ASSESSMENT REPORT

for 2013

XL MINERAL CLAIMS

(XL 1, 2; XL 3; XL J; XL B; XL C; XL D)

Work Type: Technical And Geochemical

CARIBOO MINING DIVISION, BC

BCGS MAP: 093 H

Coordinates of center:

53^{o} 7’ 45” North, 121^{o} 6’ 49” West

Prepared

By

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Submitted

To

Province of British Columbia, Mineral Titles

On

May 20, 2014.

0.0. **PREFACE.**

0.1 **General.**

This Assessment Work and Report is a continuation and follow up on the previous Assessment Report, dated February 15, 2013, (Event Number 5432004) and previous Assessment Report, dated February 10, 2014, for Mineral Claims XL1, XL2, and XL3. The intent of the previous Assessment and Report, dated February 15, 2013, focused on proving that the XL MINERAL CLAIMS are potential producers of Gold. The intent of this Assessment Work focused the on proving that in addition to Gold, the Platinum Group Elements, particularly, Palladium, Platinum and Rhodium, may chemically be extracted from said XL MINERAL CLAIMS. For the purpose of providing a complete picture, this Report presents some duplication of previous reports in regards to Mining Data, Geology, History, Access et al. Completely new insights and new conclusions are discussed especially in Sec. 6.b. New Geological And Geochemical Conclusions, and Sec. 7. Chemical Assessment:

0.2. **INDEX TO REPORT:**

0.3. **Legal Description of the XL MINERAL CLAIMS.**

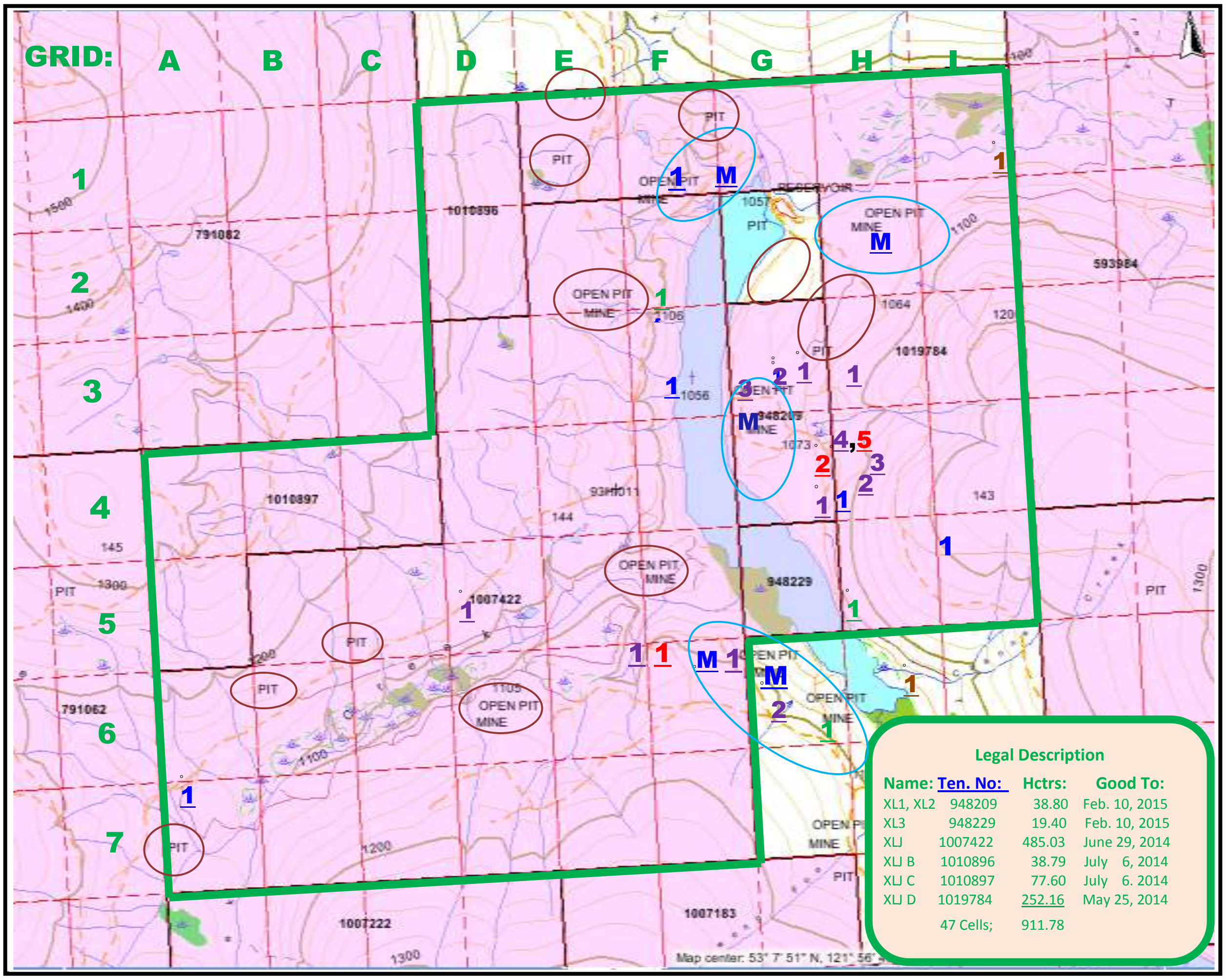
Name:	Tenure:	Hectare:	Cells:	Issue Date:	Good to:	Map:	Division:
XL1, XL2	948209	38.80	2	2012/Feb/10	2015/Feb/10	093H	Cariboo
XL3	948229	19.40	1	2012/Feb/10	2015/Feb/10	093H	Cariboo
XLJ	1007422	485.03	25	2012/Jun/29	2014/Jun/29	093H	Cariboo
XLJ B	1010896	38.79	2	2012/Jul/06	2014/Jul/06	093H	Cariboo
XLJ C	1010897	77.60	4	2012/Jul/06	2014/Jul/06	093H	Cariboo
XLJ D	1019784	252.16	13	2013/May/25	2014/May/25	093H	Cariboo
		911.78	47				

