

### ASSESSMENT REPORT TITLE PAGE AND SUMMARY

TITLE OF REPORT: Report of Satellite Based Structural Analysis

#### TOTAL COST: \$4200

AUTHOR(S): Farshad Shirvani Jonathan Pokotylo SIGNATURE(S):

NOTICE OF WORK PERMIT NUMBER(S)/DATE(S): Event no 4805608 STATEMENT OF WORK EVENT NUMBER(S)/DATE(S):

YEAR OF WORK: 2010-2011 PROPERTY NAME: Reliance

CLAIM NAME(S) (on which work was done): Golden 1 (661487)

#### COMMODITIES SOUGHT: Gold, Copper

MINERAL INVENTORY MINFILE NUMBER(S), IF KNOWN:

MINING DIVISION: Lillooet NTS / BCGS: 92-J-15W LATITUDE: 50° 50' LONGITUDE: 122° 43' (at centre of work) UTM Zone: Zone 10 EASTING: 519000m E NORTHING: 56410000m N

OWNER(S): Farshad Shirvani

MAILING ADDRESS: 310-675 West Hastings St Vancouver BC, V6B 1N2

OPERATOR(S) [who paid for the work]: As Above

MAILING ADDRESS: As Above

REPORT KEYWORDS (lithology, age, stratigraphy, structure, alteration, mineralization, size and attitude. **Do not use abbreviations or codes**) Bender granodiorite intruded into late Paleozoic/mid-Mesozoic formations, mostly argillites, cherts, and limey rocks. Dominant fractions follow Cordilleran northwest trends

REFERENCES TO PREVIOUS ASSESSMENT WORK AND ASSESSMENT REPORT NUMBERS:

	EXTENT OF WORK	ON WHICH CLAIMS	PROJECT COSTS
	(in metric units)		APPORTIONED (incl. support)
GEOLOGICAL (scale, area)			
Ground, mapping	Structural	Coldon 1	\$4200
Photo interpretation	Analysis	Golden 1	\$4200
GEOPHYSICAL (line-kilometres)			
Ground			
Magnetic			
Electromagnetic			
Induced Polarization			
Radiometric			
Seismic			
Other			
Airborne			
GEOCHEMICAL (number of samp	les analysed for)		
Soil			
Silt			
Rock			
Other			
DRILLING (total metres, number o	f holes, size, storage location)		
Core			
Non-core			
RELATED TECHNICAL			
Sampling / Assaying			
Petrographic			
Mineralographic			
Metallurgic			
PROSPECTING (scale/area)			
PREPATORY / PHYSICAL			
Line/grid (km)			
Topo/Photogrammetric (sca	ale, area)		
Legal Surveys (scale, area	)		
Road, local access (km)/tra	ail		
Trench (number/metres)			
Underground development	(metres)		
Other			
		TOTAL COST	\$4200

#### **REPORT OF SATELLITE-BASED STRUCTURAL ANALYSIS**

#### **GOLDEN 1 MINERAL TENURE**

[Tenure No. 661487]

BRIDGE RIVER MINING DISTRICT

LILLOOET MINING DIVISION

**BRITISH COLUMBIA** 

CANADA

NTS 92 – J – 15 W Latitude 50°50' North, Longitude 122°43' West UTM Zone 10 (NAD 83), 5641000 N, 519000 E.

Mineral Tenures: Golden 1, tenure no. 661487

Owner:

Farshad Shirvani.

Work and Report by:

Farshad Shirvani, MSc.

Jonathan Pokotylo, BSc., AD GIS

Date of Report: March 24, 2011.

Submitted as an assessment report in fulfillment of Event No. 4805608.

