ASSESSMENT REPORT

GEOLOGICAL MAPPING

The SP and KRL Claims

Fort Steele Mining Division
Southeastern B.C.

B.C.G.S. 082G/022
UTM 594000E and 5453500N
Lat. 115° 42' 30" and Long. 49° 13' 34"

For:
GRANDEUR RESOURCES LTD.
Suite 1030, 475 Howe Street
Vancouver, B.C.
V6C 2B3

By:
D.L. Pighin, P. Geo.
301 8th Street South
Cranbrook, B.C.
V1C 1P2

MARCH 2009

BRITISH COLUMBIA

Ministry of Energy & Mines
Energy & Minerals Division
Geological Survey Branch

ASSESSMENT REPORT
TITLE PAGE AND SUMMARY

TITLE OF REPORT [type of survey(s)]: **Geological Mapping SP and KRL Claims**

TOTAL COST: **$11,325.00**

AUTHOR(S): **DL Pighin, P. Geo.** SIGNATURE(S):

PROFESSIONAL ENGINEER OF BRITISH COLUMBIA D. L. PIGHIN GEOSCIENTIST

NOTICE OF WORK PERMIT NUMBER(S)/DATE(S): **2008**

STATEMENT OF WORK - CASH PAYMENT EVENT NUMBER(S)/DATE(S): **4252600 Dec. 18, 2008**

PROPERTY NAME: **SP and KRL Claims**

CLAIM NAME(S) (on which work was done): **KRL Tenure No. 519022**

COMMODITIES SOUGHT: **Lead, Zinc, Silver**

MINERAL INVENTORY MINFILE NUMBER(S), IF KNOWN:

MINING DIVISION: **Fort Steele** NTS: **082G/022**

LATITUDE: **115** ° **42** ' **30** " LONGITUDE: **49** ° **13** ' **34** " (at centre of work)

OWNER(S)

1) **Darlene Lavoie**
Sara Kennedy

2)

MAILING ADDRESS
2290 De Wolfe Ave.
Kimberley, BC V1A 1P5

RECEIVED
GOVERNMENT AGENT
CRANBROOK
MAR 13 2009
NOT AN OFFICIAL RECEIPT
TRANS #

OPERATOR(S) [who paid for the work]

1) **Same as Above**
Grandeur Resources Ltd.

2)

MAILING ADDRESS
Suite 1030, 475 Howe Street
Vancouver, BC V6C 2B3

PROPERTY GEOLOGY KEYWORDS (lithology, age, stratigraphy, structure, alteration, mineralization, size and attitude):
The property is underlain by Quartzite, Siltstone, Argillite, members of the Proterozoic Creston Fm, NNE and east-west faults, widespread Supergene limonite and pyrolusite, vein-hosted cerussite, pyromorphite, hemimorphite, 1 m(?) to 4 m (?) thick east-west striking, steeply dipping south.

REFERENCES TO PREVIOUS ASSESSMENT WORK AND ASSESSMENT REPORT NUMBERS: **20 700; 23 083**
25671 28623

(OVER)

TYPE OF WORK IN THIS REPORT	EXTENT OF WORK (IN METRIC UNITS)	ON WHICH CLAIMS	PROJECT COSTS APPORTIONED (incl. support)
GEOLOGICAL (scale, area)			
Ground mapping	At 1:5 000 scale Tepee Creek	519022 and 519048	$11 002.66
Photo interpretation			
GEOPHYSICAL (line-kilometres)			
Ground			
Magnetic			
Electromagnetic			
Induced Polarization			
Radiometric			
Seismic			
Other			
Airborne			
GEOCHEMICAL (number of samples and type for ...)			
Soil			
Silt			
Rock			
Other			
DRILLING (total metres, number of holes, size)			
Core			
Non-core			
RELATED TECHNICAL			
Sampling/assaying			
Petrographic			
Mineralographic			
Metallurgic			
PROSPECTING (scale, area)			
PREPARATORY/PHYSICAL			
Line-cutting (kilometres)			
Topographic/Photogrammetric (scale, area)			
Legal surveys (scale, area)			
Road, local access (kilometres)/trail			
Trench (metres)			
Underground dev. (metres)			
Other			
		TOTAL COST	$11 002.66

