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GEOLOGICAL AND GEOCHEMICAL REPORT

ON THE  
STORY 3 AND 4 CLAIMS

NTS 104B\9W

Latitude 56° 34' Longitude 130° 29'

Skeena Mining Division

By

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Homestake Canada Inc.  
#1000-700 W. Pender St.  
Vancouver, BC  
V6C 1G8

FILMED

November 1993

Property Owner: Ecstall Mining Corp.

Project Operator: Homestake Canada Inc.

GEOLOGICAL BRANCH  
ASSESSMENT REPORT

23,181

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## SUMMARY

The Story claims are located in northwestern British Columbia within the Skeena Mining Division on NTS map 104B\09W. During the 1993 field season the property was accessed via helicopter from the Eskay Creek exploration camp located 8 km to the northeast of the Story claims.

The claims are 100% owned by Ecstall Mining Corp. and were optioned by Prime Resources Group Inc. in order to evaluate the potential of the claims to host significant precious metal mineralization.

The claims had seen very little previous work and the claim area was covered by a wide spaced grid. The grid area was mapped at 1:5000 and soil samples collected at 50 m intervals along the lines. This work indicated that the Story 3 and 4 claims are underlain by Hettangian to Sinemurian sedimentary rocks (Unuk River Formation) and highly foliated Pliensbachian volcanoclastic rocks (Betty Creek Formation) intruded by a plagioclase-hornblende diorite with sparse orthoclase megacrysts.

No significant mineralization was encountered and the potential for finding significant mineralization is low. No further exploration expenditures are warranted.

## 1. INTRODUCTION

The Story 3 and 4 claims were optioned by Prime Resource Group Inc. from Ecstall Mining Corp. in order to evaluate the potential of the claims to host significant precious metal mineralization; either as Eskay type exhalative mineralization or as epigenetic precious metal mineralization. The claims had seen very little previous work and the claim area was covered by a wide spaced grid. The grid area was mapped at 1:5000 and soil samples collected at 50 m intervals along the lines. Total costs incurred for mapping and geochemical work described in this report are \$11,500.

## 2.0 CLAIM STATUS

The Story 3 and 4 claims consist of two claims for a total of 20 units. The claims overlap with adjacent properties and the effective area of the claims is less than 15 units (see Fig. 2). The claims are 100% owned by Ecstall Mining Corp. and are under option to Prime Resource Group Inc. Upon acceptance of this report the claims will be valid until:

Story 3	Rec No. 252261	Due date Nov 12, 1997
Story 4	Rec No. 252262	Due date Nov 12, 1996

## 3.0 LOCATION AND ACCESS

The Story claims are located in northwestern British Columbia within the Skeena Mining Division on NTS map 104B\09W. The claims are centred at latitude 56° 34', longitude 130° 29'. The property is located 45 km SW of Bell II on the Stewart Cassiar highway and can only be accessed via helicopter (0.3 hrs). During the 1993 field season the property was accessed via helicopter from the Eskay Creek exploration camp located 8 km to the northeast of the Story claims.

## 4.0 PHYSIOGRAPHY AND VEGETATION

The Story 3 and 4 claims are located in an area of moderate terrain located at low elevations in the Unuk River valley. Elevations range from 800 feet in the Unuk river to 3200 feet at the north end of the Story 4 claim. Most of the claim is covered by mature timber, dominated by hemlock and minor spruce. The east side of the 3200' ridge along the western margin of the claims is covered by alder as are parts of the main south draining creek, east Coulter Creek. The climate is mild and wet and is free of snow cover from May through November.

## 5.0 PREVIOUS WORK

The Story 3 and 4 claims were briefly evaluated by International Kodiak (AR #20,907). They performed minor grid based mapping and soil sampling programs. The work failed to define any significant anomalies or to define the stratigraphic position of the geology