Because of positive progress, the Miner augmented the XL Mineral Claim group on May 25, 2013, by claiming the additional 13 cells of Mineral Claims XLJ D.

1. Map: TREGILLUS LAKE XL MINERAL CLAIMS

Cariboo Mining Division, British Columbia

Original Map 93H.011, https://webmaps.gov.bc.ca/imf5/imf.jsp?site=mem_mto_min-view-title



LEGEND:

Linked Color-Coded Mining Data:

Bed Rock Sample, Historic Data, Access, Setting and Perimeter

Historic Mining: ; Historic and Present Mining: M

2. MINING DATA:

Cell H5,1: Tregillus Lake Setting.

Looking North West.

Cell F2,1:

Looking South.

Cell G6,1:

Looking North East.

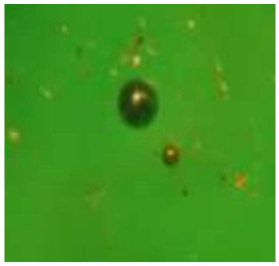
Cell E6,1: Extensive Bed Rock Exposed on Surface Amygdaloidal Schist.


Cell F1,1: Amygdaloidal Bed Rock Lime Stone Replacement Sulfides in Schist



Cell F3,1,a:



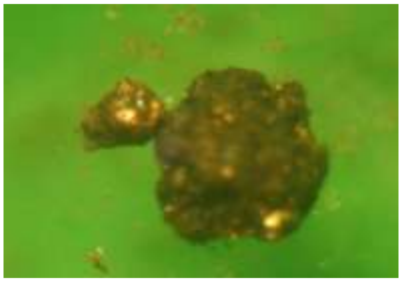



1 Kg Quartz Sericite Schist, crushed, panned, produced free 2 gold particles and spheres of PGE oxide, and gold.

Cell G3,1,b:

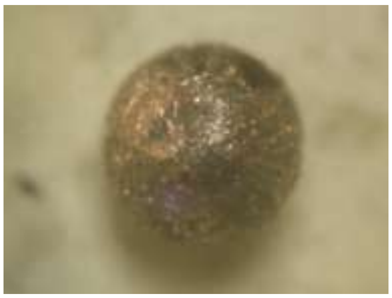
250 gm (Decomposed Sulfides, Quartz Sericite Schist)

Electro-precipitated Deposit of Gold and Platinum Group Metals



Fused gold, encapsulated by PGE Oxides,

Cell G3,1,b:

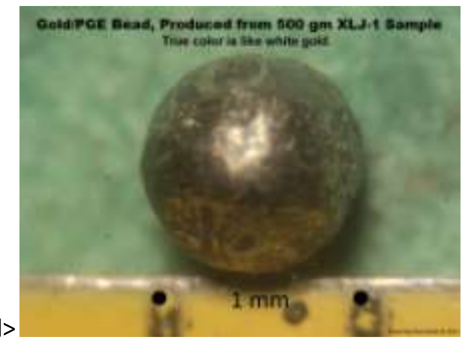

Approximately 500 gm rock sample produced 1 mm sphere of metallic gold.

Cell G3,2: Sample Bedrock (To be tested chemically. Note garnets and amygdaloidal features in schist.)

Cell G3,3: Sample Bedrock (Free gold panned from crush; copper extracted chemically)

Cell G4,1,a:

<This rock produced this metal>



Cell G4,1,b:

Metal Content of Above Solution XLJ-2b

Analytes:	In Solution %		Analytes:	In Solution %		Analytes:	In Solution %	
Ca	67.03	%	Cr	212.41	ppm	Au	3.22	ppm
Fe	19.72	%	Co	195.40	ppm	Cs	2.16	ppm
Al	4.23	%	Ti	137.93	ppm	Cd	1.93	ppm
Mg	3.08	%	Y	125.28	ppm	Se	1.84	ppm
Mn	2.71	%	Pb	105.88	ppm	Ge	1.84	ppm
P	1.52	%	Li	93.79	ppm	Zr	1.84	ppm
S	0.32	%	V	36.78	ppm	Be	1.84	ppm
Ce	0.32	%	B	36.78	ppm	Ag	1.16	ppm
K	0.28	%	Sc	33.10	ppm	Bi	0.644	ppm
La	0.15	%	Rb	16.09	ppm	Tl	0.506	ppm
Sr	0.14	%	Sn	15.63	ppm	Te	0.460	ppm
Cu	0.12	%	Th	12.87	ppm	Mo	0.276	ppm
Na	965.48	ppm	Ga	11.95	ppm	In	0.276	ppm
Ni	823.42	ppm	U	7.36	ppm	Nb	0.184	ppm
Ba	622.51	ppm	Sb	6.67	ppm	Pt	0.120	ppm
Zn	361.83	ppm	As	4.60	ppm	Total:	999,873	ppm

Cell H3,1: Bedrock < 2 Feet below surface:



Cell H4,1: Sample Bedrock **Cell H4,2:** Sample Bedrock **Cell H4,3:** Sample Bedrock



(To be tested chemically. Note amygdaloidal features in schist.)

Cell H4,4: Samples of Bedrock Wall of Limestone.



On surface, weathered, crumbly, >75% acid soluble carbonates; few, cubical, resistant sulfides.

Cell I5,1: Exposed Bed Rock, Amygdaloidal Schist, with Predominant Nile Blue of Molybdenum



map

Cell G6,2:




Bedrock, Exposed by Previous Placer Miner (N.B.: Porphyry, Limestone Replacement, and Schist)

Cell D5,1:



Porphyritic Intrusive Bedrock, Exposed on Logging Road (3514).