TABLE OF CONTENTS

0 50 100 150 200 250 300 Kilometers

Scale 1in. = 165 miles

INDEX MAP

REGIONAL LOCATION OF THE SP-KRL PROPERTY

Map Reference: Road Atlas	Scale: as shown. FIG. 1

1.00 INTRODUCTION

See **Figure 1** - Index Map, page 1 and **Figure 2** – Location Map, page 4.

1.10 Location and Access

The SP-KRL claims are situated in the McGillvary Mountain Range 11 kilometers southeast of Moyie B.C. The claims are centered around UTM Coordinates, 594000E and 5453500N, plotted on map sheet 082G/022.

Access to SP-KRL claims is gained by following good all weather forestry roads which leave the highway at a point three kilometres south of Moyie B.C. The forestry road is followed up the valley of Sunrise creek for 10 km to the summit between Sunrise creek and the headwaters of Tepee creek. To gain entrance to the north portion of the property turn left off the summit and drive 6 km downstream along Tepee creek. Access on the property is provided by abundant forestry haul roads.

1.20 Property

The SP-KRL property consists of 4 claims, tenure numbers 519022, 519048, 519679 and 515408, totalling 1244.7 sq. hectares. The claims are registered to Darlene E. Lavoie and Sara Kennedy.

1.30 Physiography

The claims cover an area of forested mountain terrain. The mountains have rounded tops with moderate to very steep flanks. The area was covered by thick stands of lodgepole pine; however, clear-cut logging in recent years has removed nearly two-thirds of the standing timber. Year round water occurs as small streams in all of the major valleys. Small tributary creeks dry up shortly after the spring run-off. Naturally occurring springs are very rare on the property and in the surrounding area. Immediately south of the property, a small shallow lake marks the head of the Yahk river. Naturally occurring outcrop is rare on the property and in the surrounding area; however, bedrock exposure is abundant in the numerous road cuts.

1.40 History of Previous Exploration

Mineralized showings were first staked in the Jake creek drainage in 1989 as the Jake claims. Subsequent prospecting mineralized float hosting high grades in Pb, Ag, and Hg. These discoveries lead to further staking of additional Jake and Snake claims. At this time, the owners completed a soil geochemical survey that located a Cu, Pb, Zn, As anomaly.

1.40 History of Previous Exploration – continued --

Auckland Explorations Ltd. optioned the property in 1990. Auckland completed a program, consisting of aerial geophysics (EM and Mag), ground geophysics (VLF-EM and HLEM), grid soil geochemistry, and diamond drilling. This work was not formally reported. However, much of the original data is available in files retained by individuals that were involved with the Auckland program.

The ground geophysics defined two distinct VLF-EM anomalies interpreted to be mafic dykes. Ground magnetics partly outlined a north-east-trending muscovite-syenite dyke. A regional Airborne Magnetic Survey flown in 1969 and 1970, funded by the Province of British Columbia, defined a fairly strong magnetic anomaly. This anomaly appears to reflect the strongly disseminated sediment-hosted magnetite that occurs regionally in the Creston formation sediments. Recent mapping on the Jake claims has discovered that in certain stratigraphic horizons the sediments host abundant disseminated magnetite (est.1-5% by vol.).

In 1990, Auckland drilled seven NQ diamond drill holes totalling 330.7 meters. The exact location of these holes are unknown to the writer. However, if these holes are located where the current owners think they are, the holes would not have tested the main Sara vein as outlined by the high grade cerussite float trend. However, assays from these holes show that most of the holes are strongly to weakly anomalous from top to bottom in Pb, Ag, Zn and Hg.

In 2006, Grandeur conducted a program of prospecting and rock and soil geochemistry. Forty-six rock samples were collected from the general area of the Sara vein showings, and two soil geochemistry lines totalling 50 samples were located 1.5 to 2 km SSE of the Sara showings, and a third line totalling 41 samples is located approximately 3 km NW of the Sara showing.

