

### ASSESSMENT REPORT TITLE PAGE AND SUMMARY

TITLE OF REPORT: SOL Claim Rock Geochemistry, Omineca Mining Division, British Columbia

TOTAL COST: \$6,878.59 (amount applied for assessment credit: \$6,500.00)

AUTHOR(S): Glen Prior SIGNATURE(S):

Sh Pi

NOTICE OF WORK PERMIT NUMBER(S)/DATE(S): STATEMENT OF WORK EVENT NUMBER(S)/DATE(S): 5684818 / 2018-FEB-06

YEAR OF WORK: 2017

PROPERTY NAME: SOL

CLAIM NAME(S) (on which work was done): SOL (Title Number 1049872)

COMMODITIES SOUGHT: Gold, silver

MINERAL INVENTORY MINFILE NUMBER(S), IF KNOWN: MINFILE No 094D 013 (Bruce)

MINING DIVISION: Omineca NTS / BCGS: NTS Map Sheet: 94D/09 LATITUDE: 56.529° N LONGITUDE: 126.252° W (near centre of claim) UTM Zone: 09V EASTING: 669000 NORTHING: 6268300 (NAD 83)

OWNER(S): Glen Prior

MAILING ADDRESS: 793 Birch Avenue, Sherwood Park, Alberta T8A 1X2

OPERATOR(S) [who paid for the work]: Glen Prior

MAILING ADDRESS: 793 Birch Avenue, Sherwood Park, Alberta T8A 1X2

REPORT KEYWORDS (lithology, age, stratigraphy, structure, alteration, mineralization, size and attitude. Do not use abbreviations or codes) Takla Group, Solo Lake Stock, Triassic, Bruce mineral occurrence, quartz vein, gold, silver, Johanson Lake, Goldway Creek

REFERENCES TO PREVIOUS ASSESSMENT WORK AND ASSESSMENT REPORT NUMBERS: Assessment Report Numbers: 11636, 13145, 13175, 14105, 15313, 21394 (see also Previous Work section of report).

TYPE THIS	OF WORK IN REPORT	EXTENT OF (in metric unit	WORK is)	ON WHIC	CH CLAIMS	PROJECT COSTS APPORTIONED (incl. support)
GEOL	GEOLOGICAL (scale, area)					
	Ground, mapping					
	Photo interpretation					
GEOF	PHYSICAL (line-kilometres)					
	Ground					
	Magnetic					
	Electromagnetic					
	Induced Polarization					
	Radiometric					
	Seismic					
	Other					
	Airborne					
GEOC	CHEMICAL (number of samp	les analysed for)				
	Soil					
	Silt					
	Rock	10	samples	SOL	Title No. 1049872	\$6,500.00
	Other					

DRILL	ING (total metres, number of holes, size, storage location)		
	Core		
	Non-core		
RELA	TED TECHNICAL		
	Sampling / Assaying		
	Petrographic		
	Mineralographic		
	Metallurgic		
PROS	PECTING (scale/area)		
PREP	ATORY / PHYSICAL		
	Line/grid (km)		
	Topo/Photogrammetric (scale, area)		
	Legal Surveys (scale, area)		
	Road, local access (km)/trail		
	Trench (number/metres)		
	Underground development (metres)		
	Other		
		TOTAL COST	\$6,500.00

# SOL Claim Rock Geochemistry, Omineca Mining Division, British Columbia

Claim: SOL (Title Number 1049872) Mining Division: Omineca NTS Map Sheet: 94D/09 Location: 56.529° N Latitude, 126.252° W Longitude Owner: Glen Prior Sherwood Park, Alberta Author: Glen Prior Sherwood Park, Alberta Date Submitted: 2018-May-03 Event Number: 5684818

### **Table of Contents**

Summary	1		
Introduction	2		
Location and Access	2		
Claim Description	2		
Physiography	2		
Previous Work	6		
Geological Terrane Setting	9		
Regional Geology			
Property Geology	15		
Mineralization	17		
2017 Exploration Program	27		
Field Work	27		
Laboratory Methods	27		
Results	28		
Discussion and Conclusions	33		
Recommendations	33		
References	34		
Qualifications	36		
Expenditures	37		

#### Tables

Table 1. Summary of assessment reports for work on and near ground now covered by the SOL claim.	3
Table 2. Legend for Figure 6 and table of formations	13
Table 3. Width and grade values of chip samples from the A vein	23
Table 4 Summary of Au assay results for 2017 samples. Table 5 Summary of Au assay results for 2017 samples.	31 32
Figures	
Figure 1. Location of the SOL claim within British Columbia.	3
Figure 2. Map showing SOL claim.	4
Figure 3. Photo showing the upper part of the Goldway Creek valley.	5
Figure 4. Geological terranes of British Columbia.	9
Figure 5. Regional geology map.	11
Figure 6. Geology of the Johanson Lake – Solo Lake area.	12
Figure 7. Map showing quartz veins in the SOL claim area	18
Figure 8. Channel sample results from the A vein compiled by Richards (1991).	20
Figure 9. Chip sample results from the A vein reported by Phendler (1984).	21
Figure 10. Assay results for C Vein samples.	24
Figure 11. Map showing location of 2017 grab samples from the A vein.	29
Figure 12. Photo of A Vein near location where samples GW4001-GW 4003 were collected.	30

### Appendices

Appendix 1: Rock Sample Descriptions	38
Appendix 2: Analytical Results: Aqua Regia – ICPMS	41
Appendix 3: Analytical Results: Gold Assays	45
Appendix 4: Analytical Results: Silver and Lead Assays	48

### Summary

The SOL claim, which lies within the southern part of map NTS area 94D/09 in north-central British Columbia, was acquired in 2017 based upon previously reported high gold grades in rock samples. Precious metal mineralization on the SOL claim is associated with quartz veins of considerable length and width related to regional dextral faulting and hosted within an intermediate to felsic Triassic intrusion (the Solo Lake Stock).

The most well explored and well sampled vein on the SOL claim is the A Vein. Previous work on the A Vein, undertaken between 1946 and 1990, has revealed a strike length of at least 125 m and a steep westerly dip. A review of previous reports has identified data for 85 chip samples across the A Vein collected during five different sampling programs. The weighted average gold value based on this data set is 11.7 g/t Au (0.34 oz/ton Au) over an average width of 0.58 m.

Several other auriferous veins are known to occur within the boundaries of the SOL claim. The C Vein is traceable for up to 44 meters and is fairly constant in width. The average weighted gold value of the C Vein is 14.7 g/t Au (0.43 oz/ton Au) across an average width of 0.61 m (based on 9 chip samples collected in 1947).

No diamond drilling has been undertaken within the boundaries of the SOL claim (an attempt with a Winkie drill in 1985 was unsuccessful due to an inadequate water pumping system).

During the 2107 exploration program on the SOL claim the A Vein was located and rock sampling was undertaken. Ten grab samples of vein material were collected and submitted for gold assays and multielement ICPMS analyses. Assay results include values of up to 147.57 g/t Au (4.30 oz/ton Au). Of the ten samples collected, four returned results of > 30 g/t Au with the other six samples ranging from 1.27 to 15.81 g/t Au. Values of up to 123.8 g/t Ag (3.61 oz/ton), 2.28% Pb, 105.9 ppm Bi, 58.6 ppm Sb and 11.8 ppm Te were also obtained.

A two-phase program is recommended for further exploration of the SOL claim. The first phase includes systematic geological mapping, talus fines/soil sampling, ground magnetic surveying and prospecting (± trenching). The second phase consists of diamond drilling of the A and C veins and any additional drill-worthy targets identified during Phase 1.

### Introduction

#### **Location and Access**

The SOL claim is located in north-central British Columbia about 240 km northwest of Mackenzie in NTS map area 94D/09 (Figure 1). It lies approximately seven km southwest of Johanson Lake and about 0.5 km north of the upper reaches of Goldway Creek. The northeastern part of the claim encompasses part of Solo Lake (formerly also known as Bruce Lake) and Goldway Peak lies a small distance west of the claim.

The Omineca Resources Road lies along the northeast shore of Johanson Lake. From Johanson Lake the SOL property may be accessed by travelling 10 km in a generally westerly direction along the Omineca Resources Road, then by quad along an old road (trail) that leads to the A Vein on the SOL property. The old road is about 15.5 km long. In 2017 quad travel was blocked about 2.7 km from the end of the road by a small rock slide. This final section was traversed on foot.

#### **Claim Description**

The SOL claim, title number 1049872, consists of 12 cells and covers an area of 214.12 hectares within the Omineca Mining Division (Figure 2). The recording date was February 7, 2017. The SOL claim is owned (100%) by Glen Prior of Sherwood Park, Alberta. The name is derived from Solo Lake, part of which underlies the northeastern part of the claim.

#### Physiography

The SOL claim lies in an area of considerable topographic relief within the Omineca Mountains (Holland, 1976). Goldway Peak, with an elevation of 2270 m, lies near the northern end of the Osilinka Ranges (Department of Energy, Mines and Resources, Canada (1986): McConnell Creek, NTS Map 94D, Edition 4, 1:250000). Elevations across the property range from about 1800 m to 2200 m. The entire property lies above tree line and talus covered slopes are common (Figure 3).



Figure 1. Location of the SOL claim (black star) within British Columbia. Base map from B.C. Ministry of Energy and Mines MapPlace.



Figure 2. Map showing SOL claim. Base data includes information from BC Ministry of Energy, Mines and Petroleum Resources MapPlace and digital files licensed under the Open Government Licence – Canada.



Figure 3. Photo showing the upper part of the Goldway Creek valley. The photo was taken from beside the old road/trail that leads to the A Vein. View is toward 080° from 667861E, 6267213N (NAD 83 Zone 9V). The A Vein is exposed above talus in the area below the arrow.

### **Previous Work**

Previous work in the area of the ground now covered by the SOL Claim is reviewed below. A table summarizing relevant assessment reports is presented in Table 1.

