REVIEW OF THE ST. EUGENE PROJECT,

SOUTHEAST OF CRANBROOK,

BRITISH COLUMBIA, CANADA

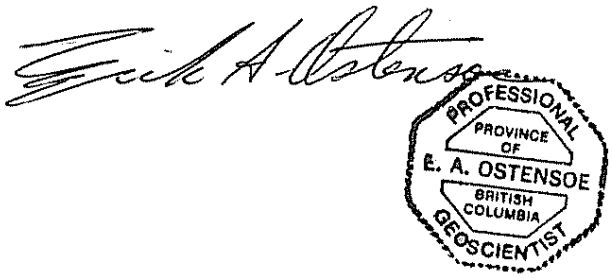
Latitude 49° 16′ 30″ N
Longitude 115° 51′ 20″ W

NTS Map 82G/SW

For: St. Eugene Mining Corporation Ltd.
North Vancouver, British Columbia

By: Erik A. Ostensoe, P. Geo.

Date of Report: August 18, 2005.



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ILLUSTRATIONS

0.0 SUMMARY

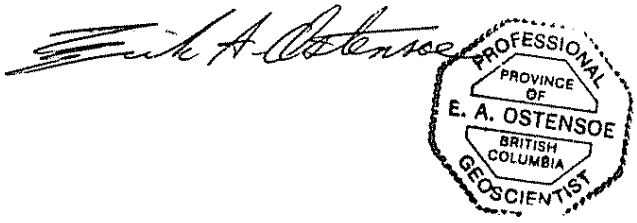
The middle Proterozoic age Belt-Purcell Basin that extends from southeastern British Columbia to western Montana and northern Idaho is a remarkable structure that hosts two significant silver-base metal mineral districts, the Sullivan mine and the multi-deposit Coeur d'Alene district. The basin was defined by bordering growth faults that allowed it to accommodate as much as 18 km of sediments. These sediments, characterized as the Belt Supergroup, were deposited in a series of cycles and varied from coarse turbiditic sandstones to carbonates. The timing of basin-filling is estimated at 1.6 b.y. to 1.1 b.y. Gabbroic to dioritic sills and dykes were introduced during sedimentation or shortly thereafter. All rocks were influenced to some degree by the emplacement in Cretaceous time of the Nelson granitic batholith and related satellite intrusive bodies.

Of particular interest in the Moyie area south of Cranbrook, B. C. are strata referred to as the Aldridge Formation, that were deposited in the middle Proterozoic in cycles related to basin extension and deepening followed by infilling. Metal-rich hydrothermal fluids were active at intervals and introduced anomalous quantities of zinc, lead, silver and other elements. Subsequent events, diagenesis and/or plutonism, combined with structural adjustments to mobilize the metals into accommodating structures.

The Sullivan mine at Kimberley, British Columbia, combined stratabound and massive sulphide ore bodies whereas in northern Idaho the Coeur d'Alene district was largely developed on vein-type ores. The St. Eugene Mine at Moyie, B. C. comprised several ore bodies in structurally defined high angled zones of shearing, with some production from "avenues" that straddled two sub-parallel fractures.

St. Eugene Mining Corporation Ltd. at Moyie, B. C. owns 79 crown granted mineral claims that encircle the former St. Eugene mine and are mostly underlain by highly prospective members of the Middle Aldridge formation. The claims control both strike extensions and the down-dip continuation of the Mine structure. It appears that the mineral zones are located in areas of shattering or interlayer slippage that form at the conjunction of fractures and limbs of folds.

It is recommended that St. Eugene Mining Corporation Ltd. continue acquiring and evaluating data pertaining to its claims and the surrounding area. Data from structural studies, geochemical and geophysical surveys, geological mapping and prospecting efforts, should be integrated and a program of diamond drilling undertaken to locate additional silver-lead-zinc mineralization. A two-part exploration program with a budget totaling $768,200 is recommended and detailed in this report. Part 1 is a continuation of compilation and interpretation, two stages of geophysical surveying and other field work to investigate selected areas. Part 2 proposes a small number of drill holes to gather data about formations and structures from sites that are selected after completion of Part 1 surveys and field work.



1.0 INTRODUCTION

1.1 Introduction

This report "Review of the St. Eugene Project, Southeast of Cranbrook, British Columbia" was prepared for St. Eugene Mining Corporation Ltd. of North Vancouver, British Columbia. It incorporates information from many sources, including mine records and drawings, exploration data from several episodes of diamond drilling, surface geological mapping by various government, corporate and independent geologists, and data pertaining to similar geological formations and mineral deposits located in British Columbia, Idaho and Montana. The author also has referred to descriptions of mineral deposits of similar ages and geological characteristics located in other parts of the world. The principals of St. Eugene Mining Corporation Ltd. made available their extensive files of data, including their own compilations and interpretations. The author has cited appropriately in the text the sources of information. Technical reports, journals, and other sources are also listed in the References section of the report.

The author has participated in field work in the western part of the Rocky Mountains of southeastern British Columbia and is familiar with the stratigraphic units that host the St. Eugene mining property. He, accompanied by Mr. Peter Klewchuk, M. Sc., P. Eng., geological consultant, on February 14, 2005, examined the lower elevation portions of the property, including areas of trenching and outcroppings of rock formations associated with mineral deposits of the area.

This report is based in part on information from several geologists and mining engineers who have extensive personal experience working in and near the former St. Eugene mine and who have examined in detail drill cores, underground and surface exposures and structures, and records and maps of the mine. Interpretations and Conclusions (Section 15.0), though derived from the work of the various technical persons and other identified sources, are the responsibility of the author.

The author expresses his appreciation for the abundant help and unfailing co-operation of Mssrs. Trenaman, Gifford and Barker, directors of St. Eugene Mining Corporation Ltd., North Vancouver, B. C. and of Mr. Peter Klewchuk, consultant, of Kimberley, B. C. and Mr. David Pighin, P. Geo. of Cranbrook, B. C. Several of the accompanying diagrams were prepared by Trenaman Mining Services and permission to include them is acknowledged with thanks. Terracad GIS Services of Vancouver assisted with preparation of several drawings.

1.2 Purpose of the Report

The report "Review of the St. Eugene Project, Southeastern British Columbia, Canada" incorporates data concerning the history of the mine, details of several episodes of exploration work, several theories of origin of the mineralization, and offers suggestions for continued exploration in search of additional mineralization that might support mining activities. Recommendations are presented, along with estimated time requirements and costs of completing such work.

The author is a Qualified Person as defined by National Policy 43-101 and this report conforms to the current guidelines enunciated by that Policy. This report will be used by St. Eugene Mining Corporation Ltd. in support of listing requirements of the Toronto Stock Exchange, Venture Section, and for purposes of arranging an underwriting to finance all or parts of the recommended programs of work.

2.0 DISCLAIMER

The author of "Review of the St. Eugene Project, Southeastern British Columbia" has relied upon information derived from many resources, including publications of the Geological Survey of Canada, the Ministry of Energy and Mines, British Columbia, and mining and exploration companies. Some of the information is inherently flawed to the extent that historical mining data commonly is: the St. Eugene mine itself has been mostly inactive since 1921 and has been, by the passage of time and in the interests of safety, rendered inaccessible and thus it is not possible to examine the underground workings. Similarly, much of the data presented in the early literature is based on field work and research that is dimly documented and, although considered fully reliable, cannot be readily verified. Concepts of ore genesis have evolved greatly since plate tectonic theory emerged in the 1970s. Since that event, intensive and detailed mapping and compilation initiatives have been directed to metallogenic provinces as well as to property-scale studies. More precise dating methods and better analytical techniques also have contributed to new ore deposit models by overwhelming the classic beliefs and causing abandonment of many opinions that were formerly strongly held.
Areas of possibly questionable reliability have been identified in the text and the author disclaims responsibility for that material.

3.0 PROPERTY DESCRIPTION AND LOCATION

The St. Eugene Mining Corporation Ltd. property at Moyie, B. C. comprises 79 contiguous crown granted claims, the lot numbers and areas of which are detailed in Appendix 1. Total area is 1362.69 hectares. It appears in NTS map sheet 82/5W and is located in the Ft. Steele Mining Division of southeastern British Columbia (Figures 1, 2 and 3). The principal workings of the former St. Eugene mine lie 24 km (15 miles) south of Cranbrook, B. C. and **are not** included in the property of St. Eugene Mining Corporation Ltd. whose claims adjoin the former mine on all sides. Figure 3 illustrates claims with lot numbers, where applicable, along with locations of mineral zones.

Geographic co-ordinates of the town of Moyie and the lower levels of the former mine are 49° 17'N latitude, 115 ° 50'E longitude.

Crown granted claims convey mineral and surface rights, subject to certain easements and impairments, and are maintained by payment annually of property taxes. Most of the claims currently in the control of St. Eugene Mining Corporation were located at the time of the development of the St. Eugene mine, that is, in the period approximately 1893 through 1910, were surveyed and crown granted soon after and were ultimately assembled by St. Eugene by terms of various agreements. It appears, from Land Registry and other records, that a deficiency exists with respect to registration of agreements and transfers of titles of the Baltimore claim, Lot no. 4413 (RT Trenaman, 2005, personal communication). These may be in part bookkeeping errors and oversights that may have occurred during the World War II period when personnel shortages existed and other priorities took precedence. Management of St. Eugene Mining Corporation Ltd. are currently working with Land Titles Division to clarify and rectify these deficiencies and, with the above-discussed exception, the entire property, on which, incidentally, that company has been paying the taxes for many years, is properly held.

The claims that comprise the holdings of St. Eugene Mining Corporation Ltd. have sparse cover of larch, fir and pine forest with small areas of grasslands. Logging activities have been directed in recent years to parts of the area.

St. Eugene Mining Corporation Ltd., incorporated in British Columbia, except as noted, holds 100% interest in the Moyie area claims. The author is not aware of any royalties, back-in rights, or other agreements that limit the company's ownership of the claims. The St. Eugene property is located beside Moyie Lake in the southern Rocky Mountain Trench, 32 km (24 miles) north of the International Boundary, in a popular outdoor recreational area. Other activities, in addition to boating and fishing, include camping, hiking and hunting. Commercial uses include cattle grazing and logging. Several residences and recreational homes have been built near the lake and such usage is likely

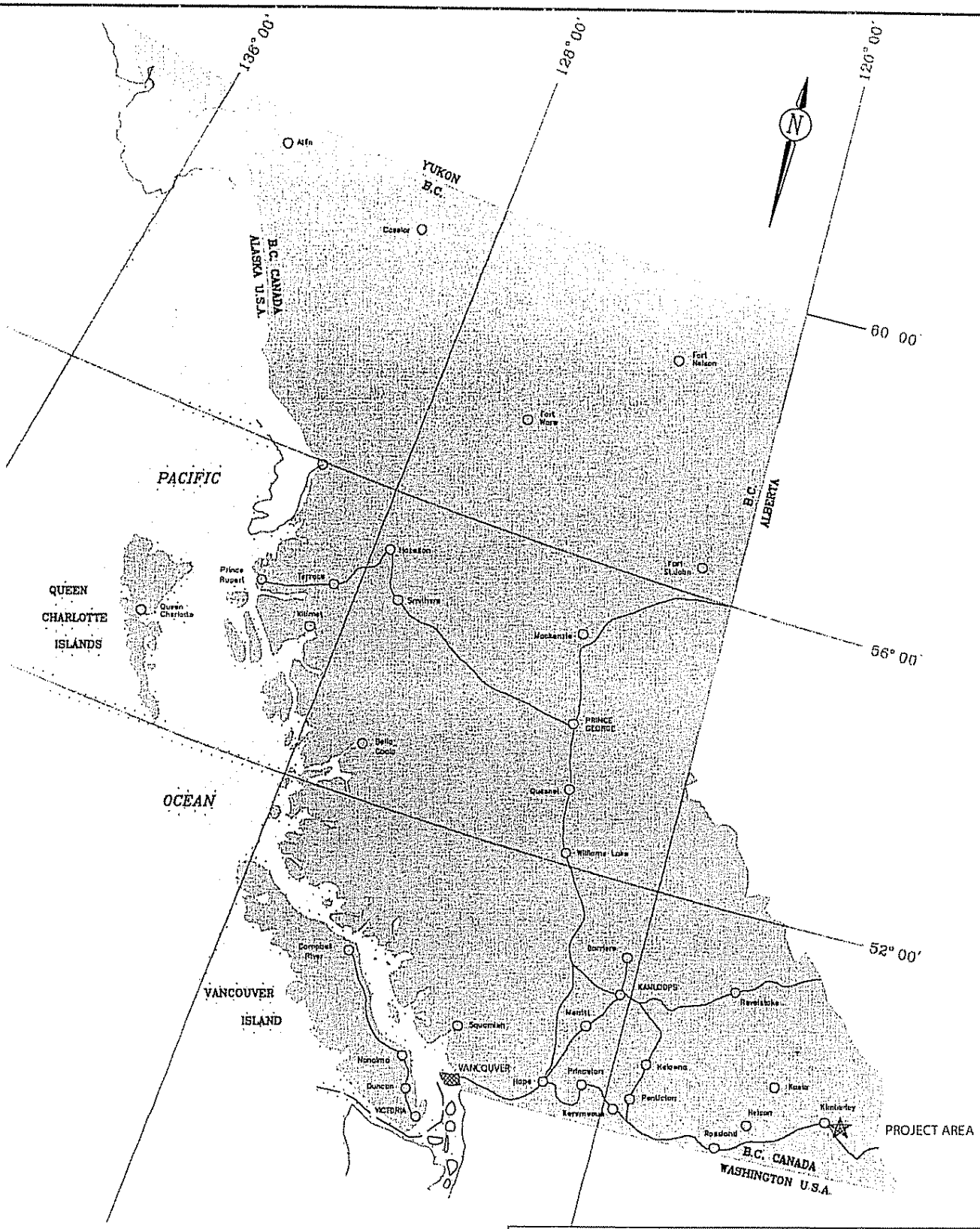
COMPANY: **ST. EUGENE MINING CORPORATION LTD.**

DRAWING TITLE.

LOCATION MAP
CANADA

TO ACCOMPANY REPORT BY: E. OSTENSOE, P. GEO.,

LOCATION: Moyie, B.C.	FIGURE 1
DATE: Mar 2005	SCALE
DRAWN TERRACAD LTD	GEOLOGIST E. OSTENSOE, P. GEO
DATA	



COMPANY:

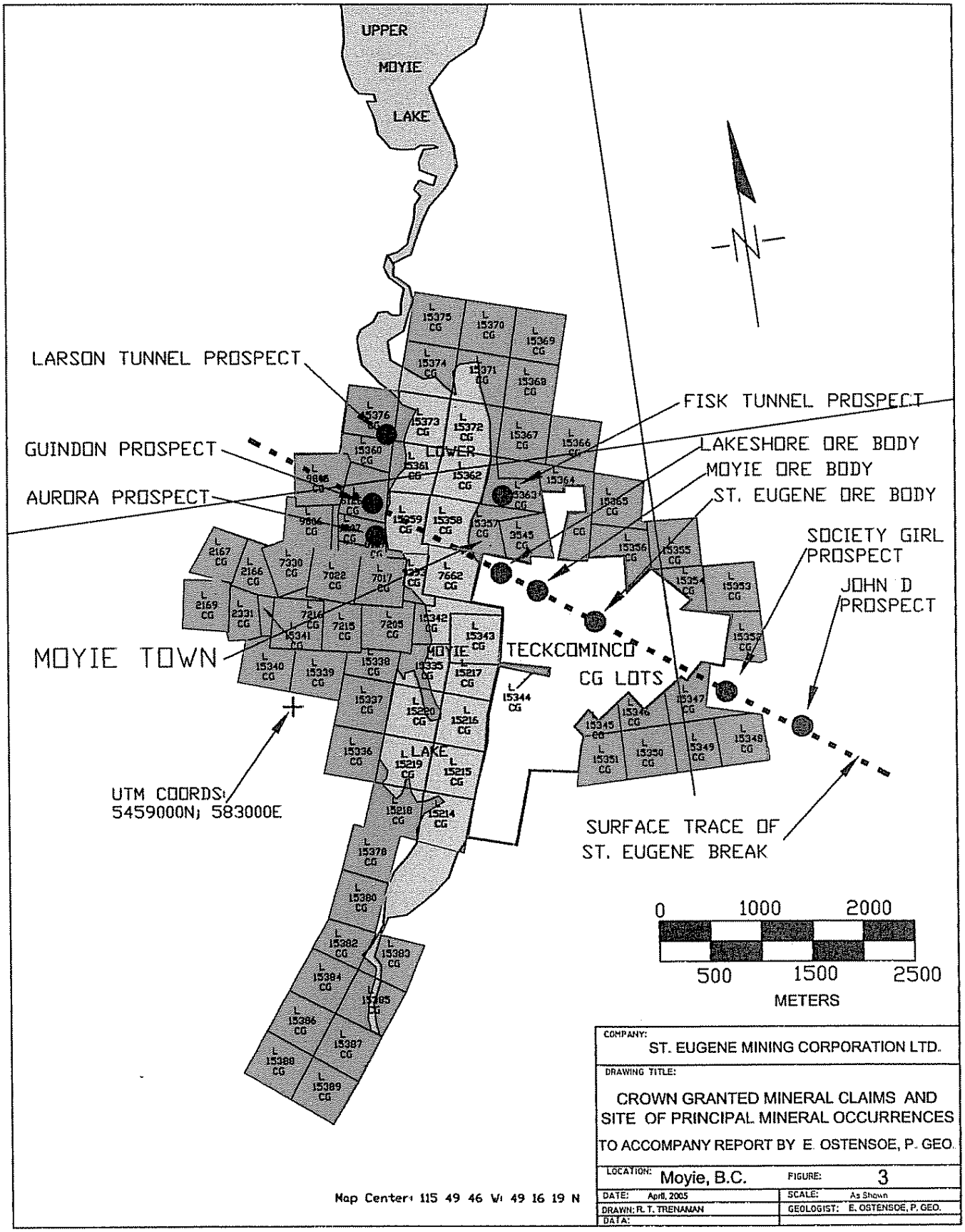
ST. EUGENE MINING CORPORATION LTD.

DRAWING TITLE

LOCATION MAP
BRITISH COLUMBIA

TO ACCOMPANY REPORT BY: E OSTENSOE. P. GEO.

LOCATION	Moyie, B C	FIGURE	2
DATE	Mar 2005	SCALE	
DRAWN	TERRACAD LTD	GEOLOGIST	E. OSTENSOE. P. GEO
DATA			



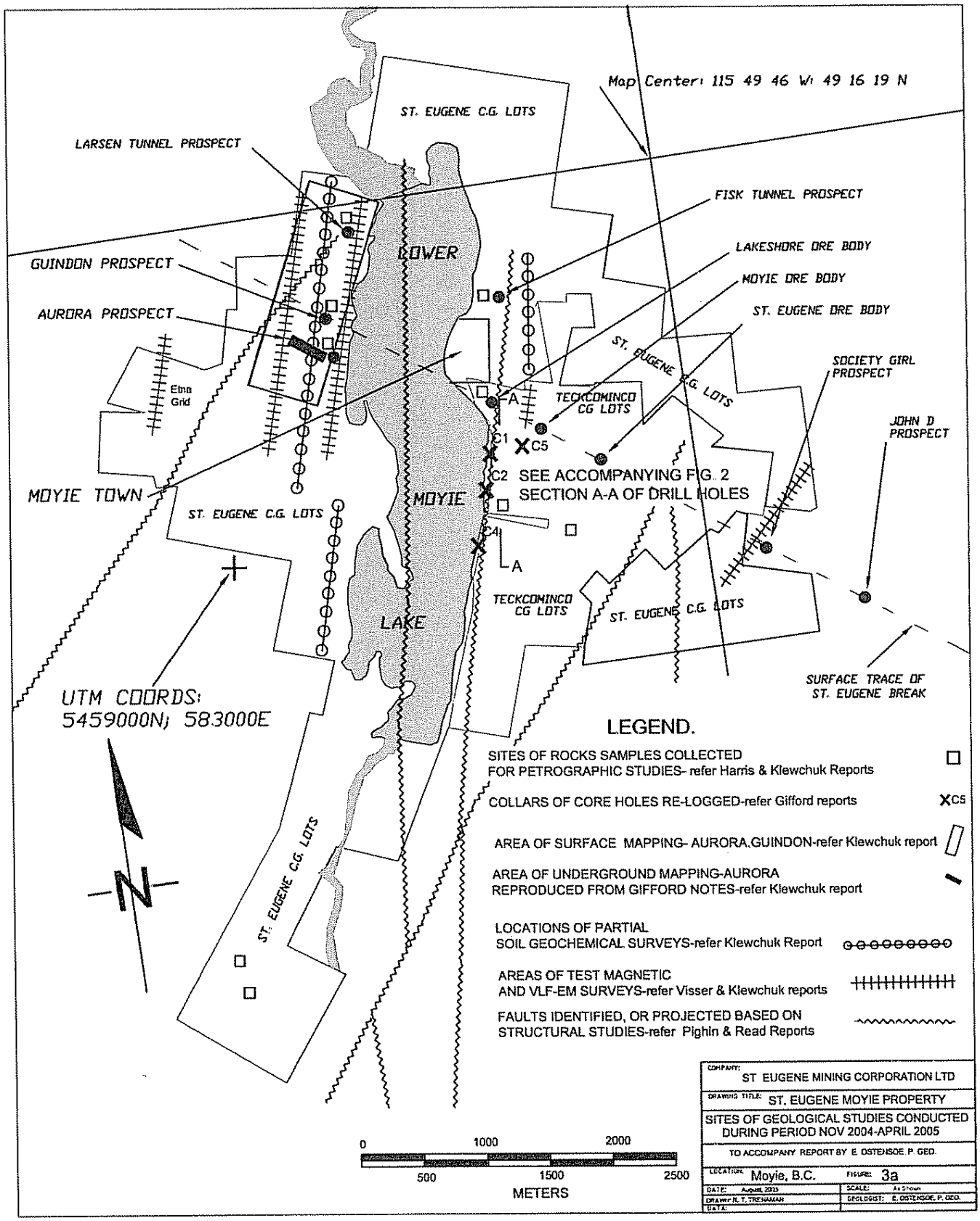
COMPANY: ST. EUGENE MINING CORPORATION LTD.

DRAWING TITLE:

CROWN GRANTED MINERAL CLAIMS AND SITE OF PRINCIPAL MINERAL OCCURRENCES

TO ACCOMPANY REPORT BY E. OSTENSOE, P. GEO.

