ARIS SUMMARY SHEET

District Geologist, Prince George — Off Confidential: 89.06.28

ASSESSMENT REPORT 17542 — MINING DIVISION: Omineca

PROPERTY: Molly
LOCATION: LAT 55 48 00 LONG 127 27 00
UTM 09 6184693 597167
NTS 093M14W
CLAIM(S): Molly 1-4
OPERATOR(S): Pantan Res.
AUTHOR(S): Hooper, D.G.
REPORT YEAR: 1987, 20 Pages
COMMODITIES SEARCHED FOR: Gold,Silver,Copper,Lead,Zinc
GEOLOGICAL SUMMARY:

A thick sequence of Jurassic sedimentary rocks has been intruded by Late Cretaceous granodiorite plugs, dykes and sills. The intrusives are believed to be responsible for late stage epithermal quartz +/- carbonate veins and stockworks. The veins carry variable amounts of pyrite, galena, sphalerite, and chalcopyrite, with minor molybdenum, gold and silver values.

WORK DONE: Prospecting
PROS 300.0 ha
Map(s) - 2; Scale(s) - 1:5000
SAMP 29 sample(s) ;AU,AG,CU,PB,ZN

LOG NO 1222 RD. 2
ACTION: Date received report back from amendments.
FILE NO:

LOG NO: 0629
ACTION:
FILE NO:

KISGEGAS PROSPECT

FILMED

PROSPECTING REPORT
on the
MOLLY 1-4 CLAIM GROUP
(Record Numbers 8502-8505)

OMINECA MINING DISTRICT
Mapsheet 93M/14W

by
Doug G. Hooper, B.Sc.
Consulting Geologist

GEOLOGICAL BRANCH
ASSESSMENT REPORT

17,542

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LIST OF ILLUSTRATIONS

SUMMARY AND RECOMMENDATIONS

The Kisgegas Prospect is comprised of an 80 unit claim block totalling 20 square kilometers centered over an east-west alpine valley 2 kilometers north of Kisgegas Peak in north-central British Columbia. Access to the property is by helicopter, although active logging roads are presently only 10-15 kilometers from the property boundaries. A two-man crew prospected the southern valley wall from August 12-17, 1987. During this time 29 rock samples were collected and analyzed for gold, silver, copper, lead and zinc.

The property is underlain by a thick sequence of Jurassic age sediments intruded by late Cretaceous granodiorite plugs, dykes and sills. The intrusives are believed to be responsible for late stage epithermal quartz $\pm$ carbonate veins and stockworks generally occurring within, or proximal to the intrusive rocks. The veins carry variable amounts of pyrite, galena, sphalerite and chalcopyrite and minor molybdenum as coarse grained sulphide blebs. Lower concentrations of the same sulphide assemblage occur disseminated in the granodiorite adjacent to mineralized veins.

Results from the prospecting work located a system of major quartz vein structures lying along a sub-parallel fracture set on the eastern edge of a granodiorite plug. High base metal values and low grade gold and silver values were obtained from 9 grab samples on these vein structures. Several stockwork quartz vein systems within granodiorite dykes and sills were located. Assay values from outcropping exposures include Au-Ag equivalent (using silver values on August 28, 1987) values of 0.367, 0.187 and 0.898 Oz/T Au on three separate showings. Talus quartz vein and stockwork quartz vein samples not prospected to source included values of 0.041 and 0.167 Oz/T Au-Ag equivalent. High base metal values are associated with all of the high silver and low grade gold values.

Sampling work done during this programme concentrated on sampling quartz

veins. Background sampling of disseminated sulphide mineralization in both intrusive and sedimentary rocks would be usefull in determining widths and economically viable zones within densely veinletted stockwork systems, and wall rock and minor vein systems adjacent to major vein structures. All major quartz veins and stockwork systems require comprehensive sampling to provide a statistically valid sample population to calculate overall grades. The nature of the showings would enable bulk sampling at a small scale (100-200 lbs of material) with a minor amount of blasting; this work could be performed in conjunction with chip and channel sampling on the veins and stockwork systems.