2013 ACTIVE MINING in the Area :

Cell F1,M:

Cell H1,M:

Cell F6,M:

Cell G6,M:

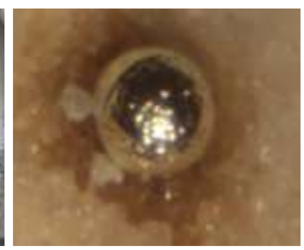
2012-13 ACTIVE MINING on Cell F6:

Cell F6,1,a:

2012 Mining

"Molybdenum Blue"

Black (Blue) Sand



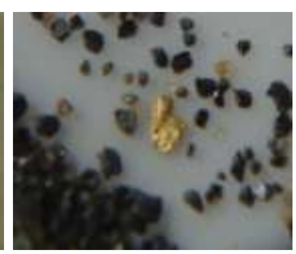
Fused Chemical Gold

Cell F6,1,b:

2013 Mining (25yards per oz)

Nuggets from Sluice

Panned $1ft^3$ (mm markers).



Panned from Bedrock

Cell F6,1,c:

Exposed bedrock, in Pit

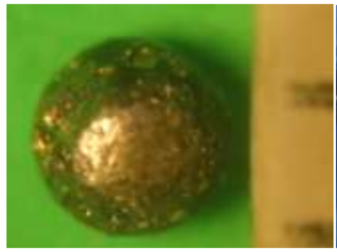
Washed Bedrock

Strike of Bedrock

Washed Talus, in Pit

Cell F6,1,d:






Talus 470 gm, crushed, panned: (1) Produced Free Gold (2) Chemical Gold, Fused, 1 mm Talus, Crushed, Post-Leach

Cell F6,1,e, M:



Talus 290 gm, crushed, panned: Produced Free Cu & Au/PGE 60 cu.yrd. of Talus produced 10 oz.

OBSERVATIONS AND INDICATORS: INTERPRETATION OF GEOLOGICAL FACTS:

Cell F6,1,f:

Amygdaloidal country rock produced in fissures elemental gold, which was freed by erosion. Note: Mold/cast of rock face on gold. Amygdaloidal Inclusions in rock samples.

Amygdaloidal inclusions are generally recognized to be a primary source for free naturally occurring copper. Gold, silver and copper (Group IB) share similar chemistry, and occur in similar geological settings. Therefore, the logical conclusion is valid: A primary source of the Cariboo free gold is amygdaloidal inclusions of the metamorphic Cariboo Schist. Since amygdaloidal inclusions contain primarily silicates, particularly the small Cariboo free gold is encapsulated in refractory silicates. Where such silicates are concentrated in quartz veins, the gold is chemically locked in with complex sulfides; occasionally larger nuggets may have formed.

3. HISTORICAL DATA: (Placer mining has been ongoing continuously since Billy Barber, 1860's.)

CELL F6,1: Old Mining Camp CELL G4,2: "Langford" Mining Town CELL H4,5: Langford Residence