LOCATION: Moyie, B.C.	FIGURE: 3
DATE: April, 2005	SCALE: As Shown
DRAWN: R. T. TRENAMAN	GEOLOGIST: E. OSTENSOE, P. GEO.
DATA:	


Map Center: 115 49 46 W 49 16 19 N
ST. EUGENE C.G. LOTS
LARSEN TUNNEL PROSPECT
FISK TUNNEL PROSPECT
LAKESHORE ORE BODY
MOYIE ORE BODY
ST. EUGENE ORE BODY
GUINDON PROSPECT
AURORA PROSPECT
LOWER
Etna Grid
ST. EUGENE C.G. LOTS
TECKCOMINCO CG LOTS
SOCIETY GIRL PROSPECT
JOHN D PROSPECT
C1
C5
C2
SEE ACCOMPANYING FIG. 2
SECTION A-A OF DRILL HOLES
MOYIE TOWN
MOYIE
ST. EUGENE C.G. LOTS
C4
A
TECKCOMINCO CG LOTS
ST. EUGENE C.G. LOTS
LAKE
SURFACE TRACE OF ST. EUGENE BREAK
UTM COORDS:
5459000N; 583000E
ST. EUGENE C.G. LOTS
N
LEGEND.
SITES OF ROCKS SAMPLES COLLECTED FOR PETROGRAPHIC STUDIES- refer Harris & Klewchuk Reports
COLLARS OF CORE HOLES RE-LOGGED-refer Gifford reports
C5
AREA OF SURFACE MAPPING- AURORA,GUINDON-refer Klewchuk report
AREA OF UNDERGROUND MAPPING-AURORA REPRODUCED FROM GIFFORD NOTES-refer Klewchuk report
LOCATIONS OF PARTIAL SOIL GEOCHEMICAL SURVEYS-refer Klewchuk Report
AREAS OF TEST MAGNETIC AND VLF-EM SURVEYS-refer Visser & Klewchuk reports
FAULTS IDENTIFIED, OR PROJECTED BASED ON STRUCTURAL STUDIES-refer Pighin & Read Reports
0
1000
2000
500
1500
2500
METERS
COMPANY: ST EUGENE MINING CORPORATION LTD
DRAWING TITLE: ST. EUGENE MOYIE PROPERTY
SITES OF GEOLOGICAL STUDIES CONDUCTED DURING PERIOD NOV 2004-APRIL 2005
TO ACCOMPANY REPORT BY E. OSTENSOE, P. GEO.
LOCATION: Moyie, B.C.
FIGURE: 3a
DATE: August, 2005
SCALE: As Shown
DRAWN: N. T. TRENAMAN
GEOLOGIST: E. OSTENSOE, P. GEO.
DATA:

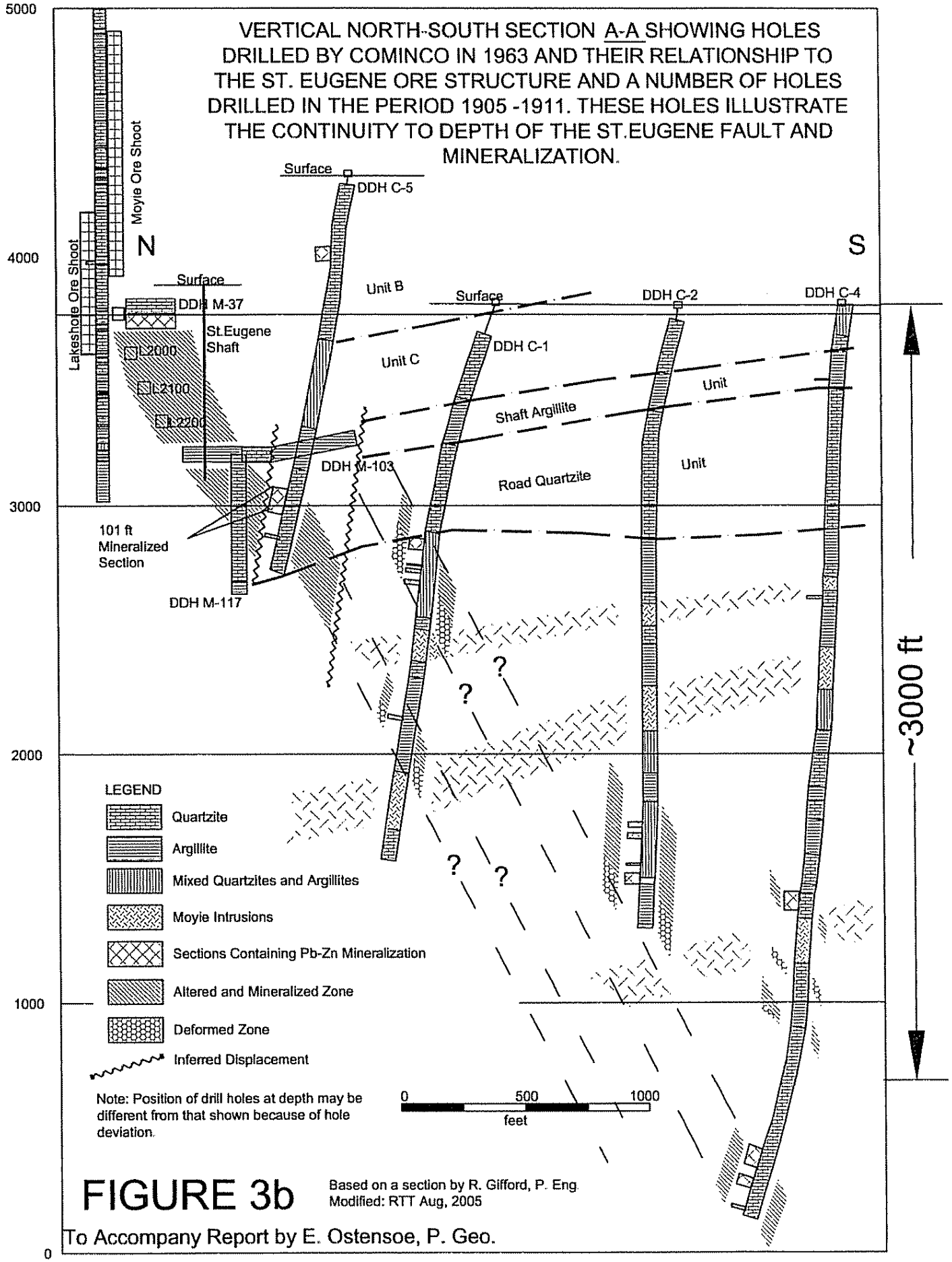


FIGURE 3b

Based on a section by R. Gifford, P. Eng.
Modified: RTT Aug, 2005

To Accompany Report by E. Ostensoe, P. Geo.

to increase. The southern line of the Canadian Pacific Railway that operates between Cranbrook and Trail passes through the area along the east side of Moyie Lake close to the boundary between St. Eugene Mining Corporation Ltd. claims and those of Teckcominco. The former sites of several short tunnels, including the Aurora and Guindon prospects, located near the west shore of the lake, have been extensively reclaimed in accordance with present environmental and safety standards and there are no identified or unresolved environmental liabilities.

4.0 ACCESSIBILITY, CLIMATE, LOCAL RESOURCES, INFRASTRUCTURE AND PHYSIOGRAPHY

The St. Eugene Mining Corporation Ltd. property lies between elevations 900 m.(3000 ft.) and 1500 m (5000 ft.). Terrain variously is gentle to moderately steep with sparse to continuous forest cover and areas of open grasslands. Access from Cranbrook is by Highway 3/97, the southern transprovincial highway, to the former mine on the east side of Moyie Lake, a distance of 24 km (16 miles) and thence by rudimentary roads. Cranbrook is a city of major regional importance and population 20,000 that supports a broad range of services, light industry and transportation facilities.

The southern Rocky Mountain Trench area enjoys a temperate climate with moderate precipitation, about 80 cm annually, equally as rain and snow, warm summers and cold winters. Mineral exploration work can be undertaken on a year-round basis.

St. Eugene's crown granted claims, with area 1362.69 hectares, can accommodate almost any type of mining operation. The Sullivan mine operated for 100 years at Kimberley, B. C., 41 km (26 miles) north of the claims, and the huge Fernie coal district is 65 km (40 miles) east: the area may be characterized as "mining friendly". Most personnel and services required in support of exploration and mining operations can be obtained locally.

Permits will be required if ground disturbance such as drill sites and access roads are to be constructed or if trenching work is undertaken. All work is subject to working cooperatively with owners of surface rights and to protection of habitat and water supplies. The project at a later stage will be subjected to intense scrutiny if the owners apply for a mine operating certificate and the location adjacent to, and possibly under, a recreational lake may or may not become a difficult issue.

5.0 HISTORY

5.1 Early History

The St. Eugene mine, located on the east shore of Moyie Lake at Moyie, B. C., operated in the period 1900 through 1921, as an underground mine producing zinc, lead and silver ores. Ownership was held by The Consolidated Mining and Smelting Company (later Cominco and, more recently, Teckcominco) and production was further processed at that company's Trail smelter, located 160 km west. Ores were derived from three principal "shoots", the Lakeshore, Moyie, and St. Eugene, and totaled about 1.1 million tons that contained, on average, 5% zinc, 15% lead and 7 ounces silver per ton (Trenaman, 2003). [In a private report for St. Eugene Mining Corporation Ltd., Mr. Dave Pighin, P. Geo. states that the "...St. Eugene vein system produced 78,846 gms (2781 oz) gold, 218,773 kg silver, 139,336,460 kg lead and 46,445,487 kg zinc from 928,910 metric tons (1,024,123 tons) of ore" (Pighin, 2005)].

St. Eugene Extension Mines Limited (SEEM) was organized in 1929 to consolidate title to various claims located both east and west of the former mine, and was later reorganized as St. Eugene Mining Company Ltd., for convenience, SEMC, in 1939. SEMC was a subsidiary of Ventures Ltd., a prospecting company that was subsequently absorbed by Falconbridge Ltd. SEEM leased the former mine property from Cominco and during the 1930s conducted programs of surface and underground geological studies. This lease was extended by SEMC for an additional 20 years in 1939. SEMC added to the land position and drilled several holes in the Aurora area and near the town of Moyie. A Cominco-SEMC joint venture in 1962 drilled the depth extension of the St. Eugene vein system.

Cominco, in 1995, to ensure public safety, secured certain of the mine openings on the former St. Eugene mine site. SEMC in 1997 did similar remedial and precautionary work on its claims (Trenaman, 2000, p.7). Falconbridge Ltd., parent company of SEMC, in 2001 sold its 81.7% interest in that company to R. T. Trenaman. The Moyie area claims, owned 100%, are the principal assets of St. Eugene Mining Corporation Ltd.

5.2 Recent History

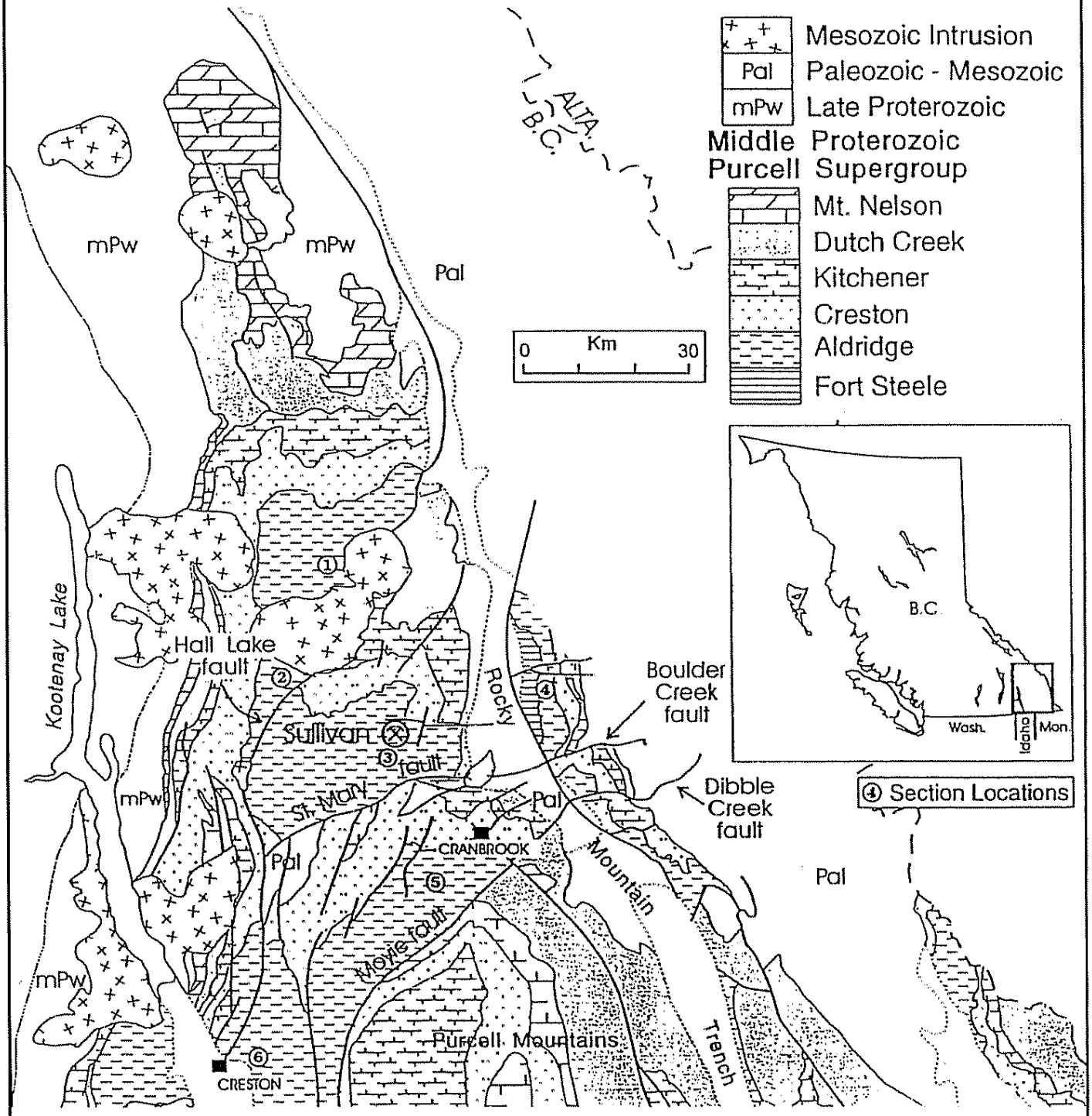
In 2004, St. Eugene Mining Corporation Ltd. engaged locally-based consulting geologists to conduct limited programs of geological compilation (Pighin, 2005), and geological mapping, soil and rock geochemistry and surface VLF-EM and ground geophysics over parts of its claims, in particular, along the east shore of Moyie Lake, at higher elevations east of the former mine, and over parts of the Aurora and Guindon prospects close to the west side of the lake (Klewchuk, 2005). Selected rock specimens were examined and

described by a consulting petrographer (Harris, 2004) and a specialist structural geologist reviewed available structural and other data and made recommendations concerning further investigations (Read, 2005). Drill cores with total length 3119 metres (10,239 feet) from four drill holes that had been in storage in the area for many years were relogged by a consulting geologist who is familiar with the former mine, with sedex and modified sedex-type mineral deposits and with regional geological features (Gifford, 2005).

David Pighin, P. Geo., a geologist with many years experience in prospecting and mineral exploration in the Kootenay Mining District, prepared a report " Geological Report for the St. Eugene Mine and Surrounding Area" dated February 7, 2005, that included data from his extensive history of field work in the district. As illustrated in Figure 3a, he was able to plot several north-trending faults that approximately parallel the trend of the Moyie Anticline and which may intersect the principal St. Eugene Mine vein system. He recommended re-mapping in detail the area of the crown granted claims owned by St. Eugene Mining Corporation Ltd with special attention to structure and lithology. Aldridge marker beds must be located and accurately plotted using GPS mapping techniques.

Mr. Pighin's recommendations were addressed in part by the company by having Peter B. Read, PhD., P. Eng., a consulting geologist with expertise in structural geology and geological reconstruction, review available data. He conducted three-dimensional modeling studies and recommended further work to refine the relationship between the St. Eugene vein system and major stratigraphic units (Read, 2005).

Mr. Peter Klewchuk, M. Sc., P. Geo., also a locally-based consulting geologist and prospector, in his "Summary Report on Geology, Petrography, Soil and Rock Geochemistry, Ground Magnetic and VLF-EM Geophysics, Drill Core Evaluation, St. Eugene Mining Corporation Claims" dated April, 2005, described "...a program of limited geologic mapping, soil and rock geochemistry and surface VLF-EM and ground magnetic geophysics" (Klewchuk, 2005, p. 5) that was undertaken "...to evaluate the potential for the discovery of additional St. Eugene style (vein) ore mineralization on and near the claim block (op cit. p. 5). His work included what he styled a "pilot project" of soil and rock geochemistry and surface geophysics to evaluate their effectiveness as tools in the mineral exploration process. He included a review of the Pighin report and noted areas where locally-based and government geologists hold alternative geological interpretations. Among topics still to be resolved are the relationship of north-trending faults to the axial plane of the Moyie Anticline and uncertainties concerning Moyie Intrusions of gabbroic and dioritic composition versus younger Nicol Creek lavas that have similar appearances but are related to an episode of volcanism.



(after SULLIVAN Volume J. LYDON, ed.)

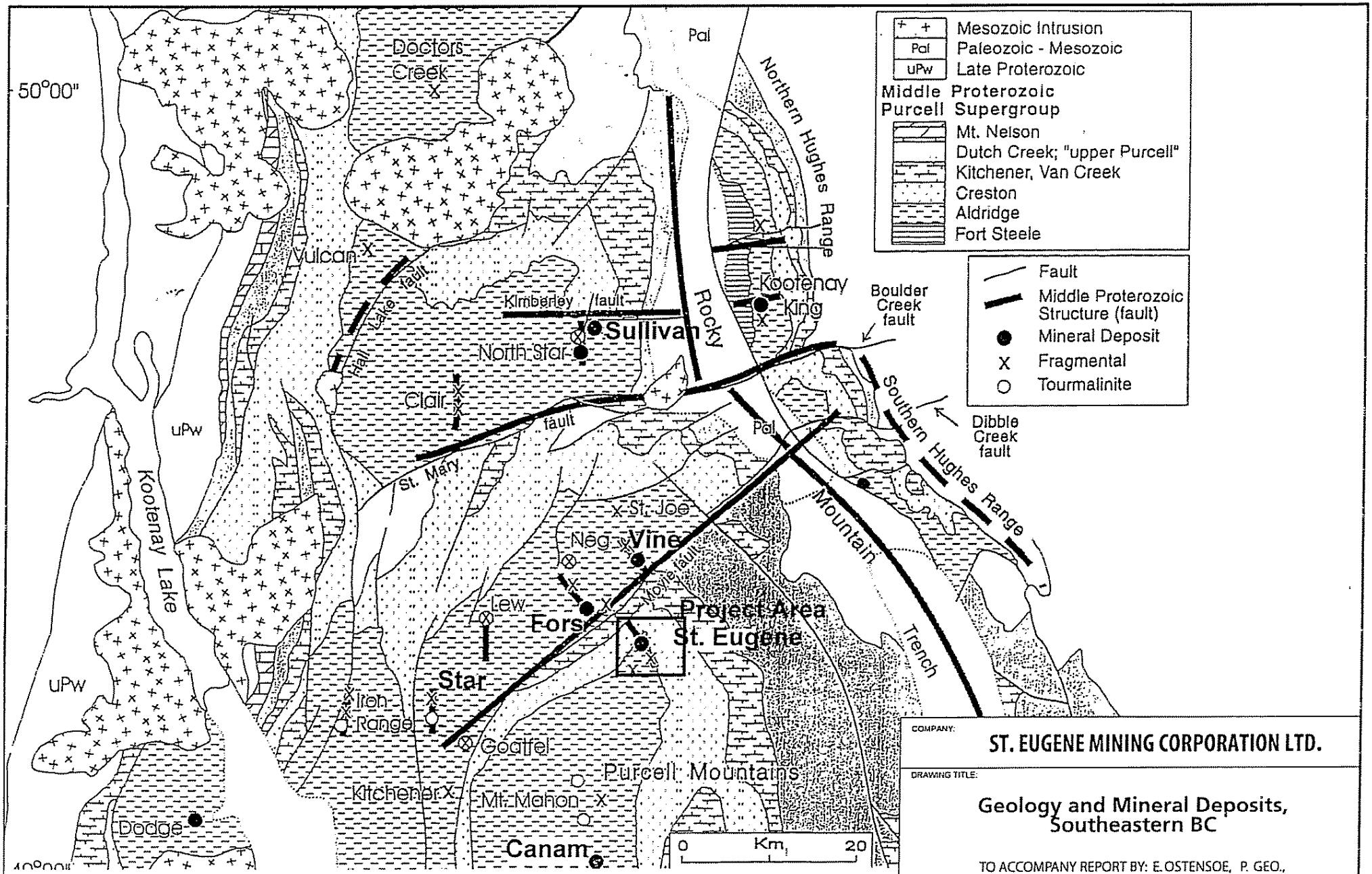
COMPANY: **ST. EUGENE MINING CORPORATION LTD.**

DRAWING TITLE:

Geology of Southern Rocky Mountain Trench Area, BC

TO ACCOMPANY REPORT BY: E. OSTENSOE, P. GEO.,

LOCATION: Moyie, B C.	FIGURE: 4
DATE: Mar 2005	SCALE: As Shown
DRAWN: TERRACAD LTD.	GEOLOGIST: E. OSTENSOE, P. GEO
DATA:	



(after SULLIVAN Volume J. LYDON, ed.)

COMPANY: **ST. EUGENE MINING CORPORATION LTD.**

DRAWING TITLE:

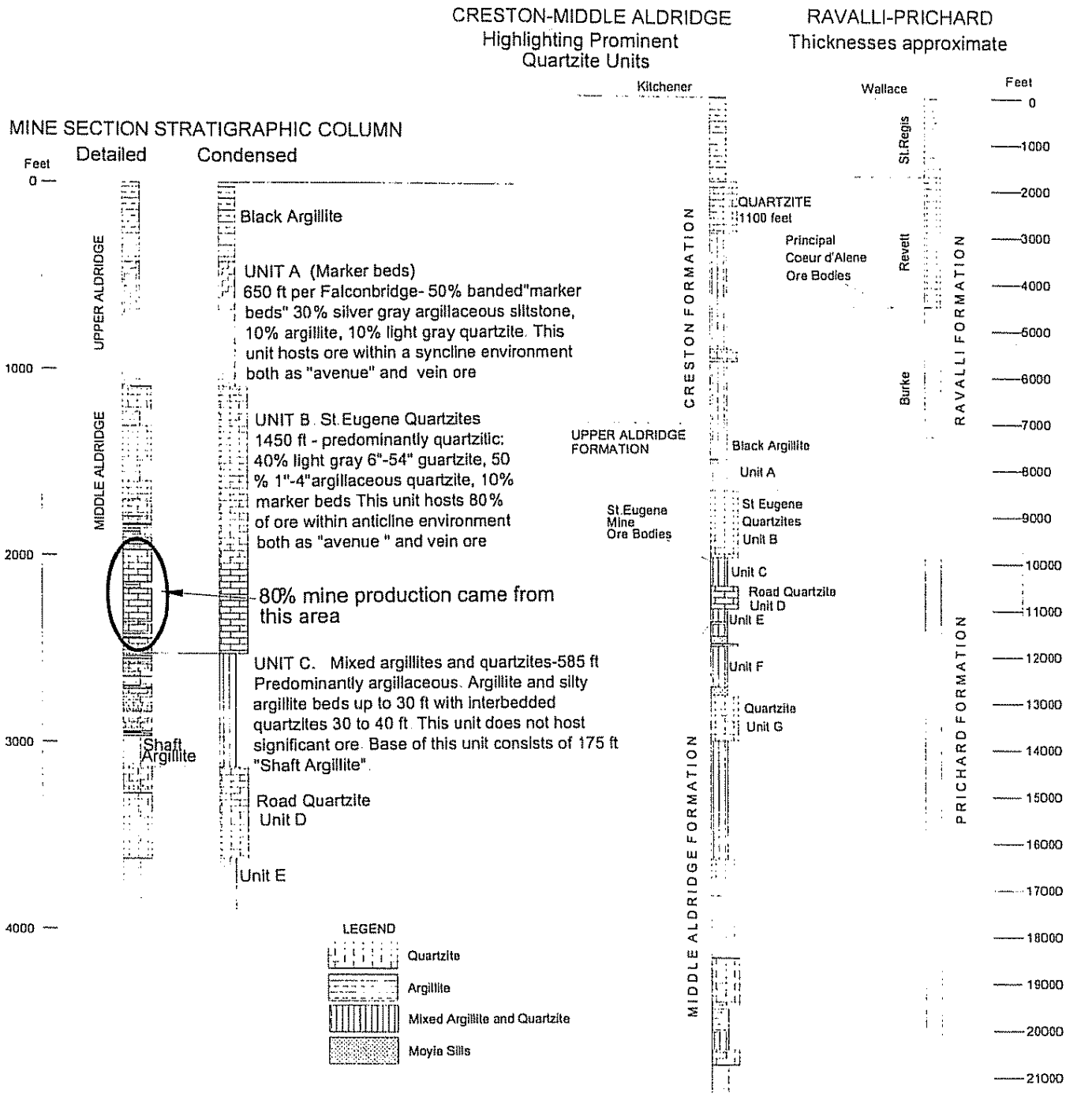
Geology and Mineral Deposits, Southeastern BC

TO ACCOMPANY REPORT BY: E. OSTENSOE, P. GEO.,

LOCATION:	Moyie, B.C.	FIGURE	5
DATE	Mar 2005	SCALE	As Shown
DRAWN:	TERRACAD LTD	GEOLOGIST	E. OSTENSOE, P. GEO
DATA			

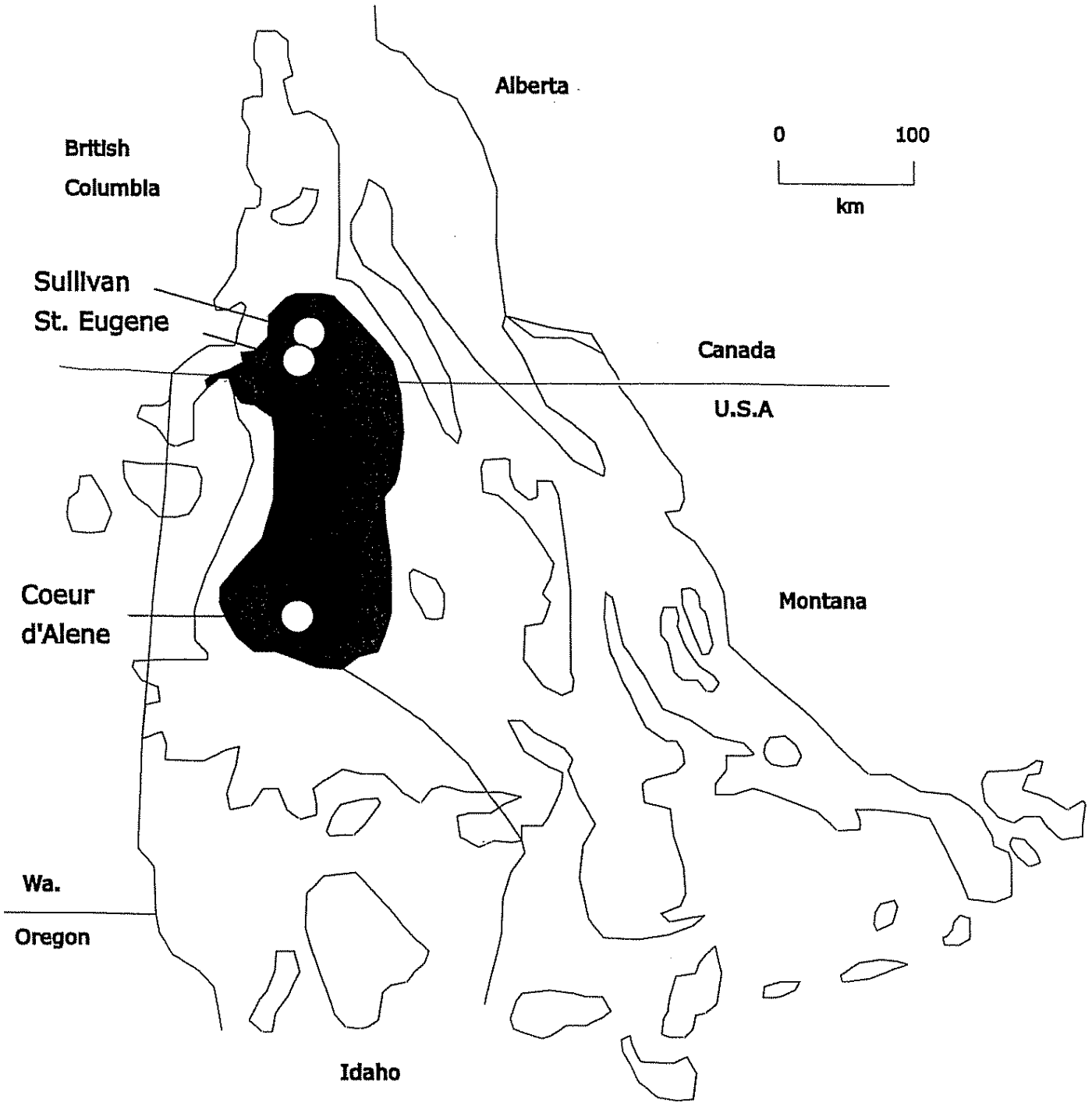
STRATIGRAPHIC COLUMNS

Based on Data by Gwillam, Chubb, Owens, Gifford, Fryklund, Hoy



(after Trenaman, 2003)

COMPANY:	ST. EUGENE MINING CORPORATION LTD.
DRAWING TITLE	Stratigraphic Columns Moyie Area and Coeur d'Alene Area
	TO ACCOMPANY REPORT BY: E OSTENSOE, P. GEO.
LOCATION: Moyie, B C	FIGURE: 6
DATE: Mar 2005	SCALE: As Shown
DRAWN: TERRACAD LTD	GEOLOGIST: E. OSTENSOE, P. GEO
DATA:	



(from Beaudoin, 1997)

COMPANY: ST. EUGENE MINING CORPORATION LTD.	
DRAWING TITLE: Distribution of Belt-Purcell Metasedimentary Rocks	
TO ACCOMPANY REPORT BY: E OSTENSOE. P. GEO.	
LOCATION: Moyie. B C	FIGURE: 7
DATE: Mar 2005	SCALE:
DRAWN: TERRACAD LTD	GEOLOGIST: E OSTENSOE, P GEO
DATA:	

The Klewchuk report included detailed descriptions of a number of rock samples that were collected from and near the claims and analysed for 34 elements by induced coupled plasma methods and for gold by standard geochemical gold determination techniques. That information and analytical information, including Certificates of Analysis, are included in Appendix 4 of this report. J. F. Harris, Ph.D, consulting petrographer, studied some of the rock samples and reported on their textures and mineralogy (Harris, 2004). Locations of the samples are illustrated as small square boxes in Figure 3(a) and the co-ordinates of the various locations are listed in Appendix 4.