BC Geological Survey Assessment Report 32144

## Contents

1.0	SUMMARY 1
2.0	INTRODUCTION1
3.0	PROPERTY DESCRIPTION, LOCATION AND ACCESS 1
4.0	CLIMATE, LOCAL RESOURCES, INFRASTRUCTURE AND PHYSIOGRAPHY1
5.0	HISTORY
6.0	GEOLOGICAL SETTING
7.0	DEPOSIT TYPES
8.0	PHOTOGRAMMETRIC STUDY
9.0	STATEMENT OF EXPENDITURES
10.0	STATEMENT OF QUALIFICATIONS
10a	. Farshad Shirvani, MSc
10в	JONATHAN POKOTYLO, BSC., AD-GIS
11.0	REFERENCES10

## Illustrations

FIGURE 1 – PROJECT LOCATION IN BRITISH COLUMBIA	2
FIGURE 2 – DETAILED CLAIM MAP	3
FIGURE 3A – GEOLOGY MAP	5
FIGURE 3B – LEGEND TO GEOLOGY MAP	5
FIGURE 4 – MINERAL OCCURRENCES	6
FIGURE 5 – LINEAMENTS STUDY	8
FIGURE 6A, 6B, 6C – ROSE DIAGRAMS	9

#### 1.0 SUMMARY

Structures in the vicinity of the Golden 1 mineral tenure, tenure no. 661487, located in the Bridge River Mining District of Southern British Columbia, have been studied using computer-based methods of structural analysis. This report is a presentation of data derived from that study.

#### 2.0 INTRODUCTION

The Golden 1 mineral tenure (tenure no. 661487) was acquired on October, 2009 by Mineral Titles On Line procedures. Registered owner is Farshad Shirvani of West Vancouver, B. C. Area is 489.88 hectares.

The Golden 1 mineral tenure is located on the north flank of Mt. Truax, 4 km east of Gold Bridge, in the historic Bridge River gold mining district of southwestern British Columbia. Anchored by the productive Pioneer and Bralorne gold mines that commenced production before 1930, the entire district has been the site of intensive mineral exploration. More than fifty mineral properties are situated within 20 km of Gold Bridge town site and the Bralorne gold mine that has been mostly idle in recent decades is currently preparing to resume operations.

The Golden 1 mineral tenure was acquired as an exploration "bet" due to its proximity to the formerly active gold mines and to several properties that have been the sites of underground and other exploration work. The owner was unable, in 2010, to obtain funding for fieldwork and there are no records of any recent work on the tenure.

A satellite image was the subject of a computer-based photogrammetric structural analysis that is presented in this report.

#### 3.0 PROPERTY DESCRIPTION, LOCATION AND ACCESS

The Golden 1 mineral tenure comprises 489.88 hectares in an approximately rectangular configuration (Figures 1 and 2). It's west boundary is situated four km due East of the town of Gold Bridge, on the northwest flank of Mt. Truax, a dominant peak that rises to 2880 metres. Surrounding terrains are mostly steep to very steep and stream drainages are westerly into tributaries of Ferguson Creek, and northerly into tributaries of Truax Creek. There are no known buildings or other improvements on the tenure.

Road access to the Bridge River valley is by paved road from Lillooet, a town of 2500 located beside the Fraser River. An alternate, seasonal (July – October) route is by an 82 km mostly unimproved logging road, the "Hurley", from Pemberton, population 600, located 30 km north of Whistler, B. C. Access to the Golden 1 tenure is best achieved by helicopter but several historic footpaths, built to access mine sites, including the Truax Creek trail to the Gray Rock, located 2 km southeast, and a Ferguson Creek trail to Truax Gold, 1 km west, can be followed to high elevation, well above treeline, from whence the remaining distance is readily traversed.

There are no known environmental liabilities attached to any part of the Golden 1 mineral tenure.

#### 4.0 CLIMATE, LOCAL RESOURCES, INFRASTRUCTURE AND PHYSIOGRAPHY

The Bridge River Mining District experiences a moderately severe climate, with snowy winters and warm summers. A partial "rain shadow" effect prevails and shelters the area from the wetter Coastal Marine climate conditions that affect areas a short distance to the west. High mountain areas, including Mt. Truax, elev. 2880 metres, receive deep snow packs that are mostly melted by early July. Annual precipitation at Gold Bridge, elev. 650 metres, is about 50 cm but higher areas undoubtedly receive more.