4. ACCESS:

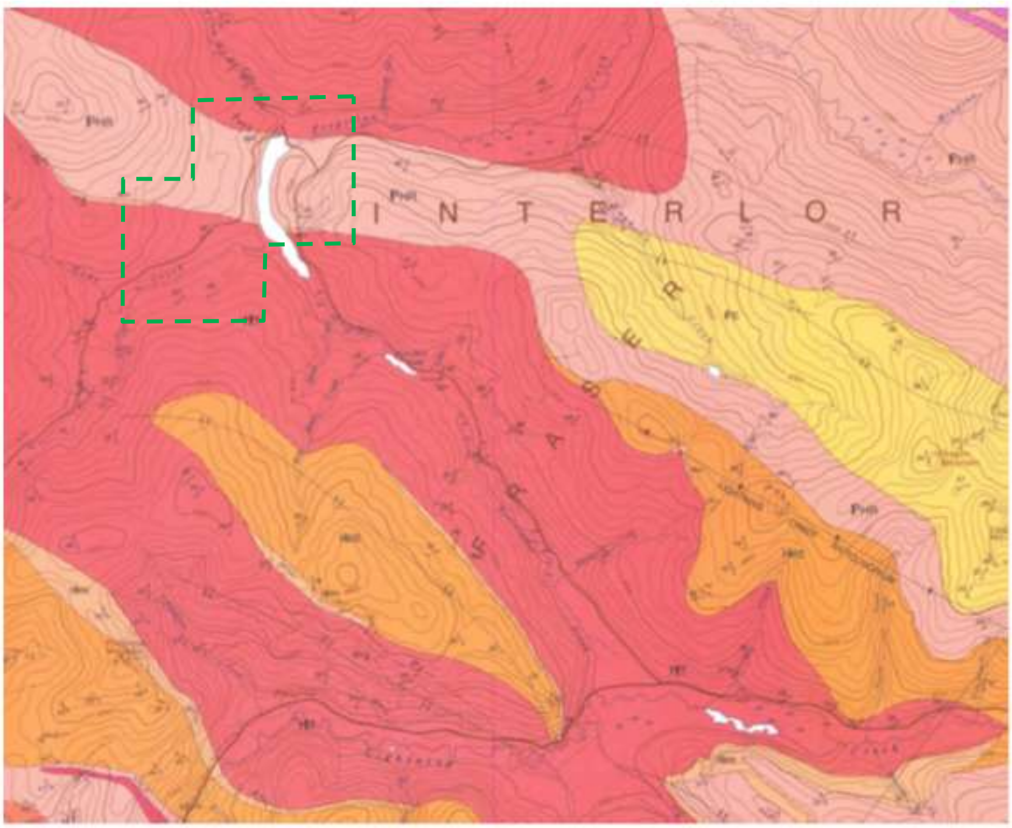
The TREGILLUS LAKE XL MINERAL CLAIMS are accessible in three ways:

1. 50 km East from Quesnel on Highway 26; 8 Km North on 2400 Logging Road.
2. 30 km East from Quesnel on Highway 26; 5 Km North on 600 Road; 12 km East on 3500 Road.
3. From Hixon, not recommended.


Legend for Roads on Mineral Claim Map:

1. **Cell H6,1,** 2400 Logging/Mining Road, **Yellow** Line:
2. **Cell I1,1,** 2400 Logging/Mining Road, continuing on towards Hixon.
3. **Cell A7,1,** 3500 Logging/Mining Road; Dotted **Yellow** Line.

5. GEOLOGICAL MAP: Applicable Segment of Geological Map "Wells"



6.a. GEOLOGICAL CONTEXT.

The geology, pertaining to the Tregillus Lake XL MINERAL CLAIMS, is that, which miners colloquially call the Cariboo. Geologically, the Cariboo extends from Pleasant Valley, in the East to just past Wingdam, on the West, having a Northwesterly trend. Creeks generally run Southeast/Northwesterly, and Northeast/Southwesterly. This area is one of the very oldest geological formations in the Province of British Columbia; it is flanked on the East and the West by younger igneous rock. As the peripheral and underlying younger igneous intrusions occurred, they re-heated the older pre-existing gold-bearing Cariboo formations, which originally also were of igneous origin, into metamorphic, very micaceous schist. During such repeated re-heating, most of the previously existing salts (sulfides, arsenide and others) decomposed into complex oxides. During the final stages of metamorphosis and re-cooling, the still liquid complex silicates, like liquid acids readily dissolved, assimilated the already ionic metals, and excreted them into the upper reaches of the earth's crust. As over time, due to weathering, these vein deposits decomposed, the metallic gold of these veins was concentrated by two methods: (1)

Horizontally, by the physical flow of water in creeks, and (2) vertically, by chemical erosion, which is typical of gossans. Since gold readily descends vertically, and by reason of its density resists being moved horizontally, the gossan type of erosion and re-depositioning is by far the most significant. This explains why certain locations of the Cariboo have extreme concentrations of gold, and many others are virtually barren. Examples of such gossan-reconcentrations are the lower (not the upper) section of Williams Creek, Wingdam, and Tregillus Lake.

The Tregillus Lake area is of particular interest, because it is at the direct contact point of a slow- and fast-cooled igneous intrusive, having porphyritic large and small crystals, extremely micaceous metamorphic schist, evidence of calcium replacement, presence of sulfide deposits, ionic and elemental gold, copper, molybdenum, even the Platinum Group Elements.