A program of grid and contour soil sampling was undertaken by Mr. Klewchuk in two areas on the St. Eugene Mining Corporation Ltd. claims to evaluate the effectiveness of that exploration method. Sample line locations, shown in a "beads on a string" pattern are plotted on Figure 3(a) that is attached hereto:

(1) immediately west of Lower Moyie Lake, traversing the traces of the Aurora, Guindon and Larson Tunnel prospects and extending southerly to the vicinity of the south end of the lake

(2) a line of samples in the Glencairn area, immediately east of Moyie town, that passes close to the Fisk Tunnel prospect.

444 soil samples from the above-described grids were analysed by ALS Chemex of North Vancouver, B. C. for a 34 element ICP package by standard analytical techniques. Analyses were included in the Klewchuk report and have been reviewed. Mr. Klewchuk in his analysis of results obtained employed general threshold levels that were established for the Aldridge Formation over many years by a major mining company: copper - 32 ppm, lead - 50 ppm, zinc - 150 ppm and silver - 0.2 ppm.

West of Moyie Lake in proximity to the Aurora, Guindon and Larsen Tunnel prospects (Figure 3(a)) anomalous values of copper, lead, zinc and silver were obtained in the vicinity of the Aurora and Guindon prospects but less notable values were obtained in the Larson Tunnel area. Anomalies are generally indistinct, possibly reflecting widespread mineralization but other explanations are also offered, including "leakage" of sulphides from a mineral zone emplaced in a fold structure. The possibility that the underlying rocks have high metal contents creating an elevated background or threshold level cannot be addressed in a small survey and further geochemical soil survey work was suggested: in particular, Mr. Klewchuk suggested that his survey should be extended to the west.

No anomalous base metal or silver values were obtained from soils collected on Klewchuk's Glencairn grid located on the east side of Moyie Lake (Figure 3(a)). Geochemical responses from mineralization that may be present may have been masked by excessive amounts of overburden.

Mr. Klewchuk reported that previous experience with VLF-EM surveying in the St. Eugene area demonstrated that west-northwest trending structures can be detected and he made reference to experience in tracing the Vine vein located a few kilometers north of the St. Eugene property. Both mineralized and weakly mineralized portions of that vein were recognized. Other examples were also cited. Klewchuk's observations were based on VLF-EMsurvey methods and are somewhat at odds with those of Mssrs. Rastad and Visser (see Appendix 3). The latter, representing SJV Consultants Ltd. a geophysical survey and consulting group, expressed concerns that because the Upper Aldridge Formation contains weakly conductive bands of sulphide minerals, electromagnetic input signals may be captured and distorted and the responses from underlying horizons would be masked.

Mr. Klewchuk using a Crone Radem VLF-EM receiver surveyed parts of the former St. Eugene mine, between the Lakeshore and Moyie orebodies, across the trace of the Aurora, Guindon and Larson Tunnel prospects and at the westmost side of the property (the "Etna Grid"). Several north-south lines were surveyed in the vicinity of the Society Girl and John Dee prospects east of the former St. Eugene mine. Locations of the surveys are shown in Figure 3(a).

A "moderate" anomaly was recognized at the St. Eugene system where it is presumed that the sulphide zone was mined out. A weak anomaly was detected in coincidence with the Aurora vein. The latter structure showed geophysical continuity but complexity and Mr. Klewchuk suggested that further such geophysical work, possibly combined with more sophisticated geophysical methods and soil geochemical surveys, should be completed to enable meaningful interpretation.

Results from the Larson Tunnel area were complicated by the conjunction of the WNW structure that carries mineralization with a NNE-trending fold: further surveying is required to enhance the interpretation.

The small VLF-EM survey by Klewchuk in the Etna grid area at the west side of the property detected a strong response coincident with a magnetic anomaly. This result was confirmed later by similar work by SJV Geophysics. Conductivity was indicated and follow-up work, comprising geological mapping, additional VLF-EM surveying, soil geochemistry and possibly HLEM geophysics and trenching" (Klewchuk, op cit., p. 22) was suggested.

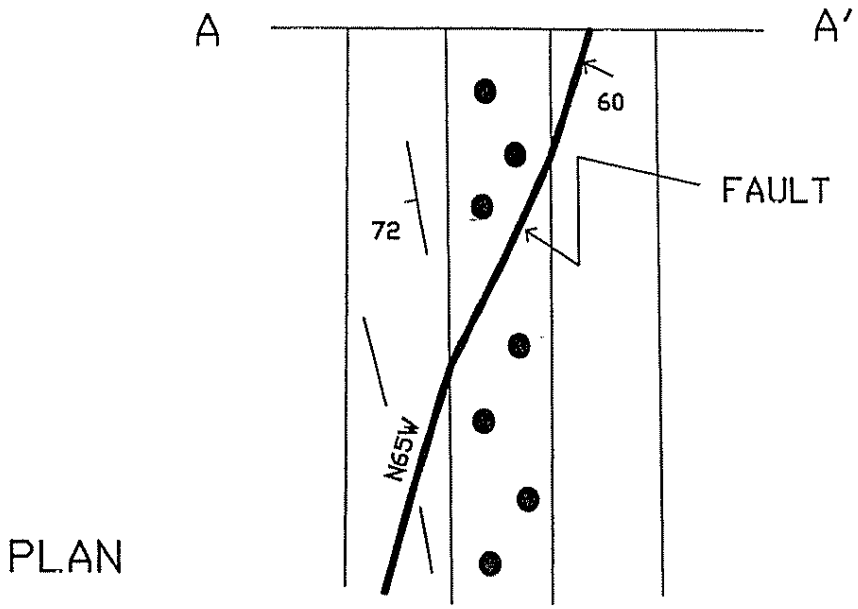
Mr. Robert Gifford, B.A. Sc. (Geological Engineering), P. Eng., a consulting economic geologist and also a director of St. Eugene Mining Corporation Ltd, was engaged by that company to re-log of cores from four diamond drill holes that had been drilled in the Moyie area in 1962 and 1963 by a joint venture of The Consolidated Mining and Smelting Company Ltd. (now Teckcominco Ltd.) and St. Eugene Mining Corporation

Ltd (then a company related to Falconbridge Ltd). The holes, with total length 3119 metres (10,239 feet) were located in proximity to the former St. Eugene mine (see Figure 3(a)) and provided rare valuable information concerning parts of the stratigraphic succession that occupies the Belt-Purcell Basin. The companies, at the time of the drilling program, believed that in addition to furthering the exploration of the St. Eugene mine area, information from the cores would be constructive in helping decipher the oddities and riddles of the huge Sullivan mine, located 41km north of Moyie. The cores, surprisingly, were preserved in the district and forty years after their creation were acquired by St. Eugene Mining Corporation Ltd.

Mr. Gifford had, in 1962-1963 as a geologist employed by The Consolidated Mining and Smelting Company of Canada Ltd., logged the cores. At that time he recognized and described certain distinctive stratigraphic intervals at Moyie that he believed mirrored intervals that were intimately related to Sullivan Mine ores. Subsequent to the drilling of the cores a massive upheaval in geological thought occurred: plate tectonic theory rapidly wiped out many of the classic concepts of geosynclinal sedimentation. The discovery of Red Sea-type "black smoker" fumaroles that spew metal-rich brines into sedimentary environments caused re-evaluation of evidence formerly used in support of hydrothermal theories of ore formation.

Mr. Gifford was commissioned by St. Eugene Mining Corporation Ltd. in 2004 to re-log in detail the Moyie area cores employing modern concepts of "sedex"-type mineral deposits and their genesis. He used computer-assisted methods of recording and presenting his observations and has prepared a comprehensive report that includes a discussion of the geological setting of the former St. Eugene mine and nearby mineral occurrences, details of his re-logging and his interpretation, conclusions and recommendations, as well as graphics. That report (Gifford, 2005), complete with appendices and illustrations, is voluminous and is currently still a "work in progress" and will doubtless be enhanced and modified. Nonetheless it is discussed and in part reproduced, with Mr. Gifford's permission, in order to illustrate the type and quality of work that is guiding exploration of the Moyie area claims of St. Eugene Mining Corporation Ltd. and to make available in a timely fashion the newly acquired data.

Locations of drill holes are shown in Figure 3(a) of this report. [Note that Hole C-3 failed to enter bedrock and was abandoned.] Figure 3(b), prepared prior to the re-logging work, is a vertical north-south section that shows principal geological features relative to the drill holes and to the former mine. Mr. Gifford will in due course prepare a similar vertical section that will incorporate his newly acquired data. The Summary section of the Gifford report, the drill hole legend, the re-log of drill hole C-2 (length (771 metres (2530 feet)) and title blocks of Holes C-1, C-3 (abandoned), C-4, and C-5 are included in Appendix 5 of this report to illustrate the format and the very detailed nature of the study. Both graphic and geologic logs were presented to facilitate correlations between drill



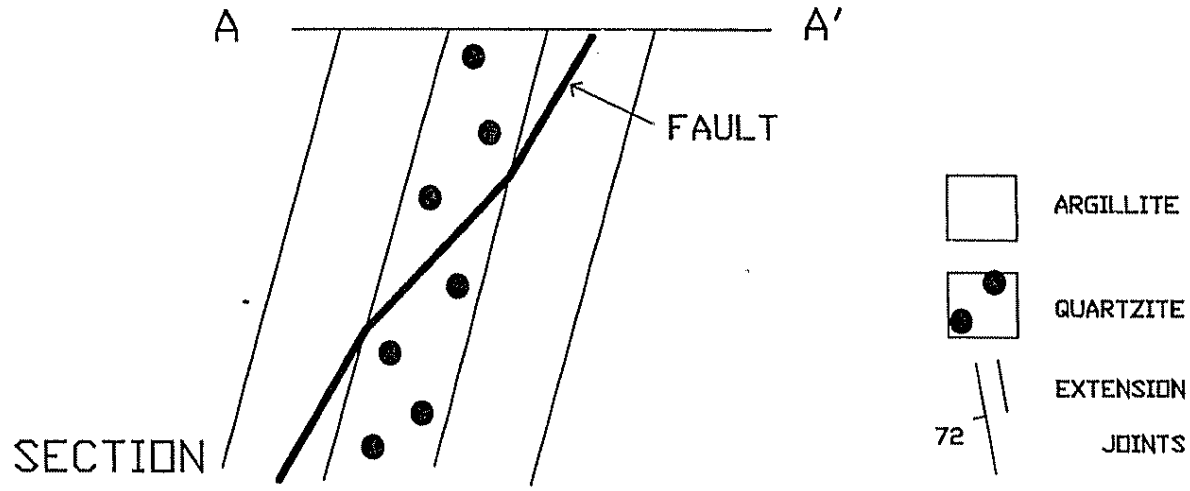


Figure showing A fault cutting quartzite and argillite beds is deflected toward the normal to the bedding upon entering the quartzite. (from Reid, et. al., 1975)

COMPANY:	**ST. EUGENE MINING CORPORATION LTD.**
DRAWING TITLE:	**Diagrammatic Presentation of Fracture Showing Deflection**
	TO ACCOMPANY REPORT BY: E OSTENSOE, P. GEO.
LOCATION: Moyie, B C.	FIGURE: 8
DATE: Mar 2005	SCALE: As Shown
DRAWN: TERRACAD LTD.	GEOLOGIST. E. OSTENSOE, P. GEO
DATA:	

7.0 DEPOSIT TYPES

The Moyie deposits that supported the former St. Eugene mine are characterized as "sediment-hosted zinc-lead" deposits and as such they are typical examples of base metal deposits of the Kootenay district of southeastern British Columbia, the Coeur d'Alene district of northern Idaho and the Pend Oreille district of northern Washington state. The nearby presence of the very large and rich stratiform Sullivan SEDEX deposit inevitably has had a strong influence on exploration concepts applied in the Kootenays but evidence is that the Moyie deposits, although similar in genesis to the Sullivan, are different in morphology and history.

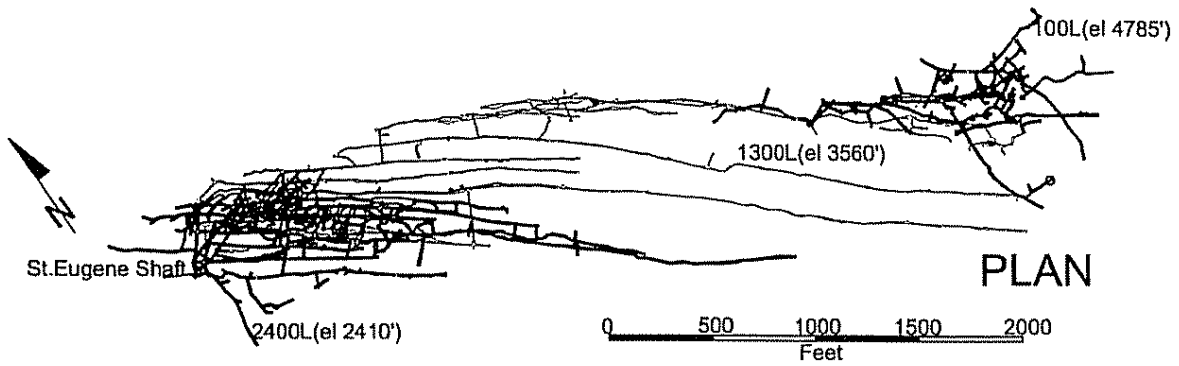
At Sullivan the metals appear to have accumulated in a restricted structural sub-basin and then were subjected to thermal events whereas in the Moyie area it seems likely that they originally were dispersed in sediments that were deposited at the same time and were subsequently reconstituted and concentrated by igneous and metamorphic events. .

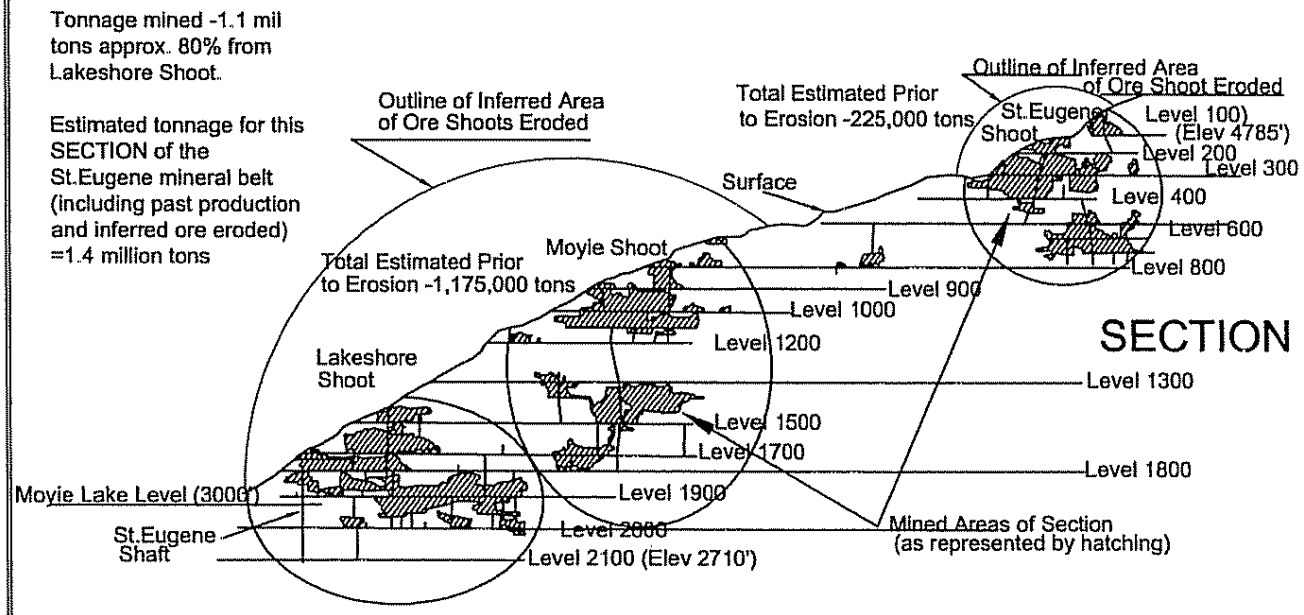
Subsequent to the early characterization of the Sullivan orebody as being of hydrothermal origin, a concept that was abandoned as it was examined in greater detail, or as simply "stratiform", geological staff of the mine worked with federal and provincial scientists and others to solve the riddles presented by the variety of morphologies of ores. They used evolving concepts of ocean-floor rifts and so-called "black smoker" metal-rich sub-sea fumaroles, and revised the definition to that of a "sedex" deposit that was

> "....formed in submarine hydrothermal vent fields of sedimentary basins. It consists of a concordant body of sulphides, whose economic portion is about 2,000 m by 1,600 m in area, and up to 100 m thick" (Mining Review, Fall, 2001, p. 21).

The Sullivan ores may have accumulated contemporaneously with Aldridge formation turbiditic sediments in a restricted rift basin. Growth faults that bounded that basin likely inhibited dispersal of the metals and thereby created an orebody of bedded strata. Elsewhere in the Belt-Purcell basin that same formation is enriched in metals, even to the extent that near-ore grade strata are present. The existence of the latter suggests that vents similar to those at Sullivan were active in Aldridge time in various parts of the basin but that they were shorter-lived, or less productive, or that their products were more widely distributed. At the Sullivan mine, subsequent to their deposition the metals were to varying degrees affected by metamorphic events that "...reconstituted both wall rocks and sulphides" (Mining Review, op cit. p. 25). Some migration of metals occurred.

The host rocks of the St. Eugene mine are dominantly argillaceous quartzites of the Upper-Middle Aldridge formation of Proterozoic age, younger but similar in character to





PLAN AND VERTICAL SECTION LOOKING N35E SHOWING SECTION OF ST. EUGENE MINERAL BELT MINED DURING PERIOD 1900-1911 (after Trenaman, 2003)

COMPANY: ST. EUGENE MINING CORPORATION LTD.	
DRAWING TITLE: St. Eugene Mine Plan and Longditudinal Section	
TO ACCOMPANY REPORT BY E. OSTENSOE, P. GEO.	
LOCATION: Moyie, B.C.	FIGURE: 9
DATE: Mar, 2005	SCALE: As Shown
DRAWN: TERRACAD LTD.	GEOLOGIST: E. OSTENSOE, P. GEO.
DATA:	

holes. Assays from the original sampling at the time of drilling are tabulated. The computer-assisted compilation can be subjectively screened to highlight many features, including rock types, alteration, mineralization, foliation, fracturing and fracture density, and rock competency.

Mr. Gifford in his report discusses "....the nature of the stratigraphic environment that could have formed the favorable host-rock units...", .a number of structures, both minor and prominent, that with careful examination can be identified in the drill cores, and, in particular, the nature of turbiditic sedimentary units. He notes that among his objectives was the identification of "...significantly-sized competent and incompetent rock units" the presence of which may govern the formation of significant mineral zones. Details of tectonic structures, alteration and mineralization were also recorded, along with evidence of rapid changes in the bedding characteristics. He observed (op cit., p. 5) that "...narrow zones of deformation can be an important guide to structures which may control the localization and development of sites favorably conditioned for deposition of ore" and that distinctive beds that he was able to trace between drill holes showed a tendency to thicken and thin dramatically over short distances.

Drill holes C-1 and C-5, as shown in Figure 3(a) are located in proximity to the Lakeshore orebody of the former St. Eugene mine and yielded information concerning the "Mine Sequence" that, due to the present inaccessibility of the mine, is otherwise unobtainable.

Mr. Gifford's studies of the St. Eugene mine area and the Moyie district in general are continuing and the company intends to make available in timely fashion any further reports and interpretations that may be prepared.

There are at present no mineral resources or reserves on the claims of St. Eugene Mining Corporation Ltd.

6.0 GEOLOGICAL SETTING

The St. Eugene mine at Moyie, B. C. lies in the East Kootenay mining district of the Canadian Cordillera close to the International Boundary (Figure 2). The East Kootenay district, in addition to being the site of the Sullivan mine, a world class base-metal deposit that has been crucial to the development of mining in British Columbia, is host to very large deposits of metallurgical coal in the Fernie area, and elsewhere to many industrial mineral quarries. The Rocky Mountains portion of the district is of particular interest to the petroleum industry as it provides a stratigraphic "laboratory" in which important parts of the Western Canada Sedimentary Basin that are otherwise deeply

buried are accessible to geological study. Government and industry geoscientists have subjected the southern Rocky Mountains to intensive examinations, including a Lithoprobe seismic transect that revealed some details of the deep basement beneath the mountains.

The central part of the district includes the Rocky Mountain Trench, the Purcell Ranges and the east side of the Nelson batholith (Figure 4). The Rocky Mountain Trench, a prominent geographic feature, is characterized (Douglas, et al., 1970, p. 368) as "...a linear erosional zone partly controlled by normal faults". Its eastern side is the border with the Rocky Mountain Thrust Belt, the western side, the Purcell anticlinorium.

In the Cordillera

> "...most lead-zinc-silver deposits lie within a northwesterly trending eastern belt, near and beyond the eastern margin of the main zone of large intrusions such as the Nelson batholith"....."....in every important case, the country rocks are mainly sedimentary, and the deposits appear to be, or to have some of the characteristics of, moderate to low temperature types." (Stockwell, et.al, 1957).

The Purcell Anticlinorium which lies along the west side of the RMT is aligned north-northwesterly and extends southerly into northwest Montana. Dominant rock formations belong to the Belt-Purcell basin,

> "...a Middle-Proterozoic intracratonic basin with an early synrift fill succession, the Aldridge Formation, and an overlying rift cover succession. The Aldridge is dominated by deepwater turbidites and contains numerous mafic sills and a variety of base metal deposits including the Sullivan SEDEX deposit. Overlying, dominantly shallow water rocks contain a number of large stratabound copper-silver deposits as well as massive lead-zinc barite replacement or SEDEX deposits (Hoy, et. al. 1995).

