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BC Geological Survey

Assessment Report
Title Page and Summary

TYPE OF REPORT [type of survey(s)]: Mineral Claim Exploration & Development Work

TOTAL COST: $13,376.36

AUTHOR(S): Thompson, R.I., Hetherington, R., Cook, F.

SIGNATURE(S):

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

YEAR OF WORK:

STATEMENT OF WORK - CASH PAYMENTS EVENT NUMBER(S)/DATE(S): 5559461/2015/Jun/20

PROPERTY NAME: LBDL Property

CLAIM NAME(S) (on which the work was done): LBDL

COMMODITIES SOUGHT: building (dimension) stone, rock cladding, decorative slabs

MINERAL INVENTORY MINFILE NUMBER(S), IF KNOWN:

MINING DIVISION: Nelson

NTS/BCGS: 82F/04 Zone 11

LATITUDE: 49 ° 11 ' 15 " LONGITUDE: 117 ° 50 ' 19 " (at centre of work)

OWNER(S):
1) RIT Minerals (RITM) Corp.
2) Salt Spring Imaging, Ltd.

MAILING ADDRESS:
10915 Deep Cove Road,
North Saanich, B.C. V8L 5P9

128 Trincomali Heights,
Salt Spring Island, B.C. V8K 1M8

OPERATOR(S) [who paid for the work]:
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PROPERTY GEOLOGY KEYWORDS (lithology, age, stratigraphy, structure, alteration, mineralization, size and attitude):
dimension stone, cladding, quarry, gabbro, Nelson intrusions, labradorite

REFERENCES TO PREVIOUS ASSESSMENT WORK AND ASSESSMENT REPORT NUMBERS:

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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	& research	LBDL	$ 13,376.36
Photo interpretation			
GEOPHYSICAL (line-kilometres)			
Ground			
Magnetic			
Electromagnetic			
Induced Polarization			
Radiometric			
Seismic			
Other			
Airborne			
GEOCHEMICAL (number of samples analysed 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/grid (kilometres)			
Topographic/Photogrammetric (scale, area)			
Legal surveys (scale, area)			
Road, local access (kilometres)/trail			
Trench (metres)			
Underground dev. (metres)			
Other			
		TOTAL COST:	$ 13, 376.36

LBDL Property: A New Dimension Stone Prospect

Southeastern British Columbia
(Technical Event Number 5559461)

Nelson Mining Division,
British Columbia

LBDL1: 1029375
NTS 82F/04 Zone 11
UTM Zone 11, 439003E, 5448436N; 49^{o} 11' 15" N, 117^{o} 50' 19" W

By

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For

Property owners/operators:

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1.0 Summary

The LBDL Property is a new dimension stone prospect near Rossland, B.C. Quarries can be important, long term, environmentally friendly economic drivers for small communities and the distinctive coarse-crystalline gabbro, called LBDR, that characterizes the Property has the colors, textures and patterns that lend themselves to applications as building (dimension) stone and as cladding (veneer). LBDR displays the important characteristics of strength, resistance to weathering and appearance necessary to meet the durability demands for a building material meant to last for generations. Further, the size, aspect ratio and natural setting are well suited to a quarry operation.

“Building green” is an increasingly important consideration when choosing building materials. Stone provides the most durable, long-lasting “green” alternative to building products such as concrete, steel, laminated plastics and glazed glass. Stone is natural product exempt from energy intensive production processes; it is durable, totally recyclable and (significantly) outlasts other building material.

The LBDL Property (the Property) was staked on July 2, 2014 by RIT Minerals (RITM) Corp. and Salt Spring Imaging Ltd. And is located 12 km north of Rossland, B.C. A geological field reconnaissance of the Property was undertaken in 2014. The Property is considered an excellent candidate for a rock quarry to produce dimension stone, rock cladding and polished decorative slabs appropriate for counter and tabletops and as wall hangings.

Four (4) days of fieldwork were undertaken from August 18th to 21st, 2014. Further data synthesis and interpretation, and report preparation and submission were performed to December 31, 2014 for a total value of work of $13,376.36.

Access to the property was gained through selective removal of brush and downed trees along existing logging roads and trails. Samples were taken using sledge and chisel, and slabs were cut using a portable diamond cut-off saw. The borders of unit LBDR, a labradorite-bearing porphyritic gabbro dike were identified and mapped.

LBDR contains biotite phenocrysts arranged as black, elongate clusters set in a matrix of medium to dark-grey coarse-crystalline feldspar. The combination of black, linear (crystal) forms and grey equigranular (crystal) forms, provides an appealing textural contrast that is both pleasing to the eye and unusual. Flashes of vivid blue and green laminated iridescence emanate from crystals of labradorite scattered throughout the feldspar matrix.

LBDR has structural properties well-suited to building and exterior wall cladding, and to interior decorating when polished. Outcrops are coherent and break along irregular crystal boundaries; sawing produces coherent slabs; fractures are rare and there is no penetrative or closely spaced fracture system; exposed surfaces are resistant to weathering.

2.0 Introduction and Terms of Reference

The LBDL Property (the Property) comprises ine claim encompassing 84.45 hectares. The mineral cell titles were acquired online and as such there are no posts or lines marking the location of the Property on the ground.

The Property was staked on July 2, 2014 by RIT Minerals (RITM) Corp. and Salt Spring Imaging Ltd. (Table 3.1, Figs. 3.1 and 3.2). This claim is within the Nelson Mining Division. The Property is owned 66% by RIT Minerals (RITM) Corp and 34% by Salt Spring Imaging, Ltd., British Columbia.

This report is a statement of geological examination activities undertaken between July 2, 2014 and December 31, 2014.

2.1 Terms of Reference

No fees were paid to the authors, and the preparation of this Technical Report is not dependent in whole or in part on any prior or future engagement. The claim for work done is in accordance with industry standards for work of this nature.

All of the figures in this report were prepared by, or under the direction of, the authors or adapted from previous figures prepared by, or under the direction of, the authors. Sections of the report that describe regional-, local- and property-scale geology rely on either fieldwork undertaken by the authors or information available in published reports.

Included in this report are a description of the general geological setting of the Property, interpretation and reinterpretation of geological relationships, work completed in 2014, conclusions and an evaluation of the merits of the Property, as well as a statement of costs. Reports reviewed by the authors are listed in the reference section at the end of this report.

The authors are familiar with the LBDL Property having spent a combined 4 days in 2014 exploring, evaluating and taking samples.

All measurement units used in this report are metric. The coordinate system in use on the Property and on all maps is UTM zone 11 (NAD83).