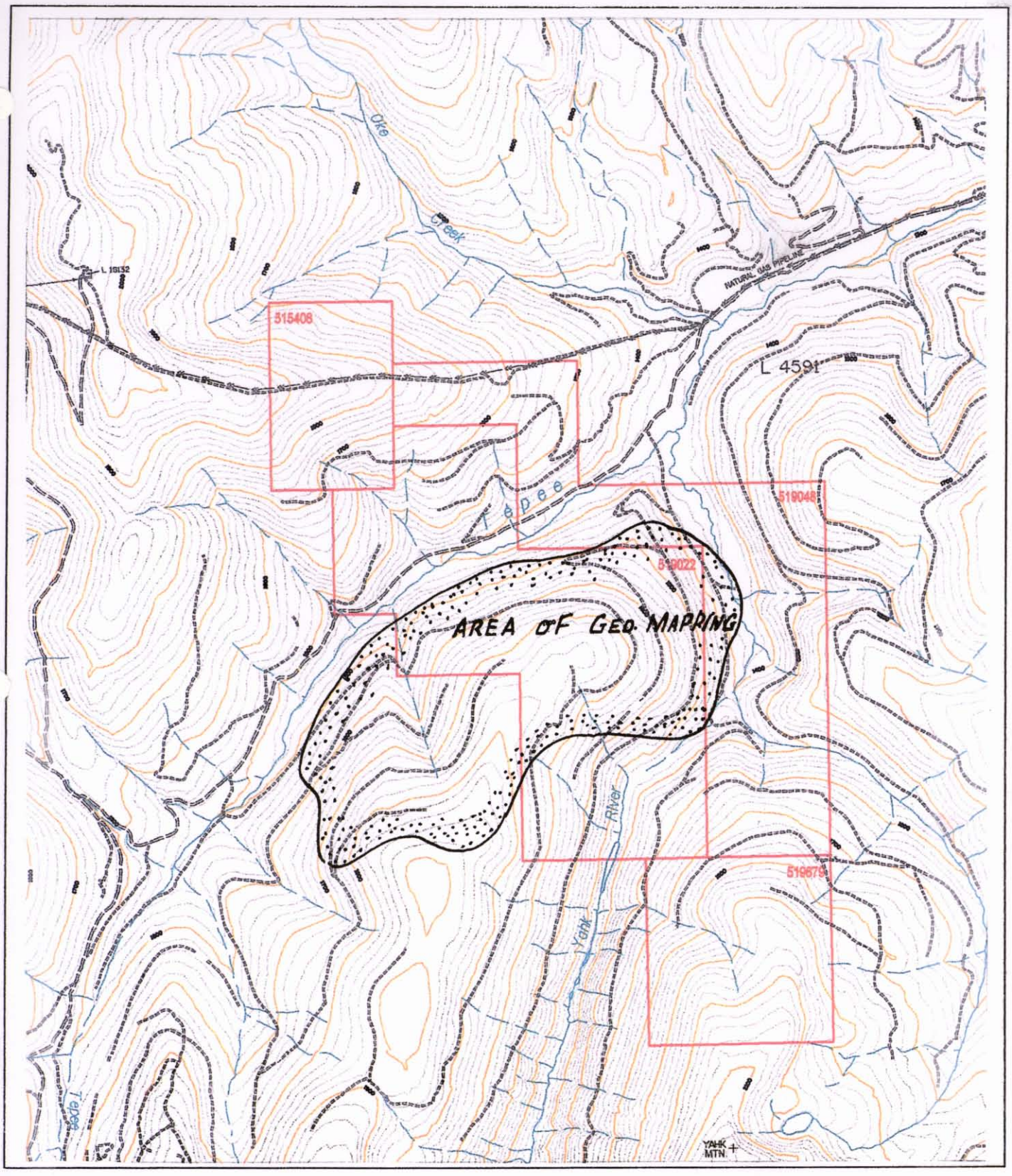
The 46 rock samples are grab samples taken from surface. Many are float material but believed to be close to subcrop. Material sampled included mineralized quartz, hematite, altered breccias, syenite and gabbro. Many of the rocks returned high values in lead (>10,000 ppm), zinc (up to 4903 ppm), silver (>100 ppm), and gold (up to 4226 ppb).

