

84-1098(A) - 13244

GEOLOGICAL, GEOCHEMICAL AND  
GEOPHYSICAL REPORT

BURNIE 1-4, STANLEY 7 AND REG 10 CLAIMS

Lat 56°35' North

Long 131°03' West

NTS 104B 10/11

**GEOLOGICAL BRANCH  
ASSESSMENT REPORT**

Liard Mining Division

BRITISH COLUMBIA

**13,244**

Owner: Skyline Exploration Ltd.

Operator: Anaconda Canada Exploration Ltd.

by

Myron Sawiuk M.Sc.

John Burlington B.Sc.

Andris Kikauka B.Sc.

November 1984

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## SUMMARY

Previously sampled stream sediments and rock chips in areas of geophysical E.M. conductors have indicated anomalous Au and/or Ag responses. Additional reconnaissance sampling has identified several of these anomalies, generally distributed along northwest and east trending lineaments. Prospecting and reconnaissance geological mapping indicate the lineaments to represent fault/fracture systems. The fracture systems are marked by zones of silicification, carbonatization, fracturing and brecciation, broad epidotization and weak pyritization.

A very strong, conductive zone outlined by the airborne work was further defined by ground VLF-EM surveying. Trenching revealed the geophysical response to be related to Ag-Cu mineralization within shears and fractures.

Recommendations for further work include thorough geological mapping and geochemical surveying to further detail the above structural zones which are considered to have good potential for hosting fissure-vein type precious metal mineralization.

## INTRODUCTION

### Location and Access

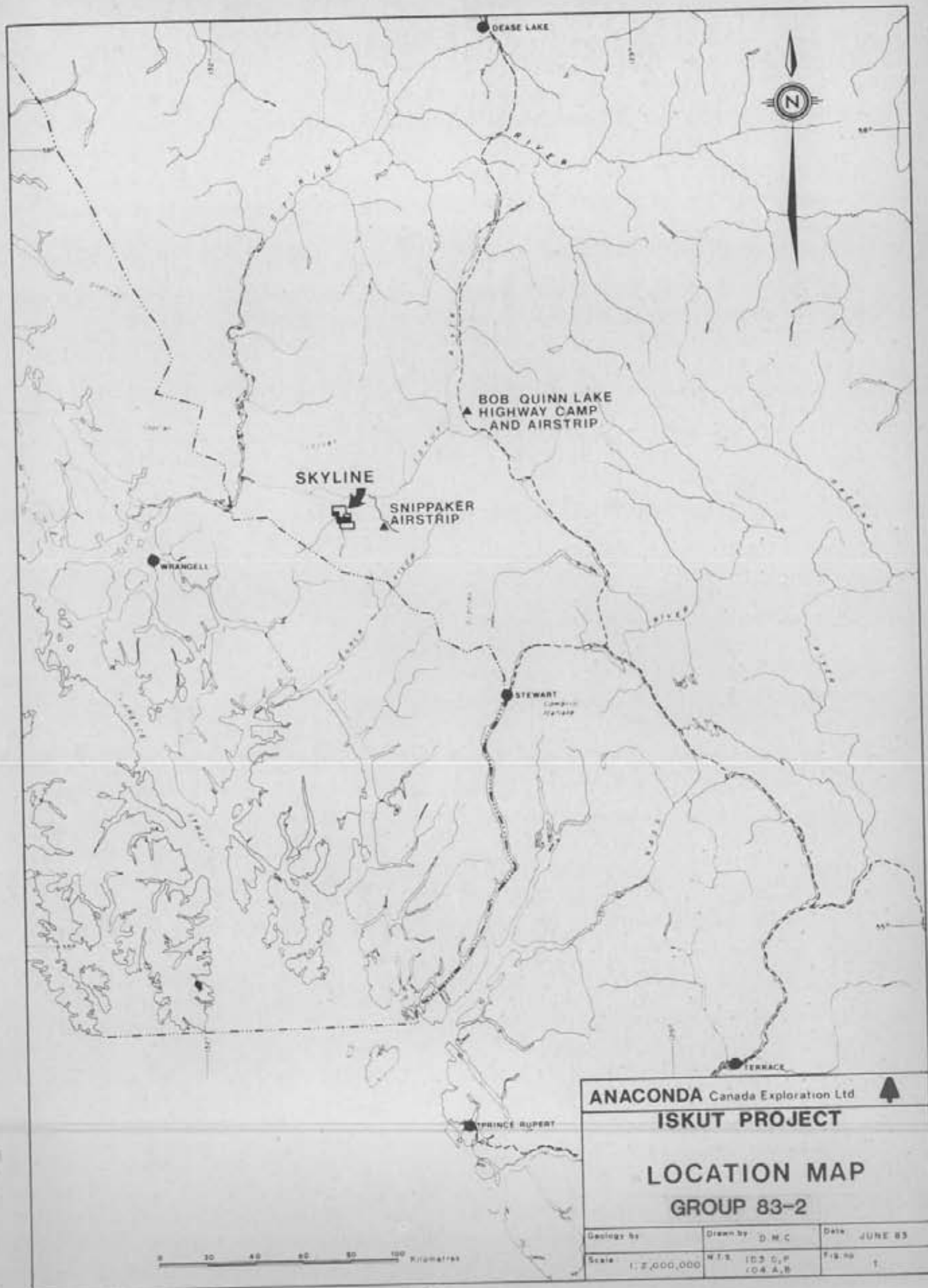
The Burnie 1-4, Stanley 7 and Reg 10 claims are located in NTS map areas 104B/10 and 11, approximately 90 km northwest of Stewart, British Columbia (Figure 1) and 9 km south of the Iskut River, near Johnny Mountain. The approximate geographic coordinates at the centre of the claim group are 56°35' North latitude and 131°03' West longitude (Figure 2). The claims are normally accessible only by helicopter.

### Property and Ownership

The Burnie 1-4, Stanley 7 and Reg 10 claims consist of 100 units having been grouped and designated as 83-2. The claims are located in the Liard Mining Division and are entirely owned by Skyline Exploration Ltd. of Vancouver, British Columbia.

The following summary outlines the present land status:

<u>Claims</u>	<u>Record No.</u>	<u>Expiry Date</u>	<u>Date of Grouping</u>	<u>Group #</u>
Reg 10	2544	Oct. 13, 1985		
Burnie 1-4	2564-2667	Sept. 13, 1985	Sept. 13, 1983	83-2
Stanley	2580	Oct. 13, 1985		



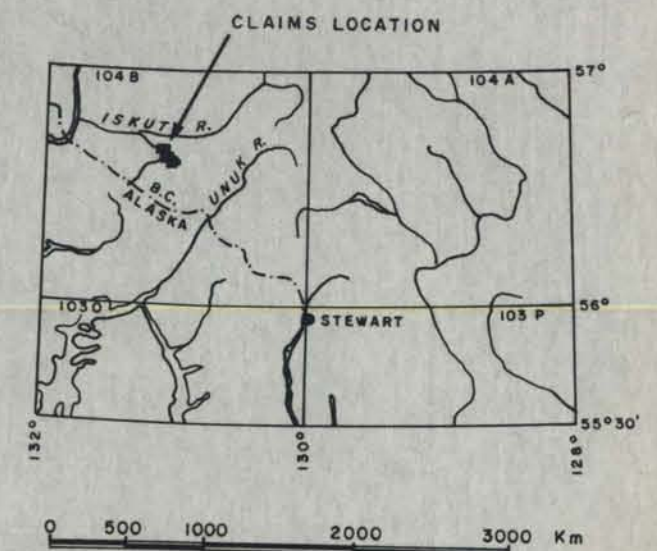
**ANACONDA** Canada Exploration Ltd


**ISKUT PROJECT**

**LOCATION MAP**

**GROUP 83-2**

Geology by	Drawn by D.M.C.	Date JUNE 83
Scale 1:2,000,000	N.T.S. 103 C.P. 104 A,B	Fig. No. 1



<b>ANACONDA</b> Canada Exploration Ltd. 		
<b>ISKUT PROJECT</b>		
<b>STANLEY, BURNIE AND REG</b>		
<b>CLAIMS LOCATION MAP</b>		
geology by:	drawn by D.M.C.	date OCT, 84
scale: 1:50,000	n.t.s. 104 B/10, 11	fig/proj no. 2

## Physiography and Glaciation

The claims lie within the Coast Mountains physiographic subdivision of the Coast and Cascade Belt. The region is entirely glaciated and is characterized by wide U-shaped, drift-filled major valleys and deeply-cut-V-shaped upland valleys. Mountain peaks in the area average 1750 m ASL in elevation and rise abruptly from the major valleys.

