We are committed to providing <u>accessible customer service</u>. If you need accessible formats or communications supports, please <u>contact us</u>.

Nous tenons à améliorer <u>l'accessibilité des services à la clientèle</u>. Si vous avez besoin de formats accessibles ou d'aide à la communication, veuillez <u>nous contacter</u>.



# REPORT ON THE 2016 DIAMOND DRILLING PROGRAM AT THE LUNDMARK-AKOW LAKE PROPERTY OF ROMIOS GOLD RESOURCES INC.

Patricia Mining Division,

Northwestern Ontario.

NTS Mapsheets 53B/15 and 53B/16

Ву

John L. Biczok, P.Geo.

Date: November, 2016

## Contents

INTRODUCTION
LOCATION AND ACCESS
TOPOGRAPHY
PROPERTY DESCRIPTION
REGIONAL GEOLOGY
Structure
Metamorphism
PROPERTY GEOLOGY9
LITHOLOGIES
STRUCTURE
MINERALIZATION
SUMMARY OF PREVIOUS WORK16
2016 DIAMOND DRILLING PROGRAM
DRILL HOLE RGR-16-1
DRILL HOLE RGR-16-223
DRILL HOLE RGR-16-3
DRILL HOLE RGR-16-427
LITHOGEOCHEMISTRY
DISCUSSION
CONCLUSIONS AND RECOMMENDATIONS:
STATEMENT OF EXPENDITURES
LIST OF REFERENCES

## LIST OF FIGURES

Figure 1: Regional Location Map	2
Figure 2: Claim holdings and 2016 diamond drilling	4
Figure 3: Akow Lake grid, EM targets and past drilling	5
Figure 4: General geology of the North Caribou Greenstone Belt and surrounding area	6
Figure 5: General geology of the claims area	9
Figure 6: Cross section DDH RGR-16-1	21

Figure 7: Cross section DDH RGR-16-2	24
- Figure 8: Cross section of DDH RGR-16-3	27
Figure 9: Cross-section DDH RGR-16-4	29
Figure 10: Rb/Sr versus Na <sub>2</sub> O	31

#### LIST OF TABLES

Table 1: Mining claims held by Romios Gold Resources Inc	3
Table 2: Whole rock analyses of metasediments and schists	31
Table 3: Abbreviations used in drill logs and sections	39

#### LIST OF APPENDICES

Appendix One: 2016 Diamond Drill Logs

Appendix Two: Assay and Analytical Techniques and Results

Appendix Three: Lithogeochemical Sample Descriptions, Procedures and Results

Appendix Four: QAQC procedures and data verification results

### **INTRODUCTION**

Romios Gold Resources Inc. ("Romios" or "the company") is the owner of 13 mining claims in the Lundmark-Akow Lake area of northwestern Ontario. Romios Estates Ltd. acquired these claims by staking in 1994 and 1996 and transferred them to Romios Gold Resources Inc. shortly thereafter. From 1996 to 2013 the company conducted a series of work programs including prospecting and geological mapping, line-cutting and a variety of ground geophysical surveys, airborne geophysical surveys, and 2 diamond drilling programs. The geophysical work identified a series of electromagnetic conductors and magnetic highs and the mapping program located 2 small surface gold showings (the Spence and Bishop showings) as well as a ~100m wide gossanous, schistose zone termed the "Romios Shear Zone" (Zhang, 1998; Spence, 1998). After being partially intersected by drill hole 98-9 in the 1998 drill program, the "Romios Shear Zone" was targeted by 5 drill holes in 1999 (holes 99-1 to 99-5). These holes returned broad zones of low-grade copper-(gold) mineralization with short, sporadic higher-grade intervals, within a package of coarse-grained garnet-staurolite-biotite-sericite schists (Zhang, 1999). Since that 1999 drill program, a large-loop Transient EM (TEM) survey was carried out over the Akow Lake grid and identified in more detail the apparently formational conductors flanking the "Romios Shear Zone" and as well as a shorter conductor which appears to correspond to the copper-(gold) zone. A VTEM survey flown in 2013 also returned strong anomalies along the known formational conductors as well as a somewhat weaker response over the copper-(gold) zone. In 2014 Romios was granted an exploration permit (#PR-13-10449) for the Lundmark-Akow Lake property by the Ontario Ministry of Northern Development and Mines (MNDM). In 2015 the company signed a Memorandum of Understanding (MoU) with the North Caribou Lake First Nation within whose traditional territories the property is situated. With these permits and agreements in place, Romios began planning a diamond drill program to follow-up on the previous results from the copper-(gold) zone drilled in 1999. This 4-hole program commenced on September 7<sup>th</sup>. 2016 and was completed about one month later on October 6th. This report presents the results of this drill program.

