

LOG NO: 0219	RD.
ACTION:	
FILE NO:	

ASSESSMENT REPORT  
ON  
GEOLOGICAL, AND GEOCHEMICAL SURVEYS  
PERFORMED BY  
GOLDEN BEE MINERALS INC.  
ON THE  
GAP CLAIM GROUP  
ATLIN MINING DISTRICT  
NTS 104M/9E

LATITUDE - 59 DEGREES 32' 00" N  
LONGITUDE - 134 DEGREES 09' 00" W

CLAIMS OWNED BY GOLDEN BEE MINERALS INC.

OPERATOR: GOLDEN BEE MINERALS INC.

AUTHOR OF REPORT: GARY R. THOMPSON

DATE: FEBRUARY 15, 1990

GEOLOGICAL BRANCH  
ASSESSMENT REPORT

19,630

### Appendices

- Appendix I - Assay Results and Description of Method
- Appendix II - Minfile 104M 013
- Appendix III - Minfile 104M 014
- Appendix IV - Minfile 104M 016
- Appendix V - Geology and Sample Location Map

### Table of Figures

- Figure I - Location Map
- Figure II - Claim Map of GAP Group

Table of Contents

	<u>Page</u>
Introduction . . . . .	1
Location and Access . . . . .	2
Claim Information . . . . .	3
Physiography, Climate and Glaciation . . . . .	3
Claim Topography and Vegetation . . . . .	5
History . . . . .	5
Regional Geology . . . . .	6
Claim Geology . . . . .	7
Exploration Work . . . . .	9
Discussion of Results . . . . .	9
Conclusions and Recommendations . . . . .	11
Statement of Costs . . . . .	13
Author's Statement of Qualifications . . . . .	14

INTRODUCTION

In July of 1989 a reconnaissance exploration program was carried out on the GAP claim group, located 30 km west of the town of Atlin, B.C. The claims were acquired by staking in February of 1989. Situated in the mountainous region of the western most margin of the intermontane geological tectonic boundary of the Canadian Cordillera, the claims are underlain by Jurassic Laberge Group sediments. The property is accessible by water or air from Atlin. The Geological Survey of Canada has produced Regional Geological Mapping, and the Geological Survey Branch of the Ministry of Energy, Mines, and Petroleum Resources will have updated regional information to be released in February, 1990. The property is held by Golden Bee Minerals Inc., of Kamloops, B.C. (also the operator)

The exploration program carried out on the GAP group was conducted as a result of a stibnite vein that was discovered by prospector, Lawrence Maki. The program was to determine if other concentrations of metallic minerals could be found here. 229 soil samples, 9 rock samples, 2 silt samples, and 2 float samples were assayed at Northern Analytical Laboratories in Whitehorse, Yukon. 12 man days were spent on the property. Grid installation, sampling, traversing, and 1:10,000 scale geological mapping was performed in July 1989. See Appendix IV.

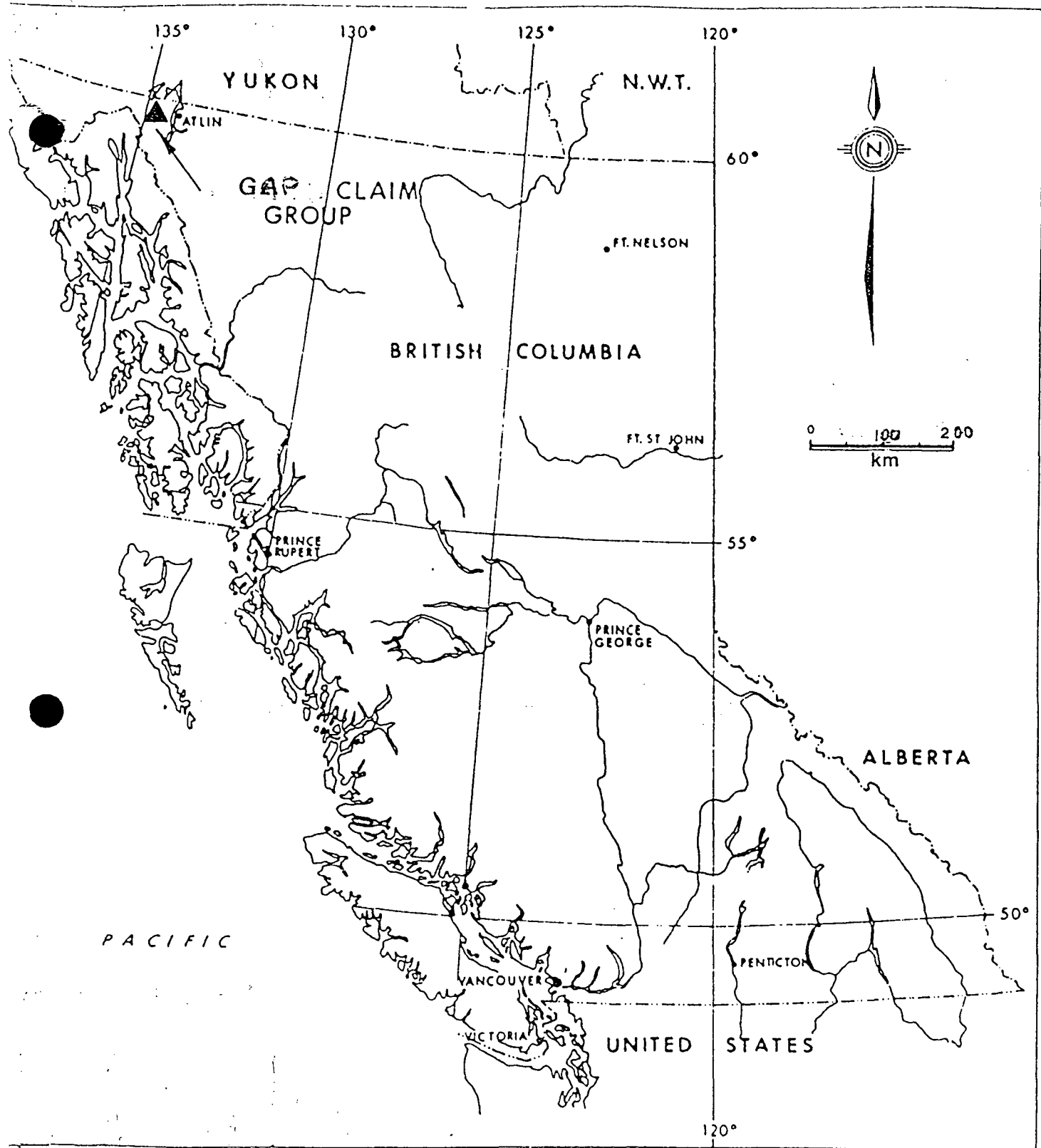


FIG. No. 1

## REGIONAL LOCATION MAP

GAP MINERAL CLAIM GROUP  
ATLIN MINING DISTRICT  
BRITISH COLUMBIA

These Claims cover part of the wide spread epithermal to hydrothermal gold-silver mineralization related to Bee Peak, and adjoin the Happy Sullivan north trending fault system.

The veins discovered by Lawrence Maki returned Sb values from 20 ppm to 80100 ppm, As values from 150 ppm to 3160 ppm, and Au values from 48 ppb to 479 ppb with notable depleted Cu, Pb, and Zn values.

#### LOCATION AND ACCESS

The GAP claim group is located in northwestern B.C. (NTS 104M/9E) on the east side of Taku Arm (Tagish Lake), the centre of the group is approximately 59 degrees 32' 00" North and 134 degrees 09' 00" West.

