

Technical Report  
On  
Keeley Frontier Project, South Lorrain Township  
Larder Lake M.D. Ontario  
For  
Canadian Silver Hunter Inc.

By: G.A. Harron P.Eng.  
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## **1.0 Summary**

Canadian Silver Hunter Inc. owns a 100 % interest in the Keeley Frontier Project located in South Lorrain Township, Larder Lake Mining Division, Ontario. The Keeley Frontier Project consists of 13 contiguous, patented (surveyed) mining claims covering a surface area of 174.29 hectares. Both surface and mining rights are attached to lands subject to (a) easements granted to hydro electric power companies for the purpose of establishing transmission lines, and (b) surface rights withheld by the Ministry of Mines and Northern Development, over the mine sites of both the Keeley and Frontier mines.

The best road access to the Keeley Frontier Project is via highway # 567, which departs North Cobalt in a south-southeastern direction, and can be followed a distance of approximately 26 km to the "Keeley Frontier "road. This road forks to the southwest and can be followed for 1-2 km to the historical mine sites located, near the abandoned village of Silver Centre.

The discovery of bonanza grade silver (> 1,000 ounces silver per ton, or 34.286 kg/tonne) at Cobalt in 1906 precipitated a major exploration boom in the area. It is estimated that the Keeley and Frontier mines produced 19,197,400 ounces (597,096 kg) of silver and 3,310,600 pounds (1,501,655 kg) of cobalt from 332,000 tons (301,185 tonnes) at a recovered grade of approximately 58 ounces of silver (1,988 g per tonne) and 0.5% cobalt per tonne. Cessation of mining activities was directly related to economic factors, which has left unknown quantities of mineralization considered to be sub-economic at the time in the mine workings. Current high metal prices provide the impetus to re-examine economics of exploitation. Identifying and defining this mineralization is the focus of exploration on this project.

The Keeley Frontier Project is situated in the Southern Province of the Canadian Shield, adjacent to the Grenville Province. Huronian Supergroup sedimentary rocks dated at 2.5 - 2.2 Ga rest unconformably on folded Archean granite / greenstone belts and gneissic terranes of the older Superior Province. Major north-northwest trending normal and reverse faults define a graben structure in the area. The axial portion of the graben is filled with flat lying Ordovician and Silurian sedimentary rocks, which rest unconformably upon both Archean and Proterozoic terranes. Faulting affecting these Paleozoic rocks may be related to kimberlite igneous activity in the Jurassic era.

Nipissing Diabase bodies are the most abundant and widespread igneous rocks intruding the Huronian sediments. These tholeiitic rocks occur as dykes, and sills up to several hundred metres thick and are uniformly distributed across the Cobalt Embayment. It is thought that these intrusions are also a manifestation of a mantle plume igneous event. Five-element deposit type mineralization displays a close spatial relationship with the Nipissing Diabase, occurring in dilation veins above, within and below the diabase. Mineralization is predominantly controlled by shear structures, which are parallel and transverse to the graben-bounding structures.

A 2,600 m program of diamond drilling and limited bore hole IP/RES geophysical surveying is proposed in the Phase I program with an estimated expenditure of \$ 600,000. Historical geological and geophysical reports concerning this project have identified the targets, which will be diamond drill tested in the vicinity of Beaver Lake.

A Phase II program of 5,000 metres of diamond drilling and compilation work is partially contingent upon encouraging results being obtained in the Phase I program. Compilation work would entail digitization of the plans and sections, with assay data, of the underground workings. Knowledge of the location of the economic veins in the underground veins will assist in the preparation of future work programs. The estimated expenditure associated with the Phase II program is \$ 1,000,000.

Based on the success and results from prior period exploration programs conducted on the Keeley and Frontier mine properties, the proposed Phase I and Phase II programs are warranted, and should expand considerably knowledge of the potential of the north-northeast trending fault structures to host economic silver mineralization.

The aggregate expenditure covering the two phases of exploration is estimated to be \$ 1,600,000.

## **2.0 Introduction and Terms of Reference**

Canadian Silver Hunter Inc. ("CSH") or the "Company") is engaged in the acquisition, exploration and development of mineral properties. CSH is proposing to conduct staged exploration programs for Ag-Ni-Co mineralization in the vicinity of the past-producing Keeley and Frontier mines.

CSH is a private company incorporated in Ontario. The address of the Company is 65 Harbour Square, Toronto, Ontario M5J 2L4.

The Project is comprised of 13 patented contiguous claims, located in South Lorrain Township, Larder Lake Mining Division, Ontario (Figure 1). The Keeley Frontier Project is material to the Company as it represents the Company's main exploration project.

At the request of CSH, G.A. Harron & Associates Inc. ("GAHA") has been contracted to prepare a Technical Report for CSH on the 100% owned Keeley Frontier Project as of December 31, 2010. The purpose of this report is to update public disclosure of the assets, the results of new geophysical surveys and qualify the recommended phased exploration programs. The project is at an advanced stage of exploration, since geophysical surveys have been completed and diamond drilling is recommended in the first phase of exploration.

This report contains details of the land tenure, a summary of previous exploration and development work, a compilation and synthesis of geology and geophysics data, with recommendations for further exploration and development of the properties. The information herein is derived from a review of the documents listed in the section 21.0 and from information provided by CSH. The author is familiar with the general area through involvement in numerous exploration programs in the general area on behalf of several other companies.

This technical report is to conform to National Instrument 43-101 standards. Terms of engagement are in a letter from GAHA to CSH dated November 17, 2010.

This technical report was revised as reflected on the cover page. The revision was to remove discussion of any potential metal value per ton based on historic production grades and current resource prices.

Prior to this assignment GAHA has not provided technical services to CSH.

The author of this report has completed a site visit to the property on October 5, 2010, at which time access to the property and geology of the property were examined. Some reclamation has occurred in respect of demolition of the mill buildings, removal of machinery, waste rock piles and tailings pond management.

There were no limitations put on the author in preparation of this report with respect to technical information.

Cost data used to create proposed budgets to support the proposed work programs are based on a general knowledge of current costs, as experienced by the author on other projects in northern Ontario over the past 12 months. References to dollars in the report are to the Canadian currency, unless otherwise indicated.

Metric units of measure are used in this report.