1941-1945: Field mapping by the Geological Survey of Canada (Lord, 1948).

*1946-1947:* "The property was originally discovered and staked in 1946. The presently known veins, A through E, were mapped, described and sampled by W. H. White for the British Columbia Department of Mines in 1947 (White, 1948), and by D. D. Campbell for Goldway Mines in September, 1947. The property was known as the "Bruce Property" at this time" (Richards, 1991, p. 5). "Goldway Peak Mines, Limited explored the Bruce property in 1947. From a comfortable tent camp located on Goldway creek at the edge of scrub timber, a crew of six men carried on development-work under the direction of the company. Five main veins, named 'A', 'B', 'C', 'D', and 'E' veins, and several other smaller veins were stripped and sampled" (von Rosen, 1982, p. 6).

*1973-1976:* "The property was restaked in 1973, and optioned to San Jacinto Explorations in 1974. In 1976, all interest passed to Western International Explorations, for which D. D. Campbell wrote an updated report on the property, although no additional visit to the area was included." (Richards, 1991, p. 5).

*1979:* "The Vi 1 and 2 mineral claims were staked in 1979 by Clayton Powney to cover the main showings." (Richards, 1991, p. 5).

*1980:* "Further ground was staked for Dermont Fahey in 1980 to include all the showings, A to E, with the inclusion of the Vi claims by option" (Richards, 1991, p. 5). A stream sediment sampling program was undertaken by Du Pont along Goldway Creek about 3 km southeast of the ground now covered by the SOL claim. Sixteen stream sediment samples were collected with the highest value being 2250 ppb Au. Two rock samples yielded a maximum of 35 ppb Au (Strain, 1981).

**1982:** A grid-base sampling program consisting mainly of soil sampling but including some silt samples was undertaken in the Goldway Creek valley below the level of slide rock (talus) to the south of the ground now covered by the SOL Claim (276 sample collected). Anomalous soil samples were obtained over the entire length of the sampling grid (1440 m) north of Goldway Creek with a maximum value of 2500 ppb Au (von Rosen, 1982).

**1983:** "A route for potential road access onto the property was outlined by R. W. Phendler (1983) for Laramie Mining Corp." (Richards, 1991, p. 7). The route proposed by Phendler (1983), to the east of Solo Creek and Solo Lake, is not the path followed by the existing road (trail), which lies well west of Solo Creek.

Sampling of trenches on the A vein in 1983 confirm previously reported high gold values. High gold results from quartz vein material included 2.164 oz/ton Au over 0.95 feet and 0.702 oz/ton Au over 2.50 feet. Wallrock returned up to 0.055 oz/ton Au over 1.16 feet (Phendler, 1984).

*1984:* "A VLF-EM survey was completed across the main mineralized veins in 1984 by R. E. Game, who concluded that VLF-EM results were of little use in outlining the vein structures. This was due to the steepness of slope and the minor amount of sulphides within the veins" (Richards, 1991, p. 7). BP Resources Canada Limited undertook a program of preliminary geological mapping and geochemical sampling in 1984 to the south of Goldway Creek (south of the ground now covered by the SOL Claim; Meyers and Smit, 1985).

*1985:* Blasting and trenching was completed on the A vein. Prospecting led to the discovery of the F vein and several smaller veins. An attempt to drill the A vein with a Winkie drill was unsuccessful due to the lack of a pump capable of lifting water from Goldway Creek. Recommendations for future work included diamond drilling with a relay pumping system (Pawliuk, 1985).

*1986*: A bulk sample of 1565 kg of quartz was collected in 1986 by blasting and hand mucking from the A Vein (von Rosen (1986). Some uncertainty exists as to the exact location this sample was collected from. In addition to the bulk sample, the 1986 exploration program included the collection of samples from the F and G veins (Richards, 1991).

*1989:* "In August of 1989, Buster Irving of Vanderhoof, B. C., restaked the Vi 1 and 2 claims as the Buster 1 and 2 in order to cover the main A-vein, which had come open. Additional claims were staked to cover the adjacent ground, all of which were subsequently transferred to Jetta Resources. The Solo 1 to 4 mineral claims were staked by Jetta Resources over all the existing claims in May 28, 1990, and all previous claims are now included in the Solo Group" (Richards, 1991, p. 7).

**1990:** An exploration program in 1990 on behalf of Jetta Resources Ltd. was undertaken with the objective "...to examine, map, sample and prospect the Solo Group in order to determine what the mineralized setting was and to confirm previous data, and to incorporate all previous data into a single report. The determination the logistics of drilling and the location of potential drill sites was part of the project, as the property has never been drilled" (Richards, 1991, p. 7).

"Field investigations occurred in late August and ended on the 12 of September, 1990. Three to four persons were on the property for twelve days. Part of the program was to re-trench and resample the A-vein. During this process, the location of the previous sampling by White, Campbell and Phendler was attempted .... Prospecting over much of the claims was undertaken .... Five new showings, of either outcrop or proximal float, with gold greater than 0.1 opt, were noted. A reconnaissance geologic map was done ...." (Richards, 1991, p. 7-8). Recommendations in Richards (1991) included diamond drilling of the A vein.

Report	Ву	Year of Field Work	Comment
09275	Strain, 1981 (for Du Pont of Canada Exploration Limited)	1980	16 stream sediment samples from Goldway Creek. 2 rock samples. About 3 km SE of SOL claim.
10809	Von Rosen (1982) for Dermot Fahey	1982	Soil samples collected in Goldway Creek valley south of SOL Claim below level of slide rock (talus). 276 samples collected consisting mainly of soil samples but including some silt samples.
11636	Phendler (1983) for Laramie Mining Corporation	1983	Reconnaissance trip to investigate possible road access and examination of veins.
13175	Phendler (1984) for Laramie Mining Corporation	1983	Sampling of trenches on the A vein.
13145	Game (1984) for Laramie Mining Corporation	1984	VLF EM16 survey (not successful in tracing veins).
13697	Meyers and Smit (1985) for BP Resources Canada Limited.	1984	Preliminary geological mapping and geochemical sampling to south of SOL Claim (south of Goldway Creek).
14105	Pawliuk (1985) for Laramie Mining Corporation	1985	Prospecting, blasting and trenching on A vein. Discovery of F vein and several smaller veins. Attempt to drill A vein with Winkie drill unsuccessful because unable to lift water from Goldway Creek.
15313	von Rosen (1986) for Laramie Mining Corporation	1986	Bulk sample of about 1.5 metric tonnes of quartz from the A vein. Grab and chip sampling quartz veins (many which are southeast of the SOL Claim).
21394	Richards (1991) for Jetta Resources Ltd.	1990	Mapping, sampling and prospecting and to locate potential drill sites. Compilation of previous data.

Table 1. Summary of assessment reports for work on and near ground now covered by the SOL claim.

### **Geological Terrane Setting**

Figure 4 shows the setting of the SOL claim area within the geological terranes of British. It lies within the Quesnel Terrain (Quesnellia) within, and near the eastern margin of, the Intermontane Belt.



Figure 4. Geological terranes of British Columbia (from Colpron and Nelson, 2011). The SOL claim lies in the Quesnel Terrain (Quesnellia) near the centre of the red circle.

### **Regional Geology**

A map showing the regional geological and terrane setting of the SOL claim area within part of northcentral British Columbia is presented in Figure 5. The geology of the Johanson Lake – Solo Lake area, which includes the SOL claim, is shown in Figure 6 and a table of lithologic units is presented in Table 2.

The Johanson Lake area "... is underlain by the Quesnel Terrane, which includes Late Paleozoic through mid-Mesozoic volcanic, volcaniclastic and plutonic rocks formed in a system of magmatic arcs that developed along or near the western North American continental margin. East of Johanson Lake, the Quesnel Terrane is faulted against Proterozoic and Paleozoic carbonates and siliciclastics of the Cassiar Terrane, which formed part of the ancestral North American miogeocline.... To the south, however, the Quesnel Terrane is separated from miogeoclinal rocks by oceanic rocks of the Slide Mountain Terrane, commonly interpreted as the imbricated remnants of a Late Paleozoic marginal basin.... Along much of its length, the Quesnel Terrane is bounded to the west by the oceanic Cache Creek Terrane, which includes rocks that formed in an accretion-subduction complex related to the Quesnel magmatic arc.... The Cache Creek Terrane is not present at the latitude of Johanson Lake, however, due to shuffling of terranes along Cretaceous-Tertiary dextral strike-slip faults .... Here, the Quesnel Terrane is juxtaposed against the Stikine Terrane, a markedly similar volcanic arc terrane, which may have originated as a northern extension of the Quesnel arc system...." (Schiarizza and Tan, 2005a, p. 110).

"The Quesnel Terrane is in large part represented by Upper Triassic volcanic and sedimentary rocks, which are assigned to the Takla Group in northern and central British Columbia and to the Nicola Group in the south. These rocks are locally overlain by Lower Jurassic sedimentary and volcanic rocks, and are cut by several suites of Late Triassic through Middle Jurassic plutons. In north-central British Columbia, older components of the Quesnel Terrane comprise Late Paleozoic arc volcanic and sedimentary rocks of the Lay Range assemblage, which are restricted to the eastern margin of the Quesnel belt...." (Schiarizza and Tan, 2005a, p. 110).

"Late Triassic–Early Jurassic intrusive rocks are a prominent and economically important component of the Quesnel Terrane. These include both calcalkaline and alkaline plutonic suites, as well as Alaskan-type ultramafic–mafic intrusions. Many of these plutonic suites are found within and adjacent to the Hogem Batholith ... which extends from the Johanson Lake project area more than 150 km south to the Nation Lakes area. In addition to Late Triassic–Early Jurassic rocks, the composite Hogem Batholith also includes younger granitic phases correlated with Early Cretaceous plutons that are common regionally and crosscut the Quesnel and adjacent terranes" (Schiarizza and Tan, 2005a, p. 110).