The results from the extensive sampling programme should be fully evaluated before proceding with further blasting and bulk sampling and possibly drilling. Geological mapping and prospecting should be conducted during the initial sampling stage; mapping work should concentrate on identifying sections of high vein density mineralized stockworks and mineralized wall rock and veins adjacent to major vein structures. Because of the fairly good nature of the rock exposures, no geophysical work is recommended at this time.

INTRODUCTION

The Kisgegas Prospect lies 2 kilometers due north of Kisgegas Peak in north-central British Columbia, approximately 60 kilometers north-northeast of the town of Hazelton. The property ranges in elevation from 4500-7500 feet above sea level within broad alpine valleys and rugged peaks partially capped by receding alpine glaciers. The lower elevations are sparsely vegetated by juniper giving way to alpine grasses and flowers over the valley floors. The upper reaches and valley walls contain approximately 50% outcropping rock exposure masked by talus.

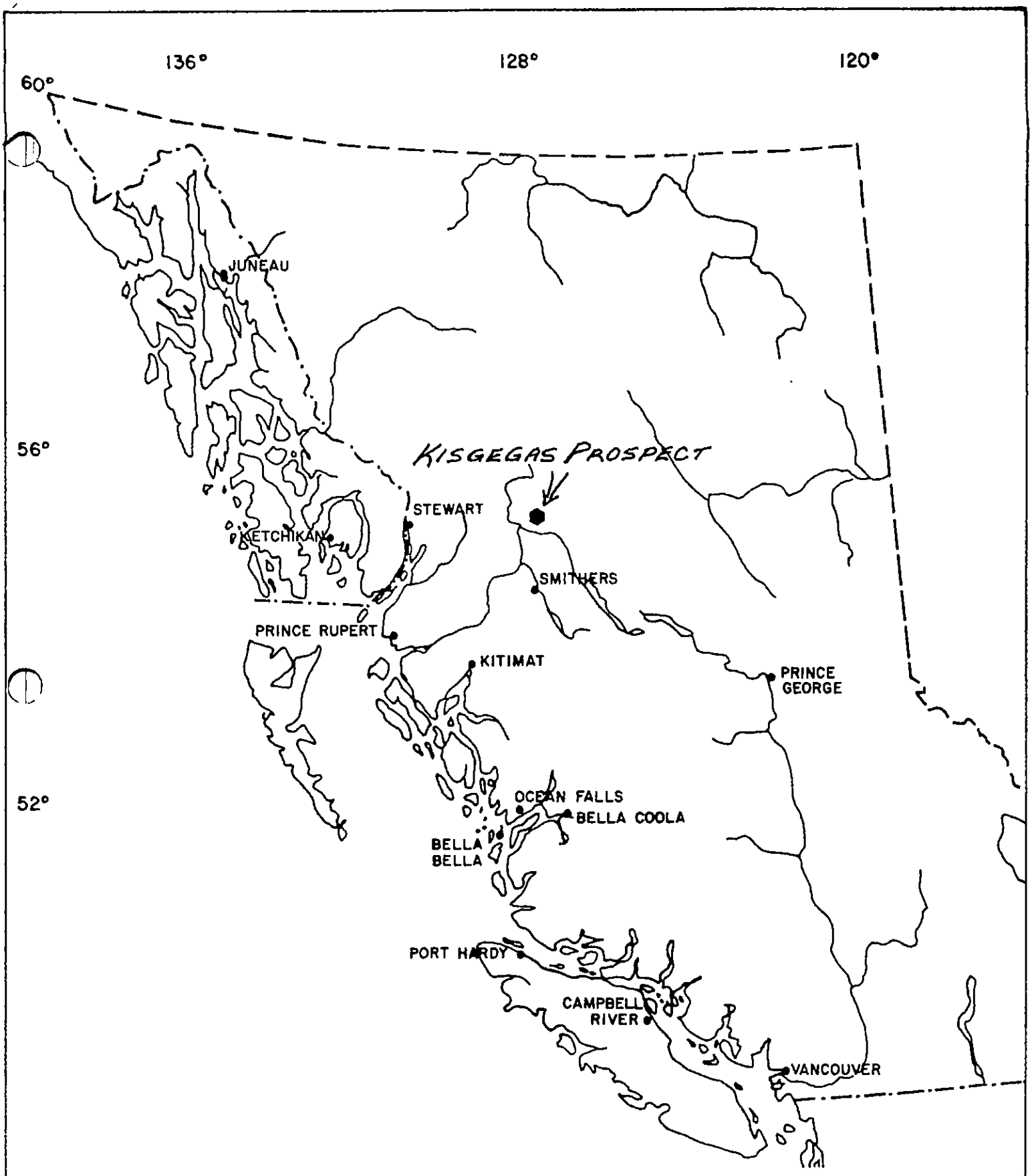
Access to the property is by helicopter from Smithers (permanent helicopter base 130 km SE) or from Hazelton (temporary helicopter base during seasonal forestry use). Active logging roads are approaching the claims from both the west and east sides, and are presently 10-15 kilometers from the property boundaries; supplies can be ferried to the property from these roads.

