REPORT ON THE
EAST KOOTENAY CLAIMS
FORT STEELE MINING DIVISION,
CRANBROOK, B.C.

**FOR** 

FENWAY RESOURCES LTD. 6 - 10th Avenue South Cranbrook, B.C.

by

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# CONTENTS

		_	Page			
Summary and Conclusions	•	•	. 1			
Cost Estimates	•	•	. 2			
Introduction	•		. 3			
Location and Access	•	•	. 4			
Property		•	. 5			
History		•	. 6			
Previous Exploration		•	. 7			
Geology		•	. 8			
Showings		•	. 9			
Recommendations		•	. 11			
Bibliography		•	. 13			
Certification		•	. 14			
Maps			٠			
Figure 1 - Property Location Map following page 4						
Figure 2 - Claim Location Map following page 5						

### Summary and Conclusions

Fenway Resources Ltd., has been working for the past nine months on an optioned claim group consisting of 123 units in the Old Baldy Mountain area, west of Cranbrook, British Columbia in the Fort Steele Mining Division. Past work on the property has consisted of driving two short adits and sinking two shallow winzes, or pits, on a vein structure located on the old Crowngranted Prospectors Dream claim. There are no written records of past sampling on this showing. There are no other areas known to have been worked in the past, nor is there evidence of prior prospecting.

The writer examined the property on April 5th, 1984 and had the disadvantage of a heavy snow blanket over the complete claims area. Structurally with the various quartz veins and mineralized shear zones uncuvered by the company in its recent operation, the property has merit. It is primarily a precious metals possibility as evidenced by the numerous sample results taken by the company's field operators. To date with less than two-thirds of the property examined, there has been located six areas of major interest. No priority of the showings can be made until the remaining portion of the ground has been investigated.

It is the writer's contention that additional showings could exist on the unexplored portion of the claims as no apparent effort appears to have been made in the past to prospect the area. The initial recommended phase of this program is organized to explore the potential of this unexamined section. The second phase of the program tests the showings on a priority basis by means of shallow air track drill holes.

It is intended to fully explore by means of geochemical sampling of soils, sediments and rock chip the remaining portion of the property. In addition, geophysics in the form of an EM 16 program to delineate shears and faults coupled with routine prospecting and localized mapping should identify areas of further interest. As an extension to target identification the writer recommends trenching and thorough sampling. The follow-up phase would be air track drilling on a priority target basis of all zones discovered to date.

This two-phase success-contingent program is recommended for the East Kootenay claims of Fenway Resources Ltd. with the total cost being \$100,400 (say \$100,000) over a 4 month operational period.

## **Cost Estimates**

### Phase I 2½ months

Geologist 4½ months @ \$3,200 Assistants (2) 2½ months @ \$2,500 Benefits (10%)	14,400 12,500 2,200	29,100
Machinery & Equipment Rental		
Back hoe & operator Vehicle rental or charges EM 16 Unit	8,000 1,200 1,000	10,200
Miscellaneous		
Laboratory sample analysis Sample freight Transportation, lodgings Report preparation, drafting	4,500 500 2,800 2,500	10,300
Total Phase I Contingency 10%		49,600 4,900
D		54,500
Phase II 1½ months		
Air track rental Sample Analysis & freight	20,000 5,000	25,000
Fees		
Management Professional 12 days @ \$400/day	12,000 4,800	16,800
Total Phase II Contingency 10%		41,800 4,100
		45,900

Total Phase I & II

\$100,40000

Say

Phase III

This would be a success-contingent phase with the amount of drilling required being dependant upon the proceeding phase.

No cost estimate can be advanced at this present time.

#### Introduction

The East Kootenay property of Fenway Resources Limited consisting of 123 units is located approximately 24 kilometers (15 miles) southwest of the city of Cranbrook, B.C. Examination of the claims took place April 5, 1984 at the request of Mr. Wm. Inverarity, President of Fenway Resources Ltd. Deep snow covered the claims during the examination period with the result major points of interest could not be visited.

The topography is quite rugged within the area with the claims extending from a low of 1,400 meters (4,600 feet) to a high elevation of 2,395 meters (7,860 feet). Old logging roads allow access to specific areas whereas the company during 1983 cut in excess of 18,000 meters (11.5 miles) of new roadway.