The town of Gold Bridge, located 4 km west of the Golden 1 tenure, offers accommodation and is a very limited source of groceries and fuels. Lillooet, a town of 2500, lies 100 road-km east of Gold Bridge, and is well equipped to supply necessities of a mineral exploration project, and is the home site of a helicopter service.





The Bridge River area lies in a transition area between the rugged Coast Mountains and the more subdued Interior Physiographic province. Church, an officer of the Geological Survey Branch who conducted comprehensive studies of the entire area (Church, 1995), found evidence of post-Miocene relative uplift of more than 1500 metres. Several of the highest mountains attain 2500 metres (~8000 feet) and exhibit the sharp tooth-like outlines of peaks that rose above the intense Ice Age glaciations. At slightly lower elevations mountain slopes have been modified by glacial action and various cirques, talus, eskers and moraines as well as glacial-fluvial clay and till deposits, remain and, in places obscure, the underlying formations.

#### 5.0 HISTORY

The history of mineral exploration in the Bridge River valley extends from pre-1900 when placer miners first recognized some potential in the streams. There is little evidence that any of their workings were particularly rich but concomitantly, bedrock sources of gold were found and despite difficulties of access and supply, small scale mining commenced, leading in the 1920s to start-up of the Pioneer gold mine, followed in early 1930s, after on-set of the Depression and higher "New Deal" gold prices, by the Bralorne gold mine. Those mines sustained the valley economy for several decades and encouraged mineral exploration. Although gold was the principal metal of interest, occurrences of tungsten, mercury, antimony, copper, lead and zinc, broadened the focus of work.

The Bralorne-Pioneer gold mines closed in 1971 after producing 129 tonnes of gold but have been revived in recent years as exploration scenes. Resumption of milling operations is scheduled for 2011.

Prospectors have scoured all parts of the Bridge River mining district and at various times have worked on more than sixty prospects. The Golden 1 mineral tenure is located in proximity to several historic sites where gold, silver, antimony, molybdenite, and other metals have been explored.

#### 6.0 GEOLOGICAL SETTING

The geological setting of the Golden 1 mineral tenure and nearby areas has been exhaustively studied and reported by N. Church of the provincial Geological Survey Branch (Church, op cit. 1995). The dominant formation is biotitehornblende granodiorite of the Late Cretaceous-Early Tertiary Bendor Intrusions, Figure 3a, 3b. These resemble and are likely closely affiliated with the massive Coast Intrusions that prevail a few km to the west. The Bendor intruded, hornfelsed, and no doubt assimilated, late Paleozoic to mid-Mesozoic formations comprising ordinary sedimentary types, including argillite, cherts and limey beds, that are hosts to several metallic mineral deposits.

Strong geologic structures as mapped by Church (op cit., Figure 1A) place Mt. Truax (incorrectly shown as Traux) at the centre of several high angle faults, of both normal and thrust character. The pattern is consistent with adjustments attendant upon emplacement of the batholith-scale plutons and proximity to the major, crustal scale, break that passes close to the southwest and is the location of the major gold deposits.

The Bralorne and Pioneer gold mines occur in quartz veins in the zone of major faulting in association with shreds of "old", late Paleozoic age, basic rock types, including gabbro and sodic granite, and somewhat younger (Jurassic?) ultrabasic rocks, including serpentinites and listwanites.

## 7.0 DEPOSIT TYPES

Acquisition and analysis of the Golden 1 mineral tenure was predicated on the possible presence of mineral zones related to structures that could be observed using photogrammetric analysis. Of primary interest were any fracture patterns that parallel the Bralorne, et al. structure or that may be interpreted as related to basic and ultrabasic formations.

Church (op cit.) presents details of a variety of mineral deposits, many of which have no affinity to the gold-bearing structures, Figure 4 illustrates the locations of nearby minerals occurrences.