The claims encompass the north-west ice fields below Kalahin Mountain (2340 m ASL) to the east and the Jekill River along the western boundary. West flowing tributaries of the Jekill River form a sheet drainage pattern flowing directly into the Craig River Valley. Elevations within the claim area range from 110 m to 2340 m ASL.

## 1984 Exploration

The work carried out in 1984 was a follow-up of the helicopter airborne geophysical survey carried out in July 1983 by the Placer - Anaconda - Skyline joint venture. Complete details of the Dighem III survey were submitted in the report - "Johnny Mountain Gold Prospect - V190" by B. Young of Placer Development Ltd., April 1984.

In 1984, reconnaissance geological mapping, prospecting, reconnaissance geophysics and stream sediment sampling were carried out by an Anaconda exploration crew based at Johnny Mountain. A total of 28 stream sediment heavy mineral samples and 15 rock samples were collected and submitted for analysis. An additional 5 grab samples were collected at the trench on the Hangover showing. A grid was established over the Hangover showing with the location given in Figure 3.



## REGIONAL GEOLOGY

The regional geology is described in the vicinity of Johnny Mountain, by Kerr (1948), GSC map 9-1957 and assessment reports by Cominco and Texas Gulf. The time-stratigraphic classification described in this section is after Groves (1971).

The area encompassed by the claim group contains Paleozoic and Mesozoic rocks of three distinctive lithologic groups (Figure 3). Outcropping in the western portion of the claim group and between 100 m and 800 m ASL are metamorphosed sedimentary rocks including schist, slate and marble of late Paleozoic to Triassic age.

Distinct from these and outcropping at Johnny Mountain between 600 m to 1400 m elevation are isoclinally folded and sheared volcanic and sedimentary rocks of the lower Jurassic Unuk River Formation. These include black shale and argillite, lithic wacke and coarse conglomerate, some of which have a significant volcaniclastic component, which are predominant lower in the section. Fine-grained to coarse-grained, intermediate volcaniclastic rocks are predominant higher in the section.

The contact between the Unuk River Formation and overlying Betty Creek Formation is an angular unconformity marked by a flat-lying basal conglomerate. Outcropping in the eastern portion of the claim block, between 1200 m and 2300 m elevation, are the relatively undeformed volcanic and sedimentary rocks of the lower middle Jurassic Betty Creek Formation. These rocks include coarse clastic conglomerate and breccia with minor finer-grained clastic rocks, intercalated with basaltic to rhyolitic volcanic rocks.

These volcanic and sedimentary rocks are intruded by stocks, dikes, sills and apophyses of gabbro, granodiorite and felsite. One large granodiorite pluton outcrops in the southern portion of the claim block. This plutonic activity is probably related to the Coastal

Crystalline complex of late Mesozoic age. Complex nappe-fold features, thrust planes and overturned beds evident in the Cohee claims are the result of regional compression from this intrusive event. Lamprophyre and diabase dikes intrude all of the rocks and are of Cenozoic age. These may be related to the Pleistocene Mt. Hoodoo volcanic activity.

Regional shearing and faulting are evident in the Jekill and Bronson River valleys. Foliation is developed parallel to these lineaments.

## PROPERTY GEOLOGY

Geologic mapping of the claim group was carried out in selected areas utilizing a 1:20,000 scale topographic bases (Figure 3). Detailed mapping at a 1:200 scale was restricted to the Hangover trench exposures with the results presented in Figure 5.

Partial mapping indicates the lithology in the eastern portion of the claims to consist of a homogeneous sequence of fine-grained fractured and brecciated volcanic rocks. The upper section contains intervals of vesicular/amygdaloidal basaltic flows. The volcanic rocks are intruded by numerous dikes and sills ranging in composition from basalt to rhyodacite. In the vicinity of the Jekill River valley the rocks consist of a thick sequence of sedimentary rocks comprising arenite, greywacke, argillite and minor carbonate. These dip moderately to the west and have been regionally metamorphosed to the upper greenschist facies. The main contact of the Coast Range intrusive rocks is located 0.5 km to the south within the volcanic sequence.

Quartz-filled fractures with variable amounts of carbonate and pyrite are common in most of the rocks. Alteration consisting of epidotization and carbonatization is pervasive in the sequence of volcanic rocks. Numerous limonitic and rusty zones occur in the sedimentary and volcanic rocks near the contacts of the dikes and sills.

## GEOCHEMISTRY

### Stream Sediments

Heavy mineral concentrates from stream sediments were taken (Appendix I) at or near the mouths of streams which flow into the Jekill River and at the intersection of tributaries of these streams. Mineralization occurring upstream from these sample points should show an anomalous geochemical expression in the stream sediments. From previous reconnaissance work the medium sized (<80 mesh), heavy (S.G. >2.95), non-magnetic fraction was the most anomalous; thus during the 1984 program, this fraction, only, was analyzed. A total of 75 samples were taken during the program, of which 28 were taken on Group 83-2. Results are given in Table 1 and results and locations are given in Figure 6.

All of the samples were subjected to statistical analysis and the results reported here were compared to this analysis to determine anomalous behaviour. Thresholds were determined from visual examination of the data, summary statistics and from probability plot analysis. (Appendix II, III) (Lepeltier, 1969; Chand, 1981).

Three samples, 3-32-005, 3-32-035, 3-32-047 showed anomalous Au enrichment with no significant enrichment in other elements. Two other samples, 3-37-001, 3-37-002, showed anomalous Cu enrichment and again showed no enrichment in any other element. Further sampling and mapping in the areas upstream from these anomalies has, to date, not indicated their source.

### Rock Chip

Rock chip specimens were sampled from both geologically interesting outcrop and from float samples within stream beds. The samples consisted of 1-2 kg samples and generally contained some metallic

TABLE 1

## Stream Sediment - Heavy Mineral Concentrates

## Medium Non-Magnetic Fraction - Assays

## Claim Group 83-2

Sample No.	Au (ppb)	Ag (ppm)	Cu (ppm)	Pb (ppm)	Zn (ppm)	As (ppm)	Sb (ppm)	Bi (ppm)
3-32-004	3,610	12.7	79	52	90	31	2	2
-005	4,920	5.0	314	205	220	109	2	21
-029	1,530	4.8	338	258	408	235	4	3
-030	115	0.6	143	23	90	29	2	3
-031	3,960	2.2	173	148	241	175	2	3
-032	170	0.6	42	25	59	25	2	2
-033	675	1.5	187	278	138	74	2	2
-034	75	0.5	61	17	64	26	2	2
-035	7,860	1.7	54	14	40	24	2	2
-036	14	0.8	126	22	74	36	2	2
-038	8,120	0.3	41	15	79	19	2	2
-039	155	1.0	135	39	196	89	2	2
-045	6,910	1.0	89	19	66	23	2	2
-046	285	.8	101	14	65	20	2	2
-047	14,200	2.6	186	21	162	60	2	2
-048	3,120	1.7	135	15	85	112	2	2
3-33-001	33	2.8	441	96	181	64	2	2
-002	1,460	1.2	233	36	119	23	2	2
-003	1,730	1.5	114	10	75	18	2	2
3-37-001	60	4.7	1,148	55	172	187	10	2
-002	50	7.3	1,394	60	180	168	18	2
-003	1	3.5	501	50	154	79	7	2
-004	125	2.6	197	111	278	107	2	2
-005	1	4.6	480	279	442	109	9	3
-006	1	4.7	333	64	157	94	12	2
-007	1,120	2.7	202	198	327	180	2	2
-008	440	2.1	175	116	231	131	2	2
-009	275	2.6	194	119	277	130	2	2

mineralization commonly including pyrite, pyrrhotite, sphalerite, galena, chalcopyrite or others as noted. The samples were then assayed by Bondar-Clegg (Appendix 1) for Au  $\pm$  Ag, Cu, Pb, Zn and results are given in Table 2. Locations and results are given in Figure 7.