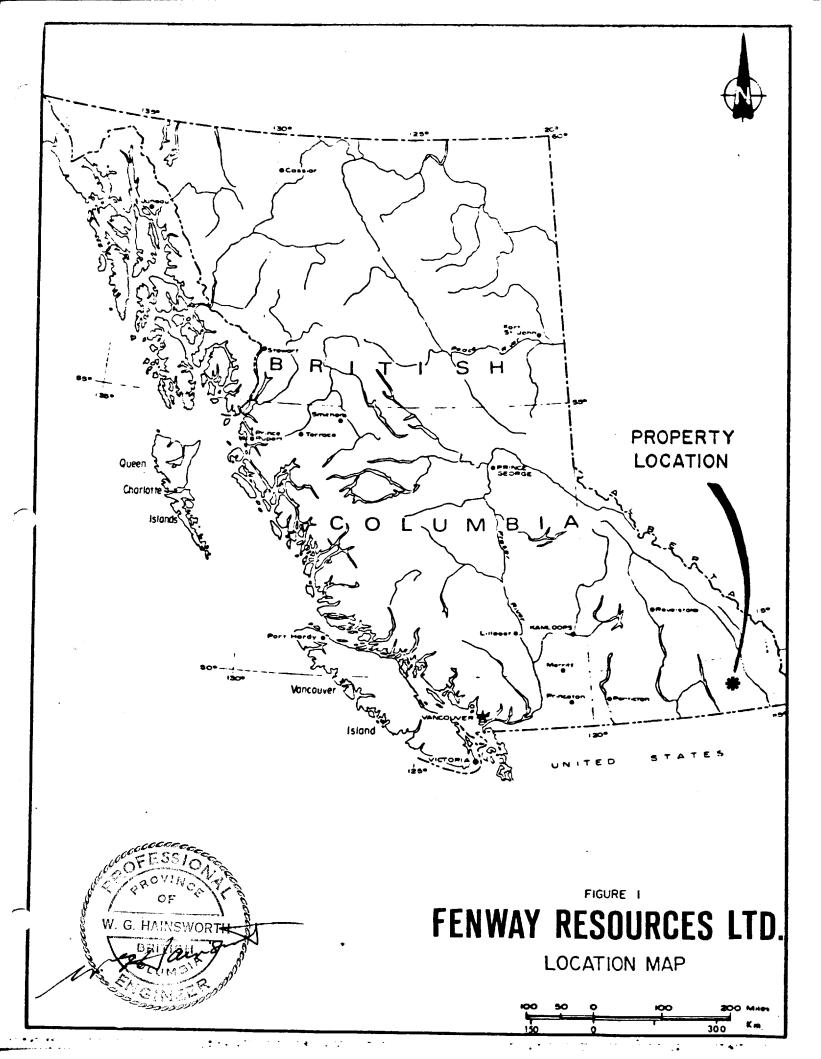
Mineralization occurs as the normal type of fissure filling along previously weakened structures. Gold and silver values are the prime targets of the project but lead and zinc sulphides are occasionally evident.

There has been no major underground exploration efforts in the past although shallow winzes and trenches attest to historical interest in the area.

#### Location and Access

The claim group lies some 24 kilometers (15 miles) to the southwest of the city of Cranbrook, B.C. Access to the claims is south from Cranbrook on Highway #3 for 13 kilometers (8 miles) to a small village, Lumberton; a gravel road runs west from here to Negro Creek, at which point the road forks with the western portion continuing along the north side of the Moyie River to its junction with Weaver Creek. Here two old logging roads leave the Moyie River road with one carrying north to the Prospectors Dream showing while the other heads in a more north western direction into the claims. From Cranbrook to the central part of the claims is a distance of 30 kilometers (19 miles).

The Fenway Resources property is within the Fort Steele Mining Division with the claims centering on north 49°25' latitude and west 116°05' longitude. Its National Topographic System location is 82/F/8 East.



#### Property

The East Kootenay property of Fenway Resources Ltd. is within the Mining Division of Fort Steele, British Columbia.