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British Columbia

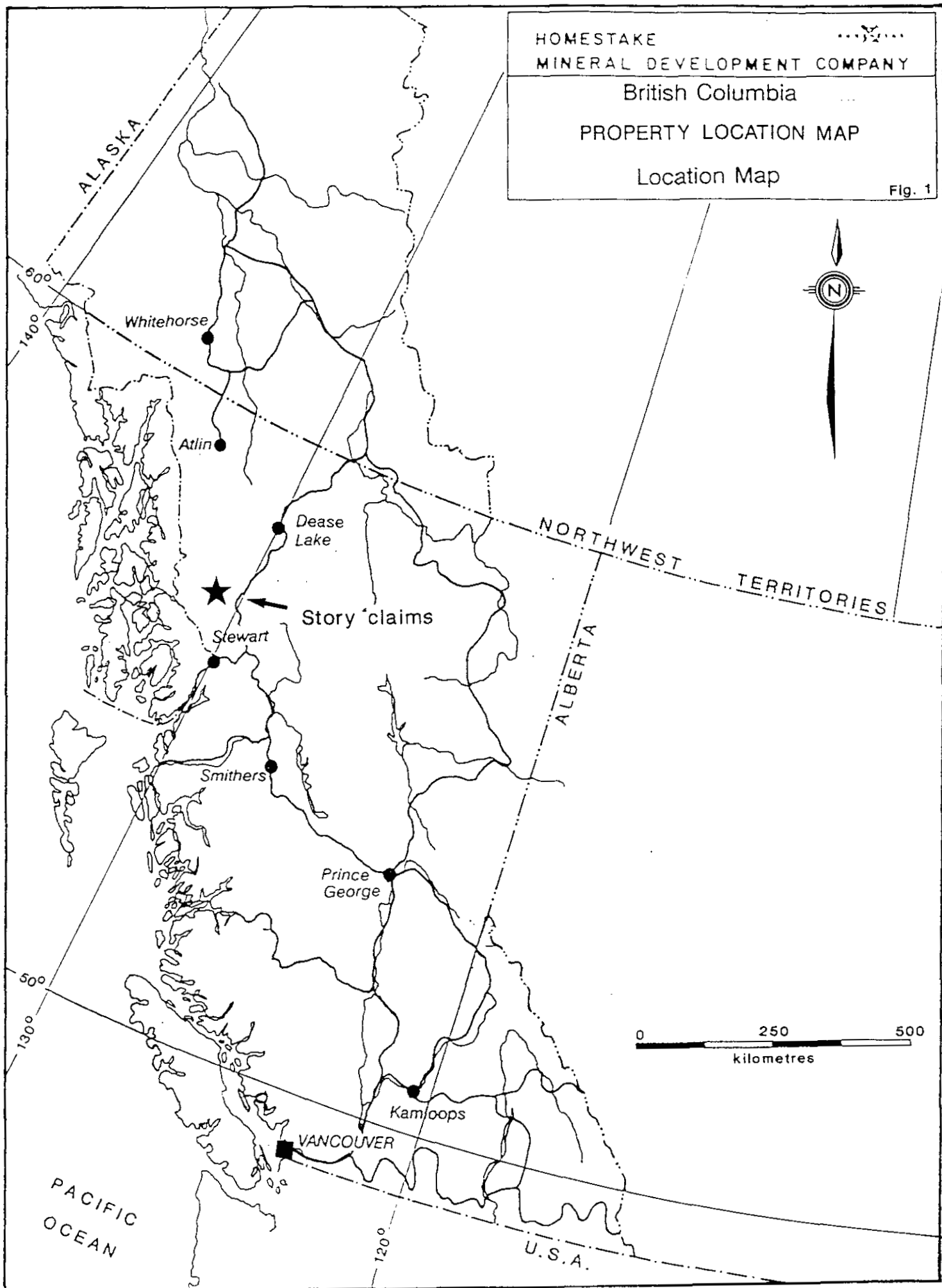
PROPERTY LOCATION MAP

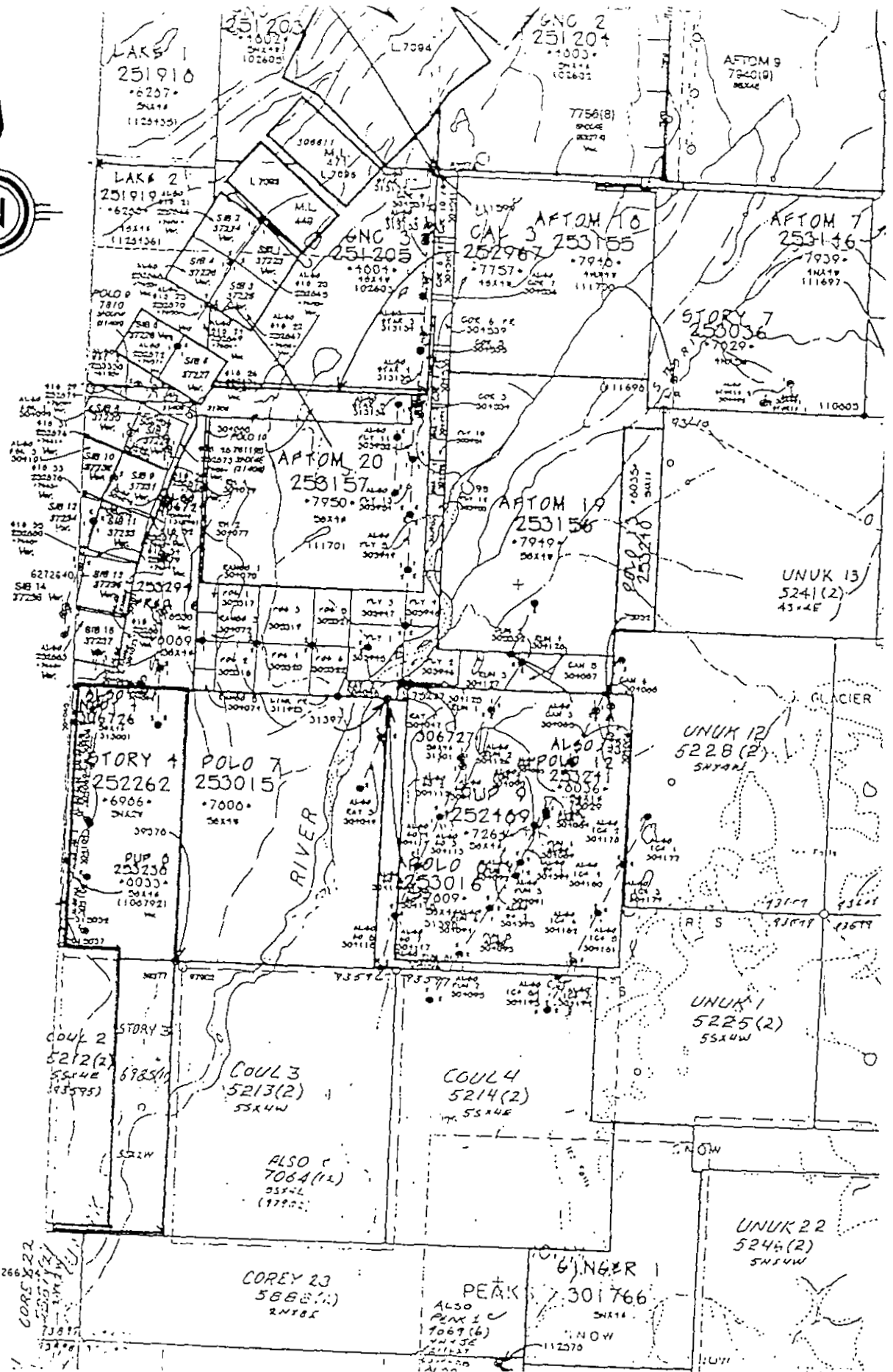
Location Map

Fig. 1

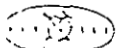


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### CLAIM LOCATION MAP

DATE: DEC 1993      SCALE: 1:50,000      DRAWING NO. Fig. 2

underlying the claims.

## 6.0 REGIONAL GEOLOGY

### 6.1 Stratigraphy

The Story claims are located within Stikinia, the largest of the accreted terranes that form the northern Canadian Cordillera. Stikinia is characterized by Paleozoic sedimentary and volcanic rocks of the Devonian to Permian Stikine Assemblage, Upper Triassic volcanic and sedimentary rocks of the Stuhini Group and Jurassic volcanic and sedimentary rocks of the Hazelton Group. Overlying Middle to Upper Jurassic sediments of the Bowser Lake Group, the Cretaceous Sustut Group and Tertiary volcanic fields are post accretionary overlap assemblages that link Stikinia to adjacent terranes.

The Iskut River map area is characterized by a volcano-plutonic arc complex of Triassic to mid-Jurassic age comprising the Stuhini and Hazelton Groups. These igneous and sedimentary rocks are part of an extensive volcanic field exposed around the periphery of a large post-volcanic marine sedimentary basin, the mid to late Jurassic Bowser basin.