Figure 5. Regional geology map (Schiarizza and Tan, 2005a) showing SOL claim area (red star).



Figure 6. Geology of the Johanson Lake – Solo Lake area (from Schiarizza and Tan, 2005b) showing the SOL claim (blue boundary). See following page for geology legend.

#### Quaternary



Unconsolidated glacial, fluvial and alluvial deposits

#### Early Cretaceous

Light grey biotite-hornblende tonalite and quartz diorite; minor amounts of hornblende diorite

#### Middle Jurassic



EKt

Light grey hornblende-biotite tonalite and quartz diorite



Grey to pinkish-grey hornblende quartz monzonite, quartz monzodiorite, quartz diorite, monzonite, diorite and monzodiorite

#### Late Triassic / Upper Triassic



Light to dark grey and greenish-grey diorite, monzodiorite and gabbro; locally includes monzonite, quartz diorite, microdiorite, hornblende-feldspar porphyry, intrusion breccia, pyroxenite and hornblendite



uTTg

Dark grey to grey-green pyroxenite, hornblendite, wehrlite and mafic gabbro; includes lesser amounts of dunite, diorite and monzodiorite

#### TAKLA GROUP

#### **Goldway Peak unit**

Dark green to grey-green, brown-weathering mafic volcanic breccias; clasts dominated by pyroxenephyric basalt; locally includes pyroxene-rich volcanic sandstone, siltstone and massive pyroxene porphyry (dikes, sills, flows)

#### Kliyul Creek unit

**uTtk** Grey to green, fine to coarse grained volcanic sandstone, siltstone, pebble conglomerate, lapilli tuff and volcanic breccia; commonly massive, locally thin to thick bedded; typically feldspar-rich, locally also rich in pyroxene and pyroxene-bearing lithic fragments; locally includes rusty-weathered, thinbedded siltstone and argillite, dark grey limestone, and green pyroxene-feldspar-phyryic basalt



Sandstone-carbonate subunit: Grey to green volcanic sandstone, siltstone, conglomerate and breccia; commonly associated with dark grey limestone which occurs as beds, lenses, slump blocks, clasts in conglomerate/breccia, and chaotically-deformed breccia matrix



Light to dark grey, massive to well-bedded limestone; minor amounts of sandy limestone and siltstone

UTTKS Siltstone-limestone subunit: dark grey, reddish weathering, thin bedded siltstone, limestone and calcareous siltstone; lesser amounts of volcanic sandstone, calcareous sandstone, breccia and conglomerate

	Fault	 Fold (axial trace
$^{\prime\prime\prime}$	Quartz-carbonate alteration zone	SOL claim
o 170	Mineral occurrence and MINFILE number (prefix 094D omitted)	

Table 2. Legend for Figure 6 (Geology of the Johanson Lake – Solo Lake area) and table of formations (from Schiarizza and Tan, 2005b).

"The structural history of the region included the development of east-directed thrust faults that juxtaposed Quesnel Terrane above Cassiar Terrane in late Early Jurassic time.... To the west, east-dipping thrust faults, in part of early Middle Jurassic age, imbricate the Cache Creek Terrane and juxtapose it above the adjacent Stikine Terrane.... This thrusting was broadly coincident with the initiation of the Bowser basin ..., which formed above the Stikine Terrane and contains detritus that was derived, in part, from the adjacent Cache Creek Terrane. The subsequent structural history of the region included the development of prominent dextral strike-slip fault systems in Cretaceous and Early Tertiary time. These structures include the Finlay, Ingenika and Pinchi faults, which form the western boundary of Quesnel Terrane, and may have more than 100 km of cumulative displacement" (Schiarizza and Tan, 2005a, p. 110).

#### Structural Geology in the Solo Lake Area (Southwest Domain of Schiarizza and Tan, 2005a)

"The Ingenika fault marks the boundary between the Quesnel and Stikine terranes at the latitude of the Johanson Lake ... area, and occupies a series of low, drift-covered valleys.... It forms part of a major system of dextral strike-slip faults that also includes the Finlay fault to the north and the Pinchi fault to the south.... Within the map area, the westernmost exposures of Takla rocks between Goldway Peak and the Johanson Creek pluton are characterized by a strong foliation that dips at moderate to steep angles toward the east. This foliation rapidly dies out eastward, and is suspected to be related to the adjacent Ingenika fault" (Schiarizza and Tan, 2005a, p. 122).

"All the strata and intrusions are cut by major shear zones, in addition to the Ingenika-Finlay Fault.... Most significant of these is the Dortatelle Fault, a north-trending shear zone traceable for some 30 kilometres.... These shear zones range in style from mylonitic zones up to 50 meters across (Dortatelle Fault), to phyllonitic zones of augen chlorite and local1y sericite schists, to discrete fault surfaces. This style is indicative of both ductile and brittle shearing, suggesting deep-seated, mesozonal environment for faulting" (Richards, 1991. p. 11).

"The structure west of the Dortatelle fault is dominated by the north-trending Solo Lake anticline.... In the south, the eastern limb of the anticline consists of a homoclinal panel of the Kliyul Creek unit several kilometres wide that is overlain by the Goldway Peak unit adjacent to the Dortatelle fault. To the north, from Mariposite Creek to Solo Lake, this panel is disrupted by northeast and northwest-striking faults, and northward from there it comprises rocks that dip and face mainly to the north or northeast. The western limb of the Solo Lake anticline is folded across several, mainly north-plunging, subsidiary folds, including an anticline-syncline pair that is mapped south of Goldway Creek. These folds seem to die out to the north, and northwest of Solo Lake the Kliyul Creek unit forms a west-facing, locally overturned panel that is stratigraphically overlain to the west by the Goldway Peak unit" (Schiarizza and Tan, 2005a, p. 121).

"Steeply dipping, north to north-northeast-striking faults are a prominent feature of the southern and western portions of the southwest domain. Many of these are marked by conspicuous orange-weathered zones of Fe-Mg carbonate alteration. Others exhibit quartz-pyrite alteration or are defined by zones, up to tens of metres wide, of strongly foliated chlorite schist. Shear bands cutting chlorite schist within one

north-striking fault zone in the southern part of the domain indicate dextral strike-slip movement" (Schiarizza and Tan, 2005a, p. 121).

"Northwest to west-northwest striking faults are prominent structures around Solo Lake. A history of dextral movement along these faults is indicated by geometrical relationships at the Solo and Bruce mineral occurrences, where northwest-striking fault zones within the Solo Lake stock locally host en echelon arrays of more northerly striking gold bearing quartz veins.... Farther north, a north-northwest-striking dextral fault is inferred to occupy the drift-covered valley of Solo Creek, based on an apparent dextral offset of the southern margin of the Johanson Creek pluton" (Schiarizza and Tan, 2005a, p. 121).

#### Timing of Deformation

"The timing of deformation within the Johanson Lake ... area is not well constrained, but is suspected to range from Late Triassic to Tertiary in age. The dominant structures ... are dextral fault systems. These include the north to northwest-striking Dortatelle and Upper Wrede Creek–Polaris Creek systems, as well as numerous smaller faults with similar orientations and documented dextral displacements. Dextral faults are known to cut the youngest rocks within the Johanson Lake ... area, the Jura-Cretaceous Osilinka granites.... They are related to the Finlay-Ingenika fault system ... which is part of a Cordillera-wide system of dextral faults that was active mainly in Late Cretaceous through Late Eocene time" (Schiarizza and Tan, 2005a, p. 122).

### **Property Geology**

The SOL claim is underlain mainly by the Late Triassic Solo Lake Stock, which is intrusive into sedimentary and volcanic rocks of the Middle to Upper Triassic Takla Group (Figure 6).

#### Takla Group

"All stratified rocks within the Johanson Lake map area are part of the Middle to Upper Triassic Takla Group.... The Takla Group is a prominent and characteristic unit of the Quesnel Terrane throughout central British Columbia, although the namesake (Takla Lake) and type area of group are found to the west of the Quesnel belt, where the name is also applied to Upper Triassic rocks of the Stikine Terrane" (Schiarizza and Tan, 2005a, p. 110).

"The Takla rocks ... are mainly or entirely Late Triassic in age.... Within the Johanson Lake area, these rocks are subdivided into two main units: a heterogeneous succession of volcaniclastic, volcanic and sedimentary rocks assigned to the Kliyul Creek unit, and a more homogeneous assemblage of pyroxenerich volcanic breccias assigned to the Goldway Peak unit" (Schiarizza and Tan, 2005a, p. 110). Within the Solo Lake area the "... sedimentary rocks include mainly volcaniclastic siltstones and sandstones with locally abundant gritty argillite. These rocks have been strongly baked in proximity to the intrusion, where they are hornblende hornfelses" (Richards, 1991, p. 13). The western part of the SOL claim is underlain by volcanic rocks. "The volcanic rocks include mainly feldspar, augite and/or hornblende phyric andesites and basalts metamorphosed regionally to greenstone volcanics. The volcanics range from fine-grained green to greyish green tuffs and lapilli tuffs to massive finely porphyritic units that may be either flows or sills. Many of the rocks are fine breccias, seen only on good weathered surfaces" (Richards, 1991, p. 13).

#### Solo Lake Stock

"The Solo Lake stock intrudes the volcanic sandstone unit of the Takla Group ... along and southwest of Solo Lake. The intrusion consists mainly of light to medium grey, medium grained, equigranular hornblende quartz diorite to diorite. Melanocratic hornblende-rich diorite, locally grading to hornblendite, occurs locally, as do patches and dikes of mafic-poor tonalite. Dikes showing a similar range of composition are common within the Takla Group peripheral to the stock" (Schiarizza, 2004, p. 90). A Late Triassic (Norian) U-Pb zircon date ( $223.6 \pm 0.8$ ) was obtained on a sample of diorite collected from the Solo Lake stock (Schiarizza and Tan, 2005a, p. 117).