Access to camp was by water with a 16 foot Zodiac powered with a 25 horsepower outboard, from the village of Atlin B.C., then a 1.5 km hike to the western edge of the claim group (40.0 km by water). On a calm day this trip is achieved by water in approximately 1.55 hours, however the trip can take much longer depending on wave conditions on Atlin Lake, Graham Inlet and Taku Arm.

Access can also be gained by helicopter or float plane, both available in Atlin. (some 30.5 air km to the east)

Many of the traverses began with a helicopter placing survey people near the start location.

Gap Group Location Map 08

G R A H A M

2151±

Golden Gate

Rupert

L 4373

07

L O C K 2

06

Mount Brook

4684

05

04

03

02

Golden Mountain

5300

01

NB

NA

Golden Bee #2

3545

Golden Bee #3

3548

Bee Peak

98

Hope Creek

Scale 1:50000

42 15' 43 44 45 46 134° 10' 48 49 50 51

### CLAIM INFORMATION

The GAP claim group consists of two metric claim blocks; Golden Bee 2, Golden Bee 3. (40 units.) The claims lie within the Atlin Mining Division. Claim ownership is shown in Figure # II. Golden Bee Minerals Inc. of Kamloops, B.C. is the owner. Mr. G.R. Thompson was the project operator.

### PHYSIOGRAPHY, GLACIATION AND CLIMATE

Taku Arm acts as one of the main drainage channel for the district.

Two contrasting types of topography occur in the region; that on the Teslin Plateau (part of the larger physiographic region - the Yukon Plateau, and roughly comparable to the Intermontane geological province, and that of the Tagish Highlands) (part of the Boundary Ranges physiographic region, and given character by the Coast Plutonic Complex). The Teslin Plateau is an extensively dissected and eroded plateau. Topography consists of irregularly distributed, rounded hills with variable elevations (local area with flat-topped, uniform elevations). The valleys are wide, deep, steep-walled and typically U-shaped. The Tagish Highlands are



rugged, consisting mainly of knife-like ridges, needle summits, and abruptly incised valleys where considerable ice and snow are seen throughout the entire year.

During the Pleistocene epoch the Tagish Highlands became extensively glaciated, while the upland of the Teslin Plateau was affected to a lesser degree. Glacial processes and deposits have modified the terrain.

The rivers and creeks generally open in May, but on some lakes, ice remains until the first of June. Warm summer weather is experienced for about four months with June and July receiving almost continuous daylight. The mean daily temperature in July is no less than 14 degrees celsius. The month of July receives 10 to 13 days with measurable precipitation; mean annual precipitation is around 60 cm. In January the mean daily temperature is -15 degrees celsius with 14 to 17 days with measurable precipitation.

#### CLAIM TOPOGRAPHY AND VEGETATION

The claims lie within the Tagish Highlands. Topography is dominated by the deep U-shaped valley between Bee Peak and Golden Mountain. There is also a small unnamed lake in the northwest corner of this claim group that is 1.5 km x .5 km and drains into Tagish Lake. These claims are forested for the most

part. Alpine vegetation covers approximately 30% of the property. There is much exposed bedrock and numerous talus slopes.

The low-lying area of the claim group is covered by mature stands of balsam, spruce, pine, and shrubs of willow and alder. The mountain slopes are thickly covered by stunted balsam with local buckbrush and willow patches. Tree line is at approximately 1200 m., above which vegetation is less diverse, consisting of mosses, lichens, berries, alpine flowers, patches of buckbrush and an occasional stunted balsam.

#### HISTORY

Mining activity in the area dates back to 1898 as men made their way to the Atlin creeks. The past producing Engineer Mine is located approximately 5.5 km. southwest of the centre of the GAP group. Mining claims were first located over this deposit in 1899. Production was intermittent from 1913 to 1952 during which 17,150 tons of ore were milled. 18,058 ounces of gold and 8,950 ounces of silver were reported to be recovered. (See Minfile No. 104M 014 in Appendix III). The deposit is classified as epithermal.

In 1933 work on the nearby Happy Sullivan gold-silver prospect consisted of a 10 ton bulk sample taken from Quartz Material assayed 8.5 - 9.5 ounces per ton Au (1.5 km. south of the

southwest corner of the GAP claim group). (See Minfile No. 104M 013 in Appendix III).

Golden Bee Minerals Inc. staked the Golden Bee 2, and 3 claims in February, 1989.

### REGIONAL GEOLOGY

The claims lie within the Intermontane belt near the boundary of the Coast Plutonic Complex. All main tectonic elements have northwest trending contacts, which are generally complex fault systems. To the west, the Llewellyn Fault, a long lived, deep seated system separates Carboniferous and Permian (and possibly older) schists and gneisses (Nisling Assemblage) to the east from upper Triassic Stuhini Group andesites and basalts. Also east of the fault are rhyolitic flows of uncertain age, and lower to middle Jurassic Laberge Group argillites, greywackes, and conglomerates.

The Laberge Group occurs as a northwest trending, 20 km. wide belt with parallel contacts complicated by intrusions or large deposits of Cretaceous to Tertiary volcanics. The Group is bounded to the east by the Nahlin Fault which separates it from Permian and Carboniferous age rocks of the Cache Creek Group (Atlin Terrane).

To the east the Nahlin Fault is for the most part a northeast-facing thrust, but in the area of Atlin Mountain, may be vertical. The Cache Creek Group, in the Atlin area, is comprised mainly of cherts and argillites (Kedahda Fm.), and basaltic

andesite (Nakina Fm). Associated with basaltic andesites are irregular bodies of serpentized and carbonatized ultramafic rocks.

To the north, north of Graham Inlet, the contact between the Laberge Group and the Atlin Terrane is covered by Eocene Sloko Group volcanics. Large and small belts and patches of these young volcanics (felsic to mafic pyroclastics and lesser flows) occur in contact with all of the above mentioned older groups. Plugs of Tertiary leucogranite, probable feeders to the Sloko Group volcanics, commonly crop out near these volcanic patches.

#### CLAIM GEOLOGY

The GAP group of mineral claims is underlain by Jurassic Laberge Group sediments, mainly greywackes, argillites, shales, and conglomerates. A body of leucocratic, vuggy, brown weathering granite intrudes these sediments at Bee Peak. There are also intermediate to felsic dykes and associated minor intrusives present. Bee Peak may be a center that feeds these volcanic accumulations.

The claims lie 2 km. east of the complex north-south to northwest trending Llewellyn Fault system that separates the Intermontane and Coast Crystalline Complex tectonic belts. The general attitude of the bedding is north-south to north-west and dipping slightly to the east. However, the bedding is almost

vertical on the south face of Golden Mountain. Beds trend north and dip at 85 degrees east.

The western edge of the GAP group takes in the north-south trending fault from the Happy Sullivan prospect to the south 1.5 km. This fault parallels the Llewellyn fault which is to the west.

#### **MINERALIZATION; ALTERATION**

Large scale, bright orange-brown hornfels-pyrrhotite oxidation and alteration of the Inklin Strata south end of the claim group reflects hydrothermal activity. This volcanic system may be responsible for the Au, As, stibnite-berthiorite mineralization north west from Bee Peak.

#### **EXPLORATION WORK**

A reconnaissance exploration program was carried out in July of 1989. The GAP claim group consists of 40 claim units in the Atlin Mining District. Twelve man days of work were performed on an intermittent basis between July 22, 1989 and July 30, 1989. The work included grid and soils, geological mapping, reconnaissance traverses and data compilation. A total of 229 soils, 13 rock samples, 2 silt samples, and 2 floats were taken and submitted to Northern Analytical Laboratories in Whitehorse, Yukon. For assay results see Appendix I.