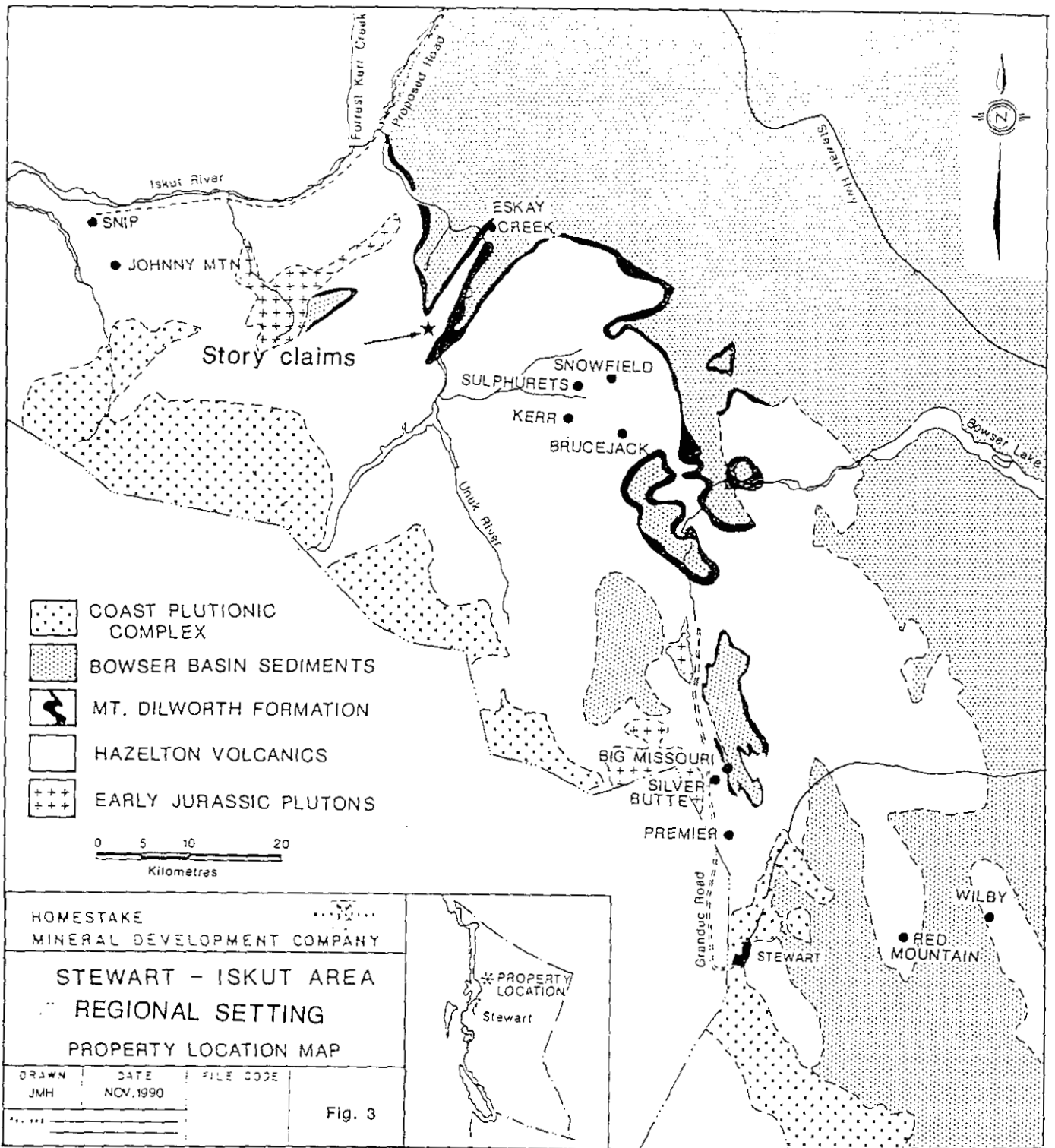
The Stuhini Group consists of marine sedimentary rocks, predominantly argillite with calcareous siltstone or sandstone laminations and beds of coarse arenitic sandstone, intercalated with mafic volcanic rocks, predominantly feldspar-augite phyric volcanoclastic rocks.

The Hazelton Group has been traditionally divided into four main formations (Grove, 1986; Alldrick, 1987; Anderson and Thorkelson, 1990). Recent mapping by the MDRU (Lewis, 1992;1993) has demonstrated that the extension of these formations from the Salmon River valley to the Iskut and Unuk river valleys is tenuous and instead utilises five regional units without formal formational divisions.

The oldest rocks are marine clastic rocks of Hettangian to Sinemurian age, the lower Hazelton strata of Lewis (1993) and the Unuk River Formation of Alldrick (1987). In the Unuk River valley, these rocks are almost entirely sedimentary and comprise medium to coarse grained arenitic sandstone interbedded with mudstone and pebble to cobble conglomerate. Henderson et al. (1992) noted the presence of a distinctive conglomeratic marker unit with granitoid and volcanic cobbles (Jack formation) that marks an erosional unconformity at the base of the Hazelton group strata. In the Stewart-Salmon River valley area, the section is dominated by igneous rocks; andesitic to dacitic tuffs and flows interbedded with fine marine clastics. The upper parts of the formation include numerous flows, sills and dikes of the Premier porphyry, a distinctive hornblende +/- biotite-plagioclase porphyry with locally conspicuous orthoclase megacrysts. These rocks appear to be coeval with the Texas Creek granodiorite; they have yielded U-Pb ages of 194.8 +/- 2.0 Ma and 195 +/- 2.0 Ma. (Alldrick et al., 1987) and 190 +/- 2.0 Ma. (Brown, 1987).

These basal sedimentary and volcanic strata are conformably overlain by a distinctive section of andesitic to dacitic volcanic rocks, the intermediate volcanic package of Lewis (1993) and Betty Creek formation of Alldrick (1987). These rocks are characterized by hornblende-feldspar phyric flows, breccias and volcanoclastic rocks intercalated with volcanoclastic sandstone/wacke. Some sections are typically oxidized to a maroon colour suggesting subaerial exposure during deposition or redeposition of the volcanic and





sedimentary rocks. The age of these rocks is constrained by the underlying Hettangian to Sinemurian rocks and Pliensbachian fossil collections from the overlying sedimentary section. Felsic ash tuffs appear to form part of the section, possibly overlying the hornblende-feldspar volcanic rocks. A U-Pb date from south of John's Peaks indicates a 190 +/- 1 Ma age. These rocks may be correlative with felsic volcanic rocks exposed throughout the Salmon river valley, the Mt. Dilworth Formation of Alldrick (1987).

The intermediate volcanics in the Unuk river valley (Betty Creek formation) and the Mt. Dilworth formation of Alldrick (1987) in the Salmon River valley are overlain by a regionally distinctive sequence of sedimentary rocks, the basal Salmon River formation of Anderson and Thorkelson (1990) and JrHs of Lewis (1993). These sedimentary rocks comprise mudstone, calcareous sandstone, pebbly conglomerate and minor limestone. The sedimentary rocks are commonly fossiliferous and have yielded several good fossil collections that define a Toarcian to Pliensbachian age.

In the Salmon River valley, these sedimentary rocks are overlain by well bedded argillite, siliceous argillite and tuffaceous siltstone, the Troy Ridge pyjama beds of Anderson and Thorkelson (1990). However, in the Unuk River valley area, there is a large section of felsic to mafic volcanic strata that occupy an intermediate position between the two sedimentary units. The felsic volcanic rocks have been previously defined by Alldrick and Britton (1991) as the Mt. Dilworth Formation and the mafic volcanics as the Eskay member of the Salmon River Formation by Anderson and Thorkelson (1990). Recent mapping, U-Pb and biostratigraphic age controls have indicated that these rocks are younger than the type Mt. Dilworth Formation and belong to a distinctive package of volcanic rocks mapped by Lewis (1993) as upper Hazelton felsics JrHf and mafics JrHm. Fossil collections and age dates indicate an Aalenian age.

The uppermost volcanic rocks are gradationally overlain by well bedded argillite, siliceous argillite, tuffaceous siltstone and dark limestone. These sedimentary rocks appear to grade upwards into the overlying Bowser Lake Group sedimentary rocks.

The Bowser Lake Group consists of well bedded argillite with laminations of calcareous siltstone to sandstone, overlain by sandstone and chert pebble conglomerate intercalated with mudstone. Fossil collections indicate a Bajocian or Late Aalenian to Bathonian age.