"Inclusions of hornfelsed volcanics are common throughout the intrusion.... Contacts with the volcanics and sediments are usually sharp" (Richards, 1991, p. 14).

#### Structure and Metamorphism

The rocks in the Solo Lake area "…have been deformed mainly by faulting and fracturing. All the mineralization noted … appears to be structurally controlled and … associated directly with shear zones and large tension-gash features that are interpreted to result of movement along the shear zones" (Richards, 1991, p. 14). Quartz veins trend mainly northwesterly to northerly with a lesser easterly component. The main system of quartz veins (A to K) are up to 400 meters in length and up to 10 meters in width. "They appear to be the result of the development of tension gashes developed as the result of strike-slip movement along the mylonitic and phyllonitic shear zones" (Richards, 1991, p. 15).

"All the stratified rocks have undergone regional greenschist metamorphism as noted by the widespread development of epidote, actinolite and chlorite." (Richards, 1991, p. 8).

### Mineralization

#### **MINFILE Occurrences**

Based on the map of Schiarizza and Tan (2005b), three MINFILE mineral occurrences lie within the boundary of the SOL claim (Figure 6). These are, from west to east, 094D 138 (Tar), 094D 013 (Bruce) and 094D 178 (F Vein). In addition, occurrence 094D 12 (Solo) lies a short distance north of the SOL claim.

094D 138 (Tar): "Mineralization consists of gold-bearing proximal quartz veins in the talus at the base of the cirque. One of the best samples assayed 3.87 grams per tonne gold (Assessment Report 21394)" (B.C. Ministry of Energy and Mines MINFILE No. 094D 138 Summary). This appears to correspond to the L Vein talus of Richards, 1991 (Figure 9). The L Vein talus is described below.

094D 013 (Bruce): According to the MINFILE summary the Bruce occurrence includes the A to E veins. These are discussed below.

094D 178 (F Vein): The F Vein is discussed below.

094D 12 (Solo): This MINFILE occurrence includes the G to K veins. The G, H and I veins, which lie totally or partly within the SOL claim, are discussed below.

#### Veins Associated With The Solo Lake Stock

The locations of the Solo Lake Stock (the Late Triassic intrusion centred west of Solo Lake) and MINFILE occurrences are shown in Figure 6. A map showing the location of veins in the area of the SOL claim, which is largely underlain by the Solo Lake Stock, is presented in Figure 7.

"Gold-bearing quartz veins associated with the Solo Lake stock include the Solo (MINFILE 094D 012), Bruce (MINFILE 094D 013) and Goldway (MINFILE 094D 027) occurrences, discovered in the mid-1940s (White, 1948), and the F vein, V3 and Tar (MINFILE 094D 138) occurrences, discovered during renewed exploration in the 1980s and 1990s (Pawliuk, 1985; von Rosen, 1986; Richards, 1991). The vein systems associated with the Solo Lake stock were well described by Richards (1991). Each occurrence ... comprises a number of veins, with individual veins ranging from several metres to more than 100 m in length, and from a few centimeters to several metres in width. Gold and silver ratios are commonly near one to one, and the precious metals are associated with pyrite, and locally galena and sphalerite. Visible gold has been reported from the A and C veins of the Bruce occurrence. The A vein has returned assay values up to 74.19 g/t Au over 29 cm (Phendler, 1984)" (Schiarizza and Tan, 2005a, p. 126).



Figure 7. Map showing quartz veins in the SOL claim area. Vein locations after Richards (1991) with position of A vein modified based on 2017 field observations. Elevation contours are in metres. Base data includes information from digital files licensed under the Open Government Licence – Canada. The location of road / trail is from field GPS recordings.

"The geometry of the vein systems is most apparent at the Solo and Bruce occurrences, where individual veins are arranged en echelon within northwest-striking zones that approach 1 km in length. Individual veins strike more northerly than the overall system, and are inferred to occupy extensional fractures within dextral shear systems (Richards, 1991). Alteration related to the veins is minimal, and Richards (1991) suggested that the veins may be related to fault movements during the late stages of emplacement and cooling of the Solo Lake stock. Alternatively, the veins may be considerably younger, and the Solo Lake stock may have been a favourable mechanical and chemical host for vein systems that were localized along components of the regional system of Late Cretaceous–early Tertiary dextral strike-slip faults" (Schiarizza and Tan, 2005a, p. 126).

The SOL Claim"... is underlain by a set of quartz veins associated with shear zones and tension gashes arranged in a northerly trending en echelon manner. Gold and silver values are variably distributed in these veins, and range from veins with good grade values (greater than 0.25 opt) and continuity across 100 meters to veins with spotty values" (Richards, 1991, p. 21). Gold appears to be associated with mainly pyrite and, to a lesser extent, galena and sphalerite. "Visible gold has been noted, particularly in the A-vein, and the gold appears to be free-milling. Most gold/silver ratios are 1/1, with a range ... of 3/1 to 1/4 (Richards, 1991, p. 15).

The most important veins discovered to date "…occur as an en echelon set of gash veins that are restricted, in the main, to the eastern part of the stock. These include the A, B, C, D, E, F, G, H, I, J and K veins … that are traceable over a strike length of 2.5 kilometers. Of these, the A-vein has received most of the attention since 1947 as it contains significant gold assays over a strike length of some 100 meters. Good gold assays have been obtained from channel samples from the C-vein, and anomalous gold from grab samples in the F, G, I, J and K-veins. The best values are from veins that contain disseminated pyrite +/- galena and sphalerite through-out their strike-length. These are commonly sheeted. Most of the veins (B, D, E, F, G, H, I and J) comprise mainly of white bull quartz with local pods of pyrite and rust. Pure white quartz does not appear to carry anomalous values of precious metals" (Richards, 1991, p. 16).

#### A Vein

A sketch showing channel sample results for the A Vein from 1990 (Richards, 1991) and prior to 1990 is presented in Figure 8. A second sketch showing chip samples results for the A Vein reported Phendler (1984) is presented in Figure 9.



Figure 8. Channel sample results from the A vein compiled by Richards (1991). Northern part of vein not shown. The location accuracy of pre-1990 samples in unknown. Note that "Samples on left side of vein from von Rosen report, Oct. 1985" include many, but not all, of the Phendler (1984) samples.



A13B - 0.702 / 0.76 m Sample Number - oz/ton Au / Sample Width

Figure 9. Chip sample results from the A vein reported by Phendler (1984). Samples were collected in August, 1983. Sample widths are in metres.

"The A-vein is the most significant and obviously mineralized vein on the property. It was discovered in 1946 and has been the main focus of activity on the claims" (Richards, 1991, p. 17). It has been sampled by White (1947), Campbell (1947), Pawliuk (1985) and Richards (1991). Sample locations and gold values from these surveys are shown in Figure 8. The location of the pre-1990 sampling is shown on the right side of the diagram and represents the best-fit for these samples compared to the mapping and sampling of Richards (1991). "The values shown confirm clearly the consistency of gold mineralization in this vein. The vein strikes north to northwest, and dips steeply to the west. It varies in width from a few centimeters to one meter where exposed. It is traceable along strike for about 100 plus meters and vertically for about 100 meters. It appears to pinch out to the north, at higher elevations near the ridge crest, and disappears under overburden and talus at lower elevations, where it attains its greatest width" (Richards, 1991, p. 17). "Free gold has been noted in at least three locations.... Best gold values appear to be found in the hanging wall portions of the vein, in association with galena and pyrite" (Richards, 1991, p. 17). Several samples collected during different programs have returned over 1 oz/ton Au.

The A Vein was examined by White in 1947 on behalf of the B.C. government. White (1948) gives an average width for the A vein of 24 inches (0.61 m) over a length of 420 feet (128 m). Nine samples of the A vein collected by White returned high values of 1.30 oz/t Au and 1.3 oz/t Ag over 0.43m and 0.99 oz/t Au and 1.0 oz/t Ag over 0.46m (White, 1948).

"Detail chip sampling carried out in 1947 by Goldway Peak Mines Ltd., showed that 127 meters of vein "A" averaged 0.52 oz Au per ton across an average width of 0.6 meters" (Phendler, 1984, p. 2).

Richards (1991) states that Campbell, based on his 1947 sampling, "... summarized three zones on the A-vein as follows:

-upper zone: 0.29 oz. Au/ton across 2.1 feet for 180 feet of horizontal length over 140 foot vertical interval,

-middle zone: 0.94 oz. Au/ton across 2.3 feet for a length of 80 feet, and

-a lower zone: 0.88 oz. Au/ton across 2 feet for a length of 50 feet" (Richards, 1991, p. 17).

As this only sums to a length of 310 feet (94.5 m), which is less than the 128 m and 127 m lengths cited by White (1948) and (Phendler, 1984), it is possible that covered intervals exist between the upper, middle and lower zones that are not included in the Richards (1991) tally. Note that Phendler (1984) shows the sampled (exposed) part of the vein to be approximately 130 m in length.

Table 3 lists weighted average gold values and average widths of the A Vein calculated based on the data provided by several previous sampling programs. Similar values are reported in a data review by Carter (1991).

Sampling Program	Number of samples	Au (oz/ton) weighted average	Average width (m)	Comment
Campbell (1947)	23	0.47	0.74	Data from Richards (1991, Fig. 9B)
White (1948)	9	0.26	0.71	
Phendler (1984)	16	0.32	0.55	
Pawliuk (1985)	8	0.22	0.62	
Richards (1991)	29	0.27	0.40	
All above	85	0.34	0.58	

Table 3. Width and grade values of chip samples from the A vein.

#### A Vein Bulk Sample

A bulk sample of 1565 kg of quartz was collected in 1986 by blasting and hand mucking from the A vein at a location where the vein is about 1 meter wide. The site was selected in fog and the location along the A vein appears to be uncertain. "As there was no survey point to measure from, nor any manner to indicate the high-grade section of the vein, the bulk-sample site was chosen for its ease of access...." (von Rosen, 1986, p. 13). Given their proximity, there is a small chance the bulk sample was collected from the B vein rather than the A vein (although von Rosen (1986) seemed confident that he had located the A vein).