- JKCsf Mesozoic Cayoosh Assemblage(?) mudstone, siltstone, shale fine clastic sedimentary rocks
- MmJBsv Paleozoic to Mesozoic Bridge River Complex marine sedimentary and volcanic rocks
- IKTDcg Mesozoic Taylor Creek Group Dash Formation conglomerate, coarse clastic sedimentary rocks
- uTrCgs Mesozoic Cadwallader Group Volcanic Unit greenstone, greenschist metamorphic rocks

# 0895277 BC. LTD.

# RELIANCE

# Legend to Geology Map

Scale: As Shown	Design: JP	Figure: <b>3b</b>
Date: Dec, 2010	Drawing: Terracad Geoscience Services Ltd.	Datum: NAD 83/Zone 10



#### 8.0 PHOTOGRAMMETRIC STUDY

Terracad Geoscience Services Ltd., a mineral industry service company specializing in IT and GIS applications, located in Vancouver, B. C. and owned and operated by Farshad Shirvani, MSc., the recorded owner of the Golden 1 mineral tenure, conducted a photogrammetric structural analysis of that tenure and nearby areas. Working from satellite imagery, and using Global Mapper, v. 9, ARC GIS, v. 9.3 and AutoCAD software, a computer-aided survey of the area was accompanied by identification and recording of all structural elements. Data were plotted on a satellite image that is included as Figure 5 of this report. Rose diagrams that summarize lineament counts, average lengths of lineaments, and maximum lengths of lineaments are included as, respectively, Figures 6(a), 6(b) and 6(c).

The structural analysis may be interpreted as reflecting the location of the Golden 1 tenure in an area that is relatively featureless, an exposed granodioritic pluton that is essentially massive in nature. The dominant fracture pattern as shown in Figure 6(a) is oriented at 300° to 320°, not greatly different from dominant Cordilleran trends, and almost parallel to the massive fracture zone referred to in section 6 of this report. Collectively, the lineaments, as shown in Figure 6(b), average less than 600 metres in length, with the small number that are oriented at 010°, reaching 800 metres. Maximum lengths, in excess of 800 metres, as shown in Figure 6(c), appear to be randomly distributed.

The photogrammetric analysis failed to reveal any previously unrecognized specific areas that demand follow-up field work. The Bridge River mining district, however, with a fertile mixture of geologic formations and structures and a rich history of gold production and prospect discovery, retains its allure.

#### 9.0 STATEMENT OF EXPENDITURES

Terracad Geoscience Services Ltd. prepared the illustrations and text of the accompanying technical report using "inhouse" resources, including employees and associates, various software packages and computer-related hardware. The cost of those services attributed to the Golden 1 analysis has been determined as

\$4200.

## **10.0 STATEMENT OF QUALIFICATIONS**

#### 10a. Farshad Shirvani, MSc.

Principal of Terracad Geoscience Services Ltd., holds BSc. (1983) and MSc. (1986) degrees from Shiraz University (Iran). He worked eight years in Iran in mineral exploration, engineering geology and hydrogeology and as Project Manager of the Malayer Reservoir Dam and City pipeline to Hamadan. Resident of Canada since 1996. Citizen of Canada since 2002. Has worked in Canada as a geologist, web designer, AutoCAD specialist, 3D modeler and GIS specialist. Principal owner of Terracad since 1998.

#### 10b. Jonathan Pokotylo, BSc., AD-GIS.

GIS specialist employed by Terracad Geoscience Services Ltd. He obtained a BSc. Degree in Geography from University of British Columbia in 2008 and an Advanced Degree in Geographic Information Systems from British Columbia Institute of Technology in 2010. He is a computer hardware and software specialist, with special skills in data acquisition, compilation and processing, AutoCAD systems, modeling, graphic presentations and photographic and satellite imaging.





#### **11.0 REFERENCES**

The following publications were the sources of parts of the information included in the accompanying report:

Cairnes, C. E., 1937, Geology and Mineral Deposits of the Bridge River Mining Camp, British Columbia, Geol. Surv. Canada, Memoir 213

Church, B. N., 1996, Bridge River Mining Camp, Geology and Mineral Deposits, Ministry of Employment and Investment, Energy and Minerals Division, Geological Survey Branch, Government of British Columbia

Minfile Data Base, 2010, accessed by Map Place Data Base of BC Ministry of Energy, Mines and Petroleum Resources.