The 2006 soil geochemistry did not locate any anomalus base metal or precious metal mineralization.

1.50 Objectives

The 2008 geological mapping program on the SP-KRL property was designed to:

(1) Accurately map the various Sara vein showings to show their relationship with one and the other.
(2) Extend the known strike length of the Sara vein.
(3) Define any possible ore shoots in the vein by detailed geological mapping.



0 500 1000 1500 2000 m.

SCALE 1:40,000

SP-KRL PROPERTY

LOCATION MAP

MAP Ref. 82G/SW

Fig. NO. 2

2.00 REGIONAL GEOLOGY

The SP-KRL claims are located on the eastern flank of the Moyie anticline. The Moyie anticline is a major north-east plunging structure that is mapped from the Moyie fault south into Idaho and Montana. The Moyie anticline is composed of Middle Proterozoic Purcell Supergroup rocks. The Moyie anticline is terminated on the north by the Moyie fault. The Moyie fault is a major regional thrust fault, which has 9 km of right-lateral movement. The eastern flank of the Moyie anticline is strongly complicated by numerous north-west-trending normal faults.

The Purcell Supergroup comprises an early synrift succession, the Aldridge and Fort Steele formations, and an overlying, generally shallow, water post-rift or rift fill sequence, including the Creston and Kitchener formations.

The exposed part of the Aldridge formation has a thickness of more than 3000 meters of mainly turbidite deposits, and numerous laterally extensive gabbroic sills. The Aldridge formation is conformably overlain by the Creston formation.

The Creston formation consists mainly of siltstone, quartzite, argillite and quartz arenite, with many shallow water features such as syneresis cracks, mud cracks, asymmetrical ripple and cut and fill channels. The Creston formation near Moyie lake has a measured stratigraphic thickness of 2208 meters, (T. Hoy, 1982). The Creston formation is conformably overlain by the Kitchener formation.

The Kitchener formation consists mainly of dolomitic siltstone, dolomitic argillite, calcareous siltstone and argillite, and minor limestone. The Kitchener formation sediments exhibit many shallow water features as described above in the Creston formation. The Kitchener formation throughout the Belt Basin has a variable stratigraphic thickness; however, in the current area of interest, it has a measured thickness of between 1600 and 1800 meters. (Hoy, 1982).

3.00 PROPERTY GEOLOGY (See Figure 3 attached).

Detailed geological mapping at a scale of 1:5000 was completed in the fall of 2008. The mapping was centered on claim tenure 5190222 and focused mainly in the area in and around the Sara base metal vein. In general, the SP-KRL claims are underlain by Proterozoic sediments, namely the Creston formation. The current mapping program on the SP-KRL claims has sub-divided the Creston formation into 5 mappable sub-divisions, namely LC1, MC1, MC2, MC3, and MC4. This work was done in order to better understand any structural and lithological controls which may have influenced the development of high grade ore shoots along the trend of the Sara vein.

3.10 **Stratigraphy** (Creston Formation Sub-divided)

Unit LC1 marks the top of the lower Creston formation. Unit LC1 is composed, mainly of silty argillite, interbedded siltstone, and argillite, that are generally thin to medium-bedded. Bedding planes are wavy and commonly marked by asymmetrical ripples, mud cracks and syneresis cracks. The sediments in this unit are generally fine-gained and finely current laminated. These sediments are mainly light grey, light green and rarely dark green, and white to chalk white due to intense alteration. Euhedral magnetite is weakly disseminated in some of the sediments in this unit.