## DISCUSSION OF RESULTS

Rock samples 891-1R32 to 891-1R42 were taken from quartz stibnite flooded feldspathic greywacke and siltstones, with minor pyrite and cinnabar. All of these samples are depleted in Cu, Pb, and Zn values but returned anomalous Au, Ag, As, and Sb. The highest values obtained from these samples was 479 ppb Au, 13.5 ppm Ag, 3160 ppm As, and 80100 ppm Sb. Fracturous zones were noted near the 155 degree vertical fault in the rock sample area. This fault corresponds to a structural lineament apparent in an aerial photo. The structure appears to splay off the north-south trending Happy Sullivan fault to the south-west. This may all be related to the volcanic activity found on Bee Peak.

Two parallel soil lines 100 meters apart were installed east-west in this group. Six samples were anomalous in gold to a maximum value of 117 ppb. However, most did not produce any interesting values outside the fault and fractured area.

The threshold selection for background values has been taken from Mr. Mitch Mihalyuk's Regional Programs, 1988 British Columbia Ministry of Energy, Mines and Petroleum Resources, Geological Survey Branch NTS 104M/W and 10E, Lithogeochemical Survey determine threshold. Mihalyuk used a computer problem plot program from U.B.C. to Assays greater than 60 ppb Au, and greater than 39 ppm As, are considered anomalous.

The mean and median for samples taken from the GAP group are as follows:

<u>ROCKS</u>	<u>Mean</u>	<u>Median</u>
Au	290.7 ppb	281 ppb
Ag	3.9 ppm	4.3 ppm
Cu	20 ppm	24 ppm
Pb	56 ppm	51 ppm
Zn	72.3 ppm	69.7 ppm
As	968 ppm	730 ppm
Sb	5015 ppm	5420 ppm

<u>SOILS</u>	<u>Mean</u>	<u>Median</u>
Au	24.6 ppb	21 ppb
Ag	1.6 ppm	1.2 ppm
Cu	48 ppm	43 ppm
Pb	50.5 ppm	49.6 ppm
Zn	148 ppm	151 ppm
As	178 ppm	171 ppm
Sb	37.5 ppm	39 ppm

#### CONCLUSION & RECOMMENDATIONS

The exploration program on the GAP group did uncover elevated Sb, As, and Au values in place on a 155 degree trending

vertical fault system. However, limited work was done to define the extent of this mineralized zone.

The minerals found here are intimately related to the felsic to intermediate intrusives on Bee Peak as a source and may be related to the north-south trending Sullivan fault system.

A control grid establishment, followed a VLF survey, detailed rock sampling and geological mapping program should be conducted in the mineralized zone, prospecting on strike in both directions, and prospecting around Bee Peak. At the west end of the claim group there should be an investigation of the Sullivan fault system. It is recommended that all data compiled be correlated with the contiguous claims and local geology.



GAP Claim Group  
STATEMENT OF COSTS (1989)

Food and Accommodation . . . . .	\$ 438.40
Mob - Demob (gas, heli, boat) . . . . .	3,575.00
Communications . . . . .	123.60
Labour - 4 men 3 days . . . . .	1,800.00
Survey Materials . . . . .	178.12
Rentals of Equipment . . . . .	47.40
Consumable Supplies (gas) . . . . .	456.93
Air Photo Interpretation . . . . .	263.00
Assays . . . . .	3,888.77
Report . . . . .	741.17
Miscellaneous . . . . .	48.00
Management . . . . .	<u>1,156.05</u>
TOTAL COST . . . . .	\$12,716.43 =====

STATEMENT OF QUALIFICATIONS

I, Gary Robert Thompson of 363 Crawford Court, Kamloops, B.C. certify that:

I have successfully completed the Advanced Prospectors Training Program (B.C. Ministry of Energy, Mines and Petroleum Resources).

I am presently enrolled in 1st year geology at Cariboo College in Kamloops and plan to achieve a degree in geology.

I have spent 7 years in the mineral exploration service business.

I am secretary / treasurer of Grassroots Enterprises Ltd., a company performing Claim Staking, Prospecting, Line-Cutting, Geochemical and Geophysical Surveys, and Geological Mapping since 1987.

I am the president of Golden Bee Minerals Inc., since incorporation, April 1989.

I am a director of the Canadian Sports and Miners Association, a non-profit organization promoting the outdoor lifestyle of mining explorationists.

I am a member of the British Columbia and Yukon Chamber of Mines.

Feb. 15, 1990

Date

GRT

Gary R. Thompson

APPENDIX IV

MINFILE 104M 015

APPENDIX V

GEOLOGY AND SAMPLE LOCATION MAP

APPENDIX I

ASSAY RESULTS AND DESCRIPTION OF METHOD

August 23, 1989

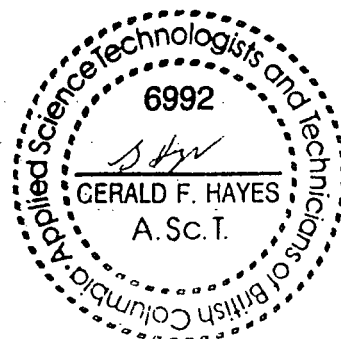
Golden Bee Minerals Inc.  
 P.O. Box 159  
 Kamloops, B.C.  
 V2C 5K3

ASSAY CERTIFICATE FOR SAMPLES PROVIDED

WORK ORDER # 29082E

Sample	ppb Au	ppm Ag	ppm Cu	ppm Pb	ppm Zn	ppm As	Sb
891-4S70	25	1.8	29	23	84	70	30
891-4S71	17	0.4	18	5	81	120	70
891-4S72	23	0.6	24	42	76	220	70
891-4S73	20	0.4	29	21	105	40	90
891-4S74	27	0.5	33	27	104	210	30
891-4S75	22	0.2	33	18	123	50	50
891-4S76	22	0.2	21	41	83	<10	30
891-4S77	21	0.3	36	39	284	<10	60
891-4S78	25	0.2	33	27	321	100	40
891-4S79	21	0.8	15	26	89	60	60
891-4S80	25	0.9	35	24	217	110	30
891-4S81	15	1.1	20	26	99	260	50
891-4S82	18	1.3	18	281	99	570	30
891-4S83	23	0.3	43	41	115	680	50
891-4S84	16	0.3	16	17	82	10	30
891-4S85	18	0.6	15	23	93	<10	50
891-4S86	25	1.0	36	12	114	250	50
891-4S87	40	1.9	30	11	88	<10	60
891-4S88	22	1.1	34	44	84	<10	30
891-4S89	22	0.9	23	33	92	160	40
891-4S90	14	0.8	34	37	94	<10	50
891-4S91	25	1.1	42	57	144	60	50
891-4S92	11	0.7	31	35	104	380	40
891-4S93	19	1.3	30	23	94	70	60

Au -- 15g Fire Assay/AAS  
 Metals -- Aqua regia digestion/AAS



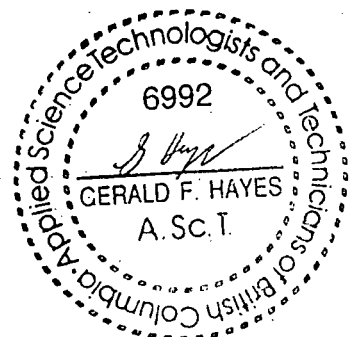
August 29, 1989

Golden Bee Minerals Inc.  
P.O. Box 159  
Kamloops, B.C.  
V2C 5K3

ASSAY CERTIFICATE FOR SAMPLES PROVIDED

WORK ORDER # 29082

Sample	ppb Au	ppm Ag	ppm Cu	ppm Pb	ppm Zn	ppm As	ppm Sb
GAR - 4S+01	<10	0.03	90	7	169	110	70