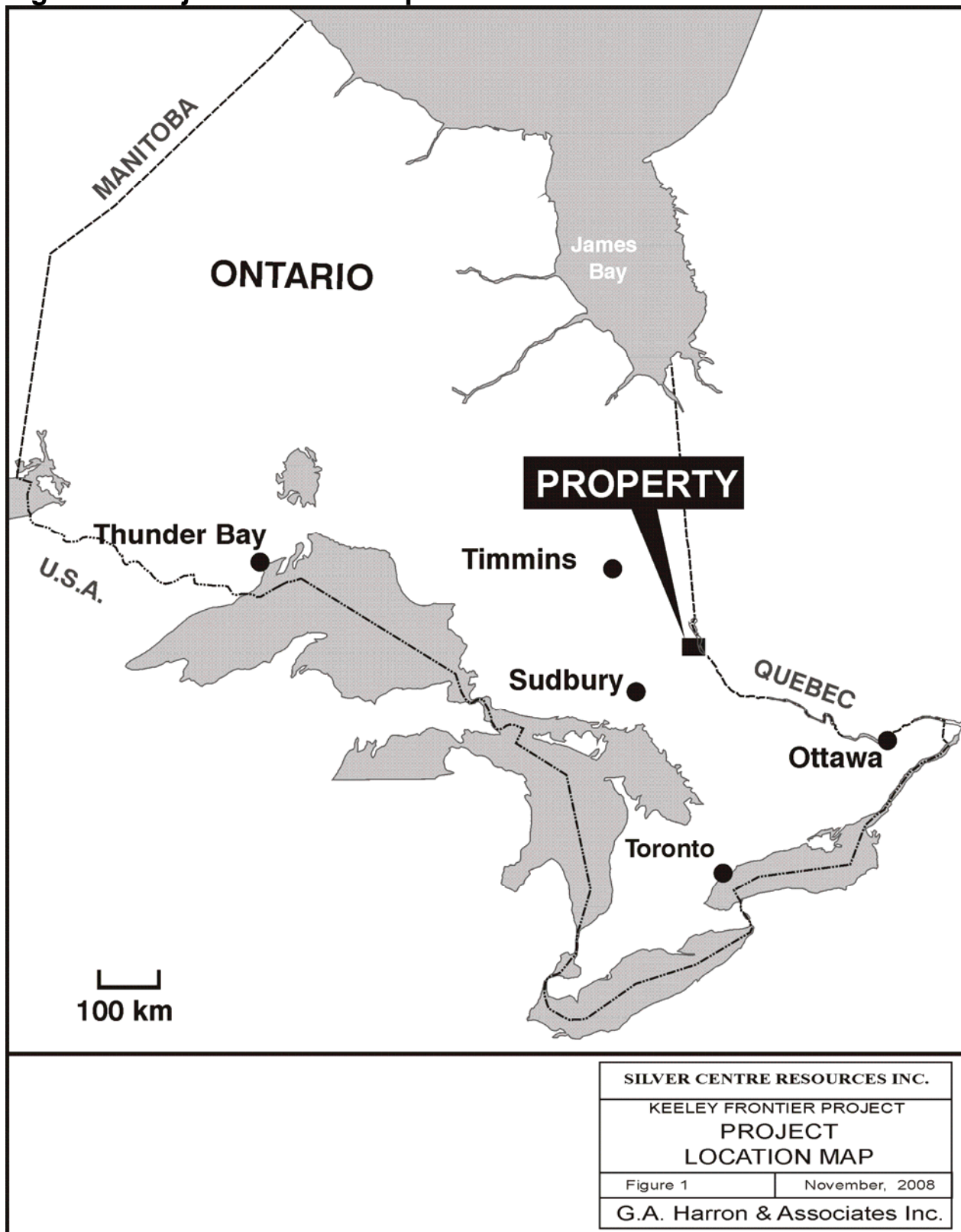
The following list shows the meaning of the abbreviations for technical terms used throughout the text of this report.

<u>Abbreviation</u>	<u>Meaning</u>
AEM	airborne electromagnetic (survey)
Ag	silver
AMAG	airborne magnetic (survey)
As	arsenic
Au	gold
cm	centimeter
Co	cobalt
Cu	copper
DDH	diamond drill hole
g	gram
Ga	billions of years
g/t	grams per tonne
ha	hectare(s)
HLEM	horizontal loop electromagnetic (survey)
IP/RES	induced polarization / resistivity (survey)
km	kilometre(s)
L	level
Ni	nickel
m	metre(s)
MAG	magnetic (survey)
mm	millimetre
ppb	part per billion
ppm	part per million
U/Pb	uranium / lead (age date)
VLF-EM	very low frequency electromagnetic (survey)
Zn	zinc

The prefix “meta-” has been omitted from the words metasediment and metavolcanic for the sake of brevity and readability. It is to be understood that all of the supracrustal Precambrian age rocks in the area exhibit amphibolite to granulite facies of metamorphism.

References to dollars in the report are to the Canadian currency, unless otherwise indicated.

**Figure 1: Project Location Map**



### 3.0 Reliance on Other Experts

Land tenure information has been obtained from the Ontario Government Land Registry Office, Haileybury, Ontario, and GAHA relies upon the veracity of the data. GAHA has also relied on representations of CSH's management that the Company has a 100% interest in the mineral claims listed in Table 1 of Section 4.

GAHA has prepared this report based upon information believed to be accurate at the time of completion, but which is not guaranteed. The historical work reported in this technical document is taken from assessment files and other documents held by the Ontario Ministry of Northern Development and Mines, and private reports and maps provided by CSH. While the author has made every attempt to accurately transcribe and convey the contents of these reports and maps, he cannot guarantee the accuracy, validity or completeness of the data contained in these reports. Therefore in writing this technical report GAHA relies on the truth and accuracy presented to us from the sources listed in section 21.0 of this report and CSH management.

## 4.0 Property Description and Location

The Keeley Frontier Project owned 100% by CSH Inc. consists of 13 contiguous, patented (surveyed) mining claims covering a surface area of 174.29 hectares in South Lorrain Township, Larder Lake Mining Division, Ontario (Figure 2). Both surface and mining rights are attached to lands subject to (a) easements granted to Hydro Electric Power Commission of Ontario, (b) Mines Power Company; and (c) and Northern Ontario Light and Power Company for the purpose of establishing transmission lines. Small portions of Surface Rights have also been withheld by the Ministry of Mines and Northern Development, over parts of the un-reclaimed mine sites of both the Keeley and Frontier mines.

Table 1 List of Claims and Parcels, Keeley Frontier Project, Lorrain Township

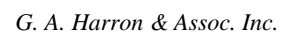
Parcel Description	Old Claim No.	Current Claim No.	Area (ha)	Mining Land Tax (\$)
14082SST	HR17	T9299	15.580	62.32
8342NND	HS 39	T9771	17.705	70.82
4851NND	HR 16 N pt	T9771	7.689	30.76
7361NND	HR 16 S pt	T10155	7.689	30.76
4815NND	HR 19	T10285	17.705	70.82
4852NND	HR 21	T10286	18.009	72.04
4929NND	HR 22	T10287	12.788	51.15
14081SST	RL 455	T10288	14.771	59.08
14081SST	RL 456	T10289	16.187	64.75
5305NND	HR 25	T10359	8.903	35.61
2730SST	HR 68	T19308	1.174	4.70
13533SST	na	T32960	16.697	66.79
14999SST	na	T46400	19.393	77.57
		<b>13</b>	<b>174.29</b>	<b>728.85</b>

All parcels are held "Fee Simple", which requires the payment of \$ 728.85 Mining Land Tax, \$ 692.07 School Tax and \$ 78.00 provincial Land Tax annually. Management warrants that all taxes are current.

Notes:

- Claim T46400, easement in favor of Hydro-Electric Power Commission of Ontario, (transmission line).
- Claim HS 39 easements in favor of The Mines Power Company (transmission line), and provincial highway 567.
- Claim 19308, easement in favor of Northern Ontario Light and Power Company (transmission line).







A title and certificate search dated April 13, 2006, indicates no writs of execution, extent or certificates of lien against the owners of the land, at that time. There are no current or pending challenges to ownership of the lands revealed by examining claim abstracts maintained by the Provincial Land Registry Office. The Company further warrants that there are no royalties or other encumbrances to title.

CSH warrants that the corporation has not received from any government authority any notice of, or communication relating to, any actual or alleged breach of any environmental laws, regulations, policies or permits.

Permits issued by Provincial and Federal Government ministries are not required in order to execute diamond drilling activities on the property.

## **5.0 Access, Climate, Local Resources, Infrastructure and Physiography**

The best vehicle access to the CSH property is via highway # 567, which departs North Cobalt in a south-southeastern direction, and can be followed a distance of approximately 33 km to the "Keeley Frontier Road". This road forks to the south and can be followed for 1-2 km to the historical mine sites located on the current landholdings, near the abandoned village of Silver Centre (Figure 3).

Haileybury is located adjacent to North Cobalt and is serviced by the Ontario Northland Railway and the provincial highways system. Electric power is readily available and all necessary social, commercial and telecommunication services are available in the immediate area. Experienced mining and managerial personnel are available in the general vicinity of Haileybury.

Relief is in the order of 150 m from a base level of 200 m, with higher elevations in the southern part of the claim group. The hills are steep sided due to faulting and glacial sculpting.