The results were subjected to statistical analysis (see page 9) to determine thresholds. The samples in this report were then compared to these statistics to determine any anomalous behaviour.

Sample 1-32-072, which sampled a white felsitic rock with pyrrhotite, pyrite, freibergite, malachite, azurite and chalcopyrite was, not surprisingly, highly anomalous in Ag, Cu and to a lesser extent Zn and Pb. The locale of this sample was trenched and geophysically surveyed, a description of which work is given in subsequent sections.

Samples 1-32-096, a phyllitic schist with pyrite and sample 1-37-003, an altered volcanic rock were both anomalous in Zn only.

TABLE 2

Rock Chips - Assays

Claim Group 83-2

Sample No.	Au (opt)	Ag (ppm)	Cu (ppm)	Pb (ppm)	Zn (ppm)
1-32-072	0.005	709.7	10,450	3,700	1,820
-073	0.002	8.9	85	280	65
-096	<0.002	0.8	73	101	480
-097	<0.002	1.8	30	60	360
1-33-004	0.002	1.8	138	122	235
1-37-001	0.005	3.4	250	102	126
-002	0.004	0.7	20	72	330
-003	0.005	0.7	66	104	1,680
-004	<0.002	<0.2	8	6	54
-005	<0.002	2.5	4	40	92
-006	0.002	0.3	20	25	57
1-38-001	<0.002	0.8	51	30	13
-002	<0.002	0.6	85	9	55
-003	<0.002	0.5	63	9	70
-004	0.004	3.4	57	76	20

## HANGOVER SHOWING

### Geology and Geochemistry

At the end of the summer a follow-up program to evaluate the anomalous silver-base metal showing hosted in a felsitic rock was carried out. This showing, the Hangover showing, was trenched and blasted to a total length of 17 m and width of 5 m and was then mapped and sampled. Additionally, a VLF geophysical survey was run in the vicinity of the showing.

The trenching exposed (Figure 5) a pale buff to grey fine to medium grained felsic rock, composed of a fine grained allotriomorphic granular intergrowth of feldspar and quartz overgrown by abundant secondary carbonate. The fine grained character of the feldspar makes microscopic identification impossible. The rock is cut by abundant 10 cm long by 1/2 cm wide iron-rich carbonate veinlets which weather a rusty colour. Mineralization consisting of pyrite, pyrrhotite and abundant freibergite with lesser chalcopyrite, malachite and azurite occurs in the wall rock and on the margins of three major 1 cm quartz veins which transect the trench.

In addition to the original sample 1-32-072, five grab samples were taken during the trenching. Results of this sampling are given in Table 3. All of the samples had significant amounts of Ag, from 1.02 o.p.t. to 23.93 o.p.t. Of the base metals, Cu was consistently enriched and in samples which assayed high silver generally exhibited a positive correlation. Zn and Pb both showed variable enrichment. Gold assays were low; the highest assay was 0.005 o.p.t.



Pale, buff albitite with tetrahedrite, malachite, azurite, chalcopyrite, pyrite, pyrrhotite mineralization associated with quartz veins.

Abundant ankerite veins  
St. 0-30° D. Vert.

Quartz veins

Sericitic Shear

1-34-175 }  
176 } Grab Samples  
177 }  
178 }

1-32-072

1-34-174



<b>ANACONDA</b> Canada Exploration Ltd. ▲		
<b>ISKUT PROJECT</b> <b>Hangover Showing</b> <b>Trench Geology</b>		
geology by: <b>J.B./M.S.</b>	drawn by: <b>J.B.</b>	date: <b>Oct. 1984</b>
scale: <b>1:200</b>	n.t.s. <b>104 B/II</b>	drawing no. ___ of ___ <b>5</b>

TABLE 3

Hangover Trench - Grab Sample Assays

Claim Group 83-2

Sample No.	Au (opt)	Ag (opt)	Cu (ppm)	Pb (ppm)	Zn (ppm)
1-32-072	0.005*	20.70*	10,450	3,700	1,810
1-34-174	<0.002*	1.37*	1,385	9	279
1-34-175	0.002*	20.97*	10,740	1,500	1,990
1-34-176	0.002*	3.89*	1,715	290	312
1-34-177	0.003*	23.93*	14,650	1,000	2,500
1-34-178	<0.002*	1.02	850	500	194

\* - results by assay, all others by geochemical methods - see Appendix I.

- N.B. results for 1-32-072 are also included in Table 1.

## GEOPHYSICS

A total of 1.98 km of VLF were completed in the Hangover area near the northwest end of the major INPUT conductor in Burnie 1/Stanley Claims. A Geonics EM-16 electromagnetometer was used for the VLF survey, with station NLK (Seattle, Washington at 24.8 KHZ) as the primary VLF field. The results are presented in profile form and plotted so that a "left-wave" cross over of the in-phase tilt angle indicates the position of a discrete VLF conductor (Figure 8). Quadrature ellipticity readings were also taken but variation of the primary field make the data inconclusive so it is not presented here.

The line to line correlation of the Hangover VLF data generally indicates flat responses. The absence of a strong EM response suggests this area to be distinct from the Digem conductor located just to the north. A single cross over indicated at L 50E/9S is not present on any of the adjacent profiles. Mapping at the Hangover Showing indicated the presence of a sulfide bearing felsic dike (?). If the dike is related to this response then a  $045^{\circ}$  trend may be inferred on this dike and perhaps guide follow-up work.

## CONCLUSIONS AND RECOMMENDATIONS

Several interesting features were discovered during the 1984 reconnaissance program carried out on the Burnie 1-4, Stanley 7 and Reg 10 claims.

1. The existence of an older metamorphosed sedimentary sequence of Late Paleozoic to Triassic age adjacent to rocks of the Lower Jurassic Unuk River Formation.
2. Anomalous silver (1.02 to 23.93 o.p.t. Ag) assays in veins associated with freibergite, pyrite, pyrrhotite and chalcopyrite within fine grained felsic rocks adjacent to a strong INPUT anomaly.
3. Strong unexplained Au responses in heavy mineral concentrates (up to 14,200 ppb) located in several streams east of Jekill Creek between elevations of 500-2000 metres.

Follow-up stream sediment and rock chip sampling accompanied by subsequent hand trenching is recommended to evaluate potential source areas for anomalous stream sediment values east of Jekill Creek. Ground coverage of the INPUT conductor by VLF-EM and magnetic surveys and detailed prospecting, may define the relationship between the airborne EM responses and the felsic intrusives that are host to the high grade Ag mineralization.