"The writer obtained a head sample (G1) by taking handfulls of crushed material in advance of the ballmilling operation" (von Rosen, 1986, p. 13). This sample (G1) returned an average grade of 0.076 oz/ton Au (2.6 g/t Au). Gold recovery by simple milling and tabling was about 97%.

"The fact that the amount of gold recovered is low does not weigh heavily against the worth of the Goldway Peak property, as this was caused by a tactical error of inadvertently choosing one of the low-grade sections of the 'A' vein for the sample. Other sizeable sections are documented in the literature as having a much higher grade of gold" (von Rosen, 1986, p. 16). The bulk sample was evidently collected from a base-metal poor section of the vein as the head sample (G1) returned <5 ppm Pb, 30 ppm Zn, 12 ppm Cu and 0.04% S. The head sample (G1) also contained 11.61% Al2O3, 4.21% Fe, 1.32% MgO, 0.43% Na2O, 3.25% K2O and 0.44% TiO2 suggesting that a substantial amount of wallrock may have been included in the bulk sample (the low S content indicates that very little of the iron occurs as sulphide).

#### B Vein

"The B-vein ... consists of an elongate lens of quartz, striking mainly northwest for about 150 meters, that attains a width of up 10 meters at its thickest, and pinches out along its strike in both directions. It is comprised mainly of milky white to translucent quartz with little or no visible sulphides. It is traceable to the ridge crest, where it is of stringer width" (Richards, 1991, p. 17). Assay results for the B vein shown by Richards (1991, after Douglas D. Campbell, 1947) indicate only low gold values (trace to 0.03 oz/t Au) for most of the vein including the wide, central section. However, samples collected near the southern end of the exposed vein returned values of up to 0.20 oz/t Au across 1.8 m. White (1948) obtained a result of 0.07 oz/t Au over 1.5 m from the southern end of the B vein.

#### C Vein

"The C-vein ... is traceable for up to 40 meters, and averages 45 centimeters wide. It contains visible gold and assay values to 1 oz/tonne" (Richards, 1991, p. 17). White (1948) states that the C Vein has a length of 145 feet (44 m), an average width of 18 inches (0.46 m) and is fairly constant in width. The C Vein strikes northwest and dips steeply to the northeast (Richards, 1991).

Based on nine samples collected by Campbell in 1947 (reported by Richards, 1991) the average weighted gold value of the C Vein is 0.43 oz/ton Au across an average width of 0.61 m (Figure 10).



0.84/2.8' Au (oz/ton) / width (feet)



#### 7464 Vein

The vein from which sample 7464 was collected is described as an 18 cm wide white quartz vein with abundant limonite coating fractures and no sulphides. It returned 0.244 oz/t Au and 0.21 oz/t Ag over 18 cm. This vein is located about 75 m east of the C vein (Pawliuk, 1985).

#### D Vein

"The D-vein ... is traceable for in excess of 200 meters, ranging in width from less than one meter to greater than 3 meters width. It occurs as a series of en echelon lenses striking about 140/70 north" (Richards, 1991, p. 18). Sampling for the BC government by White in 1947 returned up to 0.26 oz/t Au and 0.3 oz/ton Ag over 1.63 m.

#### F Vein

The F Vein consists "... of a white quartz vein traceable for 400 meters above the southwest shore of Solo Lake. Sampling by Pawliuk (1985) and von Rosen (1988) showed only a few anomalous gold values, to 0.12 opt across 0.32 meters. The vein contains very little sulphides" (Richards, 1991, p. 18). "Vein F is from 0.27 m to 5 m (average about 0.4 m) in width" (Pawliuk, 1985, p. 8).

#### 7473 Vein (Talus)

"Sample 7473 is described as white quartz vein pieces (46 cm wide) in talus containing abundant limonite and locally up to 4% galena and up to 1% chalcopyrite, malachite and azurite. It returned 0.39 oz/t Au, 2.08 oz/t Ag and 0.46% Pb over 46 cm. The sample was collected about 50 m south of (and uphill from) the southeastern end of the F vein exposure (Pawliuk, 1985).

#### G Vein

"The G-vein consists of a quartz vein, to 2 meters width, traceable for up to 100 meters cutting both the intrusive and hornfelsed volcanics. Its exposure is irregular, and trends north-northwest although splays appear to be present. Three grab samples from this vein gave low gold values. Pyrite is irregular in this vein (Richards, 1991, p. 18).

#### H Vein (Stockwork)

"The H-vein is not a vein, but represents a north-trending quartz stockwork system cutting both intrusives and hornfels. The quartz is white and milky with little or no other sulphides common. A grab of 620 ppb ... from the south end of this zone suggests the presence of anomalous gold" (Richards, 1991, p. 18).

#### I Vein

"The I-vein strikes north-northwest, dips steeply west, and attains a thickness of up to 2 meters, traceable for greater than 100 meters. It is composed mainly of milky white bull quartz, locally with minor vugs of quartz crystals. In local patches the vein weathers rusty from the presence of pyrite. Four grab samples from these rusty zones gave highly anomalous gold to 0.470 opt. Other portions of the vein were not sampled" (Richards, 1991, p. 19).

#### L Vein (Talus)

"In a cirque basin, north of Goldway Creek and west of the D- and E-veins, six samples of proximal quartz veins were sampled. It is apparent that these were derived from veins immediate1y up-slope from the talus. Widths are not known, although values to 50 cm were quoted. Gold values to 0.113 opt [3.87 g/t] were obtained, and 5 of the 6 samples contained anomalous gold (Richards, 1991, p. 19).

### **2017 Exploration Program**

#### **Field Work**

Exploration activities on the SOL claim in 2017 consisted of locating and sampling the A vein.

Ten grab samples of vein material were collected consisting of five sample from outcrop and five samples of talus and/or (trench?) rubble.

Rock sample analyses, including gold assaying of all samples, were performed by TSL Laboratories Inc. in Saskatoon, Saskatchewan. Rock sample descriptions are provided in Appendix 1 and analytical results are presented in Appendices 2, 3 and 4.

Location information was obtained using a Garmin GPSMAP 64st instrument. Location units are presented in the UTM NAD83 coordinate system. Horizontal accuracy, as measured by the instrument, is generally within 3 m. The instrument does not display vertical accuracy but it is much poorer than horizontal accuracy.

#### Laboratory Methods (Rock Geochemistry)

[Laboratory method descriptions provided by Mark Acres of TSL Laboratories Inc.]

#### Sample Preparation

Samples received at TSL Laboratories Inc. in Saskatoon, Saskatchewan were opened, sorted and dried prior to preparation. Rock samples were crushed using a primary jaw crusher to a minimum 70% passing 10 mesh (1.70 mm).

A representative split sample was obtained by passing the entire sample through a riffler. The 250 gram sub-sample thus obtained was pulverized to a minimum 95% passing 150 mesh (106 microns). A silica sand wash was used between each pulverization to prevent contamination between sub-samples.

#### Multi-Element Analysis (aqua regia extraction)

A 0.5 gram sample was digested with 3 ml of aqua regia (3:1 HCl/HNO<sub>3</sub>) at 95°C for 1 hour and then diluted to 10 ml with deionized water. The solution was analyzed by inductively coupled plasma mass spectrometry (ICP-MS) for 36 elements. Aqua regia digestion may fail to liberate significant proportions of several of the reported elements (depending on sample mineralogy) including Al, B, Ba, Ca, Cr, Fe, Ga, K, La, Mg, Mn, Na, P, Sn, Sr, Th, Ti, V and W.

#### Assays

*Gold*: All 10 samples were submitted for fire assay. Gold was determined on 29.16 g (1 assay ton) subsamples by fire assay procedure (production of Dore bead) followed by a gravimetric finish. Several samples were assayed more than once (up to three times).

*Silver*: The one sample that initially returned > 100 g/t Ag (GW4007) was submitted for an assay determination. A 0.5 g subsample underwent an analysis method utilizing four-acid (HNO<sub>3</sub>-HF-HClO<sub>4</sub>-HCl) digestion, large dilution and atomic emission spectroscopy.

*Lead*: The three samples that initially returned > 10000 ppm Pb (GW4007, GW4009 and GW4010) were submitted for assay determinations. A 0.5 g subsample underwent an analysis method utilizing four-acid (HNO<sub>3</sub>-HF-HClO<sub>4</sub>-HCl) digestion, large dilution and atomic emission spectroscopy.

#### Analytical Quality Assurance

A number certified reference materials (standards) were inserted into the sample batches by TSL. The data obtained on these samples were reviewed and no significant issues were detected.

#### Results

Locations of the ten rock samples collected in 2017 from the SOL claim along with analytical results for gold and silver are shown in Figure 11.

The A vein was examined in outcrop at the locations where samples GW4001-GW 4003 and GW4005-GW4006 were collected (Figure 12). The vein was observed to be 30 to 50 cm wide, have a northerly strike (varying from 335° to 020°) and dip 72° to 75° W. The vein is commonly massive but is locally vuggy and some examples of coxcomb quartz were observed. It commonly exhibits limonitic Fe-oxide alteration (along hairline fractures and as a surface stain) and minor amounts of galena are moderately common (along hairline fractures and in blebs up to 5 mm across).



Figure 11. Map showing location of 2017 grab samples from the A vein (outcrop and rubble/talus). Location of the B vein is from Richards (1991). Location of the A Vein is after Richards (1991) with position modified based on 2017 field observations. Southern part of vein is covered by talus (southern dashed line). Northern extent of A vein is uncertain (northern dashed line). Elevation contours in metres. Base data includes information from digital files licensed under the Open Government Licence – Canada. Location of road/trail from 2017 field GPS recordings.