## 6.2 Metallogeny

The Iskut River area is a well known and productive mining district. Past and present producing mines include precious metal veins deposits at Silbak Premier, Snip and Stonehouse and a volcanogenic massive sulphide Cu deposit at Granduc. The Eskay Creek deposit, a precious metal rich volcanogenic massive sulphide deposit, is scheduled for production in 1996. Significant reserves have been delineated in the Sulphurets area within Cu-Mo-Au porphyry systems, Au only porphyry systems and in shear hosted vein systems. Ongoing work at Red Mtn. will define significant reserves within Au-rich telluride bearing sulphide pods in breccia zones along the margin of a Bi-enriched intrusive. Table 1 lists the major deposits within the Iskut River map area and their indicated reserves.

Other deposit types known within the Iskut River map area include Fe-rich skarns,

Au-rich skarns, and magmatic Cu-Ni mineralization.

TABLE 1

Deposit Name	Reserves	Deposit Classification
Eskay Creek	Proven and probable 1.2 Mt @ 65 gpt Au, 2924 gpt Ag	Precious metal volcanogenic exhalative
Snip Mine	0.96 Mt @ 28.5 gpt Au	Shear hosted vein. Epithermal
West Zone Brucejack	0.65 Mt @ 14.8 gpt Au, 675 gpt Ag	Shear hosted vein and stockwork. Epithermal
Kerr deposit Sulphurets	127.5 Mt @ 0.62% Cu, 0.27 gpt Au	Porphyry copper
Snowfields		Porphyry gold
Stonehouse Johnny Mtn	0.21 Mt @ 14 gpt Au, 22 gpt Ag and 0.45 % Cu	Quartz-sulphide veins. Mesothermal?
Silbak Premier	4.3 Mt @ 14 gpt Au, 304 gpt Ag	Quartz-sulphide veins and stockwork. Epithermal
Red Mtn	2.8 Mt @ 12.7 gpt (1992)	Intrusive-related Au-Te breccia zone

## 7.0 PROPERTY GEOLOGY

### 7.1 Stratigraphy

The Story 3 and 4 claims were mapped on a wide spaced grid at a scale of 1:5000. The geology of the claim area is presented on Map 1. The stratigraphy has been broken down into five stratigraphic units and two intrusive units. Correlations based on regional mapping indicate that the stratified rocks are parts of the Unuk River and Betty Creek formations. The following descriptions are ordered from oldest to youngest.

#### 2. Unuk River Formation

2a. Argillite-siltstone. Well bedded argillite with siltstone layers is well exposed in the main creek drainage east of the claims and south of line 0+00S. These rocks are part of a Hettangian to Sinemurian sedimentary sequence exposed along the west side of the Unuk River. The rocks are moderately deformed with a well defined bedding parallel flattening

cleavage.

2b. Volcanic sandstone and conglomerate. The southernmost part of the map area is underlain by green grey volcanic sandstone to conglomerate. These rocks are weakly deformed with a poorly developed cleavage.

### 3. Betty Creek Formation volcanics.

These highly foliated rocks are intermediate volcanic to volcanoclastic, feldspar phyric rocks, correlative with less deformed hornblende-feldspar phyric volcanics exposed along the ridge extending from Eskay Creek through American Fibre's Sib claims. Within the Story 4 claim, three subunits are present.

3a. Closest to East Coulter Creek and the Unuk River formation the rocks are highly foliated chlorite to chlorite-sericite schist with no discernible original textures or primary phenocrysts.

3b. West and upslope from 2a are feldspar crystal schists. These rocks are green to green and maroon chlorite +/- sericite schists with numerous plagioclase phenocrysts from 2-8 mm long. Volcanoclastic textures are locally evident on the main cleavage plane.

3c. West of unit 2b is a narrow band of dark grey to dark green chlorite schist with local concentrations of fine feldspar crystals less than 2 mm long.

### 9. Intrusive rocks

The above rocks are cut by a small stock exposed along the main north-south ridge on the western boundary of the Story 4 claim. The intrusive is crowded hornblende-feldspar porphyry with rare orthoclase megacrysts to several cm in diameter. The margins of the stock are strongly carbonate altered.

An aphanitic mafic dyke, striking north to northeasterly can be traced from L300s to 10000N.

## **7.2 Alteration and mineralization**

Very little alteration has affected the rocks on the Story claims. Local zones of strong carbonate alteration are present around the margins of the intrusive (unit 9). One zone of carbonate-sericite alteration with pyrite and chalcopyrite was traced from L10600N near 91E to the NNE for a distance of 400 m. The zone is 2-3 m wide and carries minor chalcopyrite but no significant precious metals.

## **7.3 Structure**

The rocks exposed on the Story 3 and 4 claims are more deformed than most rocks within the immediate district. The volcanic rocks of unit 3 are all strongly flattened with a prominent foliation that strikes to the NE and dips moderately to the SE. Rocks of unit 2 are less deformed but still have a prominent cleavage that is generally bedding parallel and strikes to the northwest and dips moderately to steeply to the northeast.

## 8.0 GEOCHEMISTRY

The Story 3 and 4 claims were already partially covered by existing grids. Part of the Story 4 claim was covered by cut lines established by American Fibre in 1992 to cover their Polo 7 claim and adjacent ground. These lines are spaced at 200 m intervals and trend 285 degrees from a 015 degree baseline. The cut lines were extended using a hip chain and compass to provide flagged lines 200 m apart and marked at 50 m intervals to the western margin of the claim block. The northern portion of the Story 3 claim was partially covered by east-west flag lines 100 m apart extending from the claim line along the eastern margin of the claim block. These lines were rerun and flagged at 50 m intervals.

All lines that had not previously been soil sampled were sampled at 50 m intervals. Samples of the B-horizon, located 10-50 cm below surface were collected in Kraft sample bags, dried and sent to Bondar-Clegg for analysis.

10 rock samples were collected for geochemical analyses. these samples includes both grab and chip samples, sample descriptions are included in Appendix II.

All soil and rock samples were analyses for Au by Fire assay and for Ag, Cu, Pb, Zn, Mo, As and Sb by ICP at Bondar-Clegg Analytical labs.

### 8.1 Results

Previous sampling covers parts of the claim area. The northern half of the Story 3 claim was covered in 1990 by International Kodiak. The eastern portions of the cut lines on the Story 4 claim were sampled by American Fibre in 1992. Map 3 shows Au, Ag, As and Sb results compiled from all three sources, plotted at 1:5000. One spot Au anomaly of 396 ppb Au is present on line 9200N at 9200E. This anomaly probably sources from minor quartz veining that is locally evident along the thrust fault between units 2a and 3a. Minor spot As highs are evident on lines 10800N at 8400E and on line 9800N at 8950E. Two areas of weakly anomalous Cu (100-200ppm Cu) are evident between lines 9200N and 9400N near 9200E and on line 10800N at 8800E and 9100E.

None of the above anomalies are of sufficient extent or strength to warrant further evaluation.