Staking of the Kisgegas Prospect was carried out by representatives of George Stokes (Smithers resident) on June 30, 1987 and recorded at the Smithers Gold Commissioner's office on July 7, 1987 (record numbers 8502-8505). The property comprises four contiguous twenty unit claim groups (Molly 1-4) totalling twenty square kilometers. The individual claims have been grouped for the purpose of filing assessment work. The assessment work value filed in this report will maintain the claims in good standing to July 7, 1989.

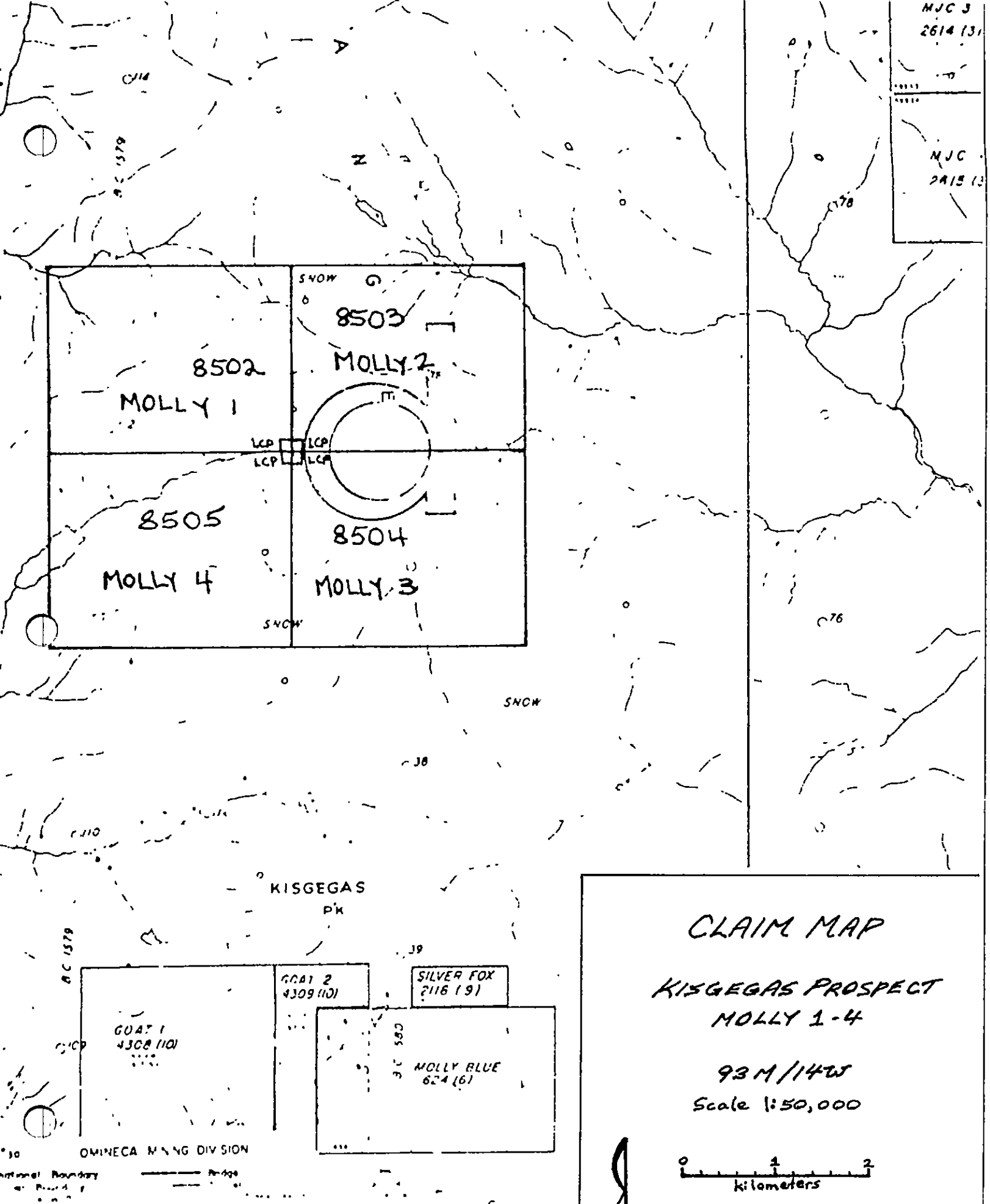
The Kisgegas Prospect was staked to cover known Ag-Au quartz vein showings and includes a fairly large area around these showings to maintain a strong land position for future prospecting or the development of the known veins. No previous assessment work has been filed for the claim area, although there is evidence of earlier prospecting activity. A molybdenum showing 6 kilometers south was actively worked in the 1960's, late 1970's, and early 1980's ; no current work is

