# REPORT OF EXPLORATION ON THE GWYN LAKE GOLD PROSPECT, NORTH-WESTERN ONTARIO, CANADA

Thunder Bay Mining Division

McComber and Vincent Townships (G-0166, G-0163)

NTS N49.63464 Latitude, W87.77830 Longitude UTM (NAD83) Zone 16 443800E and 5498300N

Prepared for

#### **Empire Rock Minerals Inc.**

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### SUMMARY

The Gwyn Lake Gold Prospect ("GLGP") is situated approximately 15 km east of Beardmore, North-western Ontario, within the Thunder Bay Mining Division. It lies within the Beardmore-Geraldton Gold Camp ("BGGC"), a well-known gold mining district that reportedly produced more than 4 million ounces (127.4 tonnes) of gold with combined average grade 0.37 oz (11.5 g /t) gold. Strata-bound gold mineralization occurs in the greenstone-belt-hosted banded iron formations ("BIF").

Buck Lake Ventures Ltd. ("Buck") optioned the Gwyn Lake claims in 2003 from prospector F. A. Houghton. In 2005 the agreement was amended to grant Buck an option to purchase a 100 % interest in the Extension Claims comprised of 9 mineral claims (57 claim units). Buck was obliged to pay \$ 65,000 and to issue 80,000 non-assessable common shares to the holder. In addition, Buck committed to spending \$80,000 on the Extension Claims by December 31, 2007 and the holder retained a one % net smelter returns royalty (NSR), a half of which could Buck purchase for \$ 500,000.

Following the acquisition, Buck launched an exploration program including mapping, trenching and sampling, focusing mainly on the geophysical anomalous zones. The program resulted in locating three zones with anomalous gold in the Banded Iron Formation ("BIF") outcrops. Buck changed its name to Ultra Uranium Corp. ("Ultra") and continued to explore the zones in 2007 and 2008. A trail was cut from northwest to southeast across the BIF trend and stripping and systematic channel sampling with more than 500 continuous channel, chip and grab samples was completed.

In February 2009, two new claims adjoining the main GLGP were optioned from F. A. Houghton. In 2010, Ultra optioned 70 % interest in the GLGP to Pierre Enterprises Ltd. The exploration continued by further stripping and continuous channel sampling on various areas of the GLGP. The company name was changed to Ultra Resources Corp., and more recently to Empire Rock Minerals Inc. ("Empire").

Based on the work to-date, several promising gold-bearing zones occur on the GLGP. The zone with the best potential includes the historical Dominion Showing, the # 12 showing, the Gwyn Lake West showing, the Gwyn Lake Showing and the Gwyn Creek showing. Combined length of this zone is more than 1,500 meters. However its persistence could not be verified due to intermittent swampy areas, which were not accessible to exploration. Other promising zones include Ralph Lake showing and extensions of the historical Orion – Blacksmith showing.

The Gwyn Lake showing reportedly includes a 160 meters long interval containing a weighted average of 2.15 g/t gold over an average width 1.54 meters and its eastern and western extensions returned the weighted averages of 1.95 g/t gold over a mean true width 1.14 meter from the former and 6.25 g/t gold over 0.67 meters from the latter. This showing appears to represent a future drilling target. Further work on the Gwyn Lake Gold Prospect is warranted and the writers recommend further systematic channel sampling of the BIF and remediation of the stripped areas to allow for additional stripping and systematic sampling.

### **1. INTRODUCTION**

Empire retained the first writer in October 2015 to conduct an exploration program on the GLGP and to prepare a report with recommendations for further work. The first writer is a consulting geologist and a Professional Geoscientist (BC) with over forty years of experience in mineral exploration. The second writer is the claim holder and a well-known prospector in the Beardmore area with over 40 years of experience in mineral prospecting.

The first writer with an assistant worked on the GLGP from October 30 to November 1, 2015 and from November 4 to November 5, 2015. Their work consisted of selecting the continuous channel sampling sites, collection of chip and channel samples from the Dominion showing and outcrop mapping and sampling on the claim 3011478. The second writer with two assistants conducted hand-stripping on the Dominion showing from October 25 to October 29, 2015 and cutting of continuous channels for sampling from October 30 to November 5, 2015. and transported the samples to a safe storage in Beardmore. On January 5, 2015 the second writer prepared manuscript notes on the fieldwork and on January 9, 2015 he with one assistant dispatched the samples to Accuraassay Laboratories in Thunder Bay.

For parts of this report the writers relied on the work of other experts, on the assessment reports generated from previous exploration and research programs and on information available from the Ministry of Northern Development and Mines, Ontario ("MNDM") website. The information by other experts who are not qualified persons for this project is generally presented without comments, and is to the best of writers' knowledge and experience correct and suitable for inclusion in this report. The writers took steps to verify the previous exploration and assay results by re-examining and re-sampling the anomalous areas. The sources of all information not based on personal examination are quoted in the References item. The claims description provided herein has been excerpted from the MNDM electronic application and relates to the status as of December 20, 2015.

### **1.1. Location and Access**

The Gwyn Lake Gold Prospect lies approximately 200 km north-northeast of Thunder Bay in Northwestern Ontario, within the Thunder Bay Mining Division (Fig. 1). The prospect is centered about 15 kilometers east of Beardmore at N49.63464 latitude and W87.77830 longitude (map sheet G-0166 and G-0163) and the UTM coordinates for the CZ of the prospect are approximately 443800 E and 5498300 N (NAD83) on the NTS UTM zone 16.

### 1.2. The Claims

The GLGP is situated in a previously under-explored area. The prospect is comprised of 14 claims (89 claim units) covering approximately 1,424 hectares (Fig. 2). The claim status as of February 20, 2015, based on the MNDM web site, is listed below:

Tenure Number	Township	Units	Due date	Rec. Holder	Reserve
3005108	McComber	16	2017-02-20	Houghton F. A.	2
3005109	Vincent	1	2017-02-20	Houghton F. A.	0
3005110	McComber	3	2017-02-20	Houghton F. A.	33
4209001	McComber	12	2016-11-24	Houghton F. A.	401
4209002	McComber	16	2016-11-24	Houghton F. A.	325
3011477	McComber	4	2016-11-10	Houghton F. A.	0
3011478	3011478 Vincent		2016-11-10	Houghton F. A.	0
3011479	Vincent	2	2016-01-10	Houghton F. A.	0
3018950	McComber	3	2016-01-10	Houghton F. A.	0
3011887	Vincent	1	2016-01-10	Houghton F. A.	0
3011487	Vincent	2	2016-11-10	Houghton F. A.	0
3011488	Vincent	6	2016-11-10	Houghton F. A.	0
4225181	McComber	2	2016-01-17	Houghton F. A.	0
4225182	4225182 McComber		2016-01-17	Houghton F. A.	0
TOTAL		89			761

Recorded holders of the adjacent claims are Maki, N. R. (claims 1138900, 1197034, 603295, 603296 and 603297), TLC Explorations Inc. (claims 4203994, 4210062 and 4215198) and Skalesky A. (claim 862665). Adjoining to the east and west are active mining leases owned by Goldstone Resources Inc., Tombill Mines Ltd., and by other undisclosed holders.

### 1.3. Topography, Vegetation and Local Resources

Topography in the GLGP area is gently rolling with elongated hills aligned east-northeast, parallel to regional geological structure. The relief ranges from 350 meters to 400 meters above sea level. The bedrock is exposed in places in the form of hummocky outcrops.