Rock samples were collected from all altered and mineralized outcrops on the property. No significant precious metal mineralization was encountered. At the north end of the map area a narrow zone of carbonate-sericite alteration with disseminated pyrite and chalcopyrite trending to 330 degrees carries low Cu grades.

## 9.0 CONCLUSIONS AND RECOMMENDATIONS

The Story 3 and 4 claims cover parts of the lower Hazelton Group sedimentary and volcanic stratigraphy. The rocks are highly foliated due to their proximity to a thrust fault emplacing the Hazelton group volcanic rocks over the younger Bowser Lake Group. Very little mineralization was noted within the property boundary and the rocks lack significant

alteration. There is no potential for Eskay type mineralization and little or no potential for epigenetic precious metal mineralization.

No further work is recommended.

**APPENDIX I  
STATEMENT OF COSTS**

Food and accommodation: 19 man days @ \$100/day	1900
Salaries and benefits:	
Henry Marsden      5 days @ \$280/day	1400
Andrew Kaip        5 days @ \$195/day	975
Chris Downie      4 days @ \$125/day	500
 Helicopter 4.4 hrs @ \$743/hr	 3270
 Analytical	
Soil samples 101 @ \$13/sample	1313
Rock samples 16 @ \$17/sample	272
 Report preparation	
Henry Marsden      5 days @ \$280/day	1400
Maps and drafting	500
Total	\$11,500
Withdrawn from PAC account	500
Total filed	\$12,000

**APPENDIX III**  
**ANALYTICAL RESULTS**



REPORT: V93-00634.0 ( COMPLETE )

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PROJECT: 90702/STORY 3

PAGE 1

SAMPLE NUMBER	ELEMENT UNITS	Au PPB	Ag PPM	Cu PPM	Pb PPM	Zn PPM	Mo PPM	As PPM	Sb PPM
R2 66101		<5	<0.2	13	12	119	2	23.0	2.3
R2 66102		<5	<0.2	4	<2	12	3	2.1	1.0
R2 66103		<5	<0.2	78	5	96	<1	4.8	13.0
R2 66104		6	<0.2	69	8	97	1	13.0	21.6
R2 66105		<5	0.3	239	8	105	20	36.0	167.0
R2 66106		72	0.3	1489	4	77	<1	16.0	32.0
R2 66107		<5	<0.2	260	3	79	<1	30.0	84.5
R2 66108		17	1.5	26	59	100	14	254.0	6.9
R2 66109		2298	3.0	11	112	422	80	3690.0	52.0
R2 66110		7	<0.2	88	14	105	3	31.0	3.3
R2 66111		17	<0.2	92	22	73	26	28.0	3.1
R2 66112		<5	<0.2	84	79	387	2	55.0	7.3
R2 66601		9	<0.2	74	29	37	2	38.0	4.5
R2 66602		6	<0.2	14	18	20	3	141.0	13.0
R2 66603		<5	<0.2	13	10	7	2	31.0	6.0
R2 66604		11	<0.2	74	26	537	1	39.0	9.1

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STANDARD NAME	ELEMENT UNITS	Au PPB	Ag PPM	Cu PPM	Pb PPM	Zn PPM	Mo PPM	As PPM	Sb PPM
B-C GEOCHEM STD		-	-	-	-	-	-	156.0	1.0
Number of Analyses		-	-	-	-	-	-	1	1
Mean Value		-	-	-	-	-	-	156.00	1.00
Standard Deviation		-	-	-	-	-	-	-	-
Accepted Value		-	0.2	140	13	140	4	145.0	-
GS89-2		-	4.1	776	200	453	515	-	-
Number of Analyses		-	1	1	1	1	1	-	-
Mean Value		-	4.08	776.4	199.9	453.4	515.0	-	-
Standard Deviation		-	-	-	-	-	-	-	-
Accepted Value		-	5.0	820	250	500	600	310.0	70.0
ANALYTICAL BLANK		-	<0.2	<1	<2	<1	1	-	-
Number of Analyses		-	1	1	1	1	1	-	-
Mean Value		-	0.10	0.5	1.0	0.5	1.3	-	-
Standard Deviation		-	-	-	-	-	-	-	-
Accepted Value		5	0.2	1	2	1	1	<0.1	<0.1

REPORT: V93-00634.0 ( COMPLETE )

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SAMPLE NUMBER	ELEMENT UNITS	Au PPB	Ag PPM	Cu PPM	Pb PPM	Zn PPM	Mo PPM	As PPM	Sb PPM
66105		<5	0.3	239	8	105	20	36.0	167.0
Duplicate		<5	0.3	239	8	106	19		
66111		17	<0.2	92	22	73	26	28.0	3.1
Prep Duplicate		17*	<0.2		21	69		21.0	3.1

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PAGE 1

SAMPLE NUMBER	ELEMENT UNITS	Au PPB	Ag PPM	Cu PPM	Pb PPM	Zn PPM	Mo PPM	As PPM	Sb PPM
S1 L92N 8700E		6	<0.2	30	15	161	2	14	<5
S1 L92N 8750E		<5	<0.2	57	9	47	9	15	<5
S1 L92N 8800E		<5	<0.2	24	15	43	<1	19	<5
S1 L92N 8850E		<5	<0.2	55	18	70	4	21	<5
S1 L92N 8900E		<5	<0.2	53	16	49	4	18	<5
S1 L92N 9050E		<5	<0.2	67	14	34	2	5	<5
S1 L92N 9100E		<5	<0.2	40	11	41	2	13	<5
S1 L92N 9150E		60	<0.2	55	14	53	3	8	<5
S1 L92N 9200E		396	<0.2	100	24	132	11	27	<5
S1 L92N 9250E		7	0.2	49	16	66	2	15	<5
S1 L94N 8600E		<5	<0.2	20	11	5	3	9	<5
S1 L94N 8650E		23	<0.2	28	20	12	1	19	<5
S1 L94N 8700E		<5	<0.2	33	10	95	4	42	<5
S1 L94N 8750E		<5	<0.2	30	20	42	2	43	<5
S1 L94N 8800E		<5	<0.2	40	11	35	3	25	<5
S1 L94N 8850E		9	<0.2	89	20	91	<1	31	7
S1 L94N 8900E		29	<0.2	31	21	122	<1	12	<5
S1 L94N 8950E		<5	<0.2	16	15	50	4	9	<5
S1 L94N 9000E		<5	<0.2	49	5	37	<1	10	<5
S1 L94N 9050E		6	<0.2	69	16	57	4	11	<5
S1 L94N 9100E		9	<0.2	136	24	107	<1	20	<5
S1 L94N 9150E		10	<0.2	70	15	65	<1	5	<5
S1 L94N 9200E		11	<0.2	79	13	61	<1	10	<5
S1 L96N 8550E		12	<0.2	16	10	5	<1	<5	<5
S1 L96N 8600E		12	<0.2	48	17	9	2	<5	<5
S1 L96N 8650E		28	<0.2	20	50	6	3	<5	<5
S1 L96N 8700E		7	<0.2	86	11	51	11	5	<5
S1 L96N 8750E		<5	<0.2	10	8	44	3	<5	<5
S1 L96N 8800E		6	<0.2	16	16	43	<1	6	<5
S1 L96N 8900E		13	<0.2	69	22	55	<1	26	9
S1 L96N 8950E		12	<0.2	66	13	70	1	25	7
S1 L96N 9000E		20	<0.2	40	4	33	<1	9	<5
S1 L96N 9050E		16	<0.2	111	12	63	1	<5	<5
S1 L96N 9100E		<5	<0.2	62	9	52	<1	12	<5
S1 L96N 9150E		<5	<0.2	55	11	52	<1	9	<5
S1 L98N 8500E		30	<0.2	64	7	6	<1	<5	<5
S1 L98N 8550E		12	<0.2	100	28	23	8	<5	<5
S1 L98N 8600E		10	<0.2	31	27	18	4	<5	<5
S1 L98N 8650E		11	<0.2	14	10	11	3	<5	<5
S1 L98N 8700E		12	<0.2	73	14	17	7	<5	<5