2.2 Abbreviations and Acronyms

In addition to the use of standard chemical element symbols, the following includes a list of frequently used acronyms and abbreviations:

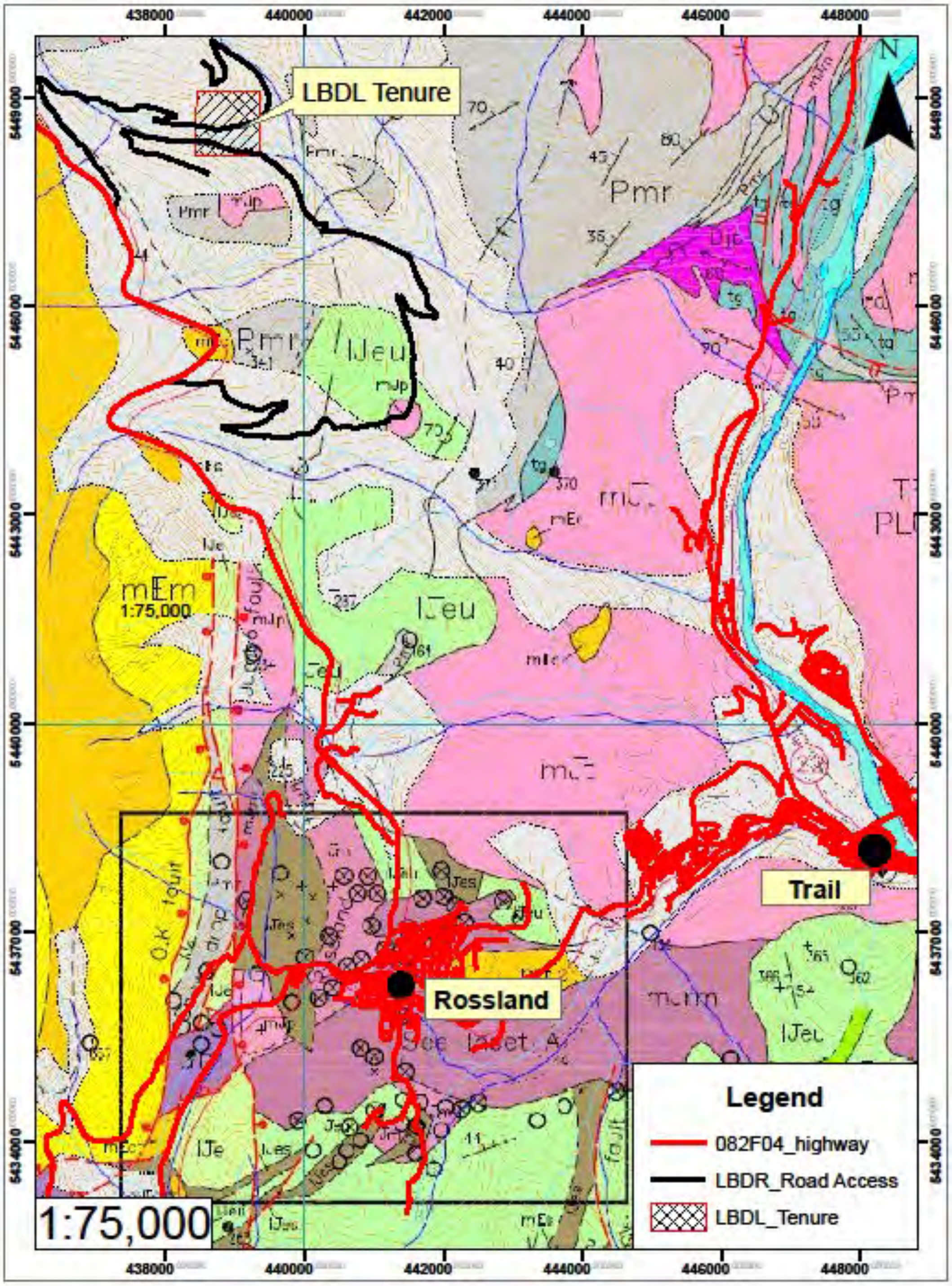
cm: centimetre
g/t: grams per tonne
kg: kilogram
km: kilometer
m: metre
masl: metres above sea level
mm: millimeter
ppb: parts per billion
ppm: parts per million (34.286 ppm equals one troy ounce per short ton)
tonne: metric ton (1000 kg)

3.0 Mineral Tenure Description and Location

The LBDL Property is located approximately 5 km east of highway 3B, and approximately 12 km north of the town of Rossland in south-central British (Fig. 3.1. The Property is centered at: UTM Zone 11, 439003E, 5448436N; 49^{o} 11' N, 117^{o} 50' W, within NTS map sheet 82F/04 (82F.011). The property encompasses 800.4 hectares (Table 3.1; Figs. 3.1 - 3.3).

Table 3.1: Description of the LBDL mineral title.

Tenure Number	Good-to Date	Claim Name	Owner	Area (Hectares)
1019375	July 1, 2018	LBDL	RITM & SS Imaging	84.45


LBDL Tenure
Rossland
Trail
1:75,000
Legend
082F04_highway
LBDR_Road Access
LBDL_Tenure
438000
440000
442000
444000
446000
448000
5449000
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5443000
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Pmr
lJeu
mEm
N