August 17, 1989

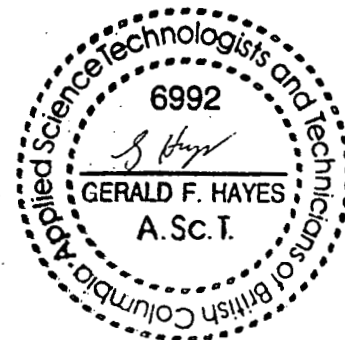
Golden Bee Minerals Inc.  
 P.O. Box 159  
 Kamloops, B.C.  
 V2C 5K3

ASSAY CERTIFICATE FOR SAMPLES PROVIDED

WORK ORDER # 29082A

Sample	ppb Au	ppm Ag	ppm Cu	ppm Pb	ppm Zn	ppm As	Sb
891-2R34	43	0.7	4	15	13	70	<10
GAP -5R01	53	1.2	10	16	25	40	30
-5R02	31	<0.1	33	290	481	400	20
-5R03	3257	58.9	949	9860	2028	80500	580
-5R04	288	5.8	93	812	257	11800	20
-5R05	39	1.1	17	89	252	450	30
-5R06	25	<0.1	20	20	8	60	<10
-5S01	33	3.1	10	16	17	20	4120
GAP -5F02	22	0.2	11	749	484	240	160
-5F03	31	<0.1	75	<1	82	<10	<10

Au -- 15g Fire Assay/AAS  
 Metals -- Aqua regia digestion/AAS





August 17, 1989

Golden Bee Minerals Inc.  
 P.O. Box 159  
 Kamloops, B.C.  
 V2C 5K3

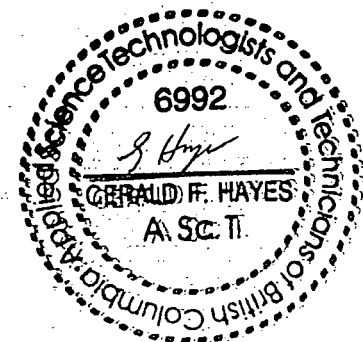
ASSAY CERTIFICATE FOR SAMPLES PROVIDED

WORK ORDER # 29082B

Sample	ppb Au	ppm Ag	ppm Cu	ppm Pb	ppm Zn	ppm As	Sb
891-1R32	71	6.7	22	17	14	160	80100
-1R33	385	13.5	21	17	11	1290	54800
-1R34	135	8.8	21	3	<10	940	72500
-1R35	448	4.9	11	35	8	3160	480
-1R36	299	4.5	13	46	14	1480	3160
-1R37	48	<0.1	40	24	62	150	20
-1R38	145	11.5	16	23	6	400	5420
-1R39	115	0.9	13	42	27	1520	1050
-1R40	125	9.3	20	27	11	1790	52700
-1R41	192	3.7	22	21	24	1490	29400
-1R42	479	2.9	13	15	<1	1600	1020
-1F03	65	15.5	12	<1	2	260	9120
-2R26	36	0.8	17	24	48	140	<10
-2R27	28	1.6	10	26	18	90	<10
-2R28	34	<0.1	58	26	414	180	10
-2R29	27	0.2	11	44	29	100	<10
-2R30	32	<0.1	10	22	3	180	<10
-2R31	35	0.3	81	23	24	740	<10
-2R32	38	4.9	636	43	89	110	<10
-2R33	34	0.3	8	35	30	20	<10

*GAP*

Au -- 15g Fire Assay/AAS  
 Metals -- Aqua regia digestion/AAS



August 28, 1989

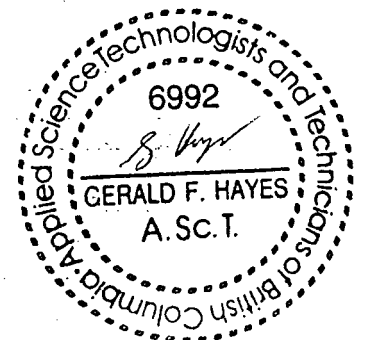
Golden Bee Minerals Inc.  
 P.O. Box 159  
 Kamloops, B.C.  
 V2C 5K3

ASSAY CERTIFICATE FOR SAMPLES PROVIDED

WORK ORDER # 29082i

Sample	ppb Au	ppm Ag	ppm Cu	ppm Pb	ppm Zn	ppm As	ppm Sb
1St10	26	0.6	68	53	109	70	30
1S02	33	3.5	33	300	322	290	10
1S03	17	2.5	141	264	763	270	50
1S04	19	1.2	18	37	93	200	30
1S05	36	0.7	60	45	102	70	20
5S01	33	<0.1	61	29	112	90	30
5S02	32	0.1	35	18	73	20	30
5S03	30	1.3	42	31	102	30	40
5S04	22	0.4	59	28	97	110	20
5S05	26	0.7	54	24	113	70	30
5S06	21	0.3	106	2	155	110	30
5S07	24	0.8	126	20	331	140	20
5S08	20	0.2	65	<1	114	110	10
5S09	14	<0.1	62	29	126	20	<10
5S10	18	1.4	67	15	122	70	<10
5S11	13	2.0	69	23	121	180	10
5S12	23	0.6	40	2	85	140	50
5S13	16	0.9	60	11	143	100	20
5S14	18	1.1	62	1	98	60	110
5S15	25	1.0	52	<1	101	70	40
5S16	23	0.7	49	35	102	20	40
5S17	17	0.2	42	<1	91	80	10
5S18	19	0.7	26	<1	56	40	10
5S19	15	1.1	40	2	99	40	20

Au -- 15g Fire Assay/AAS  
 Ag -- Aqua regia digestion/AAS



August 23, 1989

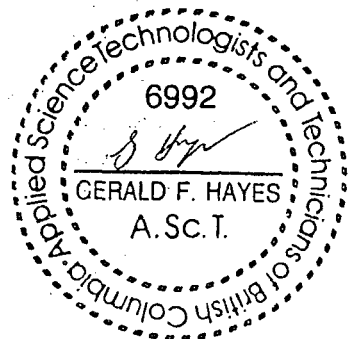
Golden Bee Minerals Inc.  
 P.O. Box 159  
 Kamloops, B.C.  
 V2C 5K3

ASSAY CERTIFICATE FOR SAMPLES PROVIDED

WORK ORDER #29082D

Sample	ppb Au	ppm Ag	ppm Cu	ppm Pb	ppm Zn	ppm As	Sb
891-5S20	11	0.9	52	38	92	280	50
891-5S21	15	2.1	79	22	127	160	80
891-5S22	12	1.5	59	28	122	210	30
891-5S23	10	1.5	81	32	131	<10	60
891-5S24	12	2.0	73	29	122	<10	40
891-5S25	19	1.3	87	17	146	<10	60
891-5S26	21	<0.1	62	34	114	190	40
891-5S27	17	0.2	71	29	133	170	50
891-5S28	23	0.8	59	30	122	150	20
891-5S29	21	0.4	49	27	108	70	40
891-5S30	21	1.4	86	46	124	<10	40
891-5S31	19	1.5	46	34	130	<10	60
891-5S32	15	1.3	72	17	120	130	30
891-5S33	16	2.8	53	18	147	140	40
891-5S34	28	1.4	75	10	115	240	30
891-5S35	21	2.3	77	12	142	300	30
891-5S36	19	1.3	82	12	120	220	20
891-5S37	20	1.6	87	26	156	200	20
891-5S38	16	1.8	87	25	175	190	40
891-5S39	27	1.0	48	39	137	580	160
891-5S40	18	1.6	44	51	112	<10	40
891-5S41	18	2.4	41	41	121	310	130
891-5S42	16	1.4	40	14	90	220	80
891-5S43	15	2.8	31	5	106	190	120