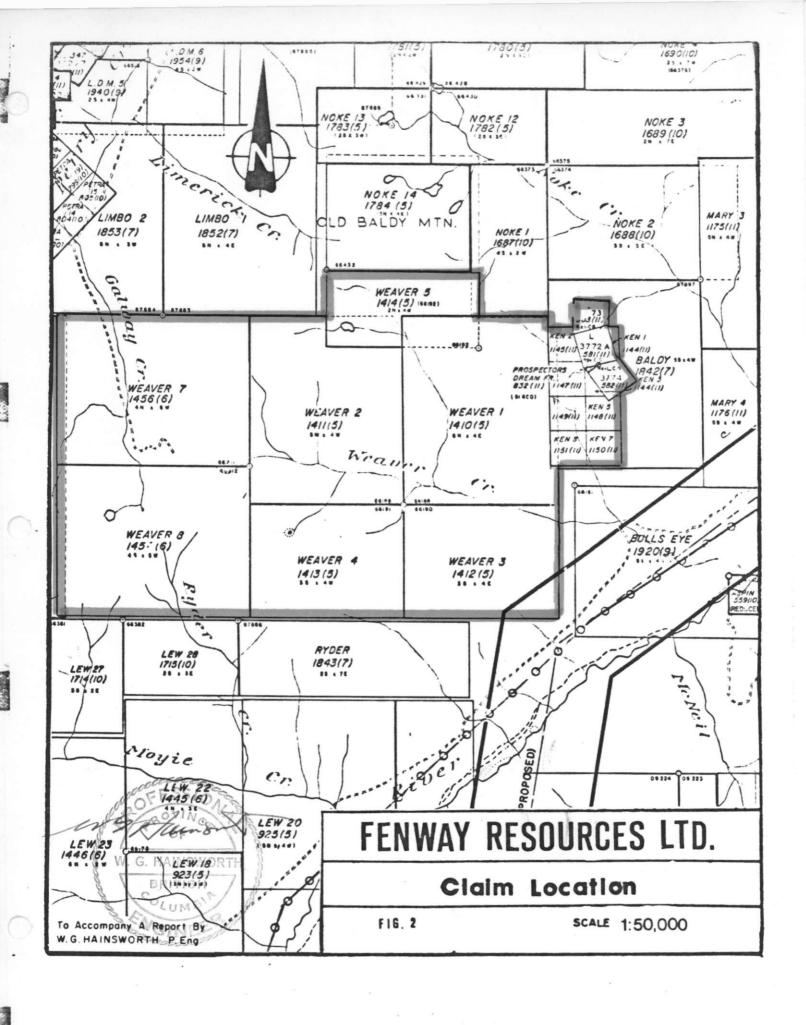
The property consists of 17 claims which total 123 units, with an east-west arrangement of some 7 kilometers (4.3 miles) and a north-south length of 4 kilometers (2.5 miles). In total the property occupies approximately 2,917 hecatres (7,200 acres) with the southeast corner post of the claim block being at an elevation of 1,400 meters (4,600 feet) rising to 2,200 meters (7,200 feet) along the north central boundary line.

The Claims

Name	No. of Units	Record No.	Expiry Date
Weaver #2	20	1411	May 12, 1984
Weaver #3	12	1412	May 12, 1985
Weaver #4	12	1413	May 12, 1984
Weaver #5	8 (4 over)	lap) 1414	May 12, 1985
Weaver #7	20	1456	June 9, 1984
Weaver #8	20	1457	June 9, 1984
Ken #1 to #8	1 each	1144 to 1151	Nov. 5, 1987
		incl.	
Prospectors Dr	eam 1	581	Nov. 5, 1986
Old Abe	1	582	Nov. 5, 1986
Ben d'Or	1	583	Nov. 5, 1986
Weaver #1	20	2076	Feb. 1985

Weaver #1 was allowed to lapse with a restake completed and recorded at the Cranbrook Recorder's office in February 1984.

Assessment work was registered with the Mining Recorder in September 1983. As a result there is one assessment year pending, upon approval, to record numbers 1411, 1413, 1456 and 1457.



### History

The area was first introduced to mining through placer operations on several large local creeks and rivers in the late 1880's. Lode mining gradually put in an appearance and took over from placer in the early 1900's. Placer mining is sporadic in operation and location today.

In the Old Baldy Mountain area where Fenway's present operation is located, one of the first mineral claims recorded was the Prospectors Dream. This particular section saw a modest spurt of activity on this and several of the surrounding claims in the mid 1890's. Trenching and limited inclined tunnel work was the extent of the operations. There is no record of production or shipment.

In April of 1983, Fenway under its president, Wm. Inverarity, completed a transaction to acquire a group including the Prospectors Dream claim, now a reverted Crowngrant, plus several contiguous claim blocks west of this claim all of which straddled the Old Baldy Mountain ridge. Forming a joint venture with a group of Calgary people, work was initiated on the ground in mid summer of 1983. The work was directed by Mr. Inverarity, working with a geological consultant, Mr. G. Mason of Kimberly, a well known and respected Cominco geologist.

Claims to the northeast and several kilometers south are held by Falconbridge Copper. Other large claims blocks in the vicinity belong to Cominco.

#### **Previous Exploration**

Until Fenway Resources acquired the property there has been no major exploration work recorded on the ground. Sporatic investigation, particularily on the Prospectors Dream claim, attests to past individual efforts. As reported this particular claim has 2 short adits while 2 shallow winzes or pits have been put down on the adjoining claim.