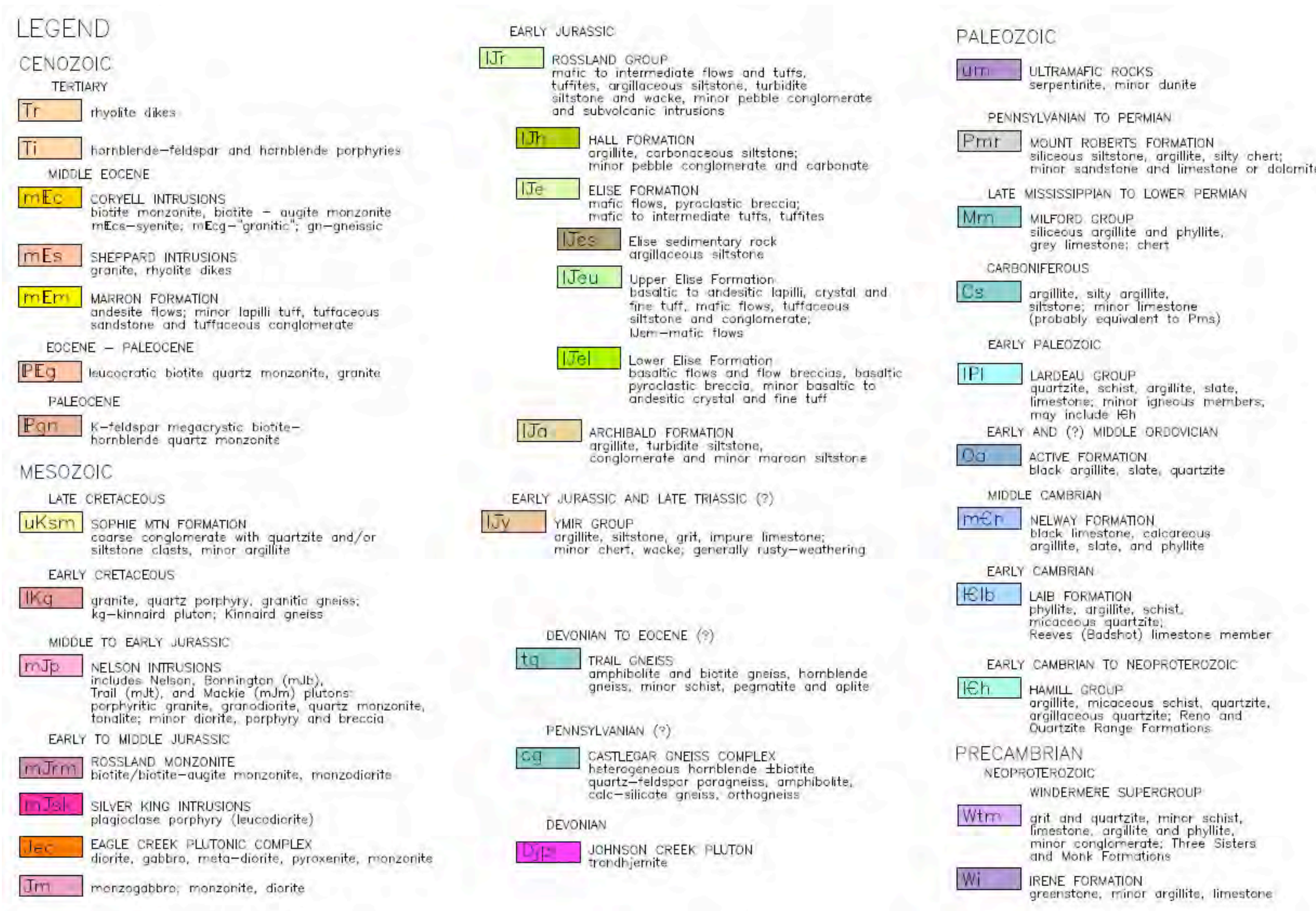

Figure 3.1: Geological map and legend (Höy and Dunne, 1989) of the Rossland-Trail area showing the location of LBDL Property about 12 km north of Rossland. The LBDL Property is located within an unmapped part the Mount Roberts Formation (Pmr) just north of Nelson Intrusions (mJp). Earlier mapping by Little (1960) shows LBDL partially underlain by Nelson Intrusions (ref. Fig. 6.2).

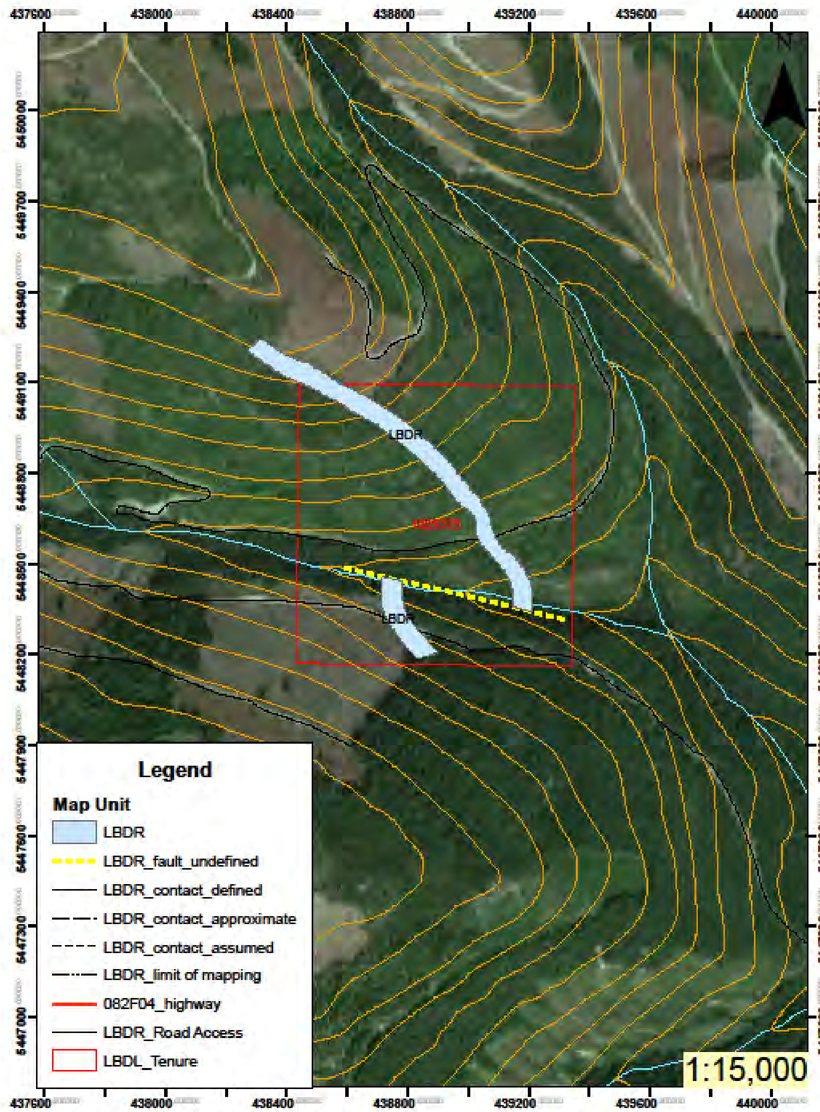

Figure 3.2: LBDL Property tenure located relative to local topography, drainage, road access and geology. The map unit LBDR is a late, dike-like intrusion into granodiorite belonging to the Nelson Intrusions (Fig. 3.1 above).

Figure 3.3: View to the north, across the headwaters of Murphy Creek (ref. Figs. 3.1, 3.2), of LBDL Property. Grey outcrop in trees at centre-right is an exposure of map unit LBDR. The forest cover consists of closely-spaced second growth spruce, sub-alpine fir, cedar and hemlock. The dike is intermittently exposed along its length and can be traced from the clear-cut at the upper left to below the road at the centre-right.

4.0 Accessibility, Climate, Local Resources, Infrastructure and Physiography

Maps showing up-to-date road access for the region are available from Front Counter BC located in the Provincial Forest Services office in Castlegar, B.C. The road and trail systems within the LBDL Property area are illustrated in Figures 3.1 and 3.2.

The northern half of the Property can be accessed from Highway 3B at a turnoff 15 km north of Rossland onto logging haul roads that access the headwaters of Murphy Creek drainage (Figs. 3.1 and 6.2). The southern half of the Property is accessed from Highway 3B at a turnoff 11.2 km north of Rossland onto logging haul roads that access the headwaters of Hanna Creek drainage.

Rossland is the nearest town and Trail is the nearest major logistical centre where material and services adequate to explore the property can be found (Fig. 3.1). Personnel with heavy equipment, exploration and mining experience are locally available.

The climate is temperate and agreeable. More than 2 m of winter snow accumulates at upper elevations and the property is typically snow covered from late October until early May.

The area is part of the Okanagan Highlands, which are bounded on the west by the Thompson Plateau (west of the Okanagan Valley) and on the east by the Selkirk Mountains (east of the Columbia River Valley; Fig. 6.1). Several deeply incised east-flowing rivers (e.g. China, Murphy and Hanna creeks) dissect the area, resulting in locally steep relief. The Property ranges in elevation between 1100 m and 1480 m; Murphy Creek is deeply incised near its channel, but topography broadens outward into moderately steep slopes (Figs. 3.2, 3.3 and 6.2).

Much of the area is covered by glacial overburden. Vegetation may be dense. About 30-year old 2nd (or 3rd) growth trees cover the Property north of Murphy Creek; a combination of recent clear-cut logged areas abutting mature growth forest characterizes the Property south of Murphy Creek (Fig 3.2). Dominant tree species include: Interior Douglas Fir (*Pseudotsuga* menziesii), Subalpine fir (*Abies lasiocarpa*), Engelmann Spruce (*Picea engelmannii*), pine, and Western Hemlock (*Tsuga heterophylla*); juniper, alder and Western Red Cedar (*Thuja* plicata) are less common.

5.0 Exploration History and Metallogeny

There are no on-going quarry operations in the Rossland area. Building stone was used, sparingly, during early construction in the town; however, we are not aware of any significant historical quarry operation that provided building stone or rock cladding to a regional market. However, Rossland has a rich mining history that focused on recovery of base- and precious-metals. The LBDL Property is located a few km north from where most of the historical mining activity took place (Figs. 5.1a and 5.1b).