Small lakes and swampy lands in the western part of the property drain into the Montreal River before it merges with the Ottawa River. Small streams in the eastern part of the property drain directly into the Ottawa River, which flows southward into the St. Lawrence River.

Vegetation on the property consists of a discontinuous cover of mixed deciduous and coniferous trees and small bushes and shrubs.

The climate is typical of northern boreal forest areas, with extended periods of sub zero temperatures though the winter months of November through March. More temperate conditions prevail during the summer months with temperatures in the range of 15-24° C with moderate precipitation. Most advanced exploration (and mining) activities can be executed during all seasons.

The property has the sufficiency of surface area for future exploration or mining operations including potential tailings storage areas, potential waste disposal areas, heap leach pads areas and potential processing plant sites.

Figure 3: Access and Infrastructure Map



## **6.0 History**

The discovery of bonanza grade silver at Cobalt in 1906 precipitated an exploration boom in the area for silver that extended as far west as Gowganda and Shining Tree (see Figure 5 in section 7.1).

Early exploration on the Frontier Mine consisted of shaft sinking in 1912 by the Haileybury Frontier Company on claim HR 16, which became Haileybury Silver Mines Ltd. The Mining Corporation of Canada in 1921 amalgamated several companies and claims, including the former Compton, (HR 25), Little Keeley (HS 40) and the Keeley Extension properties (HR39, HR 41) into Frontier Silver Mines Limited.

The original discovery of silver mineralization on the Keeley claim (HR 19) leading to development of the Keeley Mine was made in 1907 by prospectors J.M. Wood, R.J. Jowsey, and C. Keeley. In 1908 J.M. Wood discovered the Wood vein on the adjacent Beaver Lake claim (HR-21).

Keeley Silver Mines Ltd., originally controlled by Anglo-Huronian Ltd., and Frontier Mines Ltd., originally controlled by Mining Corporation of Canada Ltd., were merged in 1961 to form Keeley Frontier Mines Ltd. This corporate entity was subsequently re-organized as Canadian Keeley Mines Ltd. in 1964, and became Keeley Frontier Resources Inc., in 1980.

Both mines have extensive underground workings shown in Figure 4. As summarized by McIlwaine (1970), during the initial operations 5 shafts were sunk on the Keeley property and 3 on the Frontier property. The main working shaft of the Keeley Mine was the No. 3 shaft, which extended to a depth of 174 metres. The No. 1 shaft was an emergency exit and ventilation shaft. The No. 2 shaft served as a prospect shaft for the No. 4 vein. The No. 4 and No. 5 shafts were prospect shafts on the Woods vein. In addition to the shafts, there were originally 6 winzes, but only 2 were operative in the 1960s.

At the Frontier Mine the No. 3 shaft sunk to a depth of 194 m was the main working shaft. The F8 and F9 winzes extended to depths of 415 m and 444 m respectively. In total 16 shafts and winzes were sunk on the property for a total of 2,513 m providing access to a depth of 427 metres. Development totals occurring between 1961 and 1965, after the Woods vein had been mined out include 1,110 m of drifting and 598 m of cross cutting and 1,117 m of raising. Little drilling was done prior to 1961, but from 1961 to 1965, 5 surface drill holes and 276 underground drill holes were completed for a total of 15,922 metres.

In 1962, Keeley Frontier dewatered and rehabilitated the Keeley and Frontier mines. During this period the two mines were connected by a main haulage way between the 6<sup>th</sup> level of the Frontier Mine and the 8<sup>th</sup> level of the Keeley Mine. Access and services were provided largely through the Frontier No. 3 shaft and the 828 winze, which was deepened to the 12<sup>th</sup> level. In the 1963-65 period 347,645 ounces (10,812 kg) Ag, 9,003 pounds (4,083 kg). Co and 14,358 pounds (6,512 kg) Ni were produced.

The Keeley Mine of Keeley Silver Mines Ltd. produced intermittently from 1908 to 1942 with most of the production occurring between 1921 and 1931. Total reported production was 12,154,353 ounces Ag (378,043 kg) and 1,617,784 lbs (733,814 kg) Co. The Frontier Mine was operated by Mining Corporation of Canada Ltd. from 1921 to 1943 and produced 7,023,110 ounces (218,443 kg) Ag and 1,692,772 pounds (767,828 kg) Co and 26,506 pounds (12,023 kg) Ni (to 1965). Combined total production is recorded as 19,177,463 ounces (596,486 kg) Ag, 3,310,556 pounds (1,501,643 kg) Co and 27,242 pounds (12,357 kg) Ni. Actual production is higher than recorded in Table 2 because under the Delora Contract, the smelter accepted ore for either its silver content or its cobalt content, but not both metals. Credits were not readily given for minor elements present (Ni, Bi, As, Sb etc.).



Figure 4: Longitudinal Section

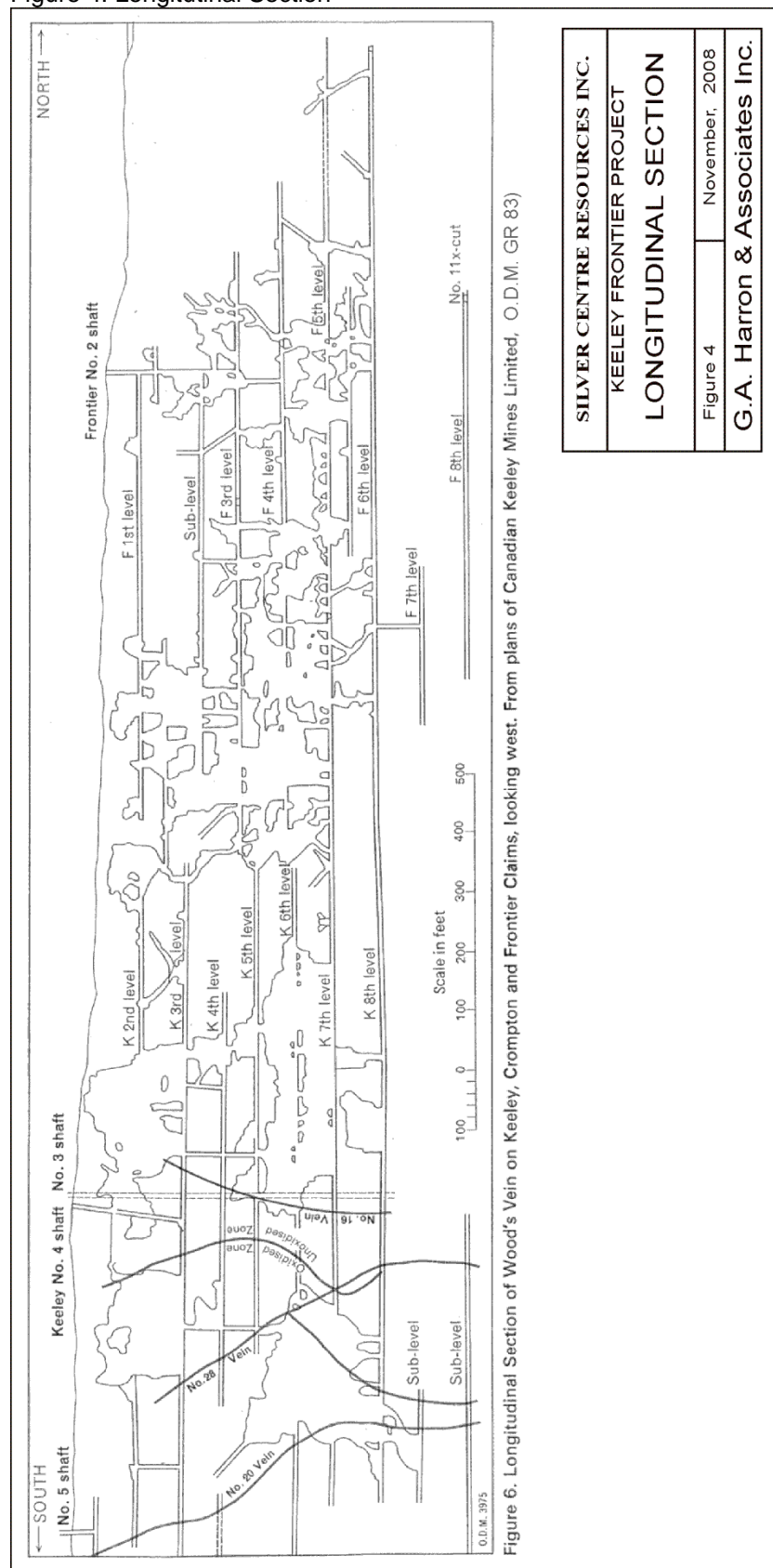


Figure 6. Longitudinal Section of Wood's Vein on Keeley, Crompton and Frontier Claims, looking west. From plans of Canadian Keeley Mines Limited, O.D.M. GR 83)

