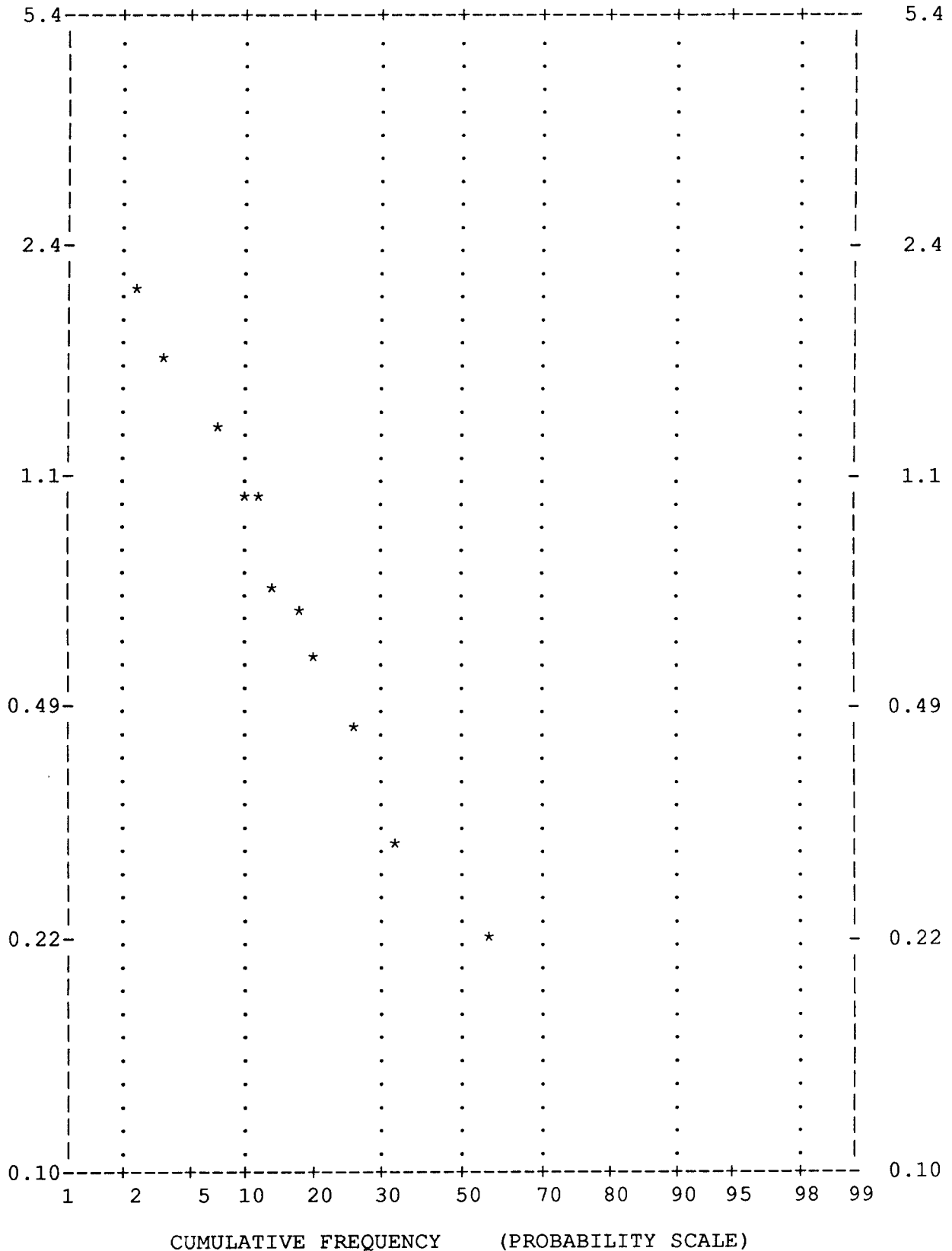
Field name: AG

LOG =1

REPVAL =

0.0010C

MIN = .10000      MAX = 5.4000      MEAN = .40615      STD DEV = .73418  
 NUMBER OF DATA PLOTTED = 65    (    0 NULLS      0 < YMIN      0 > YMAX)



PRBPLT:

KASHSTAT2

F

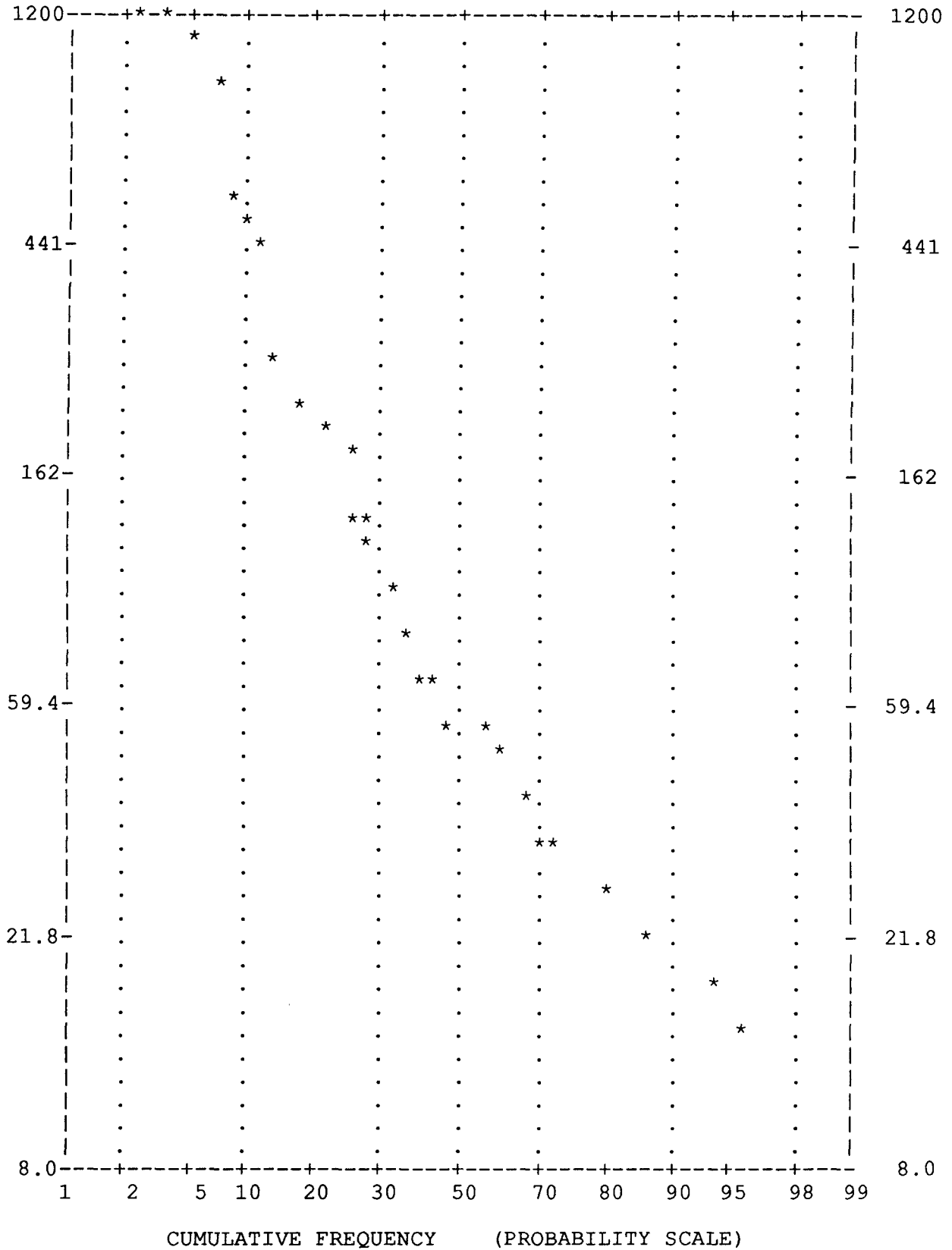
file: kashstat2

Field name: HG

LOG =1

REPVAL = 0.00100

MIN = 8.0000      MAX = 1200.0      MEAN = 158.77      STD DEV = 277.63  
 NUMBER OF DATA PLOTTED = 65 ( 0 NULLS    0 < YMIN    0 > YMAX)





PRBPLT:

KASHSTAT2

F

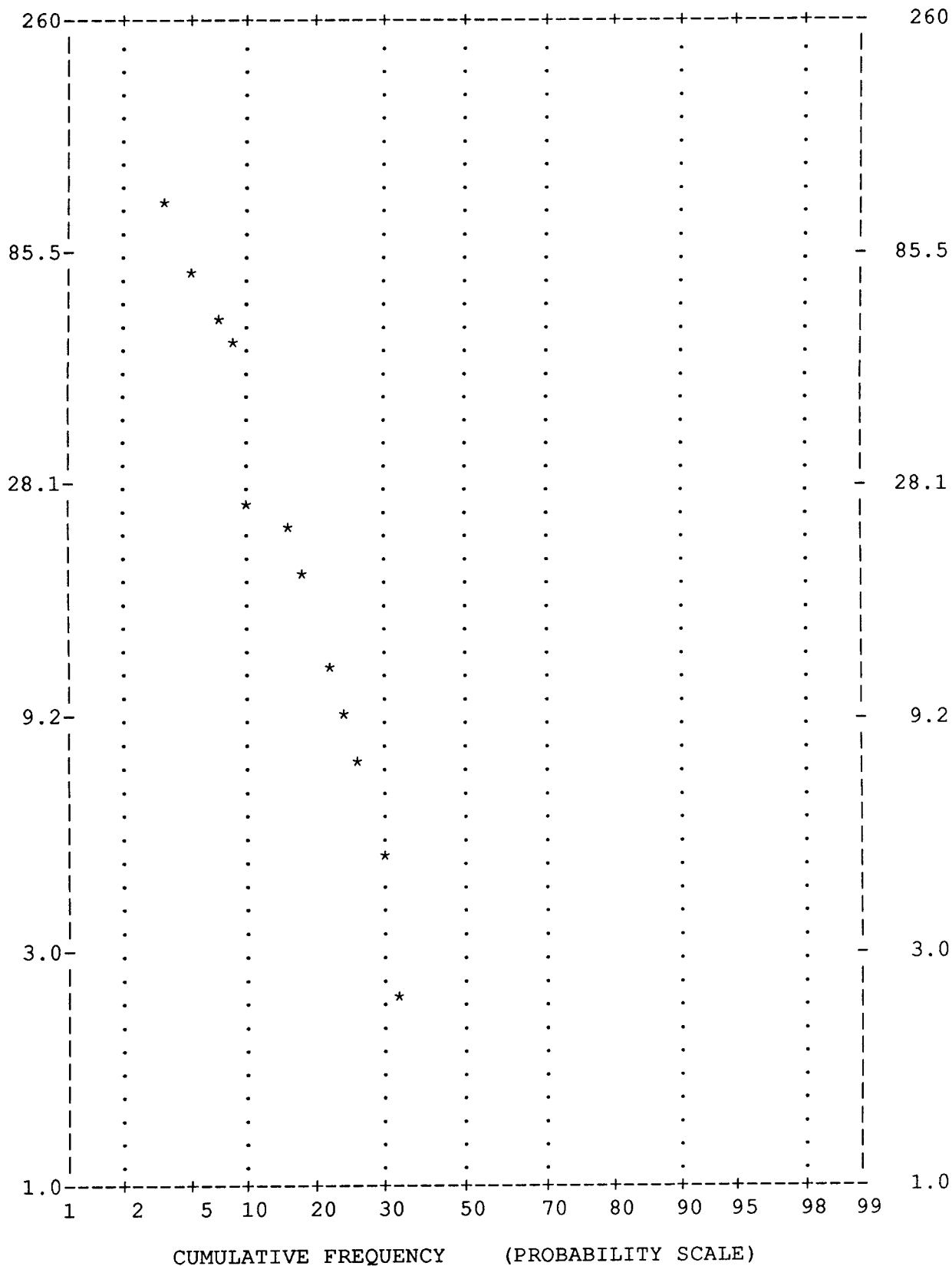
file: kashstat2

Field name: AS

LOG =1

REPVAL = 0.00100

MIN = 1.0000      MAX = 260.00      MEAN = 15.046      STD DEV = 45.274  
 NUMBER OF DATA PLOTTED = 65    (    0 NULLS      0 < YMIN      0 > YMAX)



PRBPLT:

KASHSTAT2

F

file: kashstat2

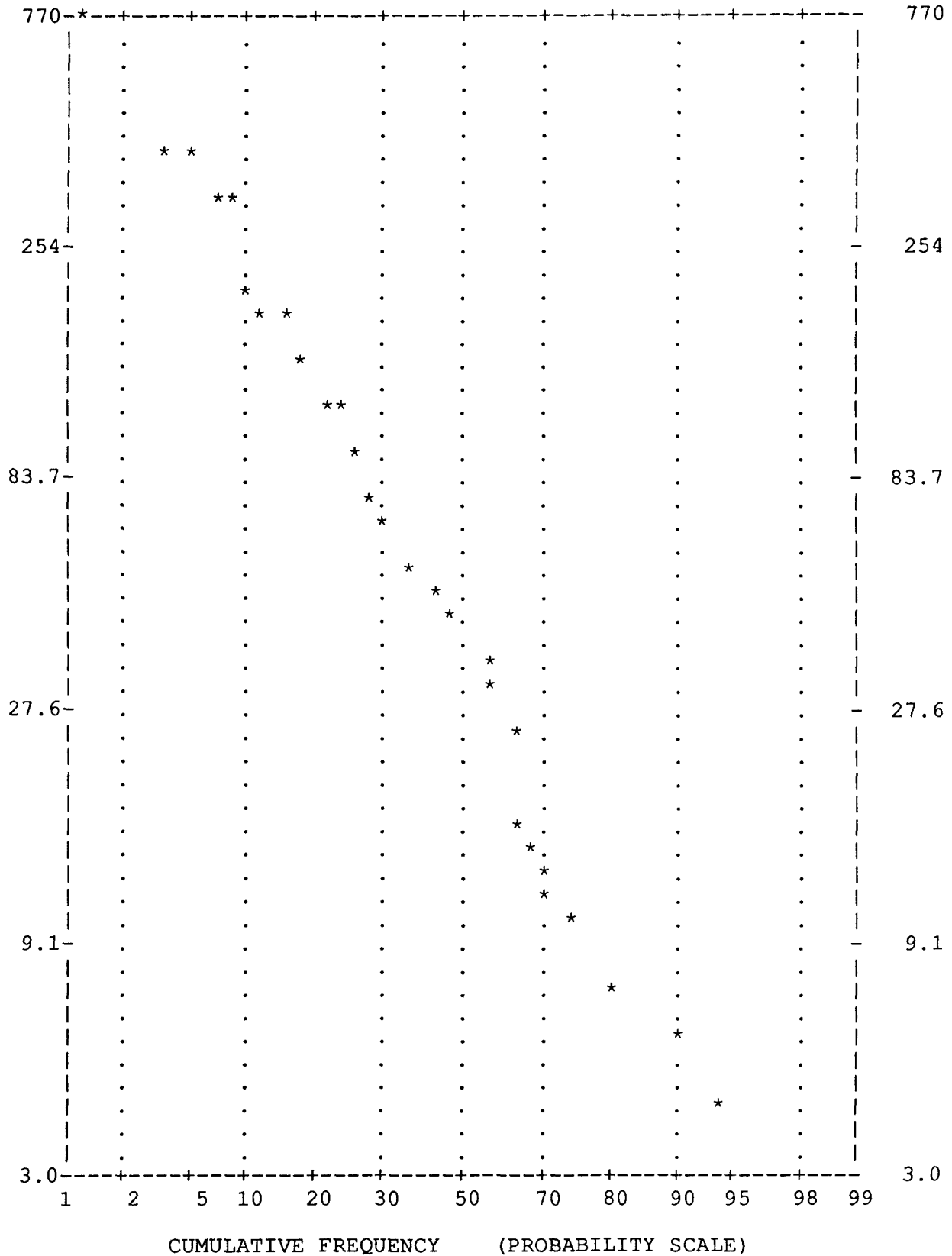
Field name: CU

LOG =1

REPVAL =

0.0010C

MIN = 3.0000      MAX = 770.00      MEAN = 77.415      STD DEV = 124.58  
 NUMBER OF DATA PLOTTED = 65 ( 0 NULLS      0 < YMIN      0 > YMAX)



PRBPLT:

KASHSTAT2

F

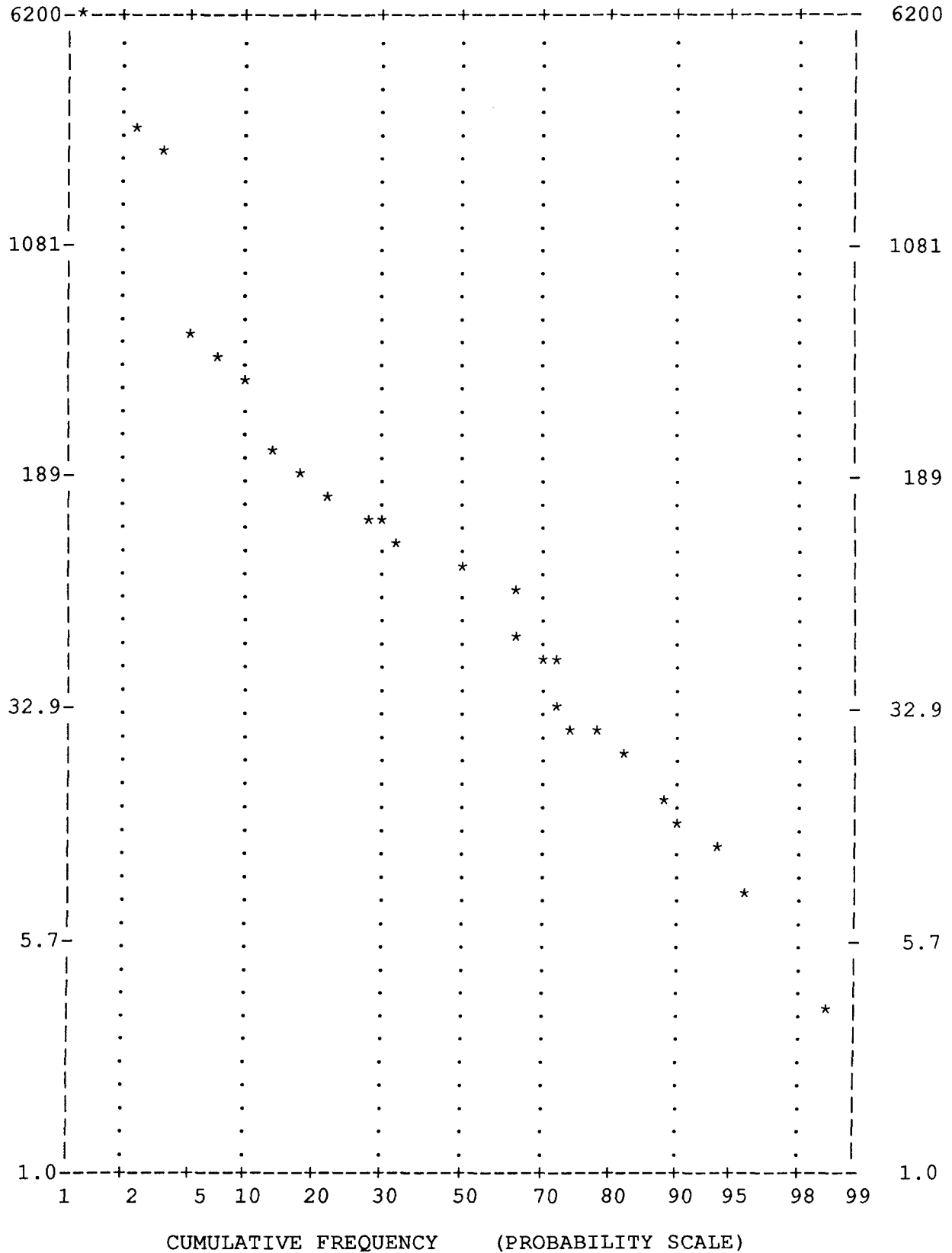
file: kashstat2

Field name: ZN

LOG =1

REPVAL = 0.0010C

MIN = 1.0000      MAX = 6200.0      MEAN = 235.77      STD DEV = 822.85  
NUMBER OF DATA PLOTTED = 65 ( 0 NULLS    0 < YMIN    0 > YMAX)



P L A C E R     D O M E     I N C .  
-----

PDI Data Analysis System - STATS

run on 90:11:05 at 15:23:26

Current directory: /placer1\_2f

V264 KASHUTL

Summary of data from file : kashsoil  
-----

(Soil Samples)

This data file contains an internal header: ( 5 records)

Data grouped into 14 fields

with format: (3A8,A4,A2, 9F6.0)

Character ID fields:

GRID SAMP SMP2 PROJ TYPE

Coordinate fields:

Other data fields:

AG AS AU1 CU HG MO PB SB ZN

Missing data indicated by NULL value 99999.0

BASIC STATISTICS OF SELECTED DATA FIELDS:

NAME	NDATA	NULLS	MINIMUM	MAXIMUM	MEAN	STD. DEV.	GEOM. MEAN
AU1	38	0	2.50000	170.000	8.93421	27.9827	3.37056
AG	38	0	0.100000	7.00000	0.705263	1.50422	0.256302
HG	38	0	48.0000	840.000	199.632	190.594	150.453
AS	38	0	1.00000	1100.00	37.5263	178.467	2.95207
CU	38	0	7.00000	460.000	92.9211	104.120	56.1210
PB	38	0	4.00000	156.000	24.9474	30.8036	15.8877
ZN	38	0	36.0000	1150.00	126.079	189.983	86.5714

HISTO:

V264 KASHUTL

RU

File: kashsoil Field name: AU1 LOG = 1 REPVAL = 0.00100

38 SAMPLES WITH AU1 MINIMUM: 2.50000 MAXIMUM: 170.000

38 VALUES PLOTTED: 0 NOT IN RANGE 2.50000 to 170.000

GEOMETRIC MEAN: 3.37056 DISPERSION: 1.35744 8.36915

SCALE OF HISTOGRAM IS 1.00 COUNTS /PRINT POSITION # = 5,50,95%

N	MIDPOINT	PERCENT	0	10	20	30	40
33	2.5000	# 86.84	I*****				I
0	2.7781	0.00	I				I
0	3.0872	0.00	I				I
0	3.4307	0.00	I				I
0	3.8123	0.00	I				I
0	4.2365	0.00	I				I
0	4.7078	0.00	I				I
1	5.2315	2.63	I*				I
0	5.8136	0.00	I				I
0	6.4603	0.00	I				I
1	7.1791	2.63	I*				I
0	7.9777	0.00	I				I
0	8.8653	0.00	I				I
0	9.8516	0.00	I				I
0	10.948	0.00	I				I
0	12.166	0.00	I				I
0	13.519	0.00	I				I
0	15.023	0.00	I				I
0	16.694	0.00	I				I
0	18.552	0.00	I				I
0	20.616	0.00	I				I
0	22.909	0.00	I				I
0	25.458	0.00	I				I
0	28.290	0.00	I				I
0	31.437	0.00	I				I
1	34.935	2.63	I*				I
1	38.821	# 2.63	I*				I
0	43.140	0.00	I				I
0	47.940	0.00	I				I
0	53.273	0.00	I				I
0	59.200	0.00	I				I
0	65.786	0.00	I				I
0	73.105	0.00	I				I
0	81.238	0.00	I				I
0	90.276	0.00	I				I
0	100.32	0.00	I				I
0	111.48	0.00	I				I
0	123.88	0.00	I				I
0	137.66	0.00	I				I
0	152.98	0.00	I				I
1	170.00	2.63	I*				I

38

0 10 20 30 40

HISTO:

V264 KASHUTL

RU

File: kashsoil Field name: AG LOG = 1 REPVAL = 0.0010C

38 SAMPLES WITH AG MINIMUM: 0.100000 MAXIMUM: 7.00000

38 VALUES PLOTTED: 0 NOT IN RANGE 0.100000 to 7.00000

GEOMETRIC MEAN: 0.256302 DISPERSION: 0.788038E-010.833598

SCALE OF HISTOGRAM IS 0.40 COUNTS /PRINT POSITION # = 5,50,95%

N	MIDPOINT	PERCENT	0	4	8	12	16
16	0.10000E+00#	42.11	I*****I*****I*****I*****I				
0	0.11121	0.00	I				I
0	0.12367	0.00	I				I
0	0.13753	0.00	I				I
0	0.15294	0.00	I				I
0	0.17007	0.00	I				I
0	0.18913	0.00	I				I
7	0.21033	# 18.42	I*****				I
0	0.23389	0.00	I				I
0	0.26010	0.00	I				I
4	0.28925	10.53	I*****				I
0	0.32166	0.00	I				I
0	0.35771	0.00	I				I
3	0.39779	7.89	I*****				I
0	0.44237	0.00	I				I
1	0.49194	2.63	I**				I
0	0.54707	0.00	I				I
2	0.60837	5.26	I*****				I
1	0.67654	2.63	I**				I
0	0.75235	0.00	I				I
0	0.83666	0.00	I				I
0	0.93041	0.00	I				I
0	1.0347	0.00	I				I
0	1.1506	0.00	I				I
0	1.2796	0.00	I				I
0	1.4229	0.00	I				I
0	1.5824	0.00	I				I
0	1.7597	0.00	I				I
0	1.9569	0.00	I				I
0	2.1762	0.00	I				I
0	2.4200	0.00	I				I
1	2.6912	2.63	I**				I
0	2.9928	0.00	I				I
0	3.3282	0.00	I				I
0	3.7011	0.00	I				I
1	4.1159	2.63	I**				I
0	4.5771	0.00	I				I
1	5.0900	# 2.63	I**				I
0	5.6603	0.00	I				I
0	6.2946	0.00	I				I
1	7.0000	2.63	I**				I

-----  
38

I-----I-----I-----I-----I  
0 4 8 12 16

HISTO:

V264 KASHUTL

RU

File: kashsoil

Field name: HG

LOG = 1 REPVAL = 0.0010C

38 SAMPLES WITH HG MINIMUM: 48.0000 MAXIMUM: 840.000

38 VALUES PLOTTED: 0 NOT IN RANGE 48.0000 to 840.000

GEOMETRIC MEAN: 150.453 DISPERSION: 74.6422 303.262

SCALE OF HISTOGRAM IS 0.20 COUNTS /PRINT POSITION # = 5,50,95%

N	MIDPOINT	PERCENT	0	2	4	6	8
2	48.000	# 5.26	I*****				I
0	51.561	0.00	I				I
0	55.385	0.00	I				I
0	59.493	0.00	I				I
1	63.907	2.63	I*****				I
2	68.647	5.26	I*****				I
1	73.739	2.63	I*****				I
1	79.209	2.63	I*****				I
1	85.084	2.63	I*****				I
2	91.396	5.26	I*****				I
1	98.175	2.63	I*****				I
2	105.46	5.26	I*****				I
1	113.28	2.63	I*****				I
1	121.68	2.63	I*****				I
1	130.71	2.63	I*****				I
1	140.40	2.63	I*****				I
6	150.82	# 15.79	I*****				I
2	162.01	5.26	I*****				I
2	174.02	5.26	I*****				I
2	186.93	5.26	I*****				I
1	200.80	2.63	I*****				I
1	215.69	2.63	I*****				I
0	231.69	0.00	I				I
2	248.88	5.26	I*****				I
0	267.34	0.00	I				I
0	287.17	0.00	I				I
0	308.47	0.00	I				I
0	331.35	0.00	I				I
0	355.93	0.00	I				I
0	382.33	0.00	I				I
1	410.70	2.63	I*****				I
0	441.16	0.00	I				I
0	473.88	0.00	I				I
0	509.03	0.00	I				I
1	546.79	2.63	I*****				I
0	587.35	0.00	I				I
1	630.92	2.63	I*****				I
0	677.72	0.00	I				I
0	727.99	0.00	I				I
1	781.99	# 2.63	I*****				I
1	840.00	2.63	I*****				I

38

0 2 4 6 8

HISTO:

V264 KASHUTL

RU

File: kashsoil Field name: AS LOG = 1 REPVAL = 0.0010C

38 SAMPLES WITH AS MINIMUM: 1.00000 MAXIMUM: 1100.00

38 VALUES PLOTTED: 0 NOT IN RANGE 1.00000 to 1100.00

GEOMETRIC MEAN: 2.95207 DISPERSION: 0.582546 14.9597

SCALE OF HISTOGRAM IS 0.50 COUNTS /PRINT POSITION # = 5,50,95%

N	MIDPOINT	PERCENT	0	5	10	15	20
20	1.0000	# 52.63	I*****I				I
0	1.1913	0.00	I				I
0	1.4193	0.00	I				I
0	1.6908	0.00	I				I
5	2.0144	13.16	I*****				I
0	2.3998	0.00	I				I
0	2.8590	0.00	I				I
0	3.4060	0.00	I				I
1	4.0577	2.63	I**				I
0	4.8341	0.00	I				I
3	5.7590	7.89	I*****				I
0	6.8609	0.00	I				I
2	8.1737	5.26	I****				I
1	9.7376	2.63	I**				I
0	11.601	0.00	I				I
2	13.820	5.26	I****				I
0	16.465	0.00	I				I
1	19.615	2.63	I**				I
0	23.368	0.00	I				I
0	27.840	0.00	I				I
0	33.166	0.00	I				I
0	39.512	0.00	I				I
0	47.072	0.00	I				I
0	56.079	0.00	I				I
0	66.809	0.00	I				I
1	79.592	2.63	I**				I
0	94.821	0.00	I				I
1	112.96	# 2.63	I**				I
0	134.58	0.00	I				I
0	160.33	0.00	I				I
0	191.00	0.00	I				I
0	227.55	0.00	I				I
0	271.09	0.00	I				I
0	322.96	0.00	I				I
0	384.75	0.00	I				I
0	458.37	0.00	I				I
0	546.08	0.00	I				I
0	650.56	0.00	I				I
0	775.04	0.00	I				I
0	923.33	0.00	I				I
1	1100.0	2.63	I**				I

38

0 5 10 15 20



HISTO:

V264 KASHUTL

RU

File: kashsoil

Field name: CU

LOG = 1 REPVAL = 0.00100

38 SAMPLES WITH CU

MINIMUM: 7.00000

MAXIMUM: 460.000

38 VALUES PLOTTED:

0 NOT IN RANGE 7.00000

to 460.000

GEOMETRIC MEAN:

56.1210

DISPERSION: 20.0783

156.865

SCALE OF HISTOGRAM IS

0.10 COUNTS /PRINT POSITION

# = 5,50,95%

N	MIDPOINT	PERCENT	0	1	2	3	4
1	7.0000	2.63	I*****				I
0	7.7721	0.00	I				I
0	8.6294	0.00	I				I
0	9.5813	0.00	I				I
1	10.638	# 2.63	I*****				I
1	11.812	2.63	I*****				I
0	13.114	0.00	I				I
0	14.561	0.00	I				I
3	16.167	7.89	I*****				I
0	17.950	0.00	I				I
1	19.930	2.63	I*****				I
0	22.129	0.00	I				I
3	24.569	7.89	I*****				I
1	27.280	2.63	I*****				I
2	30.289	5.26	I*****				I
2	33.630	5.26	I*****				I
1	37.339	2.63	I*****				I
0	41.458	0.00	I				I
0	46.030	0.00	I				I
0	51.108	0.00	I				I
2	56.745	5.26	I*****				I
1	63.004	2.63	I*****				I
3	69.954	# 7.89	I*****				I
2	77.670	5.26	I*****				I
3	86.237	7.89	I*****				I
2	95.749	5.26	I*****				I
1	106.31	2.63	I*****				I
1	118.04	2.63	I*****				I
1	131.06	2.63	I*****				I
0	145.51	0.00	I				I
0	161.56	0.00	I				I
0	179.38	0.00	I				I
0	199.17	0.00	I				I
2	221.14	5.26	I*****				I
1	245.53	2.63	I*****				I
1	272.62	2.63	I*****				I
0	302.69	0.00	I				I
0	336.07	0.00	I				I
1	373.14	# 2.63	I*****				I
0	414.30	0.00	I				I
1	460.00	2.63	I*****				I

38

0 1 2 3 4

HISTO:

V264 KASHUTL

RU

File: kashsoil

Field name: PB

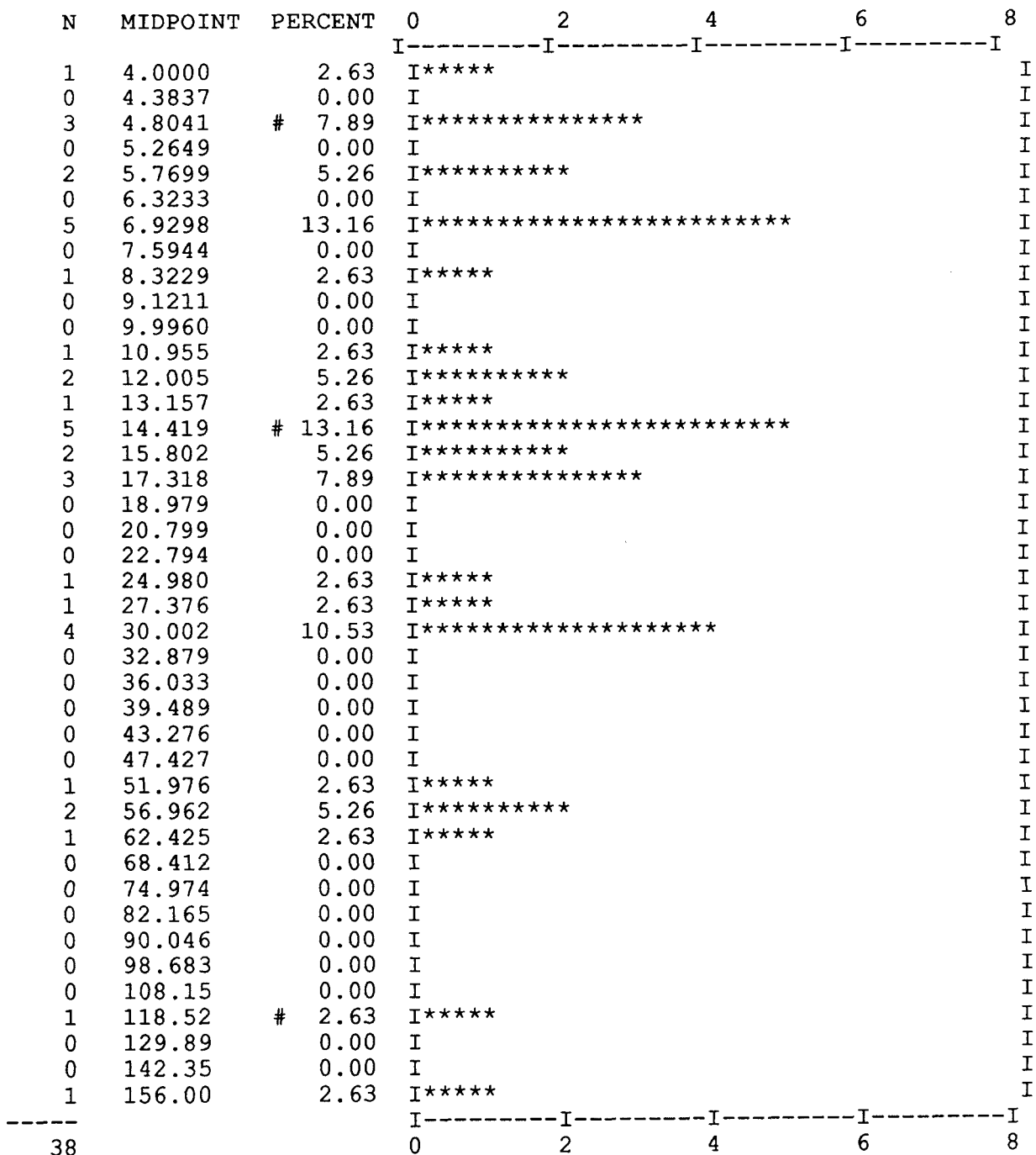
LOG = 1 REPVAL = 0.00100

38 SAMPLES WITH PB MINIMUM: 4.00000 MAXIMUM: 156.000

38 VALUES PLOTTED: 0 NOT IN RANGE 4.00000 to 156.000

GEOMETRIC MEAN: 15.8877 DISPERSION: 6.48316 38.9348

SCALE OF HISTOGRAM IS 0.20 COUNTS /PRINT POSITION # = 5,50,95%



HISTO:

V264 KASHUTL

RU

File: kashsoil

Field name: ZN

LOG = 1 REPVAL = 0.0010C

38 SAMPLES WITH ZN MINIMUM: 36.0000 MAXIMUM: 1150.00

38 VALUES PLOTTED: 0 NOT IN RANGE 36.0000 to 1150.00

GEOMETRIC MEAN: 86.5714 DISPERSION: 42.5266 176.233

SCALE OF HISTOGRAM IS 0.20 COUNTS /PRINT POSITION # = 5,50,95%

N	MIDPOINT	PERCENT	0	2	4	6	8
3	36.000	# 7.89	I*****				I
1	39.257	2.63	I*****				I
1	42.808	2.63	I*****				I
1	46.680	2.63	I*****				I
3	50.903	7.89	I*****				I
0	55.508	0.00	I				I
5	60.529	13.16	I*****				I
2	66.004	5.26	I*****				I
2	71.975	5.26	I*****				I
2	78.486	# 5.26	I*****				I
6	85.586	15.79	I*****				I
2	93.328	5.26	I*****				I
1	101.77	2.63	I*****				I
1	110.98	2.63	I*****				I
1	121.02	2.63	I*****				I
1	131.96	2.63	I*****				I
0	143.90	0.00	I				I
0	156.92	0.00	I				I
1	171.11	2.63	I*****				I
1	186.59	2.63	I*****				I
1	203.47	2.63	I*****				I
0	221.88	0.00	I				I
0	241.95	0.00	I				I
0	263.83	0.00	I				I
1	287.70	2.63	I*****				I
0	313.73	0.00	I				I
0	342.11	0.00	I				I
0	373.05	0.00	I				I
0	406.80	0.00	I				I
0	443.60	0.00	I				I
1	483.73	# 2.63	I*****				I
0	527.48	0.00	I				I
0	575.20	0.00	I				I
0	627.23	0.00	I				I
0	683.97	0.00	I				I
0	745.84	0.00	I				I
0	813.31	0.00	I				I
0	886.89	0.00	I				I
0	967.11	0.00	I				I
0	1054.6	0.00	I				I
1	1150.0	2.63	I*****				I

38

0 2 4 6 8

PRBPLT:

V264 KASHUTL

F

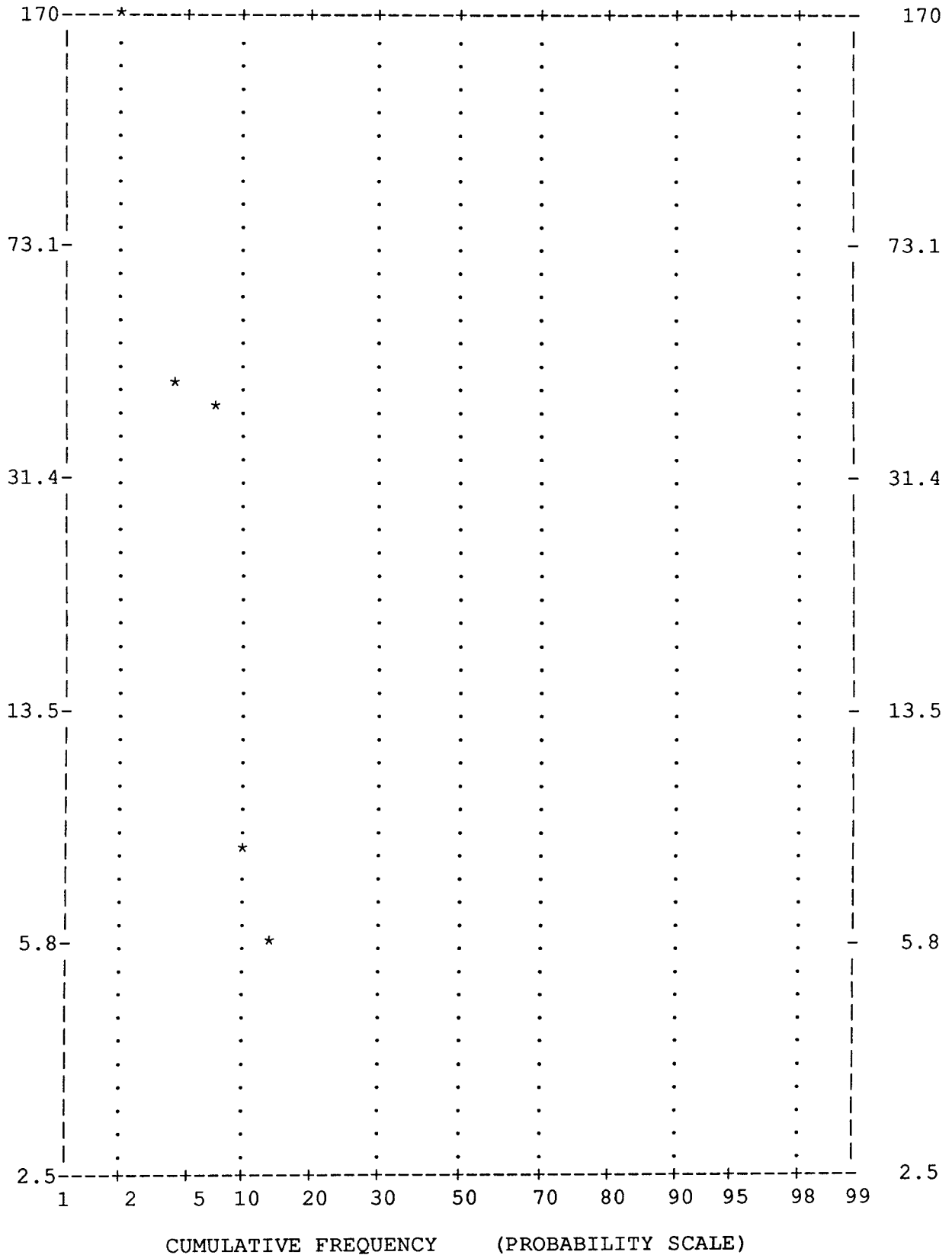
file: kashsoil

Field name: AU1

LOG =1

REPVAL = 0.0010C

MIN = 2.5000      MAX = 170.00      MEAN = 8.9342      STD DEV = 27.983  
 NUMBER OF DATA PLOTTED = 38    ( 0 NULLS    0 < YMIN    0 > YMAX)



PRBPLT:

V264 KASHUTL

F

file: kashsoil

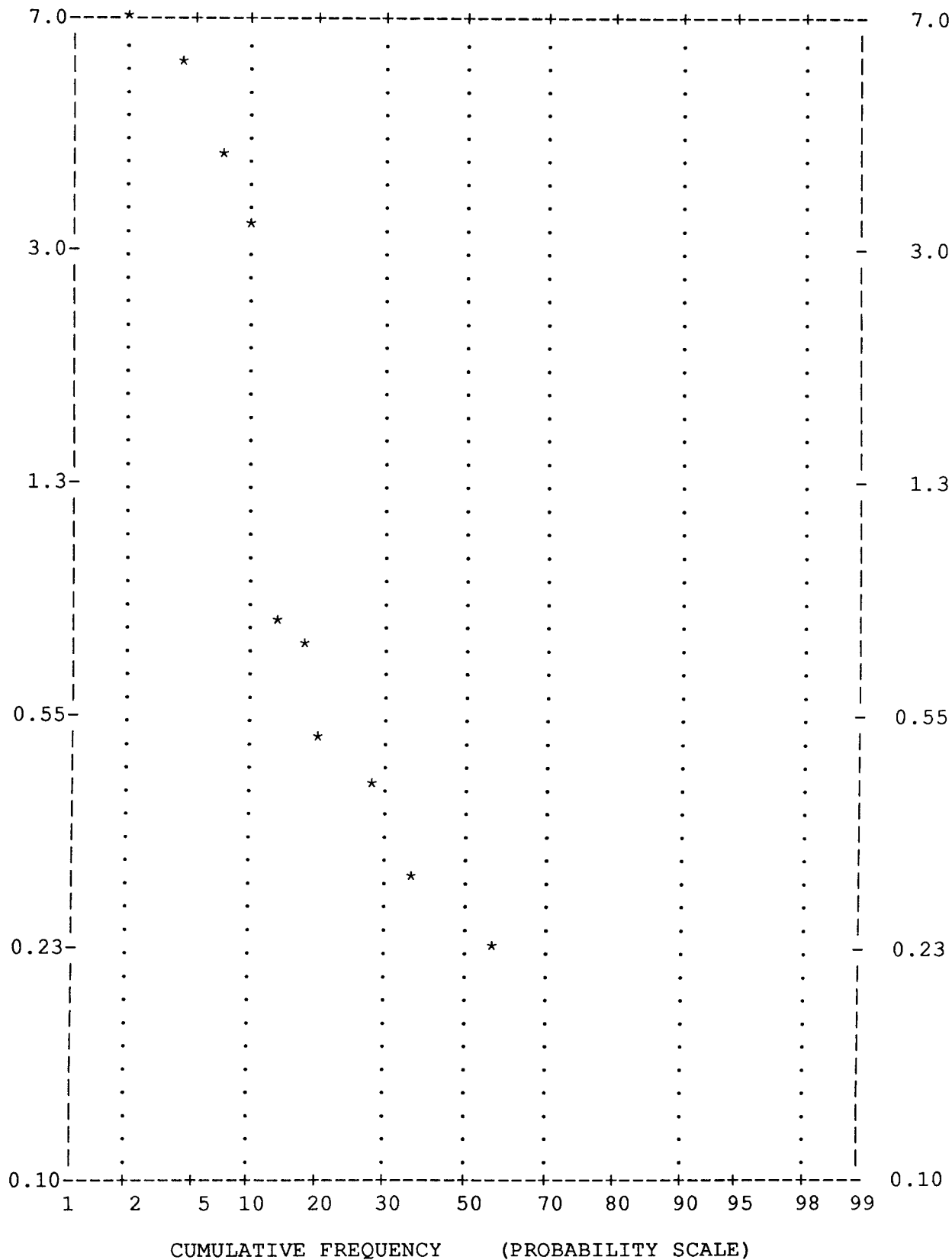
Field name: AG

LOG =1

REPVAL =

0.0010C

MIN = .10000      MAX = 7.0000      MEAN = .70526      STD DEV = 1.5042  
 NUMBER OF DATA PLOTTED = 38    ( 0 NULLS      0 < YMIN      0 > YMAX)



PRBPLT:

V264 KASHUTL

F

file: kashsoil

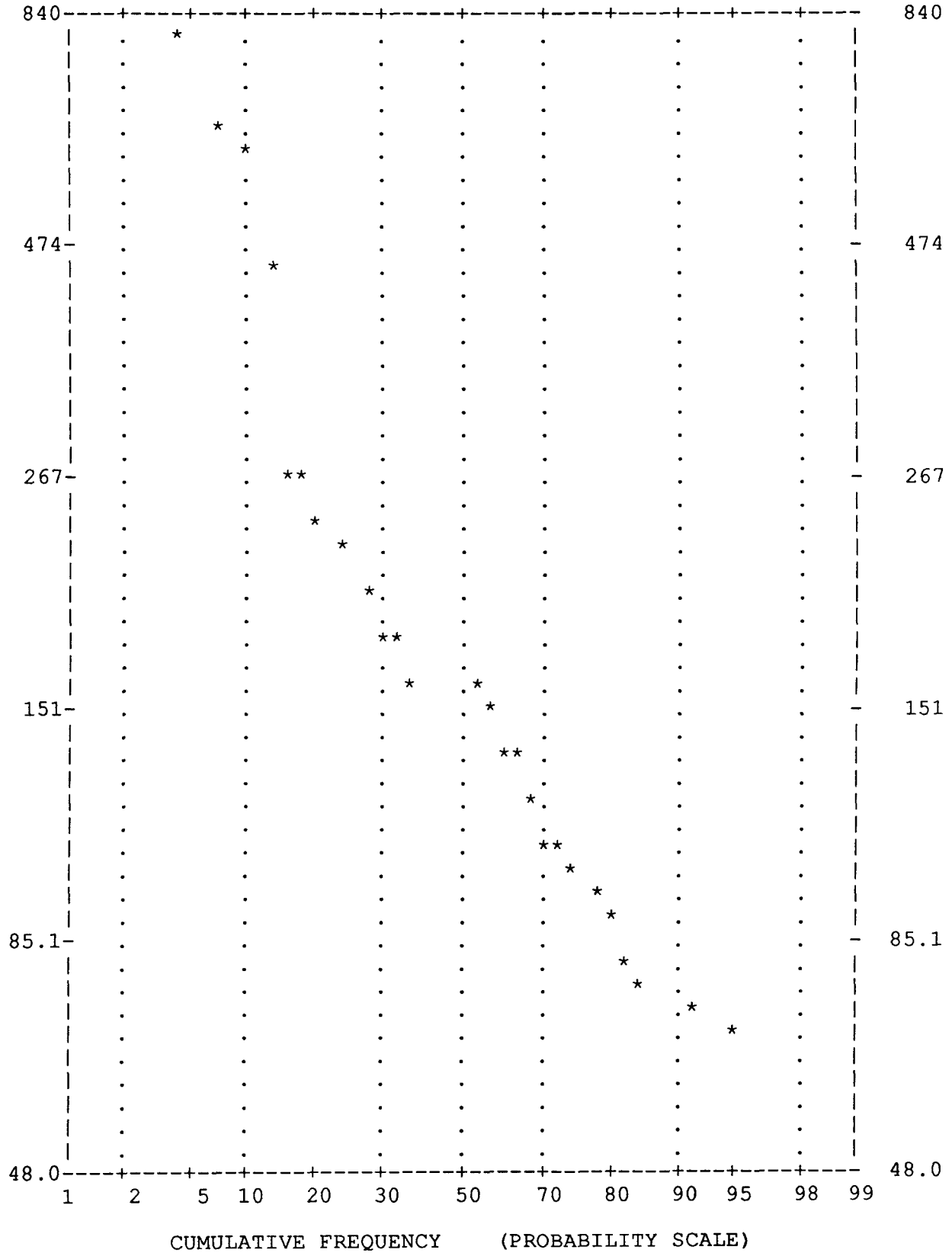
Field name: HG

LOG =1

REPVAL = 0.00100

----

MIN = 48.000      MAX = 840.00      MEAN = 199.63      STD DEV = 190.59  
 NUMBER OF DATA PLOTTED = 38    (    0 NULLS      0 < YMIN      0 > YMAX)



PRBPLT:

V264 KASHUTL

F

file: kashsoil

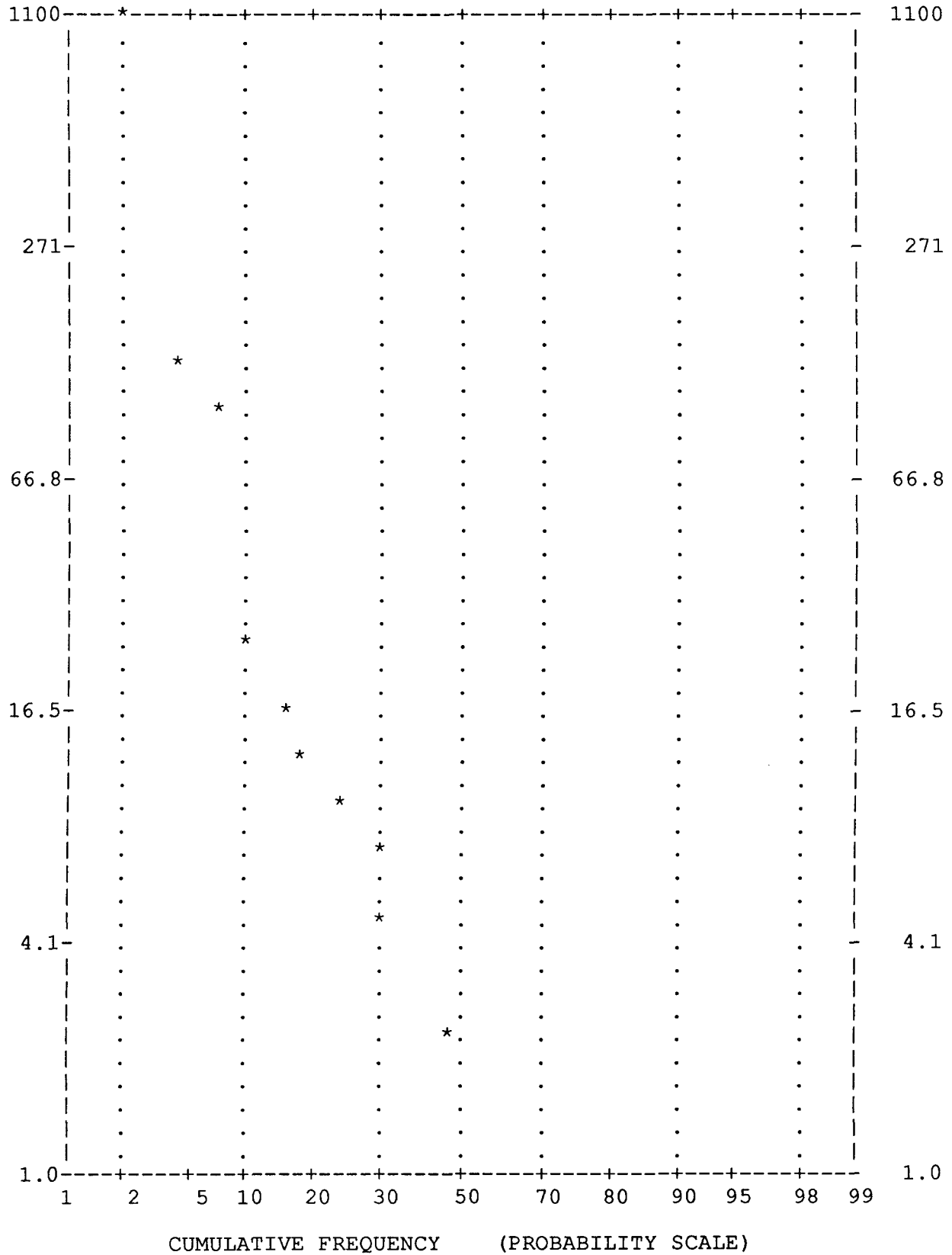
Field name: AS

LOG =1

REPVAL = 0.0010C

----

MIN = 1.0000      MAX = 1100.0      MEAN = 37.526      STD DEV = 178.47  
 NUMBER OF DATA PLOTTED = 38    ( 0 NULLS    0 < YMIN    0 > YMAX)



PRBPLT:

V264 KASHUTL

F

file: kashsoil

Field name: CU

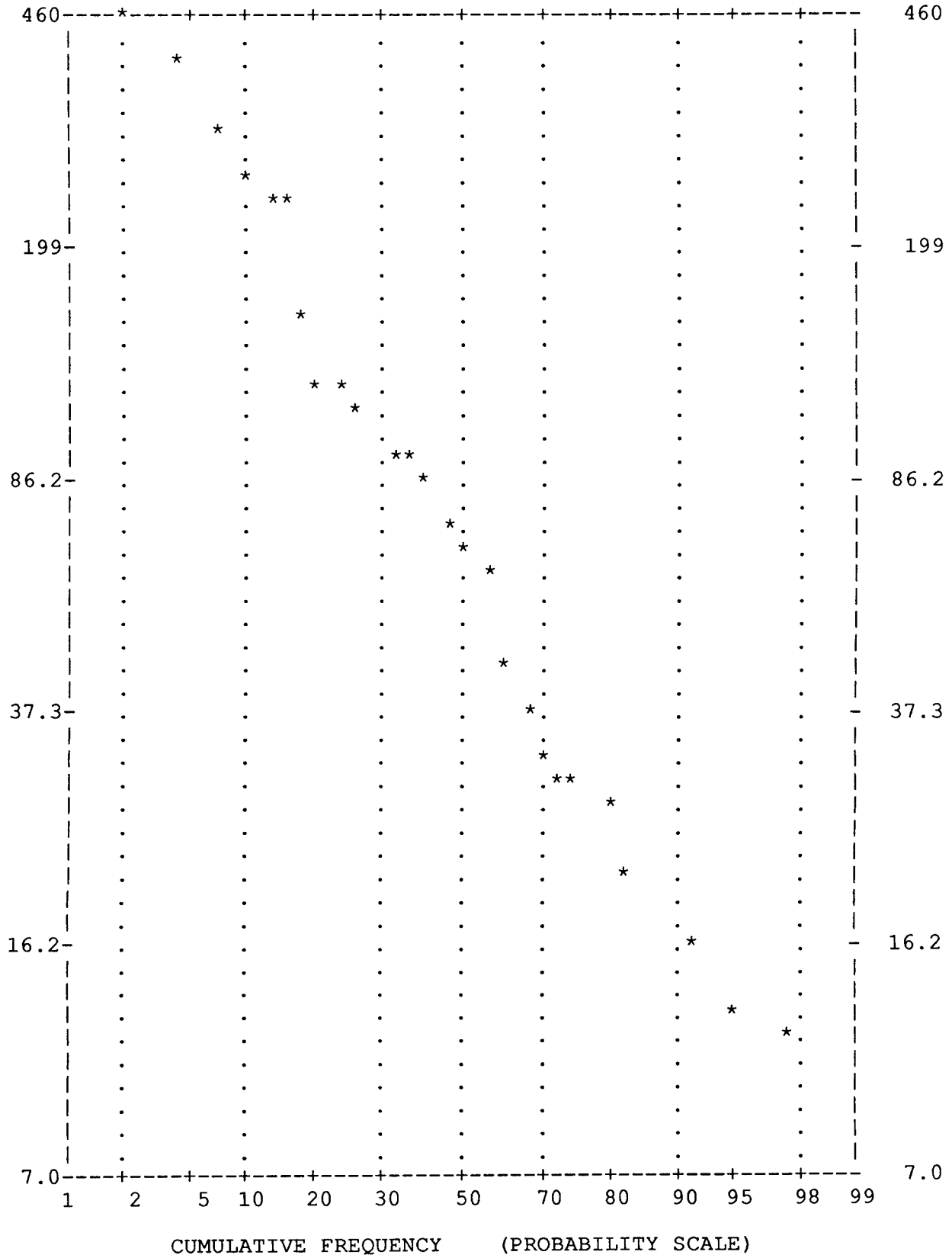
LOG =1

REPVAL =

0.00100

----

MIN = 7.0000      MAX = 460.00      MEAN = 92.921      STD DEV = 104.12  
 NUMBER OF DATA PLOTTED = 38    (    0 NULLS      0 < YMIN      0 > YMAX)





file: kashsoil

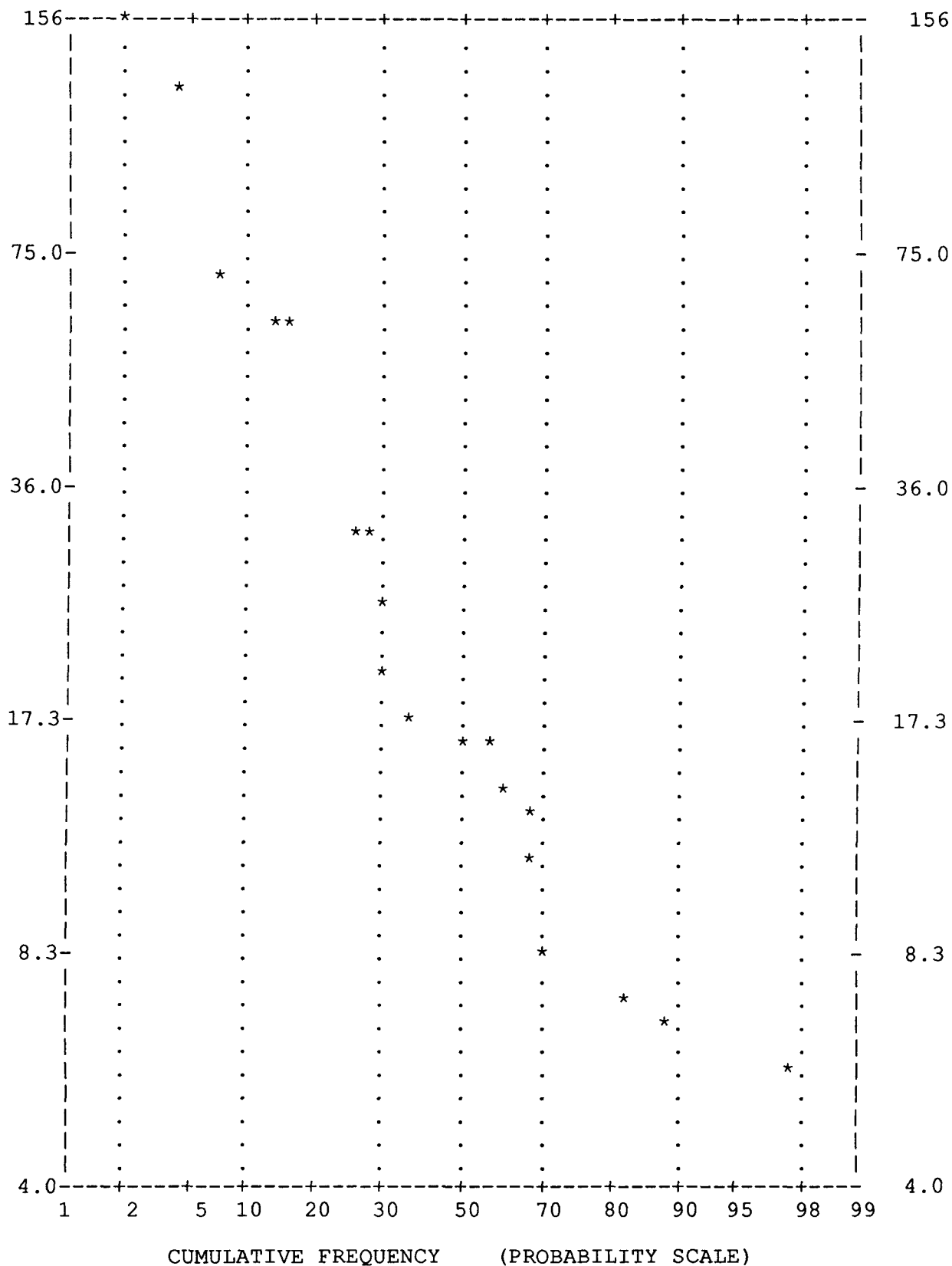
Field name: PB

LOG =1

REPVAL =

0.00100

MIN = 4.0000      MAX = 156.00      MEAN = 24.947      STD DEV = 30.804  
 NUMBER OF DATA PLOTTED = 38    ( 0 NULLS    0 < YMIN    0 > YMAX)



PRBPLT:

V264 KASHUTL

F

file: kashsoil

Field name: ZN

LOG =1

REPVAL =

0.0010C

MIN = 36.000

MAX = 1150.0

MEAN = 126.08

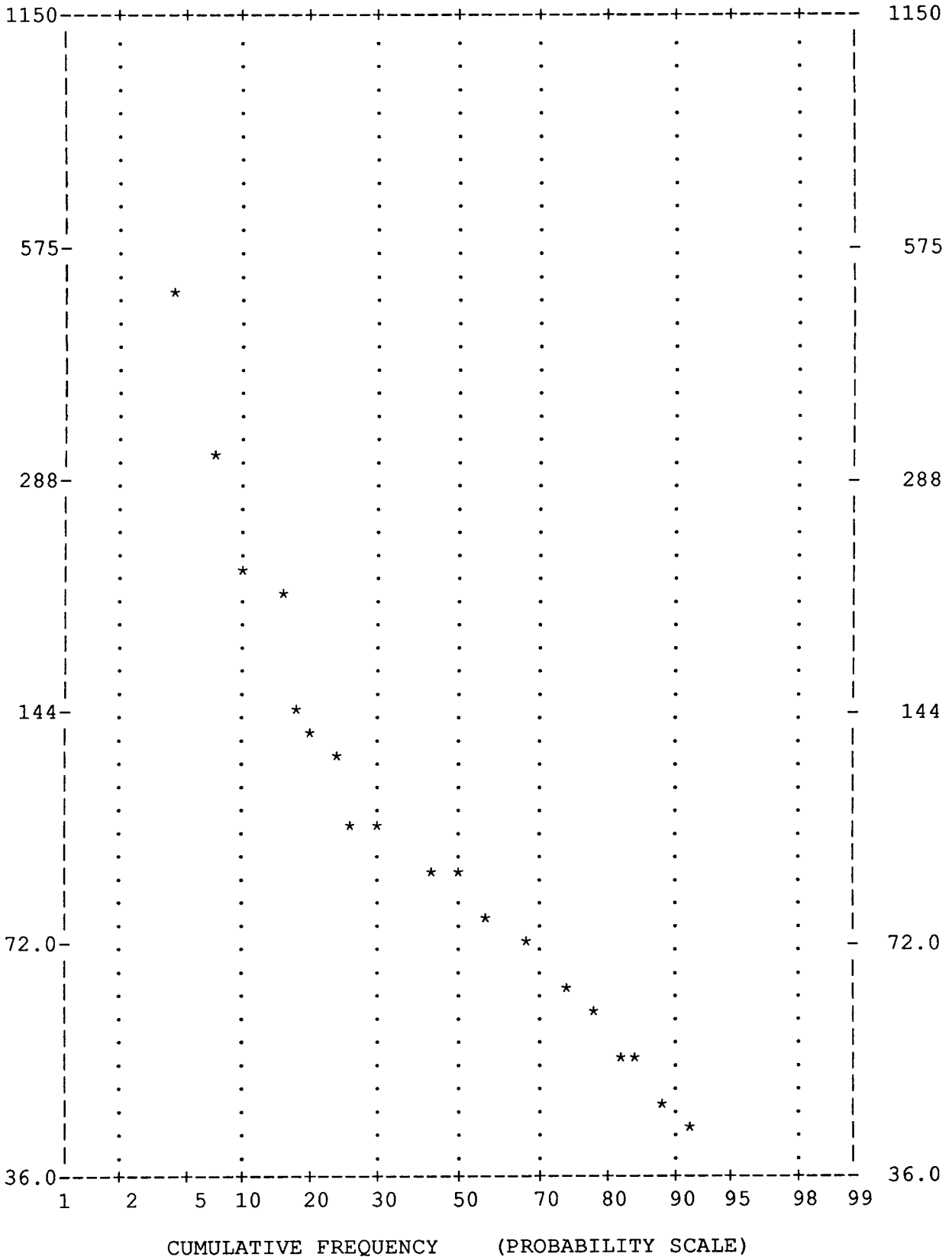
STD DEV = 189.98

NUMBER OF DATA PLOTTED = 38

( 0 NULLS

0 < YMIN

0 > YMAX)



**APPENDIX V**  
**STATEMENT OF QUALIFICATIONS**

**STATEMENT OF QUALIFICATIONS**

I, Dale A. Sketchley, hereby certify that:

1. I am a graduate of The University of British Columbia in Honours Geology-Geophysics (B.Sc. 1975) and Geology (M.Sc. 1986);
2. I have practised within the geological profession for the past eighteen years;
3. I am a member of the Canadian Institute of Mining and Metallurgy and a Fellow of the Geological Association of Canada;
4. The opinions, conclusions and recommendations contained herein are based on field work supervised and conducted by me on the Kashutl property during July, 1990.