Au -- 15g Fire Assay/AAS  
 Metals -- Aqua regia digestion/AAS



August 28, 1989

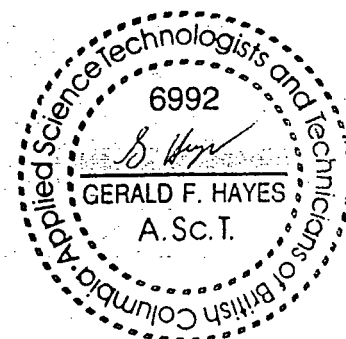
Golden Bee Minerals Inc.  
P.O. Box 159  
Kamloops, B.C.  
V2C 5K3

ASSAY CERTIFICATE FOR SAMPLES PROVIDED

WORK ORDER #29082J

Sample	ppb Au	ppm Ag	ppm Cu	ppm Pb	ppm Zn	ppm As	ppm Sb
5S44	41	6.4	74	60	258	70	60
5S45	105	1.9	42	45	190	190	30
5S46	31	1.6	48	35	145	145	50
5S47	69	1.9	32	42	121	130	60
5S48	36	1.9	35	28	63	140	50
5S49	63	1.0	47	25	105	<10	30
5S50	52	2.2	35	25	169	320	30
5S51	55	3.8	27	53	138	210	10
5S52	55	<0.1	33	36	157	80	10
5S53	56	<0.1	35	36	179	270	10
5S54	33	<1	42	23	204	100	10
5S55	56	<1	44	24	151	390	<10
5S56	53	<0.1	61	32	176	40	60
5S57	53	<0.1	66	60	284	90	70
5S58	57	<0.1	30	108	198	220	60
5S59	71	<0.1	43	66	198	70	30
5S60	14	<0.1	36	21	145	150	50
5S61	39	0.2	55	36	217	130	70
5S62	37	1.5	44	12	196	240	60
5S63	38	0.9	54	26	211	240	70
5S65(1)	31	0.3	48	116	229	190	30
5S65(2)	57	<0.1	10	27	82	180	20
5S66	53	0.9	14	4	57	240	10

Au -- 15g Fire Assay/AAS  
Ag -- Aqua regia digestion/AAS



August 28, 1989

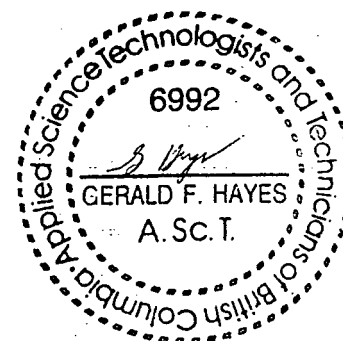
Golden Bee Minerals Inc.  
 P.O. Box 159  
 Kamloops, B.C.  
 V2C 5K3

ASSAY CERTIFICATE FOR SAMPLES PROVIDED

WORK ORDER #29082K

Sample	ppb Au	ppm Ag	ppm Cu	ppm Pb	ppm Zn	ppm As	ppm Sb
5S67	12	0.7	23	2	89	350	<10
5S68	25	0.2	14	50	64	60	20
5S69	27	1.3	22	19	140	200	50
5S70	27	0.2	17	43	80	80	30
5S71	29	0.5	32	142	155	155	50
5S72	88	1.0	20	74	90	90	20
5S73	48	0.2	13	15	96	260	10
5S74	42	1.3	15	34	93	150	<10
5S75	33	1.1	26	64	86	110	20
5S76	11	1.2	25	63	83	160	<10
5S77	<10	1.6	22	32	68	<10	<10
5S78	15	0.6	24	29	62	<10	10
5S79	<10	0.4	21	52	64	<10	10
5S80	10	<0.1	18	35	64	90	10
5S81	12	1.5	45	28	125	<10	<10
5S82	<10	0.9	91	25	80	<10	<10
5S83	<10	0.9	47	17	165	<10	30
5S84	21	2.4	35	44	113	<10	<10
5S85(1)	30	1.6	46	75	164	140	20
5S85(2)	<10	0.8	54	44	143	60	<10
5S86	<10	2.2	142	27	358	90	20
5S87	<10	<1	48	27	114	210	<10
5S88	11	<0.1	36	42	107	230	60
5S89	21	<1	50	51	130	60	50

Au -- 15g Fire Assay/AAS  
 Ag -- Aqua regia digestion/AAS



August 28, 1989

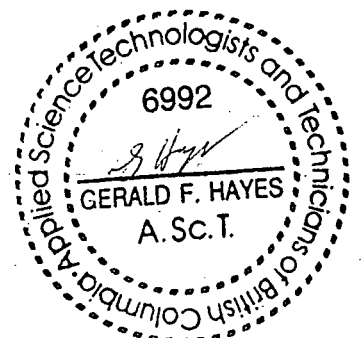
Golden Bee Minerals Inc.  
 P.O. Box 159  
 Kamloops, B.C.  
 V2C 5K3

ASSAY CERTIFICATE FOR SAMPLES PROVIDED

WORK ORDER #29082L

Sample	ppb Au	ppm Ag	ppm Cu	ppm Pb	ppm Zn	ppm As	ppm Sb
5S90	41	2.6	24	25	82	150	<10
5S91	14	0.7	15	7	67	<10	<10
5S92	45	2.5	20	29	85	<10	<10
5S93	43	2.5	26	19	68	190	<10
5S94	117	1.4	17	17	70	130	<10
5S95	26	2.7	26	25	77	80	<10
5S96	37	0.1	35	40	120	320	<10
5S97	28	2.4	21	28	97	410	<10
5S98	35	0.4	10	17	80	90	<10
5S99	10	2.2	31	23	117	130	<10
5S100	8	1.5	35	20	105	520	<10
5S101	43	1.4	47	25	135	330	<10
5S102	47	0.7	34	13	132	540	<10
5S103	14	<0.1	53	21	169	370	<10
5S104	86	1.4	49	40	160	490	<10
5S105	17	1.1	31	24	82	260	<10
5S106	13	0.5	38	23	88	450	<10
5S107	23	1.6	26	14	71	620	<10
5S108	26	<0.1	31	38	113	580	<10
5S109	11	<0.1	37	62	361	650	<10
5S110	15	2.5	48	124	537	760	<10
5S111	2	1.3	42	66	184	850	<10
5S112	34	0.1	56	61	147	850	<10
5S113	48	1.3	79	540	262	930	<10

Au -- 15g Fire Assay/AAS  
 Ag -- Aqua regia digestion/AAS



August 28, 1989

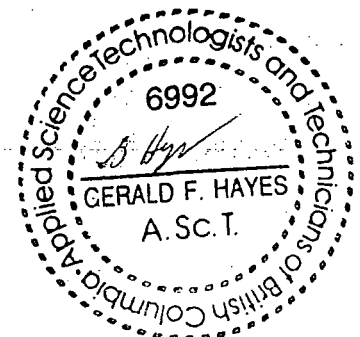
Golden Bee Minerals Inc.  
 P.O. Box 159  
 Kamloops, B.C.  
 V2C 5K3