Table 2 Production Statistics Frontier and Keeley Mines

<b>Frontier Mine</b>			
Year	Silver (ozs.)	Cobalt (lbs)	Nickel (lbs)
1921	47,277		
1922	508,958	31,529	
1923	1,300,323	143,545	
1924	446,047	54,687	
1925	1,158,854	253,191	
1926	1,104,597	80,582	
1927	902,591	88,980	
1928	395,692	117,418	
1929	14,295	7,162	
1930	404,903	292,351	
1931	320,302	550,773	
1932	22,144	6,517	
1935	14,000	2,000	
1936	7,306	10,253	
1937	8,368	3,804	
1938	2,097	5,235	3,157
1939	5,278	15,881	7,954
1940	4,327	1,470	1,047
1941	4,233	7,910	
1942	3,007	7,516	
1943	866	2,965	
1963	136,274	9,003	14,322
1964	93,609		26
1965	117,762		
<b>Totals</b>	<b>7,023,110</b>	<b>1,692,772</b>	<b>26,506</b>
<b>Keeley Mine</b>			
1908	13,124	24,800	
1909	11,213	236	
1914	3,524		
1918	39,199	2,410	
1919	4,586	3,160	
1920	8,253	9,897	
1921	281,659	16,167	
1922	775,349	167,062	
1923	1,655,323	175,689	
1924	1,903,793	231,005	
1925	1,446,679	167,020	
1926	1,705,531	210,764	
1927	1,153,024	99,402	
1928	690,168	99,841	
1929	837,331	119,766	
1930	1,351,121	91,700	
1931	265,458	196,089	
1935	2,412		
1942	6,606	2,776	736
<b>Totals</b>	<b>12,154,353</b>	<b>1,617,784</b>	<b>736</b>

In 1989 LaChib Development Corporation ("LaChib") acquired an option on the Keeley Frontier Project from Sunmist Energy 1986 Inc. Sunmist had acquired the property from Keeley Frontier Resources Limited in 1983, but did not conduct any exploration programs.

An exploration proposal for LaChib recommended 4,572 m of diamond drilling focusing on fault vein systems in the vicinity of Beaver Lake (Meyer & Pearson 1989). This proposal incorporated many of the targets proposed by Hammerstrom, Thoday and Watts (1981). However, no exploration drilling occurred.

In 1996 Transway Capital Inc. acquired the property from LaChib and contracted IP/RES, VLF-EM, MAG and TDEM surveys on the property, excluding the area covered by Beaver Lake, (JVX, 1996). Geophysical targets delineated by truncations of magnetic patterns with coincident IP/RES and/or time domain EM surveys or VLF-EM surveys have not been drill tested. In total the geophysical surveys indicate the presence of five targets for diamond drilling, which are suggestive disseminated to massive sulphide mineralization.

## **7.0 Geological Setting**

### **7.1 Regional Geology**

The Keeley Frontier Project is situated in the Southern Province of the Canadian Shield, adjacent to the Grenville Province (Figure 5). The Southern Province consists of rocks of Proterozoic age (0.6 to 2.5 Ga) located in the Sudbury / Sault Ste. Marie area (Penokean Fold Belt), the Sudbury / Cobalt / Noranda area (Cobalt Embayment) and the Lake Nipigon area (Nipigon Plate) in northwestern Ontario. The Cobalt Embayment is mildly deformed and consists predominantly of Huronian Supergroup sedimentary rocks cut by Nipissing mafic intrusions.

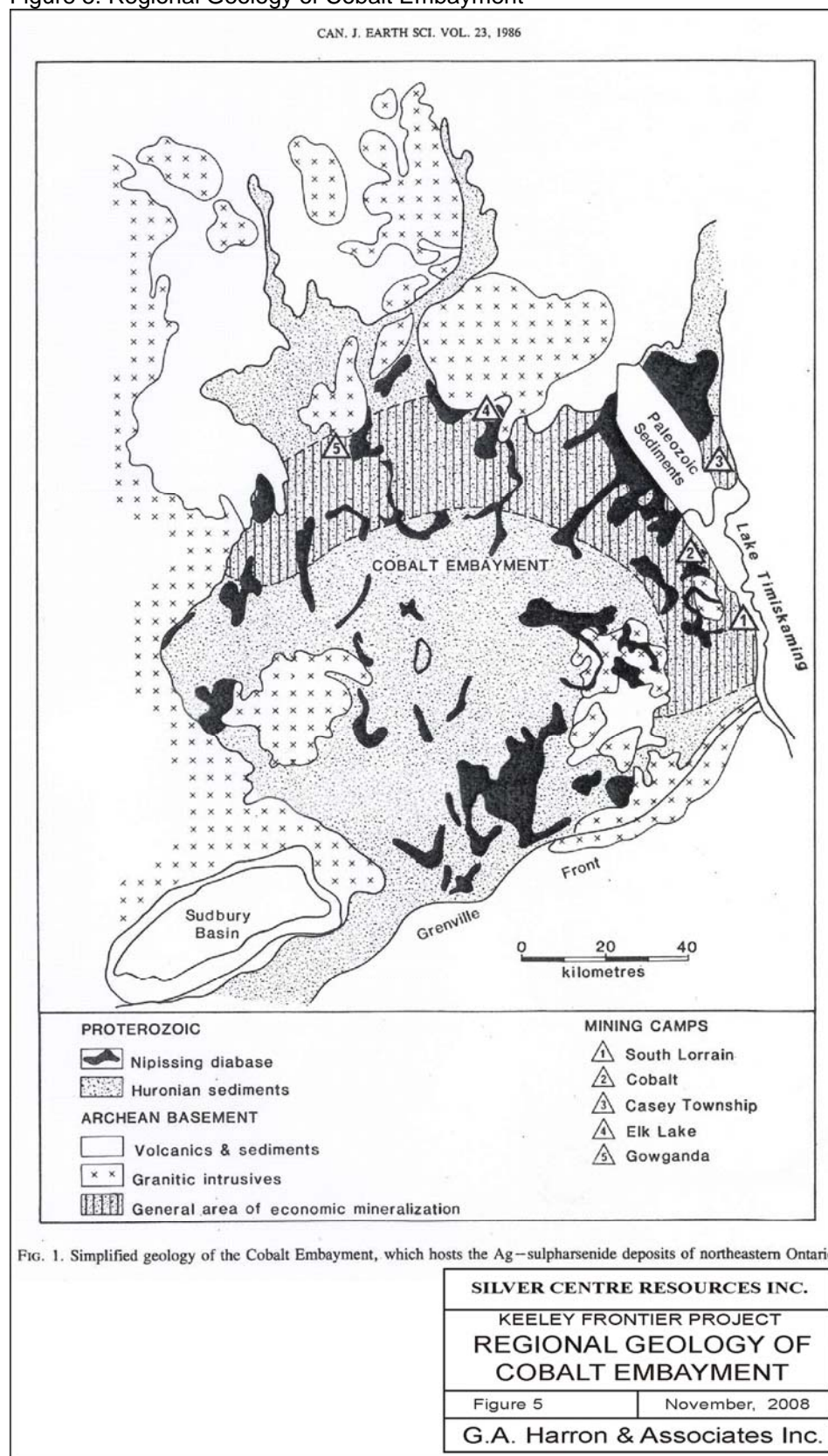
Huronian Supergroup sedimentary rocks dated at 2.5 - 2.2 Ga rest unconformably on folded Archean granite / greenstone belts and gneissic terranes of the older Superior Province. The Supergroup comprises four individual shelf type sedimentary cycles. Each cycle consists of a lower sequence of conglomerate of probable glacial origin succeeded by mudstone, siltstone and coarse arenite, with some chemical sediments associated with the uppermost cycle (Cobalt Group). Southwest of Sudbury the Huronian Supergroup attains a thickness of 12 km and thins northward across the Cobalt Embayment due to wedging out of lower cycles, a thinning of clastic units and erosion within the sequence.