## LOCATION AND ACCESS

The Lundmark-Akow Lake property held by Romios is located 493 km north of Thunder Bay, Ontario and 146 km north of Pickle Lake, Ontario (Fig. 1). It lies within the Patricia Mining Division on NTS map sheets 53B/15 and 16. The area of interest in this program is centred at about 52° 46′ 33″ N and 90° 29′ 00″ W. The property is about 18km north-northwest of Goldcorp's Musselwhite gold mine on Opapimiskan Lake. The nearest settlement is the First Nation community of Round Lake (a.k.a. Weagamow) which is 61km to the north-northwest of Akow Lake. Both Pickle Lake and Round Lake are serviced by regular scheduled air service from Thunder Bay and charter float plane service is available from both communities. A paved road leads to Pickle Lake from the Trans-Canada highway, 300km to the south, and an all-weather gravel road, the "North Road", leads from Pickle Lake to the southern shore of Round Lake, with a branch



Figure 1: Regional Location Map

road to the Musselwhite mine. An old drill trail leads from the north shore of Opapimiskan Lake northwards towards Akow Lake at least 9km.

Access to the Akow Lake property for this program was by float plane and helicopter from a staging area at Mawley Lake on the North Road, 53km SSW from Akow Lake. A float-equipped Otter aircraft chartered from Osnaburgh Airways of Pickle Lake and an A-Star B2 helicopter chartered from Forest Helicopters of Kenora, Ontario were used to move the drill equipment and fuel to the site. During the drill program, the crew stayed at North Caribou Camp fishing lodge on Cemetery Island, 13 km west of Akow Lake, and commuted to the drill site each day by helicopter.

## TOPOGRAPHY

The topography of the Lundmark-Akow Lake area features the subdued relief typical of most of the northern Canadian Shield. The terrain is relatively flat with numerous low-lying, somewhat boggy areas interrupted by several north-trending low ridges and rows of outcrops. The majority of the region is thickly forested with spruce, tamarack and jack pine with minor birch or poplar dominant areas. Several lakes 1-2km across and a few small ponds occur throughout the claims west of Akow Lake. The area north and northwest of Lundmark Lake, including the two northernmost claims, is dominated by a prominent SSW-trending linear glacial dispersion pattern that extends westward across much of North Caribou Lake.

## **PROPERTY DESCRIPTION**

Romios currently holds 13 mining claims in the Lundmark-Akow Lake area (see Table 1, Fig. 2). The claims were originally staked on behalf of Romios Estates Ltd. and then transferred to Romios Gold Resources Inc. who now hold a 3% NSR on the claims. The drill program described herein was carried out on claims 1209235, 1209237 and 1208993 west of Akow Lake.

TOWNSHIP/AREA	CLAIM #	UNITS	HECTARES	STAKED	EXPIRY
					DATE*
Akow Lake Area	1208559	16	256	1994-05-20	2017-05-27
Akow Lake Area	1208561	16	256	1994-05-20	2017-05-27
Akow Lake Area	1208991	8	128	1994-08-02	2018-05-27
Akow Lake Area	1208992	15	240	1994-08-02	2018-05-27
Akow Lake Area	1208993	16	256	1994-08-02	2017-05-27
Akow Lake Area	1208994	12	192	1994-08-02	2017-05-27
Akow Lake Area	1209235	9	144	1994-06-16	2018-05-27
Akow Lake Area	1209237	16	256	1994-06-16	2018-05-27
Akow Lake Area	1209252	6	96	1994-06-16	2018-05-27
Akow Lake Area	1215802	16	256	1997-06-17	2017-05-27
Akow Lake Area	1216798	16	256	1997-06-17	2017-05-27
Akow Lake Area	1217216	8	128	1997-06-26	2018-05-27
Akow Lake Area 1215222		16	256	1996-06-24	2017-05-27
	TOTALS	170 units	2720 Ha		