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SAMPLE NUMBER	ELEMENT UNITS	Au PPB	Ag PPM	Cu PPM	Pb PPM	Zn PPM	Mo PPM	As PPM	Sb PPM
S1 L98N 8800E		18	<0.2	95	8	22	6	<5	<5
S1 L98N 8850E		48	<0.2	28	15	29	3	<5	<5
S1 L98N 8900E		26	<0.2	84	18	94	2	28	<5
S1 L98N 8950E		14	<0.2	71	33	57	<1	626	7
S1 L98N 9000E		5	<0.2	39	13	56	1	7	<5
S1 L98N 9050E		<5	<0.2	117	8	40	<1	<5	<5
S1 L98N 9100E		6	<0.2	63	13	93	4	13	<5
S1 L100N 8400E		6	<0.2	35	20	13	2	<5	<5
S1 L100N 8450E		9	<0.2	66	54	11	4	<5	<5
S1 L100N 8500E		<5	<0.2	66	22	30	8	<5	<5
S1 L100N 8550E		9	<0.2	44	24	26	4	6	<5
S1 L100N 8600E		<5	<0.2	92	11	21	1	<5	<5
S1 L100N 8650E		12	<0.2	46	17	6	4	<5	<5
S1 L100N 8700E		<5	0.4	31	28	47	6	32	<5
S1 L100N 8900E		9	<0.2	50	21	56	2	51	<5
S1 L100N 8950E		9	<0.2	45	36	68	3	773	8
S1 L100N 9000E		12	<0.2	46	18	85	6	21	<5
S1 L100N 9050E		<5	<0.2	45	20	18	9	13	<5
S1 L102N 8400E		<5	<0.2	39	14	33	5	6	<5
S1 L102N 8450E		9	<0.2	42	34	33	5	13	<5
S1 L102N 8500E		<5	<0.2	38	16	42	2	34	9
S1 L102N 8550E		6	<0.2	94	13	20	3	<5	<5
S1 L102N 8600E		<5	<0.2	50	27	27	5	6	<5
S1 L102N 8650E		<5	<0.2	35	12	35	1	<5	<5
S1 L102N 8700E		<5	<0.2	16	5	16	2	<5	<5
S1 L102N 8800E		<5	<0.2	47	13	28	<1	48	<5
S1 L102N 8875E		12	<0.2	54	19	35	2	30	<5
S1 L102N 9000E		<5	<0.2	30	6	10	3	<5	<5
S1 L102N 8915E		<5	<0.2	57	19	38	3	<5	<5
S1 L102N 8950E		<5	<0.2	71	12	73	5	<5	<5
S1 L104N 8300E		12	<0.2	38	23	49	2	32	<5
S1 L104N 8350E		<5	<0.2	38	14	51	6	8	<5
S1 L104N 8400E		<5	<0.2	76	22	63	<1	8	<5
S1 L104N 8450E		30	<0.2	51	16	55	7	8	<5
S1 L104N 8500E		<5	<0.2	22	33	64	<1	23	12
S1 L104N 8550E		<5	<0.2	20	13	42	<1	<5	<5
S1 L104N 8600E		<5	<0.2	21	13	28	5	15	<5
S1 L104N 8700E		<5	<0.2	83	22	62	9	<5	<5
S1 L104N 8775E		7	<0.2	36	22	15	<1	19	<5
S1 L104N 8800E		<5	<0.2	110	12	42	3	<5	<5

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SAMPLE NUMBER	ELEMENT UNITS	Au PPB	Ag PPM	Cu PPM	Pb PPM	Zn PPM	Mo PPM	As PPM	Sb PPM
S1 L104N 8850E		<5	<0.2	46	6	37	<1	<5	<5
S1 L104N 8900E		<5	<0.2	31	12	54	<1	<5	<5
S1 L106N 8300E		<5	<0.2	51	19	63	6	58	<5
S1 L106N 8350E		<5	<0.2	42	9	36	4	11	<5
S1 L106N 8400E		6	<0.2	35	16	195	<1	<5	5
S1 L106N 8550E		22	<0.2	29	20	61	<1	<5	<5
S1 L106N 8600E		11	<0.2	57	12	46	3	25	<5
S1 L106N 8650E		<5	<0.2	120	9	61	2	<5	<5
S1 L106N 8700E		11	<0.2	44	26	49	5	39	<5
S1 L106N 8750E		6	<0.2	42	10	33	4	27	<5
S1 L106N 8800E		<5	<0.2	44	6	17	2	<5	<5
S1 L106N 8850E		6	<0.2	30	11	6	3	<5	<5
S1 L106N 8900E		<5	<0.2	50	46	14	8	<5	<5
S1 L108N 8350E		<5	<0.2	71	9	66	2	8	<5
S1 L108N 8400E		6	<0.2	60	21	66	7	136	<5
S1 L108N 8550E		18	<0.2	42	6	37	4	84	<5
S1 L108N 8600E		12	<0.2	56	18	44	6	8	<5
S1 L108N 8700E		6	<0.2	64	25	35	9	<5	<5
S1 L108N 8750E		30	<0.2	83	27	31	3	<5	<5
S1 L108N 8800E		<5	<0.2	117	8	24	<1	<5	<5
S1 L108N 8850E		<5	<0.2	113	7	26	3	<5	<5