The turbidite and other clastic formations that fill the basin, in places to a depth of 18 km, arguably, were transported from the southwest, south and southeast (Hoy, et al., 1995). Of particular interest is the Aldridge Formation (Figures 5, 6, and 7) that is

> "*...characterized by large fining upward cycles that are related to extension and basin deepening. Coarse turbidite facies at the base of cycles, overlain by finer grained, thinner bedded turbidites and, locally, carbonaceous, calcareous, argillaceous and/or sulphidic facies, record periodic extension followed by basin infilling*" (Hoy, et al.,1995, p. 5).

The minimum age of the Aldridge Formation has been defined by 1445 Ma to 1467 Ma U-Pb dates (Hoy, 1989, Anderson and Davis, 1995) of mafic dykes and sills; the upper age, by the proposed 1350 Ma age of the East Kootenay orogeny (McMechan and Price, 1982, quoted by Klewchuk, 2005).

The discovery in the 1970s of the "Red Sea" class of submarine fumaroles that spew metal rich brines into the seafloor where the metals are either widely dispersed by currents or, occasionally, are trapped richly in restricted depressions, greatly aided theorists who had formerly struggled to explain deposits such as the Sullivan mine. They rapidly built a conceptual model that accommodated the disparate data that included field and laboratory observations, various apparently ambiguous age-dates, and the inhomogeneity of spacially proximal ores. The Sullivan deposit was then conceded, in defiance of formerly strongly held opinions, to be a SEDEX deposit, with its stratiform morphology and its feeder pipe largely preserved. The whole has been variously modified by diagenetic effects, hydrothermal events related to emplacement of Moyie sills, and/or Cretaceous igneous events. Part of the deposit is believed to have been offset by faulting.

Mineral deposits of lead, zinc, silver and iron, with significant amounts of minor elements, have been found at many locations within the former Belt-Purcell basin. Their genesis has been the subject of many studies both in laboratories and in the field. It seems beyond dispute that certain sedimentary beds within the sedimentary pile are anomalously enriched in the same metals that are present in much greater concentrations in the ore deposits: such beds are cited in many studies as the source of the metal content of the ores. Isotopic age determinations of leads from occurrences in northern Montana and Idaho are supportive of the concept but the data are bimodal: the dominant age from Pb206/Pb204, Pb207/Pb204, and Pb208/Pb204 measurements is in the range of 1.5-1.2 b.y. with a secondary set dated as "mid-Cretaceous" by Zartman and Stacey, (1971) and as Late Cretaceous to early Tertiary by Leach, et al. (1998). Thus, in what seems to be the dominant theory of origin, it follows that metals consanguinous with the Aldridge formation beds were mobilized from those beds into their present locations in the mines and prospects under the influence of heat flow and various fluids driven by diagenesis (loading) or by igneous events such as the penecontemporaneous emplacement in "Aldridge" time of the gabbro/diorite sills of the Moyie intrusions and/or of granitic plutons in Cretaceous time. U/Pb and Pb/Pb isotopic age determinations are notoriously subject to inaccuracies due to mixing of leads from disparate sources and the data are used with caution.

Scientists employed by the provincial Ministry of Energy and Mines, in particular T. Hoy, and D. Brown, mapping specialists, studied and compiled the Moyie area geology and prepared a detailed regional map (Hoy and Brown, 1999). The Purcell Anticlinorium for simplicity can be described as having the approximate shape of an overturned boat:

its axial plane (i.e. keel) is gently warped and each end of the structure plunges at a shallow angle. Stretching due to the folding of the formations resulted in creation of a number of cross faults, some at right angles to the fold axis and others at oblique angles. Axial plane-parallel faults (oriented about 300 degrees) combined with these transverse structures to create fault-bounded blocks, all of which appear to be somewhat displaced one from another. A further product of such conjunctions was the creation of areas of complex stress fields that are believed by some to have been receptive to the emplacement of ore deposits. The St. Eugene mine ore bodies may have formed in such conjunctions (Trenaman, 2000).

The host lithology is a powerful determinant of ore zone formation: many observers have remarked on the tendency of fractures in passing from beds of contrasting competency to deflect (i.e. refract) and become more closely normal to the more competent unit (Figure 8). That the latter rock type is more capable of sustaining the fracture and is slower to dissipate the imposed stress field is an important vector with respect to ore formation. In the Coeur d'Alene mining district of northern Idaho, for instance, vein structures that were feeble in the sericitic quartzite/phyllite of the St. Regis formation routinely became robust in the underlying more quartzose Revett formation (Reid, et al. 1975). [This is particularly the case in the Bunker Hill, Lucky Friday and Star-Morning mines.] Similarly, in the St. Eugene mine, the Upper-Middle Aldridge quartzitic member hosted ore shoots whereas the same shears in the overlying, less competent argillic Creston formation have to date mostly been unproductive.

7.0 DEPOSIT TYPES

The Moyie deposits that supported the former St. Eugene mine are characterized as "sediment-hosted zinc-lead" deposits and as such they are typical examples of base metal deposits of the Kootenay district of southeastern British Columbia, the Coeur d'Alene district of northern Idaho and the Pend Oreille district of northern Washington state. The nearby presence of the very large and rich stratiform Sullivan SEDEX deposit inevitably has had a strong influence on exploration concepts applied in the Kootenays but evidence is that the Moyie deposits, although similar in genesis to the Sullivan, are different in morphology and history.

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and others to solve the riddles presented by the variety of morphologies of ores. They used evolving concepts of ocean-floor rifts and so-called "black smoker" metal-rich sub-sea fumaroles, and revised the definition to that of a "sedex" deposit that was

> "....formed in submarine hydrothermal vent fields of sedimentary basins. It consists of a concordant body of sulphides, whose economic portion is about 2,000 m by 1,600 m in area, and up to 100 m thick" (Mining Review, Fall, 2001, p. 21).

The Sullivan ores may have accumulated contemporaneously with Aldridge formation turbiditic sediments in a restricted rift basin. Growth faults that bounded that basin likely inhibited dispersal of the metals and thereby created an orebody of bedded strata. Elsewhere in the Belt-Purcell basin that same formation is enriched in metals, even to the extent that near-ore grade strata are present. The existence of the latter suggests that vents similar to those at Sullivan were active in Aldridge time in various parts of the basin but that they were shorter-lived, or less productive, or that their products were more widely distributed. At the Sullivan mine, subsequent to their deposition the metals were to varying degrees affected by metamorphic events that "...reconstituted both wall rocks and sulphides" (Mining Review, op cit. p. 25). Some migration of metals occurred.

The host rocks of the St. Eugene mine are dominantly argillaceous quartzites of the Upper-Middle Aldridge formation of Proterozoic age, younger but similar in character to the rocks that host the Sullivan ores. Moyie Intrusions (1.475 Ga by U-Pb dating) and younger Nicol Creek "lavas" (1.43 Ga), sub-alkaline tholeitic gabbros and diorites, are present as sills and dykes, intrusive into, and sometimes forming as much as 30% of, a section (Hoy, et al.1995, p. 18). Their role in altering the sediments, concentrating the metals and providing both heat and fluids has not been fully deciphered. Ore was produced from three zones, the Lakeshore, Moyie and St. Eugene. The ores occurred near the axial plane of the Moyie anticline, a subsidiary fold on the regional Purcell anticlinorium. Three north-trending faults have been mapped in the vicinity of the former mine: namely, the Shore, Lake and Stone Creek faults (Pighin, 2005, p. 4). Hoy and Pighin (1995) suggest that these are representative of Eocene age re-activated Aldridge growth faults: if so, they can be thought of as outlining structural blocks and enabling movement and adjustments in response to major tectonic events.

The St. Eugene mine (Figure 9) extracted ores from a structural corridor that strikes on average north 45 degrees west, dips 70 degrees southerly and is defined by two sub-parallel faults. The ores were massive in vein-like structures, vastly different from the finely bedded horizons of much of the Sullivan ore. The uppermost (easternmost) ore lens, the St. Eugene, is proximal to a Moyie (or Nicol) sill. Both the St. Eugene and Sullivan deposits, and also the Fors (see following section), have steeply dipping pipe-like zones of massive sulphides that occupy structures that served as vents or conduits

and allowed egress and passage of hydrothermal fluids related to magmatism and/or tectonism (Hoy, et al., 1995). Thus these may be feeder zones to "Red Sea" type fumaroles that developed on deep-seated fractures and brought an abundance of base metals into the sedimentary environment.

The St. Eugene mine is described in the Geological Survey of Canada, Economic Geology Series (Stockwell, et al., 1957):

> *Two main fissures in argillaceous quartzite of the Purcell series are joined by a system of connecting fissures that usually meet the main fissures at small angles. The orebodies occurred as replacements, mainly at or near such junctions. The ore consisted of galena, with sphalerite, pyrite, pyrrhotite, magnetite, and chalcopyrite. Garnet, actinolite, and quartz are prominent in the gangue and wall-rocks.*

If the metals behaved similarly to those in the Sullivan area, they may have migrated into areas of lower stress, to wit, the fissures referred to above and illustrated in Figure 8, the principal difference being that at the St. Eugene area the source beds from which the metals were derived were not as obviously enriched as were those at the Sullivan where some were of mineable grade.

More recently, the several deposits of the St. Eugene mine area have been compared to those of the Coeur d'Alene mining district of northern Idaho (compiled by Trenaman, 2003). A principal source of information concerning the Coeur d'Alene "camp" is Fryklund, a United States Geological Survey scientist who conducted a comprehensive study of the district (Fryklund, 1964).

The Coeur d'Alene district of Idaho, the principal silver producing area in the United States, is located about 160 km (100 miles) south of the International Boundary. Ore deposits are "...replacement veins of simple mineralogy" (Fryklund, 1964, p. 1). The zinc-lead-silver mineral deposits are identified by Fryklund and others, particularly Zartman and Stacey (1971), as being of Cretaceous age but the lead contained therein is of Precambrian age. Such characteristics are consistent with those of Canadian deposits in the Belt-Purcell basin.

Ramalingaswamy and Cheney (1975) observed that

> *"It is tempting to speculate that the vein ores of many of the Coeur d'Alene mines might have been derived from a single, laterally zoned sulphide-bearing stratigraphic interval that rivaled in tonnage but not in grade the Aldrich* (sic.) *Formation (equivalent to the Pritchard Formation of the United States) of the Sullivan Mine at Kimberley, British Columbia, Canada".*

8.0 MINERALIZATION

Three mineral zones in the principal structural corridor at the former St. Eugene mine are distributed between elevations 825 m (2710') and 1460 m (4800') in a horizontal distance of 1200 m (4000 feet) (Figure 9). The lowest zone, the Lakeshore, yielded close to one million tons, the Moyie and St. Eugene, about 200,000 tons. Mineralization comprised heavy concentrations of galena and sphalerite with iron sulphides, pyrite and pyrrhotite (Smith, 1949).

A comprehensive report on the St. Eugene mine by Dr. Alexander Smith, geologist for Ventures Ltd., may be the most recent such documentation that benefited from access to parts of the underground workings of the mine (Smith, 1949). He stated that the St. Eugene mine deposits were "...a high temperature type similar mineralogically to those of the Sullivan Mine". He noted too that Schofield (1915) compared them "...to those of the Coeur d'Alene district in Idaho" and that "Evidently this belt, extending from Coeur d'Alene to Kimberley, is a distinct metallogenic province".

> *"The St. Eugene ore consisted mainly of coarse grained galena with minor amounts of sphalerite, pyrrhotite, magnetite and chalcopyrite. The portion of gangue in the ore is small; it is mainly garnet, amphibole, quartz and minor calcite. There is no apparent vertical mineralogical zoning in the ore deposits such as is encountered in many lead-zinc camps, e.g. the Slocan. However the ore shoots at the Upper mine and those on the Aurora appear to carry more zinc and pyrrhotite than do the Lakeshore and Moyie shoots. This seemingly higher temperature condition may be caused in both instances by proximity to the Purcell dykes* (Smith, p. 13)

Smith noted, as have others, that ore in the St. Eugene mine occurred in association with two sub-parallel fracture zones, trending N70°W and dipping on the average about 65° southwest (Smith,. p. 13). He noted, too, that these fractures were likely "...cross fractures about normal to the anticlinal axis." and that the north fracture was the more productive whereas the south fracture was less continuous and less well defined. Toward the west end of the Lakeshore ore zone, mineralization was present in "avenues" between the north and south veins.

Read, in an interim report on the structural framework of the St. Eugene mine and adjacent properties, observed, based in part on an examination of level plans and other data from the former mine, that the west-northwesterly oriented faulting and vein formation was of Proterozoic age and that the movement on the faults should be "..normal, left-lateral oblique-slip motion" (Read, 2005). He related mineral zone orientation to the "...differing abilities of the quartzite-rich and argillite-rich sections of

the wall rocks to maintain a fracture opening". The distribution of stopes as depicted on longitudinal sections of the former mine indicates

> *"...the best mineralization occurs where linkage develops between south stepping, west-northwesterly striking faults. The distribution of the level and raises on long Vein are untested and rocks lying east of the "avenue" veins and north of the mineralized vein are untested by any mine workings or drill holes"* (Read, 2005).

The St. Eugene mine now is inaccessible due to the passage of time and to safety and environmental concerns and it is no longer possible to observe *in situ* mineralization.

Smith (op cit.) speculated that the Aurora and Guindon veins, located on the west side of Moyie Lake, were in the same zone of fracturing as were the veins in the mine. The fracture zones had total identified length of 5 km (17,000 feet) but were explored by underground openings over only about 1.2 km (4000 feet) in the mine, a few hundred metres in the Aurora prospect to the west, and a similar distance in the Society Girl to the east.

Smith observed that

> *"The location of the ore shoots within this long fracture zone was apparently controlled by the intersection of the vein structures with north-south zones of fracturing, and small scale folding or crumbling. The ore shoots definitely occur at these minor irregularities on the major anticlinal pattern. Long stretches along the vein where the strata dips regularly have been drifted on and found barren. The ore to date is confined to these irregular areas with the barren portions generally devoid of visible galena or sphalerite"* (Smith, pp. 14 – 15)

and that some beds were more favourable for ore deposition than were others. The most productive ore shoots, in the Lakeshore section of the mine, were in thick bedded quartzites and the uppermost (the St. Eugene) were in very thin-bedded argillaceous rocks. Swanson, (1948) noted that thick bedded quartzites could be expected at depth beneath the St. Eugene mine and that thicker and coarser beds yielded the best ore. He also offered the opinion that the main fracture zone beneath the unfavourable argillite horizon, the Shaft Argillite, had not been adequately tested. This thought may have influenced the program of long diamond drill holes that was completed in the early 1960s.

The writer examined the portal areas of the Aurora and Guindon mines located on the west side of Moyie Lake, about one km west of the St. Eugene mine. The adits are inaccessible due to reclamation but several pieces of superficially oxidized sulphide

bearing rock were recovered from the dumps. In hand specimens, the mineralized material was noted to include seams of coarse galena without gangue or other sulphide minerals, massive but weakly magnetic pyrrhotite, and vaguely bluish vein quartz with narrow seams of fine grained sulphides. Other specimens presented finer-grained intergrowths of galena and sphalerite with disseminated grains of iron pyrite and chalcopyrite (?). It is presumed that this material is similar to mineralization at the St. Eugene mine. Arsenopyrite is reported in the various reports but was not identified in the specimens. Wallrock material comprised phyllitic argillite. The specimens were not assayed.

Descriptions of a suite of mineral and rock specimens and thin and polished sections as observed by J. F. Harris, Ph.D, (Harris, 2004) were reviewed as part of the preparation of this report. Details of mineralogy, particularly textures and mutual boundary relationships, are described but are not of much assistance in illuminating the topic of origin of the deposits. The specimens were gathered in the field by P. Klewchuk, P. Geo. and the petrographic and mineralogic details are illustrative of rocks and sulphide minerals found in the vicinity of the claims of St. Eugene Mining Corporation Ltd. and at the St. Eugene mine. Five samples of dykes and sills were analysed by induced coupled plasma methods in search of "markers" that might help distinguish "St. Eugene" (i.e. Moyie) dykes from Upper Rudd sills and seven samples of sulphide mineralization from occurrences west of Moyie Lake were similarly analysed to investigate precious and base metal contents. Variations in amounts of minor elements also were determined. Analytical results and a discussion are included in Appendix 4 of this report.

9.0 EXPLORATION

Management of St. Eugene Mining Corporation Ltd., when planning the resumption of exploration work in the vicinity of the former St. Eugene mine, recognized the need to recover as much data as possible from previous exploration and mining programs. They subsequently initiated a search for all available data in corporate and also their personal files, in technical publications, including those of various government scientists and agencies, and in files (where accessible) of Teckcominco. This major undertaking has occupied about three years and was expanded to include a number of office and field studies to build the data base and to test the effectiveness of certain geophysical and geochemical techniques.

Management of St. Eugene Mining Corporation Ltd.,with the cooperation of Teckcominco, has assembled available geological information concerning the Moyie area. In particular, Robert Gifford, P. Eng., consulting geologist and a director of the company, re-logged core from diamond drill holes that were drilled in 1962-1963 in the vicinity of the St. Eugene mine. The core had been preserved by Teckcominco and is

now in the custody of St. Eugene Mining Corporation Ltd. Four of the holes were collared on the property of St. Eugene Mining Corporation Ltd. and one, on the former mine property. David Pighin, P. Geo., consulting geologist and prospector, prepared "Geological Report for the St. Eugene Mine and Surrounding Area", complete with a regional surface geology map and vertical sections, parts of which were used in the preparation of this report (Pighin, 2005). Peter Klewchuk, P. Geo., consultant, in 2004 carried out technical surveys over parts of the company's property in order to determine the suitability of various methods in following structures and mineral zones and he prepared "Summary Report on Geology, Petrography, Soil and Rock Geochemistry, Ground Magnetic & VLF-EM Geophysics, Drill Core Evaluation" (Klewchuk, 2005). Peter B. Read, PhD., chief geologist of Geotex Consultants Limited, working from historic data including mine level plans and sections of the St. Eugene and Aurora mines, prepared an analysis of the regional structures and, more particularly, the structure of the St. Eugene mine. He identified a need for further investigations of the vein systems and their relationship to stratigraphic units, faults and folds (Read, 2005).

A UTEM geophysical survey employing deep penetrating electromagnetic survey techniques was performed on parts of the Cominco ground in 1988 (personal comm. R.T. Trenaman) but details may not be obtainable and parts or all of the survey may have to be repeated. It is believed that the method is well suited to the search for mineral deposits of the St. Eugene type, that is, to massive sulphide vein deposits. Limited VLF-EM and magnetometer geophysical surveys were performed in 2004 over three small grids on the St. Eugene Mining Corporation claims: the Glencairn grid (5.6 km) located immediately north of the mine, the Etna grid (5 km) located west of the Aurora/Guindon prospects, and the Aurora grid (4.9 km) close to the west shore of Moyie Lake. Results were reported by S. J. Visser, P. Geo., consulting geophysicist, who stated that no "...significant or clearly defined anomalous features" were found (Visser, 2005). Mssrs. Rastad, B.Sc. and Visser, in a later recommendation to St. Eugene Mining Corporation Ltd., suggested that a survey employing both "....large loop (UTEM) and 3D Induced Polarization (3DIP) survey to evaluate the geophysical responses for each technique" should be undertaken. They also recommended "...that a survey be conducted over the Aurora, Guindon and Larson Tunnels deposits on the western side of Moyie Lake: and also that a portion of the survey should cover an area of Upper Aldridge formation: there is concern that that weakly conductive formation may make "...discrimination of a deep or weak conductor" in the Middle Aldridge formation difficult. The recommendation is included as Appendix 3 of this report.

R. T. Trenaman, P. Eng., president of St. Eugene Mining Corporation Ltd., in the period 2000 through 2003 compiled information concerning the Moyie, B. C. area, its mineral deposits and regional and local geology. He has prepared two reports (1) Ore Controls for St. Eugene Style Vein Mineralization – Paper One – Model Concepts dated August 2000 and (2) Paper Two – An Update, dated February 2003.

Work to date has been focused and supportive of the owner's objectives: the various consultants have recognized expertise in mineral exploration in the East Kootenay area. Further studies are in progress and will lead to definition of exploration opportunities.

An exploration strategy to locate additional mineralization in historic areas and to find as yet undiscovered mineral zones has to consider the recognized controls of such zones:

1. Strongest mineralization has been found in quartzitic members of the Middle Aldridge Formation; argillic and other softer rock types have been found to be less favourable hosts. The softer members are less permeable and therefore less conducive to forming strong fractures that enable movement of mineralizing fluids. The Road Quartzite member of the Middle Aldridge Formation lies several hundred feet below the St. Eugene quartzite members of that formation (see Figure 6) and may provide a similarly receptive brittle host rock that sustains and propagates fractures and permits formation of mineral zones.
2. The productive ore bodies in the former St. Eugene mine occurred where east-west oriented fractures intersected northerly-trending folds and, possibly, rifts that paralleled the axial portion of the north oriented Moyie anticline. Similar mineral zones may occur in supplementary folds or drag folds on the limbs of the Moyie anticline.
3. The Aurora/Guindon veins, the Moyie mine orebodies, the Society Girl and John Dee lenses occur along an identified southeast trending, southwest dipping structural break with length of at least 3600 metres (12,000 feet). This structure has been explored by various means, including surface and underground openings and diamond drill holes, over about 1200 metres (4000 feet). Speculatively, the Vine deposit, which is located several km north of the St. Eugene mine, and is north of the Moyie fault, may be located on a continuation of the mine sheared zone that is offset by that fault. This may be difficult to demonstrate, but if accurate, it implies that that the shear is a strong fracture that was either the locus of a deep-seated, migrating fumarolic "hot spot" or was positioned to tap into a source of metals that were brought into the Belt-Purcell Basin at various locations. The analogy to the very productive Coeur d'Alene silver and base metal "camp" located near the south end of the Basin, where there is an enigmatic relationship to the Osburn fault and the dominant Lewis and Clark line, is seductive.
4. The Middle Aldridge formation quartzites that host the known mineral zones are folded into an upright anticline, the Moyie Anticline. The axial plane passes close to the east side of Moyie Lake where the quartzites lie almost horizontally, and appear to steepen on the limbs. That configuration will place the prospective quartzite unit at depths greater than the depth of most of the exploration work completed in the past.

5. Moyie and Nicol dykes and sills frequently are found in proximity to mineral zones.
6. Smith (quoted by Swanson, 1948) found that mineralization yields a distinct magnetic anomaly.
7. Klewchuk (2005) reported that the VLF-EM method of geophysical surveying had previously been successful in identifying the Vine vein, located several km north of the St. Eugene property. A series of tests of the method in the latter area found anomalies in proximity to the Society Girl and John Dee prospects, and in the Aurora/ Guindon area.
8. Klewchuk (2005) conducted soil geochemical surveys in several parts of the area. Results were mixed and inconclusive. Further work was recommended, paticularly west of the Aurora prospect where he recognized soil anomalies in proximity to crumpled strata.
9. Pighin (2005) plotted known fault structures in the greater Moyie region. Further study is required in order to determine the locations of possible "sweet spots" (conjunctions of folds and fractures) where ground conditions may permit formation of mineral deposits.
10. Anomalous amounts of lead and zinc are present in much of the Middle Aldridge formation that underlies most of the St. Eugene Mining Corporation Ltd. property.
11. Significant mineral zones are present along the east-trending St. Eugene mine fracture zone at about 800 metre intervals.
12. The basic geological framework of stratigraphic controls has been determined by Gifford (2005) who recommended mapping in detail lithology and structure, including " identification and correlation of relatively minor tectonic structures..." to assist in targeting of drill holes.
13. Gifford (op cit.) recognized that the three principal ore zones of the St. Eugene mine were each hosted by distinct sub-members of the Middle Aldridge formation and drew attention to the lack of lithologic detail in the historic records of the mine.

10.0 DRILLING

St. Eugene Mining Corporation Ltd. in recent years has not drilled any part of its Moyie area property but has records of earlier campaigns. Data recovery is being pursued.

11.0 SAMPLING METHOD AND APPROACH

St. Eugene Mining Corporation Ltd. with the exception of very limited geochemical soil sampling by Mr. Peter Klewchuk in 2004, has not sampled any substantial part of its Moyie area property.

12.0 SAMPLE PREPARATION, ANALYSES AND SECURITY

The topic of sample preparation, analyses and security will be addressed upon commencement of field work.

13.0 DATA VERIFICATION

For the purposes of preparing this report, the author has reviewed a number of technical reports by government and private sector scientists. He visited the property on February 14, 2005 and was able to view its characteristics but due to limitations imposed by reclamation work and by a small amount of freshly fallen snow, was unable to verify data and conclusions reported by previous workers. Mr. Peter Klewchuk, P. Geo. in April, 2005, submitted for analysis by induced coupled plasma methods five samples of mafic dykes and sills and seven samples of mineralized material collected from various dumps on the Aurora, Guindon and Larson Tunnel prospects. He recorded using GPS methods the locations of his samples. The analytical data and a discussion of that information are included as Appendix 4 of this report.

Records in the files of St. Eugene Mining Corporation Ltd. include geological reports by Gwillim (1909), Kerr (1937), Chubb (1939), Smith (1949), and others that were prepared many years ago. Recent contributions by Mssrs. Trenaman, Pighin, Klewchuk, Gifford and Read, among others, have served to present information in forms consistent with present day science and have expanded greatly the interpretation of the historic data and have added new data.