## Table 1: Mining claims held by Romios Gold Resources Inc.

\*Prior to filing of this report

The property is covered to a large degree by several cut grids which are described in detail in Vickers (2001). The grid upon which the recent drill holes are sited in is known as the Akow Lake grid (Fig. 3). The baseline for this grid trends 340° degrees with perpendicular section lines cut every 100m from Line 2300S to Line 2600N. The section lines are between 1,000m and 3,000m in length and were originally marked with cut and labelled pickets every 25m. Very few of these pickets are still standing or readable any longer. For this program, drill hole collars situated on cut lines were accomplished by measuring back along the lines from past drill hole collars or the baseline using a nylon chain and/or a GPS. For the two holes not located on cut lines, GPS co-



Figure 2: Claim holdings and 2016 diamond drilling



Figure 3: Akow Lake grid, EM targets and past drilling

ordinates were determined by measuring them off a TEM map of the grid which also depicted the UTM grid. The author also measured the location of all old drill holes in the area of this recent drilling and found that the aforementioned map was accurate to within several metres. Two of the holes, 98-8 and 98-9 were believed to have suspect co-ordinates and these were indeed found to be incorrect by 150 to 250m when located in the field. They have been plotted in the correct locations on the maps in this report.

## **REGIONAL GEOLOGY**

The Lundmark-Akow Lake area lies within the central portion of the Archean North Caribou Lake greenstone belt (NCGB), one of the northernmost belts in the North Caribou Superterrane adjacent to its internal contact with the Island Lake Domain (Fig. 4). The belt was mapped in detail by the Ontario Geological Survey over a 3 year period in the 1980's (Breaks et al., 2001). These workers divided the belt into 8 groups which were modified somewhat by Thurston, (1991) and Hollings and Kerrich (1999). Only those units of relevance to the Romios property will be discussed in any detail here. For information on the other units the reader is referred to Breaks et al. (2001) and Biczok et al. (2012).



Figure 4: General geology of the North Caribou Greenstone Belt and surrounding area.

The central portion of the NCGB and the adjacent part of the northwestern arm are dominated by three assemblages designated by Breaks et al. (1986, 2001) as the South Rim Volcanics along the southern and western margins of the belt, the Eyapamikama metasediments along the axial centre of the belt, and the North Rim volcanic assemblage along the northern and eastern margins of the belt (Fig. 4).

The South Rim volcanic assemblage (SRV) is dominated by fine- to medium grained, massive to pillowed basalt flows with lesser intercalated felsic to intermediate volcanics, including a major felsic pile structurally overlying the iron formation at Musselwhite, rare ultramafic flows (Breaks et al., 1986), as well as locally prominent packages of intercalated clastic metasediments and banded iron formations (Newman, 1987). Age-dating of the felsic-intermediate units has returned ages of 2982 Ma (Davis and Stott, 2001) and 2980 and 2978 Ma (V. McNicoll et al, 2013) with one felsic horizon NW of Musselwhite returning an age of 3053 Ma. The complex iron formation that hosts the Musselwhite deposit has historically been assigned to the Opapimiskan-Markop assemblage (the OMU) in the mine area. However, it is known from the OGS mapping and various airborne geophysical surveys to continue north of Musselwhite onto and beyond the Romios claims in what is mapped as the South Rim assemblage. Research at Musselwhite suggests that these two assemblages, the South Rim and the OMU, are gradational into each other and largely age-equivalent to each other along strike.

The Eyapamikama assemblage (ELS) is described by Breaks et al. (2001) as "a fining-upward sequence in which basal alluvium and fan delta conglomeratic cycles grade vertically and laterally into finer grained metasedimentary rocks". It occupies the centre of the belt for tens of kilometres. The ELS was dated at between <2846 Ma and <2880 Ma by Davis and Stott (2001) and Kelly and Schneider (2015) report a minimum U-Pb zircon core age of 2800 Ma from eleven samples with younger overgrowths in the 2788-2703 Ma range (due to a regional hydrothermal event).