## REFERENCES

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- Groves, E.W., 1971. Geology and Mineral Deposits of the Stewart Area. B.C. Dept. of Mines and Petroleum Resources, Bull. 58.
- Kerr, F.A., 1948. Lower Stikine and Western Iskut River Areas, British Columbia. Geol. Surv. Canada, Memoir 246.
- Lepeltier, C., 1969. A simplified statistical Treatment of geochemical data by graphical representation. Econ. Geol., V 64, p.538-550.
- Young, B.J., 1984. Johnny Mountain Gold Prospect, Iskut River Area. Vols. I & II. Placer Development Internal Report.
- B.C.D.M. Assessment Report 630
- Mawer, A. B., 1965. Report on Geological Survey of Bron Nos. 1 and 2 Groups. Cominco Report.
- B.C.D.M. Assessment Report 769
- Parsons, G., 1965. Geological Report on Bronson Creek Nos. 1-3 Claim Groups, Cominco Report.
- B.C.D.M. Assessment Report 5275
- L'Orsa, A., 1974. Geological Report Quinella Claims 1-64, Ecstall Mining Ltd. Report.
- G.S.C. Map 9, 1957

### STATEMENT OF COSTS

Burnie 1-4, Stanley 7, Reg 10 Mineral Claims  
82-2 Group

#### Iskut Project

<u>Personnel</u>	<u>Field Time (incl. 20% Benefits)</u>	\$	\$
M. Sawiuk Project Super.	* July 8-10, Aug. 2, Sept. 2-9 6 days @ \$124/diem	744.00	
J. Burlington Geologist	* Sept. 9 1/2 day @ \$120/diem	60.00	
A. Kikauka Geologist	July 8-10, Aug. 2 4 days @ \$112/diem	448.00	
R. Gordon Geologist	July 8-10, Sept. 2-9 11 days @ \$85/diem	935.00	
D. Carr Field Tech.	Sept. 2-4, 6-9 6 days @ \$105/diem	630.00	
F. Thrane Field Tech.	Sept. 7-9 3 days @ \$95/diem	285.00	
D. Coolidge Field Tech.	Sept. 3-6 4 days @ \$78/diem	<u>312.00</u>	3,414.00
Pro rata labour and indirect charges (per Schedule A): 46.5 man days @ \$263.31			12,243.92

\* Indicates half-days

#### Helicopter - Hughes 500-D

July 8	0.6 hrs.
10	0.5 "
Aug. 2	1.7 "
Sept. 2	1.1 "
3	1.6 "
4	2.2 "
5	1.1 "
6	1.1 "
7	1.5 "
8	1.0 "
9	2.0 "
10	<u>0.5 "</u>

	14.9 hrs. @ \$410/hr.	6,109.00	
Fuel: 14.9 hrs. X 100 L/hr. X \$1.125/L		<u>1,676.25</u>	<u>7,785.25</u>
		C/F.	\$23,443.17

	B/F	\$23,443.17
<u>Geochemical costs</u>		
28 Stream Sediment samples @ \$23.80	\$666.40	
15 Rock Chip Samples @ \$15.70	235.50	
5 Rock Chip Samples - Assay at \$18.95	<u>94.75</u>	996.65
<u>Report Writing 15 days @ \$244/diem</u>		
M. Sawluk 15 days @ \$124/diem	1,860.00	
J. Burlington 15 days @ \$120/diem	<u>1,800.00</u>	<u>3,660.00</u>
<b>Total</b>		<b>\$28,099.82</b>

## SCHEDULE "A"

### Project Costs

Schedule of general costs, expenditures, travel expenses and general project expenses. To be applied to assessment on a pro rata basis.

Total Project Man Days 623

#### General Labour Costs Incl. travel time

##### Personnel

M. Sawluk	June 25, Sept. 20-21	3 days @ \$124/diem	372.00
J. Burlington	June 22-24, Sept. 20-21	5 " @ \$120/diem	600.00
A. Kikauka	June 15-24, Aug. 10	11 " @ \$112/diem	1,232.00
R. Gordon	June 15-24, Sept. 11	11 " @ \$ 85/diem	935.00
F. Thrane	June 15-24, Sept. 15-21	17 " @ \$ 95/diem	1,615.00
B. Marini	June 15-24, Aug. 8	11 " @ \$135/diem	1,485.00
D. Carr	Aug. 11, Sept. 11	2 " @ \$105/diem	210.00
D. Coolidge	Aug. 22, Sept. 15-21	8 " @ \$ 78/diem	624.00
L. Riccio	July 13, 17, Aug. 3,8	4 " @ \$187/diem	748.00
J. Burdette	June 15-24	10 " @ \$230/diem	<u>2,300.00</u>
			\$10,121.00

Pro rata cost: 82 days @ \$218.33/diem 17,903.06

\$28,042.06

Cost/diem \$44.98



Indirect Costs

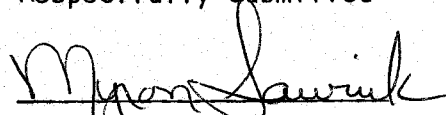
Cook (G. Slawson) 87 days @ \$136/diem	\$11,832.00
Food	18,981.33
Fuel (camp) 64 x 200 l.	13,383.68
Propane	820.78
Travel	16,412.31
Travel expenses	3,617.03
Sundry expenses	501.22
Expediting	3,200.00
Miscellaneous -field supplies	11,445.74
Field equipment - rentals and maintenance	12,992.90
Fixed wing a/c support	35,663.40
Freight	<u>7,167.44</u>
TOTAL	\$136,017.83
PER DIEM	218.33
	<u>+44.98</u>
TOTAL COST PER DIEM	\$263.31

## STATEMENT OF QUALIFICATIONS

- M. Sawluk BSc (1977) - University of Western Ontario.  
- Geology.  
MSc (1982) - McGill University.  
- Geology.
- J. Burlington BSc (1977) - University of Western Ontario.  
- Chemistry.  
MSc (pending) - University of Western Ontario.  
- Geology.
- A. Kikauka BSc (1979) - Brock University.  
- Geology.

November 1984

Respectfully Submitted

  
M. Sawluk

Project Supervisor

**APPENDICES**

## Appendix I Analytical Methods

Stream sediment samples for geochemical analysis were pre-sieved on site to -80 mesh and a 1 kg sample of this fraction was collected and dried. Samples were shipped to Acme Analytical Laboratories, Ltd., for further preparation and for analysis.

At Acme the samples were sieved to -20 mesh and wet panned to a sample size of approximately 250 g. The sample was then dried and treated with tetrabromoethane of S.G. of 2.96. The sample was redried, the magnetic fraction removed and hand pulverized. Gold was analysed by conventional fire assay and atomic absorption techniques and the other metals were analyzed on a sample digested with  $\text{HCl-HNO}_3\text{-H}_2\text{O}$  (3:1:3) and analyzed by I.C.P.

Rock chip samples include both bedrock grab and chip samples and float samples. These samples were shipped directly to Bondar-Clegg and Company Ltd. At Bondar-Clegg the samples undergo preliminary crushing of the entire sample to 80% -10 mesh. A split consisting of 200-400 g is separated and pulverized to 50% -150 mesh and 99% -80 mesh in an impact pulveriser. From this sample a split was treated with a hot  $\text{HNO}_3\text{-HCl}$  solution to extract Cu, Pb, Zn and Ag. The resultant solution is analyzed by conventional atomic absorption methods for the above. Gold on all samples was analyzed by fire assay according to the following procedure. Samples were analyzed on a 0.5 assay ton or 1.0 assay ton basis depending on fuseability. The dore bead was dissolved and analyzed by A.A. for Au. Samples in excess of 0.20 o.p.t. were re-assayed and finished by the classic method of re-weighing the gold bead.