The author believes that the work of all these scientists was performed in a professional and conscientious manner. Any inaccuracies in the early data and interpretation resulted from application of then-current geological concepts without the benefit of subsequent regional mapping studies, age dating data, and more evolved theories of the genesis and emplacement of SEDEX- and modified SEDEX-type zinc-lead-silver deposits.

14.0 ADJACENT PROPERTIES

Mineral deposits and occurrences in Middle Aldridge formation rocks are of particular interest due to the opportunity they offer to study SEDEX-type deposits other than the apparently unique but much-studied very large Sullivan deposit. By analogy, supported by various types of geological and metallogenic information, including, particularly, structural studies, and isotopic data, it seems assured that Middle Aldridge time in what is now the East Kootenay and Coeur d'Alene districts, was one of considerable tectonic activity, with creation and filling of the Belt-Purcell basin, emplacement of massive sills and dykes of gabbroic to dioritic composition, development of basin parallel and transverse faults, and "hydrothermal discharge centers", or, more precisely, rift-related fumarolic "black smokers" and their effusions of metal-rich brines.

(a) St. Eugene Mine

The former St. Eugene Mine is described in some detail in Section 8.0 of this report. It is the most significant mineral property in the Moyie area, with historic production of about 930,000 Mt of high grade lead-zinc-silver ore (company records). The property of the St. Eugene mine is mostly surrounded by the claims of St. Eugene Mining Corporation Ltd. but is **not** part of that company's property. The underground workings are at present inaccessible and useful descriptions are taken from geological reports prepared by Ventures Ltd. geologist, Dr. Alexander Smith in 1949 and Cominco geologists Dr. C. O. Swanson in 1948, and Dr. O. E. Owens in 1958 and 1959. Additional information is from a SEMC report by B.G. Walker dated July 30, 1959.

The mine was developed on veins that occur

> *"...in thin-bedded Upper Aldridge argillites and thick and thin-bedded Middle Aldridge quartzite and argillites. The upper veins lie within a few hundred feet of the top of the Aldridge. The lower levels of mine development lie about 1300' below the top of the Middle Aldridge. .... The bedrock formations strike about east-west and dip north at 8 degrees in the vicinity of the mine"* (Owens, (1959).

The main veins on the St. Eugene property, as noted in section 8.0 of this report, lie within two parallel narrow faults or broken zones striking N45W with dips ranging from vertical to 70 degrees south that can be traced on surface for at least 3600 metres (12,000 feet). The Aurora and Guindon veins occur west of the lake in structures that Smith believed were probably continuations of the St. Eugene mine fractures. Ore at the St. Eugene mine occurred in fractures (faults) and also in tension structures lying between the two fracture zones (Walker, 1959). The dominant fold structure in the mine area is a regional scale anticline (the Moyie anticline) the axial plane of which strikes N20E and plunges north at about 10 degrees. Two north-trending normal faults, the Shore and the

Lake fault, dip easterly at -77 degrees and are separated by about 500 metres. The Lakeshore ore shoot, the most productive of the mine, occurs at the intersection of the Shore fault with the St. Eugene vein system (Pighin, 2005, p. 4).

St. Eugene ore consist of coarse grained argentiferous galena together with significant amounts of sphalerite, pyrrhotite, magnetite and minor chalcopyrite. Gangue minerals are garnet, amphibole and quartz with minor occurrences of calcite (Walker, 1959). Gifford (2005) in his report of relogging of mine area drill cores summarized the physical nature of the ore as reported by Turnbull (1963):

(i) St. Eugene and Moyie zones: - *occurred only in the Main (north) vein*
well-defined bodies with good walls
sometimes sharp-walled slabs of solid galena 4 to 5 feet thick
the South vein in this region was exposed but showed simply as a barren fissure

(ii) Lake Shore (western) zone: *most of the ore occurred in the Main vein and in the Avenues (cross-over structures), with smaller shoots in the South vein*
the Fourth Avenue was the largest branch structure - carried good ore for 200 ft. length, 200 ft depth, and 40 ft width, from surface (3385' a.s.l.) to 1500 Level (3360' a.s.l.), to 1900 Level (3000' a.s.l.)
on 1700 Level, Main vein (3210' a.s.l.) ore extended for several hundred feet, mostly narrow and rich, at one point an ore shoot was 80 ft in length with 12 ft of solid galena

(b) Aurora, Guindon and Larson Tunnel Prospects

The Aurora, Guindon and Larson Tunnel prospects are located on St. Eugene Mining Corporation Ltd. property on the west shore of Moyie Lake, a few hundred metres west of the former St. Eugene mine. They were explored, and to a limited extent developed, during the operation of the mine and are reported (in government records) to have produced 5300 tons with 7.8% Pb, 18.5% Zn and 3.25 opt Ag. **The accuracy of these figures cannot be verified to NI 43-101 standards.** The workings have been reclaimed and are inaccessible.

The host rocks, mineral suites and apparent principal structures appear to be similar to, and possibly continuations of, those of the former mine. Chubb (1939), in discussing the Aurora prospect commented that the mineral zone is located close to a northeast/ southwest thrust fault (i.e. the St. Eugene structure) and that on crossing the anticlinal axis movement was "...transmitted into fractures parallel to the strike of strata on the east flank of the anticline", presumably with reference to the "avenue" mineralization. He believed that the St. Eugene mine was on the footwall of the fault zone and that the Aurora and Guindon were on the hanging wall side. He noted, too, that ore bodies do not seem to occur where the fracture is of a simple type passing through otherwise undisturbed rock and that rock type is important with respect to reaction to external stress. Massive thick bedded units tend to permit open cavities and to develop minute fracturing which allows freer movement of solutions and present greater surface area in contact with the solutions. Also, he observed that, in general, the thick bedded members contain more lime and magnesium and may to that extent be more susceptible to replacement and that the thin bedded argillaceous members sheared more readily, producing a gougy fracture that acts as a barrier to solutions.

Chubb (1939) also observed that

> *"The Aurora and Guindon mines are near the upper limits of the favourable rock member in which the Moyie and Lakeshore ore shoots were located. We can reasonably expect that the pre-requisite conditions for ore development will greatly improve in these fractures along their projection downwards and southwards s they come closer and closer to the main fault. This favourable rock type will be found for 1,100 feet below the Aurora ore body."*

Klewchuk in 2004 conducted field studies in the vicinity of the Aurora and Guindon prospects, including geological mapping, rock and soil geochemistry and ground geophysics, and " demonstrated that these techniques will all be very useful in exploring for base metal veins in the St. Eugene area" (Klewchuk, 2005).

(c) Society Girl Prospect

The Society Girl prospect is located east of, and apparently on strike with, the St. Eugene vein structures but is at higher elevation. Geologically it may be situated in the basal part of the Creston formation that overlies the Aldridge formation although S. L. MacDonald, mining engineer, in a letter report to a Mr. A. Nicholson believed that it occurred in the Aldridge formation and that a 3000 foot favourable structure was present (MacDonald, 1945). M. E. Armstrong, a mining engineer, in 1923, in a report of the Society Girl property quoted Schofield (reference not provided) as stating that it was "...in the Aldridge Formation which here strikes north-south with dip 25 degrees east and forms

the east limb of the anticline. The vein is narrow in thin bedded argillaceous rock types, widens in heavier bedded quartzites". The Creston comprises sedimentary members similar to those of the Upper Aldridge and is distinguished in part by having a characteristic green or purplish colour (Smith, 1949).

Two parallel veins were investigated, apparently similar to the nearby St. Eugene mine. The mine was developed on two levels by crosscut adits with drifting on the south vein on both levels, and, from the lower elevation adit, a short drift on the north vein. Armstrong (op cit.) stated that there was abundant evidence that the extremity of the orebody had not been reached in any direction. He also reported assays from "hand samples" including some with high copper contents, viz.

#8	8.9% Pb, 25.9 opt Ag, 5.1% Cu
#9	31.5% Pb, 10.3 opt Ag, 4.0% Cu
#10	3.7% Pb, 14.6 opt Ag, 8.6% Cu.

Note that these assays indicate the tenor of specimens and are not necessarily representative of substantial amounts of the Society Girl mineralization and cannot be verified to NI 43-101 standards.

The high copper content is in contrast to St. Eugene mine ores which had only slight amounts of copper. The Society Girl prospect is not part of the St. Eugene Mining Corporation Ltd. property.

MacDonald (op cit. p. 2) reported that the mineral zone was oxidized to depth 100 feet and that 700 tons of lead carbonate ore, with an average of 45% lead and 12 oz. silver per ton, were shipped from the property in the period 1900 – 1912. Another **undocumented** note in company files reported Society Girl production of 1600 tons with grade 23% Pb, 0.6% Zn, 6 oz. Ag.

(d) John Dee Prospect – located east of Society Girl, in synclinal environment, no production

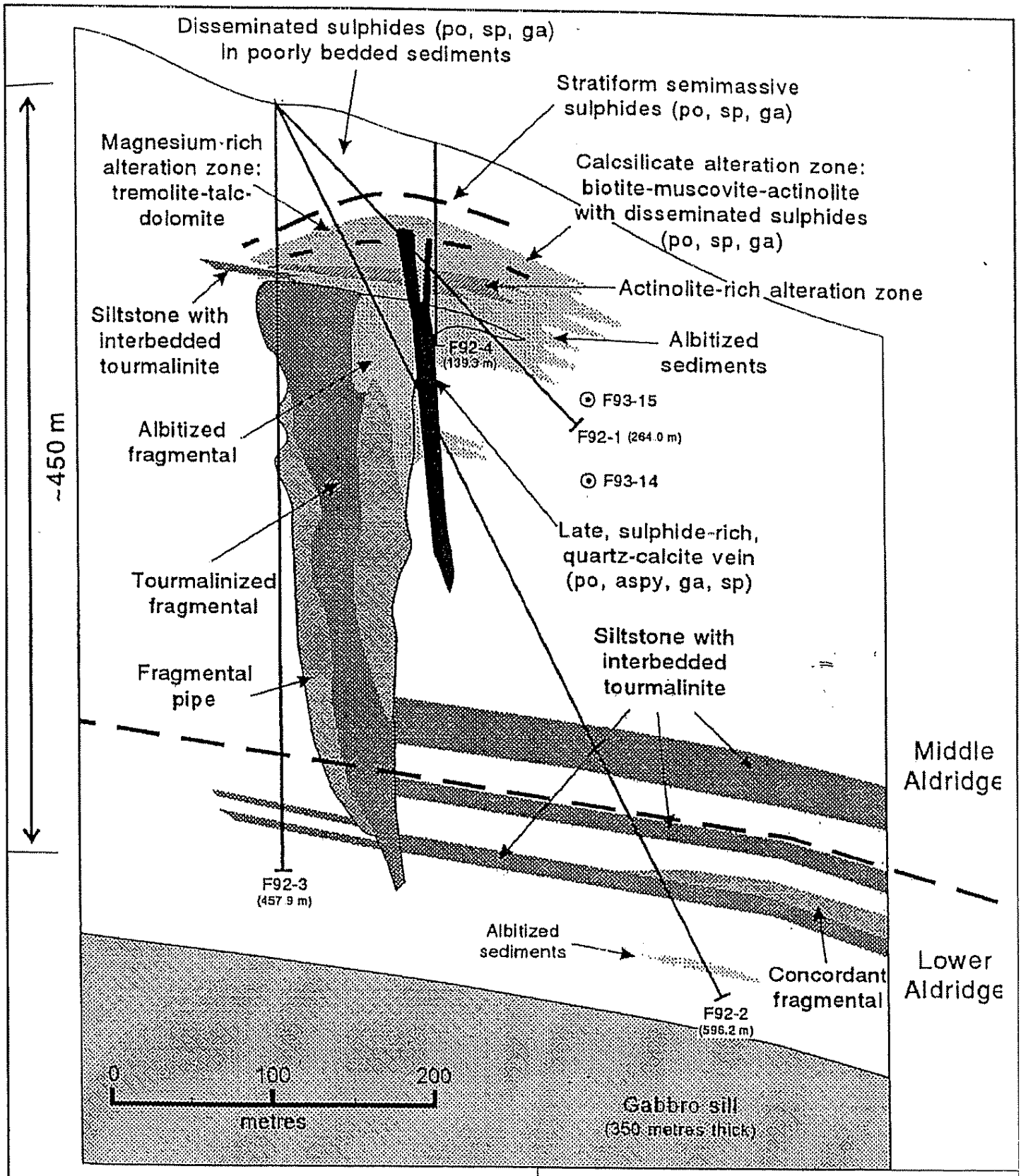
(e) Fors Prospect

Hoy, et al. (1995, p. 31) described the Fors Prospect, located north Moyie Lake, about 11 km north of the former St. Eugene mine, as

> *"...a small, high-grade lead-zinc-silver vent and feeder pipe deposit, with only minor exhalative mineralization, in the lower part of the Middle Aldridge Formation...*
>
> *"Fors is a pipe-shaped body of coarse clastic material, referred to as a discordant fragmental.....*
>
> *"The deposit is crudely mushroom shaped. Its stem consists of a discordant fragmental, variably altered by tourmaline and, at higher levels, albite. A vent zone lies immediately above the pipe and comprises plagioclase-biotite, calcsilicate and mica alteration assemblages with disseminated to bedded sulphides. ...Low-grade zones of sulphides (stringers, veins, disseminations and small semimassive lenses) are quite widespread within and immediately adjacent to the feeder pipe.*
>
> *"It is interpreted to be located at the intersection of two Aldridge-age growth faults: a northwest trending rift-parallel fault and the antecedent to the northeast trending Moyie fault. Minor stratiform sulphides, above the vent complex and approximately 400 m above the Sullivan horizon, indicated that Fors records exhalative hydrothermal activity within the basal part of the Middle Aldridge."*

The Fors entry in Minfile (082GSW035) describes two styles of mineralization: (1) base metal sulphides occur as bedding parallel disseminations and replacement patches and comprise pyrite, pyrrhotite, sphalerite, galena and chalcopyrite in a shear zone in quartzite and quartz-feldspar arenite, and (2) minor sulphide mineralization (pyrite and pyrrhotite with minor chalcopyrite) in quartz veins in Moyie metagabbro. Drilling in 1992 is reported to have intersected exhalative massive sulphides and a large hydrothermal alteration zone (Figure 10). A 1 metre section of massive sulphides assayed 1.3% zinc, 9.8% lead and 100.09 grams per tonne silver. Drilling in 1996/1997 of 17 very deep holes failed to intersect significant mineralization. **[The characteristics and tenor of Fors deposit mineralization are not necessarily indicative of mineralization that may be present on the property that is the subject of this report.]**

Figure 10 of this report is a schematic cross-section of the Fors deposit. The Minfile entry for the Fors property is included in Appendix 2.



Modified from Consolidated Ramrod Gold Corporation.

(from Geological Fieldwork 1994, paper 1995-1)

COMPANY: **ST. EUGENE MINING CORPORATION LTD.**

DRAWING TITLE:

Fors deposit:
Schematic cross-section

TO ACCOMPANY REPORT BY: E OSTENSOE. P. GEO.

LOCATION	Moyie, B C	FIGURE	10
DATE	Mar 2005	SCALE	As Shown
DRAWN	TERRACAD LTD	GEOLOGIST	E. OSTENSOE P. GEO
DATA			

(f) Star and Canam Properties

The Star and Canam prospects are located about 30 km west southwest and south southwest respectively of the St. Eugene mine. Both properties have elevated contents of lead and zinc but lack ore grade mineralization and both are thought to occur at the intersection of synsedimentary growth faults with transverse structures..

Hoy, et al. (1995, p. 33) described the two occurrences of weak but widespread disseminated galena and sphalerite in the middle part of the Middle Aldridge formation.

> *"Disseminated sulphides over a stratigraphic interval of tens of metres in arenite beds suggests a diagenetic origin. This is supported by Middle Proterozoic Pb-Pb isotopic data in both occurrences (Cominco Ltd. data). Evidence of Middle Proterozoic structures, including fragmentals and concentrations of hydrothermal alteration assemblages, suggests north-trending basin parallel fault controls. Prominent east-west trending veins at Star further suggest that a local control may be the intersection of these faults with transverse structures, a similar setting as the Sullivan-North Star hydrothermal field"* (Hoy, et al, 1995).

(g) Vine Deposit

The Vine deposit

> *"..is a steeply dipping massive pyrrhotite-base metal vein deposit that cuts across shallow-dipping Lower and Middle Aldridge siltstones and wackes just north of the Moyie fault southwest of Cranbrook. The vein is exposed by trenching for over 150 m; drilling has indicated that is continuously mineralized along a strike length of at least a kilometer and to a depth of 800 m"* (Hoy, et al. 1995).

The Vine deposit, (Minfile 082GSW050), located 12 km north of the former St. Eugene mine, exhibits many of the same geological features as does the St. Eugene. In addition to being close to the Moyie fault, and a northeast striking regional right-lateral reverse fault, it occurs in proximity to the central portion of the Purcell Anticlinorium, to a Moyie dyke and to an inferred Aldridge growth fault (Hoy, et al.1995). The principal mineralized zone comprises massive and disseminated pyrite, sphalerite and galena in a sheared vein system with attitude 120 degrees and dip 45 to 85 degrees southwest. It has been explored by 14,368 m of diamond drilling and 150 m trenching and by geophysical and geochemical surveys. Two, or possibly three, other massive sulphide veins are reported.

Unlike information concerning the St. Eugene deposits, Vine deposit data were generated in recent years: cores and trenches are accessible and have been reviewed by consultants

employed by St. Eugene Mining Corporation and by government geologists. The size of the mineral zone was calculated in 1990 but the figures, characterized as "proven and probable", categories that are no longer used in such calculations, are not compliant with NI 43-101 standards. The zone was estimated at 1,300,000 tonnes grading 2.2 g/tonne gold, 36.3 g/tonne silver, 3.12% lead, 3.12% zinc and 0.22% copper (reference: prospectus, Kokanee Exploration Ltd.(1990) quoted in Minfile inventory report). **[These figures are not reserves. Details of the resource calculation are unknown and despite the similarities of the deposits, the characteristics and tenor of Vine deposit mineralization are not necessarily indicative of mineralization that may be present on the property that is the subject of this report. The estimate is provided as an indication of the type of mineral zones that may be found in the Moyie district.]**

Figure 11 of this report depicts a cross-section of the Vine deposit. The Minfile entry for the Vine prospect is included in Appendix 2.

(h) Midway Property

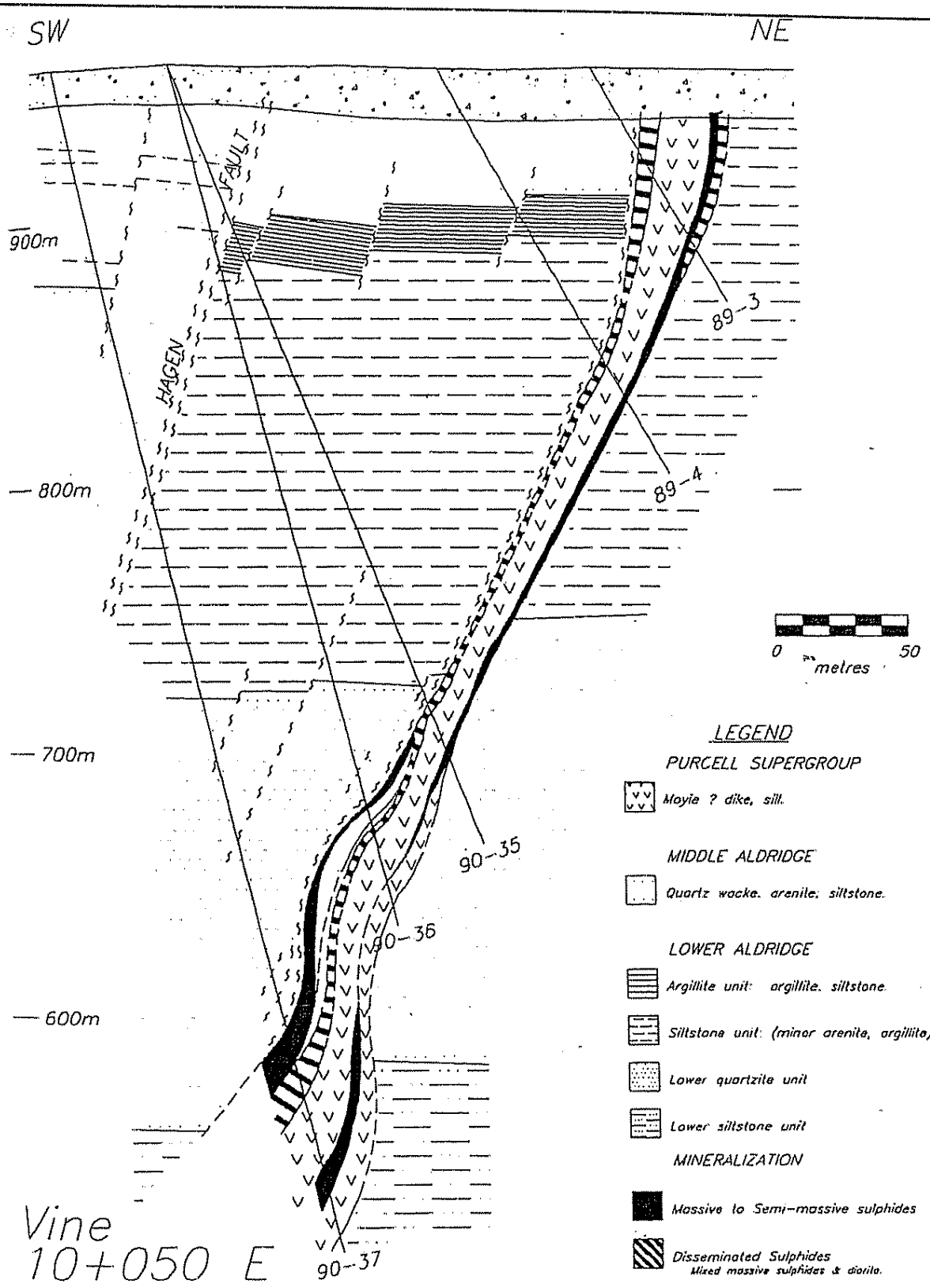
The Midway property, (Minfile 082GSW021) located 5 km southwest of Moyie, is described as being located in Middle Aldridge quartzites, turbidites and argillites on the west limb of the Moyie Lake anticline, near its axial plane. It is described as a zone of quartz veins with sulphide minerals and has been explored by two short adits (upper 412 metres, lower 320 metres, in length). Production of 1168 tonnes is recorded in the period 1933 to 1962. Metal content is stated to be 73.23g/tonne silver, 7.78 g/tonne gold, with minor amounts of zinc and lead, but is likely distorted by having been hand-sorted rather than run-of-the-mine material. **[The characteristics and tenor of Midway deposit mineralization are not necessarily indicative of mineralization that may be present on the property that is the subject of this report.]**

The Midway property has been explored by surface and underground methods. The adits, due to the configuration of the fold structure in which it occurs, appear to have passed through the most prospective portions of the Middle Aldridge formation, into progressively younger strata.

The Minfile entry for the Midway property is included in Appendix 2.

(i) Discussion

The several mineral deposits described in the above paragraphs have striking similarities in metallogeny (and mineralogy) and in structural settings. They, and several others that are less well documented, occur at different levels within the Aldridge formation, and vary in morphology from disseminated bedded (Canam) to massive vein fillings (St. Eugene mine) to occurrences that exhibit mixed characteristics. Pipe-like steeply dipping



Vine
10+050 E

(from Geological Fieldwork 1994, paper 1995-1)

COMPANY

ST. EUGENE MINING CORPORATION LTD.

DRAWING TITLE:

Section 10+050E
Vine Deposit

TO ACCOMPANY REPORT BY: E. OSTENSOE, P. GEO.,

LOCATION	Moyie. B C	FIGURE	11
DATE	Mar 2005	SCALE	As Shown
DRAWN	TERRACAD LTD	GEOLOGIST	E. OSTENSOE P. GEO
DATA			

to vertical high grade ore shoots are present in the Lakeshore and St. Eugene portions of the St. Eugene mine and in the Fors deposit as well as, incidentally, at the Sullivan mine. Most deposits ambiguously show evidence of relatively passive accumulation of disseminated metal sulphides and of remobilization from source beds (?) into structural settings. Controlling structures in the vicinity of mineral zones are consistently a conjunction of north-striking faults, the basin edge slippages that occurred as the structural basins developed, and transverse fractures, that enabled accommodation of the regional stresses.

It is also of interest to note that additional mineral occurrences with similarities to the St. Eugene and Society Girl prospects have been reported in the area lying east of those locations. Those occurrences are believed to lie in Creston formation strata that are anomalously quartzitic compared to the nominal Creston which is strongly argillaceous. The implications from that observation are that the strong St. Eugene mine "break" (see Figures 3 and 3(a)) persists to the east and that it presents evidence of hosting lead-zinc-silver mineralization where it passes through suitable rock and structural conditions, irrespective of the formation. Similar potential may be expected to exist in the area west of Moyie Lake.

Hoy, et al. (2000, p. 22) noted that "*...important similarities with Middle Proterozoic basins in northern Australia, including the McArthur basin, are the recognition of active extensional tectonics and intersecting syndepositional faults controlling hydrothermal centers. These features control both the spatial distribution and stratigraphic levels of sulphide deposits within the Aldridge Formation*".