The North Rim volcanic assemblage (NRV) occupies the eastern margin of the belt in the claims area and is clipped by the easternmost corners of several Romios claims. It is very similar to the South Rim as it is dominated by basalt flows with lesser felsic to intermediate volcanic centres and at least one banded iron formation. It has been suggested by various workers over the years that the entire greenstone belt is a synform and that the North Rim unit is the folded equivalent of the South Rim. However, this is not supported by the age dates of the two volcanic assemblages. An age of 2870 Ma was obtained by Davis and Stott (2001) in the McGruer Lake area and work contracted by Musselwhite returned an age of 2868 Ma from a felsic horizon NE of Doubtful Lake. These ages indicate that the North Rim volcanics are more than 100 Ma younger than the South Rim volcanics and cannot be their folded equivalent.

The greenstone belt is cut off along the western edge of the claims by the large North Caribou Lake composite batholith which has been dated at between 2880 and 2830 million years (Ma) (Davis and Stott, 2001; Van Lankvelt, 2013). To the east, the belt is in fault contact with the

Schade Lake Gneiss Complex, dated at 2860 to 2840 Ma (Biczok et al., 2012; Van Lankvelt, 2013). Where observed by the author, the fault contact between the Schade Lake complex and he North Rim volcanics is marked by a well-developed L-tectonite plunging very shallowly to the south and dipping shallowly to the east; elsewhere the fault contact is reported to be closer to vertical.

#### Structure

Three periods of deformation have been mapped in the North Caribou belt by Hall and Rigg (1986) and Breaks et al. (2001 and references therein) and supported by subsequent workers.

The earliest event,  $D_1$ , was until recently recognized almost exclusively only in iron formations as tight isoclinal folds with a penetrative foliation. Mapping by the author in the Musselwhite mine area combined with high-precision age-dating by the GSC, revealed a major F1 fold that has completely overturned the stratigraphy in the mine area. Many small scale recumbent folds have also been found in mapping of the iron formations in that area.  $D_2$  is the strongest phase of deformation and is evidence by northwest-plunging folds, often with a steeply dipping axial planar foliation. The intersection of  $D_1$  and  $D_2$  locally creates well developed fold-interference patterns such as the "dome and basin" on Grunerite Island in Opapimiskan Lake and a similar pattern evident in the aeromagnetic pattern on the NW side of the same lake.  $D_3$  appears to have been a relatively minor, heterogeneous event that produced small-scale, asymmetric, broad to open or chevron folds with a steep southwest trending crenulation cleavage (Oswald et al., 2014).

Mineral lineations throughout the NCGB exhibit a well-developed and somewhat unusual pattern in that they are quite shallow plunging and reverse plunge directions at several points along the belt, but their axes remain roughly parallel to the axis of the belt overall. The reason for this flip in the lineation plunge is uncertain but may in part be due to the intrusion of the crescent shaped North Caribou pluton (Stott and Biczok, 2010) or perhaps a large-scale F<sub>3</sub> effect. In the central part of the belt, in the region of the Romios claims, the intensity of deformation appears to increase eastward towards the contact with the Schade Lake gneiss complex, a contact marked locally by a highly lineated L-tectonite plunging very shallowly (<5 deg) to the southeast. Examination of the aeromagnetic pattern of the Schade Lake gneiss suggest that it underwent a pronounced south-directed movement adjacent to the central part of the greenstone belt and this deformation event likely induced a dextral strain throughout much of the adjacent belt. Dextral offsets on fault structures of all scales are the norm throughout the NCGB.

#### Metamorphism

The metamorphic grade of the NCGB exhibits an overall increase from low grade (chlorite and biotite bearing assemblages) in the western arm to medium grade assemblages east and south of Doubtful Lake where index minerals such as garnet, staurolite, cordierite, grunerite and rarely, sillimanite are found (Beaks et al. 2001). Work by Kelly and Schneider (2015) suggests that some of the higher-grade assemblages are produced by contact metamorphism from small intrusions throughout the belt. Assemblages in metasedimentary rocks at Akow Lake include garnet, staurolite and grunerite indicative of medium grade (amphibolite) conditions.