6.b. New Geological And Geochemical Conclusions:

Although the geological rock formations of the XL MINERAL CLAIMS, in the Tregillus Lake area, may differ slightly in origin, from local rock formations of the immediate townships of Barkerville and Wells, they share a very similar, if not identical geological history. They originated as sulfide enriched igneous intrusives, which were carriers of precious metals, gold, the Platinum Group Elements, and some copper. As the older intrusives were re-heated by younger, more recent intrusives, older intrusives were transformed from igneous rock to the metamorphic rock of a very micaceous schist; sulfur oxidized, and sulfides were transformed into oxides. What used to be fairly large sulfide crystals in original intrusives, were changed into amygdaloidal oxide remnants and garnets (e.g., **Cell G3,2:**).

During such repeated events, complex silicates were in flux and semi-liquid:

- Gold was molecularly separated from sulfur and reduced by heat (< 300^{o} C); some of the gold was concentrated and re-deposited as crystallized nuggets in silicate quartz veins, but most of the gold remained in the siliceous micaceous schist, because gold silicide (Au_4Si) readily combines chemically at the very low temperature of 370 Degrees Celsius (even 80 C), by a process called "eutectic bonding," a principle that is usefully and extensively employed in the electronic equipment industry (cf., "Silicon Valley"). Thus even small-grained micaceous silicon crystals in schist are coated with nano-layer (islands) of gold, which is extracted effectively by an electrolytic dissolution (not Aqua Regia digestion), as described below in Section 7 below.

- All elements that have a high reduction potential form silicides; particularly the PGE readily bond with silicon and form complex PGE oxide/silicides. But the PGE, which form strong chemical bonds with oxygen, were not reduced during metamorphoses, like gold. These PGE complex silicide oxides have a much stronger and a more refractory chemical bond than the gold/silicon chemical bond. Therefore, they require much more time in the electrolytic dissolution process, described below, and they escape most conventional commercial testing procedures of a one hour aqua regia leach; they also escape XRF analyses, for they are so complex, that they are not yet classified. It appears that the PGE are more abundant in the Tregillus Lake area than gold, by a factor greater than ten.

- The micaceous schist is interlaced with carbonate deposits, all of which is very subject to decomposition by weathering. There is no evidence of continental glacial erosion. And there is no evidence of erosion by valley glaciers. During glaciations, the Tregillus Lake valley was "ice-locked." In post glacial times, and since then, decomposed rock, talus, slowly worked its way down gentle mountain slopes. (Which this Miner expects to 'harvest.' Cf., Section 9.)

7. CHEMICAL ASSESSMENT: EXTRACTION PROCEDURES.

Since the gold mining industry is equipped to extract native gold and gold that is chemically combined with sulfides, arsenides and tellurides, the Miner had to invent a new process, which recovers gold from silicides and silicide complex oxides. Since such a recovery system involves acid digestion, which in the past has proven to be complicated, cumbersome and mostly in-efficient, the Miner determined to improve previous extraction procedures; he determined to devise a procedure, which would streamline the process and extract gold and all the desirable Platinum Group Metals simultaneously, efficiently, and effectively without any filtering, or arduous separation procedures. This accomplishment the Miner defined and described in detail, in:

> CANADIAN PATENT APPLICATION: No. 2,839,275, entitled ELECTROLYTIC DECOMPOSITION AND REDUCTION OF PRECIOUS METALS, DIRECTLY FROM ACIDIC SOLUTIONS, EVEN SOLUTIONS OF ORE, which was registered with the Canadian Patent Office on January 20, 2014, and is scheduled by the Canadian Patent Office to be laid open in August, 2015.

The essence of this information, by virtue of Canadian Patent Law, is deemed to be proprietary intellectual knowledge, which will be revealed publicly at the pre-designated time, as defined by Patent Laws. It is not appropriate that the Miner divulge this proprietary knowledge in this public Assessment Report. Individuals, who desire a preview, should contact the inventor/Miner directly. Until then, suffice it to say, the extraction process comprises three relatively simple steps:

1. To an aqueous acidic solution of ore (gold and PGE)
2. Two benign chemicals are added;
3. From this altered solution, reduced precious metals are exclusively extracted, electrolytically.