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STANDARD NAME	ELEMENT UNITS	Au PPB	Ag PPM	Cu PPM	Pb PPM	Zn PPM	Mo PPM	As PPM	Sb PPM
LOW AU STANDARD		16	-	-	-	-	-	-	-
LOW AU STANDARD		15	-	-	-	-	-	-	-
Number of Analyses		2	-	-	-	-	-	-	-
Mean Value		15.5	-	-	-	-	-	-	-
Standard Deviation		0.71	-	-	-	-	-	-	-
Accepted Value		17	-	-	-	-	-	-	-
GS89-2		-	3.2	736	-	422	459	-	39
Number of Analyses		-	1	1	-	1	1	-	1
Mean Value		-	3.16	736.0	-	421.8	459.0	-	38.9
Standard Deviation		-	-	-	-	-	-	-	-
Accepted Value		-	5.0	820	250	500	600	320	50
ANALYTICAL BLANK		<5	<0.2	<1	<2	<1	<1	<5	<5
ANALYTICAL BLANK		<5	<0.2	<1	<2	<1	<1	<5	<5
ANALYTICAL BLANK		-	<0.2	-	2	<1	<1	<5	<5
Number of Analyses		2	3	2	3	3	3	3	3
Mean Value		2.5	0.10	0.5	1.3	0.5	0.5	2.5	2.5
Standard Deviation		<0.01	<0.001	<0.01	0.58	<0.01	<0.01	<0.01	<0.01
Accepted Value		5	0.2	1	2	1	1	5	5
GEO TRACE STD1(1989)		-	30.8	207	15	54	14	<5	6
Number of Analyses		-	1	1	1	1	1	1	1
Mean Value		-	30.79	207.4	15.3	53.7	13.9	2.5	6.2
Standard Deviation		-	-	-	-	-	-	-	-
Accepted Value		-	36.0	190	15	62	17	8	-
HIGH GOLD STANDARD		500	-	-	-	-	-	-	-
Number of Analyses		1	-	-	-	-	-	-	-
Mean Value		500.2	-	-	-	-	-	-	-
Standard Deviation		-	-	-	-	-	-	-	-
Accepted Value		500	-	-	-	-	-	-	-
TRACE GEOCHEM STD		-	<0.2	269	30	234	1	29	<5
Number of Analyses		-	1	1	1	1	1	1	1
Mean Value		-	0.10	269.4	30.4	234.3	1.1	28.6	2.5
Standard Deviation		-	-	-	-	-	-	-	-
Accepted Value		-	0.5	290	33	255	4	30	-

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SAMPLE NUMBER	ELEMENT UNITS	Au PPB	Ag PPM	Cu PPM	Pb PPM	Zn PPM	Mo PPM	As PPM	Sb PPM
L92N 8900E		<5	<0.2	53	16	49	4	18	<5
Duplicate		<5	<0.2	48	13	46	4		<5
L94N 9150E		10	<0.2	70	15	65	<1	5	<5
Duplicate			<0.2	70	18	66	<1		
L96N 8750E		<5	<0.2	10	8	44	3	<5	<5
Duplicate		<5							
L98N 8850E		48	<0.2	28	15	29	3	<5	<5
Duplicate			<0.2	28	14	29	3	5	<5
L100N 8550E		9	<0.2	44	24	26	4	6	<5
Duplicate		<5							
L102N 8400E		<5	<0.2	39	14	33	5	6	<5
Duplicate			<0.2	43	15	33	4	7	<5
L104N 8775E		7	<0.2	36	22	15	<1	19	<5
Duplicate			<0.2	34	24	15			<5
L108N 8550E		18	<0.2	42	6	37	4	84	<5
Duplicate			<0.2	43	9	36	2	82	<5



**APPENDIX IV**  
**STATEMENT OF QUALIFICATIONS**

I, Henry Marsden, of the City of Vancouver, in the Province of British Columbia, do hereby certify that:




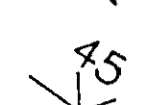
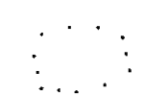




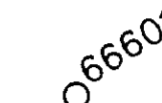
1. I am a geologist in the employ of Homestake Canada Inc. and have worked in this position since 1991.
2. I graduated from the University of British Columbia with a Bachelor of Science degree in Geology in 1986.
3. I graduated from Carleton University with a Master of Science degree in Geology in 1990.
4. My primary employment since 1981 has been in the field of mineral exploration.
5. I personally performed and supervised all work performed for this report.



Henry Marsden  
Geologist

# LEGEND

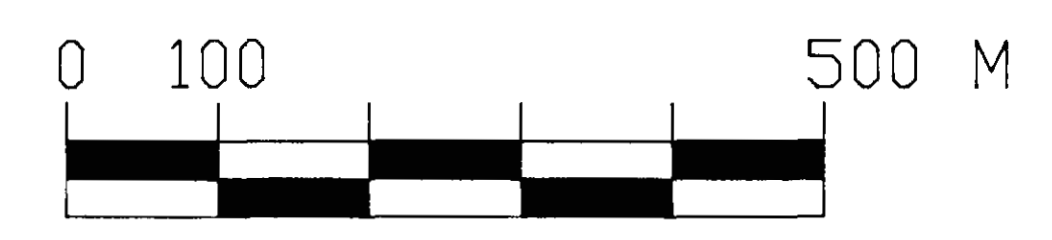
## SYMBOLS

-  strike and dip
-  overturned bedding
-  foliation
-  vein
-  outcrop
-  contact
-  faults
-  alteration
-  helicopter pad
-  sample location

## GEOLOGY

- 3 Betty Creek Formation
  - 3c dark feldspathic schist
  - 3b feldspathic schist (volcaniclastic)
  - 3a aphanitic chlorite schist
- 2 Unuk River Formation
  - 2b volcanic sandstone and conglomerate
  - 2a argillite and siltstone (turbidite)
- 9 Early Jurassic intrusive rocks
  - 9a orthoclase megacrystic diorite or monzonite