The Southern Province in the Sault Ste. Marie / Sudbury area represents a zone of orogenesis (Penokean Fold Belt) that occurred about 1.8 billion years ago. The Cobalt Embayment on the other hand was not greatly affected by the tectonic activity evidenced farther south, and remains essentially flat lying. The Lake Timiskaming Structural Zone (graben) trends north-northwest from the Grenville Front and extends across the Cobalt Embayment well beyond the Cobalt / Kirkland Lake area (Figure 5). The axial portion of the graben is filled with flat lying Ordovician and Silurian sedimentary rocks, which rest unconformably upon both Archean and Proterozoic terranes. Faulting affecting these Paleozoic rocks may be related to kimberlite igneous activity in the Jurassic era.

Gabbroic rocks (Nipissing Diabase) are the most abundant and widespread igneous rocks intruding the Huronian sediments. These tholeiitic rocks occur as dykes, and sills up to several hundred metres thick and are uniformly distributed across the Cobalt Embayment. It is thought that these intrusions are also a manifestation of a mantle plume igneous event.

Kimberlite intrusions, of Jurassic age, are a newly recognized igneous event in the Cobalt Embayment and only occur within and proximal to the Lake Timiskaming Graben. Recent exploration indicates that some of the (20 or more) kimberlite intrusions are diamondiferous. Sage (1996) notes that kimberlites of the Cobalt - New Liskeard area are often spatially associated with northwest-trending Lake Timiskaming structures and oblique cross structures.

Figure 5: Regional Geology of Cobalt Embayment





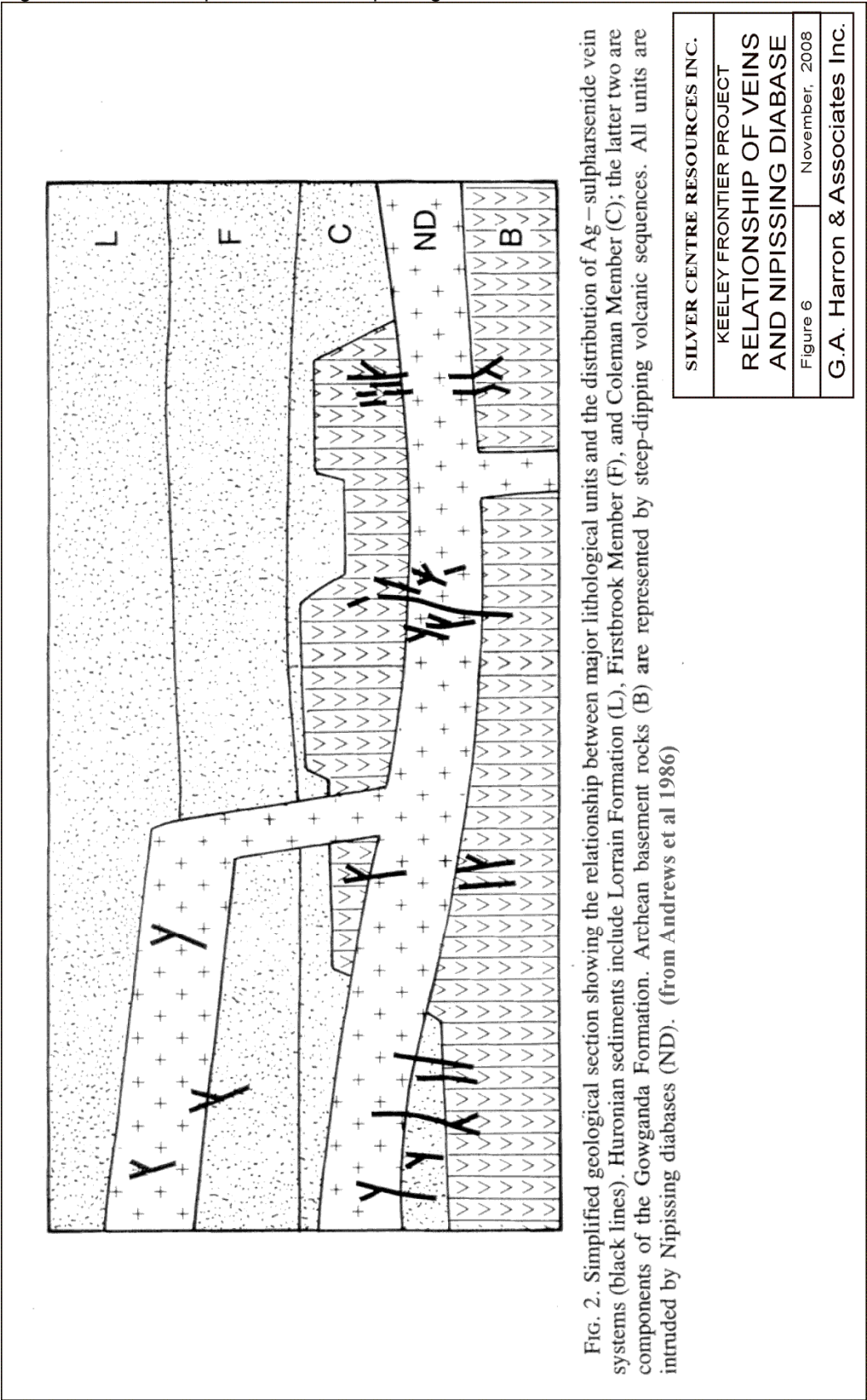
Other igneous intrusive activity in the Southern Province includes the Sudbury Igneous Complex, a 1.85 Ga structure believed to have also resulted from mantle plume igneous activity. World scale deposits of nickel – copper ores with platinum group element and precious metal credits are associated with this intrusion, which resides along the north side of the Mid-continent Rift, a major structure centered beneath Lake Superior. In addition to the Sudbury ores, the Southern Province hosts numerous deposits of gold, silver, uranium, copper, and industrial minerals.

Silver deposits in the Cobalt area occur in vertical to steeply dipping veins and nested vein systems. Approximately 97% of the silver occurs in its native form, 85-96% pure, with the most significant impurities being antimony, arsenic and mercury. The veins are characterized by a complex ore mineralogy consisting of arsenides and sulpharsenides of Co, Ni and Fe, native silver and bismuth with subordinate antimonides, and sulphides of Pb, Zn and Cu (Petruk, 1971). Native silver also occurs in fractures adjacent to the calcite veins. The gangue mineralogy consists dominantly of carbonates (mainly calcite with lesser dolomite) and minor silicates (Jambor, 1971). Wall rock alteration consisting of chlorite, calcite and albite is restricted to 2-5 centimeters on both sides of the veins.