Unit MC1 marks the base of the Middle Creston formation. This unit consists of silty argillite, siltstone and argillite. These sediments are generally medium- to thin-bedded with some very thin-bedded sequences. Bedding planes are wavy and are commonly marked by mud cracks and syneresis cracks. Lenses of mud chip breccia are widely scattered throughout the sediments within this unit. The sediments in unit MC1 are characteristically coloured purple, greyish purple, and locally green. Euhedral magnetite is strongly disseminated throughout the sediments (1% to 5% by volume) in unit MC1.

Unit MC2 is part of the Middle Creston formation. On the SP-KRL claims the base of this unit is in fault contact with the underlying MC1 unit. Rocks that form this subdivision are dominantly medium- to thin-bedded siltstone. Bedding planes are wavy and commonly marked by asymmetrical ripples and mud cracks. These sediments are generally very fine-grained and locally very finely current laminated. These sediments are generally light grey and rarely light green in colour. Euhedral magnetite from 1% to 5 % is disseminated throughout most of the sedimentary beds in this subdivision.

Unit MC3 is a quartzite subdivision formed by 1 to 2 meters thick sequences of thin-bedded, coarse-grained quartzite with a silty dolomitic matrix. Paper thin black argillite layers form distinct partings between individual quartzite beds. These beds are commonly cross-bedded with scattered mud chips.

Unit MC4 is argillite interbedded silty argillite, medium to thin bedded. Bedding is generally flat with limonitic banding parallel to bedding. These sediments are dominantly light grey and rusty weathering.

3.20 **Intrusive Rocks**

Two separate and lithologically different dykes outcrop in the area near the Sara vein showings. The dykes are 120 meters apart. The deposition of both dykes appears to be controlled by parallel-trending, right lateral NNE-trending faults. The west dyke has an outcropped width of 50 meters, and has been mapped at surface for 600 meters. The eastern dyke has a minimum outcropped width of 10 meters, and has been mapped at surface for 400 meters.

3.20 Intrusive Rocks – continued –

A megascopic examination of the western dyke suggests that it is muscovitic syenite. The syenite dyke has a phaneritic and equigranular texture, and is composed of approximately 70% euhedral microline and 30% muscovite and biotite. In the syenite, late epidote alteration is abundant locally. Within the syenite, epidote occurs as fine disseminations and fracture fillings. Locally, a black magnetic oxide associated with limonite overprints the epidote on fracture surfaces.

Megascopic examination of the eastern dyke suggests that it is a gabbro, consisting of euhedral amphibole phenocrysts in a matrix of fine-grained plagioclase, quartz, amphibole, chlorite and epidote. Late veins of massive, green epidote are common throughout the outcropped dyke and associated float train.

3.30 Structure

The SP-KRL property is located on the limb of a major regional structure formally known as the Moyie anticlinorium. Sediments on the property strike northerly and dip between 20° and 27° east. A major topographic NNE-trending linear known as the Yahk River Linear begins in the State of Montana and continues NNE through the SP-KRL property. Using existing government mapping, a geological section drawn across the Yahk linear shows that the Creston formation is 1000 meters to thick. Therefore, the Yahk linear may be a regionally significant extension fault.

The oldest faults on the property are steeply-dipping east-west faults. Two east-west faults 300 meters apart have been identified on the property. The southern fault is host to the Sara vein. The northern fault has Sara vein-type alteration associated with it. However, no base metals have been discovered that can be related to this fault. These faults appear to be steeply-dipping; however, current geological data does not provide enough data to determine the relative off-sets produced by these east-west faults.

Geological mapping in 2008 has identified three NNE-trending faults on the property. A significant NNE-trending fault cuts the SP-KRL property at a point approximately 1.5 km west of the Sara vein Showing No. 1. This fault that can be seen in road cuts has a steep dip to the west, the relative movement remains unknown. Two parallel-trending NNE faults approximately 120 meters apart displaced the Sara vein in a right lateral sense. The displacement on the Sara vein is 80 meters on the upper fault and 300 meters on the lower fault. Both faults appear to be closely related to the Yahk river linear. It is difficult to assign an age to these NNE faults.