8. ESTIMATE OF RESERVES.

Judging on the basis of gravels and talus worked to date, at an average of 1 oz. of gold per 50 cubic meters of material, a conservative estimate is that the Tregillus Lake area produced to date approximately 300,000 ounces of gold; and the deep lead has never been touched, except for a small underground section of Aura Fine Creek. On the basis of the remaining talus in the area, it is not unreasonable to assume that at least 1,000,000 ounces of "free gold" are yet to be extracted. The Miner intentionally uses the term "free gold" instead of "placer gold," for "free gold" has been liberated from host rock, not by the flowing of water (rivers and creeks), but by chemical decomposition, such as gossan erosion of native hardrock. Since the amount of atomic and molecular gold by far exceeds the amount of visible nugget gold, e.g., **Cell F,6,a,b,c**, **Cell F6,1,d,e,f**. The hard rock mineral resource of the TREGILLUS LAKE XL MINERAL CLAIMS has not been mined or developed to date, but it is reasonable to conclude that the hard rock resource is greater than the placer gold, mined to date.

9. PROPOSALS.

2014-16, Intermediates Goals and Objectives:

1. Following the above-described Chemical extraction procedure (cf., Section 7), the next step is to proceed with pyrometallurgical refining of chemical extracts, to create cash flow, and to establish exact Dollar values per ton and cubic meter of ore.
2. Develop a project for extracting free gold and Black Sand from "Talus." This Miner anticipates recovering free gold and PGE oxides/silicides from "Talus," which blankets the XL MINERAL CLAIMS.

   (Almost all present day "Placer Mining" operations on the XL MINERAL CLAIMS are technically not "Placer Mines;" they are processing "Talus," which lawfully, according to the Definition of the Mining Act and Regulations, belongs to of Mineral Claims owner(s). This Miner does not wish to contest operations, which were previously started under the pretense of being "Placer Mines." (Example of a "Placer Mine" processing and extracting free gold from "Talus:" **Cell F6,1,a,b,c**, **Cell F6,1,d,e**)
3. Continue analyses and evaluation of the potential resources of Tregillus Lake XL MINERAL CLAIMS, such as PGE, copper, molybdenum, et. al. to target most cost-effective returns.
4. Develop a strategy for successful diamond core drilling program, to establish subterraneous, values, geological trends, and primary targets.
5. Invite and consider offers from miners and companies, who consider involvement and development of Tregillus Lake XL MINERAL CLAIMS

2017-20, Long Range Objectives:

1. Establish an open pit hard rock mine, to be expanded to underground mining.
2. Develop and employ "IN SITU MINING," Canadian Patent Application, No. 2,761,496.
3. Develop and employ chemical recovery of all extracted minerals and by-products.

10. FINANCIAL STATEMENT FOR ASSESSMENT WORK.

Financial statement In consideration of:

1. Geological And Geochemical Conclusions,
2. Chemical Assessment: Extraction Procedures

In field financial expenditures were at a relatively low, because the Miner worked with bed rock samples, which he had secured as reported in previous Assessment Reports (Upload Report: Event Numbers: 5430984, 5432004), the Miner applied his chemical skills and expertise, to develop and produce at his laboratory the cost-effective, efficient electro-chemical extraction process, defined in the CANADIAN PATENT APPLICATION: No. 2,839,275, entitled ELECTROLYTIC DECOMPOSITION AND REDUCTION OF PRECIOUS METALS, DIRECTLY FROM ACIDIC SOLUTIONS, EVEN SOLUTIONS OF ORE.