Vegetation consists of mature stands of spruce, pine, balsam and birch with moss-covered regolith and some underbrush in the forested areas. Patchy areas of thick willow bushes are common. Swampy areas and lakes occupy much of the lower relief and often contain willow and labrador tooth vegetation. The climate in the area is typical of north-western Ontario. Warm summers and long, cold winters with average annual temperatures from -37 to +35 °C, annual rainfall from 50 to 63 centimeters and snow precipitation from 13 to 25 centimeters (water equivalent). The prevailing wind direction is westerly, most of the year.

Railway, power and gas are within two kilometers of the claim boundary and qualified manpower is readily available. The town of Thunder Bay is the closest industrial centre that provides most services required to conduct mineral exploration.





### 1.4. History

Early 1900's: the first production phase from the gold mines located within BGGC, which ranked among the top five in Canada with production of 4.1 million ounces of gold from 19.5 million tons of ore and a combined average grade 0.21 oz gold/ton (6.5 g/t), (Malouf, 2003).

Early 1930s: extensive exploration including trenching, drilling and geophysical surveys conducted on the Vega-Craskie claims east of Gwyn Lake.

1929: trenching on the former Colins, Webster Holmes and Humphries holdings (Langford, 1929). One trench uncovered a 10 feet (3.04 meters) wide iron band running along strike for 30 chains ( $\sim 604$  meters). This band contained over 5 feet of arsenopyrite, pyrite and chalcopyrite and the best gold assay returned \$ 3.20 over five feet (1.52 meters). Minor exploration was conducted from the Gwyn Lake area including hand trenching and sampling. One of the MNDM reports describes a mineralization within the southern zone, comprised of several sub-parallel veins, the largest being 50 meters long, five meters thick and open in both directions. Chip sampling from the vein returned up to 1.23 oz/t (38.25 g/t) gold over two feet.

1985: an airborne magnetometer and VLF EM geophysical survey was flown over the GLGP. Three prominent east – west trending geophysical anomalies were detected.

2003-2005: Buck Lake Ventures Ltd. ("Buck") optioned the Gwyn Lake Gold Prospect from F. A. Houghton and conducted a reconnaissance program to map, trench and sample the geophysical anomalous zones. Grab and chip samples from the hand dug channels from the North and South zones reportedly assayed 4.56 ppm over 2.5 meters and 7.44 ppm gold over 0.27 meter in the former zone and up to 5.33 ppm gold over 2 meters in the latter zone (Brickner, 2005; Molak et al., 2006.

2007-2009: Buck changed its name to Ultra Uranium Corp. ("Ultra") and optioned the New Claims (13 units) adjoining the Extension Claims in the southwest from F. A. Houghton. Ultra would obtain a 100 % interest in the said claims on payment of \$ 5,000 to the holder and to incur \$10,200 on exploration by December, 2009. The holder retained 1 % NSR. Ultra's work on the claims included trail cutting across GLGP from northwest to southeast, stripping and systematic channel-sampling of the BIFs. More than 500 continuous channel, chip and grab samples were collected. Many assays from the Gwyn Lake showing, Ralph Lake showing and Camp Lake showings returned more than one ppm gold. The mineralized zones of notable widths and strike occurred on strike with the Kondrat, Delbridge and Dominion veins (zones). Several continuous channel and chip samples from the Gwyn Lake and Ralph Lake showings returned more than 10 ppm gold (maximum value of 76.4 ppm gold), (Molak, 2009).

2010: Ultra entered into an option agreement with Pierre Enterprises Ltd. ("Pierre"), whereby Pierre was to acquire 70 % interest in the GLGP if it paid \$180,000 to Ultra over four years and incurred \$500,000 on exploration and development on or before September 30, 2013. In the same year, Ultra further explored the prospect by stripping and continuous channel sampling on the historical Orion – Blacksmith showing and on the extensions of the Gwyn Lake showing (Molak, 2010).

2014: Ultra under a new name Ultra Resources Corp. conducted further field program on the GLGP consisting of chip, grab and channel sampling of the Dominion, Ralph Lake, Gwyn Lake and # 11 showings. A total of 38 samples were collected from the shear zones and veins associated with the BIFs and the samples were assayed by an accredited laboratory in Thunder Bay. The assays from Dominion showing (18 continuous channel samples) yielded a weighted average of 1.40 g/t gold over an average width 0.78 m. These values compared fairly well with the weighted average of 1.54 ppm gold over an average width 0.74 meter from the previously sampled (13 continuous channel samples) # 12 showing, thus, the two gold-mineralized zones appeared to be continuous and their combined strike length attained at least 300 meters and remained open in both directions (Molak, 2014).

2015: Ultra Resources Corp. changed its name to Empire Rock Minerals Inc. ("Empire") and continued to explore the GLGP. collecting channel samples from the Dominion showing and outcrop mapping on the claim 3011478. The results of this work are presented in this report.

### **1.5. Regional Geology**

The Beardmore-Geraldton area lies along the southern margin of the Archean Wabigoon subprovince of the Superior Province within the Canadian Shield. The Quetico subprovince lies to the south of the Wabigoon subprovince and the Wawa subprovince to the north. The region consists of shear-bounded, interleaved, meta-sedimentary and meta-volcanic units of Archean age, which are typically intruded by numerous bodies of various compositions. The units comprised in the area were imbricated between 2,696 and 2,691 Ma, during the thrusting and accretion of the Wabigoon, Quetico and Wawa sub-provinces. Subsequent deformation events following the accretion of these sub-provinces formed the regional BGGC.

The central Wabigoon region contains fragments of old (~ 3 Ga) crust. The greenstone belts at the Central Zone of the central Wabigoon subprovince are much younger (~ 2.7 Ga) and show evidence of an oceanic environment with either MORB – type, primitive arc, or plume-generated characteristics (Tomlinson et al., 1997). The "greenstone belts" are believed to be ancient volcanic arcs and/or adjacent submarine troughs. Comprised in them are BIFs made up of repeated layers of iron oxides (magnetite, hematite) alternating with bands of iron-poor shale and chert. The BIFs may vary between carbonate-oxide iron-formation and arsenical sulphide-silicate iron-formation. Metamorphic grade ranges from lowest greenschist to upper amphibolite facies. Gold occurs in crosscutting quartz veins and veinlets or as fine disseminations associated with pyrite, pyrrhotite and arsenopyrite hosted in BIFs and adjacent rocks within volcanic or sedimentary sequences.

Metallogenetically, the mineralization at Gwyn Lake can be classified as an iron (ironstone) formation-hosted gold mineralization. Related metallogenetic styles include mesothermal vein mineralization (McMillan, 1996a), gold-bearing quartz veins, also termed lode veins, greenstone gold, lode gold, mesothermal gold-quartz veins, shear-hosted lode gold or low-sulphide gold-quartz veins (Ash and Alldrick, 1996), lode gold banded iron-formations (Gross, 1996) and turbidite-hosted Au-quartz veins (McMillan, 1996b). Examples of iron formation-hosted gold mineralizations include Lupin and Cullaton Lake B-Zone (Northwest Territories, Canada), Detour Lake, Madsen Red Lake, Pickle Crow, Musselwhite, Dona Lake, (Ontario,

Canada), Homestake (South Dakota, USA), Mt. Morgans (Western Australia); Morro Velho and Raposos, Mineas Gerais (Brazil); Vubachikwe and Bar 20 (Zimbabwe); Mallappakoda, Kolar District (India) (Boyle, 1979, Fyon et al., 1992, Fripp,1976, Kerswill 1993, Padgham and Brophy 1986, Rye and Rye 1974), Siddaiah et al. 1994, Thorpe and Franklin 1984, Vielreicher et al. 1994).