being done in this area.

A total of 6 days were spent on the Kisgegas Prospect from August 12-17, 1987. During this time myself and an assistant prospected the southern valley wall and collected 29 rock samples from outcrop and talus. All samples were assayed for gold and silver and geochemically analyzed (A.A.) for copper, lead, and zinc. The results from this work comprise the data presented in this report.



LOCATION MAP
BRITISH COLUMBIA
CANADA



CLAIM MAP

KISGEGAS PROSPECT
MOLLY 1-4

93 M/14W

Scale 1:50,000

0 1 2
kilometers

N

GEOLOGY

Geological mapping by T.A. Richards (1980) shows the Kisgegas Peak region to be a block fault bounded structure underlain primarily by Lower Bowser Lake Group sediments of Late Jurassic age. The sediments lie generally in a northwest-southeast attitude with fold axes oriented along a similar azimuth. The sediments are comprised mainly of sandstone, siltstone, and conglomerates, Late Cretaceous Bulkley intrusive stocks, plugs, dykes and sills of granodioritic composition cut through the sediments and are interpreted by Richards to form the base of an uplifted block carrying the sediments in a roof pendant-type fashion. Later Tertiary age Babine intrusions are mapped to the south of the Kisgegas Prospect, but are possibly correlative with late-stage leucocratic micro-granodiorite dykes observed on the claims.

The Kisgegas Prospect claim area is underlain mainly by Lower Bowser Lake Group siltstones and sandstones. The sediments are locally tightly folded and minor faults offset the sedimentary beds in places. Numerous granodioritic dykes and sills of the Bulkley intrusive event protrude from the more easily eroded sedimentary layers. Granodioritic plugs were noted in the southwest portion of the claims and at the toe of the glacier feeding off the Kisgegas Peak icefield. Later stage micro-granodiorite dykes cut the earlier intrusives locally.

Latest stage epithermal quartz $\pm$ calcite $\pm$ siderite veins are associated with the Bulkley intrusives. The veins range in size from less than 1 cm - 1.3 m and occur as massive and stockwork structures. Both types of veining appear to be more favourably hosted by the granodiorite dykes, sills and plugs, although, they do occur in the sediments but are usually proximal to the intrusives. The quartz veins are bounded by intense propyllitic and carbonate alteration halos in the granodiorite; alteration of the sediments is less apparent. Granodiorite dykes and sills contain stockwork veins or subparallel fracture-fill cockscomb and vuggy quartz veins from 0-10% density. A system of subparallel major quartz veins was found at the eastern edge of the granodiorite plug in the southwest portion

of the claim. The veins average 0.25m in width although continuous widths of up to 1 m were observed on several of the veins. The principal vein in this vein system was termed the 'Gully Vein' ; this vein occupies the contact between the intrusion and the sediments and averages 0.5 m wide over 50 m of exposure. At least ten separate vein structures can be identified from the aerial photographs taken; grab samples were taken on 5 of the structures (51521-529). Talus float of large quartz vein material was observed in two other locations on the property and have not yet been prospected to source.