3.30 Structure – continued --

For example, the upper fault hosts a syenite dyke that is regionally always cretaceous. The lower fault has a gabbro dyke that is regionally Proterozoic in age. The North Star-Sullivan corridor is formed by NNE-trending faults. The North Star-Sullivan corridor is considered to be the feeder system to the Proterozoic Sullivan ore body.

3.40 Alteration

The degree of metamorphic alteration of the rocks that underlie the SP-KRL claims is no more than greenschist facies with local areas of late hydrothermal and supergene alteration.

A kilometer west of the property boundary a zone of intense sericitization is exposed nearly continuously 500 meters along a road cut. In this area, the siltstone is nearly completely altered to fine, white sericite with disseminated euhedral magnetite and lesser pyrite. The sediments that overlie the sericite alteration zone host numerous large and small, steeply-dipping quartz-massive chlorite veins that are in some cases anomalous in gold.

Locally supergene alteration on the property is well developed in and adjacent to the trace of the east-west faults. On the property, the supergene alteration is most likely due to the surface weathering of primary base metal sulphide veins that are related to the Sara vein. Mapping suggests that supergene alteration is best developed in the coarse-grained, porous quartzite units that are cut by the mineralized faults.

3.50 Mineralization

Base metal mineralization on the SP-KRL claims has been located in place, and as east-west-trending mineralized float trains. The base metal mineralization occurs as a steeply-dipping vein (Sara vein) deposited in an east-west striking fault structure. Mapping in 2008 has extended the Sara vein a further 750 meters to the west, for a total indicated strike length of 1400 meters.

Property geology suggests that the width and grade of the Sara vein may be governed by wallrock lithology and structure. For example, the data indicates that the vein and associated supergene alteration increases width and grade in the presence of the coarse-grained quartzite sequences. High-grade float is most abundant in areas where the NNE-trending syenite and gabbro faults cut the Sara vein, suggesting that high ore shoots may be developed at these structural intersections.

3.50 Mineralization – continued –

For the purpose of discussion, the Sara vein is subdivided into 4 showings.

Showing No. 1 is located immediately east of the NNE-trending gabbro dyke. At Showing No. 1, the Sara vein has been located in place. Beginning from the footwall the vein has an exposed width of 1.0 meters. However, the true hangingwall is not exposed. At this locality the vein is hosted by thin-bedded, rusty weathering siltstone which has been sericitized, silicified and chloritized over a width of +3 meters below the footwall of the vein. The Sara vein at this showing consists of quartz, cerussite and minor hemimorphite.

Showing No. 2 occurs between the syenite fault and the gabbro. The showing is defined by a float train consisting of numerous quartz-cerussite and massive cerussite float boulders. Showing No. 2 represents the Sara vein faulted 300 meters NNE along the west side of the gabbro fault.

Showing No. 3 represents the Sara vein faulted 80 meters NNE along the west side of the syenite fault. The showing consists of a mineralized float train that follows a slight topographic depression 300 meters long. Supergene alteration, consisting mainly of limonite and pyrolusite, is strongly developed in the coarse-grained quartzite for 300 meters north of the Sara vein. At Showing No. 3, the mineralized float consists mainly of quartz and cerussite and locally abundant pyromorphite.

Showing No. 4 appears to be on strike with the Sara vein Showing No. 3, located 750 meters to the east. Showing No. 4 is exposed along a road cut for a width of 16 meters; however, the showing remains open to the south and to the north. The showing consists of limonite and pyrolusite flooding along joints, cleavage and bedding planes in siltstone and quartzite beds. Limonite and pyrolusite are also heavily disseminated in the matrix of coarse-grained quartzite. The Sara vein mineralization was not observed in road cut, but may be present under the cover of the adjacent overburden.