The metallogenetic models applicable to this mineralization style either postulate deformation processes and coeval precipitation of hydrothermal fluids from the metamorphogenic or magmatic sources within the brittle - ductile transition zone late in the orogenic cycle and/or a syngenetic origin for the widespread anomalous gold values, similarity of the geological environments to currently active submarine exhalative systems, and the association with chemical sedimentary strata. Replacement features could be explained as normal, diagenetic features and contact areas between sulphide-rich ore and carbonate wall rock as facies boundaries.

Blackburn et al. (1991) described two types of gold mineralization within the BGGC, the first being shear-related quartz veining and the second being pyritized BIFs. Sulphide replacement of magnetite occurs within banded iron formations, which are interbedded in the meta-volcanic greenstone. The replacement of magnetite with pyrite in the BIF followed development of a late, regional cleavage along the Wabigoon - Quetico subprovince boundary and accompanied veining and gold deposition in shear zones.

Based on classification of the Canadian gold deposits (Poulsen et al., 2000), the Gwyn Lake prospect belongs to the family of Archean gold deposits in the Superior and Slave Provinces. The Archean terranes in Canada contain an estimated 8,122 tonnes of gold, accounting for approximately 80 per cent of the country's production and reserves. In both metallogenetic provinces, the gold deposits are hosted mainly by supracrustal sequences and coeval intrusions. The majority of them occur within, or immediately adjacent to greenstone belts, commonly in spatial association with crustal-scale fault zones marking lithological boundaries. Suitable exploration methods for this mineralization style are geochemical and geophysical surveys. Airborne and ground electromagnetic, magnetic and induced polarization surveys can detect and map the high sulphide and magnetite content.

### 1.6. Local Geology and Mineralization

The GLGP is floored by the greenstone belt formation of Archean to Proterozoic age, which hosts east-northeast-trending BIFs. Both, the greenstones and the BIFs were folded and deformed and contain parallel shear zones and conformable or cross-cutting quartz veins, which are the principal hosts for the gold mineralization in disseminated, or massive sulphides, or in a native form. The mineralization commonly occurs in the axial plane cleavage areas or in the fold hinges. The textures and structures are highly variable; the gold mineralization may be finely disseminated in sulphide minerals, or may occur as the native mineral.

Although the airborne magnetic and electromagnetic anomalies clearly delineate the BIFs and can therefore be used as indirect guides to mineralization, the gold-mineralized shear zones may

also occur in the weakly-magnetic greenstone and/or BIF, such as those adjoining the GLGP to the north.

The gold mineralization developed during, or shortly after the Precambrian trans-pressional, brittle-ductile, shearing deformation of an Archean greenstone belt, which in the prospect comprises metavolcanics, metasediments and porphyry rocks, locally intercalated with BIFs. A shear - fault system set up during the regional deformation and subsequent extensional processes resulted in the deposition of quartz veins with sulphide  $\pm$  gold mineralization. The shear zones and veins are regionally related to the late shearing along the boundary between the Wabigoon and Quetico sub-provinces (Blackburn et al., 1991). The prospect is part of the BGGC and the gold mineralization is closely tied to the geophysical anomalies and conductors.

The Blackwater River Fault Zone, which roughly separates meta-volcanic rocks in the north from meta-sedimentary rocks in the south, runs along the river course. The GLGP lies south of the Blackwater River and the BIFs run from east to west across the whole GLGP and parallel to the Blackwater River Fault Zone.

The principal ore minerals are native gold, pyrite, arsenopyrite, magnetite, pyrrhotite, and the subordinate minerals include chalcopyrite, sphalerite, galena, stibnite and rare gold tellurides. Ultra reported gold inclusions up to a half millimeter in diameter in arsenopyrite from the Ralph Lake showing (Harris in: Molak, 2009).

Ultra reported correlation results for the precious and base metals and arsenic, which revealed strong spatial variations. While the samples from Gwyn Lake showing yielded a strong correlation between gold and arsenic (correlation coefficient 0.91104, co-variance 83 %), the correlation was subdued in the samples from Camp Lake and Ralph Lake showings and virtually absent in the samples from Gwyn Lake West showing. Very weak correlation was detected between gold and silver, but it increased with the bismuth, antimony, mercury and selenium. The contents of these elements however are very low even in the high-grade samples indicating gold is of high fineness. Such gold is typically found in high temperature hydrothermal systems (Molak, 2009).

The contents of silver and base metals are generally low. The maximum reported for silver was > 8 ppm, for > 0.12 %, for lead > 0.08 % and for zinc > 0.25 %, respectively. However, the correlations among zinc, lead, antimony and cobalt are fairly significant. The iron contents typically range from 15 to 34 per cent, but the correlation with sulphur is very weak indicating that most iron occurs in a non-sulphidic (carbonate?) form (Molak, 2009).

The main gangue minerals at the GLGP are vein quartz, chert, carbonates (calcite, dolomite or ankerite) and subordinate graphite, grunerite, stilpnomelane, tourmaline and feldspar (albite). The alteration processes in the low metamorphosed facies include prominent carbonatization (generally ankeritic or ferroan dolomite). Sulphidization (pyritization, arsenopyritization and pyrrhotitization) is common in the wall rocks adjacent to crosscutting quartz veins. On weathering, the sulphide-rich, carbonate-poor deposits may produce significant gossans. Formation of asbestos was observed at one location in the greenstone.

Ultra's structural study has confirmed the east-northeast strike and sub-vertical ( $\pm 10^{\circ}$ ) dips of the BIFs, conformable with the general trends. The foliation is commonly composed of s<sub>1</sub> and s<sub>2</sub> planes making an acute angle and their intersections make up the lineation dipping about 15° west. These two intersecting planes may coincide with a dextral shear system described by Lafrance et al. (2004).

A typical feature of the BIFs at GLGP is tight, isoclinal, assymmetrical folding with steep to vertical fold axes. The alternation of BIFs strips with the greenstone strips indicates a presence of large-scale folds with sub-horizontal fold axis, which are to various degrees eroded, thus exposing the fold limbs in the form of east-northeast trending strips. The occurrence of sheath folds at various showings within GLGP suggests the type 1 refolding *sensu* Grasemann et al., (2004). On the other hand, sub-vertical and/or sub-horizontal orientation of two super-imposed fold systems may also indicate the presence of type 2 refold structures, frequently leading to dome-crescent-mushroom interference patterns. It should be noted that samples from the sheath folds taken from the Orion – Blacksmith showings commonly returned ore-grade gold values. The tight isoclinal fold hinges are commonly filled with massive sulphide.

Ductile deformation effects on the rock units depended on the rock competence. While the incompetent greenstone commonly fills-in the spaces between folded BIFs and/or enwraps the segments taking up their shape, the BIFs behaves as competent units. Based on the whole rock analysis, the greenstone was originally a volcanic rock of basaltic-andesite composition. Other typical deformation features are pinch and swell structures and eye-folds. The breccias formed under brittle deformation conditions.

Tightly folded BIFs in some GLGP areas, e.g. at the Ralph Lake and Orion – Blacksmith showings are truncated by oblique slip faults, which displace the segments by as much as several meters. The BIFs are further disturbed by vertical faults with various orientation.

More detailed descriptions of local geology and mineralization and references can be found in the reports by Molak et al. (2006), Molak (2009) and Molak and Houghton (2010).

### 2. EXPLORATION

The writers aided by three assistants conducted a geochemical sampling program on the Dominion showing (Area "A"), and on the # 3011478 claim (Area "B"). The first writer with an assistant marked the channel sampling sites, recorded petrographic and structural data and coordinates and collected continuous channel and chip samples from October 30 to November 1, and from November 4 to November 5, 2015. The main focus was on the shear zones and quartz veins with oxidation products associated with the BIFs.