MINERALIZATION

Disseminated pyrite was common in the sediments and disseminated sulphides were also noted in the intrusives; the economic significance of the disseminated mineralization within these rocks remains to be tested. Sulphide mineralization is best developed within the quartz ± carbonate veins. Sulphides in the veins include pyrite, galena, sphalerite, chalcopyrite and rare molybdenum. The sulphides occur as coarse grained blebs and disseminations in abundances ranging from 0-50%. Pyrite is the most common sulphide observed in the veins. Galena, sphalerite and chalcopyrite generally occur together, when present.

Sample results from the Gully Vein (51521-524) returned high base metal (Cu, Pb, Zn) values with only low-grade silver and gold (maximum 0.072 Oz/T Au-Ag equivalent). Other veins in the fracture system returned poor assay results (51525-529), although these values are from single grab samples and do not represent a thorough testing of the structures.

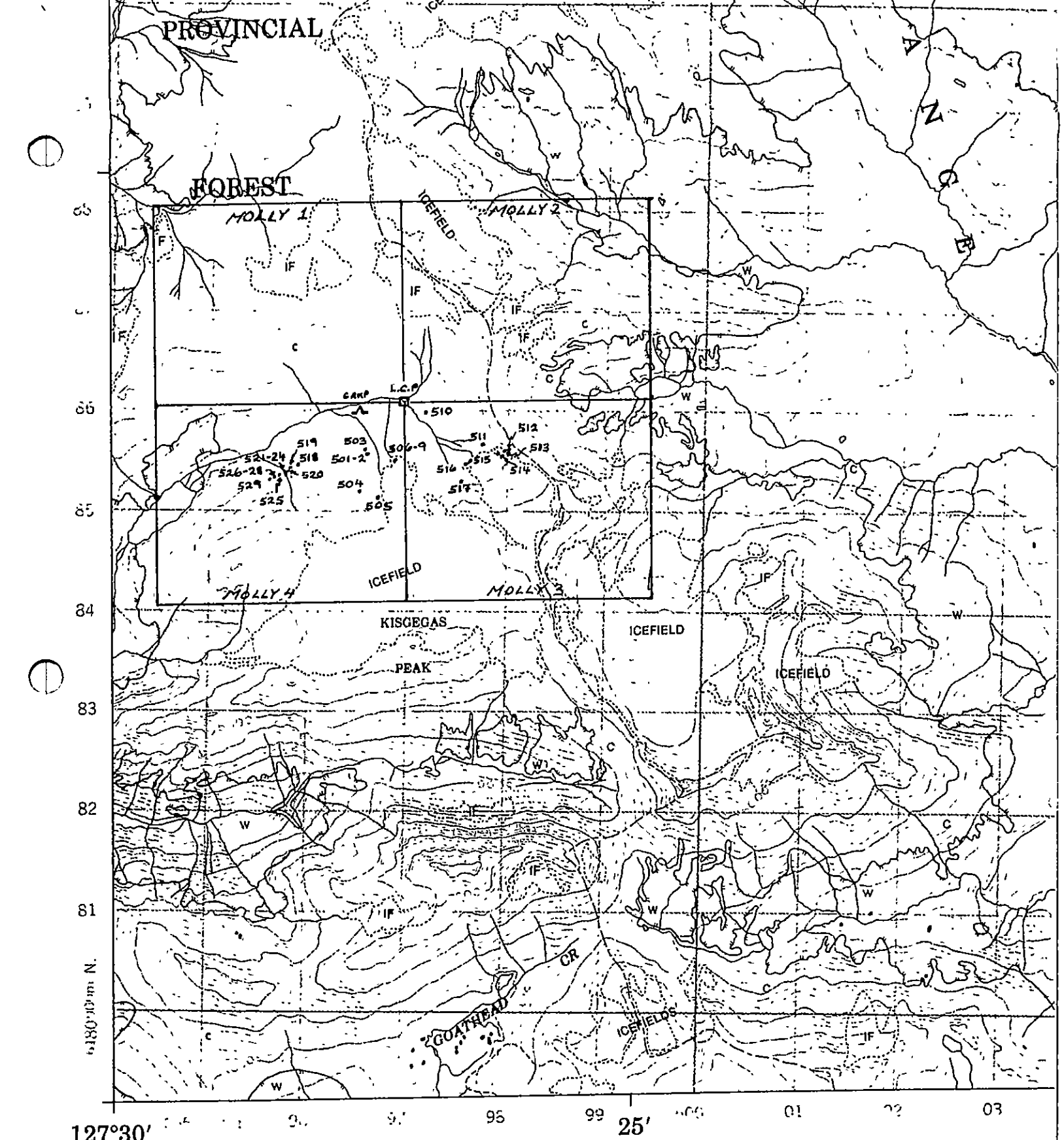
Sample 51517 returned 0.898 Oz/T Au-Ag equivalent (53.67 Oz/T Ag and 0.012 Oz/T Au) from a 20-30 cm wide quartz-sulphide vein within a 2.5 m wide granodiorite dyke. This vein represents a series of subparallel minor veins and vein stockworks in the dyke; more sampling is required on this showing. A nearby dyke (approximately 75 m west) was not prospected and could possibly be related to this showing.