All of the economically productive deposits occur in close proximity to the Archean / Huronian unconformity and are hosted by Archean volcanic rocks, Huronian sediments (Coleman Member of the lower Gowganda Group), and Nipissing Diabase sills (Figure 6). Past mining illustrates that the economic deposits occur within the diabase or within 250 m of its upper and lower contacts (Andrews et al, 1986). Empirical evidence also indicates that most of the productive veins occur within or marginal to linear depressions developed in the Archean basement and filled with Coleman Member sediments. The mineralized veins occur both separately and in networks. The veins pinch and swell and range from millimetres to 1.2 m in width and are up to several hundred m in horizontal and vertical extent. The networks of veins are composed of a series of closely spaced individual veins and have greater horizontal and vertical dimensions than single vein mineralization. The preferred direction of the vein systems is poorly developed, but appears to mimic the regional north-northwest and east-northeast trending fault pattern. In greater detail the veins follow a fracture pattern that appears to have resulted from shattering of the host rocks by hydrostatic overpressure.

Historically, the Cobalt area has produced approximately 18,662,100 kg (600 million ounces) of silver and more than 20,408 tonnes of cobalt, 7,259 tonnes of nickel and 2,269 tonnes of copper since 1906. Production of silver from the Cobalt camp reached its peak in 1911, when 980,000 kg (31,507,791 ounces) were shipped, and continued at a high level until 1922, when 333,172 kg (10,711,727 ounces) were shipped. A decrease in the price of silver in the early 1920's and exhaustion of high-grade silver ore caused most mines to close. From 1929 to 1950, mining activity consisted of small leasing operations at several locations. Increased demand for cobalt in the 1950-55 period renewed interest in the camp, and some mines reopened on the basis of this incremental co-product value. By the late 1950's the demand for cobalt dropped and once again the mines closed. An increase in the price of silver in 1960 created renewed interest, and some mines reopened accompanied by a few exploration successes. Declining metal prices and dwindling ore reserves through the 1970's and 1980's have forced the closure of all of the mines. The last mine (Silverfields) closed in 1989, not for a lack of ore, but because of low silver prices.

Figure 6: Relationship of Veins and Nipissing Diabase



## **7.2 Property Geology**

The oldest rocks on the property are Archean age intermediate to mafic volcanic flows, tuffs and agglomerates. These rocks are folded, faulted and steeply dipping. Numerous lamprophyre dikes intrude the volcanic rocks and in several places have been the loci for veins. A small granodiorite body intrudes the Archean age volcanic rocks near Beaver Lake. Huronian sediments of Proterozoic age unconformably overlie the Archean assemblage. Rocks of the Coleman Formation are exposed in the northwest corner of the property (Figure 7). Nipissing Diabase, found to be 277 m thick in the Frontier Mine dips westerly across the property. Contours of the top of the diabase indicate an anticlinal structure striking and plunging to the west.

Major structural feature consists of Keewatin volcanic rocks intruded by the west side of a domed Nipissing quartz diabase sheet, up to 305 m thick in places. Also important are the intrusions of Haileyburian lamprophyre dykes, and a granodiorite stock about whose contacts reverse faults have occurred in which ore bearing veins formed.

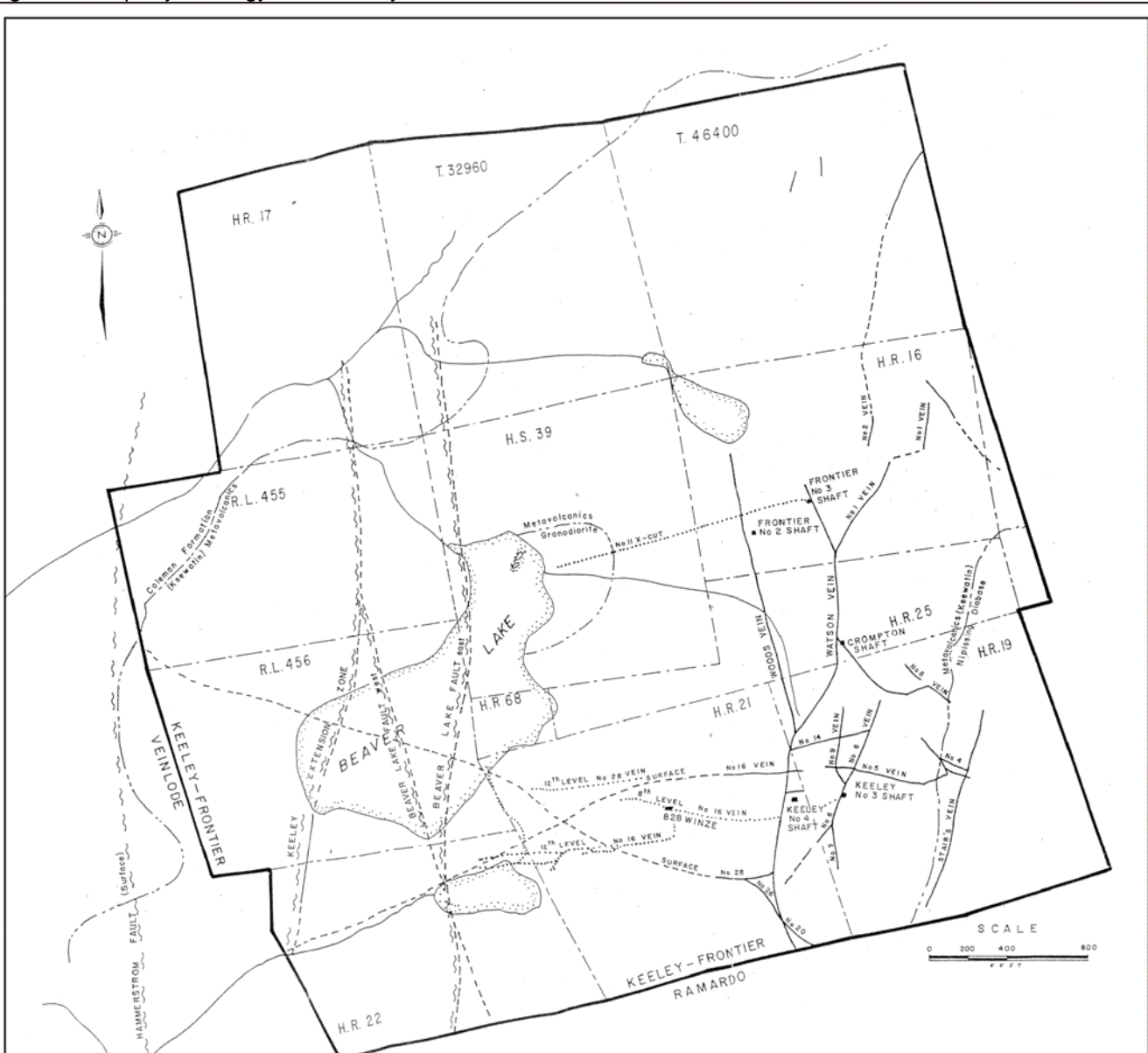
The main ore structure is the Woods vein, which occurs in a reverse fault (Figure 4). The Woods vein and its branches form the vein system on the property. Pre glacial weathering on part of the Wood vein extends to a depth of 146 m, consequently ore mineralogy is partly secondary and the vein is vuggy, Silver is in leaf, wire, ruby and spongy forms, smaltite is both massive and vuggy in grape-like form. Metal zonation results in higher Co values in distal locations and high silver values in proximal locations. It has also been observed that the ore bodies are preferentially developed at the intersection of east-west and north-northwest trending faults.

Production came from veins in both Keewatin volcanic rocks and Nipissing diabase from 30 m below the lower contact to 60 m above upper contact of diabase. Ore shoots ranged from 3 m to 30 m in length, 15 cm to 1 m wide. One shoot measured 31 m by 10.7 m and up to 1.02 m wide.

The majority of the veins are localized in steeply dipping fault zones. The important Wood's vein is known over a north-south strike length of 2 km has been mined in the Keeley, Frontier, Crompton and Little Keeley mines. Other parallel veins include the # 2 and the Watson have proven productive. A series of east-west faults containing veins such as the # 14 and # 20-28 veins contained considerable mineralization where they intersected the north-south vein systems. Other areas on the property are known where similar intersections occur and these represent exploration targets.