A total of 22 continuous channel and chip samples were collected from the Dominion showing and from the claim 3011478 and the first writer personally transported samples to an accredited laboratory in Thunder Bay.

The second writer with his assistants worked on the GLGP from October 25 to November 23, 2015. The topsoil was stripped to expose the BIF, the continuous channels were cut where marked and the channel samples collected after the first writer left.

The cuts were made perpendicular to the BIF strike with a diamond saw. The continuous channels were 5 to 7 centimetres wide, 5 to 7 centimeters deep. The sample sites, descriptions and assays are displayed in Figs. And in Appendix I. and the samples were 0.30 to 1.2 meters long. A chisel and a sledgehammer were used to extract samples from the channels. Although, most samples were selective, the sampled zones are fairly persistent throughout the investigated showings. The samples were stored securely in Beardmore after collection and dispatched to Accurassay Laboratories ("AL") in Thunder Bay on November 5, 2015.

The first writer with an assistant worked on the GLGP from October 30 to November 1, 2015 and from November 4 to 5, 2015. Their work was conducted on two areas, designated as area "A" and area "B" and consisted of selecting continuous channel sampling sites on the Dominion showing and collection of chip and channel samples from the cuts. The work on area "B" consisted of outcrop mapping and sampling on the claim 3011478. The second writer with two assistants conducted outcrop stripping and cutting continuous channels into the exposed BIFs from October 25, 2015 to November 5, 2015. After the first writer and his assistant left, the second writer with his crew conducted additional cutting and collection of samples from the channels and transported samples from GLGP to a safe storage in Beardmore. The results of this work will be described in another report that will be written after the assays are available.

A total of 22 continuous channel samples were collected from the Dominion showing and one chip was taken from the claim 3011478. The main focus was on the shear zone associated with the BIF, characterized by brown to red oxidic stains and infiltrations. The cuts were made perpendicular to the BIF strike with a diamond saw. The continuous channels were 5 to 7 centimeters wide, 5 to 7 centimeters deep and the samples ranged from 0.3 to 1.2 meters in length. A chisel and a sledgehammer were used to extract samples from the channels. Although, most samples were selective, the sampled zones are fairly persistent throughout the investigated showings. The samples were stored securely in Beardmore after collection and the writer dispatched the samples personally to Accurassay Laboratories ("AL") in Thunder Bay on November 5, 2015.

### 2.1. Itinerary

October 25, 2015: Frank Houghton (FH) and George Cheboyer (GC) prepare, load and transport the ATVs from Beardmore to the claim 3005108 on the GLGP.

October 26, 2015: FH and GC prepare, load and transport equipment, rock saws, pumps, hoses and tools from Beardmore to the claim 3005108 on the GLGP.

October 27, 2015: FH and GC manually strip the areas on the Dominion showing to expose the BIF (Area "A").

October 28, 2015: FH and GC continue to manually strip the areas on the Dominion showing to expose the BIF.

October 29, 2015: FH and GC prepare the rock saws, pumps, hoses and tools for work; geologist Bohumil B. Molak, P.Geo (BM) and his assistant Andrej Molak (AM) arrive from Thunder Bay to join the field crew and together with FH they mark the channel sampling sites. October 30, 2015: FH, GC, BM and AM drive from Beardmore to the GLGP, area "A". While BM and AM flag the sites for continuous channel cutting, FH and GC cut continuous channels into the BIF using a rock saw.

October 31, 2015: FH, GC, BM and AM drive from Beardmore to the GLGP, area "A". BM and AM flag the sites for continuous channels and then collect samples from the cut channels. FH and GC continue to cut continuous channels into the BIF using a rock saw. Six samples were taken and driven to a safe storage in Beardmore.

November 1, 2015: FH, GC, BM and AM drive from Beardmore to the GLGP, area "A", BM and AM flag the sites for continuous channels and collect samples from channels. FH and GC cut continuous channels into the BIF using a rock saw. Five samples were taken and driven to a safe storage in Beardmore.

November 2, 2015: FH and GC drive from Beardmore to GLGP to continue to cut channels into BIF at the marked sites.

November 3, 2014: Sam Potan (SP) joins the crew and together with FH and GC drive from Beardmore to GLGP, area "A" to continue cutting channels into BIF using a rock saw.

November 4, 2015: FH, GC and SP drive from Beardmore to GLGP, area "A" and continue to cut channels into the BIF with a rock saw. BM and AM conduct outcrop mapping on the claim 3011478 (Area "B"). One chip sample was taken from an outcrop.

November 5, 2015: FH, GC, SP, BM and AM drive from Beardmore to GLGP, then ride to Dominion showing (Area "A") to cut the previously marked areas with a rock saw; BM and AM collect samples from channels using a chisel and sledge hammer. twelwe samples taken; in the afternoon, the samples are loaded onto the quads and driven to Beardmore. BM and AM then drive 22 samples to Accurassay Laboratory, Thunder Bay, for snalysis.

November 6, 2015: FH, GC and SP, drive to GLGP, then ride to Dominion showing to the previously flagged sites to cut continuous channels into the BIFs and the associated shears and veins using the rock saw. BM and AM travel from Thunder Bay to Vancouver.

November 7 to 23, 2015: FH, GC and SP cut continuous channels at the previously marked sites on the Dominion showing using the rock saws, log and sample the BIF on channels and associated shears and veins. This work will be described in another report.







Fig. 5: Detail map showing sample sites 617490 – 617492.



Fig. 6: Detail map showing sample sites 617494 – 617499.



Fig. 7: Detail map showing sample sites 617500, 662351-662355.



December 20, 2015



Fig. 9: Claim 3011478, Area B, mapping/sampling grid





Fig. 11: 3D image of mapping/sampling grid, claim 3011478

### 2.2. Sampling Method and Analysis

Before sampling on the Dominion showing (Area A), the writers flagged the sampling sites and continuous channels were cut using a rock saw. Additional chip samples were taken as shown. One chip sample was collected from outcrop located on claim 3011478, Area B. The sample sites are shown on Figs. 4 - 11 and the sample descriptions are listed in Appendix I. The assay certificates are attached as Appendix II.

In this report, the term continuous channel sample means a sample taken from a continuous channel cut perpendicular, or *quasi* perpendicular to the BIF with a diamond saw. The channels are 5 to 7 centimeters wide, 5 to 10 centimeters deep and the samples are extracted using the chisel and sledgehammer. The 2015 channel samples were from 0.30 to 1.2 meter long. Chip samples were collected from the associated quartz veins and shears. All samples were more or

less selective in the sense that they were collected from the shears and veins associated with the BIFs where oxidation and/or alteration products indicated sulphidic mineralization. At the Dominion showing, like on several other showings on the GLGP, the altered/oxidized zones form nearly continuous strips flanking the BIF.

The samples were placed in standard, polypropylene bags, provided with tags with sample numbers and closed with flagging tape. The samples were kept in a safe place until dispatched to the laboratory. Sample locations were determined using GPS in NAD 83 (zone 16) projection.

The samples were not modified after collection. The first writer personally transported 22 rock samples to the AL in Thunder Bay on November 5, 2015. The second writer supervised the continuous channel sampling from November 6, 2015 and personally transported rock samples to a safe storage in Beardmore. This sampling will be reported after the assays are received.

The AL Laboratory is ISO 17025:1999 accredited and its quality system complies with the industry standards. The protocol for sample preparation involves crushing, splitting, pulverizing and matting. If necessary, the samples are placed in a drying oven prior to preparation (approximately 50 ° C) until dry. The entire samples are then crushed using TM Engineering Rhino Jaw crusher to -10 mesh. Approximately 500 gram sub-sample is split using a Jones Riffle Splitter and pulverized using a TM Engineering ring and puck pulverizer with 500 gram bowls to 90 per cent - 150 mesh (105 microns). The bowls are cleaned with silica sand between each sample. Pulverized samples are matted to ensure homogeneity.