APPENDIX II

LOGARITHMIC SUMMARY STATISTICS

HEAVY MINERAL GEOCHEMISTRY

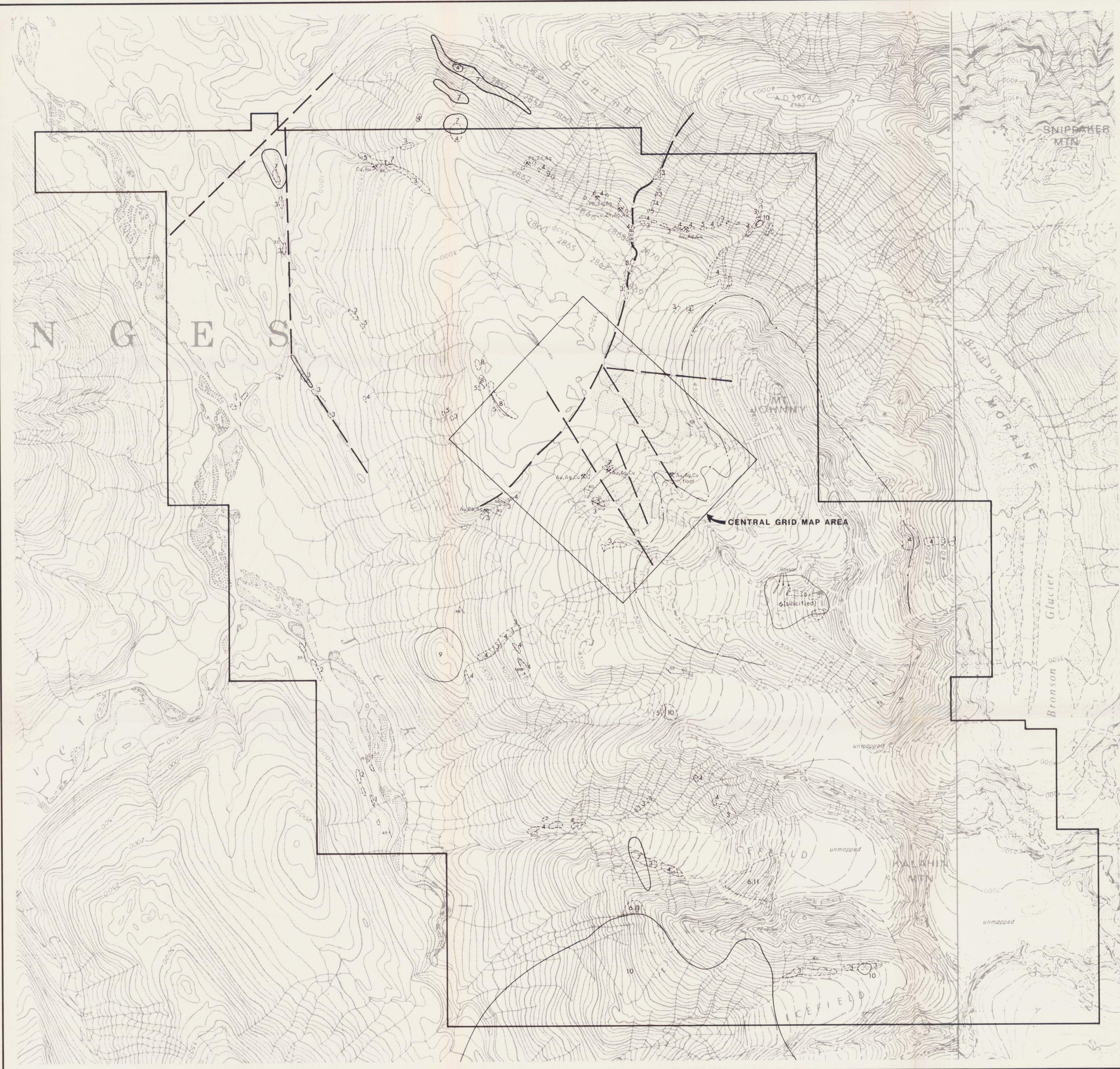
METALS	Au	Ag	Cu	Pb	Zn	As	Sb	Bi
No. of Samples	75	75	75	75	75	75	75	75
Minimum Value	1.00	.30	41.00	10.00	28.00	2.00	2.00	
Maximum Value	30700.00	122.50	2859.00	5484.00	21607.00	6570.00	670.00	
Range	30699.00	122.20	2818.00	5474.00	21579.00	6568.00	650.00	570.00
Median	950.00	3.70	201.00	103.00	220.00	89.00	20.00	20.00
Mode	40.00	1.70	197.00	15.00	277.00	406.00	20.00	20.00
Mean	647.23	3.62	247.86	103.18	273.30	95.90	39.44	29.77
Log St Dev	1.07	.54	.42	.58	.52	.58	.43	.37
Mean + 2SD	88409.56	43.66	1690.97	1507.15	3060.76	1386.48	284.10	161.08
Coeff Variation	.38	.97	.17	.29	.22	.29	.27	.25
Skewness	.00	.38	.00	.00	.00	.00	.00	.93
Kurtosis	.08	1000.00	5.89	1.05	3.89	1000.00	72.00	3.76
2.5 Percentile	1.00	.30	42.00	12.00	40.00	11.00	20.00	20.00
5.0 Percentile	10.00	.50	54.00	14.00	61.00	17.00	20.00	20.00
16.5 Percentile	50.00	1.00	101.00	22.00	85.00	24.00	20.00	20.00
50.0 Percentile	950.00	3.70	201.00	103.00	220.00	89.00	20.00	20.00
82.2 Percentile	6200.00	10.20	663.00	312.00	725.00	325.00	90.00	40.00
90.0 Percentile	8200.00	15.50	870.00	483.00	1412.00	446.00	180.00	140.00
95.0 Percentile	20800.00	32.90	1248.00	909.00	2143.00	642.00	330.00	190.00
97.5 Percentile	24200.00	35.30	1772.00	1133.00	2652.00	925.00	510.00	230.00
99.0 Percentile	25200.00	57.20	2022.00	4327.00	7216.00	2940.00	530.00	580.00

APPENDIX III

LOGARITHMIC SUMMARY STATISTICS

ROCK CHIP SAMPLES

METALS	Au	Ag	Cu	Pb	Zn
No. of Samples	158	138	138	138	138
Minimum Value	.00	.20	3.00	6.00	2.00
Maximum Value	2.88	1200.70	52800.00	280000.00	23700.00
Range	2.88	1200.50	52797.00	27994.00	236998.00
Median	.01	20.00	250.00	835.00	2600.00
Mode	.00	18.00	85.00	405.00	480.00
Mean	.01	77.36	303.01	949.00	2707.59
Log St Dev	.70	167.56	.83	1.08	1.13
Mean +2SD	.27	412.48	13738.22	139378.98	492779.90
Coeff Variation	-.35	2.17	.33	.36	.33
Skewness	.00	3.91	1000.00	.09	11.75
Kurtosis	155.00	17.78	.26	.00	135.00
2.5 Percentile	.00	.20	7.00	9.00	20.00
5.0 Percentile	.00	.50	20.00	25.00	54.00
16.5 Percentile	.00	1.70	57.00	64.00	144.00
50.0 Percentile	.01	20.00	250.00	835.00	2600.00
82.2 Percentile	.04	102.80	1650.00	11700.00	51800.00
90.0 Percentile	.11	170.70	3500.00	23200.00	101000.00
95.0 Percentile	.17	435.80	10450.00	72000.00	160000.00
97.5 Percentile	.59	684.00	24200.00	127000.00	195000.00
99.0 Percentile	.79	709.70	41000.00	248000.00	221000.00



**LEGEND**

**INTRUSIVES**

- Coast Range
- Cenozoic
  - 11 Lamprophyre, diabase dikes and sills
- Cretaceous
  - 10 Granodiorite - diorite
  - 9 Gabbro
  - 8 Alaskite
- Jurassic
  - 7 Feldspar porphyry, felsite dykes and sills