The silver occurs in the native state in carbonate veins and vein systems. Throughout the silver area these veins systems have been found to have a very close spatial relationship to the Nipissing Diabase sill or sheets. In the South Lorrain area the production has mainly come from the first 90 m of volcanic rocks overlying the diabase on the western flank of the gently dipping diabase dome. Little ore is associated with the lower contact of the diabase with the volcanic rocks in the Keeley Mine. Some production has been sourced entirely within the diabase, such as the Wettlaufer Mine.

Figure 7: Property Geology and Vein Systems



SILVER CENTRE RESOURCES INC.

KEELEY FRONTIER PROJECT  
PROPERTY GEOLOGY  
AND VEIN SYSTEMS

Figure 7

November, 2008

G.A. Harron & Associates Inc.

## 8.0 Deposit Types

The silver deposits of the Cobalt and South Lorrain areas are classic examples of the Five-Element (Ni-Co-As-Ag-Bi) Vein ("FEV") type ore deposit. The model for this type of deposit has been described in detail by Kissin (1993). The major characteristics include:

- Localized in rifted (or other extensional tectonic settings) areas underlain by continental crust
- Occur in mafic igneous rocks ranging in age from early Proterozoic to Tertiary. In the Cobalt region some veins are found in diabase sills, and may extend upward and downward into Huronian sedimentary rocks and/or Archean age rocks. The economic veins are present both above and below the diabase sills.
- Propylitic alteration envelopes over 2-5 centimetres are found adjacent to mineralization.
- Sequential deposition of distinct vein assemblages from (a) early barren, to (b) uraninite – quartz, followed by (c) Ni-Co arsenide-native silver, and finally (d) sulphide carbonate minerals. In the Cobalt area assemblage (b) is missing. Pulsations of ore forming fluids at different times cause repetitive zoning and the development of "ore shoots" along the veins.
- Deposition from high saline solutions commencing at ~ 450° C and ending at 100° C with a concomitant shift to a more reduced solution. Evidence of intermittent boiling at shallow depths.
- Frequent association with structural traps (capping diabase sill), reductants (black shale), and existing sulphide minerals (in Archean basalt). However the source of the mineralizing fluids is probably connate brines derived from underlying continental crust located remote from the final depositional sites.
- Typically the veins are narrow to very narrow with diverse orientations inherited from occupying the brittle fracture pattern in the host rocks. The veins have lengths ranging from 10s to 100s of metres and vertical dimensions of 10s of metres. Silver values commonly range up to several kilograms per tonne.

In the Cobalt area exploration techniques in the past relied on prospecting for mineralized fractures supported by overburden stripping and pitting programs. It is also apparent that blind drilling has been successful, as in the case of the # 6 shaft mineralization at the Langis Mine.

The ore deposit model for FEV deposits and empirical observations indicates that exploration techniques should include recognition of Coleman Member sedimentary rocks in "basins" developed on the Archean paleotopography and proximal diabase intrusions (see Figure 6). The massive nature of the metallic and sulpharsenide minerals provides easy detection by electromagnetic and induced polarization surveys. Geochemical techniques include soil and closely spaced heavy mineral surveys searching for labile portions of the mineralization exposed at the bedrock surface. Anomaly recognition is enhanced by the fact that some of the elements in the veins are exotic to the local host rocks. Soil gas surveys can also be employed to detect mercury and hydrocarbon vapours associated with the mineralization. Diamond drilling is required to probe the geophysical and geochemical targets within an approximate 250 m vertical interval centered on the Archean / Proterozoic unconformity.

On the CSH Project contamination of the surface soils by previous mining activities limits the utility of soil geochemical surveys. However, heavy mineral and soil gas surveys can be used effectively in areas of shallow overburden and MMI techniques may be effective in areas of thicker clay cover. Geophysical surveys require close spaced traverses in two directions in order to detect the nearly orthogonal directions of the veins. IP /RES surveys can be used to detect metallic / sulphide mineralization, and to model the Archean / Proterozoic unconformity, thereby constraining the significance of chargeable sources. VLF-EM surveys can be used to localize fault structures, which occupy topographic depressions in this area.

## **9.0 Mineralization**

CSH has not completed any geological/sampling programs on the property as of the date of this report. The historical underground working attest to the fact that economic mineralization has located and exploited on the property.

## **10.0 Exploration**

Silver Center Resources Inc. (predecessor corporation to CSH) contracted JVX Ltd to conduct MAG, pole-dipole IP/RES and moving loop transient EM (TerraTEM) surveys over the Beaver Lake area in the southwestern part of the project area. Field work was completed in the February 4-19, 2010 period. Production was 61 sounding of TerraTEM, 3.2 km of MAG, and 1.3 km of IP/RES using a grid with lines 50 m apart and oriented 075°.

MAG data indicates the possible location of north-trending faults identified by previous property operators, which are now CSH targets.

The TerraTEM survey was only conducted on Beaver Lake and produced ambiguous results, which need not be drill tested.

Pole-dipole IP/RES data for the whole project area has identified 50 IP anomalies of which 33 are classified as strong. Four of the IP anomalies have an associated resistivity high and 6 have an associated resistivity low, and 40 have no clear resistivity expression. The best quality anomalies reside in the 1995 IP/RES survey (JVX, 1996). The present IP/RES survey did not identify additional quality targets underneath Beaver Lake. The VLF-EM data did not present an easily interpretable array of information. However, given the shallow nature of the overburden, some of the responses are indicative of fault/shear zones, generally trending north-south.

## **11.0 Drilling**

The Company has not undertaken any drilling on the property.

## **12.0 Sampling Method and Approach**

The Company has not undertaken any sampling of drill cores or outcrops on the property.

## **13.0 Sample Preparation, Analyses and Security**

The Company has not collected, prepared or transported any sampled to any analytical laboratories.

## **14.0 Data Verification**

The author has read four descriptions of the geology and mineral deposits of the South Lorrain area and has not found any major discrepancies between the source publications as regards geological data. A considerable amount of technical drawings and assay data pertaining to both surface and underground workings and prior exploration drill holes are not available for examination. In this instance GAHA has not been able to verify the extent and location of some of the historical exploration data.

Assay data recorded in Meyer and Pearson (1989) and Trusler (1994) has not been verified as the original data (assay certificates) are not available. Accordingly the available assay data is accepted at face value, as these assays are historical and will not be included in any resource estimates.

An informal site visit on November 10, 2008 indicates that the property consists of partially reclaimed lands, with a few negative environmental issues noted, such as unfenced open stopes and crumbled head frames.

Rock samples collected on the waste dumps contain smaltite and erythrite (cobalt bloom ) occurring in veins cutting Archean age basalt. This observation strongly suggests that the FEV deposit model provides an appropriate description of the Keeley Frontier mineralization.

## **15.0 Adjacent Properties**

The Keeley Frontier project is one of many past-producing mines located within South Lorrain Township. All of these other mines contained mineralization similar to that in the Keeley Frontier Project (McIlwaine, 1970).

## **16.0 Mineral Processing and Metallurgical Testing**

The Company has not contracted any mineral processing studies on samples from the Keeley Frontier Project. The historical production from the property indicates that the mineralization could be beneficiated to recover Ag, Ni and Co metals.

## **17.0 Mineral Resource and Mineral Reserve Estimates**

There are no current resources or reserves present on the Keeley Frontier Project.

## **18.0 Other Relevant Data and Information**

Interest in this and other silver projects is generated by the current high price of silver. Silver languished around \$US 5 per ounce until 2003, followed by a rapid ascent to the \$US 11-12 range in the period 2003 to 2007, and currently is quoted in the range of \$US 35.00 - 40.00 per ounce. This high value represents a significant impetus to conduct exploration in the vicinity of the historical mines, with the object of discovering additional mineralization.