Base metal mineralization was discovered in 1990 in Diamond Drill holes collared in the area of Showings 1 and 2. The exact drill collar locations and original drill hole logs are unknown; however, the writer has copies of old drill hole cross-sections showing assay results for 6 short holes totalling 329 meters. Two holes DDH 90-7 and DDH 90-2 discovered thick intervals of strongly anomalous lead, silver and mercury. For example, in DDH 90-7, 18.0 meters averaged approximately 16562 ppm Pb, 14.5 ppm Ag, 10042 ppb Hg.
DDH 90-2, 26 meters averaged approximately 4182.0 ppm Pb, 23.0 Ag and 1346 ppb Hg. It is not known if the base metal mineralization in these holes is primary or secondary.

4.00 SIGNIFICANT RESULTS

The 2008 geological mapping program has extended the Sara vein structure 750 meters further west for a known and inferred strike length of 1.75 kilometers.

The work shows that high grade (Pb, Ag, Zn) float is locally abundant at points where the Sara vein structure is cut by the NNE-trending gabbro and syenite faults.

Detailed mapping has outlined areas of extensive limonite and pyrolusite alteration concentrated in coarse-grained quartzite beds that are cut by the Sara vein structure.

5.00 CONCLUSIONS

The 2008 geological mapping program has shown that the Sara vein has a significant strike length that is capable of hosting numerous ore shoots. The work indicates that the NNE-trending gabbro and syenite faults, in conjunction with favourable stratigraphy, may play a significant role in the development of high grade ore shoots within the plane of the Sara vein.

6.00 RECOMMENDATIONS

Further work on the SP-KRL property is recommended as follows:

(1) Trenching of the Sara vein at Showings 1, 2, 3 and 4, to more accurately find the bed rock location of the vein, and to determine the true width, grade and dip.

(2) Six hundred (600 meters) of diamond drill to test for ore shoot development in areas of structure intersection and favourable stratigraphy.

(3) Continue detailed geological mapping on the SP-KRL claims east of the Yahk river linear to find the Sara vein structure in juxtaposition to favourable stratigraphy.

(4) Contour soil geochemical surveys on the eastern side of the Yahk river linear with follow-up detailed prospecting.

Signed:

D.L. Pighin, P. Geo.

PROFESSIONAL ENGINEER
PROVINCE OF BRITISH COLUMBIA
D. L. PIGHIN
GEOSCIENTIST

7.00 DETAILED STATEMENT OF EXPENDITURES

RE: 2008 Exploration Expenses – SP-KRL Claims

D.L. Pighin, P. Geo	Re: Field mapping, plotting, interpreting and report writing		
	Rate: $400.00 per day.		
	Days worked:		
	Sept. 2008, 24 to 27, and 29		
	5 days @ $400.00/day	=	$ 2,000.00
	Oct. 1, 2, 6, 7, 8, 15, 16, 20, 21, 22		
	10 days @ $400.00/day	=	4,000.00
	Feb. 20, 21, 22, 23, 24		
	5 days @ $400.00/day	=	2,000.00
P. Tito	Field Assistant		
	Rate: $16.00 per hour.		
	Days worked:		
	Sept. 2008, 1, 2, 6, 7, 8, @ 10 hrs per day		
	50 hours @ $16.00	=	$ 800.00
	Oct. 5, 16 and 17 @ 10 hrs per day		
	30 hours @ $16.00	=	480.00
Transportation for field crews			
	One 4 x 4 2005 GMC ½ Ton Truck		
	Rental Rate: $75.00 per day and $0.75 per km.		
	Sept. 2008, 24, 25, 26, 30		
	4 days @ $75.00 per day	=	$ 300.00
	300 km @ $0.75 per km	=	225.00
Craig Kennedy and Truck:	Guiding geologists to all known mineral and geological showings.		
	Rate: $380.00 per day (includes 4 x 4 truck)		
	Sept. 2008, 24, 25, 26, 27		
	4 days @ $380.00 per day	=	$ 1,520.00
	TOTAL EXPLORATION COSTS		**$11,325.00**

8.00 REFERENCES

- Unpublished report by Peter Klewchuk, P. Geo.
for Grandeur Resources Ltd.

- Geology of the Purcell Supergroup in the Fernie West-Half Map area,
Southeastern B.C., by Trygve Hoy.