A second stockwork-type showing carrying up to 0.367 Oz/T Au-Ag equivalent (19.54 Oz/T Ag and 0.045 Oz/T Au) was located in subcrop/talus (in place) boulders (51501-503). Only a small percentage of the boulders were well mineralized and further sampling and prospecting is required in this area. Samples 51506-509 are indicative of a similar situation at the toe of an alpine glacier south of the camp; the highest value recorded was 0.187 Oz/T Au-Ag equivalent, yet the size and distribution of the known mineralization requires further

sampling and prospecting to test the true value of the stockwork system.

Talus float boulders 51513 and 51515 (0.041 and 0.167 Oz/T Au-Ag equivalent) encourage prospecting these rocks to outcrop source; most glacial debris and talus boulders are believed to be locally derived and boulder trains can usually be followed to their ultimate source.

Analytical results show a definite correlation between high copper, lead and zinc values and silver and gold values. The silver values appear related to , but not proportional to , high lead values which is indicative of a galena-silver association. The sampling technique employed during the prospecting work frequently concentrated on samples rich in sulphides; the association between galena and silver is proven by the corresponding high silver values. All samples were taken from weathered surface outcrop or talus and the probability of geochemical leaching is high; as well, many vein surfaces contained frothed, vuggy quartz with empty sulphide boxworks which would also represent a certain amount of loss due to leaching.



KISGEGAS PROSPECT

SAMPLE LOCATION MAP

93 M/14

September 5, 1987

-11-

Scale 1:50,000

CONTOUR INTERVAL .. .. 100 FEET

ELEVATIONS IN FEET ABOVE MEAN SEA LEVEL

NORTH AMERICAN DATUM 1927

TRANSVERSE MERCATOR PROJECTION

N

PRODUCED BY THE SURVEYS AND MAPPING BRANCH, DEPARTMENT OF ENERGY, MINES AND RESOURCES OTTAWA 1976 INFORMATION CURRENT AS OF 1974

COMPILED BY THE SURVEYS AND MAPPING BRANCH LANDS SERVICE, BRITISH COLUMBIA, 1970 FROM AIR PHOTOGRAPHY AND FIELD SURVEYS 1953 1962 and 1963

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CONCLUSIONS

Late stage granodiorite dykes, sills and plugs cut through a thick sequence of sediments and provide a heat source and conduit for later stage epithermal quartz veins and vein stockworks. The quartz veins locally carry high copper, lead, zinc and silver values, as well as low grade gold values, The precious metal values are associated with the base metal (chalcopyrite, galena, sphalerite) mineralization in the quartz veins. The possibility of lower concentrations of disseminated sulphides in the intrusives or sediments carrying economic precious metal values has not been tested.

The quartz vein and stockwork systems sampled during the current prospecting work were fairly well exposed in outcrop although talus cover frequently limits exposure along strike. Comprehensive sampling of known showings is needed before a full evaluation of their economic potential is feasible. Further prospecting work is also required to locate the source of several large quartz talus boulders; the possibility of locating new showings is excellent as only 20% of the claim area has been prospected, and similar geological conditions exist over the remainder of the claim group.