15.0 INTERPRETATION AND CONCLUSIONS

15.1 Introduction

The Moyie portion of the East Kootenay district of southeastern British Columbia has been geologically mapped and prospected in some detail. Much data is available in various publications and in files but important gaps in the data base are recognized. In particular, data from a UTEM survey performed some years ago appears to be inaccessible, as is some geochemical data. Drill core data from the 1962 – 1963 exploration work was recently re-evaluated and re-interpreted in order to incorporate current theories of ore genesis (Gifford, 2005).

15.2 Regional Considerations

The Aldridge Formation of the East Kootenay district of southeastern British Columbia was deposited in Middle Proterozoic time in a regional sedimentary basin that extended into Montana and Idaho. Arenaceous sediments and coarser grained turbiditic wackes filled as much as 18 km of a basin that throughout the greater part of its existence was relatively shallow. Mafic dykes and sills are believed to have been emplaced contemporaneously with, or a short time later than, the sediments. Tectonism was active during basin development and also in the late Cretaceous to Tertiary period when granitic plutons were emplaced.

Important mineral deposits of lead, zinc and silver are present in Aldridge terrain and the area has been the object of much prospecting and geological investigation in search of further deposits. Deposits are believed to be diagenetic: the metals were introduced into the basin at the same time as the sediments, or, possibly, shortly thereafter, and were remobilized and concentrated from a dispersed state into structurally favourable locations, possibly influenced by regional stresses and/or episodes of plutonism.

15.3 St. Eugene Mining Corporation Property

The property of St. Eugene Mining Corporation Ltd. is well located for the discovery of orebodies similar to those of the former St. Eugene mine. Not only does SEMC control the strike extensions of the controlling structures of the mine, but also a large area of ground that may represent a former restricted sub-basin that is crossed by transverse faults and/or shears that intersect strong north-striking faults. The axial plane of the Moyie Anticline passes northerly through the SEMC ground and the attitudes of the fold limbs are such that favourable Middle-Upper Aldridge strata dip gently beneath adjoining mountains and become inaccessible to conventional prospecting.

Early work in the St. Eugene mine developed ore in three areas: the Lakeshore, Moyie and St. Eugene shoots. These, while respectable in size and of good grade, were exhausted in a short period. Exploration headings from underground extended easterly following structures but failed to find mineable material. An 820 foot shaft and short drifts under the Lakeshore orebody were similarly unproductive. The Society Girl prospect located higher than and east of the mine, and the Aurora and Guindon veins located on the west side of Moyie Lake gave encouragement, including small amounts of ore, but were abandoned. By 1921 all mining had ceased. Exploration by Falconbridge and Cominco in succeeding decades was sporadic but increasingly academic as geologists attempted to adjust their theories to accommodate emerging concepts of orogenesis and to apply observations from the Sullivan mine, located 40 miles north, to the Moyie area and *vice versa*. Geochemistry and geophysics were introduced and

several long drill holes from surface investigated prospective sites of Sullivan-type mineralization. That data is currently being re-evaluated by personnel engaged by St. Eugene Mining Corporation Ltd., who are working with a non-Sullivan model.

Geological studies in the Belt-Purcell Basin by government and private sector geologists led to conclusions about the structure and metallogeny of the area. The basin, likely a mosaic of sub-basins, is segmented by a complex pattern of folds and fractures with gabbroic to dioritic sills and a few granitic plutons. "Red Sea"-type brines brought metals into the basin and subsequently into the stratigraphic members. Lead-zinc-silver ore deposits and prospects were formed in structurally favourable sites into which the metals migrated.

15.4 Conclusions

The Moyie property of St. Eugene Mining Corporation Ltd. may host undiscovered bodies of modified SEDEX-type zinc-lead-silver deposits similar to the St. Eugene Mine ores and/or Sullivan-type orebodies, and a program of exploration to search for structural sites analogous to those recognized in various mineral zones is warranted. Such mineral zones can be expected to comprise 5 to 15% combined lead and zinc and 5 to 15 opt silver, and if of sufficient size could become valuable assets. The search, as discussed in the following section of this report, should include further compilation work, structural studies, geophysical surveys, and diamond drilling and is strongly recommended.

16.0 RECOMMENDATIONS

16.1 Introduction

The search for Moyie area ore deposits has to be guided by the observations discussed elsewhere in this report. Because the areas to be tested are extensive, structurally complex and likely to require long drill holes, random or ill-conceived exploration will rapidly exhaust almost any reasonable budget without much useful progress being achieved. **Part 2 of the following recommendations should be undertaken after Part 1 data has been reviewed by management and consultants, including the Qualified Person, who conclude that positive encouragement has resulted from that new information.**

16.2 Recommended Work

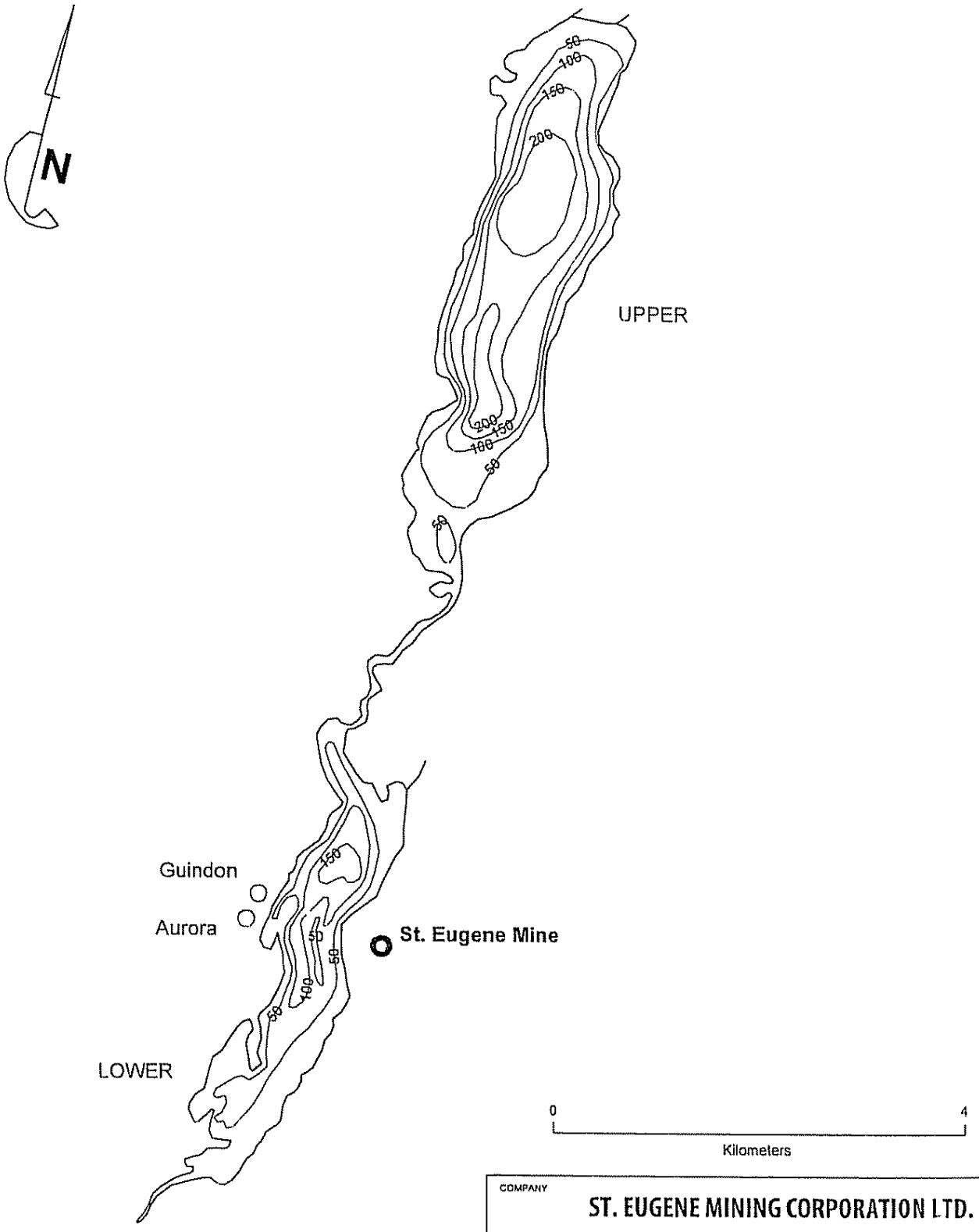
Compilation work currently in progress should continue to completion in order to embrace all available data: much remains to be done in this regard. The property package is not large and additional ground should be acquired by purchase or staking to

create a "comfort zone" to cover possible discoveries and extensions of known mineral zones and to gain control of the attractive prospects, the Society Girl and John D, and other mineral showings. Structural studies to synthesize a model of local faulting and folding in relation to mineral zones should be completed with the objective of identifying conjunctions of fractures, dykes and competent strata. The ore deposit model itself has already been defined by the several mineral zones in the St. Eugene shear zone, including the Aurora/Guindon, Lakeshore, Moyie, St. Eugene, Society Girl, and John Dee bodies, and by the Vine and Fors deposits that may have similar genitors.

A very limited program of geophysical test work was performed late in 2004 over three small grids on claims of St. Eugene Mining Corporation Ltd. The purpose of the work was to compare results of VLF-EM and magnetometer surveys. Mr. Syd Visser, P. Geo., geophysical consultant, reviewed the data and was unable to define strong geophysical responses. He also observed that the UTEM method (large loop electromagnetic system) should be a useful tool for locating SEDEX-type deposits and suggested that combined UTEM and 3D Induced Polarization surveys should be conducted over known mineral deposits on the western side of Moyie Lake (Rastad and Visser, 2005). Results would be used for exploration and to help focus future exploration work elsewhere on the St. Eugene Mining Corporation Ltd. claims.

The extensions of the St. Eugene shearing are obviously highly prospective for the discovery of additional mineral zones but the search is severely hampered by folding: the limbs of the Moyie Anticline steepen with distance from the axial plane, taking the thick quartzite member to depth. Structural analysis (currently underway) and detailed mapping of lithology and structure (as recommended by Gifford, 2005) will identify areas of best potential which should then be tested by diamond drilling methods. Some long drill holes almost certainly will be needed to explore this structure in the extensions of the principal east-west sheared zone. Similarly, other prospective areas may emerge from the studies. Creston formation strata may have mineral potential and should be included in prospecting and other exploration initiatives.

A second strong member, the Road Quartzite, was mapped in outcrops some distance south of the Moyie area (Owens, 1959) and is believed to underlie at least parts of the property of St. Eugene Mining Corporation Ltd. It is separated from the Mine Series by a more plastic argillic strata, referred to as the "Shaft Argillite", with thickness about 50 metres (165 feet). The Road Quartzite is described as being about 150 metres (500 feet) thick and has untested mineral potential: of particular importance are areas where it may be intersected at a moderately sharp angle by substantial shear zones or faults. The resulting structures may be expected to resemble those found in and near the ore zones in the former St. Eugene mine. Any such structures should be tested by suitable deep-penetrating geophysical methods. Diamond drilling then will be required to determine



(from the website of Water Management Branch)

COMPANY

ST. EUGENE MINING CORPORATION LTD.

DRAWING TITLE

Bathymetry of Moyie Lake

TO ACCOMPANY REPORT BY: E OSTENSOE, P. GEO.

LOCATION: Moyie, B C.	FIGURE: 12
DATE: Mar 2005	SCALE: As Shown
DRAWN: TERRACAD LTD	GEOLOGIST: E. OSTENSOE, P. GEO
DATA:	

the validity of targets that appear to possess structural and geophysical characteristics of modified SEDEX-type deposits.

There is no documented history of diamond drilling beneath Moyie Lake between the Lakeshore deposit and the Aurora/Guindon prospects. This area is has good potential but presents logistical problems. [The accompanying sketch (Figure 12) shows bathymetry of the lake but does not show depth of muds and other unconsolidated deposits. A hydrosond survey by Hunter Hydrosond and Seismic Surveys Ltd. in 1967 showed water depth of 100 feet (30.5metres)and total depth of 625 feet (190 metres) to solid bedrock (company records)].

16.3 Budget

Part 1. **Compilation, Field Work and Geophysical Surveys**

Structural studies, allow	$ 10,000
Geophysical data – re-interpretation of existing data, modeling studies, allow	$ 8,000
Prospecting and field examination of pertinent areas identified by structural and geophysical studies	$ 20,000
Geophysical surveys, **initial phase***, to test methods and possibly identify drilling targets, allow	$ 80,000
Geophysical surveys, **second phase***, guided by results and interpretations of data from initial phase surveys, allow	$100,000
Sub-total	$218,000
Contingency allowance @ 15%	$ 32,700
Total – **Part 1**	**$250,700**

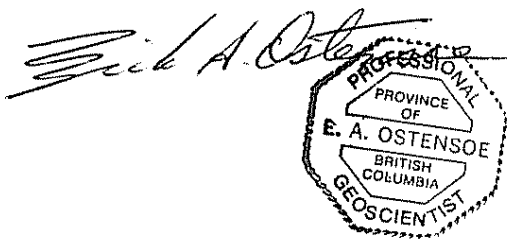
*** Because of the major cost of the surveys, it is recommended that an evaluation of work in progress should be carried out at about the mid-point of that work. This will allow determination of the effectiveness of the methods and, if deemed necessary, will permit adjustments to the surveys. "Fine-tuning" will ensure that survey orientation, electrode arrays, and methods (i.e. UTEM and/or induced polarization methods) are optimized and that the data being collected are appropriate with respect to the conceptual deposit models.**

Erik A. Ostensoe

PROFESSIONAL GEOSCIENTIST
PROVINCE OF BRITISH COLUMBIA
E. A. OSTENSOE

Part 2. **Drilling**

Permitting, allow	$ 5,000
Environmental bonding (recoverable), allow	$ 5,000
Road building and drill site preparation, plan for 1 km of road and six drill sites, allow	$ 20,000
Diamond drilling – six holes, BQ size, average length 500 metres total length 3000 metres at cost of $100/metre	$300,000
Indirect costs, including supervision, geological examination, assaying costs, at $40/metre	$120,000
Sub-total	$450,000
Contingency allowance @ 15%	$ 67,500
Total – **Part 2**	**$517,500**
Summary – **Estimated cost of Part 1 and Part 2**	**$768,200**



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CERTIFICATE OF AUTHOR

I, Erik A. Ostensoe, do hereby certify that:

1. I am a consulting geologist with office and residence in Vancouver, British Columbia

2. I am a qualified professional geologist with a B. Sc. degree in Honours Geology (UBC, 1960)

3. I have practiced my profession as an exploration geologist for more than forty years in western and northern Canada, western United States and, to a much lesser extent, in several other countries

4. I am a member in good standing of the Association of Professional Engineers and Geoscientists of British Columbia, member no. 18727, and I am, by virtue of training and experience, a Qualified Person as defined in National Policy 43-101

5. I am the author of the accompanying report "Review of the St. Eugene Project, Southeast of Cranbrook, British Columbia, Canada"

6. Prior to undertaking preparation of this report, I had not had any involvement with the St. Eugene mine or nearby claims. I visited the St. Eugene property at Moyie, B. C. on February 14, 2005 and was accompanied by Mr. Peter Klewchuk, M. Sc., P. Geo., consulting geologist, who is thoroughly familiar with the entire property. I examined parts of the property located west of Moyie Lake, including the site of the Aurora and Guindon mine workings, and the area immediately to the west thereof

7. This report is based to a large extent on information from technical reports, government publications, private reports to the owner of the property and other sources that are appropriately cited in the text and listed in the References section of the report

8. I have read National Instrument 43-101 and Form 43-101F and this report is prepared in compliance with the prescribed instrument and form

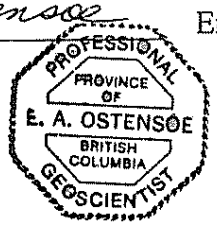
9. I am not aware of any material fact with respect to the subject matter of this report that is not reflected in this report, the omission to disclose which makes the report misleading

10. I am independent of St. Eugene Mining Corporation Ltd. in all respects and I do not own or expect to own securities issued by that corporation and I do not own, in whole or in part, any mineral claims or other properties in the vicinity of that company's Moyie, B. C. area claims

11. This report was prepared in support of activities of St. Eugene Mining Corporation Ltd. related to financing exploration work on its Moyie, B. C. area property. I consent to the filing of this technical report with any stock exchange and other regulatory authority and any publication by them for regulatory purposes, including electronic publication in the public company files on their websites accessible by the public, of the report.

Signed and sealed at Vancouver, British Columbia, on the eighteenth day of August, 2005.

Erik A. Ostensoe, P. Geo.



APPENDIX 1

ST. EUGENE MINING CORPORATION LTD.

CLAIM DATA
MOYIE LAKE AREA
SOUTHEASTERN BRITISH COLUMBIA

NTS 082G/05W

ST. EUGENE MINING CORPORATION LTD.

CLAIM DATA
MOYIE LAKE AREA
SOUTHEASTERN BRITISH COLUMBIA

NTS M082G/05W

Claim Name	Lot No.	Size (hectares)	Owner
Dorothy	2167	17.42	St. Eugene Mining Corp. Ltd.
Toronto	2168	12.95	St. Eugene Mining Corp. Ltd.
Maple	2169	18.81	St. Eugene Mining Corp. Ltd.
Roberts	2330	15.00	St. Eugene Mining Corp. Ltd.
Kruger	2331	11.98	St. Eugene Mining Corp. Ltd.
Half Moon Fraction	3545	18.63	St. Eugene Mining Corp. Ltd.
Frisco	6126	19.10	St. Eugene Mining Corp. Ltd.
Guindon	6127	17.57	St. Eugene Mining Corp. Ltd.
Etna	7015	15.67	St. Eugene Mining Corp. Ltd.
Durango	7016	20.90	St. Eugene Mining Corp. Ltd.
Aurora	7017	18.78	St. Eugene Mining Corp. Ltd.
Horse Shoe	7022	20.05	St. Eugene Mining Corp. Ltd.
Portland	7205	18.26	St. Eugene Mining Corp. Ltd.
Cambrian	7662	20.64	St. Eugene Mining Corp. Ltd.
Mabelle Fraction	9393	10.16	St. Eugene Mining Corp. Ltd.
Surprise	9805	20.53	St. Eugene Mining Corp. Ltd.
Fereole	9806	14.97	St. Eugene Mining Corp. Ltd.
Alice Fraction	9807	1.32	St. Eugene Mining Corp. Ltd.
M. L. 1	15214	19.61	St. Eugene Mining Corp. Ltd.
M.L. 2	15215	19.88	St. Eugene Mining Corp. Ltd.
M. L. 3	15216	19.87	St. Eugene Mining Corp. Ltd.
M. L. 4	15217	13.84	St. Eugene Mining Corp. Ltd.
M. L. 6	15218	20.70	St. Eugene Mining Corp. Ltd.
M. L. 7	15219	20.90	St. Eugene Mining Corp. Ltd.
M. L. 8	15220	20.90	St. Eugene Mining Corp. Ltd.
M. L. 9	15335	17.47	St. Eugene Mining Corp. Ltd.
M. L. 12	15336	20.90	St. Eugene Mining Corp. Ltd.
M. L. 13	15337	20.90	St. Eugene Mining Corp. Ltd.
M. L. 14 Fr.	15338	12.36	St. Eugene Mining Corp. Ltd.
M. L. 40	15339	18.46	St. Eugene Mining Corp. Ltd.
M. L. 41	15340	17.98	St. Eugene Mining Corp. Ltd.
M. L. 42 Fr.	15341	6.12	St. Eugene Mining Corp. Ltd.
Adel No. 3 Fr.	15342	16.56	St. Eugene Mining Corp. Ltd.
Adel No. 2	15343	20.72	St. Eugene Mining Corp. Ltd.
M. L. 55 Fr.	15344	1.32	St. Eugene Mining Corp. Ltd.

Claim Name	Lot No.	Size	Owner
M. L. 19	15345	6.47	St. Eugene Mining Corp. Ltd.
M. L. 20	15346	11.39	St. Eugene Mining Corp. Ltd.
M. L. 21 Fr.	15347	17.13	St. Eugene Mining Corp. Ltd.
M. L. 18	15348	17.51	St. Eugene Mining Corp. Ltd.
M. L. 17	15349	20.87	St. Eugene Mining Corp. Ltd.
M. L. 16	15340	20.89	St. Eugene Mining Corp. Ltd.
M. L. 15	15351	17.42	St. Eugene Mining Corp. Ltd.
M. L. 23 Fraction	15352	13.48	St. Eugene Mining Corp. Ltd.
M. L. 24	15353	20.59	St. Eugene Mining Corp. Ltd.
M. L. 25 Fr.	15354	10.11	St. Eugene Mining Corp. Ltd.
M. L. 26	15355	20.75	St. Eugene Mining Corp. Ltd.
M. L. 27 Fr.	15356	20.37	St. Eugene Mining Corp. Ltd.
Adel No. 7	15357	9.96	St. Eugene Mining Corp. Ltd.
Adel No. 1	15358	20.17	St. Eugene Mining Corp. Ltd.
Adel No. 4 Fraction	15359	19.18	St. Eugene Mining Corp. Ltd.
M. L. 53	15360	11.28	St. Eugene Mining Corp. Ltd.
M. L. 46	15361	18.04	St. Eugene Mining Corp. Ltd.
Adel No. 5	15360	11.28	St. Eugene Mining Corp. Ltd.
Adel No. 6 Fraction	15363	14.30	St. Eugene Mining Corp. Ltd.
M. L. 31 Fraction	15364	17.00	St. Eugene Mining Corp. Ltd.
M. L. 28	15365	20.90	St. Eugene Mining Corp. Ltd.
M. L. 30	15366	20.90	St. Eugene Mining Corp. Ltd.
M. L. 36	15367	20.84	St. Eugene Mining Corp. Ltd.
M. L. 37	15368	20.90	St. Eugene Mining Corp. Ltd.
M. L. 38	15369	20.90	St. Eugene Mining Corp. Ltd.
M. L. 39	15370	20.90	St. Eugene Mining Corp. Ltd.
M. L. 43	15371	20.90	St. Eugene Mining Corp. Ltd.
M. L. 44	15372	20.90	St. Eugene Mining Corp. Ltd.
M. L. 47	15373	20.52	St. Eugene Mining Corp. Ltd.
M. L. 48	15374	20.90	St. Eugene Mining Corp. Ltd.
M. L. 49	15375	20.90	St. Eugene Mining Corp. Ltd.
M. L. 52	15376	20.90	St. Eugene Mining Corp. Ltd.
M. L. Wet Fraction	15377	1.78	St. Eugene Mining Corp. Ltd.
M. L. 61	15378	18.91	St. Eugene Mining Corp. Ltd.
M. L. 63	15380	20.8	St. Eugene Mining Corp. Ltd.
M. L. 65	15382	15.53	St. Eugene Mining Corp. Ltd.
M. L. 64	15383	18.47	St. Eugene Mining Corp. Ltd.
M. L. 67	15384	20.29	St. Eugene Mining Corp. Ltd.
M. L. 66	15385	20.89	St. Eugene Mining Corp. Ltd.
M. L. 69	15386	19.35	St. Eugene Mining Corp. Ltd.
M. L. 68	15387	20.07	St. Eugene Mining Corp. Ltd.
M. L. 71	15388	20.49	St. Eugene Mining Corp. Ltd.
M. L. 70	15389	20.81	St. Eugene Mining Corp. Ltd.
M. L. 35	15390	6.75	St. Eugene Mining Corp. Ltd.
		1362.69 ha.	

APPENDIX 2.

MINERAL PROPERTIES
Minfile Entries

(a) Fors Deposit

(b) Vine Deposit

(c) Midway Deposit

MINFILE Capsule Geology and Bibliography

MINFILE Home page
Main Search Menu
Back to Search Results
ARIS Home page

Capsule Geology and Bibliography

Printable Report Next Hit

082GSW035

Name	FORS	Mining Division	Fort Steele
Status	Prospect	NTS	082G05W NAD 27
Latitude Longitude	49 21 20 N 115 53 20 W	UTM	11 5467357 580691
Commodities	Lead Zinc Silver Copper Antimony Tungsten	Deposit Types	E14 : Sedimentary exhalative Zn-Pb-Ag. I05 : Polymetallic veins Ag-Pb-Zn±Au.
Tectonic Belt	Omineca	Terranes	Ancestral North America.

Capsule Geology	The Fors occurrence area is underlain by clastic rocks of the Helikian Purcell Supergroup. The units are dominantly siliclastic sedimentary rocks of the Lower and Middle Aldridge formations. In the southeast, the right-lateral reverse Moyie fault juxtaposes Aldridge rocks with a conformable package of younger Creston Formation siltstones and argillites. The Proterozoic Moyie Intrusions are gabbro sills and intrude the Lower, and lower part of the Middle Aldridge formations. Regional metamorphism is upper greenschist facies. Two styles of mineralization are documented on the property. The first style comprises base metal sulphide mineralization related to a shear zone in Middle Aldridge Formation quartzite and quartz-feldspar arenite with minor argillaceous intercalations. The shear zone strikes 035-045 degrees and dips approximately 40 degrees northwest. The sulphide mineralization and related silicification at the Main showing occur together and are generally restricted to the zone of shearing or within a few metres of it. Argillic and sericitic alteration of the clastic rocks is common and consists of weak to complete replacement of feldspar in the matrix by white mica and clay minerals. The sulphides occur as bedding parallel disseminations and replacement patches and comprise pyrite, pyrrhotite, sphalerite, galena and chalcopyrite, in decreasing order of abundance. The second style of mineralization comprises minor sulphide mineralization (dominantly pyrite and sphalerite with minor chalcopyrite) occurring in quartz veins hosted by Moyie metagabbro sills and to a lesser extent in Aldridge units. The vein material is typically vuggy, medium to coarse grained and highly fractured with much iron and manganese staining.