Figure 12. Photo of A Vein near location where samples GW4001-GW 4003 were collected. View is toward 340°. Black lines on hammer handle are 10 cm apart.

Table 4 lists the fire assay results for the 10 samples collected from the A vein (and associated rubble / talus) in 2017. Several of the samples were assayed two or three times. The multiple analyses (i) confirm the high grades values obtained in the original determinations and (ii) suggest that the gold is relatively uniformly distributed within each sample. Sample weights shipped to TSL for analyses varied from 140 g to 962 g (Appendix 1).

Sample Number	Au (g/t) 1st assay	Au (g/t) 2nd assay	Au (g/t) 3rd assay	Au (g/t) average
GW4001	15.81	15.40		15.61
GW4002	2.16			2.16
GW4003	2.78	3.09		2.94
GW4004	6.62			6.62
GW4005	6.21			6.21
GW4006	1.27			1.27
GW4007	164.10	156.90	121.70	147.57
GW4008	32.41	41.08	61.63	45.04
GW4009	37.24	24.97	37.83	33.35
GW4010	76.20	91.36	78.36	81.97

Table 4. Summary of Au assay results for 2017 samples. All assays performed on 29.16 g of sample material.

Selected geochemical values are presented in Table 5 (see Appendices 2, 3 and 4 for all analytical results). Lead values range up to 2.28% and there is a strong relationship between gold, silver and lead (the Pb-Ag association appears to be somewhat stronger that the Pb-Au association). Small quantities of galena were noted at several places along the A vein. Zinc and copper values are somewhat elevated in the four most southerly samples (GW4001 to GW4004) while antimony values are highest in the four most northerly samples (GW4007 to GW4010), which also have the highest gold contents. Bismuth and tellurium are somewhat elevated in several samples throughout the sample set. No significant arsenic or mercury values were detected (maximum values of 13.3 ppm As and 0.03 ppm Hg). The low sulphur values obtained from the samples (<0.05% to 0.14%) attest to the relative sparsity of sulphides in the quartz vein material.

Sample	Au (g/t) average	Ag (g/t)	Pb (ppm)	Bi (ppm)	Cu (ppm)	Sb (ppm)	Te (ppm)	Zn (ppm)
GW4001	15.61	34.5	1396.7	30.7	140.4	8.2	5.2	263
GW4002	2.16	3.6	726.6	4.6	70.6	7.6	0.9	160
GW4003	2.94	59.5	4283.1	105.9	134.2	11.4	11.8	244
GW4004	6.62	29.1	5314.9	22.5	404.5	13.4	6	199
GW4005	6.21	1.2	34.2	12.3	15.7	0.4	1.8	32
GW4006	1.27	0.5	38.5	6.4	24.8	0.4	1.1	73
GW4007	147.57	123.8	16600.0	16.4	21.1	55.3	7.3	10
GW4008	45.04	35	5724.5	4.7	30.9	14.2	3.9	7
GW4009	33.35	94.8	13600.0	15.8	15.3	58.6	6.5	5
GW4010	81.97	87.5	22800.0	19.3	97.9	43.4	11.5	46

Table 5. Contents of selected elements in quartz vein samples from the A Vein (outcrop and rubble/talus).

### **Discussion and Conclusions**

Gold and silver mineralization on the SOL claim is associated with quartz veins of considerable length and width related to regional dextral faulting and hosted within an intermediate to felsic Triassic intrusion (the Solo Lake Stock).

The most well explored and well sampled vein on the SOL claim is the A Vein. Previous work on the A Vein, undertaken between 1946 and 1990, has revealed a strike length of at least 125 m and a steep westerly dip. A review of previous reports has identified data for 85 chip samples across the A Vein collected during five different sampling programs. The weighted average gold value based on this data set is 11.7 g/t Au (0.34 oz/ton Au) over an average width of 0.58 m.

Field work in 2017 was successful in finding the A Vein and obtaining GPS coordinate data on the southern part of the vein. Grab samples collected along the A vein confirmed the previously reported high grade gold values with all 10 samples returning greater than 1 g/t Au and 4 of the 10 samples yielding greater than 30 g/t Au. The highest sample value obtained (average of three fire assays) was 147.57 g/t Au (4.30 oz/ton Au). Silver is also strongly enriched within the A Vein where it is strongly associated with gold (and lead). The highest silver value obtained from the 2017 samples was 123.8 g/t Ag (3.61 oz/ton).

Several other auriferous veins are known to occur within the boundaries of the SOL claim. The C Vein is traceable for up to 44 meters and is fairly constant in width. The average weighted gold value of the C Vein is 14.7 g/t Au (0.43 oz/ton Au) across an average width of 0.61 m (based on 9 chip samples collected in 1947).

No diamond drilling has been undertaken within the boundaries of the SOL claim (an attempt with a Winkie drill in 1985 was unsuccessful due to an inadequate water pumping system).

### Recommendations

Phase 1: An initial program of systematic geological mapping, talus fines/soil sampling, ground magnetic surveying (for structural information) and prospecting (± trenching) is recommended for the SOL claim. Detailed mapping of the A Vein and C Vein should be undertaken as their surface position need to be more tightly constrained before planning diamond drill hole locations.

Phase 2: Diamond drilling of the A Vein and C Vein and any additional drill-worthy targets identified during Phase 1.

### References

Carter, N.C. (1991): Solo Group Mineral Claims. Unpublished report for Super Twins Resources Ltd. dated August 12, 1991, 5 p.

Colpron, M. and Nelson, J.L. (2011): A digital atlas of terranes for the northern cordillera. British Columbia Ministry of Energy and Mines, BCGS GeoFile 2011-11.

Game, R.E. (1984): Report on assessment work (geological and geophysical) on the GOOD (4155), MUCH (4149), PRO (4150), AND (4148), FIT (4151), PROSPECTS (4147) and DAR (4154) claims. Goldway Peak, Johanson Lake, Omineca Mining Division, British Columbia. British Columbia Assessment Report 13145 (prepared for Laramie Mining Corporation), 14 p.

Holland, S. S. (1976): Landforms of British Columbia. British Columbia Ministry of Energy and Mines Bulletin 48, 138 p.

Lord, C.S. (1948): McConnell Creek map-area, Cassiar District, British Columbia. Geological Survey of Canada, Memoir 251, 72 p.

Meyers, R.E. and Smit, H.Q. (1985): 1984 assessment report of the geological and geochemical exploration program on the Goldway 1 – 8 claims, Omineca Mining Division. British Columbia Assessment Report 13697 (prepared for BP Resources Canada Limited), 94 p.

Pawliuk, D.J. (1985): Report on assessment work on the Goldway Peak Property, Omineca Mining Division, Johanson Lake, British Columbia. British Columbia Assessment Report 14105 (prepared for Laramie Mining Corporation), 39 p.

Phendler, R.W. (1983): Assessment report (preparatory survey) on Vi 1 and Vi 2 (Record Nos. 1948 and 1949), Johanson Lake Area, British Columbia. British Columbia Assessment Report 11636 (prepared for Laramie Mining Corp.), 6 p.

Phendler, R.W. (1984): Report on assessment work (sampling and assaying) on Vi 1 and Vi 2 (Record Nos. 1948 and 1949), Johanson Lake Area, British Columbia. British Columbia Assessment Report 13175 (prepared for Laramie Mining Corp.), 9 p.

Richards, T.A. (1991): Geological setting and sampling of vein systems, Solo Group mineral claims, Omineca Mining Division. British Columbia Assessment Report 21394 (prepared for Jetta Resources Ltd.), 42 p.

Schiarizza, P. (2004): Geology and mineral occurrences of Quesnel Terrane, Kliyul Creek to Johanson Lake (94D/8, 9). British Columbia Ministry of Energy and Mines, Paper 2004-1, Geological Fieldwork 2003, p. 83-100.

Schiarizza, P. and Tan, S.H. (2005a): Geology and mineral occurrences of the Quesnel Terrane between the Mesilinka River and Wrede Creek (NTS 94D/8, 9), north-central British Columbia. British Columbia Ministry of Energy and Mines, Paper 2005-1, Geological Fieldwork 2004, p. 109-130.

Schiarizza, P. and Tan, S.H. (2005b): Geology of the Johanson Lake area, parts of NTS 94D/8 and 9. British Columbia Ministry of Energy and Mines, Open File Map 2005-4, 1:50 00 scale.

Strain, D.M. (1981): Geological and geochemical report on the AS 1 claims, Omineca Mining Division. British Columbia Assessment Report 9275 (prepared for Du Pont of Canada Exploration Limited), 14 p. Von Rosen, G.E.A. (1982): Assessment geochemical report, Gold content soil survey on GOOD:PROSPECTS:AND:MUCH:PRO:FIT and DAR mineral claims, Goldway Peak area, Omineca Mining Division. British Columbia Assessment Report 10809 (prepared for Dermot Fahey), 26 p.

von Rosen, G. (1986): Assessment geological report on mapping, sampling and bulk sampling program on the GOOD (4155) – PROSPECTS (4147) – MUCH (4149) – PRO (4150) – FIT (4151) – DAR (4154) mineral claims (Gold Group), Goldway Peak – Johanson Lake area, Omineca Mining Division. British Columbia Assessment Report 15313 (prepared for Laramie Mining Corporation), 36 p.

White, W.H. (1948): Sustut-Aiken-McConnell Lake area. British Columbia Minister of Mines Annual Report for the year ending 31st December 1947, p. A100 – A111.

### Qualifications

I, Glen Prior, of 793 Birch Avenue, Sherwood Park, Alberta do hereby certify that:

- I graduated from Laurentian University in Sudbury, Ontario, with a B.Sc. (Honours) degree in geology in 1982, from Laurentian University in Sudbury, Ontario, with a M.Sc. degree in geology in 1987 and from Carleton University in Ottawa, Ontario, with a Ph.D. degree in geology in 1996.
- I practiced my profession full-time from 1986 to 1991 and continuously since 1996.
- I am a Professional Geologist registered with the Association of Professional Engineers and Geoscientists of Alberta.
- I am the sole owner of the SOL claim (Title Number 1049872).
- This report incorporates information from field work that I undertook during the 2017 field season.