This brief synopsis relies upon excellent discussions of the geology, mineral occurrences and metallogeny of the Rossland-Nelson region by Höy and Dunne (1997, 2001) and the reader is referred to these publications for detailed descriptions, analyses and interpretations.

The historical Rossland mining camp contains a variety of mineral deposits and numerous past producers. Mineral exploration, development and production were the economic engine that led directly to settlement and growth of the region.

More than 2.76 M oz of gold, 3.52 M oz of silver and 71,502 kg of copper were produced between 1894 and 1941 from a suite of copper and gold bearing veins. As such, Rossland is the second largest lode-gold producing camp in British Columbia. The vein deposits form three belts – North, Main and South (Figs. 5.1a and 5.1b) and are parallel to, and within, numerous diorite porphyry dikes that extend, at depth, into the main mass of the Rossland monzonite (map unit mJrm, Fig. 5.1b). Preferred orientation of veins together with prominent shearing within and along vein margins suggest strong structural control on vein emplacement. West-side-down tilting during Eocene extensional faulting has tilted the vein complex such that the depth of vein exposure (structural level) increases eastward (oblique section).

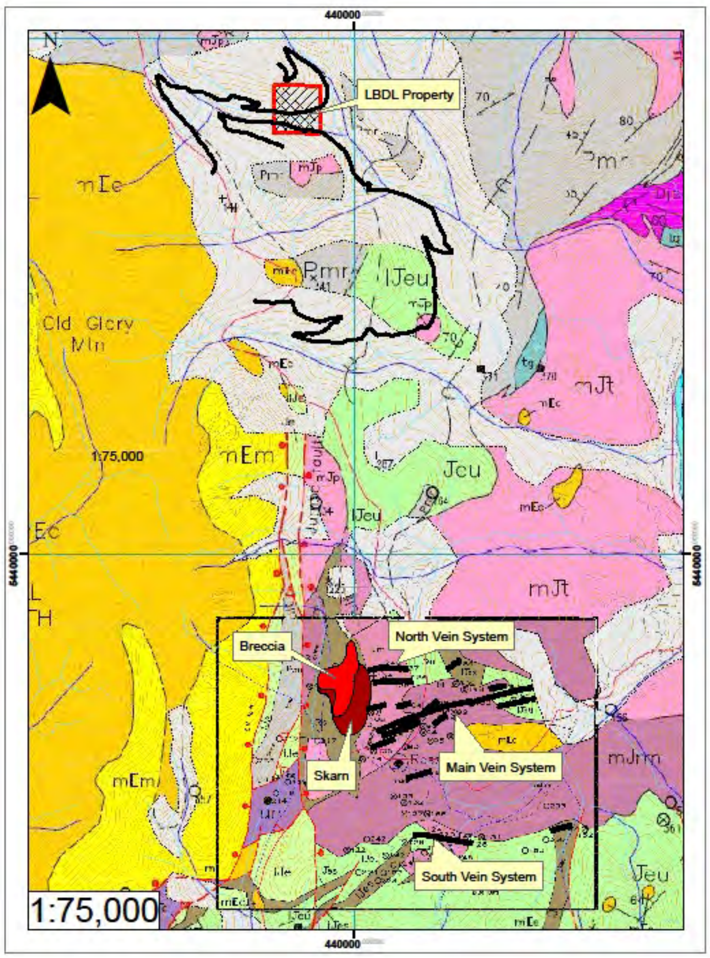

Figure 5.1a: Mineral producing gold-copper veins as well as skarn and breccia hosted deposits of the "Rossland Camp" shown in relation to the LBDL Property.

Mineralization in the Rossland camp also includes molybdenite deposits. Molybdenite and scheelite occur within a skarn-intrusive breccia complex on the western slopes of

Red Mountain west of and structurally above the gold-copper veins of the Rossland camp (Fig. 5.1b). The breccia complex is largely developed in fine-grained metasedimentary rocks of the Elise Formation, but is also intimately associated with quartz diorite breccia dikes.

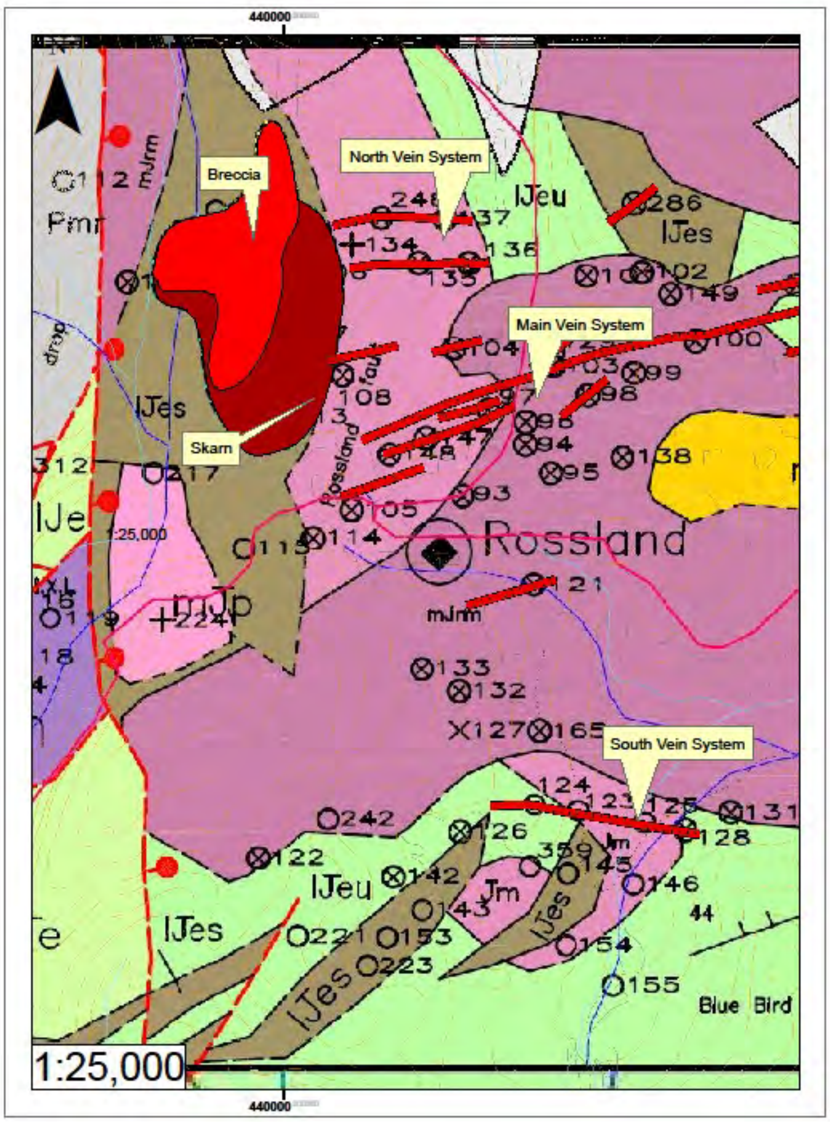

Figure 5.1b: Detailed map showing the distribution of vein, skarn and breccia-hosted deposits in the Rossland area. Details for each showing and deposit (circles with and without an x) are provided in Höy and Dunne, 2001.

A number of high-grade gold-quartz veins are known from just west of Rossland in the Sheep Creek valley and on the eastern slopes of O.K. Mountain (Fig. 5.1b).