	Grab samples from the Main showing assayed a range of values: 15-130 grams per tonne silver, 0.41 to 4.2 per cent lead, 0.21 to 7.1 per cent zinc and 0.024 to 1.45 per cent antimony (Assessment Report 19809). Recent drilling (1992) by Consolidated Ramrod Gold Corp. has intersected exhalative massive sulphides and a large hydrothermal alteration zone of the type associated with the Sullivan deposit. Sulphide mineralogy in a zone of strong mineralization consists of pyrrhotite, pyrite, galena and sphalerite and appears to be banded in places and oriented at a high angle to the core axis. Arsenopyrite and scheelite have also been identified in core. A 1-metre intersection of massive sulphides assayed 1.3 per cent zinc, 9.8 per cent lead and 100.09 grams per tonne silver (George Cross News Letter No. 222 (November 17, 1992)). The drill hole was oriented northeast along a direction of fractures associated with surface mineralization to determine if these fractures represented a seepage of mineral from depth. The collar of the hole was set up directly on the surface showing and drilled northeast (045 degrees), downslope and downsection into the Aldridge Formation. There are no structural features within the core to indicate the hole was collared in or drilled along a shear zone (George Cross News Letter No. 220 (November 16, 1992)). In 1996/1997, Citation Resources Inc. drilled over 13,000 metres in 17 very deep holes without intersecting any significant mineralization. Chapleau Resources Ltd. holds a 50 per cent interest in the Fors property.

Bibliography	EM GEOS MAP 1998-3 EMPR ASS RPT 834, 1876, 6498, 6543, 7087, 7554, 11732, *19809, 22984, 23332, 23356, 25030, 25534 EMPR EXPL 1966-240; 1967-271; *1977-E56; 1996-E2; 1997-47 EMPR GEM 1970-475 EMPR INF CIRC 1993-13 EMPR OF *1988-14; 1994-1; 2000-22 EMPR PF (Chapleau Resources Ltd. Website (Nov.1999): Fors Property, 2 p.) GSC MAP 11-1960 GSC MEM 76 GSC P 58-10 GCNL #215(Nov.6),#217(Nov.10),#218(Nov.12),*#220(Nov.16), #222(Nov.17),*#240(Dec.14), 1992 N MINER Dec.7, 1992 WWW http://www.chapleauresources.com; http://www.infomine.com/ Britton, J.M. and Pighin, D.L. (1994): The Fors Prospect, a Proterozoic Sedimentary Exhalative Metal Deposit in Middle Aldridge Formation, Southeastern B.C. (082G/5w), in Northeast Geology, October, 1994

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082GSW050 Inventory Report

Name	VINE 1	Mining Division	Fort Steele
Status	Developed Prospect	NTS	082G05W NAD 27
Latitude Longitude	49 24 00 N 115 49 10 W	UTM	11 5472374 585657
Commodities	Lead Zinc Silver Copper Gold	Deposit Types	I05 : Polymetallic veins Ag-Pb-Zn±Au.
Tectonic Belt	Omineca	Terranes	Ancestral North America.

Capsule Geology	The Vine property lies within the central portion of the Purcell Anticlinorium which consists of argillites, quartzites and related intruded gabbro sills and dykes of the Helikian Aldridge Formation (Purcell Supergroup). The Vine 1 occurrence is a shear-related vein system in Middle Aldridge Formation argillites and quartzites. Trenching and drilling has exposed massive and disseminated sulphides (pyrite, sphalerite and galena) within a sheared vein system striking about 120 degrees and dipping 45 to 85 degrees to the northwest. Stringer and disseminated sulphides are conspicuous in the shear zone for several metres on either side of the massive sulphides. The mineralized Vine structure has been traced for over 1000 metres along strike and a downdip extension of at least 700 metres. Recent drilling (1990) of the Vine structure (630 metres depth) has intersected 3 massive sulphide veins. The upper vein has a true width of 4 metres, the middle vein a true width of 2 metres and the lower vein a true width of 3.4 metres. The upper vein averages 2.94 per cent lead, 0.2 per cent zinc and 29.13 grams per tonne silver across 4 metres. The middle vein averages 36.24 per cent lead, 12.16 per cent zinc, 229.67 grams per tonne silver and 0.34 grams per tonne gold across 2 metres. The lower vein averages 4.7 per cent lead, 2.09 per cent zinc, 0 36 per cent copper and 35.3 grams per tonne silver across 3.4 metres. The lower vein represents a new sulphide zone within the Vine structure (George Cross News Letter #224 (November), 1991). Proven and probable reserves for the Vine property are 1,300,000 tonnes grading 2.2 grams per tonne gold, 36.3 grams per tonne silver, 3.12 per cent lead, 3.12 per cent zinc and 0.11 per cent

	copper (MDAP - Kokanee Exploration Ltd. Prospectus (1990)).

Bibliography	EM GEOS MAP 1998-3 EMPR ASS RPT 6498, 6863, *7087, 20518, 21827 EMPR EXPL 1978-E67 EMPR FIELDWORK 1977, p. 14 EMPR OF *1988-14; 1992-1; 1998-10 EMPR PF (Pighin, D. and Hoy, T (1994): Vine - a Middle Proterozoic Massive Sulphide vein system) GSC MAP 11-1960 GSC MEM 76 GCNL #227(Nov.27),#236(Dec.8), 1989; #4(Jan.5),#14(Jan.19), #23(Feb.1),#50(Mar.12),#112(Jun.11),#114(Jun.13),#124(Jun.27), #211(Oct.31), 1990; #27(Feb.7),*#224(Nov.21), 1991; #31(Feb.13), 1992 WWW http://www.infomine.com/

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082GSW021 Production Report

Name	MIDWAY	Mining Division	Fort Steele
Status	Past Producer	NTS	082G04W NAD 27
Latitude Longitude	49 14 05 N 115 53 25 W	UTM	11 5453922 580787
Commodities	Lead Zinc Silver Gold Copper Tin Antimony	Deposit Types	I05 : Polymetallic veins Ag-Pb-Zn±Au.
Tectonic Belt	Omineca	Terranes	Ancestral North America.

Capsule Geology	At the Midway occurrence, highly sheared and shattered quartz veins trending north to northwest and dipping 30 to 50 degrees northeast, are traced on surface over 244 metres. The veins are highly variable in width, from hairline to over 2 metres. The veins crosscut Helikian Middle Aldridge (Purcell Supergroup) stratigraphy consisting of quartzites, turbidites and interbedded argillites. The occurrence is located on the west limb of the Moyie Lake anticline near the anticlinal axis. Two adits were driven on the vein, the upper one about 412 metres along strike and the second, located 21 metres lower, was driven about 320 metres but lost the vein at about 218 metres. Due to the regional anticline, the adits cut through progressively higher stratigraphic levels of the Middle Aldridge Formation as they were developed to the west. Records also indicate diorite sills occurring west of the showing within the Upper Aldridge Formation and at the Creston Formation-Aldridge Formation contact. The vein carries lead, zinc and copper sulphides which have gold and silver values associated. Also reported from shipments are 0.9 per cent tin but the actual mineral is unidentified. Associated with the lead is 0.4 per cent antimony. Intermittent mining, 1933 to 1962, produced 85,534 grams of silver, 9082 grams of gold, 2549 kilograms of lead, 1701 kilograms of zinc and 108 kilograms of copper from 1168 tonnes.

Bibliography	EM GEOS MAP 1998-2 EMPR AR 1929-297; 1931-140; *1933-202; 1934-E31; 1935-E27; 1937-E49; A37; 1938-A35; 1939-A85; 1959-A47; 1962-A49,84; 1963-80; 1964-132; 1965-198; 1966-241 EMPR ASS RPT 1174, *5049, *8431 EMPR BC METAL MM00534 EMPR EXPL 1980-97 EMPR FIELDWORK *1982, pp. 9-17, *1983, pp. 24-25; 1997, pp. 9-1-9-22 EMPR INDEX 3-205; 4-123 EMPR MAP 49 EMPR OF *1988-14 EMPR PF (Sargent, H. (1938)) GSC MAP 11-1960 GSC MEM 76; 207 GCNL #284, 1969; #239, 1982; #58, 1983 PR REL Klondike Gold Corp., Feb.6, Mar.5, 2003

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APPENDIX 3.

Recommendation on the Type of Geophysical Survey over St. Eugene Mining's Moyie Property

prepared by

SJV Consultants Ltd.

Shawn Rastad, B. Sc.
Syd Visser, P. Geo.

RECOMMENDATION

ON TYPE OF

GEOPHYSICAL SURVEY

OVER THE

ST. EUGENE MINING'S MOYIE PROPERTY

Cranbook, British Columbia

Fort Steele Mining Division – NTS 082G/05

PREPARED FOR

ST. EUGENE MINING CORPORATION LTD.

1535 THETA COURT

North Vancouver, B.C.

PREPARED BY

S.J.V. CONSULTANTS LTD.

SHAWN RASTAD, B.SC.

SYD VISSER, P.GEO.

Table of Contents

1 INTRODUCTION

R.T. Trenaman of St. Eugene Mining corporation requested S.J.V. Consultants Ltd. provide recommendations for the appropriate geophysical survey that will provide the most effective response leading to a greater understanding of the targets over its Moyie property. The following recommendations are based on past reports and discussions with R.T. Trenaman and Peter Klewchuk.

As a result of insufficient information from past surveys (which some was unavailable), a single geophysical survey could not be recommended; therefore, it is suggested that additional geophysical tests be conducted over a known mineralized zone to examine the geophysical responses from two techniques, UTEM and 3D Induced Polarization. Each technique may be able to provide satisfactory results. Results of the test will clarify which can best image the target and provide additional insight into the current exploration model. Then the most appropriate solution should be used for continued exploration in the region.

2 PROPERTY'S TARGET BACKGROUND

The Moyie property may exhibit two possible types of targets based upon previous discoveries in the region: a polymetallic vein type target similar to the St. Eugene Mine vein with a near vertical dip crossing stratigraphy or a stratiform target similar to the Sullivan Mine which is more likely to be close to flat lying (parallel to stratigraphy).

The conductivity of these two deposits vary significantly with the amount of iron sulphides, mainly a phyrrhotite, present in the deposit. The Sullivan Mine deposit is known to have a conductivity of at least 100mhos; however, a more recent survey suggests it may be much higher, perhaps thousands of mhos. The conductivity of the veins on the other hand are known to range from very weak (actually not conductive at all) to about 100mhos. The concentrator hill horizon is about 10 to 50mhos which is similar to the sulphide layers in the Upper Aldridge.

Previous work on the St. Eugene Mine does not indicate that it is conductive (although naturally the vein is mined out). There are however other veins in the area that are known to be weakly conductive.

One of the main problems with surveying in this region is the Upper Aldridge formation. The

Upper Aldridge formation is known to carry bands of sulphides which are weakly conductive and give responses similar to that expected from a vein with the exception that the dip would be significantly different.

The EM response from a possible deposit in this area is therefore not well known. In addition, it has been suggested that the vein may be an Induced Polarization (IP) target as opposed to an EM target; therefore, it may be of interest to do an IP test survey over a known vein. Again the Upper Aldridge formation imposes similar problems to IP as with EM methods. The sulphides within the formation may give a very strong IP response as well, therefore making it difficult to distinguish the vein.

3 GEOPHYSICAL SURVEY RECOMMENDATIONS

From discussions with Roly Trenaman, the focus of exploration is on the sulphide vein targets to a depth of 400m. SJ Geophysics Ltd. recommends that a survey be conducted over the Aurora, Guindon and Larson Tunnels deposits on the western side of Moyie Lake. The geophysical techniques should consist of a combined large loop EM (UTEM) and 3D Induced Polarization (3DIP) survey to evaluate the geophysical responses for each technique. (Although UTEM has been performed over this region, the raw data is unavailable to determine the technique's effectiveness for these targets.) In addition, to determine the effect of the Upper Aldridge on these geophysical methods, a portion of the survey region should cover the Upper Aldridge formation. Results from these two surveys will not only be used for exploration purposes, but also focus future exploration work with the most effective geophysical technique to delineate these specific features.

The line spacing on a UTEM survey is very dependent on the size and depth of the target. The line spacing should be at least half of the strike length of the target. In other words, if a 200m strike length target is a viable target then the line spacing should be a maximum of 100m. Naturally, other factors come into play here. The target's strike length places a limit on its depth of detectability. Hence, a target with a strike length of 200m would be difficult to see at a depth of more than 200m. Although width and conductivity also play an important role in the detectability of a target strike length, the overall dimensions of strike length and depth extent are

more important. A rule of thumb to see a target with EM methods is that the size (ie. strike length and depth extent) should be comparable to the depth of investigation. Therefore, to see a conductive target at a depth of 400m the dimensions would have to be greater than about 400 by 300m. If the survey crosses over a portion of the Upper Aldridge formation, then discrimination of a deep or weak conductor may be very difficult.

The grid layout proposed should be approximately 800m x 1600m along the western shoreline of Moyie Lake. Survey lines should be orientated in a NNE direction to cross approximately perpendicular to the main vein systems (~330^0), with a 100m separation and 25m stations along the survey traverses. The 3DIP survey should be conducted with readings at 50m stations. UTEM recordings should utilize the same grid as the IP; however, the UTEM survey on this IP grid should be read at 25m station intervals.

R.T. Trenaman has described that the mineralized vein ore is expected to exist in the main vein system at the intersections of northerly trending synrift faults and may also be expected to occur along so called "avenues" orientated at N60E. To possibly distinguish these "avenues", it may be prudent to conduct an additional UTEM survey at a slightly different orientation. Therefore, it is proposed to survey an additional 8 UTEM lines perpendicular to the IP grid also at 100m line separation over the Aurora and Guindon vein. A more detailed examination of the expected vein azimuths should be conducted to provide a more definitive azimuth of the survey grid to maximize the response from the UTEM.

4 GRID SPECIFICATION

Grid 1 (Induced Polarization & UTEM)

Size:	800m x 1600m
Total Linear Km's:	9 Lines at 1600m = 14.4km
Estimated Survey Time:	7 days for IP; 10 days for UTEM + 1 day for looping

Grid 2 (UTEM only, rotated)

Size:	700m x 800m
Total Linear Km's:	8 Lines at 800m = 6.4km
Estimated Survey Time:	5 days for UTEM + 1 day for looping

5 ESTIMATED COSTS

This a rough estimate for the cost of the geophysical survey and does not include the cost of preparing the grid (ie. line cutting). The projected time line for the geophysical portion of the survey is estimated at just over three weeks.

Mobilization & Demobilization:	$7500
Accommodation (Lodging/Meals):	$10,000
Geophysical Crew:	$50,000
- $2050/day for UTEM, 1 Rcv. and $2540/day for IP, includes a dedicated infield processor)	
Supplemental costs (Truck, Fuel etc.):	$5000
Contingency Fund, ~10% (weather days etc.):	$8000

Respectfully submitted,

Syd Visser, B.Sc., P.Geo.
Geophysicist/Geologist

Shawn Rastad, B.Sc.
Geophysicist

APPENDIX 4

Analytical Data for Samples Collected by Peter Klewchuk, P. Geo.
April 11, 2005

[Analysed by ALSChemex, North Vancouver, B. C.]

Note to accompany analytical data for samples collected at Moyie, B. C. property of St. Eugene Mining Corporation by Peter Klewchuk, P. Geo.

On April 11, 2005, Mr. Peter Klewchuk of Kimberley, B. C. collected five samples of mafic dykes and sills and seven samples of material mineralized with sulphide minerals from the company's Moyie, B. C. area property and submitted them to ALS Chemex of North Vancouver, B. C. ALS Chemex is a full service, fully accredited analytical laboratory service with operations world-wide.

Sample locations were determined by GPS methods, supplemented with brief descriptions, and along with certified analytical determinations, are presented in the tabulation attached hereto. The samples were analysed by induced coupled plasma methods for 34 elements. Gold was determined by fire assay and atomic absorption spectrometry. When values exceeded reliability limits for silver, lead and zinc, samples were digested in aqua regia and the metal values were determined by atomic absorption spectrometry.

Samples no. R05-03715 to R05-03719 inclusive are representative samples of mafic dykes comprised of silicate minerals and were analysed in an attempt to determine if two sets of petrographically similar intrusive dykes and sills, namely the St. Eugene mafic dyke and the Upper Rudd sills, can be distinguished chemically. Data will be used during exploration of the property to assist in distinguishing the various outwardly similar mafic intrusive rock types.

Samples R05-03720 to R05-03726 inclusive were selected from sulphide mineralized fragments of broken rock that lie in proximity to the several tunnels located on claims of St. Eugene Mining Corporation west of Moyie Lake. The samples were taken to provide an indication of base and precious metal values that are found in the several mineral zones. **The metal values reported in the Certificate of Analysis are not necessarily representative of mineral zones that may be found in the course of further exploration of claims of St. Eugene Mining Corporation.**

Notable features of the analytical results as shown in the accompanying Certificate of Analysis include the following:

> The dykes, samples R05-03715 - R05-03719 inclusive, contain broadly similar amounts of most of the elements measured but the St. Eugene mafic dyke samples, R05-03715 and R05-03716, contain strikingly higher amounts of copper, chromium, nickel, strontium, and vanadium, and lower amounts of manganese and zinc, compared to the Upper Rudd sill samples, R05-03717 - R05-013719.
>
> Samples from Larson Tunnel, R05-03720 and R05-03721, have high contents of iron, copper, nickel and cobalt and low contents of lead, silver, arsenic, manganese, phosphorus and zinc compared to samples R05-03722 and R05-03723 from the Upper Guindon tunnel #5. Samples R05-03724 to R05-03726 from Aurora Tunnel #2 contain elevated levels of silver, cadmium, potassium,

manganese, lead, sulphur, antimony and zinc compared to Upper Guindon Tunnel #5.

Analytical data will become part of the company's data base and will be added to as exploration progresses. Samples from various other nearby mineral zones, including Society Girl, John D., Midway, et al. should be similarly analysed to investigate aspects of regional metallogenic zoning

File Note

Coords for Samples collected by Peter Klewchuk April 11,2005 and processed for analysis and petro work:

Sample #	GPS Coords	Location	Klewchuk ID
R05-03715	585610E,548200N	St Eugene Mafic Dyke (south half)	
R05-03716	585610E,548200N	St Eugene Mafic Dyke (north half)	
R05-03717	582975E,545533N	Upper Rudd Sill Mafic (below top)	
R05-03718	582975E,545533N	Upper Rudd Sill Mafic (middle)	
R05-03719	582975E,545533N	Upper Rudd Sill Mafic (near base)	
R05-03720	**583837E,5460854N, El 1080m**	**Larson Tunnel**	**#1**
R05-03721	**583837E,5460854N, El 1080m**	**Larson Tunnel**	**#2**
R05-03722	583585E,5460452N, El 1168m	Upper Guindon Tunnel # 5Dump	S6-1
R05-03723	583585E,5460452N, El 1168m	Upper Guindon Tunnel # 5Dump	S6-2
R05-03724	83849E,5460056N, El 990m	No 2 Tunnel Dump-Aurora (below road)	#2
R05-03725	583849E,5460056N, El 990m	No 2 Tunnel Dump-Aurora (below road)	#3
R05-03726	583849E,5460056N, El 990m	No 2 Tunnel Dump-Aurora (below road)	#6

RTT 09/05/05
Amended 10/05/05

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To: TRENAMAN MINING SERVICES
1535 THETA COURT
NORTH VANCOUVER BC V7G 2N9

Page: 1
Finalized Date: 9-MAY-2005
Account: AV

4/25/2005

CERTIFICATE VA05032944

Project:
P.O. No.:
This report is for 12 Rock samples submitted to our lab in Vancouver, BC, Canada on 29-APR-2005.
The following have access to data associated with this certificate:

R. TRENAMAN		

SAMPLE PREPARATION

ALS CODE	DESCRIPTION
WEI-21	Received Sample Weight
LOG-22	Sample login - Rcd w/o BarCode
CRU-31	Fine crushing - 70% <2mm
SPL-21	Split sample - riffle splitter
PUL-31	Pulverize split to 85% <75 um

ANALYTICAL PROCEDURES

ALS CODE	DESCRIPTION	INSTRUMENT
ME-ICP41	34 Element Aqua Regia ICP-AES	ICP-AES
Ag-AA46	Ore grade Ag - aqua regia/AA	AAS
Pb-AA46	Ore grade Pb - aqua regia/AA	AAS
Zn-AA46	Ore grade Zn - aqua regia/AA	AAS
Au-AA23	Au 30g FA-AA finish	AAS

To: **TRENAMAN MINING SERVICES**
ATTN: R. TRENAMAN
1535 THETA COURT
NORTH VANCOUVER BC V7G 2N9

This is the Final Report and supersedes any preliminary report with this certificate number. Results apply to samples as submitted. All pages of this report have been checked and approved for release.

Signature:

ALS Chemex
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212 Brooksbank Avenue
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To: TRENAMAN MINING SERVICES
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Finalized Date: 9-MAY-2005
Account: AV

CERTIFICATE OF ANALYSIS VA05032944

Sample Description	Method / Analyte / Units / LOR	WEI-21 Recvd Wt. kg 0.02	Au-AA23 Au ppm 0.005	ME-ICP41 Ag ppm 0.2	ME-ICP41 Al % 0.01	ME-ICP41 As ppm 2	ME-ICP41 B ppm 10	ME-ICP41 Ba ppm 10	ME-ICP41 Be ppm 0.5	ME-ICP41 Bi ppm 2	ME-ICP41 Ca % 0.01	ME-ICP41 Cd ppm 0.5	ME-ICP41 Co ppm 1	ME-ICP41 Cr ppm 1	ME-ICP41 Cu ppm 1	ME-ICP41 Fe % 0.01
R05-03715	St. Eugene Dyke	0.36	<0.005	<0.2	2.03	<2	<10	300	<0.5	<2	1.22	<0.5	19	6	180	4.28
R05-03716		0.48	<0.005	<0.2	2.03	<2	<10	200	<0.5	<2	1.30	<0.5	22	14	154	4.26
R05-03717	Upper Rudd Sill	0.92	<0.005	<0.2	1.98	<2	<10	180	<0.5	<2	1.45	<0.5	24	1	4	5.56
R05-03718		0.88	<0.005	<0.2	2.58	<2	<10	430	0.6	<2	1.72	<0.5	20	1	29	6.71
R05-03719		0.44	<0.005	<0.2	1.69	<2	<10	70	<0.5	<2	1.61	<0.5	18	7	82	3.86
R05-03720	Aurora-Tunnel	0.48	0.013	<0.2	0.10	<2	<10	20	<0.5	<2	0.28	<0.5	76	7	295	10.65
R05-03721	"	0.18	<0.005	0.3	0.05	<2	<10	10	<0.5	<2	0.10	<0.5	293	<1	603	37.2
R05-03722	W. Guinden #5 Tunnel	0.42	<0.005	0.3	1.32	3	<10	10	<0.5	<2	0.03	<0.5	5	11	49	8.17
R05-03723		0.68	0.047	98.5	0.16	3	<10	20	<0.5	6	0.02	437	20	6	26	1.92
R05-03724	Aurora -	0.44	0.116	88.9	0.97	36	<10	40	<0.5	3	0.56	>500	64	7	455	14.60
R05-03725	Tunnel #2	1.00	0.120	33.7	0.28	<2	<10	30	<0.5	<2	0.02	>500	25	3	38	4.48
R05-03726		1.04	0.195	>100	0.17	<2	<10	<10	<0.5	4	0.02	>500	46	<1	82	5.55

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1535 THETA COURT
NORTH VANCOUVER BC V7G 2N9

Finalized Date: 9-MAY-2005
Account: AV

CERTIFICATE OF ANALYSIS VA05032944

Sample Description	Method Analyte Units LOR	ME-ICP41 Ga ppm 10	ME-ICP41 Hg ppm 1	ME-ICP41 K % 0.01	ME-ICP41 La ppm 10	ME-ICP41 Mg % 0.01	ME-ICP41 Mn ppm 5	ME-ICP41 Mo ppm 1	ME-ICP41 Na % 0.01	ME-ICP41 Ni ppm 1	ME-ICP41 P ppm 10	ME-ICP41 Pb ppm 2	ME-ICP41 S % 0.01	ME-ICP41 Sb ppm 2	ME-ICP41 Sc ppm 1	ME-ICP41 Sr ppm 1
R05-03715		10	<1	0.28	10	0.53	274	<1	0.26	22	1030	5	0.03	3	4	50
R05-03716		10	1	0.28	10	0.88	386	<1	0.14	26	1100	9	0.02	<2	4	53
R05-03717		10	1	0.24	10	0.79	859	<1	0.21	1	700	5	0.01	<2	16	13
R05-03718		10	<1	0.78	10	0.71	703	1	0.24	<1	1470	6	0.15	<2	15	14
R05-03719		10	<1	0.13	<10	0.97	454	<1	0.18	20	550	11	0.02	<2	12	15
R05-03720		<10	1	0.01	<10	0.05	185	<1	0.01	172	10	10	6.37	<2	<1	5
R05-03721		<10	<1	0.01	<10	0.02	166	1	<0.01	527	<10	9	>10.0	<2	<1	2
R05-03722		<10	<1	0.01	<10	0.74	738	<1	0.01	6	50	521	0.23	<2	2	5
R05-03723		<10	1	0.01	<10	0.09	144	<1	<0.01	4	20	>10000	6.69	132	<1	2
R05-03724		<10	3	0.55	10	0.35	933	<1	0.01	76	160	>10000	9.71	107	1	11
R05-03725		<10	7	0.18	10	0.03	666	<1	<0.01	4	100	>10000	6.91	62	<1	2
R05-03726		<10	35	0.01	<10	0.11	614	<1	<0.01	14	10	>10000	7.19	437	<1	1

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To: TRENAMAN MINING SERVICES
1535 THETA COURT
NORTH VANCOUVER BC V7G 2N9

Finalized Date: 9-MAY-2005
Account: AV

CERTIFICATE OF ANALYSIS VA05032944

Sample Description	Method Analyte Units LOR	ME-ICP41 Ti % 0.01	ME-ICP41 Ti ppm 10	ME-ICP41 U ppm 10	ME-ICP41 V ppm 1	ME-ICP41 W ppm 10	ME-ICP41 Zn ppm 2	Ag-AA46 Ag ppm 1	Pb-AA46 Pb % 0.01	Zn-AA46 Zn % 0.01
R05-03715		0.23	<10	<10	191	<10	47			
R05-03716		0.38	<10	<10	149	<10	55			
R05-03717		0.23	<10	<10	95	<10	81			
R05-03718		0.24	<10	<10	16	<10	91			
R05-03719		0.21	<10	<10	150	<10	51			
R05-03720		<0.01	<10	<10	1	<10	18			
R05-03721		<0.01	<10	<10	4	10	3			
R05-03722		0.02	<10	<10	9	<10	767			
R05-03723		<0.01	<10	<10	1	<10	>10000		20.6	6.78
R05-03724		0.06	<10	<10	8	<10	>10000		8.78	10.25
R05-03725		0.01	<10	<10	<1	<10	>10000		3.40	22.8
R05-03726		<0.01	<10	<10	<1	90	>10000	359	26.3	>30.0

APPENDIX 5.