REFERENCES

Richards, T.A.: Geology of the Hazelton (93M) Map Area (1:250,000 scale map), G.S.C. Open File 720, 1980.

ITEMIZED COST STATEMENT

WAGES

Position	Dates	Total Days	Rate	Total
Geologist	Aug. 10-19	10	$250/day	$2500.00
	Sept. 3-5	3	$250/day	$ 750.00
Assistant	Aug. 10-19	10	$100/day	$1000.00

ROOM AND BOARD

20 man-days at $40/day - (2 men x 10 days)	2 Days Mobe Van. - Smithers 1 Day Mobe Smithers - Camp 4 Camp Days 1 Day De-Mobe Camp-Smithers 2 Day De-Mobe Smithers - Vanc.	$ 800.00

TRANSPORTATION

Helicopter	3.5 hrs.	$1914.50
Truck	14 days at $25/day	$ 350.00
	3431 km at $0.25/km	$ 857.75

SUPPLIES

General	$ 206.64

ASSAYS

29 samples for Au, Ag, Cu, Pb, Zn (incl. transportation)	$ 726.00

REPORT PREPARATION

Typing, drafting	$ 100.00
Supplies	$ 25.00
TOTAL	$9228.89

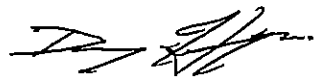
STATEMENT OF QUALIFICATIONS

I, Doug G. Hooper of 2127 W. 20th Ave., Vancouver, in the Province of British Columbia hereby certify that:

1) I obtained a B.Sc. in Geology from The University of British Columbia in 1984.

2) I have worked seasonally in mineral exploration since 1978, and as an independant professional consultant since 1985.

3) This report is based on work done by myself and an assistant from August 12-17, 1987.



Doug G. Hooper, B.Sc.
December 29, 1987

APPENDIX I: GEOCHEMICAL RESULTS

AND

SAMPLE DESCRIPTIONS

LEGEND

Q.V.- quartz vein
Q.V./GRDR - quartz vein in host granodiorite
Q.V./GRDR STWK - stockwork quartz veining in granodiorite
Q.V./SLST - quartz vein in host siltstone

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Certificate of GEOCHEM

Company:MINERAL EXPLORATION CONSULTING
Project:001
Attention:DOUG HOOPER

File:7-1165/P1
Date:AUGUST 25/87
Type:ROCK GEOCHEM

We hereby certify the following results for samples submitted.

Sample Number		CU PPM	PB PPM	ZN PPM
51501	Q.V./GRDR STWK	510	3800	9000
51502	"	510	6350	13500
51503	"	1190	62000	18000
51504	Quartz Vein	26	660	305
51505	"	380	10000	7000
51506	"	35	97	138
51507	Q.V./GRDR	490	5350	11400
51508	"	105	1950	3100
51509	Q.V./GRDR STWK	340	45000	44000
51510	"	24	275	290
51511	"	10	138	215
51512	Quartz Vein	38	143	240
51513	"	119	13000	1900
51514	Q.V./GRDR STWK	12	42	96
51515	"	2300	40000	57000
51516	"	490	118	180
51517	Quartz Vein	3400	19000	680
51518	Q.V./GRDR STWK	20	62	98
51519	"	19	69	54
51520	Q.V./SLST	120	1230	3100
51521	Quartz Vein	1620	9000	21500
51522	"	7000	34000	26000
51523	"	2600	2300	8800
51524	"	2100	380	5000
51525	"	24	32	135
51526	"	21	39	122
51527	"	8	16	43
51528	"	9	21	36
51529	"	6	8	28

*SOME OF THESE SAMPLES SHOULD HAVE BEEN REQUESTED FOR ASSAY.

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Certificate of ASSAY

Company:MINERAL EXPLORATION CONSULTING
Project:001
Attention:DOUG HOOPER

File:7-1165/P1
Date:AUGUST 26/87
Type:ROCK ASSAY

We hereby certify the following results for samples submitted.