- Personal communications – Craig Kennedy.

9.00 ILLUSTRATIONS

FIGURE 1: Index Map – page 1.

FIGURE 2: Property Location Map –
(showing claim boundary and location of work done 2008) – page 4.

FIGURE 3: SP-KRL Geology Map. Scale 1:5000, see attached.

10.00 AUTHOR'S QUALIFICATIONS

As author of this report I, David L. Pighin, certify that:

(1) I am a self-employed consulting geologist whose office is at Hidden Valley Road, Cranbrook, B.C. Mailing address:

301 – 8th Street South
Cranbrook, B.C.
V1C 1P2

(2) I am a member in good standing of the Association of Professional Engineers and Geoscientists of the Province of British Columbia.

(3) I have been actively involved in mining and exploration geology primarily in the Province of British Columbia for the past 42 years.

(4) I was employed by Cominco Ltd. As a prospector, exploration technician and geologist for 24 years, and later by numerous junior exploration companies.

(5) The field work for this report was carried out in the Fall of 2008, by the author.

David L. Pighin, P. Geo.
March 5, 2009

PROFESSIONAL ENGINEER
PROVINCE OF BRITISH COLUMBIA
D. L. PIGHIN
GEOSCIENTIST

HELIKAN

CRESTON FORMATION

MIDDLE CRESTON FORMATION Sub-divided

MC-1 Silty Argillite, interbedded Siltsone and Argillite gen. medium to thin bedded, rare very thin beds. Sediments are commonly shades of purple, purplish grey and lessor green. Bedding plans are wavy, commonly marked by mud cracks and synereous cracks. Mud chip breccia deposits are common through out this sequence. Most of the sedimentary beds in this unit host from 1% to 5% disseminated Magnetite.

MC-2 Siltstone, mainly medium to thin bedded, gen. lite grey and rarely lite green or dark grey in color. Bedding plans are wavy and are commonly marked by asymmetrical ripples, and mud cracks. Beds are generally finely current laminated and fine grained. These Sediments host from 1% to 5% disseminated Magnetite.

MC-3 Quartzite, thin Lenticular beds of coarse to very coarse grained quartz detritus. These beds form 1 to 2 meter thick sequences that are scattered through out subdivisions MC1 & MC2.

MC-4 Argillite, interbeded silty Argillite, gen. lite grey and rusty weathering Medium to thin bedded, generally banded parallel to bedding by Limonite.

LOWER CRESTON FORMATION sub-divided

LC-1 Silty Argillite, interbedded Siltstone and Argillite, medium to thin bedded, rarely very thin bedded. Gen. lite green rarely dark green, locally white due to intense sericitization. Bedding plans are wavy and commonly marked by assemetrical ripples. The beds are fine grained and finely current laminated. These sediments host from 1% to 2% magnetite and locally up to 4% magnetite.

INTRUSIVE ROCK AGE UNKNOWN

Syenite Dyke ?, phaneritic, and equigranular, Consisting of approx. 70% white euhedral microcline and 30% greenish muscovite.

Gabbro Dyke, consists of dark green amphibole in a green groundmass.

Intense lite Limonite and pyrolusite flooding

Intensely Sericitized Siltstone

20 Bedding aditude, dip indicated

80 Cleavage aditude, dip indicated

60 Quartz Vein aditude, dip indicated

69 Sara Vein aditude, dip indicated. Quartz, cerussite, pyromorphite, hemimorphite, and massive chlorite.

V.F. Sara Vein Float Occurrence

Perimeter of SP-KRL Claims

519048

519022

Sara vein Inferred

Cu float

Trace of Cu Horizon

Cu in seds float

SHOWING 1

SHOWING 2

SHOWING 3

SHOWING 4

Tepee

Yahk River

True North

Magnetic North

0 250 500 750m

SCALE 1:5,000

SP-KRL

Geology Map

Scale: 1:5,000	Figure: 3
Date: February 2009	Datum: Nad 83
Mapsheets: 082G022	krl_Geology.s01