Logging operation on the hillside during 1970-1975 accounted for several open areas and numerous good access roads. Fenway and partners utilized these roads to extensively prospect the open areas along the east slope of the ridge. The roads were similarily used for soil sampling guidance wherever interesting areas were observed. A local contracting firm ran in some 18,500 meters (11.5 miles) of new road. Trenching with a backhoe was carried out on the Prospectors vein, the Hill vein, a fault paralleling the Hill vein and other isolated areas of mineralization-quartz interest.

Some 179 soil samples from the "B" horizon were taken from various locations adjoining the roadside. Of this number 114 were obtained along the road lying south of Weaver Creek while another 22 were gathered in the vicinity of the Hill vein.

A total of 56 rock samples were collected from the various showings with 30 of the samples being taken from the three Baldy Shear extension trenches while 7 were obtained from the Hill Vein, 5 from the Prospectors Dream and 2 from the Baldy Vein.

A magnetometer survey was run along the south Weaver Creek road resulting in an anomalously high section near the junction with the Moyie River road.

### Geology

The area is underlain by late Precambrian sediments of Purcell age. The series is characterized by a great thickness of conformable sediments and has been subdivided into two sections - Upper and Lower. In addition various formations, particularily the Aldridge and Creston, have similarily been subdivided. The Helikian sediments of these formations have been classified into Upper, Middle and Lower groupings. On the Fenway property the predominating formations are the Middle to Upper Aldridge overlain by the lower Creston series, both formations demonstrating a northeasterly trend with the Aldridge having a flat easterly dip and the Creston a moderate westerly dip. The sediments are mainly composed of variable argillites with scattered beds of siltstone and fine-grained quartzites.

Intrusive into these formations are sills and dykes generally classified as Purcell or Moyie intrusives. The sills of this period are in greater number and of greater economic consequence than the dykes. The sills vary in thickness from thin sheets to tabular bodies exceeding 200 meters (650 feet) and often exhibit a multiple overlap arrangement. Mineralization is often associated with these sills.

The area displays two major north-easterly trending faults. The Perry Creek fault lies to the west of the Fenway property within the sculptured valley of Perry Creek. Trending through the claims on a north-nertheast bearing is the Old Baldy Fault. This structure lying along the prominent ridge of the property has an apparent offset to the Aldridge formation of some 2 miles. Radiating from it are scattered tensional faults or shears of varying intensity and direction. Occurrences of this nature are the Weaver Shear and the Baldy Shear both associated with precious metal deposition.

Mineralization on the claims is normally auriferous pyrite, visible gold and occassionally sulphides of lead and zinc enclosed in a quartz matrix within a fissure vein or sheared stockwork structure.

### Showings

To date there has been established four showings and two mineralized shears of interest on the property.

#### Prospectors Dream Vein

This is the original find of the Old Baldy Mountain area, going back into the early 1890's. The relatively flatlying quartz vein conforming with the country rock trend lies within a diorite sill. On surface the five foot quartz-rubble thickness shows the effect of weathering but an early inclined adit exposed a more solid structure at depth but one which pinched with deeper penetration.

Fenway 1983 exploration work unearthed two adits in the southern portion of the property and two pits close to the north boundary. Vein deflections in dip were apparent as the structure was traced out of the sill into Aldridge sediments then back into the sill.

Five rock samples were taken from the Prospectors vein. At the south end a four foot chip from gossanous material by the adits yielded 3.6 ounces gold per ton and 2.94 ounces silver per ton. At the north end four grab samples were taken from the muck pile which averaged 0.156 ounces gold per ton and 0.87 ounces silver per ton.

Fenway located an old trench 60 meters (200 feet) east of the adits which contained sulphides within a quartz structure. However when a new trench was sank there was no evidence of a vein possibly due to non-recognition of the weathering effect.

#### Hill Vein

This structure was opened by Fenway while driving a new road through the property.

This quartz fissure vein is somewhat similar structurally to the Prospectors Vein in that it has a weathered residual appearance, agrees with the formational strike, is hosted by both the Aldridge sediments and the gabbro sill and was traced for 450 meters (1,500 feet) of strike length.

Eight samples are recorded from this showing. At the north end, a one meter (3 foot) chip sample assayed 0.044 ounces gold per ton and 0.06 ounces silver per ton. Seven grab samples were taken wherever possible over the 450 meter length with five random grab samples running from a low of 0.024 ounces gold per ton to a high of 0.204 ounces gold per ton while two select grabs averaged 2.967 ounces gold per ton and 0.35 ounces silver per ton.