Detailed geology together with age-dating better define the genetic and temporal relationships between deposit-types. The *ca*. 167 Ma Rossland monzonite and associated porphyritic diorite dikes provided space and metal-rich fluids for copper-gold vein systems. Molybdenite mineralization followed approximately 5 my later with emplacement of brecciated quartz diorite dikes dated at *ca*. 163 Ma and skarn alteration dated by Re-Os at *ca*. 163 Ma.

The LBDL Property is located north of the main zones of mineralization associated with the Rossland camp (Fig. 5.1a), and the resource there is a unique intrusive rock having mechanical and textural characteristics suitable for building and decorative purposes. We view this as a new potential resource having positive economic implications for Rossland and Trail.

6.0 Geological Setting

The LBDL Property is located within the 1:250,000 Nelson map area (NTS 82F). This first comprehensive map for the western half of the Nelson sheet was published by Little in 1960. A more detailed geological map was compiled and published by Höy and Dunne (1998; Fig. 3.1).

Location of LBDL Property relative to fundamental geological elements of the region is shown in Figure 6.1, the Tectonic Assemblage Map of the Canadian Cordillera (Wheeler and McFeely, 1991). The region is dominated by Jurassic, Cretaceous and Eocene plutonic rocks. This igneous complex intrudes 'basement' metaplutonic and metasedimentary rocks of probable Proterozoic age as well as a succession of mainly Middle and Upper Paleozoic and Triassic rocks having a diverse range of compositions including amphibolitic schist, serpentinite, chert, limestone, volcanic rocks and argillite. This succession, which includes the Anarchist Group, Knob Hill Complex and Nicola (Rossland) Groups, among others, occurs as screens, septa and 'foundered' blocks. In the Greenwood area are thin detached sheets of Upper Paleozoic ultramafic and serpentanite (Fyles, 1990) interpreted as remnants of an imbricated Devonian-Carboniferous to Permian ophiolite complex (Höy and Dunne, 1997; Dostal *et a*l., 2001; Massey, 2006) active prior to mid-Jurassic intrusion.

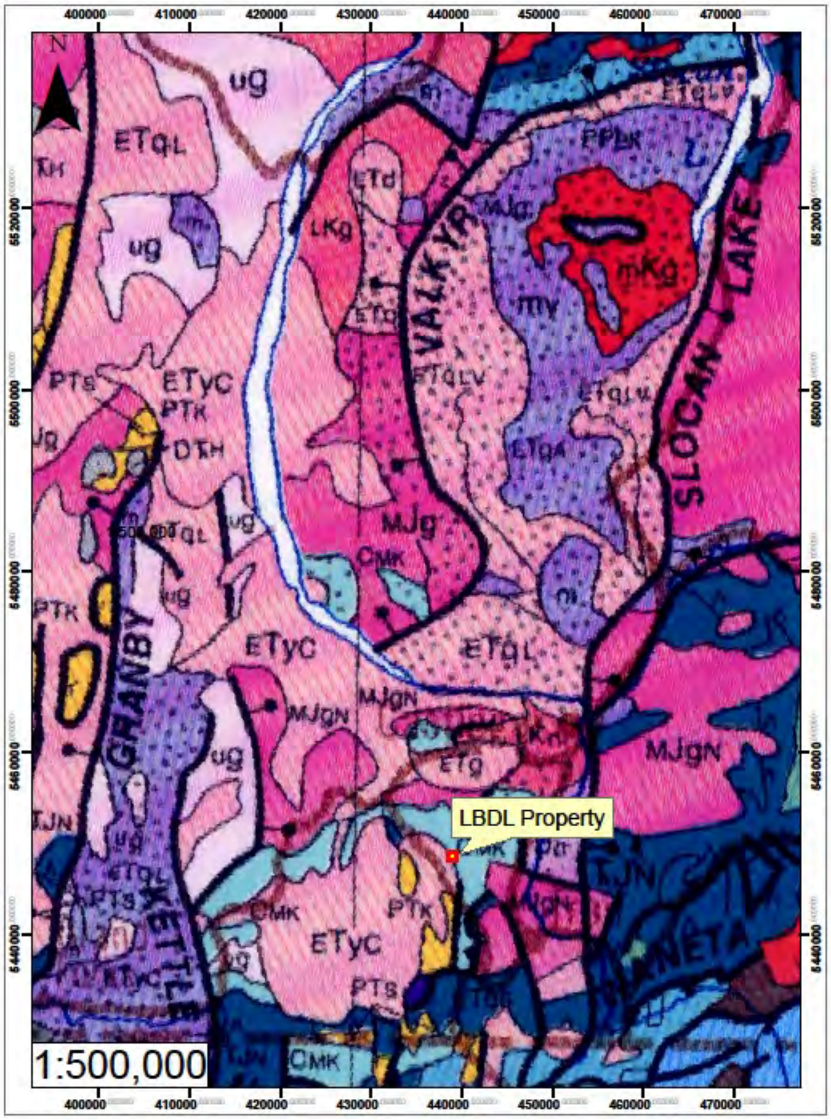

Figure 6.1: Location of LBDL Property relative to the major geological elements of south central British Columbia (Wheeler and McFeely, 1991). Major rock units include the following: eTyC _ Eocene CORYELL PLUTONIC SUITE; PTk _ Eocene MARRON FORMATION; ug _ Cretaceous OKANAGAN BATHOLITH; mJG _ NELSON PLUTONIC SUITE; TJn_NICOLA (Rossland, Slocan) GROUP; Cmk _ Upper Paleozoic MOUNT ROBERTS FROMATION; My _ undivided metamorphic rocks.

The region underwent lateral (east-west) extension during the Tertiary contemporaneous with Eocene intrusion and volcanism (Coryell Plutonic suite and extrusive equivalents). The Granby, Kettle, Valkyr and Slocan Lake faults are major antithetic extensional faults interpreted to have accommodated crustal extension. According to Höy and Dunne (2001), Eocene extension faulting tilted the Rossland copper-gold vein systems (Fig. 5.1b) downward to the west, thereby exposing an oblique section of the mineralized systems.

The Property is underlain by the Nelson Plutonic Suite, a lithologically diverse, magmatically complex and regionally extensive Middle Jurassic intrusions dominated by rocks of dioritic composition (Fig. 6.1).

6.1 Property Geology

The Property is underlain by the Nelson Plutonic Suite, which forms a discrete, small intrusion of diorite in (unmapped) siltstone, argillite, chert and minor sandstone and limestone belonging to the Pennsylvanian and Permian Mount Roberts Formation (Figs. 3.1 and 6.2). Early reconnaissance mapping by Little (1960; Fig. 6.2) shows diorite underlying most of the Property; a later compilation map by Höy and Dunne (2001) shows diorite south of the Property with presumed Mount Roberts formation sedimentary rocks underlying it. Our geological reconnaissance of the area confirms both maps, salt-and-pepper textured granodiorite typical of the Nelson suite occurs north and south of Murphy Creek and underlies all of the Property.