Dale A. Sketchley

Vancouver, B.C.  
November 9, 1990

**APPENDIX VI**  
**STATEMENT OF EXPENDITURES**

**STATEMENT OF EXPENDITURES**  
**Kashutl Property**  
**(August 14, 1989 to August 13, 1990)**

**Personnel (field)**

D. Sketchey	- 10 days @ 371.25	3,712.50
J. Taylor	- 10 days @ 167.72	1,677.20
J. Baril	- 11 days @ 249.04	2,739.44

**Personnel (office)**

D. Sketchley	- 10 days @ 303.75	3,037.50
--------------	--------------------	----------

**Transportation**

Airfare	- 1/2 trip @ 307.60 (Vancouver/Port Hardy)	153.80
Helicopter	- 2 hours @ 681.00 (Port McNeil/Kashutl Inlet)	1,362.00
Vehicle	- 10 days @ 70.00	700.00
Ferry	- 2 trips @ 26.50 (Horseshoe Bay/Nanaimo)	53.00
Barge	- 2.5 hours @ 250.00 (Fair Harbour/Chamiss Bay)	625.00

**Room and Board**

Interfor Logging Camp	- 24 man-days @ 45.00	1,080.00
Miscellaneous Motel/Restaurant	-	211.15

**Analytical Costs**

65 rock samples @ 19.75 (Au, Ag, As, Hg, Sb, Cu, Mo, Pb, Zn)	1,283.75
37 soil samples @ 17.40 (Au, Ag, As, Hg, Sb, Cu, Mo, Pb, Zn)	643.80

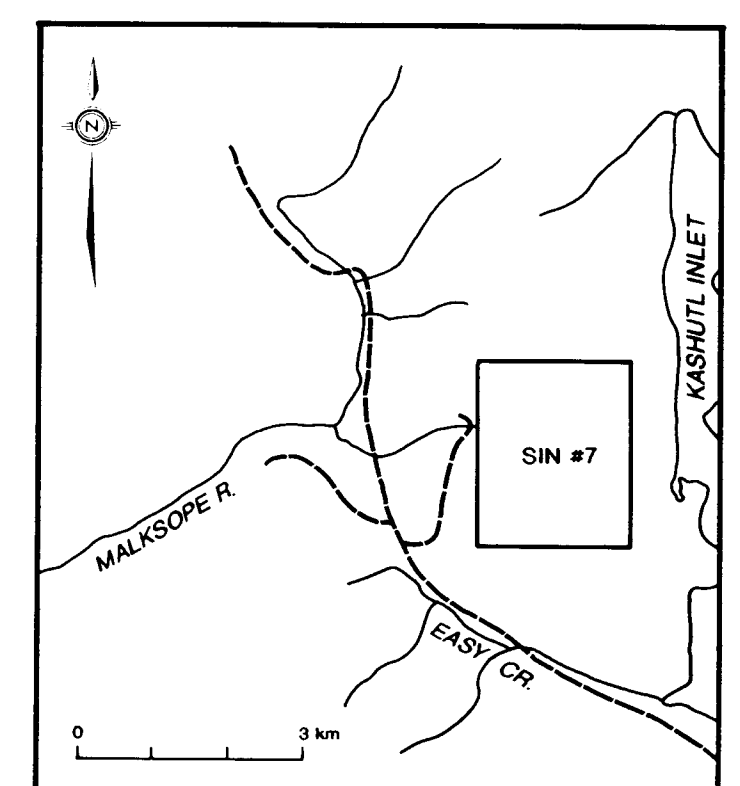
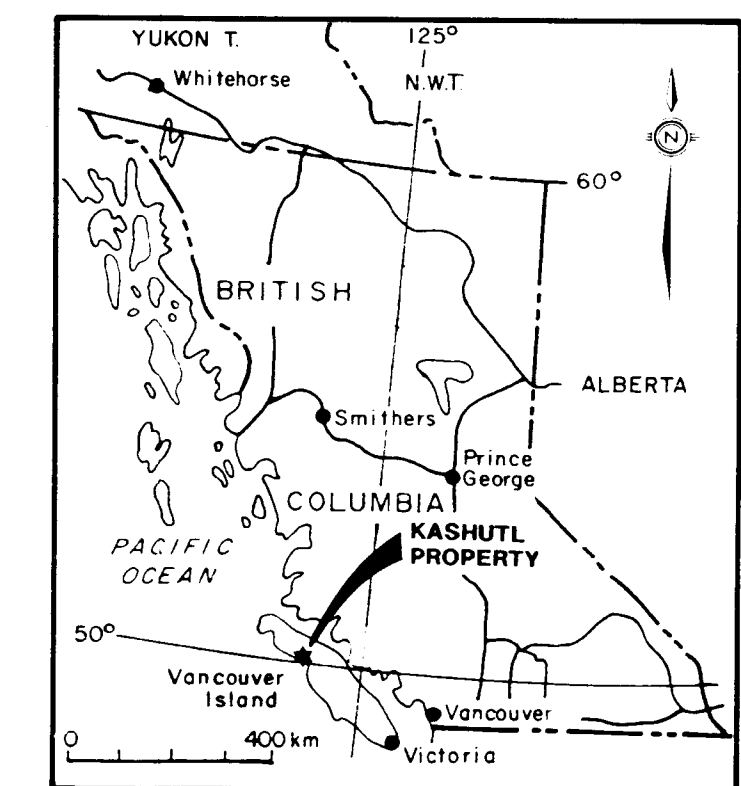
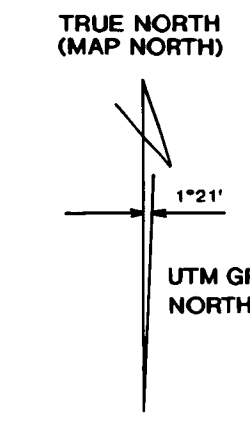
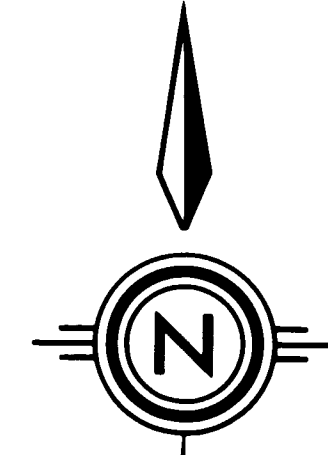
<b>Field and Office Supplies</b>	<b>500.00</b>
----------------------------------	---------------

<b>Drafting/Reproduction/Report Preparation on</b>	<b>3,000.00</b>
--	-----------------

<b>Total</b>	<b><u>\$20,779.14</u></b>
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127°21'

127°20'45"



LOCATION MAP

CLAIM MAP

GEOLOGICAL BRANCH ASSESSMENT REPORT

LEGEND 20,495

ROCK UNITS

JURASSIC BONANZA GROUP

- 7 RHYODACITIC SUBVOLCANIC INTRUSIONS
- 6 GREEN TO MAROON BASALTIC ANDESITE TO RHYODACITE FLOWS, BRECCIAS AND TUFFS; MINOR CLASTIC SEDIMENTARY ROCKS

UPPER TRIASSIC QUATSINO AND PARSON BAY FORMATIONS

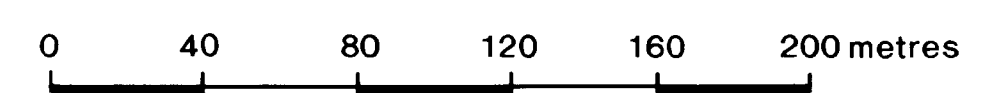
- 5 BLACK LIMESTONE
- 4 GREY LIMESTONE
- 3 CONGLOMERATE WITH GREEN TO MAROON VOLCANIC AND GREY LIMESTONE COBBLES
- 2 ARGILLITE

TRIASSIC KARMUTSEN FORMATION

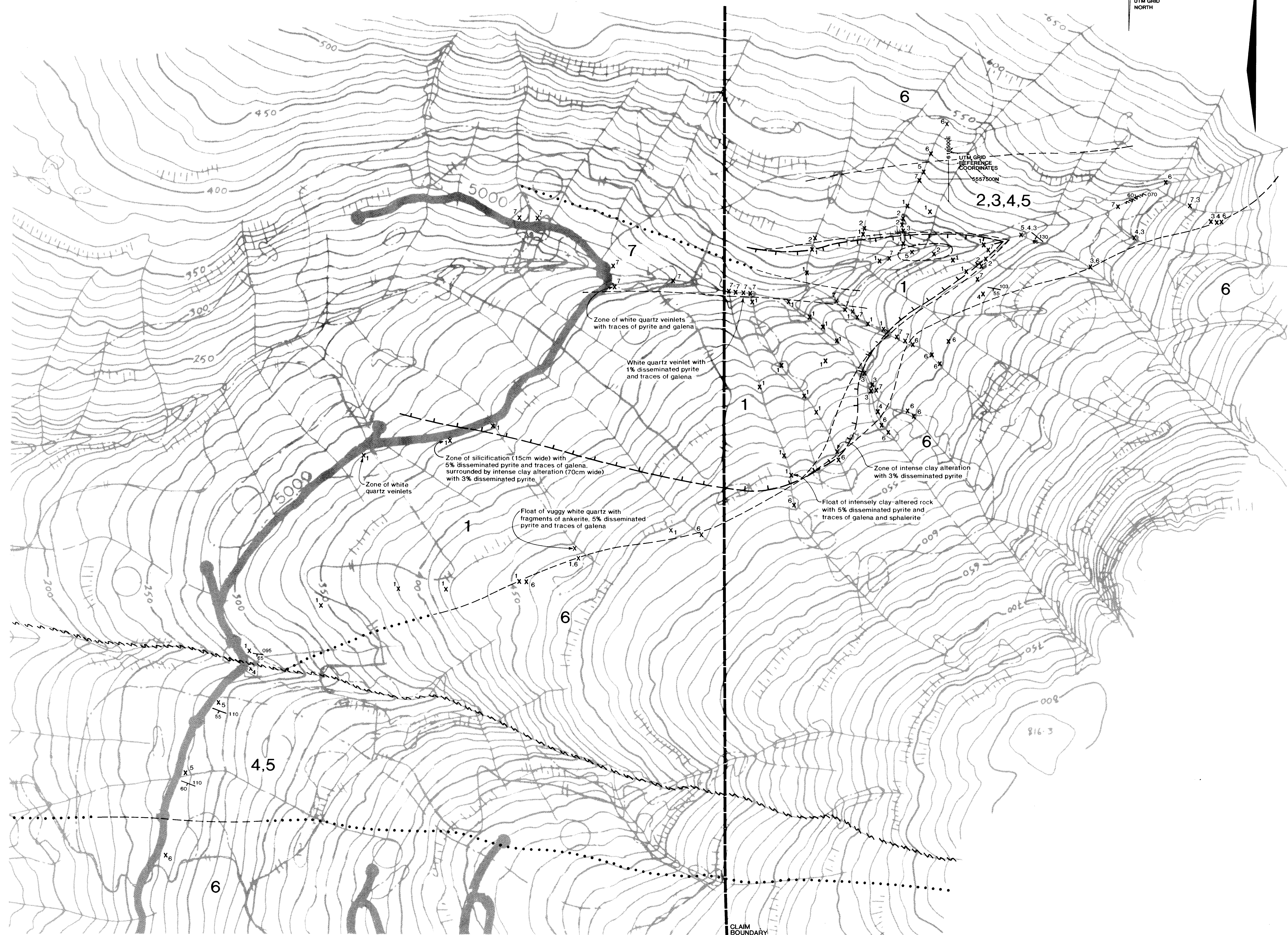
- 1 GREEN BASALT TO ANDESITE FLOWS; MINOR TUFFS AND BRECCIAS

MAP SYMBOLS

- x OUTCROP WITH OBSERVATION POINT
- .-.- CONTACT - OBSERVED, APPROXIMATE, PROJECTED
- - - - - LIMIT OF HYDROTHERMAL ALTERATION - VARIABLE PYRITIZATION AND CLAY-ALTERATION; MINOR LOCALIZED SILICIFICATION AND QUARTZ VEINING
- - - - - BEDDING, FLOW-BANDING
- - - - - FAULT - OBSERVED, INFERRED



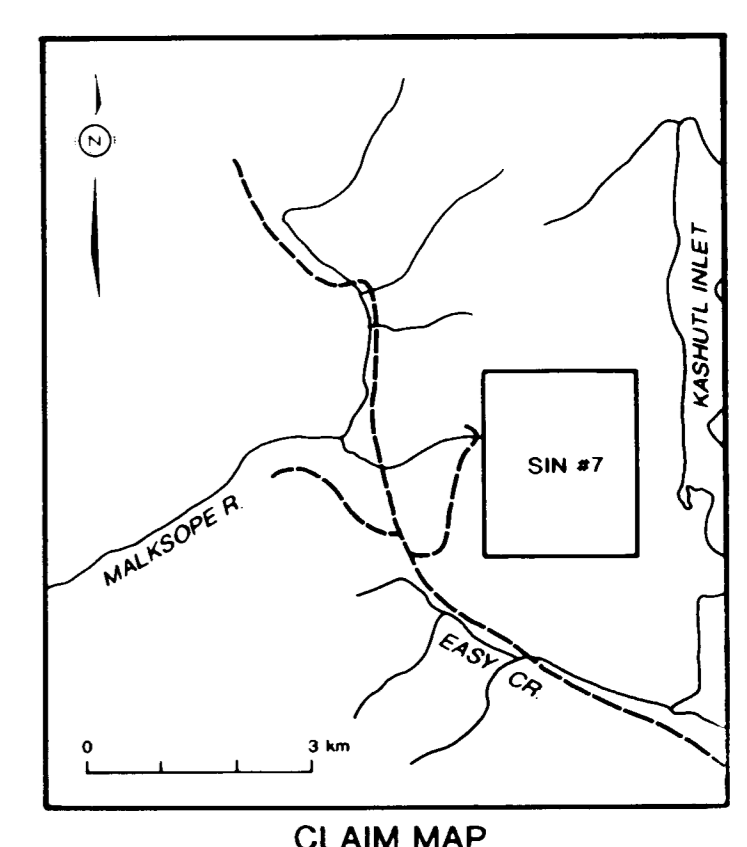
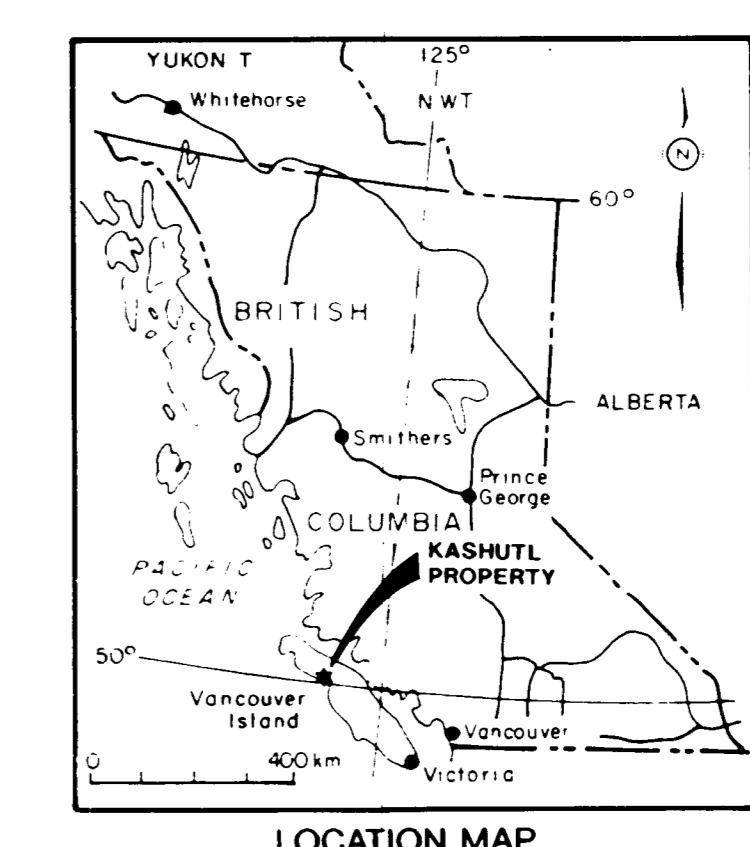
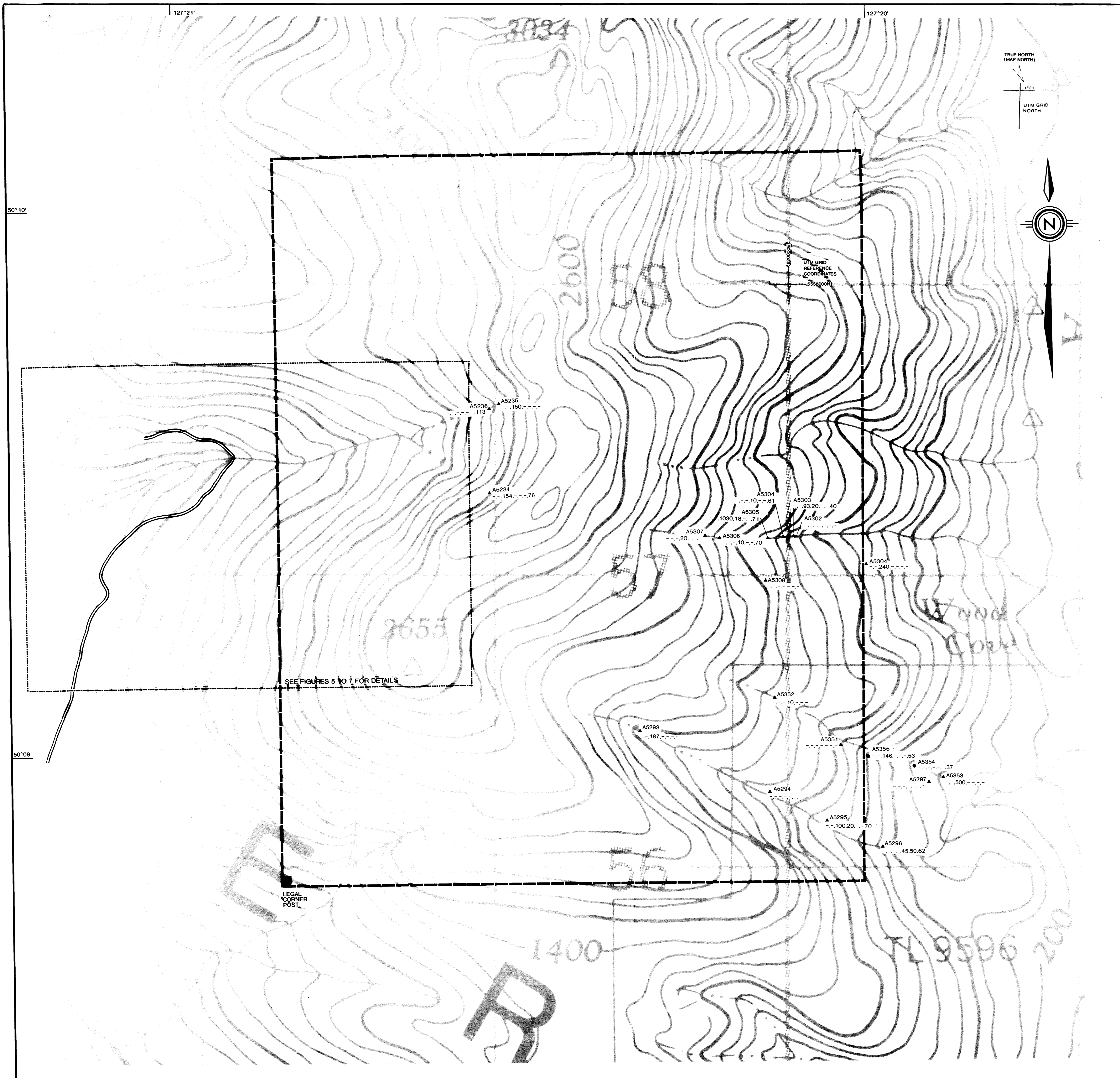
SCALE 1:2000