## Intrusive Rocks

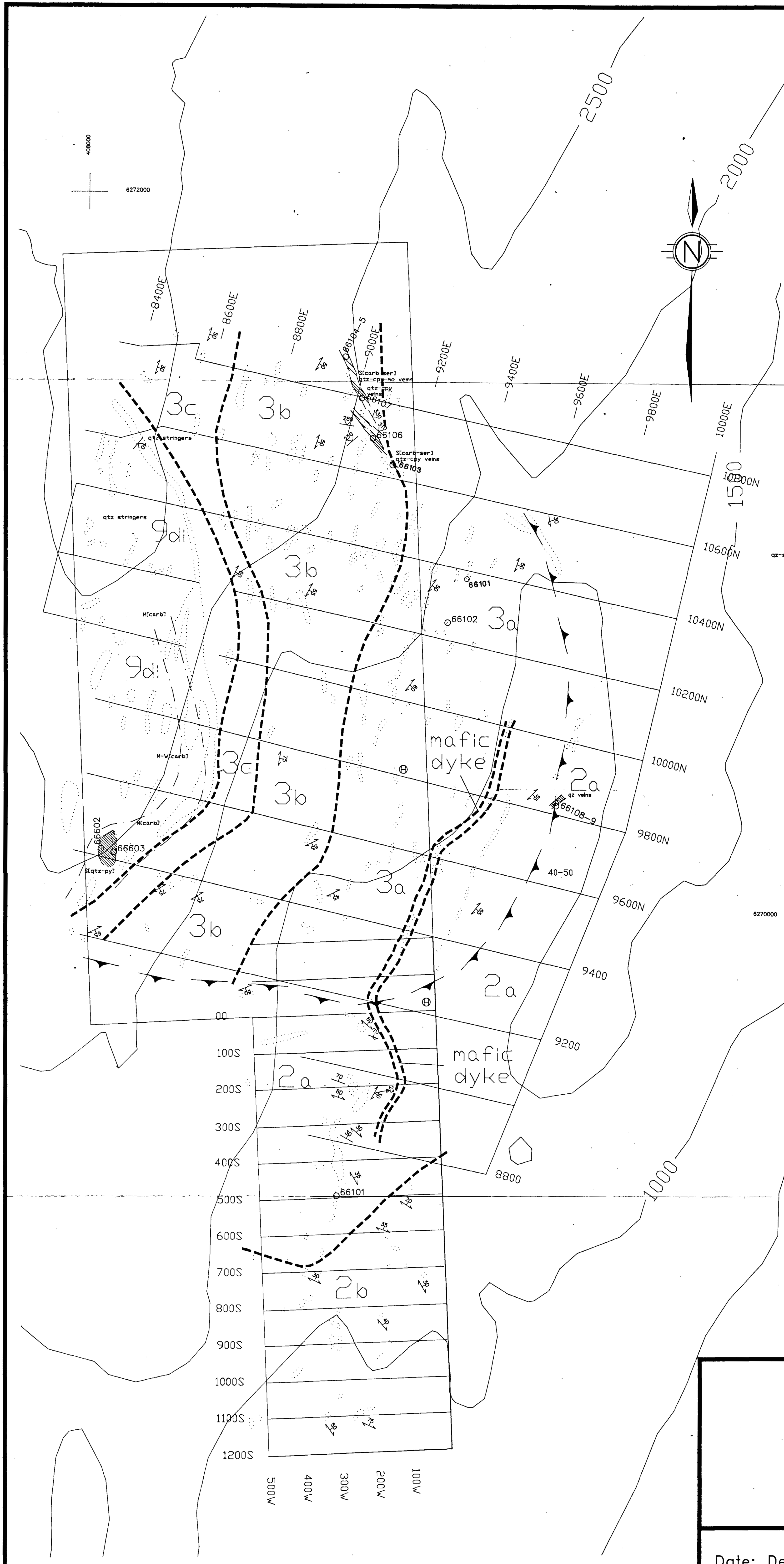


HOMESTAKE CANADA INC

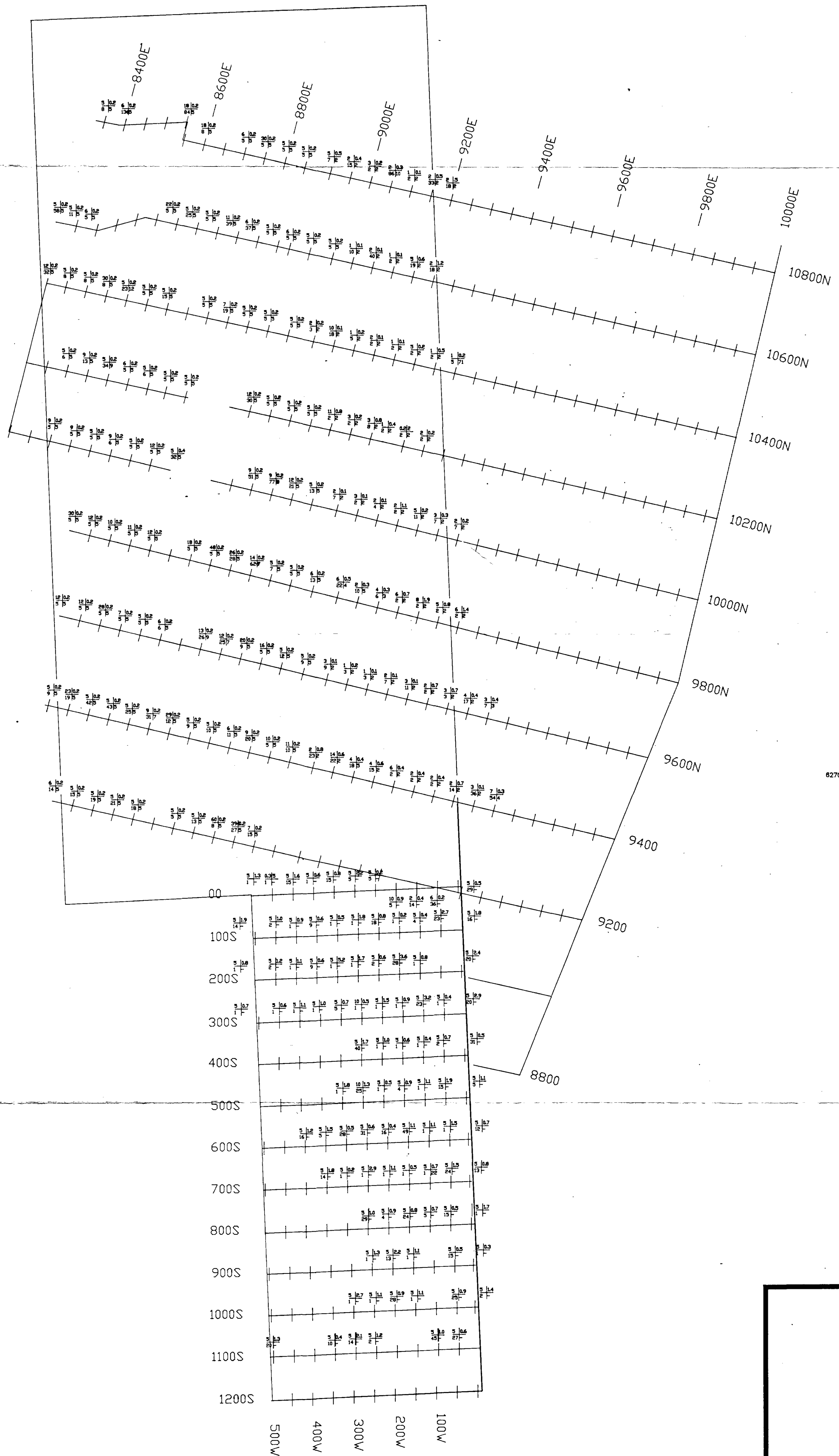
STORY 3 AND 4  
PROPERTY GEOLOGY MAP

23,181

GEOLOGICAL BRANCH

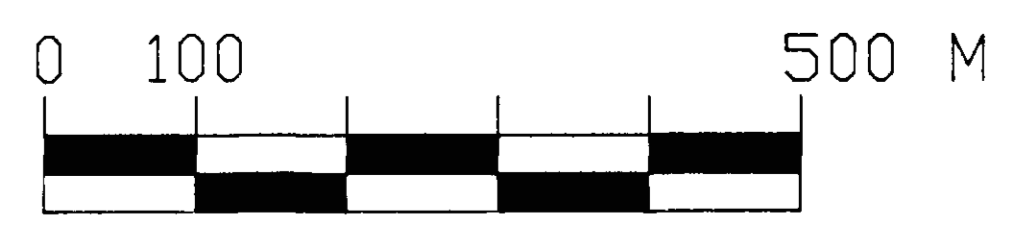


6272000  
40000



6270000  
0000

Au | Ag  
As | Sb  
Au in ppb, rest in ppm



HOMESTAKE CANADA INC

STORY 3 AND 4  
SOIL GEOCHEMISTRY  
Au, Ag, As, Sb

03,181

Date: Dec 1993

Scale: 1:5,000

Map 2