May 03, 2018

Sherwood Park, Alberta

Sh f-

**Glen Prior** 

# Expenditures

Item	Comment	Cost	Subtotal
4x4 pick-up (Ram 3/4 ton)	Fort St. John to Johanson Lake and	1010 km @ \$0.68/km	\$686.80
	return to Hwy 97 (Mackenzie turn off)		
Quad (4x4)	Claim access	5 days @ 123.35/day	\$616.75
InReach	Communication device	5 day @ \$10.00/day	\$50.00
Forestry road radio	Rental	5 days @ \$2.00/day	\$10.00
Field work*	G. Prior (Ph.D.)	3 days @ \$750.00/day	\$2,250.00
Travel days	G. Prior (Ph.D.)**	0.5 day @ \$750.00/day	\$375.00
Food and camp costs	G. Prior (field work)	3 days @ \$50.00/day	\$150.00
Report writing and compilation	G. Prior (Ph.D.)	3 days @ \$750.00/day	\$2,250.00
Rock prep + Au fire assay	Prep includes sand wash	10 samples @ \$28.35	\$283.50
Rock ICPMS analyses	Aqua regia digestion	10 samples @ \$17.05	\$170.63
Rock Ag assay	Multiacid digestion	1 sample @ \$7.56	\$7.56
Rock Pb assays	Multiacid digestion	3 sample @ \$9.45	\$28.35
Total:			\$6,878.59
Claimed for assessment credit:			\$6,500.00

\*Dates of field work: 2017-SEP-15, 2017-SEP-16 and 2017-SEP-17

\*\* Two days spent travelling but only a 1/2 day applied for assessment credit.

### Appendix 1

### **Rock Sample Descriptions**

### Location Coordinates: UTM Zone 9V, NAD83

Note: The column "Weight" lists the weight of sample shipped to laboratory.

Sample	East	North	Elev (m)	Date	Description	Weight (g)
GW4001	669554	6267985	1927	2017_09_16	Grab sample from hanging wall side of vein (from ~0 to 5 cm from hanging wall). White quartz vein with weak to moderate fracture controlled (and surface coating) medium rusty brown Fe-oxide. Trace to 0.25% dark brown sphalerite along irregular fractures. Trace to 0.25% spotty galena. Quartz vein at 335°/72°W. Vein is 48 cm wide. Vein located in "chute" with talus below. Approximately 2 m uphill on same veins as sample GW4001 is a metal tag stuck into crack within quartz vein (appears to be number 9081Y33 but the 0 and the 8 are difficult to read - the 33 is clear).	399
GW4002	669554	6267984	1926	2017_09_16	~1 m south of GW4001 (downslope) and about 0.5 m lower in elevation. Same vein as GW4001. Grab sample collected from hanging wall side of vein between 0 and 10 cm from hanging wall contact. Weak to moderate fracture controlled (and coating) Feoxide. Dark brown to black sphalerite occurs in 0.5 mm veinlet (overall about trace to 0.25% sphalerite). This is the close to being the lowermost exposure of the rusty brown (mineralized) vein within the chute (a white bull quartz vein outcrops in west wall of chute about 4 m below).	263
GW4003	669554	6267984	1926	2017_09_16	A second grab sample from essentially the same location as GW4002. Sample is similar to GW4002 except no sphalerite noted and contains trace to 0.25% fine grained galena in irregular lenses ~2 cm x 0.5 cm.	237
GW4004	669559	6267925	1874	2017_09_16	On roadway (very near end) below chute. Very angular rubble ~15x10x10 cm. White quartz vein (no host rock). Weak fracture-controlled yellow-brown limonitic Fe-oxide (and as surface stain). 0.25% to 0.5% very fine to fine grained galena (a) in irregular veinlets up to 2 mm wide consisting of 100% galena and (b) as disseminated to blebby galena (irregular blebs up to 5 mm across. Trace amounts of disseminated pyrite.	962
GW4005	669542	6268029	1963	2017_09_17	Trenched area ~5m x 5 m (hand trenching +/- blasting) with quartz veins exposed on upslope edge. White quartz vein, 30 cm wide, with weak fracture-controlled, medium yellow brown limonitic Fe-oxide (+ weak surface stain). Vein at 020°/75W°. Sample from 0 to 5 cm below hanging wall contact of vein. trace dark brown to black sphalerite along discontinuous, hairline fractures and also noted in a single bleb 5 x 3 mm in size.	418

Sample	East	North	Elev (m)	Date	Description	Weight (g)
GW4006	669542	6268029	1963	2017_09_17	About 15 cm above GW4005 in same relative position (near hanging wall). Similar to GW4005. Nil to trace hairline fracture-controlled sphalerite and a few (~1-2% of vein) rusty (limonitic) vugs up to 5 mm across that may have been sulphide. A second vein ~1 m to the west trends 320°/64°NE and is 38 to 40 cm wide (not sampled).	233
GW4007	669528	6268038	1968	2017_09_17	Angular rubble/talus block ~30x20x10 cm just below depression in slope with old, rotten timber (probably old pit or trench now covered by talus). Fe-stained quartz vein rubble/talus is common below and absent above. Sample is of quartz vein (no wallrock present). Locally the quartz is vuggy. Vane contains 0.5-2% very fine grained galena - mainly in small blebs up to 3 mm across. Galena appears to be most abundant in and near vuggy quartz.	858
GW4008	669528	6268036	1967	2017_09_17	~2 m downslope (south) of GW4007. Angular rubble/talus ~25x20x4 cm. White quartz vein, no wallrock. Weak fracture-controlled (and surface stain), medium rusty brown, limonitic Fe-oxide. 0.25-1% very fine to fine grained galena along irregular fractures and in disseminated blebs up to 3 mm across.	433
GW4009	669528	6268034	1966	2017_09_17	~2 m downslope (south) of GW 4008. Angular rubble 15x12x8 cm. White quartz vein, no wallrock. About 25% is vuggy and coxcomb quartz occurs locally. 1-3% fine to medium grained (mainly fine grained) galena as blebs up to 5 mm across. Weak fracture-controlled (and surface stain) limonitic Fe-oxide.	532
GW4010	669524	6268034	1966	2017_09_17	~4 m west of (along slope from) GW4009. Angular rubble ~11x6x5 cm. Quartz vein, no wallrock. Weak fracture-controlled (and surface stain), limonitic Fe-oxide. Vuggy quartz with some vugs partly filled with rusty brown, amorphous Fe-oxide. 3-7% fine grained galena in blebs up to 5 mm across and along irregular, hairline fractures.	140

Appendix 2

Analytical Results

Aqua Regia – ICPMS



2 - 302 48th Street • Saskatoon, SK • S7K 6A4 P (306) 931-1033 F (306) 242-4717 E info@tsllabs.com

Company: Geologist: Project: Purchase Order:	Mr. Glen I G. Prior GW	Prior	TSL Report: Date Receive Date Reporte Invoice:	S54981 ed: Feb 27, 2018 ed: Mar 09, 2018 75250
Sample Type: Rock	Number 10	Size Fraction Reject ~ 70% -10 mesh (1.)	Sa 70 mm) Cr 06 um)	ample Preparation rush, Riffle Split, Pulverize
Pulp	0		No pini)	one

#### ICP-MS Aqua Regia Digestion **HCI-HNO**<sub>3</sub>

The Aqua Regia Leach digestion liberates most of the metals except those marked with an asterisk where the digestion will not be complete.

Element Name	Lower Detection Limit	Upper Detection Limit	Element Name	Lower Detection Limit	Upper Detection Limit
Aq	0.1 ppm	100 ppm	Mn *	1 ppm	10000 ppm
AĬ*	0.01 %	10 %	Мо	0.1 ppm	2000 ppm
As	0.5 ppm	10000 ppm	Na *	0.001%	10 %
Au	0.5 ppb	100 ppm	Ni	0.1 ppm	10000 ppm
B*	1 ppm	2000 ppm	P*	0.001%	5 %
Ba*	1 ppm	1000 ppm	Pb	0.1 ppm	10000 ppm
Bi	0.1 ppm	2000 ppm	S	0.05 %	10 %
Ca*	0.01%	40 %	Sb	0.1 ppm	2000 ppm
Cd	0.1 ppm	2000 ppm	Sc	0.1 ppm	100 ppm
Co	0.1 ppm	2000 ppm	Se	0.5 ppm	1000 ppm
Cr *	1 ppm	10000 ppm	Sr *	1 ppm	10000 ppm
Cu	0.1 ppm	10000 ppm	Те	1 ppm	2000 ppm
Fe *	0.01%	40 %	Th *	0.1 ppm	2000 ppm
Ga *	1 ppm	1000 ppm	Ti *	0.001%	10 %
На	0.01 ppm	100 ppm	TI	0.1 ppm	1000 ppm
K*	0.01%	10 %	U *	0.1 ppm	2000 ppm
la*	1 ppm	10000 ppm	V *	2 ppm	10000 ppm
Ma *	0.01%	30 %	W *	0.1 ppm	100 ppm
ing	0.0170	00 /0	Zn	1 ppm	10000 ppm

Results are representative of samples submitted for testing. Test reports may be reproduced, in their entirety, without our consent. Liability is limited to the analytical cost for analyses.