**SEDIMENTS AND VOLCANICS**

- Betty Ck. Fm
- Lower - Middle Jurassic
  - 6 Andesite - Rhyolite tuffs, lapilli tuffs, breccias, conglomerate, volcanic breccias, tuffaceous sandstone, siltstone.
- Unuk R. Fm
- Lower Jurassic
  - 5 Andesite - dacite tuffs, lapilli tuffs, breccias
  - 4 Shale, argillite, minor limestone
  - 3 Siltstone, sandstone, greywacke, minor limestone

**Triassic**

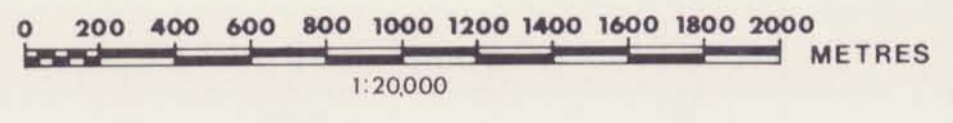
- 2 Marble
- 1 Schist, argillite, phyllite, minor gneiss

**SYMBOLS**

- Outcrop
- Contact
- Intrusive contact
- Unconformity
- Fault
- Bedding, schistosity
- Showing

**GEOLOGICAL BRANCH  
ASSESSMENT REPORT**

**13.244**

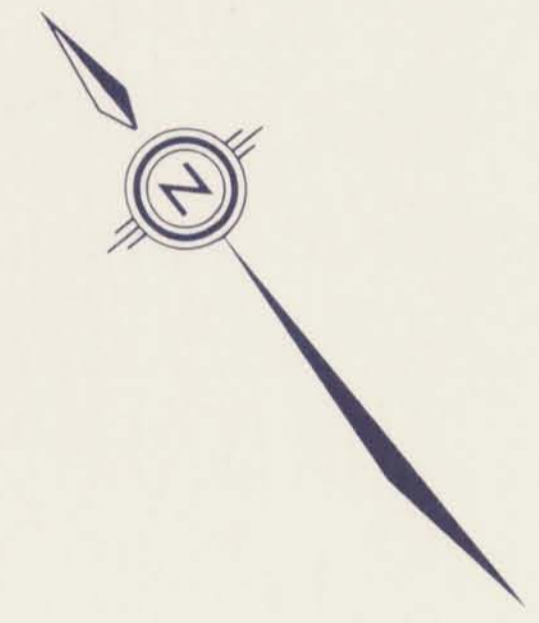


**ANACONDA** Canada Exploration Ltd.

**ISKUT PROJECT**

**CLAIM BLOCK GEOLOGY**

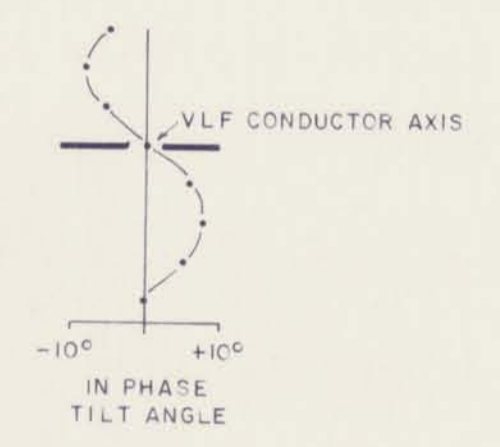
geology by: A.K.	drawn by: D.M.C.	date: NOV, 84
scale: 1:20,000	n.t.s. 104 B/11	fig./proj. no. 4



**GEOLOGICAL BRANCH  
ASSESSMENT REPORT**

**13,244**

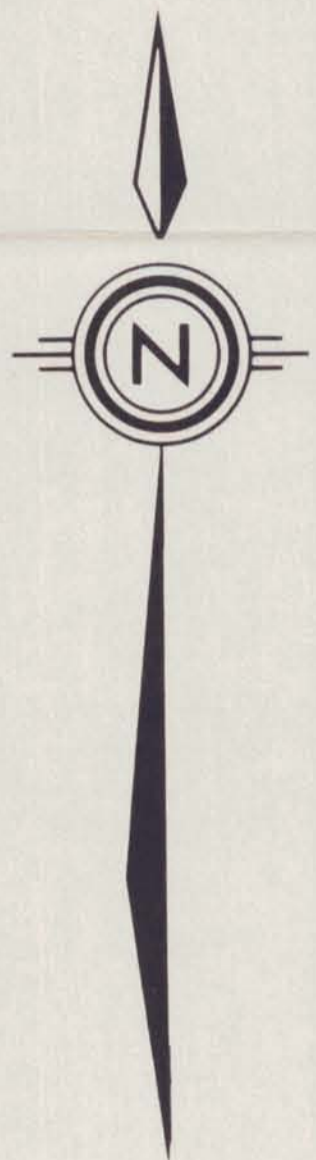
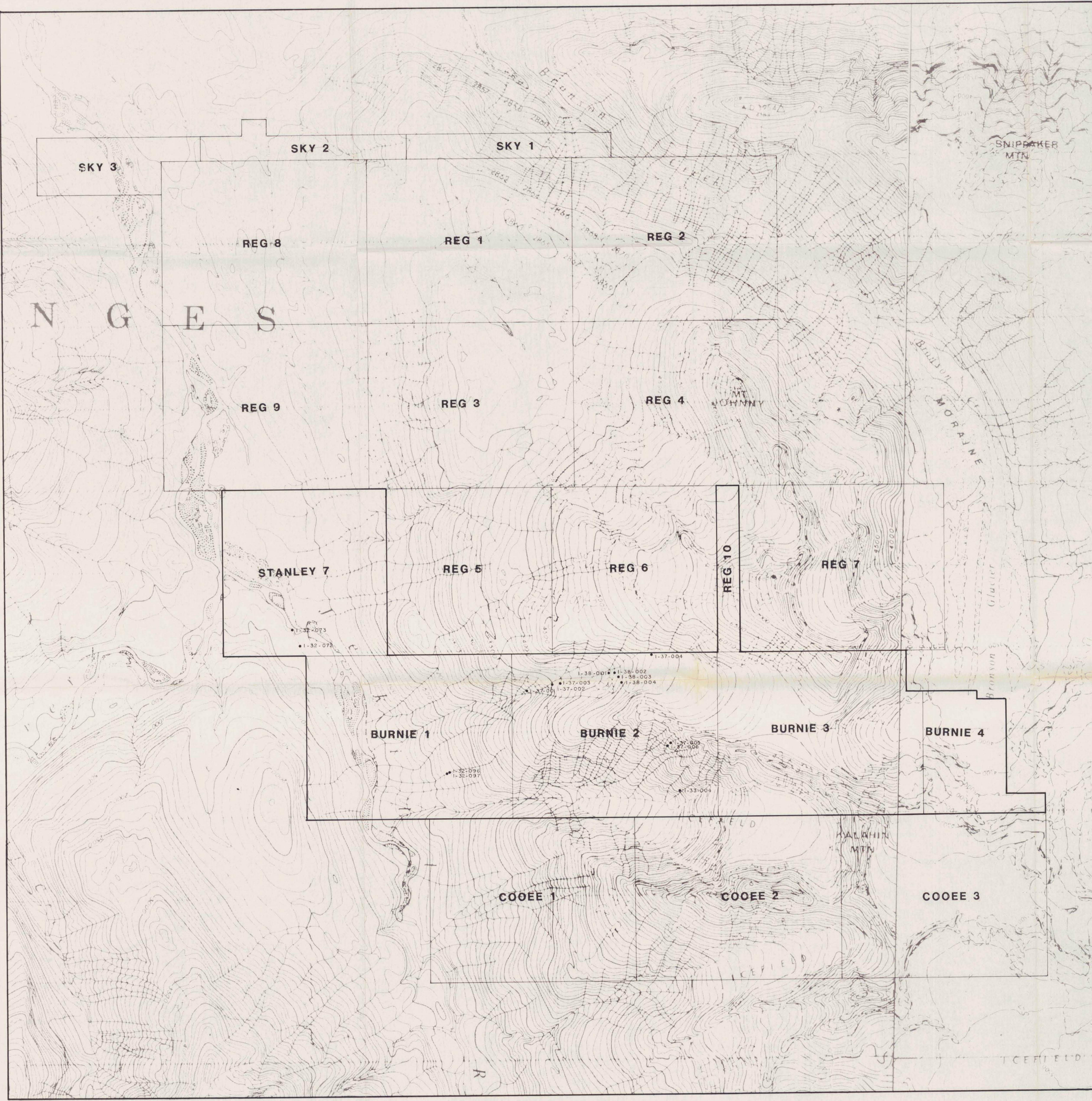
**LEGEND**