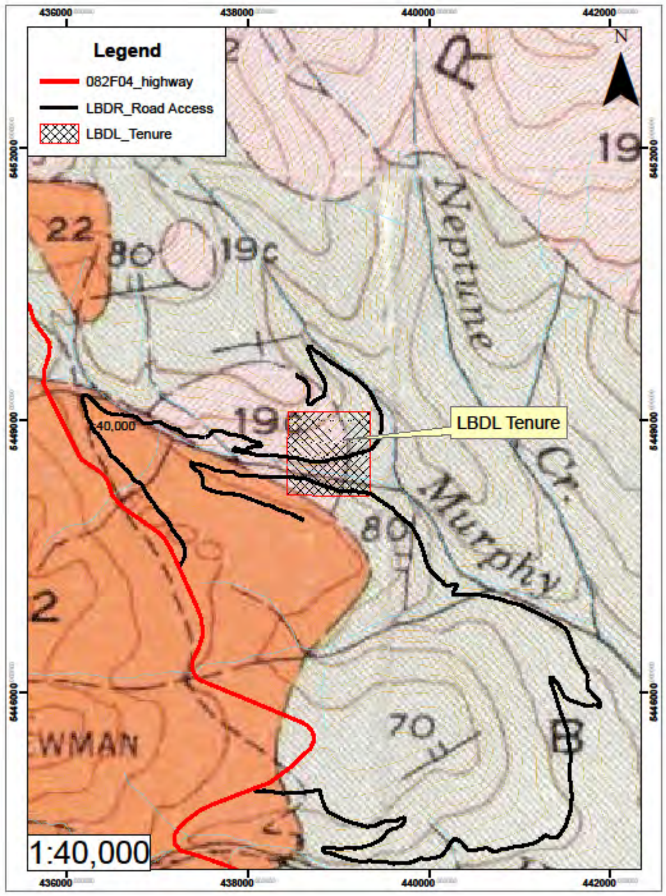

Figure 6.2: Geology of LBDL Property taken from Little (1960) and provided as a geo-referenced map superposed on the LBDL Property tenure map. Geological map units are the following: unit 22_Eocene CORYELL PLUTONIC ROCKS, porphyritic monzonite, syenite, shonkinite; unit 19c_NELSON PLUTONIC ROCKS, granodiorite; unit B _unassigned age (now assigned to Upper Paleozoic MOUNT ROBERTS FORMATION, ref. Fig. 3.1), argillite, argillaceous quartzite, greywacke

7.0 Work Completed in 2014

Stone quarries can be important economic drivers for small communities, especially those with a rich mining history like Rossland, B.C. The LDBL Property is underlain by a distinctive coarse-crystalline gabbro (map unit LBDR) having colors, textures and patterns that lend themselves to applications as building (dimension) stone and as cladding (veneer). The gabbro displays the important characteristics of strength, resistance to weathering and appearance necessary to meet the durability demands for a building material meant to last for generations. And, the size, aspect ratio and natural setting of LBDR are well suited to a quarry operation.

"Building green" is an increasingly important consideration when choosing building materials. Stone provides the most durable, long-lasting "green" alternative to building products such as concrete, steel, laminated plastics and glazed glass. For example, it is a totally natural product exempt from energy intensive production processes that carry the risks of significant air and water pollution; stone processing produces no toxic materials; water is recycled during processing, making it a perpetual resource; dimension stone is totally recyclable; and it (significantly) outlasts other building materials.

The purpose of 2014 fieldwork was to investigate the access to, and nature and geological characteristics of LBDR.

7.1 Access

Good quality, seasonal, gravel haul roads provide excellent access to the Property. The area north of Murphy Creek, which contains the best and most continuous rock exposures, is 5.8 km by road from highway 3B (Fig. 6.2). This road is suitable for large, heavy trucks and the heavy equipment required for quarry operations; the roads could be kept open year-around if snow were plowed. Active logging in the area means arterial haul roads will be kept in good condition.

Access to the southern portion of the property is via logging roads that enter the upper reaches of Hanna Creek; they branch and connect northward into the Murphy Creek drainage (Fig. 6.2).

Some "brushing" and removal of downed trees was required near the Property; however, roadbeds and bases are in good condition.

7.2 Geology

LBDR is the interior portion of a dike-like "gabbro" that intrudes medium grey granodiorite belonging to Nelson Plutonic Suite. The granodiorite host is typical of the Nelson suite, and consists of equigranular, hypidiomorphic (mainly subhedral) biotite, hornblende, plagioclase and quartz exhibiting a salt-and-pepper texture. The dike is resumed to be a later stage more mafic intrusion because its composition is consistent with Nelson Suite rocks (Little, 1960), and its glomeroporphyritic texture is a Nelson-type texture.

The dike consists of at least two phases, a border phase of unknown width consisting of black, fine- to medium crystalline, hornblende-pyroxene ± biotite porphyry, and an interior phase named LBDR which is glomeroporphyritic—loose amalgamations of, in this case, biotite crystals highlighted by labradorite crystals in a dark grey matrix. The border phase, though structurally competent, was not a focus of the current work and is not, for now, included in this appraisal of LBDR. The contact between the border phase and the more common salt-and-pepper Nelson diorite was not observed.

Mineralogy, Color, Texture, Pattern and Durability

LBDR contains biotite phenocrysts arranged as black, elongate clusters set in a matrix of medium to dark-grey coarse-crystalline feldspar. The combination of black, linear (crystal) forms and grey equigranular (crystal) forms provides an appealing textural contrast that is both pleasing to the eye and unusual. Flashes of vivid blue and green laminated iridescence emanate from crystals of labradorite scattered throughout the feldspar matrix. These textural features are well displayed on slabbed as well as naturally broken surfaces (Figs. 7.1a and 7.12b). The distribution of biotite phenocrysts is random; linear forms sometimes radiate, or they may be interspersed with blocky forms in random patterns. Sutured edges and irregular crystal form combine into produce interesting and unpredictable geometric patterns.

LBDR is very resistant to weathering. Surfaces that have been exposed for 100's of years show little evidence of change from their freshly broken or glacially polished antecedents. Neither feldspars nor micas show evidence of mineralogical breakdown. This durability is both striking and desirable.

Figure 7.1a: Slabbed sample of LBDR showing porphyritic texture defined by elongate clusters of biotite crystals (black) and highlighted by iridescent reflections from labradorite within the dark grey feldspar matrix.

Figure 7.1b: Fresh, broken surface of LBDR showing the distinctive porphyritic texture reflective coloring of feldspar in the matrix. Surfaces are created by breaking along crystal boundaries, not fractures.

Figure 7.2a: Outcrop exposure of LBDR showing competent, glacially-induced rounding without obvious flaws caused by surface weathering. Sledge for scale, saw cuts at base.

Figure 7.2b: Close-up surface image of figure 7.2a showing the fresh surface character of LBDR with mineralogical textures and patterns preserved. The weathered surfaces are slightly lighter in color than freshly broken surfaces.