Assessment Expenditures for work done between Jan 1st, 2013 to May 15, 2014:

Equipment And Supplies . . .	$ 631.61	
Use Of Facilities And Hydro: (12 months at $100.00) .	$ 1,200.00	
Time At Chemical Laboratory: (420 hrs. at $30.00) .	$ 12,600.00	
Preparation Of Assessment Report . .	$ 450.00	
Dollar Value Of Total Assessment Work	**$** 14,881.61	**14,881.61**

Assessments Attributed To XL Mineral Claims Until Anniversary Dates Of Year 2016:

Name:	Tenure:	Hectare:		
XL1, XL2	948209	38.80	$ 776.00	
XL3	948229	19.40	$ 388.00	
XLJ	1007422	485.03	$ 12,125.75	
XLJ B	1010896	38.79	$ 969.75	
XLJ C	1010897	77.60	$ 1,940.00	
XLJ D	1019784	252.16	$ 5,043.20	
Required Total			**$** 21,242.70	**(21,242.70)**

Allowable 30% of $ 21,242.70**:** $ 6,372.81		
PAC Credit Of (Cf., Event Number ID 5430984)	$ 7,310.51	
PAC Credit Attributed To Assessment Work	$ 6,361.09	**6,361.09**
Balance Of Remaining PAC Credit	$ 949.42	

Balance $ 0.00

11. SCHEDULE OF WORK.

The Miner is retired from his trade as a journeyman electrician, and he is relieved of his responsibilities as a clergyman. From January 1st, 2013 to May 15, 2014, the Miner applied in excess of 420 hours in his chemical laboratory on chemical engineering (cf., Section 7.), devising a chemical extraction process on rock sample, which he secured from the XL Mineral Claims. The Miner made two field trips, which are listed, described, and claimed in Event Number: 5432004.

12. QUALIFICATIONS OF THE AUTHOR.

1. THE AUTHOR, PAUL WELK, is the holder of the valid FREE MINER CERTIFICATE No: 128548.

2. THIS FREE MINER set out in 1983 to discover the heretofore un-known origin of placer gold of
   a. Cariboo Mining Division, initially Williams Creek.
   b. To date, he spent in excess of 1200 field days, to reach this objective.
   c. This 30 year study is about to produce results. (He staked, owned, and tried to develop 180 placer/mineral claims, primarily in the Cariboo Mining Division.)

3. But he temporarily abandoned all mining claims, and in field prospecting activities because:
   a. Results of conventional assay reports were inconsistent with in field indicators and historically verified occurrences of gold in the Cariboo Mining Division. Therefore, He determined to depend not on chemical analyses by others, but applied himself to be proficient in chemical analyses and extraction of precious metals.
   b. He studied and applied analytical wet-lab chemical procedures.
      i. Being a registered journeyman electrician and a graduate of post secondary scholastic institutions, he applied scholastic research technique, utilizing electrolytic procedures, and became an amateur specialty chemist on the wet-lab chemistry of gold and PGE.
      ii. He made several significant new chemical discoveries on wet lab chemistry of extracting gold and the PGE; he published them, particularly the CANADIAN PATENT APPLICATIONS:
         1. No. 2313144, REDUCTION AND OXIDATION OF TRANSITION METALS, INCLUDING PLATINUM GROUP METALS, WITHOUT THE USE OF AQUA REGIA.
         2. No. 2,599,490, PRODUCING PRECIOUS METALS, PARTICULARLY THE PLATINUM GROUP METALS.
         3. No. 2,729,239, ELECTRO-EXTRACTION OF DESIRABLE METALS FROM HYDROXY ACIDS, BY MICROWAVES AND ELECTROLYSIS.
         4. No. 2,761,496, IN SITU MINING.
         5. No. 2,839,275, ELECTROLYTIC DECOMPOSITION AND REDUCTION OF PRECIOUS METALS, DIRECTLY FROM ACIDIC SOLUTIONS, EVEN SOLUTIONS OF ORE (To be laid open August 2014).
         6. Above Applications are on web pages of the Canadian Patent Office (http://brevets-patents.ic.gc.ca/opic-cipo/cpd/eng/search/results.html?query=welk%20paul&start=1&num=50&type=basic_search).
         7. The Miner published several scientific articles relating to the chemistry of gold and PGE aqueous salts. (http://acrossroad.wordpress.com/; Menu: Mining Chem. and Science)