For flame AAS determinations of platinum, palladium and gold a preliminary concentration by fire assay is used. The protocol for fire assay involves weighing, fluxing, fusion and cupellation. A 30 gram sample mass is used. The sample weights may be changed to accommodate for the sample chemistry. A furnace load consists of 24 - 26 samples with a check of every  $10^{\text{th}}$  sample along with a blank and quality control standard. To analyze the whole rocks for oxides, AL utilizes sequential XRF technology.

The samples submitted for this project did not require any preliminary treatment and could be mixed directly with the assay flux and fused. The fusing takes 75 minutes at 1000 ° C and 20 - 50 gram lead buttons are cupelled at 1000 ° C for 50 minutes, then digested using a nitric and hydrochloric acids and bulked up with distilled water. All samples have a final volume of 3 ml.

Atomic Absorption Spectrometry is conducted using a Varian AA240FS with manual sample introduction for the determination of gold, platinum and palladium. A Varian AA240FS with an auto-sampler attachment is used for the analysis of copper and nickel. The laboratory codes for gold and 30 elements determinations are AL4AU3 and AL41CPAR, respectively.



Fig. 12: Graph showing gold (Au), arsenic (As) and bismuth (Bi) values.



Fig. 13: Graph showing copper (Cu), zinc (Zn) and iron (Fe) values.

Table: Correlation coefficients

	Au	As	Bi	Cd	Со	Cr	Си	Fe	Mg	Mn	Мо	Ni	Pb	Si	Sr	V	Zn
Au	1.00																
As	0.80	1.00															
Bi	0.84	0.96	1.00														
Cd	0.49	0.38	0.45	1.00													
Со	-0.39	-0.35	-0.47	-0.41	1.00												
Cr	-0.47	-0.38	-0.54	-0.57	0.87	1.00											
Cu	0.10	-0.04	0.05	0.72	-0.25	-0.34	1.00										
Fe	0.71	0.70	0.85	0.55	-0.61	-0.75	0.22	1.00									
Mg	-0.38	-0.35	-0.49	-0.54	0.87	0.94	-0.41	-0.66	1.00								
Mn	0.05	-0.07	0.06	0.17	-0.07	-0.27	-0.04	0.33	-0.16	1.00							
Мо	0.41	0.46	0.54	0.42	-0.80	-0.72	0.30	0.55	-0.79	-0.10	1.00						
Ni	-0.38	-0.35	-0.50	-0.52	0.92	<b>0.97</b>	-0.34	-0.70	0.93	-0.19	-0.74	1.00					
Pb	0.60	0.56	0.70	0.70	-0.65	-0.75	0.47	0.89	-0.68	0.27	0.52	-0.71	1.00				
Si	-0.41	-0.36	-0.44	-0.25	0.22	0.19	-0.01	-0.49	0.02	-0.02	-0.20	0.23	-0.32	1.00			
Sr	0.02	-0.07	-0.12	-0.24	0.28	0.27	-0.38	-0.15	0.47	0.18	-0.56	0.27	-0.13	-0.29	1.00		
V	-0.26	-0.25	-0.35	-0.48	0.93	0.82	-0.33	-0.49	0.83	-0.16	-0.70	0.86	-0.63	0.15	0.18	1.00	
Zn	0.19	0.05	0.05	0.87	-0.11	-0.23	0.74	0.07	-0.26	-0.02	0.17	-0.20	0.31	0.01	-0.23	-0.24	1.00

Covariance ranges (positive values only)

0.5-0.75 %
0.76 - 0.9 %
>0.9 %



Fig. 14: Airborne magnetic anomalies (brick-red); Gwyn Lake Gold Property perimeter, Dominion – Gwyn Lake Zone; trails (black lines), showings (white polygons);

Calibration standards for gold, platinum, palladium, copper and nickel are made from 1000 ppm certified stock solution. Quality Control check solutions are made up from separately purchased 1000 ppm certified stock solutions and are read after the standards and periodically throughout the analysis.

Laboratory reports are produced using AL's LIMS program. All duplicate assays are reported on the certificate of analysis. All data generated for Quality Control standards, blanks and duplicates are retained and used in the validation of results. For each quality control standard control charts are produced to monitor the performance of the laboratory. Warning lines on the chart are set at  $\pm 2$  standard deviations, and control lines are set at  $\pm 3$  standard deviations. Any data that falls between the  $\pm 2$  or  $\pm 3$  lines requires 10 % of the samples in that batch to be reassayed and have their values compared with the previous set of results. Results will be accepted as long as the standards for each batch of samples fall within the  $\pm 2$  standard deviation lines. Any data that falls outside the  $\pm 3$  standard deviation lines will result in the rejection of all results and the re-assay of the entire batch.

In-house standards are used for platinum, palladium and gold analysis. They are made up from a rock source provided to AL by a third party. The Quality Assurance (QA) sample is made in the laboratory from certified stock solutions purchased from an ISO 9000 certified supplier. The solution is different from the solution used to make calibration standards. Although a standard or quality assurance standard may not be listed by job number on the control charts, a standard and quality assurance sample was run with each job.

### 2.3. Quality Control

The Accurassay analytical quality and accuracy control made for this program included two duplicates for gold and 33 elements. The results are shown in diagrams below (Figs. 15, 16). The duplicate for sample 617494 is by 21 % less than its original and the duplicate for sample 662353 is by 3.5 % higher than the original. A nugget effect may be responsible for these differences. No standards and no blanks were measured for this program.

In conclusion, the quality control results indicate the accuracy and reproducibility of the AL assays are sufficient for this stage of the project, although nugget effects may affect duplicates.



Fig. 16: Repeat assays

### 3. CONCLUSIONS AND RECOMMENDATIONS

The 2015 exploration program consisted of rock sampling on the historical Dominion showing, with additional sampling. Although the sampling of the Dominion showing was irregular and selective, focusing mainly on the visible shear zones and quartz veins within the BIFs, the selectiveness is ameliorated by fair persistency of the mineralized structures on the showings.

The assays from the Dominion showing collected in 2014 yielded a weighted average of 1.40 g/t gold over an average width 0.78 m, which compares fairly well with the weighted average of 1.54 ppm gold over an average width 0.74 meter from the previously sampled # 12 showing. Based on this and the structural, petrographic and mineralogical similarities, the gold-mineralized zones on the two showing appear to be continuous and their combined strike length would attain at least 300 meters and remain open in both directions.

It is yet to be determined if this combined gold-mineralized zone extends farther to the east into the Gwyn Lake Western Extension and/or into the Gwyn Lake Showing. These showings are separated by 250 to 300 meters unexplored, swampy areas, which need to be properly explored before a reasonable answer can be found.

Although the BIFs coincident with airborne magnetic highs have been used as a guide to goldbearing shear zones, there are also non-coincident BIFs with gold-mineralized shear zones in the northern part of the GLGP (Fig. 11), e.g. in the area of Delbridge veins north of Ralph Lake. These may have lost their magnetic susceptibility due to oxidation processes.

The rock units on the GLGP were subject to superimposed deformation processes under ductile and brittle conditions. While the BIFs behaved as competent units, the greenstones behaved as incompetent in the process. Tight, isoclinal, asymmetric folds are typical for the BIFs and refolded structures such as poach and eye-folds are common interference patterns. The breccias seen in the BIFs locally formed under brittle deformation conditions. Massive sulphide and oregrade gold mineralization commonly occurs in the fold hinges.