### Showing - Cont'd.

#### Galena Vein

This quartz vein structure was identified over a 15 meter (50 feet) surface exposure. Coincident with the Upper Aldridge formational trend the vein dipped steeply to the northwest. Two samples cut across the sulphide rich vein, assayed 0.079 and 0.410 ounces gold per ton across respective widths of one meter (3 feet) and a third of a meter (1 foot). Trenching along the road did not show a northern projection.

### Baldy Shear

This is presumably the southern shear extension of the Galena vein. It is a shear structure traced over 1,220 meters (4,000 feet) which displayed either quartz veinlet stockworks or strong quartz saturations reaching widths of 7.5 meters (25 feet). The zone penetrates both the sediments and the sills. Two 7.5 meters (25 feet) grab samples along the strike ran 0.010 and 0.034 ounces gold per ton.

### Baldy Vein Extension

This extension lies some 1,220 meters (4,000 feet) south of the Baldy Shear projection. The shear is observed with the Baldy Vein, composed of a massive 2 meter (6 foot) quartz vein buttressing 9 meters (30 feet) of quartz veinlets, lying to the north of the Baldy Shear.

No sampling was oarried out.

#### Weaver Shear

This shear, traced over 240 meters (800 feet), is a tensional structure displaying minor mineralization in a quartz infiltrated zone. Three trenches aggregating 80 meters (270 feet) were excavated along the strike by the company. Sampling of the trenches revealed a 25 meters (80 feet) section assaying 0.023 ounces gold per ton and 0.026 ounces silver per ton.

Will

#### Recommendations

There has been interest shown in the property in the past but presumabley only in one location - Prospectors Dream claim. Past operations thought enough of the structure to run two adits and two winzes, or deep trenches, on the vein structure. Little information is available in past records to show the results of their efforts.

Fenway Resources Ltd. has spent one field season on the East Kootenay claims and has identified an additional five target areas. All the target areas have undergone preliminary examination. Sampling of the areas has shown gold with minor silver mineralization to be present.

The prime commodity of the claims is precious metals, principally gold, which has been demonstrated to be present in variable amounts within quartz veins, stockworks or shear structures. Lead, zinc and copper are of minor concern.

In the one field season approximately 65% of the claims were investigated.

It is recommended that the remaining claim area be investigated by a well organized soil and stream sediment program with the analysis being run for gold, silver, lead and zinc.

As the quartz veins are often associated with shear or fault zones, it is recommended that investigation for these structures be carried out utilizing a VLF electromagnetic system such as an EM 16 unit.

The remaining claims should also be thoroughly prospected.

New zones revealed by the above approaches should be opened up by trench excavation with mapping and sampling being carried out on this trench work.

All of the above recommendations are surface investigations of the remaining property claims and should add to the target inventory. This would constitute Phase I of the recommended program.

Phase II would be a more investigative approach of the targets revealed to this point. This phase would involve shallow sub-surface analysis by means of a air-track drill reaching below the weathering horizon. Samples should be collected from the full depth of the holes not just specific areas.

Drilling of the targets can be determined by the priority system which should have built up a good geological and surface sampling knowledge of the zones.

Phase III would be a major diamond drill program depending upon the results of the previous phase.

Respectfold submitted,

lainsworth. P. & E

# Bibliography

- G.S.C. Memoir 228 Nelson Map Area, East Half, British Columbia, H.N. Rice 1941
- B.C. Department of Mines Report: 1898, Page 1013
- G.S.C. Map Grassy Mountain Sheet, J.E. Reesor, 1981

with

#### Certificate

- I, W.G. Hainsworth, P. Eng., of Vancouver, B.C. do hereby certify:
- 1) That I am a Consulting Geologist residing at #4-4100 Salish Drive, Vancouver, B.C.
- 2) That I am a graduate of the University of Western Ontario, Bachelor of Science Degree, Honours Geology.
- 3) That I have practiced my profession for some 30 years.
- That I have been a continuous member of the Association of Professional Engineers of British Columba since 1965 and am a Professional Geologist registered with the Association of Professional Engineers, Geologists and Geophysicists of Alberta since 1979.
- 5) That I have no financial interest, direct or indirect, in Fenway Resources Ltd., and do not expect to obtain any such interest.
- 6) That the information contained in this report is based on a visit to the East Kootenay property on April 5, 1984 and perusal of all pertinent information available.
- 7) That consent is herewith given to Fenway Resources Ltd. to use any or all material from this report in information circulars, offerings or shareholders' brochures.

To accompany:
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Fort Steele Mining D

Fort Steele Mining Division Cranbrook, B.C. for

Fenway Resources Ltd. 6 - 10th Avenue South Cranbrook. B.C.

April 11, 1984

W.G. Hain

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