Size, Orientation and Internal Structural Coherence

LBDR is consistently 60 m wide and has a minimum, continuous strike length of 900 m (Fig. 7.3) for a minimum surface area of 54,000 m². It is sub vertical in aspect and

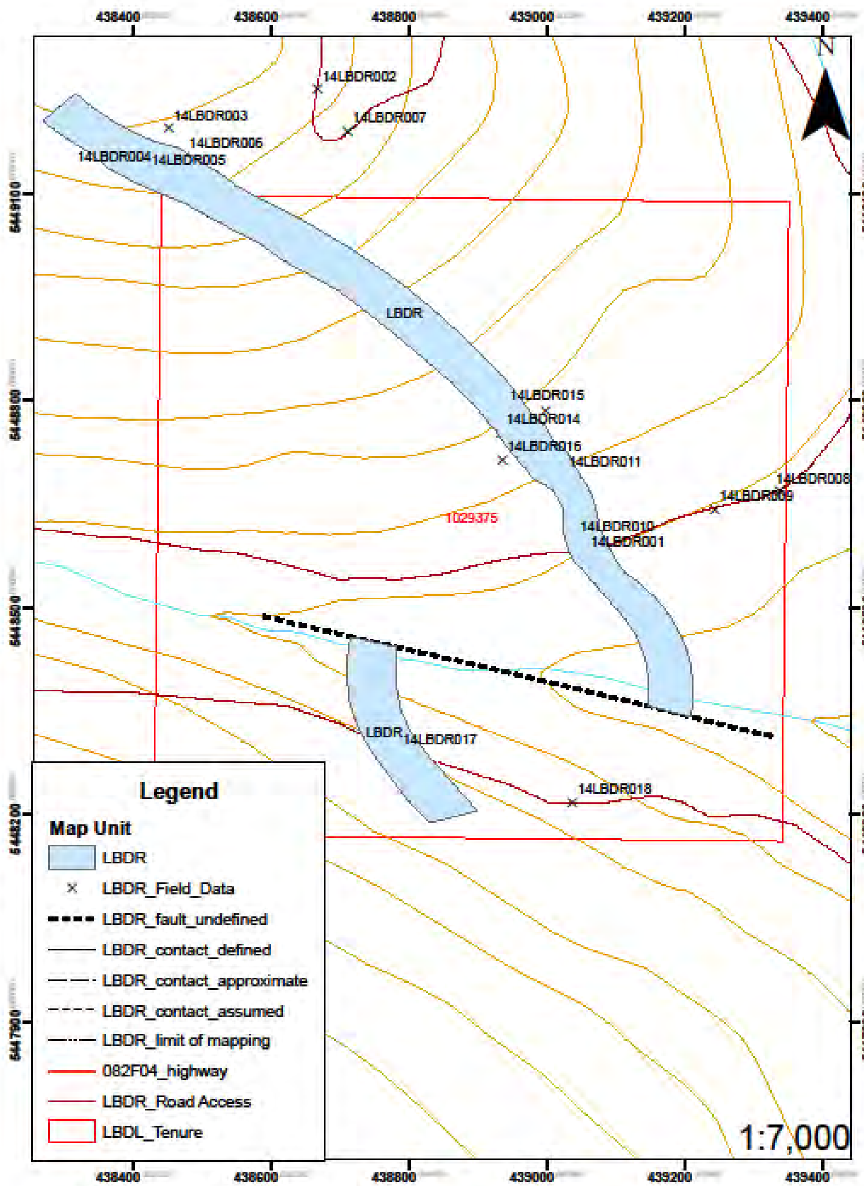

Figure 7.3: Geologic map of LBDR. The unit is consistently 60 m wide and has a minimum uninterrupted strike length of 900 m for a minimum surface area of 54,000 m².

has a rectilinear pattern with respect to topography. Hence, a number of natural cliffs and benches are formed along strike. Since topography is moderate, constructing access to benches would be a simple matter (Fig. 7.4). Table 7.1 provides a summary of observational coordinates and field observation.

Figure 7.4: Natural outcrop of LBDR located 185 m uphill from main access road. The elevation differential between outcrop and road is approximately 65m.

Table 7.1: Table of field station coordinates and observations.

UTM_X	UTM_Y	Elevation	StationID	Map Unit	Rock Type	Notes	Sample Note
439057	5448581	1200	14LBDR001	LBDR	Megacryst biot-gabbro	Roadside exposure	Slabs sawn; sampled with sledge
438668	5449252	1451	14LBDR002	LBDR	Megacryst biot-gabbro	outcrop in road	
438452	5449194	1476	14LBDR003	QzDt	Hblnd diorite	salt and pepper text	
438386	5449135	1464	14LBDR004	LBDR	Megacryst biot-gabbro	v large boulder?	Sampled with sledge
438420	5449131	1461	14LBDR005	LBDR	Megacryst biot-gabbro	v large boulder?	Sampled with sledge
438475	5449154	1469	14LBDR006	LBDR	Megacryst biot-gabbro	cluster of boulders?	
438712	5449191	1436	14LBDR007	FCGb	Fine-xlline gabbro	border phase; lbdr?	
439338	5448669	1198	14LBDR008	FCGb	Fine-xlline gabbro	olivine xeocrysts	
439244	5448643	1196	14LBDR009	FCGb	Fine-xlline gabbro	end of o/c of fine-xlline phase	
439042	5448598	1217	14LBDR010	LBDR	Megacryst biot-gabbro	upslope continuation	
439025	5448718	1260	14LBDR011	LBDR	Megacryst biot-gabbro	east side of cliff exposure	
438986	5448743	1282	14LBDR012	LBDR	Megacryst biot-gabbro	on promitory; solid o/c	
438999	5448784	1283	14LBDR013	LBDR	Megacryst biot-gabbro	at cliff edge, east side = boundary	
438935	5448754	1293	14LBDR014	LBDR	Megacryst biot-gabbro	at cliff edge, west side = boundary	
438940	5448790	1299	14LBDR015	LBDR	Megacryst biot-gabbro	northern limit of cliffs and open treed exposure - likely continues to N	
438936	5448714	1279	14LBDR016	LBDR	Megacryst biot-gabbro	at W limit in marginal, med xll phase with large biotites and lighter fldsp; part of dike but not included in resource	
438785	5448291		14LBDR017	LBDR	Megacryst biot-gabbro	Large, blasted boulder of typical LBDR	
439038	5448218		14LBDR018	FCGb	Medium-crsl gabbro	Border phase of LBDR	

Samples were taken using a sledge and a gas-powered diamond cut-off saw (Fig. 7.5a and 7.5b). In both instances, samples were easily obtained, remained coherent, did not subsequently fracture or otherwise disintegrate due to handling (Fig. 7.5c). Although widely spaced fractures occur, they have no regular pattern and appear, for the most part, to be near-surface exfoliation-type features (7.5d). On the whole, LBDR is internally coherent, does not fracture easily, and would, we presume, pass any strength (compression) test regardless of the orientation of applied stress axes (Fig. 7.6).

Figure 7.5a: Extracting sawn slab using hammer and chisels.

Figure 7.5b: Two cm thick slab retrieved without internal breakage.

Figure 7.5c: Example of internal competency of blasted (roadside) blocks. Most breaks are irregular and along crystal faces.

Figure 7.5d: Natural exposure of cliffs in LBDR showing surface parallel exfoliation-type joints, rounded edges, and irregular blocky character, indications of structural integrity.

Figure 7.6: Roadside exposure of LBDR showing overall competence, internal homogeneity, resistance to weathering, and overall structural integrity. The 1.5 m long sledge handle provides scale and saw cuts are present at bottom right of the exposure. Based on these observations we surmise that LBDR would pass any tri-axial compression strength tests required for approval as building stone.

8.0 Conclusions

LBDR is the internal portion of a gabbroic dike belonging to the Nelson Plutonic Suite. It combines color, texture and pattern appropriate for dimension and decorative stone, it is resistant to weathering degradation, and has the internal structural coherence necessary for trimming and or cutting to specific sizes and shapes. It breaks along crystal boundaries, does not contain a preferred fracture set, and has the isotropic qualities sought-after in building and cladding stone.

The dike has a continuous strike length in excess of 900 m, and a consistent width of 60 m for a total minimum surface exposure of 54,000 m^2. It has a vertical dip, trends perpendicular to a moderate slope, and is well situated for quarrying purposes.