Further work on the GLGP is fully warranted and should focus on the mineralized shear zones associated with the BIF in the extensions of the Dominion - # 12 showings and the Gwyn Lake showing and filling-in the non-explored gaps between them by regular grid sampling. The objective should be to identify suitable drilling targets where the depth extent and quality of the gold mineralization could be tested. As well, the gold mineralization at the Dominion showing should be further explored in a regular grid to confirm its contiguity with the #12 showing and with the Gwyn Lake showing. Remediation of the already sampled areas should be made to allow for further stripping. An alternative method of sample preparation should be considered to mitigate the nugget effects in the future.

The proposed budget for the recommended work is as follows:

Geologist (10 days @ \$ 600/day)	6,000.00
Prospector (10 days @ \$ 350/day)	3,500.00
Assistant (10 days @ \$ 250/day)	2,500.00
Assistant (10 days @ \$ 250/day)	2,500.00
Assistant (10 days @ \$ 250/day)	2,500.00
Truck rent (10 days @ \$ 75/day)	750.00
Truck rent (10 days @ \$ 75/day)	750.00
ATV rent (10 days @ \$ 40/day)	400.00
ATV rent (10 days @ \$ 40/day)	400.00
ATV rent (10 days $a$ \$ 40/day)	400.00
Rock saws (2 x 10 days @ \$ 40/day)	800.00
Rock saw blades (2 x \$ 300 each)	600.00
Accommodation and meals (50 days @ \$ 100/day)	7,500.00
Assays (100 x \$ 35)	3,500.00
Gas	700.00
Mob, demob (ON only)	400.00
Report (10 %)	3,320.00
Total	36,520.00

### IN ACCOUNT WITH

#### **XYQUEST MINING CORP.**

### Suite 702 • 889 West Pender Street • Vancouver BC • V6C 3B2 • Tel. 604.683.3288

Empire Rock Minerals Inc.	18-Dec-15
702-889 West Pender Street	Account #2015-061
Vancouver, BC V6C 3B2	GST#896269297

#### **Re: Gwyn Lake Exploration**

	Days	Fees per Day	Amount	
Senior Geologist, Dr. Bohumil B. Molak, PGeo				
Field work	5.5 \$	900.00	\$ 4 950.00	
Logistics, preparation, travel, mobilization and demobilization	3 \$	900.00	\$ 2 700.00	
Research on area, investigate technical disclosures, general research,	9\$	800.00	\$ 7 200.00	
report preparation			\$ 14 850.00	
Geological Assistant, Andrej Molak				
Field work	5.5 \$	350.00	\$ 1 925.00	
Logistics, preparation, travel, mobilization and demobilization	2 \$	350.00	\$ 700.00	
			\$ 2 625.00	
Prospector, Frank Houghton				
16 days @ \$400/day			\$ 6 400.00	
			\$ 6 400.00	_

# Prospector Assistant, George Chemboyer

15 days @ \$300/day		\$	4 500.00
		\$	4 500.00
Prospector Assistant, Sam Potan			
4 days @ \$300/day		\$	1 200.00
		\$	1 200.00
Assays (22 samples @ \$40/sample)		\$	1 520.00
Expenses:			
Truck Rental (16 days @ \$75/day)			1 200.00
ATV (15 days @ \$40/day)	15	40	600.00
ATV (15 days @ \$40/day)	15	40	600.00
ATV (4 days @ \$40/day)	4	40	160.00
Rock saws rental (12 days @ \$40/day)			480.00
Rock saw maintence expense			299.90
Airfare			487.15
Accommodation			404.00
Car Rental (5.5 days, 60km @ \$0.35/Km)			322.46
Food (Meals, Groceries, etc)			467.11
Fuel/ Transpiration charges			165.00
Miscellaneous Vehicle Expenses (gas,oil)			650.00
Expense Administration Fee and Office Charge		5835.62	1 050.41
Total Expenses		\$	6 886.03
Digitization, Preliminary Exploration Report (at 10% of costs)		\$	3 348.10

Subtotal		\$	36 829.13
GST		\$	1 841.46
Total		\$	38 670.59
This is our account herein			
XYQUEST MINING CORP.			
per:	• INTEREST OF 2% PER MON MONTHLY, OR 26.8% PER ANNUM CHA ACCOUNTS	ITH, CO RGED O	MPOUNDED N OVERDUE

**ANTHONY J. BERUSCHI** 

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www.sedar.com, Empire's MD&A and Interim financial statements.

### 6. STATEMENT OF QUALIFICATIONS

- I, Bohumil (Boris) Molak, Ph.D., P.Geo., do hereby certify that:
- 1. I am a self-employed Geoscientist residing at 704-6689 Willingdon Avenue, Burnaby, BC., V5H 3Y8, Canada.
- 2. I am a member of the Association of Professional Engineers and Geoscientists of British Columbia (License No. 28600) in good standing.
- 3. I graduated from the Comenius University of Czechoslovakia with a Bachelor of Science (Mgr.) in Economic Geology in 1970. The same university awarded me the degree Master of Science in Economic Geology (RNDr.) in 1980 and the degree Doctor of Philosophy (CSc.) in 1990. I have practiced my profession continuously since 1970.
- 4. My geological practice includes research, prospecting, and exploration for precious, base, ferrous and other metals in Slovakia, Zambia, Cuba, Guinea, Canada, Chile and Argentina.
- 5. Since July 2003 until present I am a self-employed, consulting geoscientist.
- 6. I conducted the field work and supervised the exploration programs on the Gwyn Lake Gold Prospect in 2005, 2007, 2008, 2010, 2014 and 2015.
- 7. I am the Qualified Person for the purposes of this report. I am responsible for all items in this report except the Item 4: 2015 Exploration expenses, which was prepared by Empire Rock Minerals Inc.
- 8. The sources of all information not based on personal examination are quoted in the References item. As of the date of this Certificate I am not aware of any material fact or material change with respect to the subject matter of this report that is not reflected in this report, the omission of which would make the report misleading.
- 9. I am independent of Empire Rock and Minerals Inc.

Dated at Vancouver, BC, Canada, this 20<sup>th</sup> day of December, 2015.

### **APPENDIX I**

#### SAMPLE DESCRIPTIONS AND GOLD ASSAYS

#	Easting	Northing	T. T. (m)	Туре	Location	Description	Au (ppm)
617485	442070	5497439	0.3	СН	Claim 4209002, DS	QV, ARSP MSUL, >10%	6.45
617486	442007	5497448	0.3	СН	Claim 4209002, DS	BIF, QV, DSUL CARB $< 3 \%$	0.336
617487	441926	5497429	0.3	СН	Claim 4209002, DS	BIF, QV, DSUL <20%	5.927
617488	441821	5497421	0.2	СН	Claim 4209002, DS	GS	WR
617489	444934	5499568	0.2	СН	Claim 3011478	GS, QL	0.006
617490	441922	5497421	0.37	CCH	Claim 4209002, DS	BIF, QV, 3-5 % ARSP, PRT	3.613
617491	441922	5497421	0.3	CCH	Claim 4209002, DS	BIF, QV, 1 – 2 % PRT	0.103
617492	441922	5497421	0.9	CCH	Claim 4209002, DS	BIF, GS, <1 % PRT	0.06
617493	441913	5497435	0.6	CCH	Claim 4209002, DS	BIF, GS DSUL < 1%	< 0.005
617494	441952	5497434	1.0	CCH	Claim 4209002, DS	BIF GS, DSUL < 2%	0.019
617495	441952	5497434	1.0	CCH	Claim 4209002, DS	BIF, DSUL 3 -5%,	0.267
617496	441952	5497434	1.0	CCH	Claim 4209002, DS	BIF, GS PRT < 1%	< 0.005
617497	441952	5497434	0.4	CCH	Claim 4209002, DS	BIF, GS DSUL 1-2%	0.007
617498	441952	5497434	0.6	CCH	Claim 4209002, DS	BIF, GS DSUL <1%	0.006
617499	441952	5497434	0.6	CCH	Claim 4209002, DS	BIF, GS DSUL <1%	0.006
617500	441998	5497440	0.5	CCH	Claim 4209002, DS	BIF, QL DSUL <5 %	0.643
662351	441998	5497440	0.5	CCH	Claim 4209002, DS	BIF, QL DSUL >5 %	2.513
662352	441998	5497440	0.8	CCH	Claim 4209002, DS	BIF, QL DSUL <5 %	0.35
662353	441998	5497440	0.8	CCH	Claim 4209002, DS	BIF, QL DSUL 1-2 %	0.057
662354	441998	5497440	0.8	CCH	Claim 4209002, DS	BIF, QL DSUL <1 %	0.007
662355	441998	5497440	0.8	CCH	Claim 4209002, DS	BIF, QL DSUL <5 %	0.209
662356	441886	5497415	0.2	СН	Claim 4209002, DS	QV, BIF, DSUL < 15%	2.119