ASSAY CERTIFICATE FOR SAMPLES PROVIDED

WORK ORDER #29082M

Sample	ppb Au	ppm Ag	ppm Cu	ppm Pb	ppm Zn	ppm As	ppm Sb
5S114	<10	1.6	33	170	148	240	60
5S115	41	13.0	111	2458	1170	510	470
5S116	<1	2.6	51	151	413	290	50
5S117	3	1.1	32	66	169	360	30
5S118	15	0.7	37	55	170	130	20
5S119	13	1.4	47	43	219	290	30
5S120	<10	0.7	31	55	152	220	50
5S121	30	0.6	38	60	176	260	10
5S122	<10	0.2	49	48	174	250	<10
5S123	10	0.9	35	47	187	90	70
5S124	23	1.2	62	96	325	30	90
5S125	30	1.0	32	52	165	10	50
5S126	19	1.3	39	100	139	<10	60
5S127	<10	0.3	27	63	108	90	20
5S128	29	0.8	41	28	124	100	10
5S129	10	1.4	39	57	90	60	10
5S130	21	0.3	22	87	86	60	10
5S131	10	0.6	36	4	111	140	50
5S132	21	0.1	57	149	147	30	40
5S133	11	1.9	32	27	115	80	<10
5S134	14	<0.1	27	27	95	130	10
5S135	15	1.6	21	21	83	100	40
5S136	10	1.3	25	56	89	150	10

Au -- 15g Fire Assay/AAS  
 Ag -- Aqua regia digestion/AAS



August 12, 1989

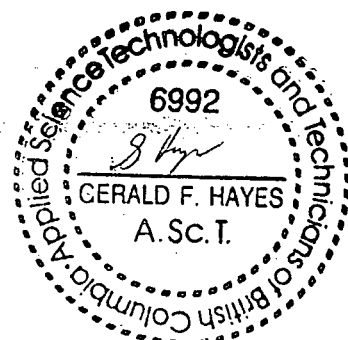
Golden Bee Minerals Inc.  
 P.O. Box 159  
 Kamloops, B.C.  
 V2C 5K3

ASSAY CERTIFICATE FOR SAMPLES PROVIDED

WORK ORDER # 29082A

Sample	ppb Au	ppm Ag	ppm Cu	ppm Pb	ppm Zn	ppm As	ppm sb
4S01	29	1.2	48	11	83	140	30
4S02	26	0.5	45	3	97	390	20
4S03	18	0.4	97	25	200	360	10
4S04	18	0.8	116	20	215	110	40
4S05	18	<0.1	77	17	143	130	40
4S06	11	<0.1	66	11	132	10	20
4S07	14	<0.1	73	4	139	580	20
4S08	13	<0.1	48	<1	111	350	10
4S09	19	1.0	57	33	114	190	10
4S10	25	0.8	47	26	145	170	10
4S11	23	0.4	56	27	96	120	<10
4S12	16	1.4	71	13	101	120	<10
4S13	27	1.3	71	1	122	250	<10
4S14	26	1.1	75	17	120	320	10
4S15	23	0.3	71	29	156	340	30
4S16	27	1.7	83	39	146	30	40
4S17	22	1.3	84	29	130	460	40
4S18	26	1.2	85	37	187	710	30
4S19	36	<0.1	60	35	143	490	50
4S20	17	0.9	60	22	149	170	30
4S21	23	1.6	50	26	97	360	60
4S02/4S22	18	1.3	65	28	144	740	30
4S23	20	0.6	49	24	122	400	20
4S24	23	1.0	65	23	151	200	30

Au -- 15g Fire Assay/AAS  
 Metals -- Aqua regia digestion/AAS





August 28, 1989

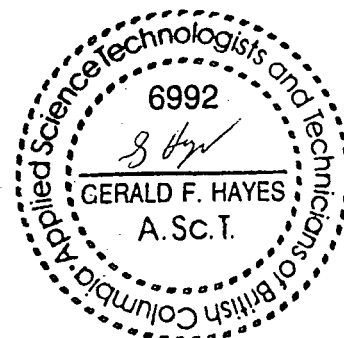
Golden Bee Minerals Inc.  
 P.O. Box 159  
 Kamloops, B.C.  
 V2C 5K3

ASSAY CERTIFICATE FOR SAMPLES PROVIDED

WORK ORDER # 29082H

Sample	ppb Au	ppm Ag	ppm Cu	ppm Pb	ppm Zn	ppm As	ppm Sb
4S25	28	0.1	59	33	134	60	30
4S26	22	0.7	57	1	121	110	10
4S27	26	0.4	79	41	195	170	<10
4S28	20	0.8	49	26	113	10	10
4S29	21	0.4	41	6	108	200	80
4S30	20	1.7	29	23	99	10	90
4S31	24	1.7	30	34	94	60	70
4S32	28	1.5	27	36	101	<10	60
4S33	30	1.3	28	27	107	160	80
4S34	16	1.4	34	11	82	120	50
4S35	16	2.4	34	33	107	60	40
4S36	20	1.5	67	69	184	<10	40
4S37	17	2.3	55	15	140	10	70
4S38	20	1.2	45	44	148	80	80
4S39	18	0.4	73	53	194	50	70
4S40	14	1.9	50	38	132	60	40
4S41	17	2.4	36	9	123	10	60
4S42	25	1.1	60	34	127	90	40
4S43	21	1.1	62	61	127	110	30
4S44	24	2.1	44	37	124	40	60
4S45	20	0.9	48	58	127	110	50
4S46	17	2.8	33	8	100	110	10
4S47	18	0.4	32	8	113	70	20
4S48	21	2.0	40	29	151	50	<10

Au -- 15g Fire Assay/AAS  
 Ag -- Aqua regia digestion/AAS



MINFILE NUMBER: 104M 014

NATIONAL MINERAL INVENTORY: 104M8 Au2

NAME(S): ENGINEER

STATUS: Past Producer  
NTS MAP: 104M08E  
LATITUDE: 59 29 15  
LONGITUDE: 134 14 00  
ELEVATION: 0833 Metres

Underground

MINING DIVISION: Atlin  
UTM ZONE: 08  
NORTHING: 6594380  
EASTING: 543423

LOCATION ACCURACY: Within 500M

COMMENTS: Occurrence associated with two main vein systems; the Engineer and Double Decker veins.

COMMODITIES: Gold Silver Antimony Tellurium

MINERALS

SIGNIFICANT: Gold Berthierite Antimony Telluride Arsenopyrite  
COMMENTS: Visible gold with minor metallic mineralization.  
ASSOCIATED: Pyrite Chalcopyrite Calcite Quartz  
COMMENTS: Pyrite content is less than 1 per cent.

ALTERATION: Mariposite

MINERALIZATION AGE: Unknown

DEPOSIT

CHARACTER: Vein  
CLASSIFICATION: Epithermal Epigenetic  
SHAPE: Regular

DIMENSION: 0000 X 0000 X 0000 Metres STRIKE/DIP: 020 90 TREND/PLUNGE:

COMMENTS: Numerous veins in deposit. Strike of the veins is between 10 and 20 degrees.

HOST ROCK

DOMINANT HOST ROCK: Sedimentary

STRATIGRAPHIC AGE

Lower Jurassic

GROUP

Laberge

FORMATION

IGNEOUS/METAMORPHIC/OTHER

LITHOLOGY: Bedded Greywacke  
Banded Siltstone  
Banded Shale  
Quartz Calcite Vein

GEOLOGICAL SETTING

TECTONIC BELT: Intermontane  
TERRANE: Inklin

Stikinia

PHYSIOGRAPHIC AREA: Teslin Plateau

CAPSULE GEOLOGY

The Engineer Mine is located on the east side of Tagish Lake about 15 kilometres south of Graham Inlet and 30 kilometres west of Atlin. The property was discovered in 1899 and operated for 3 years. Underground work and production then took place from 1910 to 1918, from 1922 to 1928, during the summer only from 1929 to 1930, and handmined from 1932 to 1934. Sporadic work occurred in 1948, 1952, 1962, 1982-1983, and in 1987 most recently by Total Erickson.