50°09'30"

50°09'15"

**PLACER DOME INC.**  
**KASHUTL PROPERTY**  
**C EXTENSION ZONE**  
**GEOLOGY**



**GEOLOGICAL BRANCH  
ASSESSMENT REPORT**

# 20,495

**LEGEND**

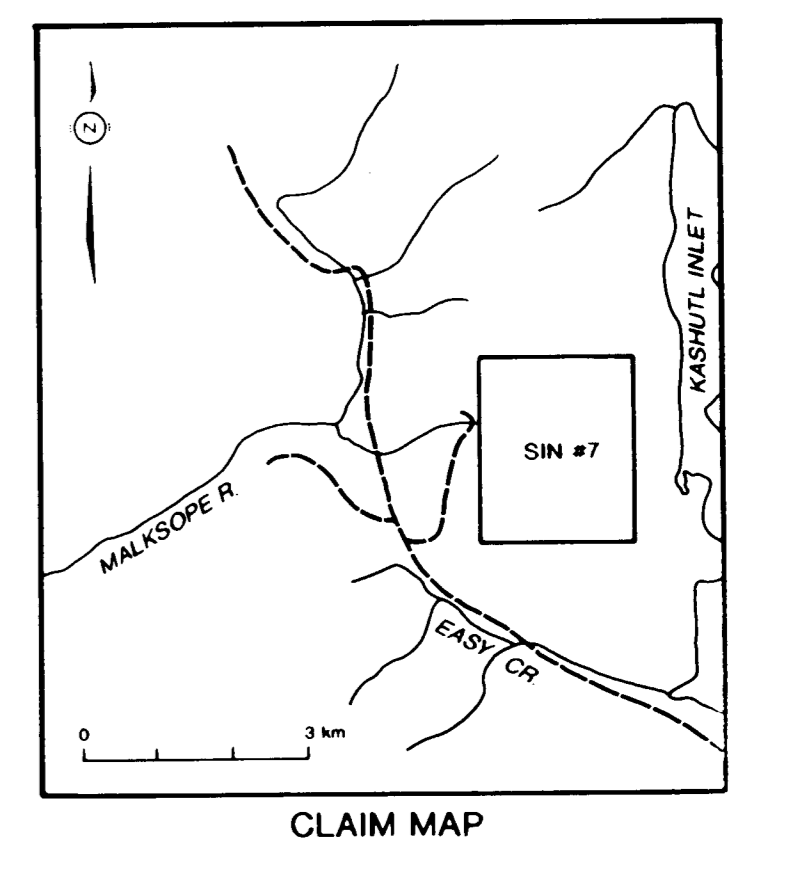
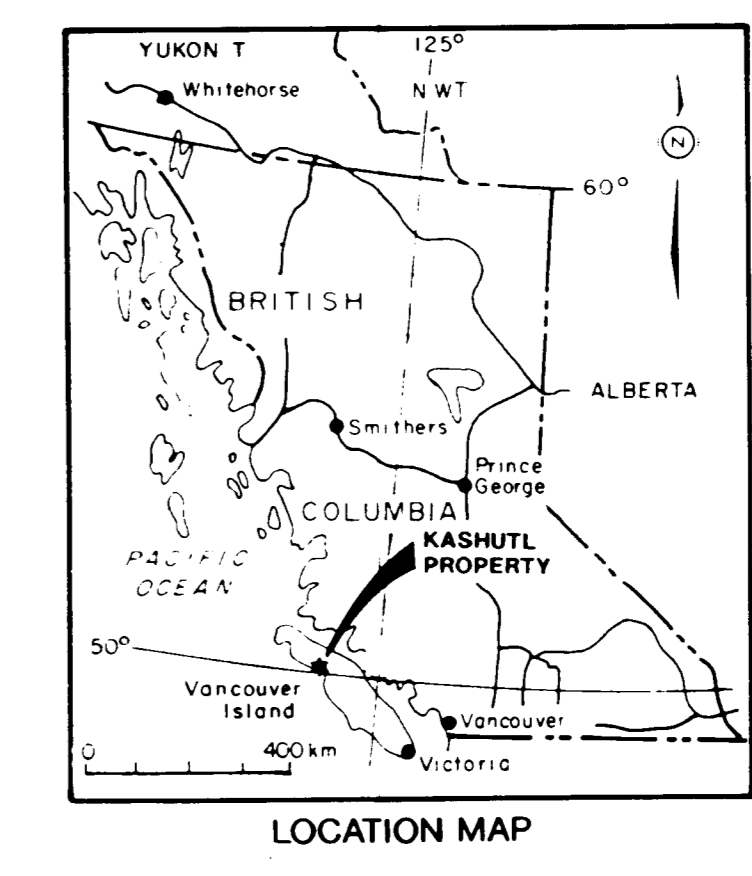
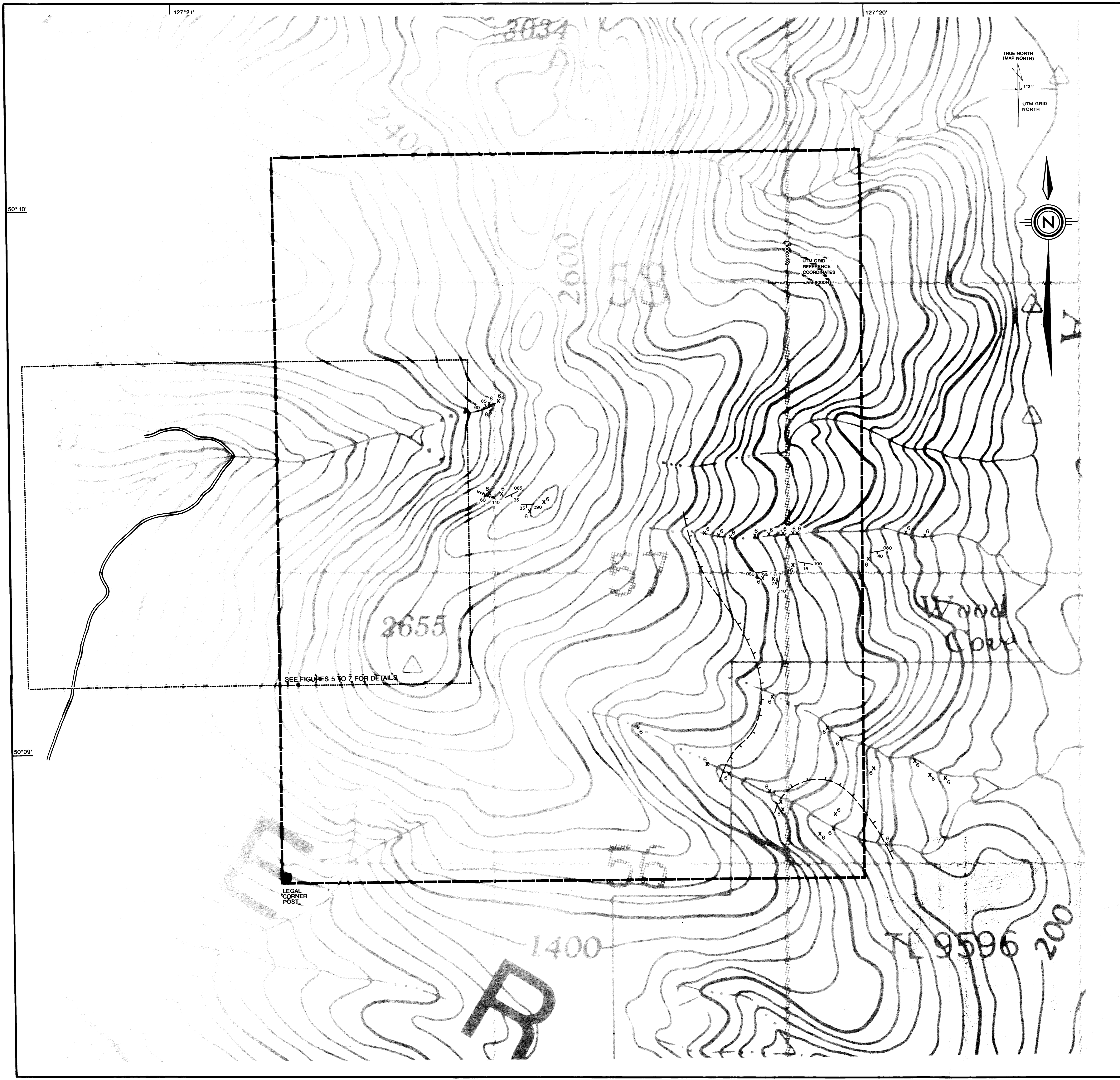
- ▲ A5235 **ROCK SAMPLE LOCATION AND IDENTIFICATION**  
Au ≥15 ppb, Ag ≥0.5 ppm, Hg ≥85 ppb, As ≥10 ppm, Cu ≥35 ppm, Pb ≥25 ppm, Zn ≥35 ppm
- A5355 **SOIL SAMPLE LOCATION AND IDENTIFICATION**  
Au ≥15 ppb, Ag ≥0.5 ppm, Hg ≥85 ppb, As ≥10 ppm, Cu ≥35 ppm, Pb ≥25 ppm, Zn ≥35 ppm



SCALE 1 : 5000

<b>PLACER DOME INC.</b>			
<b>KASHUTL PROPERTY</b>			
<b>ROCK AND SAMPLE LOCATIONS</b>			
<b>Au, Ag, Hg, As, Cu, Pb, Zn GEOCHEMISTRY</b>			
<b>(EXCLUDING C EXTENSION ZONE)</b>			
DRAWN BY: DAS	DATE: OCT. 1990	NTS: 92/L3	FIG: 6





**GEOLOGICAL BRANCH  
ASSESSMENT REPORT**

LEGEND  
ROCK UNITS

**20,495**

- JURASSIC BONANZA GROUP**
- 7 RHYODACITIC SUBVOLCANIC INTRUSIONS
  - 6 GREEN TO MAROON BASALTIC ANDESITE TO RHYODACITE FLOWS, BRECCIAS AND TUFFS; MINOR CLASTIC SEDIMENTARY ROCKS
- UPPER TRIASSIC QUATSINO AND PARSON BAY FORMATIONS**
- 5 BLACK LIMESTONE
  - 4 GREY LIMESTONE
  - 3 CONGLOMERATE WITH GREEN TO MAROON VOLCANIC AND GREY LIMESTONE COBBLES
  - 2 ARGILLITE
- TRIASSIC KARMUTSEN FORMATION**
- 1 GREEN BASALT TO ANDESITE FLOWS; MINOR TUFFS AND BRECCIAS

MAP SYMBOLS

- x OUTCROP WITH OBSERVATION POINT
- - - - CONTACT - OBSERVED, APPROXIMATE, PROJECTED
- ~ ~ ~ ~ LIMIT OF HYDROTHERMAL ALTERATION - VARIABLE PYRITIZATION AND CLAY-ALTERATION; MINOR LOCALIZED SILICIFICATION AND QUARTZ VEINING
- ||| BEDDING, FLOW-BANDING
- FAULT - OBSERVED, INFERRED

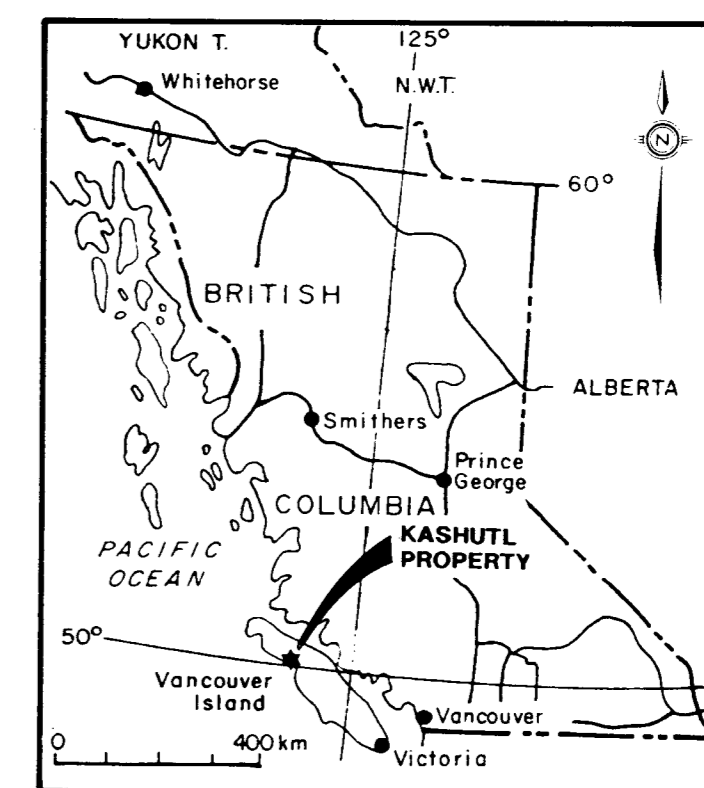
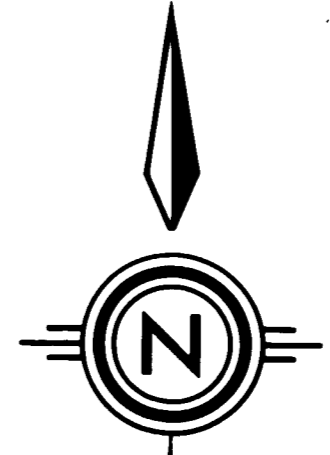
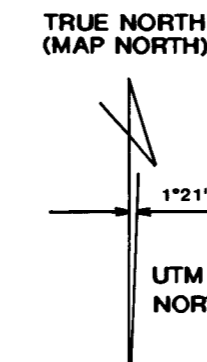
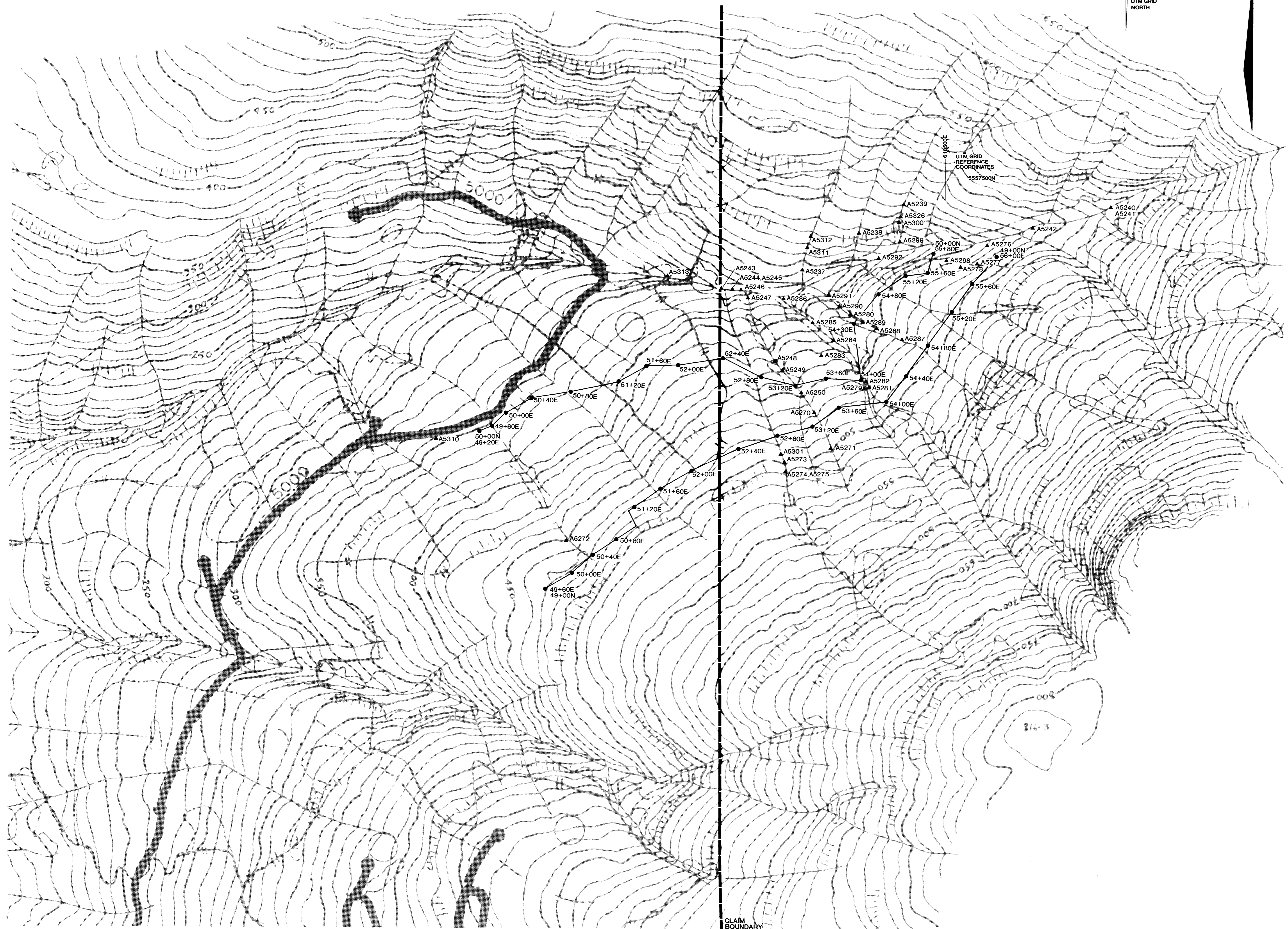