#### Mr. Glen Prior

Attention: G. Prior Project: GW Sample: 10 Rock/0 Pulp

#### **TSL LABORATORIES INC.**

2 - 302 48th Street East, Saskatoon, Saskatchewan, S7K 6A4	Report No:	\$54981
Tel: (306) 931-1033 Fax: (306) 242-4717	Date:	March 9, 2018

#### **MULTIELEMENT ICP-MS ANALYSIS**

Aqua Regia Digestion

Element	Ag	Al	As	Au	B	Ba	Bi	Ca	Cd	Co	Cr	Cu	Fe	Ga	Hg	K	La	Mg	Mn	Mo	Na	Ni	P
Sample	ppm	%	ppm	ppb	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm	%	ppm	%	ppm	ppm	%	ppm	%
GW4001	34.5	0.04	5.6	46433.3	<20	10	30.7	0.01	1.2	1.1	145	140.4	1.6	<1	0.02	0.02	<1	0.02	30	2.3	0.001	4.9	<0.001
GW4002	3.6	0.01	4.4	3415.4	<20	2	4.6	<0.01	2	0.7	164	70.6	1.09	<1	0.02	<0.01	<1	<0.01	23	1	<0.001	5.4	<0.001
GW4003	59.5	0.01	2	2668.2	25	4	105.9	0.05	1.9	0.8	151	134.2	1.28	<1	0.01	<0.01	<1	0.02	32	4.1	0.006	3.6	<0.001
GW4004	29.1	<0.01	1	5180	42	5	22.5	0.04	2.6	0.5	166	404.5	0.36	<1	0.01	<0.01	<1	0.02	23	0.6	0.008	5	<0.001
GW4005	1.2	0.02	3.5	6075.8	<20	10	12.3	0.04	0.2	0.5	156	15.7	0.37	<1	<0.01	<0.01	<1	0.02	43	0.6	<0.001	2.9	0.001
GW4006	0.5	0.03	2.7	845.7	<20	9	6.4	0.05	0.3	0.7	167	24.8	0.49	<1	<0.01	<0.01	<1	0.02	60	1	<0.001	5.4	0.002
GW4007	>100.0	0.02	9.1	67491.5	<20	29	16.4	0.05	0.5	0.4	160	21.1	0.28	<1	0.04	<0.01	<1	0.02	29	0.7	0.003	3.1	0.001
GW4008	35	0.01	2.7	45372.2	<20	9	4.7	0.04	0.6	0.5	186	30.9	0.23	<1	0.02	<0.01	<1	0.02	29	1.1	<0.001	5.3	0.001
GW4009	94.8	0.01	3.9	12373.8	<20	24	15.8	0.05	0.4	0.5	180	15.3	0.25	<1	0.03	<0.01	<1	0.02	32	0.7	0.002	3.3	<0.001
GW4010	87.5	0.03	13.3	41008.1	<20	16	19.3	0.09	0.9	0.8	216	97.9	0.58	<1	0.03	<0.01	<1	0.04	38	3.3	0.004	7	0.001
STD OREAS45EA	0.3	2.96	12.4	73.6	44	151	0.3	0.04	<0.1	57.5	907	752.2	25.55	14	0.01	0.05	8	0.1	438	1.7	0.026	446.7	0.029
BLK	<0.1	<0.01	<0.5	<0.5	<20	<1	<0.1	<0.01	<0.1	<0.1	<1	<0.1	<0.01	<1	<0.01	<0.01	<1	<0.01	<1	<0.1	<0.001	<0.1	<0.001

### Mr. Glen Prior

Attention: G. Prior Project: GW Sample: 10 Rock/0 Pulp

#### **TSL LABORATORIES INC.**

2 - 302 48th Street East, Saskatoon, Saskatchewan, S7K 6A4 Tel: (306) 931-1033 Fax: (306) 242-4717

TIDI DADNE ICD MC ANAL VOIC

### **MULTIELEMENT ICP-MS ANALYSIS**

Aqua Regia Digestion

Element	Pb	S	Sb	Sc	Se	Sr	Те	Th	Ti	TI	V	w	Zn
Sample	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm
GW4001	1396.7	<0.05	8.2	0.5	0.7	<1	5.2	<0.1	0.002	<0.1	5	0.1	263
GW4002	726.6	< 0.05	7.6	0.1	< 0.5	<1	0.9	< 0.1	< 0.001	< 0.1	2	< 0.1	160
GW4003	4283.1	< 0.05	11.4	0.2	2	<1	11.8	< 0.1	< 0.001	< 0.1	9	0.1	244
GW4004	5314.9	0.1	13.4	< 0.1	4	1	6	< 0.1	< 0.001	< 0.1	<1	0.5	199
GW4005	34.2	<0.05	0.4	<0.1	<0.5	<1	1.8	<0.1	< 0.001	<0.1	<1	0.1	32
GW4006	38.5	< 0.05	0.4	0.2	<0.5	3	1.1	<0.1	< 0.001	<0.1	1	<0.1	73
GW4007	>10000.0	0.06	55.3	0.1	2.9	1	7.3	< 0.1	< 0.001	<0.1	<1	0.4	10
GW4008	5724.5	< 0.05	14.2	0.1	2.4	1	3.9	< 0.1	< 0.001	< 0.1	1	0.5	7
GW4009	>10000.0	< 0.05	58.6	0.1	4.6	1	6.5	< 0.1	< 0.001	< 0.1	<1	0.1	5
GW4010	>10000.0	0.14	43.4	0.2	6	3	11.5	<0.1	<0.001	<0.1	2	0.3	46
STD OREAS45EA	15.6	<0.05	0.2	85.7	1.5	4	<0.2	11.3	0.114	<0.1	334	<0.1	35
BLK	<0.1	<0.05	<0.1	<0.1	<0.5	<1	<0.2	<0.1	<0.001	<0.1	<1	<0.1	<1

Report No:S54981Date:March 9, 2018

Appendix 3

**Analytical Results** 

Gold Assays



2 - 302 48th Street • Saskatoon, SK • S7K 6A4 P (306) 931-1033 F (306) 242-4717 E info@tsllabs.com

Company: Geologist: Project: Purchase Order:	Mr G. GV	: Glen Prior Prior V		
TSL Report: Date Received: Date Reported: Invoice:	S5 Fe Fe 75	4949 b 08, 2018 b 12, 2018 213		
Remarks:	So	ome samples exhibit gold nugget effe	ect	
Sample Type: Rock	Number 10	Size Fraction Reject ~ 70% at -10 mesh (1.70 mm) Pulp ~ 95% at -150 mesh (106 µm)	Sample Preparation Crush, Riffle Split, Pulverize	
Pulp	0		None	
Pulp Size: ~250 g	ram			

Standard Procedure:

Samples for Au Fire Assay/Gravimetric (g/tonne) are weighed at 1 AT (29.16 grams).

			Lower	Upper
Element		Extraction	Detection	Detection
Name	Unit	Technique	Limit	Limit
Au	g/tonne	Fire Assay/Gravimetric	0.03	100%

Results are representative of samples submitted for testing. Test reports may be reproduced, in their entirety, without our consent. Liability is limited to the analytical cost for analyses.



#2 - 302 48<sup>th</sup> Street · Saskatoon, SK · S7K 6A4 P (306) 931-1033 F (306) 242-4717 E info@tsllabs.com

### **CERTIFICATE OF ANALYSIS**

SAMPLE(S) FROM	Mr. Glen Prior	
	793 Birch Avenue	
	Sherwood Park, Albert	a T8A 1X2



#### SAMPLE(S) OF

INVOICE #:75213 P.O.:

G. Prior Project: GW

10 Rock/0 Pulp

	Au	Aul	Au2	File
	g/t	g/t	g/t	Name
GW4001	15.81	15.40		S54949
GW4002	2.16			S54949
GW4003	2.78	3.09		S54949
GW4004	6.62			S54949
GW4005	6.21			S54949
GW4006	1.27			S54949
GW4007	164.1	156.9	121.7	S54949
GW4008	32.41	41.08	61.63	S54949
GW4009	37.24	24.97	37.83	S54949
GW4010	76.20	91.36	78.36	S54949
GS-7E	6.82			S54949
GS-7E	7.37			S54949

COPIES TO: INVOICE TO: G. Prior, Alberta

Feb 12/18

SIGNED

in

Appendix 4

# Analytical Results

## Silver and Lead Assays



2 - 302 48th Street • Saskatoon, SK • S7K 6A4 P (306) 931-1033 F (306) 242-4717 E info@tsllabs.com

Company:	Mr	: Glen Prior
Geologist:	G.	Prior
Project:	G\	N
TSL Report:	S5	55018
Date Received:	Ma	ar 12, 2018
Date Reported:	Ma	ar 14, 2018
Invoice:	75	263
Remarks:	Or	iginal Report S54949
Sample Type: Rock Pulp	Number 3	Size Fraction

Sample Preparation None

Pulp Size: ~250 gram

#### Standard Procedure:

Samples for Ag (g/tonne), Base Metals (%) are weighed at 0.5 gram.

Element		Extraction	Lower Detection	Upper Detection
Name	Unit	Technique	Limit	Limit
Aa	a/tonne	HNO3-HF-HCIO4-HCI/AA	1	1000
Pb	%	HNO3-HF-HCIO4-HCI/AA	0.01	20%

Results are representative of samples submitted for testing. Test reports may be reproduced, in their entirety, without our consent. Liability is limited to the analytical cost for analyses.



#2 - 302 48<sup>th</sup> Street · Saskatoon, SK · S7K 6A4 P (306) 931-1033 F (306) 242-4717 E info@tsllabs.com

### **CERTIFICATE OF ANALYSIS**

SAMPLE(S) FROM	Mr. Glen Prior	
	793 Birch Avenue	
	Sherwood Park, Alberta	T8A 1X2



#### SAMPLE(S) OF

INVOICE #:75263 P.O.:

G. Prior Project: GW

3 Rock/Pulp

	Ag	Pb	File
	g/t	8	Name
GW4007	123.8	1.66	S55018
GW4009		1.36	S55018
GW4010		2.28	S55018
ME - 8	62.1	1.94	S55018
ME-1411	45.8	.27	S55018

COPIES TO: Original Report S54981. Assay on over-range values from ICP INVOICE TO: G. Prior, Alberta

Mar 14/18

SIGNED

Mark Acres - Quality Assurance