Unlike Norwegian labradorite-bearing rocks, LBDR has a more interesting textural arrangement of porphyritic crystals and a contrasting black on grey color scheme well suited to contemporary tastes.

Access is simple and straightforward off highway 3B on excellent, all-weather logging haul roads. Logistical resources are readily available from the nearby towns of Rossland and Trail.

The Property is close to the major Vancouver and Calgary markets, to major U.S. cities such as Spokane and Seattle in the northwestern U.S.

9.0 References

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10.0 Statement of Costs

LBDL Property – LBDL
(August 17, 2014 – December 31, 2014)

Technical Field Personnel & Expenses (August 18-21, 2014)		
R. Hetherington (4.0 days: Aug 18-21/14 @ $800/day)	3,200.00	
R.I. Thompson (4.0 days: Aug 18-21/14 @ $800/day)	3,200.00	
Total Field Personnel	$ 6,400.00	
Employment-related fees & insurance (5% of labour)	320.00	
Total Field Personnel expenses	$ 6,720.00	
Field living expenses	$ 604.88	
Field equipment rental	150.00	
Field travel & accommodation	40.20	
Office & business expense	147.79	
Vehicle mileage, rental & fuel expense	1,028.75	
Total Field expenses	$ 1,971.62	
Total Personnel & Field expenses		*$ 8,691.62*
Office, Data Interpretation & Reporting		
F. Cook (0.5 days @ $800/day)	$ 400.00	
R. Hetherington (1.5 days @ $800/day)	1,200.00	
R.I. Thompson (1.5 days @ $800/day)	1,200.00	
Total Office Personnel	$ 2,800.00	
Employment-related fees & insurance (5% of labour)	140.00	
Total Office Personnel expenses	$ 2,940.00	
Total Office, Data Interp. & Reporting		*$ 2,940.00*
Sub-total		***$ 11,631.62***
15% administration fee		$ 1,744.74
Total May 4, 2014 – December 31, 2014 expenses		**$ 13,376.36**
Total amount applied		**$ 1,689.07**

11.0 Statement of Qualifications

I, **Robert I. Thompson**, do hereby certify that:

I attained the degree of Doctor of Philosophy (PhD) in geology from Queens University, Kingston, Ontario in 1972.

I have a Hon. B.Sc. in geology from Queens University, Kingston, Ontario (1968). I am a registered member of the Association of Professional Engineers and Geoscientists of British Columbia (P.Eng. 1972).

I am a Fellow of the Geological Association of Canada.

I have worked as a geologist for a total of 38 years since my graduation from university, all of it in the Canadian Cordillera.

I have worked for the BC Geological Survey (1972-74) and the Geological Survey of Canada (1974-2007) and now act as an independent consultant (2007-present). I acted as a consultant to the Petroleum Department of the Bolivian Government (1990) under the auspices of PCIAC (Petro Canada International Aid Corp).

I have a thorough knowledge of the geology of southern British Columbia based on extensive field mapping.

I have authored numerous scholarly publications in peer-reviewed journals, and have published or am preparing to publish 32, 1:50,000 scale geological maps of Lardeau (NTS 82K) and Vernon (NTS: 82L) areas.

I am a co-author of this report.

I am not aware of any material fact or material change with respect to the subject matter of this report, which is not reflected in this report.

“signed and sealed” at North Saanich, B.C.

Robert I. Thompson, PhD, P.Eng

RIT Minerals Corp
10915 Deep Cove Rd., North
Saanich, B.C.

Dated at North Saanich, B.C., this 15th day of September, 2015

Reg. No. 115741
Association of Professional Engineers and Geoscientists of British Columbia

I, **Renée Hetherington**, do hereby certify that:

I attained the degree of Doctor of Philosophy (PhD) in interdisciplinary studies (anthropology, biology, geography and geology) from University of Victoria, Victoria, British Columbia in 2002.

I obtained an SME Enterprise Board Effectiveness Program from Univ. of Toronto (2012)

I have a Masters in Business Administration from the University of Western Ontario, London, Ontario (1985).

I have a B.A. in Business Administration from Simon Fraser University, Burnaby, British Columbia (1981).

I am a member of the Geological Association of Canada.

I was co-leader of International Geological Correlation Program (IGCP) Project 526 "Risks, Resources and Record on the Continental Shelf (2007-2011).

I was Canadian co-leader of IGCP Project 464 from 2003-2007.

I was a SSHRC Research Postdoctoral Fellow at the University of Victoria, School of Earth and Ocean Sciences (2005-2007).

I was Research Associate for Dr. Andrew Weaver, University of Victoria, Climate Modelling Group (2003-2007).

I have been a field assistant and volunteer for the Geological Survey of Canada (1996-2008; 2011-present)

I now act as an independent consultant (2007- present).

I acted as a consultant to the Ministry of Agriculture, Cattle Industry Development Council of British Columbia (1994-1995).

I was Executive Director, Finance and Research & Development, BC Cattlemen's Association (1992-1994).

I was a member of the Executive Council, Cattle Industry Development Council of British Columbia, BC Ministry of Agriculture (1992-1994).

I was Financial and Systems Analyst for Lever Bros. A & W Canada (1985-1986).

I have authored numerous scholarly publications in peer-reviewed journals, and have recently co-authored an academic text published by Cambridge University Press: *The Climate Connection* (2010) and authored *Living in a Dangerous Climate* (2012) also by Cambridge University Press.

I am a co-author of this report.

I am not aware of any material fact or material change with respect to the subject matter of this report, which is not reflected in this report.

"signed and sealed" at North Saanich, B.C.

Renée Hetherington, PhD, MBA
RIT Minerals Corp
10915 Deep Cove Rd., North Saanich, B.C.

Dated at North Saanich, B.C., this 15th day of September, 2015

I, **Frederick A. Cook** do hereby certify that:

I attained the degree of Doctor of Philosophy (Ph.D.) in geophysics from Cornell University in Ithaca, New York in 1981.
I have a B.Sc. in geology (1973) and an MSc. in Geophysics (1975) from the University of Wyoming in Laramie, Wyoming.
I am a registered member of the Association of Professional Engineers and Geoscientists of British Columbia (P. Geo. 2009). Previously, from 1984-2009, I was registered with the Association of Professional Engineers, Geologists and Geophysicists of Alberta as both a P. Geol. and a P. Goph.
I am a member of the American Geophysical Union and the Geological Society of America.
I have worked as a geophysicist/geologist for a total of 36 years since my graduation from university.
I have worked for the Continental Oil Company (1975-1977) and the University of Calgary (1982-2010).
I was the Director of the Lithoprobe Seismic Processing Facility at the University of Calgary from 1987-2003.
I have recently (2011) been appointed an International Consultant for the Chinese SinoProbe project.
I have a thorough knowledge of the geology and geophysics of southern British Columbia based on extensive geological and geophysical fieldwork.
I have authored more than 125 scholarly publications in peer-reviewed journals and books.
I am one of the authors of this report.
I am not aware of any material fact or material change with respect to the subject matter of this report, which is not reflected in this report.

“signed and sealed” at Salt Spring Island, B.C.

Frederick A. Cook, P. Geo.
Salt Spring Imaging, Ltd
128 Trincomali Heights
Salt Spring Island, B.C. V8K1M8

Dated at Salt Spring Island, B.C. this 15th day of September, 2015

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