SCALE 1 : 5000

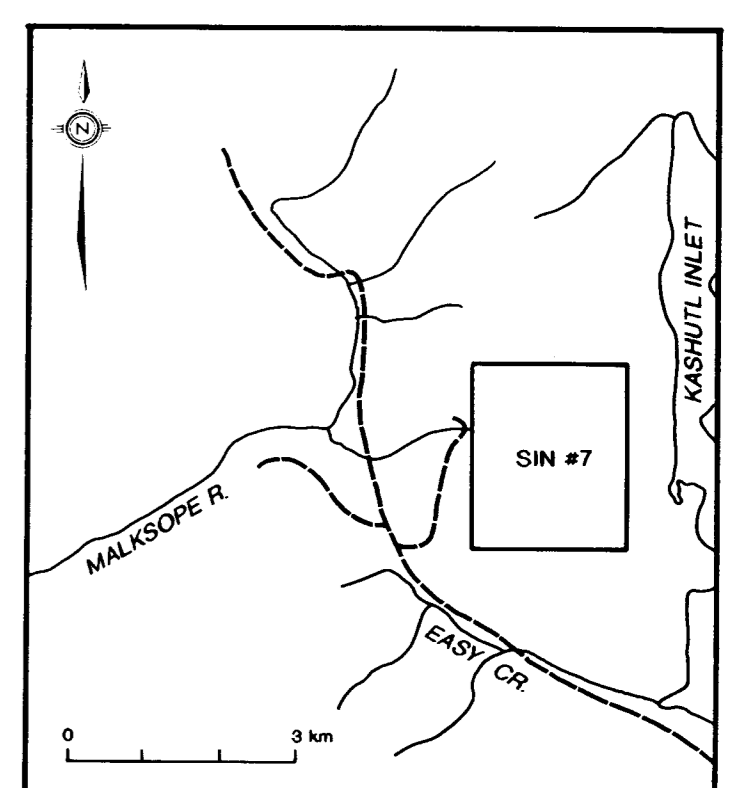
<b>PLACER DOME INC.</b>			
<b>KASHUTL PROPERTY</b>			
<b>GEOLOGY</b> (EXCLUDING C EXTENSION ZONE)			
DRAWN BY: DAS	DATE: OCT. 1990	NTS: 92/L3	FIG: 4

127°21'

127°20'45"



LOCATION MAP

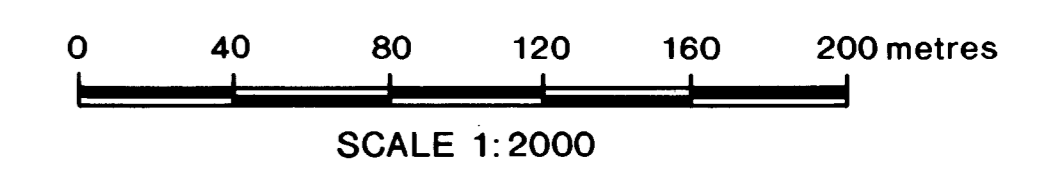


CLAIM MAP

GEOLOGICAL BRANCH  
ASSESSMENT REPORT  
**20,495**

LEGEND

- ▲ A5284 ROCK SAMPLE LOCATION AND IDENTIFICATION
- 49+00N SOIL SAMPLE LOCATION AND IDENTIFICATION
- 53+00E



**PLACER DOME INC.**  
**KASHUTL PROPERTY**  
C EXTENSION ZONE  
SAMPLE LOCATION AND IDENTIFICATION

DRAWN BY: DAS    DATE: OCT. 1990    NTS: 92/L3    FIG: 7

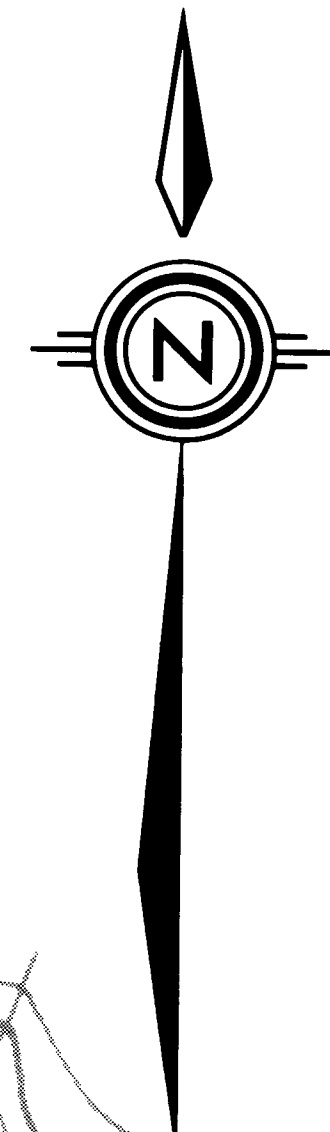
50°09'30"

50°09'15"

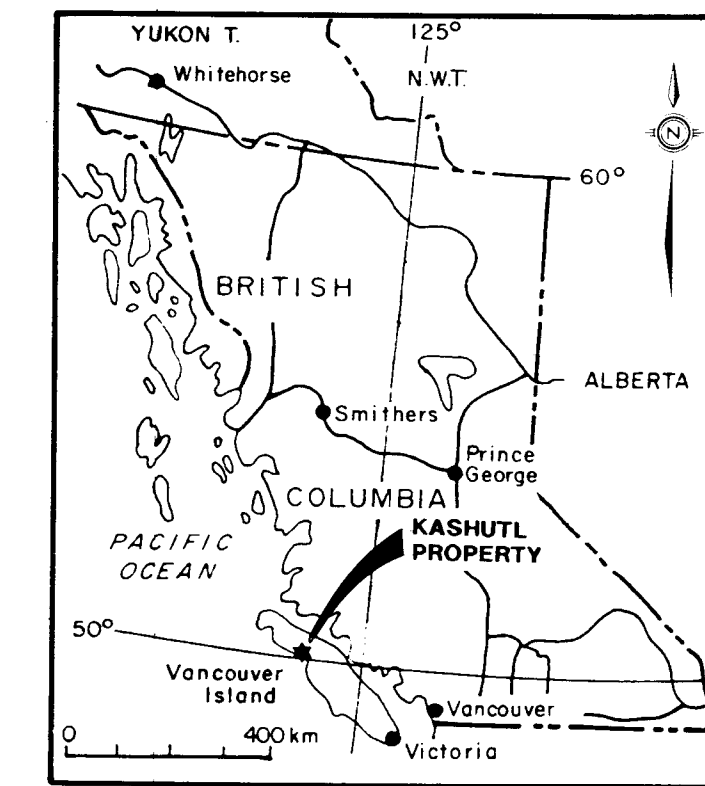
CLAIM BOUNDARY

127°21'

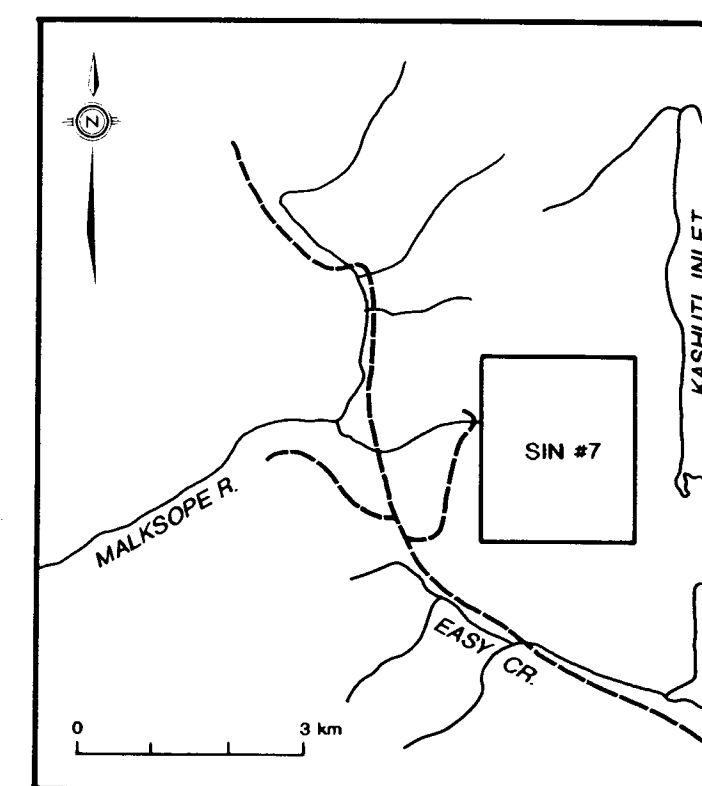
127°20'45"



TRUE NORTH  
(MAP NORTH)  
121'  
UTM GRID  
NORTH



LOCATION MAP



CLAIM MAP

GEOLOGICAL BRANCH  
ASSESSMENT REPORT

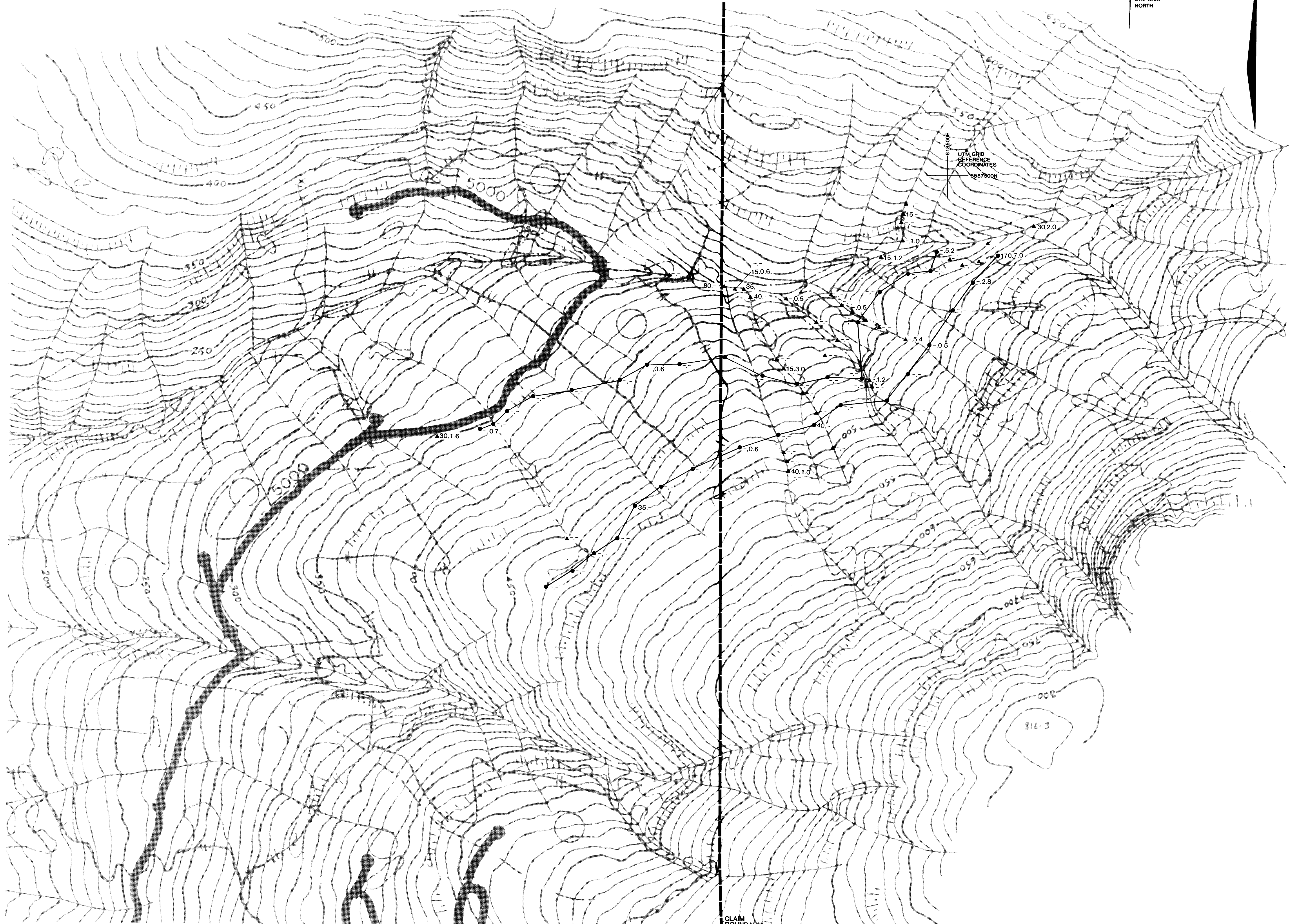
20,495

LEGEND

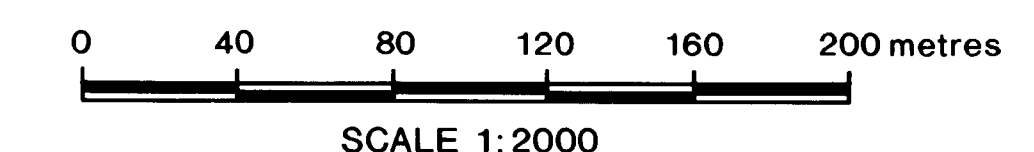
- ▲ 40.10 ROCK SAMPLE LOCATION - Au ≥ 15 ppb Ag ≥ 0.5 ppm
- 170.7.0 SOIL SAMPLE LOCATION - Au ≥ 15 ppb Ag ≥ 0.5 ppm

50°09'30"

50°09'15"



CLAIM BOUNDARY

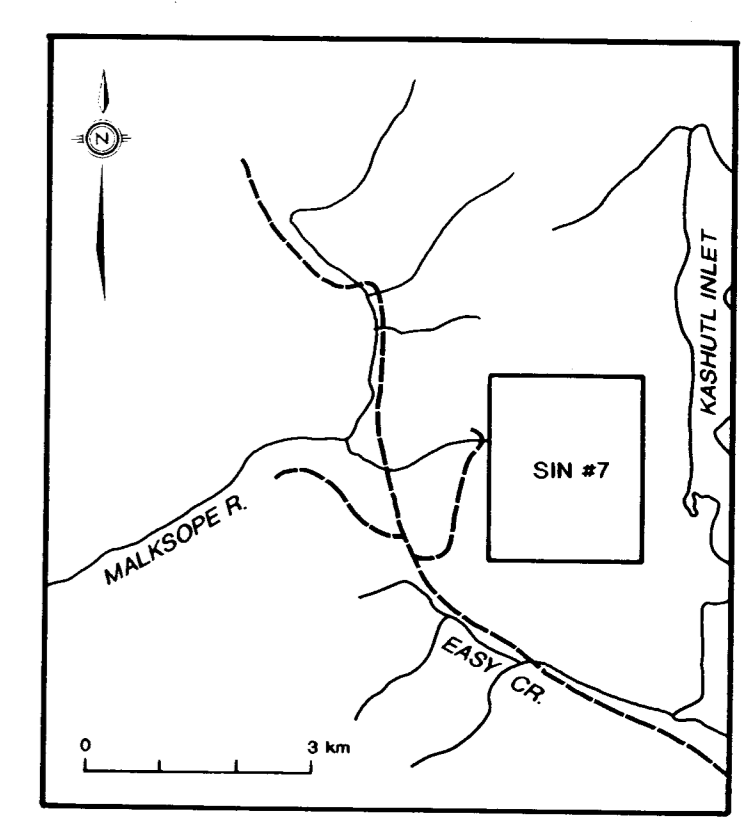
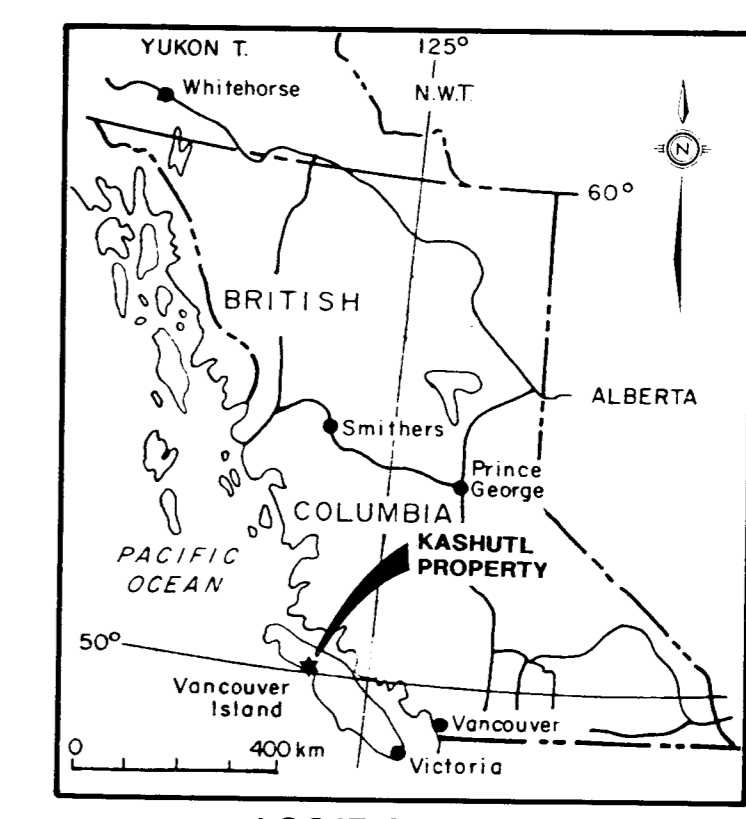
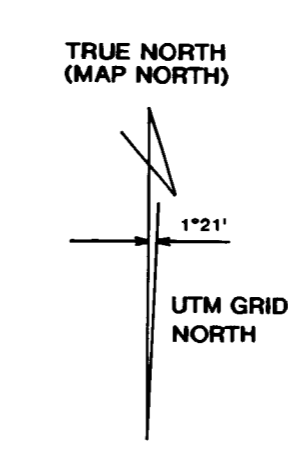
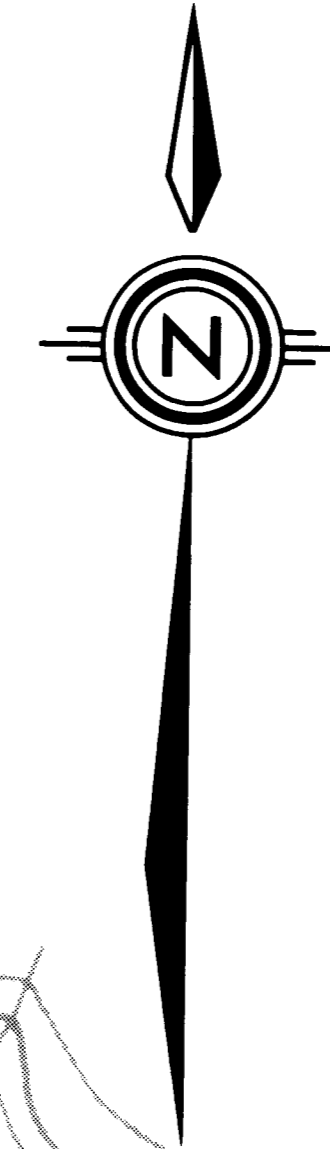