INSTRUMENT: GEONICS VLF EM-16  
STATION: NLK (SEATTLE, WASHINGTON)

<b>ANACONDA</b> Canada Exploration Ltd. 		
<b>ISKUT PROJECT</b>		
<b>VLF EM-16 SURVEY</b>		
<b>HANGOVER SHOWING</b>		
geology by: R.G.	drawn by: D.M.C.	date: OCT, 84
scale: 1:1000	n.t.s. 104 B/11	fig./proj. no. 8



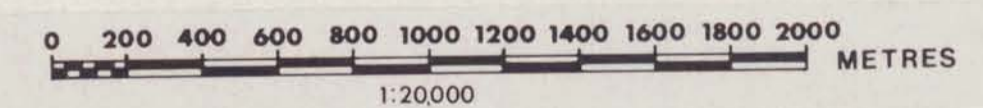


Rock chip assay results

Sample No.	Au (opt)	Ag (ppm)	Cu (ppm)	Pb (ppm)	Zn (ppm)
1-32-072	0.005	709.7	10,450	3,700	1,820
-073	0.002	8.9	85	280	65
-096	<0.002	0.8	75	101	480
-097	<0.002	1.8	30	60	360
1-33-004	0.002	1.8	138	122	235
1-37-001	0.005	3.4	250	102	126
-002	0.004	9.7	20	72	350
-003	0.005	0.7	66	104	1,680
-004	<0.002	<0.2	8	6	54
-005	<0.002	2.5	4	40	92
-006	0.002	0.3	20	25	57
1-38-001	<0.002	0.8	51	30	15
-002	<0.002	0.6	85	9	55
-003	<0.002	0.5	65	9	70
-004	0.004	3.4	57	76	20

GEOLOGICAL BRANCH  
ASSESSMENT REPORT

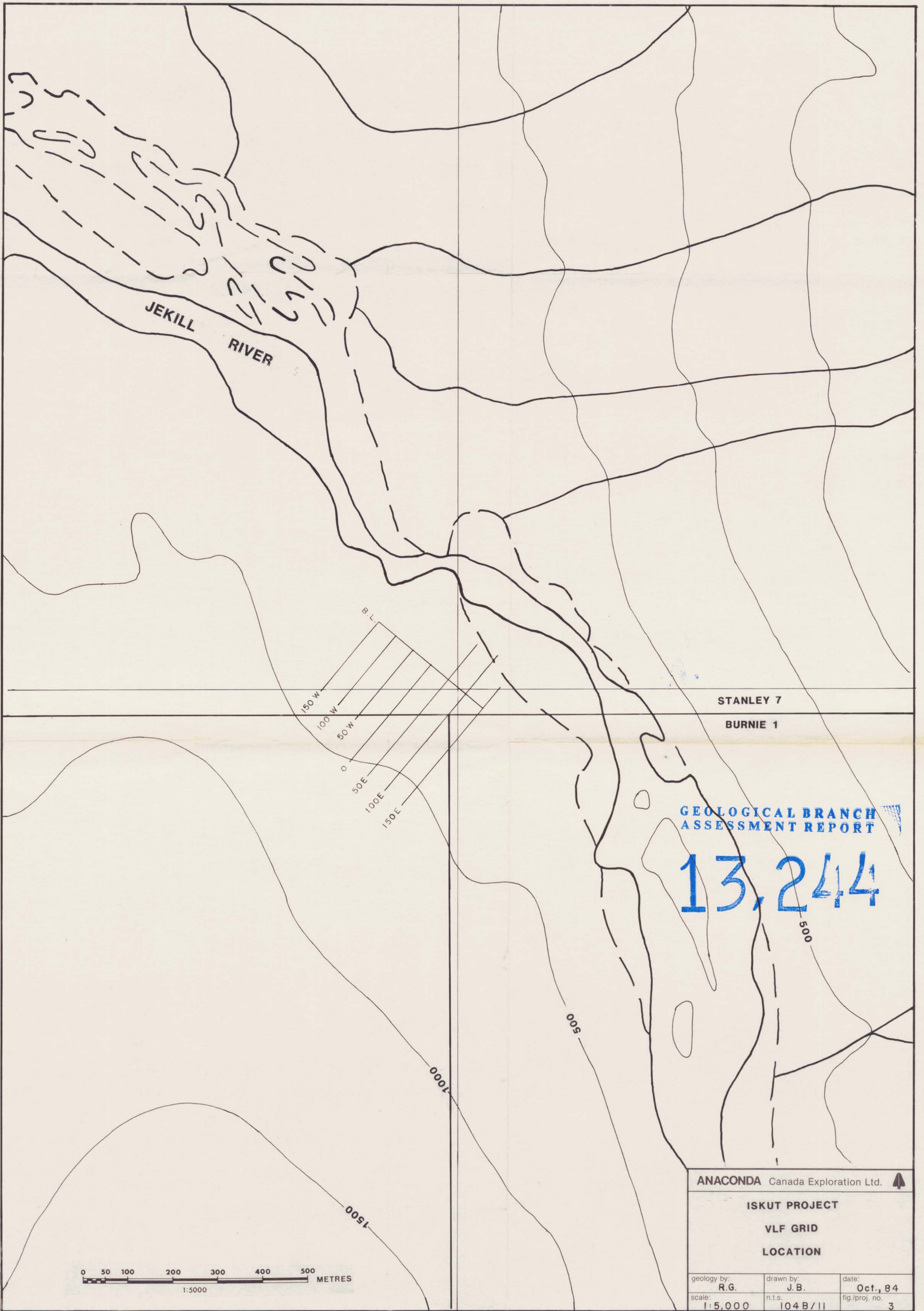
13,244



ANACONDA Canada Exploration Ltd.

**ISKUT PROJECT**  
Rock Chip  
Location and Assay  
Plan  
Claim Group 83-2

geology by: A.K./J.B.	drawn by: J.B.	date: Oct 1984
scale: 1:20,000	n.t.s. 104B/11	fig./proj. no. 7