Core Re-logging Data

Extracted from "A Re-log of Drill Core, St. Eugene Project, Moyie, British Columbia, Canada'

by Robert G. Gifford, B.A.Sc., P. Eng.

(a) Drill hole legend
(b) Title blocks, holes C-1, C-2, C-3, C-4 and C-5
(c) Detailed geologic log of hole C-2

St. Eugene Mining Corporation Limited
Relog of ddh core: RG Gifford, Nov-2004
Vicinity of St. Eugene mine (decommissioned)

Tables, Field Terms

Bouma Sequence of Structural Divisions in Turbidite Bed
(from Middleton & Hampton, 1976)

Grain size	Bouma (1962) divisions		Interpretation
mud	E	pelitic (interturbidite)	pelagic sedimentation; or fine grained, low density turbidity current deposition
silt -	D	parallel-laminated	
sand	C	cross-laminated	lower part of lower flow regime
sand	B	parallel-laminated	upper flow regime plane bed
	A	massive or graded	upper flow regime, rapid deposition

Lithology

Q	quartzite	— hard; grains visible with 10x lens:
	fine grain (fg)	— barely visible
	medium grain (mg)	— easily visible
	coarse grain (cg)	— 1 - 2 mm grain size
AQ	argillaceous quartzite	
S	siltstone	— hard; grains not certainly visible with 10x lens
AS	argillaceous siltstone	
A	argillite	— soft; aphanitic to fine sugary texture
SA	silty argillite	
frag	sedimentary fragmental unit	

Bedding Aspect

internal structure		
tnl	thinly laminated	up to 1mm (1/32 inch)
tkl	thickly laminated	up to 1 cm (3/8 inch)
primary structure		thin bedded
vnb	very thinly bedded	1-3 cm (3/8"-1")
fnb	flaggy thin bedded	3-10 cm (1"-4")
snb	slabby thin bedded	10-30 cm (4"-12")
		thick bedded
bkb	blocky thick bedded	30-150 cm (12"-60")
vkb	very thickly bedded	150 cm plus (60" plus)

Descriptive size classes
microscopic – discerned with hand-lens or microscope
mesoscopic – visible between hand specimen and outcrop size
macroscopic – integration of data from several outcrops or observation points

Descriptive Grade Class for Mineralized Intervals
~St Eugene mine production 14% Pb, 7% Zn, 7 opt Ag
~ratio Pb:Zn = 2%Pb:1%Zn and Ag:Pb = 1optAg:2%Pb
~2004 mining cost-estimate US$60/T for 1000 TPD, vein deposit, St Eugene analog
~market price for Pb = US$0.45/lb. Zn = US$0.60/lb, Ag = US$7.00/oz (Feb-2005)
galena = 87% Pb; sphalerite = 67% Zn

Grade	% Pb	% Zn	% gn	% sp
poor	to 1%	to 1%	to 1.5%	to 1.5%
fair	1 – 4%	1 – 2%	1.5 – 5%	1.5 – 3%
good	4% plus	2% plus	5% plus	3% plus

Stratigraphic Divisions
"Very Thick Beds" mainly thickly-bedded sedimentation units greater than 150 cm (60")
"Thick Beds" mainly thickly-bedded sedimentation units greater than 30 cm (12")
"Thin Beds" mainly thinly-bedded sedimentation units less than 30 cm (12")

Stratigraphic Subdivisions
"AE Turbidites" mainly undifferentiated AE turbidite and quartzite beds; usually brittle, competent
"Argillites" mainly basinal and turbiditic argillite beds; usually ductile, incompetent

Color and Munsell Value

lgy, light gray	light gray (N7) shading to med. light gray (N6)
mgy, med. gray	medium gray (N5) shading to med. dark gray (N4)
dgy, dark gray	dark gray (N3) shading to grayish black (N2)
blk, black	black (N1)

Breccia Classification
crackle breccia – incompletely fragmented
mosaic breccia – fragments can be refitted
rubble breccia – fragments mixed & randomly oriented
framework – open, supported, tight

Plotting Index - consolidating term & description

bakA	argillite; basin-background sediment, pyrrhotite laminae common; dominantly black
A	composite; unclassified turbidite component, mainly argillite (A) or silty argillite (SA); minor argillaceous siltstone (AS); dominantly medium gray
AQ	composite; unclassified turbidite component, mainly argillaceous quartzite (AQ); subordinate quartzite (Q) & siltstone (S); dominantly medium gray
AE	composite turbidite sedimentation unit comprised of: (1) upper part of turbidite bed, usually Bouma-E argillite (A be) (2) coherent lower part of turbidite bed, usually Bouma-A argillaceous quartzite (AQ ba), or Bouma-A argillaceous siltstone (AS ba)
dio	diorite; usually has amphibole (hornblende ~60° perfect cleavage) as chief dark mineral
gab	gabbro; usually has pyroxene (augite, ~90° imperfect cleavage) as chief dark mineral
lamp	lamprophyre; more than 1/3 dark minerals, abundant euhedral xls, feldspars confined to a fine-grain groundmass

Abbreviations

(())	few, slighty, some, ocassional. weak
()	subordinate, moderate
/oz	per ounce
/T	per short Ton
/t	per metric tonne
~	gradational, approximate

Keyword, colored text
ore mineral & highlights
structural features
gangue & overprints
lamprophyre. gabbro
angle-to-core record

A – L

[cb]	chocolate brown
[rb]	reddish brown
altn	alteration
arg	argillite
argilla	argillaceous
a.s.l.	above sea level
bba	basinal background argillite
bdd	bedded
bdg	bedding
bio	biotite
blch	bleached. bleaching
bot	bottom
bp	bedding plane. or bedding parallel
brkn	strongly fractured, severely broken
btc	bedding-to-core angle
bx	breccia
cc	calcite
cer	cerrusite
c.g.	coarse grained
chl	chlorite
com	common
cp	chalcopyrite, CuFeS2
crump	crumpled
ct	contact
ctc	contact-to-core angle
curr	current
dcomp	decomposed
defm	deformation
diss	disseminated
div	division
dol	dolomite
dtc	dike-to-core-angle
fbl	feeble
fe	iron sulfide; pyrite &/or pyrrhotite
f.g.	fine grained
frac	fracture
freq	frequent
gar	garnet, garnetized
gn	galena, PbS
gpt	grams per tonne
hb	hornblende
id	identification of drill hole collar
intbdd	interbedded
intmit	intermittent
ldg matter	chlorite-mica-sphalerite-iron-some galena
ldg, ledge	quartz-iron-mica (ref. ddh m117)
lgth	length (feet)
lim	limonite
lith	lithology
lt	light

M – Z

m.	mostly
ma	million years ago
Mdbk	Meadowbrook marker bed
mgt	magnetite
meth	methane
minzd	mineralized
minzn	mineralization
mod	moderately
msv	massive, prominent
mus	muscovite
nonstruc	non-structured, no internal structure
o/b	overburden
occas	occasional
opt	ounces per Ton
oz/T	ounces/Ton
p	partly
po	pyrrhotite, Fe1-xS
pop.	population, distribution
ptg	parting
py	pyrite. FeS2
qte	quartzite
qvn	quartz vein
qz, qtz	quartz
refpt	reference point
samp	sample
secn	section
sedbx	sedimentary breccia (fragmental)
serp	serpentinized
scat	scattered
shat	shattered
sil	silicified
sp	sphalerite, ZnS
spec	specimen
spot	spot, spotting
ssed	soft-sediment primary structures
sts	siltstone
sulf	sulfide
tecbx	tectonic breccia
tk,thick, k	thickly bedded unit
tn. thin. n	thinly bedded unit
tr	trace
turbA	turbiditic argillite (bouma-E)
turbQ	turbiditic quartzite (bouma-A)
vbrkn	very broken core
vn, vnlt	vein. veinlet
vtc	vein-to-core angle
w/	with
wk	weak

DDH No. C-2
Length 2530'

Drilled Date 18Aug-19Oct,1962
Core Size 0-60' casing, 60-602' standard BX. 602-2530' BX Wire Line
Casing pulled at completion
Contractor: T. Connors. Nelson BC

St. Eugene Mining Corporation Limited
Relog of ddh core: RG Gifford, Nov-2004
Vicinity of St. Eugene mine (decommissioned)
Joint-Venture Drill Program. 1962-63
CM&S and St. Eugene Mining Corp

Coordinates			
	True Coord:		
	UTM Coord:		
	CM&S Grid Coord:	25055 E	25402 N
	Mine 1908 Grid Coord:	1328 E	6043 N
	Elevation:	3044'	
	Collar Dip:	73°	
	Collar Azimuth:	007°	N 7 E

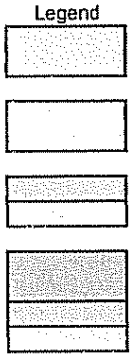
Drill Collar Location:
Moyie, B C , L15343, Adel 2 C G
Crown granted March 14th. 1952
800' south of DDH C-1
Moyie Lake, east shoreline

Core Storage:
Vine Property Headquarters, Hidden Valley Road
Peavine Creek, north-end Moyie Lake
East Kootenay, B C

Objective:
To record stratigraphic and structural features in detail, and establish guidelines for further exploration

Competent Rock Unit
dominant blocky ("b", 1-5') & very thick ("v", 5'+) "thick" (k) beds
dominantly turbidite with prominent AQ/ Q/ AS/ S as bouma-A component — viz. hard, brittle rock
Incompetent Rock Unit
dominant flaggy (1-4") and slabby (4-12") "thin" (n) beds
dominantly basinal A, and/or turbiditic A/ SA — viz. soft, ductile rock
Auxiliary Legend
Sedimentary breccia (fragmental)
Lamprophyre. gabbro. diorite
Augmented Legend
Firm: thickly-bedded & brittle (hard) rock unit
Moderate: ~balanced alternations of firm & weak units
Weak: thinly-bedded & ductile (soft) rock unit
Sequence of thick Q beds in competent environment

Legend



General Notes
"ref 1962" denotes refer to "1962 drill log" for input, or for reconstruction of missing section
All AQ, Q units are classed as fine grain unless noted otherwise
All A, SA, AS, AQ units are classed as medium gray unless noted otherwise
All basin-background argillite is black & fine lamination < 1/32" unless noted otherwise
"tkQ" denotes stub intervals dominantly of either blocky bedded or very thickly bedded AE turbidites
"ndx" denotes stratification index; calculated [no. beds in unit/ thickness of unit* 100]. i.e. beds per 100'

Keyword, colored text
ore mineral & highlights
structural features
gangue & overprints
lamprophyre. gabbro
angle-to-core record

Stratigraphic Divisions
"Very Thick Beds" mainly thickly-bedded sedimentation units greater than 150 cm (60")
"Thick Beds" mainly thickly-bedded sedimentation units greater than 30 cm (12")
"Thin Beds" mainly thinly-bedded sedimentation units less than 30 cm (12")
Stratigraphic Subdivisions
"AE Turbidites" mainly undifferentiated AE turbidite and quartzite beds; usually brittle. competent
"Argillites" mainly basinal and turbiditic argillite beds; usually ductile, incompetent

DDH C-2, Geological Log
L15343, Adel 2 C.G.
Casing pulled at completion
Joint-Venture Drill Program. 1962-63
CM&S and St. Eugene Mining Corp.

Length: 2530'
Collar Dip: 73°

St. Eugene Mining Corporation Limited
Relog of ddh core: RG Gifford, Nov-2004
Vicinity of St. Eugene mine (decommissioned)

Competent Rock Unit
dominant blocky ("b", 1-5') & very thick ("v", 5'+) "thick" (k) beds
dominantly turbidite with prominent AQ/ Q/ AS/ S as bouma-A component — viz. hard, brittle rock
Incompetent Rock Unit
dominant flaggy (1-4") and slabby (4-12") "thin" (n) beds
dominantly basinal A, and/or turbiditic A/ SA — viz. soft, ductile rock
Auxiliary Legend
Sedimentary breccia (fragmental)
Lamprophyre, gabbro, diorite
Augmented Legend
Firm: thickly-bedded & brittle (hard) rock unit
Moderate: ~balanced alternations of firm & weak units
Weak: thinly-bedded & ductile (soft) rock unit
Sequence of thick Q beds in competent environment

Legend

General Notes
"ref 1962" denotes refer to "1962 drill log" for input, or for reconstruction of missing section
All AQ, Q units are classed as fine grain unless noted otherwise
All A, SA. AS, AQ units are classed as medium gray unless noted otherwise.
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Keyword, colored text
ore mineral & highlights
structural features
gangue & overprints
lamprophyre, gabbro
angle-to-core record

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"Very Thick Beds" mainly thickly-bedded sedimentation units greater than 150 cm (60")
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Stratigraphic Subdivisions
"AE Turbidites" mainly undifferentiated AE turbidite and quartzite beds; usually brittle, competent
"Argillites" mainly basinal and turbiditic argillite beds; usually ductile, incompetent

Rock Unit From	To	Length	Bed Index	Description of Stratigraphy From	To	Length	Bedding Detail	stub: "tkQ" "ndx"	Subunit Length
0.0	60.0	60.0		Overburden					60.0'
				0.0	60.0	60.0	overburden		
60.0	125.0	65.0		Moyie Thick Beds (this report); nee Moyie Quartzites, Chubb 1939.					
				• "ref 1962" for this interval due to generally poor condition of the core; commonly graded with "tops" normal, weakly calcareous. btc 73°; occasional qz-chl-bio veinlets with minor py, po and tr sp, vtc 10-30°.					
				AE Turbidite Blocky Beds					65.0'
			bQ	60.0	62.0	2.0	AE turb [AQ:ba 1.5', A:be 0.5'] poor condition-"ref 1962"	65' tkQ	
			bQ	62.0	67.0	5.0	AE turb [AQ:ba 3', A:be 2'] poor condition-"ref 1962"	ndx 20	
			bQ	67.0	71.0	4.0	AE turb [AQ:ba 2.5', A:be 1.5'] poor condition-"ref 1962"		
			bQ	71.0	74.0	3.0	AE turb [AQ:ba 2', A:be 1'] poor condition-"ref 1962"		
			bQ	74.0	79.0	5.0	AE turb [AQ:ba 3', A:be 2'] poor condition-"ref 1962"		
			tnQ	79.0	80.0	1.0	AQ		
			vQ	80.0	86.0	6.0	AE turbidite [AQ:ba 5.5', A:be 0.5']		
			vQ	86.0	99.0	13.0	AE turbidite [AQ:ba 12', A:be 1']		
			vQ	99.0	109.0	10.0	AE turbidite [AQ:ba 9.5', A:be 0.5']		
			BBA	109.0	115.0	6.0	BBA (SA, AS) fnb		
			bQ	115.0	117.0	2.0	AQ		
			BBA	117.0	119.0	2.0	BBA		
			vQ	119.0	125.0	6.0	AE turbidite [AQ:ba 5', A:be 1'] - transition from BBA above		
125.0	442.0	317.0		Shaft Thin Beds (this report); nee Upper Group of Argillites, Kerr 1937.					
				Thin Bedded Argillites					22.0'
			BBA	125.0	147.0	22.0	BBA (A) vnb; btc 70° at 139'; marker-style at 143.2' (3 lams) and 144.2' (2 lams)		
				Mixed Thin Bedded Argillites and AE Turbidites					59.0'
			bQ	147.0	151.5	4.5	AE turbidite [AQ:ba 3.5', A:be 1']		
			BBA	151.5	154.0	2.5	BBA, tnA; ssed boudinage at 153', tr dissem sp at 154'		
			tnQ	154.0	155.0	1.0	AQ		
			BBA	155.0	158.0	3.0	BBA, (A) vnb		

Rock Unit From	To	Length	Bed Index	Description of Stratigraphy From	To	Length	Bedding Detail	stub: "tkQ" "ndx"	Subunit Length
			bQ	158.0	159.4	1.4	AE turbidite [AQ:ba 1.2', A:be 0.2']		
			BBA	159.4	161.5	2.1	BBA		
			tnQ	161.5	162.5	1.0	AS fnb, narrow 1" BBA interbeds		
			BBA	162.5	167.0	4.5	BBA; tr sp w/ qz vnlt at 165'		
			bQ	167.0	170.5	3.5	AE turbidite [AQ:ba 2.5', A:be 1']		
			BBA	170.5	177.0	6.5	BBA		
			vQ	177.0	190.0	13.0	AQ ~177-190; core is jumbled		
			BBA	190.0	206.0	16.0	BBA ~190-206; core is jumbled		
				Mixed AE Turbidites and Thin Bedded Argillites					71.0'
			vQ	206.0	216.0	10.0	AQ ~206-211; core is jumbled	30' tkQ	
			BBA	216.0	217.0	1.0	BBA ~216-217; core is jumbled	ndx 13	
			vQ	217.0	224.0	7.0	AQ ~217-224; core is jumbled		
			vQ	224.0	236.0	12.0	AE turbidite [AQ:ba ~11.5, A:be ~0.5']		
			tnQ	236.0	237.0	1.0	AE turbidite [AQ:ba 0.7', A:be 0.3']	7' tnQ	
			tnQ	237.0	237.7	0.7	AE turbidite [AQ:ba 0.5', A:be 0.2']	ndx 83	
			tnQ	237.7	238.5	0.8	AE turbidite [AQ:ba 0.6', A:be 0.2']		
			tnQ	238.5	239.5	1.0	AE turbidite [AQ:ba 0.8', A:be 0.2']		
			bQ	239.5	242.1	2.6	AE turbidite [AQ/AS:ba 2.4', A:be 0.2']		
			BBA	242.1	243.2	1.1	BBA; btc 70° at 242.5'		
			vQ	243.2	263.0	19.8	AE turb [AQ:ba 19', A:be 0.8] core loss = 37% (7' loss in 19')	34' tkQ	
			BBA	263.0	264.5	1.5	BBA ((A tkl))	ndx 15	
			vQ	264.5	271.5	7.0	AE turbidite [AQ:ba 5.5', A:be 1.5']		
			bQ	271.5	274.0	2.5	AE turbidite [AQ:ba 1, A:be 1.5']		
			bQ	274.0	277.0	3.0	AE turbidite [AQ:ba 2.5', A:be 0.5']		
				Homogeneous Finely Laminated Argillites					165.0'
			BBA	277.0	442.0	165.0	**Shaft Marker Bed:** black, argillite; btc 73°, abund fg py on bedding planes, frequent py vnlts vtc 10-30°, core saw-split; • 350-372' jumbled, 372-465' missing; "ref 1962"		
442.0	964.0	522.0		Road Thick Beds (this report); nee Road Quartzite, Kerr 1937.					
				AE Turbidite Blocky Beds					72.0'
			bQ	442.0	445.0	3.0	AE turbidite [AQ:ba 2.1', A:be 0.9'] core missing-"ref 1962"	24' tkQ	
			bQ	445.0	447.0	2.0	AE turbidite [AQ:ba 1.4', A:be 0.6'] core missing-"ref 1962"	ndx 42	
			tnQ	447.0	448.0	1.0	AE turbidite [AQ:ba 0.7', A:be 0.3'] core missing-"ref 1962"		
			bQ	448.0	450.0	2.0	AE turbidite [AQ:ba 1.4', A:be 0.6'] core missing-"ref 1962"		
			bQ	450.0	453.0	3.0	AE turbidite [AQ:ba 2.1', A:be 0.9'] core missing-"ref 1962"		
			bQ	453.0	455.0	2.0	AE turbidite [AQ:ba 1.4', A:be 0.6'] core missing-"ref 1962"		
			bQ	455.0	459.0	4.0	AE turbidite [AQ:ba 2.8', A:be 1.2'] core missing-"ref 1962"		
			bQ	459.0	462.0	3.0	AE turbidite [AQ:ba 2.1', A:be 0.9'] core missing-"ref 1962"		
			bQ	462.0	465.0	3.0	AE turbidite [AQ:ba 2.1', A:be 0.9'] core missing-"ref 1962"		
			tnQ	465.0	465.8	0.8	AQ		
			vQ	465.8	477.5	11.7	AE turbidite [AQ:ba 11.3', A:be 0.4']	48' tkQ	
			bQ	477.5	480.5	3.0	AE turbidite [AQ~AS:ba 2.5', A:be 0.5']	ndx 23	
			bQ	480.5	484.0	3.5	AE turbidite [AQ:ba 2.0', A:be 1.5']		
			BBA	484.0	486.0	2.0	BBA		
			bQ	486.0	488.0	2.0	AE turbidite [AQ~AS:ba 0.8', A:be 1.2']		
			bQ	488.0	492.0	4.0	AE turbidite [AQ~AS:ba 2.3', A:be 1.7']		
			tnQ	492.0	493.0	1.0	AE turbidite [AQ~AS:ba 0.8', A:be 0.2']		
			vQ	493.0	507.0	14.0	AE turbidite [AQ~AS:ba 13.5', A:be 0.5']		
			bQ	507.0	509.8	2.8	AE turbidite [AQ:ba 2.4', A:be 0.4']		
			bQ	509.8	511.3	1.5	AE turbidite [AQ:ba 0.8', A:be 0.7']		
			bQ	511.3	514.0	2.7	AE turbidite [AQ:ba 2.3', A:be 0.4']		
				Thin Bedded Argillites					32.0'
			BBA	514.0	546.0	32.0	BBA, & vtn turbiditic argillite, p.missing & jumbled core, "ref 1962"		
				AE Turbidite Blocky Beds					170.0'
			bQ	546.0	549.0	3.0	AE turbidite [AQ:ba 2.1', A:be 0.9']	105' tkQ	
			BBA	549.0	552.0	3.0	BBA	ndx 28	
			bQ	552.0	554.0	2.0	AE turbidite [AQ:ba 1.4', A:be 0.6']		
			bQ	554.0	558.0	4.0	AE turbidite [AQ:ba 2.8', A:be 1.2']		
			bQ	558.0	564.0	6.0	AE turbidite [AQ:ba 4.2', A:be 1.8']		
			bQ	564.0	567.0	3.0	AE turbidite [AQ:ba 2.1', A:be 0.9']		
			bQ	567.0	569.0	2.0	AE turbidite [AQ:ba 1.4', A:be 0.6']		
			bQ	569.0	572.0	3.0	AE turbidite [AQ:ba 2.1', A:be 0.9']		
			bQ	572.0	574.0	2.0	AE turbidite [AQ:ba 1.4', A:be 0.6']		
			bQ	574.0	578.0	4.0	AE turbidite [AQ:ba 2.8', A:be 1.2']		
			BBA	578.0	583.0	5.0	BBA (A) vnb ((AS fnb))		
			bQ	583.0	586.5	3.5	AE turbidite [AQ:ba 2.5', A:be 1.0']		
			bQ	586.5	590.0	3.5	AE turbidite [AS:ba 2.5', A:be 1.0']		