SCALE 1:2000

<b>PLACER DOME INC.</b>			
<b>KASHUTL PROPERTY</b>			
<b>C EXTENSION ZONE</b>			
<b>Au - Ag ROCK AND SOIL GEOCHEMISTRY</b>			
DRAWN BY: DAS	DATE: OCT. 1990	NTS: 92/L3	FIG: 8

127°21'

127°20'45"



LOCATION MAP

CLAIM MAP

GEOLOGICAL BRANCH  
ASSESSMENT REPORT

20,495

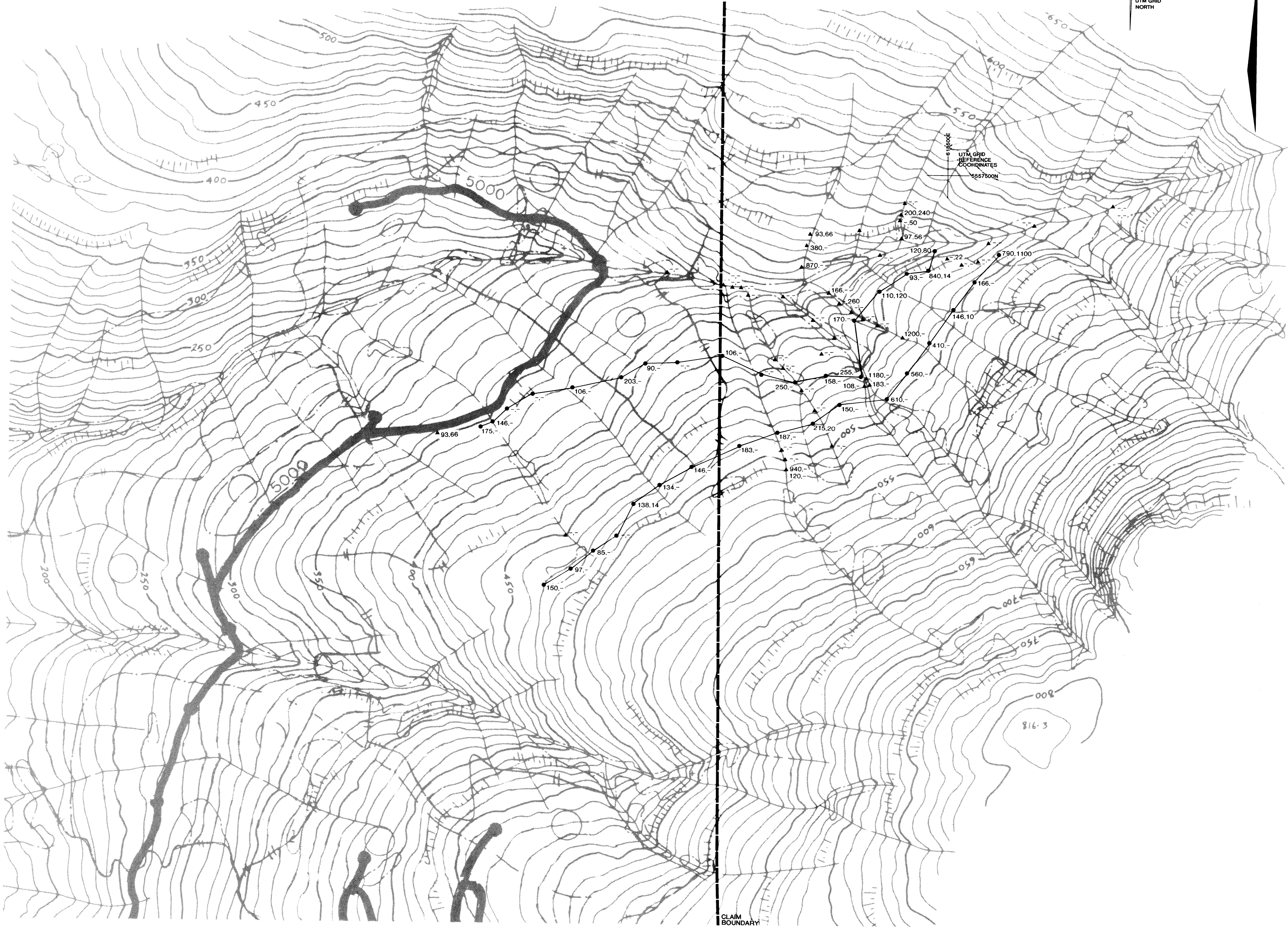
LEGEND

- 200.240 ▲ ROCK SAMPLE LOCATION - Hg 285 ppb, As 210 ppm
- 85.25 ● SOIL SAMPLE LOCATION - Hg 285 ppb, As 210 ppm



**PLACER DOME INC.**  
**KASHUTL PROPERTY**  
**C EXTENSION ZONE**  
**Hg - As ROCK AND SOIL GEOCHEMISTRY**

DRAWN BY: DAS    DATE: OCT. 1990    NTS: 92/L3    FIG: 9



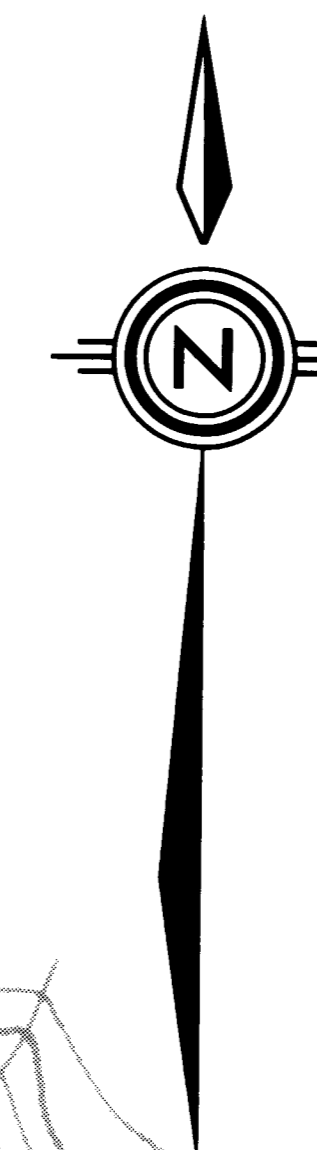
50°09'30"

50°09'15"

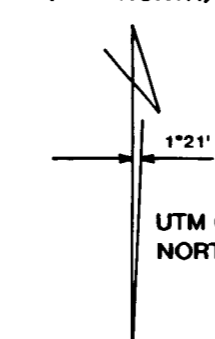
CLAIM BOUNDARY

127°21'

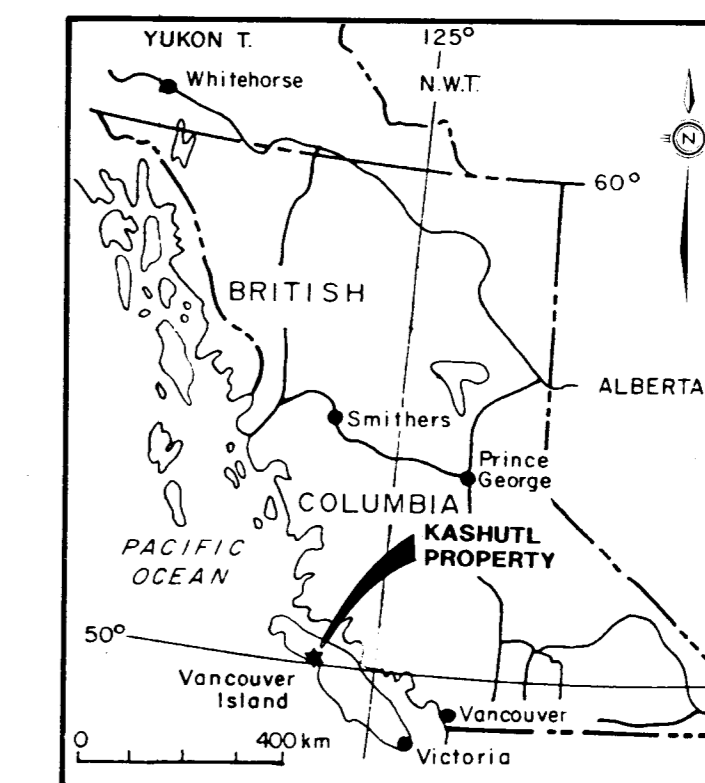
127°20'45"



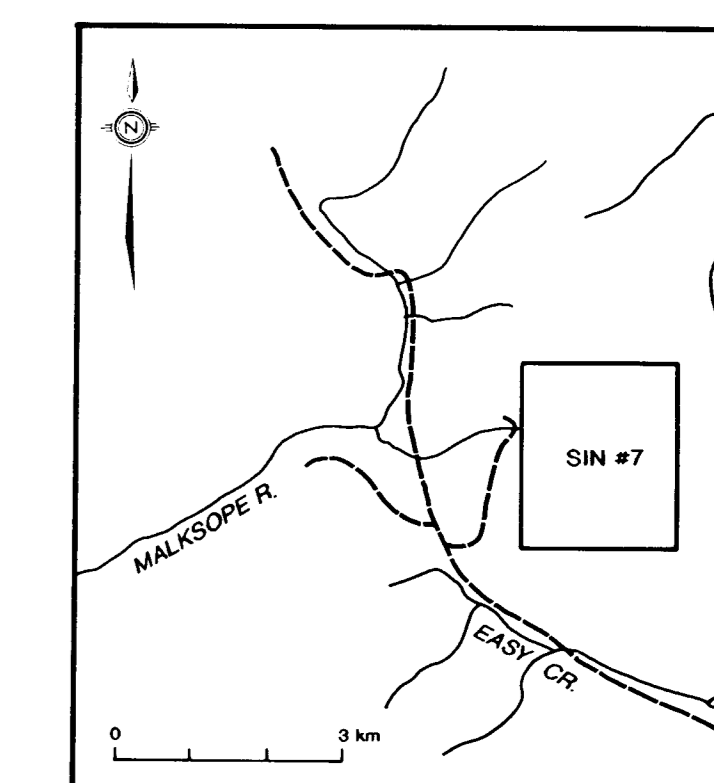
TRUE NORTH (MAP NORTH)



UTM GRID NORTH



LOCATION MAP



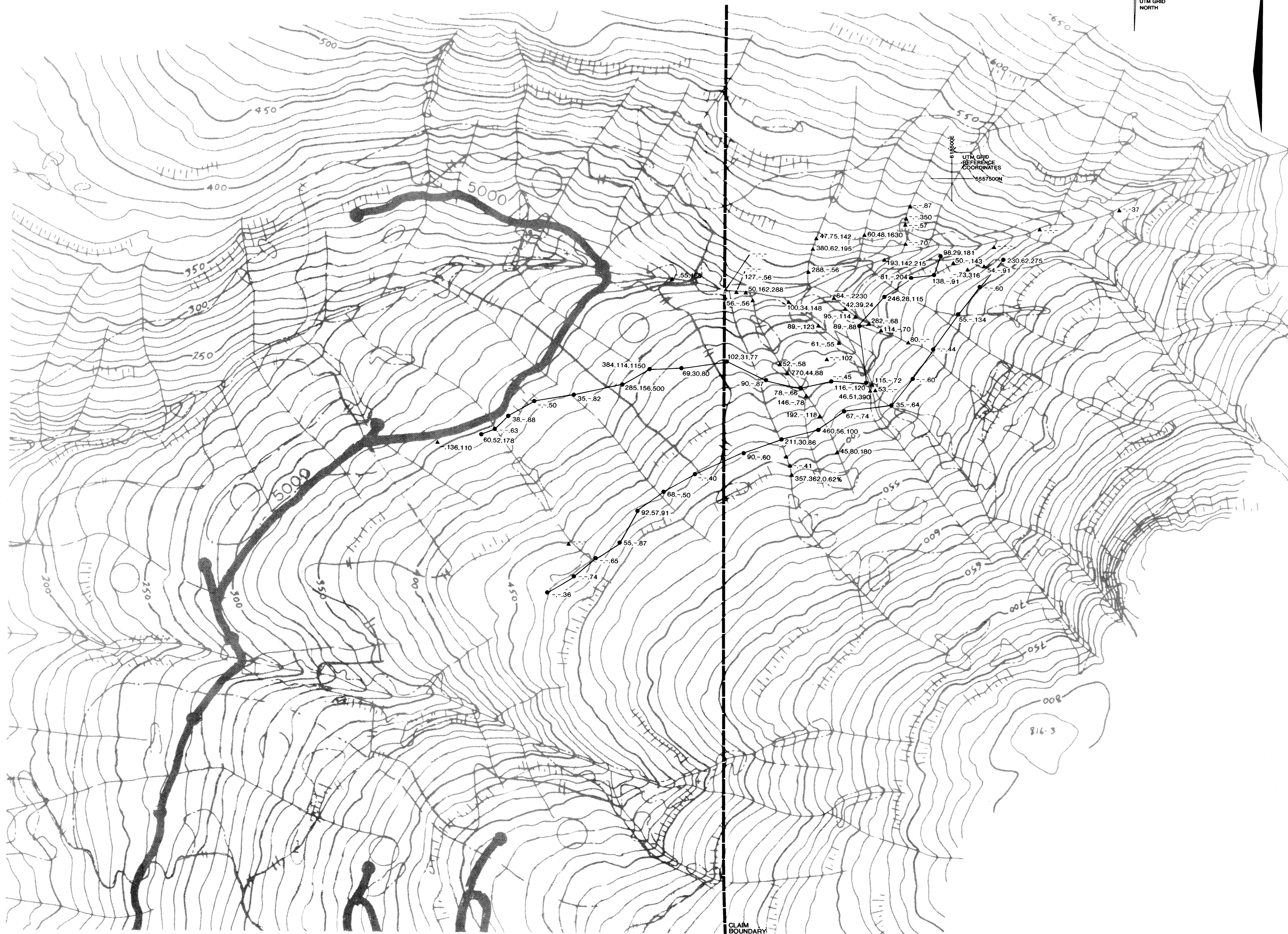
CLAIM MAP

GEOLOGICAL BRANCH  
ASSESSMENT REPORT

# 20,495

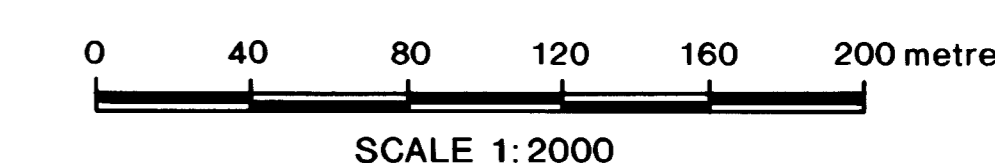
LEGEND

- ▲ ROCK SAMPLE LOCATION - Cu >35 ppm, Pb >25 ppm, Zn >35 ppm
- SOIL SAMPLE LOCATION - Cu >35 ppm, Pb >25 ppm, Zn >35 ppm



50°09'30"

50°09'15"



<b>PLACER DOME INC.</b>			
<b>KASHUTL PROPERTY</b>			
<b>C EXTENSION ZONE</b>			
<b>Cu - Pb - Zn ROCK AND SOIL GEOCHEMISTRY</b>			
DRAWN BY: DAS	DATE: OCT. 1990	NTS: 92/L3	FIG: 10