Abbreviations: ARSP – arsenopyrite; ASP – altered silicified volcanic; B – area B; BIF – banded iron formation; CARB – carbonate; CCH – continuous channel; CH – chip; DS – Dominion showing; DSUL – disseminated sulphide; GS – greenstone; MSUL – massive sulphide; PRT – pyrite; QL – quartz lense; QV –quartz vein; WT – whole rock analysis.

# **APPENDIX II**

# Assay Certificates

December 20, 2015 40



Laboratory Address: 1046 Gorham Street, Thunder Bay, ON P7B 5X5 Ph: 807-626-1630 Fx: 807-622-7571

#### Please Remit to:

Accurassay Laboratories Ltd. PO Box 177, Lambeth Station London, ON, N6P 1P9 Ph: 519-266-4640

# INVOICE

Invoiced to:	Analyzed For:	Invoice No:	IN123577
XYQuest Venture Corp	XYQuest Venture Corp	Date:	Nov 30, 2015
605-889 W. Pender Street	605-889 W. Pender Street	Page	1
Vancouver, BC V6C3B2	Vancouver, BC V6C3B2	Cust. No.:	1203

Businesss No: 10029	4768	Terms: N30	Due Date:	Dec 30, 2015					
Code	Qty	Description			Unit Price	Amount			
		Ref: 201544955 Job# 201544955							
ALP1	22	Dry, Crush (<5kg) 85%-10 mesh, Split 500g, Pulv 90%-200 M	Mesh		7.25	159.50			
ALFA1	21	Gold (FA/AAS, 30g)			12.60	264.60			
ALAR1	21	Aqua Regia Digestion with ICP-OES Finish			10.10	212.10			
ALASAR2	5	Arsenic Element Assay, AAS or ICP Finish, Aqua Regia Dig	est		7.00	35.00			
ALXR1	1	Whole Rock Analysis by fused disk, XRF			32.00	32.00			
			Tax Summary:						
Notes:			GST	0.00	Sub-Total	703.20			
			QST	0.00	Total Taxes	91.42			
			HST	91.42					
					Total Amount	794.62			
Notes:			GST QST HST	0.00 0.00 91.42	Sub-Total Total Taxes Total Amount	703.20 91.42 794.62			



1046 Gorham Street Thunder Bay, ON Canada P7B 5X5 Tel: (807) 626-1630 Fax: (807) 622-7571 www.accurassay.com assay@accurassay.com

Wednesday, November 18, 2015

#### **Final Certificate**

XY Quest Venture Corp 605-889 Pender Street West Vancouver, Br, CAN

Ph#: (604) 802-6877 Email: d.kress@telus.net, bmolak@hotmail.com

Acc #	Client ID	Au g/t (ppm)	As ppm	
434986	617485	6.450	27231	
434987	617486	0.336		
434988	617487	5.929	127460	
434989	617488			
434990	617489	0.006		
434991	617490	3.613	34230	
434992	617491	0.103		
434993	617492	0.060		
434994	617493	<0.005		
434995	617494	0.019		
434996	617494 Dup	0.015		
434997	617495	0.267		
434998	617496	<0.005		
434999	617497	0.007		
435000	617498	0.006		
435001	617499	0.006		
435002	617500	0.643		
435004	662351	2.513	19791	
435005	662352	0.350		
435006	662353	0.057		
435007	662353 Dup	0.059		
435008	662354	0.007		
435009	662355	0.209		
435010	662356	2.119	43815	

#### APPLIED SCOPES: ALP1, ALFA1, ALAR1, ALXR1, ALAsAR2



Certified By: Andrew Oleski Lab Manager - Thunder Bay

Authorized By:

Derek Demianiuk, VP Quality

The results included on this report relate only to the items tested. The Certificate of Analysis should not be reproduced except in full, without the written approval of the laboratory.

Date Received: 11/06/2015 Date Completed: 11/18/2015 Job #: 201544955 Reference: Sample #: 22



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Wednesday, November 18, 2015

### **Final Certificate**

XY Quest Venture Corp 605-889 Pender Street West Vancouver, Br, CAN

Ph#: (604) 802-6877 Email: d.kress@telus.net, bmolak@hotmail.com Date Received: 11/06/2015 Date Completed: 11/18/2015 Job #: 201544955 Reference: Sample #: 22

#### Control Standards

QC Type	Element	QC Performance (ppm)	Mean (ppm)	Std Dev (ppm)
GS45	Au	2.998	2.920	0.180
APPLIED SCOPES	S: ALP1, ALFA1, ALAF	R1, ALXR1, ALAsAR2		

Validated By Shawn Rask Laboratory Assistant Manager

Certified By: Andrew Oleski

Lab Manager - Thunder Bay

Authorized By:

Derek Demianiuk, VP Quality

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XY Quesi 605-889 I Vancouve Ph#: (604 Email: d I	t Venture Cor Pender Stree er, Br, CAN ) 802-6877	rp et West	lak@ho	tmail com																			Da	Date Red Ite Com Refe Sar	ceived: pleted: Job #: erence: nple #:	11/06/2 11/18/2 201544 22	2015 2015 1955							
	1035@10103.1																																	
Acc #	Client ID	Ag ppm	Al %	As ppm	B ppm	Ba ppm	Be ppm	Bi ppm	Ca %	Cd ppm	Co ppm	Cr ppm	Cu ppm	Fe %	K %	Li ppm	Mg %	Mn ppm	Mo ppm	Na %	Ni ppm	P ppm	Pb ppm	Sb ppm	Se ppm	Si %	Sn ppm	Sr ppm	Ti ppm	TI ppm	V ppm	W ppm	Y ppm	Zn ppm
434986	617485	<1	2.19	27231	84	5	2	32	4.20	15	11	20	111	16.95	0.01	5	1.53	4167	5	0.01	47	<100	20	6	12	0.02	<10	29	<100	6	86	<10	2	204
434987	617486	<1	0.32	1857	85	3	<2	9	0.10	7	2	56	130	8.83	<0.01	<1	0.25	893	8	0.01	46	112	12	<5	<5	0.05	<10	<3	<100	7	27	<10	<2	65
434988	617487	<1	1.07	127460	86	2	3	74	1.29	18	5	18	78	21.56	<0.01	3	0.68	1174	9	0.01	35	<100	24	21	39	0.02	<10	9	<100	5	55	<10	<2	79
434989	617488																																	
434990	617489	<1	5.01	79	87	18	2	10	5.03	9	61	142	101	11.29	0.06	24	2.80	2525	1	0.04	107	306	12	<5	<5	0.04	<10	15	2982	<2	276	<10	5	125
434991	617490	<1	3.33	34230	87	5	2	34	0.82	13	9	31	102	16.30	<0.01	11	1.19	1416	5	0.01	40	<100	17	5	<5	0.03	<10	5	123	<2	163	<10	<2	154
434992	617491	<1	1.37	1525	84	3	2	16	0.51	11	7	62	174	13.68	<0.01	3	0.81	672	8	0.01	41	<100	15	<5	<5	0.02	<10	4	<100	7	66	<10	3	79
434993	617492	<1	1.53	1644	82	2	<2	13	3.25	11	7	44	120	13.06	<0.01	4	1.92	971	6	0.01	36	<100	14	<5	<5	0.02	<10	27	<100	<2	72	<10	3	84
434994	617493	<1	1.05	37	88	8	2	18	2.70	14	14	21	78	16.04	<0.01	1	1.17	10971	4	0.01	38	129	18	<5	<5	0.03	<10	18	<100	13	50	<10	2	71
434995	617494	<1	3.50	30	82	22	2	17	1.62	12	28	37	128	13.01	0.04	21	1.25	2333	6	0.01	42	353	14	<5	<5	0.03	<10	5	212	7	157	<10	4	259
434996D	617494	<1	3.34	25	84	22	<2	13	1.53	11	27	36	122	12.47	0.04	20	1.19	2222	5	0.01	44	340	14	<5	<5	0.04	<10	6	207	8	151	<10	4	248
434997	617495	<1	0.72	1085	85	5	<2	14	2.73	10	9	37	39	10.83	<0.01	3	1.50	1476	6	0.01	40	185	15	<5	<5	0.03	<10	18	<100	5	40	<10	3	124
434998	617496	<1	5.11	77	81	8	<2	6	2.16	7	43	223	37	8.55	<0.01	41	4.47	1006	3	0.02	115	211	9	<5	<5	0.03	<10	14	106	12	232	<10	3	81
434999	617497	<1	4.40	110	86	10	<2	10	5.26	8	49	228	70	9.36	0.02	35	4.15	1652	2	0.04	121	245	13	<5	<5	0.03	<10	24	<100	13	226	<10	4	90
435000	617498	<1	3.68	112	84	10	<2	10	7.03	7	47	195	92	9.02	0.03	29	3.63	1702	<1	0.04	103	307	10	<5	<5	0.03	<10	28	<100	6	199	<10	5	78
435001	617499	<1	3.50	82	79	6	<2	8	6.31	7	46	171	101	8.44	0.03	27	3.36	1489	<1	0.04	83	286	9	<5	<5	0.03	<10	23	<100	2	193	<10	5	70
435002	617500	<1	0.47	6113	85	3	2	23	2.12	17	4	25	269	16.29	<0.01	2	0.99	2473	5	0.01	34	289	26	<5	<5	0.03	<10	10	<100	<2	31	<10	3	438
435004	662351	<1	0.53	19791	85	2	<2	20	1.45	34	15	28	302	12.74	<0.01	2	0.68	1795	6	0.01	39	159	20	<5	<5	0.03	<10	8	<100	5	35	16	2	2585
435005	662352	<1	0.35	1019	86	6	2	14	2.31	13	2	23	85	15.41	<0.01	<1	0.72	1652	4	0.01	31	200	20	<5	<5	0.03	<10	15	<100	10	24	<10	4	108
435006	662353	<1	1.95	849	83	11	<2	10	2.82	7	20	106	49	8.56	0.01	18	2.07	984	4	0.03	73	161	8	<5	<5	0.03	<10	12	<100	9	102	<10	3	71

PROCEDURE CODES: ALP1, ALFA1, ALAR1, ALXR1, ALASAR2

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Certified By: Jason Moore, VP Operations, Assayer



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#### Wednesday, November 18, 2015

**Final Certificate** 

XY Quest Venture Corp 605-889 Pender Street West Vancouver, Br, CAN Ph#: (604) 802-6877 Email: d.kress@telus.net, bmolak@hotmail.com														Date Received: 11/06/2015 Date Completed: 11/18/2015 Job #: 201544955 Reference: Sample #: 22																				
Acc #	Client ID	Ag ppm	Al %	As ppm	B ppm	Ba ppm	Be ppm	Bi ppm	Ca %	Cd ppm	Co ppm	Cr ppm	Cu ppm	Fe %	K %	Li ppm	Mg %	Mn ppm	Mo ppm	Na %	Ni ppm	P ppm	Pb ppm	Sb ppm	Se ppm	Si %	Sn ppm	Sr ppm	Ti ppm	TI ppm	V ppm	W ppm	Y ppm	Zn ppm
435007D	662353	<1	1.94	862	81	15	<2	11	2.78	7	20	106	48	8.48	0.01	18	2.04	975	4	0.03	77	158	11	<5	<5	0.03	<10	11	<100	10	102	<10	3	70
435008	662354	<1	3.71	124	79	5	<2	7	6.13	7	44	182	93	8.47	0.02	33	4.08	1363	2	0.04	118	249	10	<5	<5	0.03	<10	23	<100	5	186	<10	4	74
435009	662355	<1	2.09	191	86	7	<2	12	3.54	9	21	114	82	10.60	0.01	20	2.53	1397	3	0.03	72	231	12	<5	<5	0.03	<10	16	<100	2	100	<10	4	94
435010	662356	<1	0.78	43815	77	2	2	31	6.03	12	5	15	60	14.04	<0.01	2	1.13	2501	4	0.01	28	787	19	<5	<5	0.03	<10	34	<100	4	42	<10	3	82

PROCEDURE CODES: ALP1, ALFA1, ALAR1, ALXR1, ALASAR2

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Certified By: Jason Moore, VP Operations, Assayer



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Wednesday, November 25, 2015

### **Final Certificate**

XY Quest Venture Corp 605-889 Pender Street West Vancouver, Br, CAN

Ph#: (604) 802-6877 Email: d.kress@telus.net, bmolak@hotmail.com Date Received: 11/06/2015 Date Completed: 11/18/2015 Job #: 201544955 Reference: Sample #: 22

Acc #	Client ID	Fe203 %	Si02 %	Al203 %	Na20 %	Mg0 %	K20 %	Ca0 %	P205 %	Mn0 %	Ti02 %	Cr203 %	V2O5 %	SO3 %	L0I %	Mass Balance %
434989	617488	9.54	52.75	14.32	3.88	4.33	0.06	6.76	0.08	0.26	0.86	0.03	0.04	0.29	5.85	99.04
Control St	Std Certified															
		Fe203 %	Si02 %	AI203 %	Na20 %	Mg0 %	K20 %	Ca0 %	P205 %	Mn0 %	Ti02 %	Cr203 %	V2O5 %	SO3 %	L0I %	Mass Balance %
NIST S	R 690	95.58	3.71	0.18	0.00	0.18	0.00	0.20	0.03	0.23	0.02	0.00	0.00	0.00	0.00	100.13
NIST S	R 692	85.18	10.14	1.41	0.01	0.46	0.04	0.02	0.09	0.00	0.04	0.00	0.00	0.00	2.50	99.89

#### APPLIED SCOPES: ALP1, ALFA1, ALAR1, ALXR1, ALASAR2



Shawn Rask Laboratory Assistant Manager

Certified By:



Authorized By:

Derek Demianiuk, VP Quality

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# APPENDIX III

# Gwyn Lake Gold Prospect, Claim Map at Scale 1:10,000

December 20, 2015 41