The mine is associated with several vertical, northeast-southwest striking quartz/calcite veins hosted in well bedded sediments of the Laberge Group. Shales, siltstones, and greywackes show excellent graded bedding, load casts, flame structures, and are fossilized. Regional bedding strikes northwest-southeast and dips moderately northeast. Isoclinal folds are orientated northwest-southeast parallel to the main shear zones which run through the property. The veins are perpendicular to these structures and discordant to bedding. A second phase of buckling occurred perpendicular to the first phase. "Quartz hubs" or zones of massive bull quartz occur where the ore-producing veins intersect the shear zones, although

CAPSULE GEOLOGY

these 'hubs' are barren.

The Engineer Mine quartz veins are narrow, less than 2 metres, but have consistent orientations. The grades however, are very sporadic ranging from only a trace of gold to 50 grams per tonne. Native gold is the main metallic mineral and occurs in pockets. There is also pyrite, tetrahedrite, chalcopyrite, mariposite, antimony, berthierite, and tellurides. The veins are very vuggy with many open space textures. They have very 'clean' contacts with the host rock and commonly exhibit graphitic banding. The Double Decker and Engineer veins lie to the southwest of the shear zone and the Boulder vein lies to the northeast. The Engineer and Double Decker veins received the most work.

Estimated production from the Engineer Mine from 1913 to 1952 is 15,564 tonnes grading 36 grams per tonne gold and 17.9 grams per tonne silver (Exploration in British Columbia 1987, pages 83-87).

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- EMPR AR 1900-760,778; 1902-39; 1903-44; 1904-80; 1908-50;  
\*1910-53,57,246; 1911-60,287; 1912-60,324; 1913-72; \*1914-79,89,  
512; 1915-54; 1916-46,438; 1917-80; \*1918-90; 1919-91; 1922-91;  
1923-90; 1924-77; \*1925-113,355; 1926-106; 1927-112,480; 1928-123;  
1929-120,505; 1930-132; 1932-65; \*1933-73; 1934-335; 1944-40;  
1945-43,61; 1946-60; 1948-60; 1952-39  
EMPR BULL 1, p. 24; \*3, p. 8  
GSC MEM \*37, pp. 74-89  
GSC SUM RPT 1930A, p. 11  
GSC MAP 19-1957; 94A; 218A; 1418A  
EMR MP CORPFILE (Engineer Gold Mines)  
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EMPR Monthly Rpt. (T. Shroeter Oct. 1975)  
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EMPR ASS RPT 7923, \*9049, 10511, 17253  
N MINER Jul.24, 1975; Jan.7, 1982; Aug.25, 1983  
EMPR EXPL \*1987-A12,A42,B83-87  
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Group Workshop, October 1988)  
EMPR FIELDWORK 1985, pp. 184-189  
GSC BULL 5, pp. 22-23  
CMJ Oct. 15, 1916, p. 489

DATE CODED: 850724  
DATE REVISED: 881107

CODED BY: GSB  
REVISED BY: MHG

FIELD CHECK: N  
FIELD CHECK: Y

APPENDIX IV

MINFILE 104M 016

RUN DATE: 01/24/90  
RUN TIME: 14:06:55

MINFILE / pc  
MASTER REPORT  
GEOLOGICAL SURVEY BRANCH - MINERAL RESOURCES DIVISION  
MINISTRY OF ENERGY, MINES AND PETROLEUM RESOURCES

PAGE: 1  
REPORT: RGEN4000

MINFILE NUMBER: 104M 016

NATIONAL MINERAL INVENTORY: 104M8 A04

NAME(S): GLEANER, LUXSDEN, MYOSOTIS LAKE VIEW(L.239,241),  
TAKU CHIEF (L.240)

STATUS: Showing  
NTS MAP: 104M08E  
LATITUDE: 59 28 55  
LONGITUDE: 134 13 50  
ELEVATION: 0825 Metres  
LOCATION ACCURACY: Within 500M  
COMMENTS: Gleaner adit, Morgan (1982), Page 15, Property File.

MINING DIVISION: Atlin  
UTM ZONE: 08  
NORTHING: 6593763  
EASTING: 543588

COMMODITIES: Gold Silver Tellurium

MINERALS  
SIGNIFICANT: Gold Pyrite Telluride  
ASSOCIATED: Quartz Mariposite Calcite  
ALTERATION: Quartz  
ALTERATION TYPE: Silicific'n  
MINERALIZATION AGE: Unknown

DEPOSIT  
CHARACTER: Vein  
CLASSIFICATION: Hydrothermal Epigenetic

HOST ROCK  
DOMINANT HOST ROCK: Sedimentary

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Lower Jurassic	Laberge		

LITHOLOGY: Shale  
Greywacke  
Argillite  
Quartz Vein

GEOLOGICAL SETTING  
TECTONIC BELT: Intermontane  
TERRANE: Inklin  
Stikinia  
PHYSIOGRAPHIC AREA: Boundary Ranges

#### CAPSULE GEOLOGY

The Engineer gold camp is on the east side of Taku Arm about 10 kilometres east of the eastern edge of the Coast Plutonic Complex. Lower Jurassic and later Laberge Group greywackes, shales and argillites are folded into a syncline with a northwest trending fold axis, and host the vein systems.

Small granodiorite plugs outcrop west of Engineer Mountain and south of Bee Peak. To the east of the plug on Engineer Mountain is a subcircular volcanic cap or neck about 4 kilometres across, comprising Cretaceous or later Hutshi Group rhyolite, trachyte, and volcanic breccia. Feldspar porphyry, trachyte, and andesite dykes occur in the vicinity of the veins and are locally offset by them.

The Gleaner veins are situated on the northeast side of a major northwest trending shear zone, about 0.5 kilometres northeast of the main Engineer veins and workings (Minfile No. 104M 014).

The Gleaner group of veins strike north-south and dip to the west, on the north and south sides of Butler Creek. They have been explored by several open cuts and the 210 metre long Gleaner cross-cut tunnel. Veins range up to 1.2 metres in width, and consist of sets of quartz stringers cutting sediments, brecciated wall rock fragments cemented by quartz, and massive quartz veins. Mineralization consists of pyrite and native gold. Gold occurs as fine disseminations, thin leaves and flakes in small pockets.

MINFILE NUMBER: 104M 016

RUN DATE: 01/24/90  
RUN TIME: 14:06:55

MINFILE / pc  
MASTER REPORT  
GEOLOGICAL SURVEY BRANCH - MINERAL RESOURCES DIVISION  
MINISTRY OF ENERGY, MINES AND PETROLEUM RESOURCES

PAGE: 2  
REPORT: RGEN4000

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EMPR PF (\*Morgan, D.R. (1982): A geological report on the reverted crown grants and located mineral claims on Windarra Minerals Ltd. surrounding the 'Engineer' gold mine; Mihalynuk, M.G., et al (1988): A Closer Look at the Llewellyn Fault-Tectonic Implications and Economic Mineral Potential; In Abstracts: Smithers Exploration Group Workshop, October 1988)  
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GCNL #139, #206, 1980; #62, #138, 1982; #142, 1983  
N MINER Apr 8, 1982  
EMPR AR 1901-985; 1916-92; 1925-115; 1926-106; 1933-74,75  
EMPR EXPL 1980-498,499  
EMR MP CORRFILE (Gleaner Mining and Milling Co. Ltd.)  
EMPR ASS RPT #7923, #9049, 17253  
GSC MAP 19-1957; 93A; 1418A

DATE CODED: 850724  
DATE REVISED: 881107

CODED BY: GSB  
REVISED BY: TGS

FIELD CHECK: N  
FIELD CHECK: Y

APPENDIX V

GEOLOGY AND SAMPLE LOCATION MAP

August 23, 1989

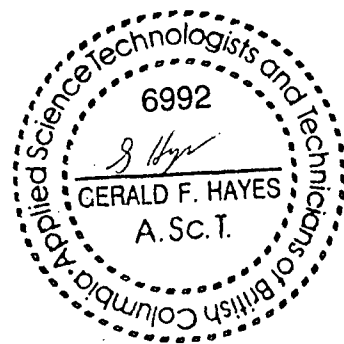
Golden Bee Minerals Inc.  
 P.O. Box 159  
 Kamloops, B.C.  
 V2C 5K3