Sample Number	AG G/TONNE	AG OZ/TON	AU G/TONNE	AU OZ/TON	Au-Ag Equivalent OZ/TON
51501	27.8	0.81	.40	0.012	-
51502	38.0	1.11	.38	0.011	0.029
51503	670.0	19.54	1.54	0.045	0.367
51504	8.3	0.24	.04	0.001	-
51505	23.9	0.70	.02	0.001	-
51506	0.2	0.01	.01	0.001	-
51507	40.4	1.18	.01	0.001	0.020
51508	6.3	0.18	.01	0.001	-
51509	380.0	11.08	.12	0.004	0.187
51510	2.2	0.06	.05	0.001	-
51511	0.3	0.01	.21	0.006	-
51512	9.7	0.28	.01	0.001	-
51513	69.0	2.01	.26	0.008	0.041
51514	0.4	0.01	.01	0.001	-
51515	325.0	9.48	.37	0.011	0.167
51516	8.2	0.24	.08	0.002	-
51517	1840.0	53.67	.40	0.012	0.898
51518	5.6	0.16	.01	0.001	-
51519	5.9	0.17	.01	0.001	-
51520	4.7	0.14	.02	0.001	-
51521	26.4	0.77	.01	0.001	-
51522	112.0	3.27	.60	0.018	0.072
51523	11.3	0.33	.14	0.004	-
51524	6.1	0.18	.03	0.001	-
51525	0.2	0.01	.01	0.001	-
51526	0.2	0.01	.07	0.002	-
51527	0.1	0.01	.04	0.001	-
51528	0.3	0.01	.01	0.001	-
51529	2.1	0.06	.01	0.001	-

Certified by _____

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ICEFIELD

IF

IF

IF

C

C

C

W

4900

LAMP

51510 GR

51511

51512

51513

51514

51515

51516

51517 GR

51518

51519 GR

SLST

SLST

SLST

SLST

ICEFIELD

KISGEGAS

PEAK

N

MOLLY 2 & 3 | KISGEGAS PROJECT

LOCATION OF SAMPLES

LEGEND

- Lega Corner Post
- Outcrop sample
- Rock float sample
- Stream sediment sample
- Soil sample
- Quartz vein
- 0.51/10.1 / 3.0 — Au/Ag (oz/ton) / Width (feet)
- G — Gossan
- Creek
- Water falls
- Outcrop
- Talus
- Contact
- Inferred contact
- Fault, shear
- Bedding attitude
- Dyke attitude
- Jointing attitude
- Foliation
- Vein attitude
- Camp
- ③ TRAVERSE (DAY 3)

LITHOLOGY

GR/ANDR - Granodiorite

SLST - Siltstone

GEOLOGICAL BRANCH
ASSESSMENT REPORT

17,542

0 100 200 300
Metres

Scale 1:5000

N.T.S. 93M/14

Work Done By; D. HOOPER

Date; AUGUST 12-17 1987

FOREST

ICEFIELD

F

IF

IF

IF

C

CAMP

GRDR

GULLY VEIN (q-)

51518

51519

51520

51521, 522

51523, 524

51525

51526

51528

51501

51502

51503

51504

51505

51506

51507

51508

51509

GR

ICEFIELD

KISGEGAS

PEAK

N

MOLLY 1 & 4 | KISGEGAS PROJECT

LOCATION OF SAMPLES

LEGEND

- Legal Corner Post (LCP)
- Outcrop sample
- Rock float sample
- Stream sediment sample
- Soil sample
- Quartz vein (qv)
- 0.5 /10.1 / 3.0 — Au / Ag (oz/ton) / Width (feet)
- Gossan
- Creek
- Water falls
- Outcrop
- Talus
- Contact
- Inferred contact
- Fault, shear
- Bedding attitude (45)
- Dyke attitude (80)
- Jointing attitude (75)
- Foliation (45)
- Vein attitude (70)
- Camp
- TRAVERSE (DAY 3)

LITHOLOGY

GR/GRDR - Granodiorite

SEDT - Sediment

GEOLOGICAL BRANCH
ASSESSMENT REPORT

17,542

100 200 300
Metres

Scale 1 5000

N.T.S. 93M/14

Work Done By; D HOOPER

Date; AUGUST 13-17, 1987