In 1981 Hammerstrom, Thoday and Watts presented an exhaustive study of the silver mineral potential of the Keeley Frontier Project, based on their broad experience working at the mines. In summary these authors identified three target areas, of which two require underground access. The third target area in the vicinity of Beaver Lake can be tested from surface to explore the silver mineralization potential of three north-trending faults.

There is to the author's knowledge no additional data or information available, of either a positive or negative aspect, that would change the data presented or the contained recommended program.



## 19.0 Interpretation and Conclusions

Historical reports indicate that there is a significant potential to discover high grade silver and cobalt mineralization in the vicinity of the historical Keeley and Frontier mines. The mines closed due to low metal prices, which had the effect of increasing "high-grading" mining practices, and curtailing exploration. This suggests that not all mineralization was mined and that not all possible locations of mineralization have been tested. One area of un-tested potential is in the vicinity of Beaver Lake. Current metal prices suggest that the FEV mineralization is potentially economic, provided that mineralization can be found in sufficient quantities as to warrant development.

## 20.0 Recommendations

GAHA is of the opinion that untested exploration targets (surface and underground locations) remaining on the property at current metal prices are of sufficient merit to justify the recommended programs.

It is recommended that a Phase I program focus on the mineral potential of two north-south faults located in the western half of the property, and induced polarization drill targets in the south central part of the property. The targets are primarily geophysically defined and interpreted in light of the known geology and the location of mineralized veins. The targets to be tested have also been recommended in other historical technical reports (Hammerstrom, Thoday & Watts, 1981, Meyer & Pearson 1989, Trusler, 1994). The following table describes the proposed drill holes keyed to the JVX (1996) survey grid, which has been re-established.

**Table 3 Proposed Phase I Diamond Drill Holes**

	Line	Station	Length(m)	Azim°	Dip°
P-1	7+00 N	1+00 W	300	270	270/-45
P-2	2+00N	7+25 W	200	90	-45
P-3	3+00N	3+25 W	200	270	-45
P-4	3+00N	0+00	175	270	-45
P-5	3+00N	1+60 E	150	270	-45
P-6	2+50 S	3+10 W	175	90	-45
P-7	2+50 S	1+50 W	175	90	-45
P-8	1+00 S	2+00 W	400	270	-45
P-9	1+00 N	1+00E	200	90	-45
P-10	0+50 S	0+75 W	175	270	-45
P-11	0+50 S	0+10 E	250	90	-45
P-12	0+50 S	1+80 E	200	90	-45
<b>Totals 12</b>			<b>2,600</b>		

A budget of \$ 600,000 is proposed to fund the proposed Phase I diamond drilling and geophysical survey program (Table 4).

The proposed diamond drilling will test the economic potential of the north-south trending structures located both north and south of Beaver Lake. A 2,600 m program of diamond drilling and limited bore hole IP/RES geophysical surveying is proposed in the Phase I program with an estimated expenditure of \$ 600,000. Historical geological and geophysical reports concerning this project have identified the targets, which will be diamond drill tested in the vicinity of Beaver Lake.

**Table 4 Proposed Phase 1 Budget.**

<b>Activity</b>	<b>Expenditure (\$)</b>
Geophysical	
Survey	140,000
Drilling	299,000
Mob/Demob	10,000
Geologist	33,000
Assistant	12,000
Assaying	30,000
Core Boxes	6,400
Accommodation	9,000
Rentals	20,000
Communication	1,000
Travel	2,400
Reporting	10,000
Contingency	27,200
<b>Total</b>	<b>600,000</b>

A Phase II program of 5,000 m of diamond drilling and compilation work is partially contingent upon encouraging results being obtained in the Phase I program. Compilation work would entail digitization of historical plans and sections, with assay data, of the underground workings. Knowledge of the location of the economic veins in the underground workings will assist in the preparation of future work programs. The estimated expenditure associated with the Phase II program is \$ 1,000,000.

Based on the success and results from prior period exploration programs conducted on the Keeley and Frontier mine properties, the proposed Phase I and Phase II programs are warranted, and should expand considerably knowledge of the potential of the north-northeast trending fault structures to host economic silver mineralization.

A Phase II exploration program is dependent upon the results of the Phase I program. The author recommends a second drill campaign of 4,000 m to provide better definition of the mineralized structures located in the Phase I diamond drill program and to test any significant geophysical responses discovered under Beaver Lake. While details of the proposed drilling pattern are unknown, it is suggested that \$ 500,000 be allocated to this phase of follow-up diamond drilling.

**Table 5 Proposed Phase II Budget**

<b>Activity</b>	<b>Expenditure</b> <b>(\$)</b>
Geophysical Survey	\$ 70,000
Compilation	\$ 35,000
Drilling	\$ 650,000
Mob/Demob	\$ 8,000
Geologist	\$ 66,000
Assistant	\$ 24,000
Assaying	\$ 30,000
Core Boxes	\$ 6,400
Accommodation	\$ 24,000
Rentals	\$ 40,000
Communication	\$ 2,000
Travel	\$ 4,800
Reporting	\$ 10,000
Contingency	\$ 29,800
<b>Total</b>	<b>\$ 1,000,000</b>

The aggregate expenditure covering the two phases of exploration is estimated to be \$ 1,600,000.

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## 22.0 Certification

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### *Certificate of Author*

I, Gerald A. Harron, M.Sc., P.Eng. do hereby certify that:

1. I am the President of:  
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Suite 501, 133 Richmond Street West  
Toronto, Ontario, Canada M5H 2L3
2. I graduated with a Bachelor of Science degree in Geology from Carleton University in 1969 and also graduated from the University of Western Ontario with a Master of Science degree in Economic Geology in 1972.
3. I am a member of the Association of Professional Engineers of Ontario, the Association of Professional Engineers, Geologists and Geophysicists of the Northwest Territories and Nunavut.
4. I have worked as a geologist for over 35 years since my graduation from university and have been involved in minerals exploration for base, precious and noble metals and uranium throughout North America, South America and Africa, during which time I directed, managed and evaluated regional and local exploration programs.
5. I have read the definition of "qualified person" set out in National Instrument 43-101 ("NI 43-101") and certify that by reason of my education, affiliation with a professional association (as defined in NI 43-101) and past relevant work experience, I fulfill the requirements to be a "qualified person" for the purposes of NI 43-101.
6. I am responsible for the preparation of entire technical report titled "Technical Report On Keeley Frontier Project, South Lorrain Township, Larder Lake M.D. Ontario for Canadian Silver Hunter Inc., dated March 17, 2011, and revised on June 8, 2011 (the "Technical Report"). Most of the technical information in the Technical Report is based on examination of public and private documents pertaining to the Canadian Silver Hunter Inc. Project.
7. The sources of all information not based on personal examination or knowledge are referenced in the Technical Report. In the disclosure pertaining to claim status I have relied on information provided by the Provincial Lands Registry Office in Haileybury Ontario. I
8. I have not had prior involvement with the property that is the subject of the Technical Report. I have completed a site visit to the property on October 5, 2010.
9. I acknowledge that as of the date of the certificate, and to the best of my knowledge, information and belief, that the Technical Report contains all scientific and technical information that is required to be disclosed to make the Technical Report not misleading.
10. I am independent of the issuer applying all of the tests in section 1.4 of NI 43-101.
11. I have read NI 43-101 and Form 43-101F1, and the Technical Report has been prepared in compliance with that instrument and form.

Dated the 17<sup>th</sup> day of March 2011, and revised this 8<sup>th</sup> day of June, 2011

*"Gerald A. Harron"*

\_\_\_\_\_  
Signature of Qualified Person

Seal

\_\_\_\_\_  
Gerald A. Harron  
Print name of Qualified Person

Association Professional Engineers Ontario