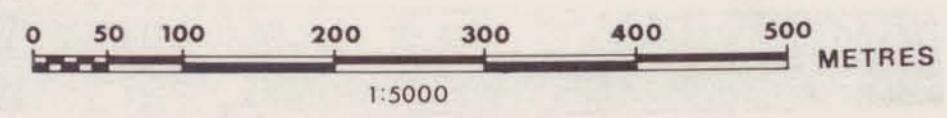



JEKILL RIVER

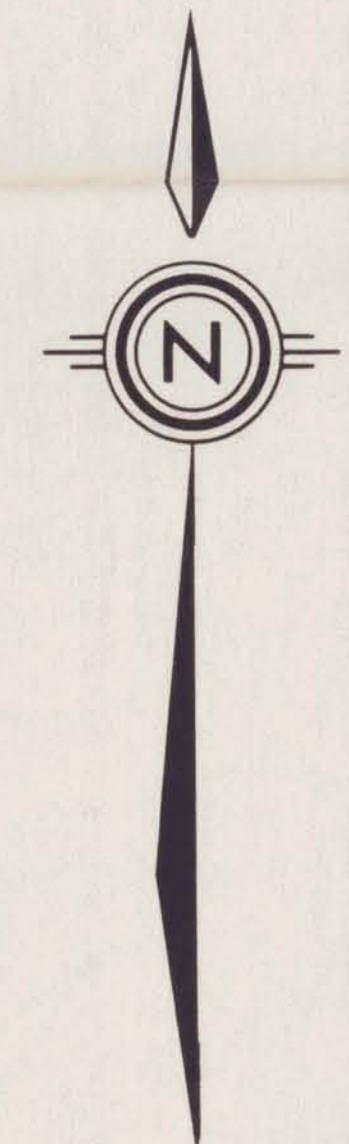
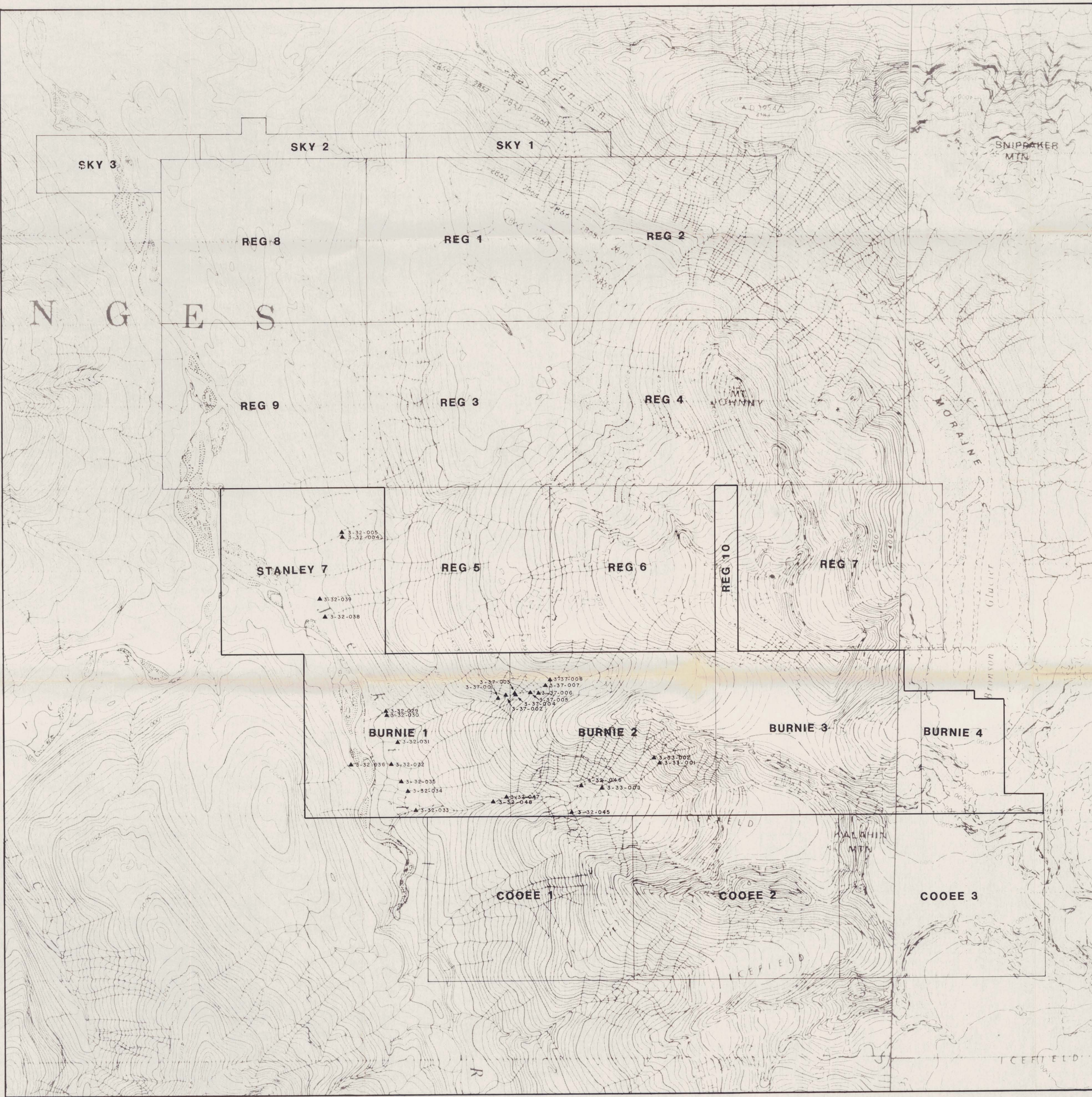
STANLEY 7  
BURNIE 1

GEOLOGICAL BRANCH  
ASSESSMENT REPORT

13,244



ANACONDA Canada Exploration Ltd. 		
<b>ISKUT PROJECT</b>		
<b>VLF GRID</b>		
<b>LOCATION</b>		
geology by: <b>R.G.</b>	drawn by: <b>J.B.</b>	date: <b>Oct., 84</b>
scale: <b>1:5,000</b>	n.t.s. <b>104B/11</b>	fig./proj. no. <b>3</b>

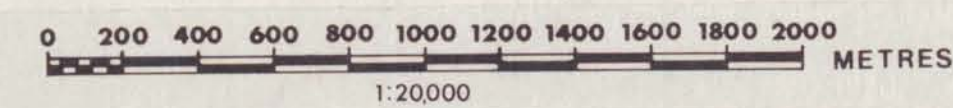


GEOLOGICAL BRANCH  
ASSESSMENT REPORT

13,244

Stream sediment sample results

Sample No.	Au (ppb)	Ag (ppm)	Cu (ppm)	Pb (ppm)	Zn (ppm)	As (ppm)	Sb (ppm)	Bi (ppm)
3-32-004	5,610	12.7	79	52	90	31	2	2
-005	4,920	5.0	314	205	220	109	2	21
-029	1,250	4.0	338	258	408	235	4	3
-030	115	0.5	143	23	90	29	2	3
-051	5,960	2.2	173	148	241	175	2	3
-032	170	0.5	42	25	59	25	2	2
-033	675	1.5	167	278	158	74	2	2
-034	75	0.5	61	17	64	26	2	2
-035	7,860	1.7	54	14	40	24	2	2
-036	14	0.5	126	22	74	36	2	2
-038	8,120	0.3	41	15	79	19	2	2
-039	155	1.0	135	39	196	89	2	2
-045	6,910	1.0	89	19	66	23	2	2
-046	285	.8	101	14	65	20	2	2
-047	14,200	2.6	186	21	162	60	2	2
-048	3,120	1.7	135	15	85	112	2	2
3-33-001	33	2.8	441	96	181	64	2	2
-002	1,460	1.2	233	36	119	23	2	2
-003	1,730	1.5	114	10	75	18	2	2
3-37-001	60	4.7	1,148	59	172	187	10	2
-002	50	7.3	1,394	60	180	168	18	2
-003	1	3.5	501	50	154	75	7	2
-004	123	2.6	197	111	278	107	2	2
-005	1	4.6	480	279	442	109	9	3
-006	1	4.7	355	64	157	94	12	2
-007	1,120	2.7	202	198	327	180	2	2
-008	440	2.1	175	116	231	131	2	2
-009	275	2.6	194	119	277	130	2	2



ANACONDA Canada Exploration Ltd.

**ISKUT PROJECT**  
**Stream Sediments**  
**Location and Assay**  
**Plan**  
**Claim Group 83-2**

geology by: A.K./J.B.	drawn by: J.B.	date: Oct. 1984
scale: 1:20,000	n.t.s. 104B/11	fig./proj. no. 6