ASSAY CERTIFICATE FOR SAMPLES PROVIDED

WORK ORDER # 29082F

Sample	ppb Au	ppm Ag	ppm Cu	ppm Pb	ppm Zn	ppm As	Sb
4S49	18	1.2	62	45	126	720	40
4S50	22	2.4	73	29	202	350	40
4S51	26	1.2	80	36	197	220	30
4S52	21	2.0	59	30	158	250	40
4S53	39	1.2	87	63	241	330	50
4S54	20	2.3	75	48	189	270	40
4S55	16	1.6	60	41	175	90	30
4S56	30	3.1	78	37	243	170	40
4S57	32	1.4	78	47	232	100	20
4S58	25	2.2	53	31	194	170	40
4S59	23	2.2	70	69	174	130	20
4S60	36	2.6	65	58	180	20	30
4S61	27	4.3	112	630	443	100	130
4S62	31	2.5	61	108	190	100	50
4S63	33	2.0	58	59	219	210	30
4S65	23	3.1	44	51	147	<10	40
4S66	20	2.5	70	37	117	80	50
4S67	31	2.5	76	73	185	50	40
4S68	29	2.0	73	30	139	180	30
4S69	24	1.3	20	8	66	90	30
4S94	<10	1.7	29	28	105	60	10
4S95	<10	2.4	36	43	107	40	20
4S96	<10	1.6	29	28	94	130	30
4S97	<10	2.4	26	38	74	<10	30

Au -- 15g Fire Assay/AAS  
 Metals -- Aqua regia digestion/AAS





August 13, 1989

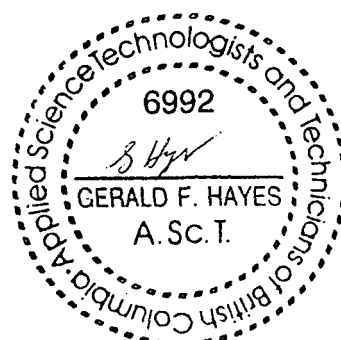
Golden Bee Minerals Inc.  
 P.O. Box 159  
 Kamloops, B.C.  
 V2C 5K3

ASSAY CERTIFICATE FOR SAMPLES PROVIDED

WORK ORDER # 29082C

Sample	ppb Au	ppm Ag	ppm Cu	ppm Pb	ppm Zn	ppm As	ppb sb
4S147	INS	1.3	137	16	95	420	<10
4S148	30	1.6	32	<1	84	510	20
4S149	21	1.4	44	18	175	60	30
4S150	23	1.6	91	13	437	40	20
4S151	17	1.7	87	20	136	230	10
4S152	15	1.7	67	12	185	130	10
4S153	22	1.8	38	3	218	40	10

Au -- 15g Fire Assay/AAS  
 Metals -- Aqua regia digestion/AAS



APPENDIX II

MINFILE 104M 013

RUN DATE: 01/24/90  
RUN TIME: 14:47:33

MINFILE / pc  
MASTER REPORT  
GEOLOGICAL SURVEY BRANCH - MINERAL RESOURCES DIVISION  
MINISTRY OF ENERGY, MINES AND PETROLEUM RESOURCES

PAGE: 3  
REPORT: RGEN4000

MINFILE NUMBER: 104M 013

NATIONAL MINERAL INVENTORY: 104M9 Au3

NAME(S): HAPPY SULLIVAN

STATUS: Prospect  
NTS MAP: 104M09E  
LATITUDE: 59 30 45  
LONGITUDE: 134 13 00  
ELEVATION: 1125 Metres  
LOCATION ACCURACY: Within 500M  
COMMENTS: Trenches at boundary between lots 3286 and 3287, Assessment Report 7923, Prospecting map and claim map.

MINING DIVISION: Atlin  
UTM ZONE: 08  
NORTHING: 6597174  
EASTING: 544334

COMMODITIES: Gold Silver

MINERALS  
SIGNIFICANT: Gold Electrum Arsenopyrite Pyrite  
ASSOCIATED: Quartz Calcite  
ALTERATION: Quartz Limonite  
ALTERATION TYPE: Silicific'n Oxidation  
MINERALIZATION AGE: Unknown

DEPOSIT  
CHARACTER: Vein Disseminated  
CLASSIFICATION: Hydrothermal Epigenetic  
SHAPE: Tabular  
MODIFIER: Fractured  
DIMENSION: 3000 X 0024 X 0000 Metres STRIKE/DIP: 000 TREND/PLUNGE:

HOST ROCK  
DOMINANT HOST ROCK: Sedimentary

STRATIGRAPHIC AGE	GROUP	FORMATION	IGNEOUS/METAMORPHIC/OTHER
Lower Jurassic	Laberge		

LITHOLOGY: Greywacke  
Argillite  
Quartz Vein

GEOLOGICAL SETTING  
TECTONIC BELT: Intermontane  
TERRANE: Inklin Stikinia  
PHYSIOGRAPHIC AREA: Teslin Plateau

RESERVES

ORE ZONE: HAPPY SULLIVAN

CATEGORY: Best Assay YEAR: 1933  
SAMPLE TYPE: Grab  
COMMODITY GRADE  
Silver 226.2000 Grams per tonne  
Gold 323.6000 Grams per tonne

COMMENTS: Grab sample a dump, west side of adit portal.  
REFERENCE: Minister of Mines Annual Report 1933, page 81

CAPSULE GEOLOGY

The area of the Happy Sullivan showing is underlain by north to northwest trending, moderately to steeply east dipping Lower Jurassic Laberge Group greywackes and argillites. A north to northwest trending silicified shear zone at least 24 metres wide and 3 kilometres long on the north side of Hope Creek, dips vertically to steeply west. The shear zone contains vuggy quartz veins up to 0.9 metres wide with up to 10 per cent disseminated arsenopyrite, pyrite and gold, commonly in dendritic habit. The mineralization has been explored by an upper and lower adit and several trenches. A grab sample from a quartz dump on the west side of upper adit assayed 323.6 grams per tonne gold and 226.2 grams per tonne silver (Minister of

MINFILE NUMBER: 104M 013

APPENDIX III

MINFILE 104M 014

RUN DATE: 01/24/90  
RUN TIME: 14:47:33

MINFILE / pc  
MASTER REPORT  
GEOLOGICAL SURVEY BRANCH - MINERAL RESOURCES DIVISION  
MINISTRY OF ENERGY, MINES AND PETROLEUM RESOURCES

PAGE: 4  
REPORT: RGEN4000

CAPSULE GEOLOGY

Mines Annual Report 1933, page 611).

BIBLIOGRAPHY

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EMPR FIELDWORK \*1985, pp. 185-189  
EMPR AR 1918-92; 1919-369; 1927-141; 1930-123; \*1933-81  
EMPR EXPL 1980-498,499  
GCNL #143,#201, 1977; #6,#180,#237, 1980; #80, 1981; #171, 1983;  
#180,#223,#234, 1984; #32,#85, 1985  
N MINER Aug 7, 1975; May 21, 1981; May 13, 1982  
IPDM Nov/Dec 1984; Feb/Mar 1985  
GSC MAP 19-1957; 1418A  
V STOCKWATCH Dec. 3, 1987

DATE CODED: 850724  
DATE REVISED: 881107

CODED BY: GSB  
REVISED BY: TGS

FIELD CHECK: N  
FIELD CHECK: Y