## PROPERTY GEOLOGY

The current Romios claims are underlain primarily by two of lithological groups, the South Rim Volcanics on the west side and the Eyapamikama Metasediments to the east. The contact between these two assemblages trends north along the western shore of Akow Lake (Fig. 5).



Figure 5: General geology of the claims area

The area of the Romios claims at the Lundmark-Akow Lake were mapped by the Ontario Geological Survey at various times and levels of detail but most recently and in the greatest detail by Breaks et al. (1986). Localised mapping was conducted in detail by various exploration company geologists including Moss Resources (Adams and North, 1985) and Romios (Zhang, 1998). The overall setting is as previously described, i.e., a north-trending ~1km wide belt of South Rim mafic volcanic rocks dominates the claims and is intruded along the western margin by the North Caribous Lake batholith and is in fault contact along the eastern edge with the younger Eyapamikama clastic sediments (Fig. 5) (this fault contact is assumed from one evident at Musselwhite). A major regional iron formation occurs in the South Rim Volcanics less than ~100m west of its contact with the Eyapamikama assemblage. The North Rim volcanics occur east of the Eyapamikama sediments in the easternmost margins of several claims. Results of Romios drilling programs and detailed mapping has revealed a somewhat more complicated picture, particularly when it comes to the South Rim volcanics. The general stratigraphy of the North Rim will be described from west to east across the Akow Lake grid taking into account the results of the work by Romios in the Akow Lake area and using the terminology of Zhang (2015) where appropriate.

#### LITHOLOGIES

The western edge of the Akow Lake grid lies close to the margin of the North Caribou Lake batholith and several granite-tonalite outcrops occur in this area at ~9+00W.

The Lower Metavolcanic Unit: The first outcrops of the of the greenstone belt are basalts of the South Rim assemblage (SRV) that occur at about 3+50W on lines 2+00S and 14+00S, near the Spence and Bishop showings, and these outcrops continue east to the baseline 0+00. These were termed the "Lower Metavolcanic Unit" by Zhang (2015). Based on the results of DDH RGR-16-3 and 98-7, these basalts can be mapped as far east as ~0+75E and as far west as 6+25W for a total thickness of at least 700m. These appear to be typical tholeiitic basalts composed of ~equal amounts of fine-grained feldspar and amphibole. It varies from relatively massive and unaltered to moderately strained and overprinted by biotite alteration, particularly in the area of the Spence showing. Zhang (2015) reports the presence of deformed pillows in some areas. Drill hole 98-7 intersected 43m of magnetic ultramafics within the volcanic sequence and the magnetic surveys indicate that this unit is semi-continuous to the south and north past Atim Lake although it may pinch and swell significantly. Small gabbro dykes/sills are also noted throughout the basaltic sequence. Numerous thin intraformational horizons of clastic and chemical sediments (iron formations) occur throughout the basaltic sequence. Typically the iron formations are <2mthick and the clastic metasediments (siltstone, mudstone, etc. +/- pyrrhotite pyrite) may be a few metres thick. These intraformational units are common throughout the belt and may contain significant amounts of syngenetic pyrrhotite-(pyrite) that make them quite conductive.

**Dacitic Volcanics**: This is a newly discovered volcanic horizon that was intersected in drill hole RGR-16-3, the only hole drilled between the baseline and the TEM conductors to the east. The hole initially intersected about 80m of dacite with lesser felsic tuffs followed by a band of

siltstone about 50m thick before ending in the aforementioned basalts. The siltstone appears to correlate with a Max-Min conductor that extends from the south end of South Atim Lake off the grid to the south. The eastern limit of the dacite is unknown as there is no drilling or outcrops between this hole at 2+07E and an outcrop at 4+50E. The magnetic and EM patterns in this gap are "quiet" and relatively flat in contrast to the basalts farther west and the mixed assemblage to the east. For this reason, the dacites have, for now, been assumed to extend from 1+20E to 4+25E.

Lower Clastic Metasediments: Eastward from the dacitic volcanics is a package of fine-grained clastic metasediments and lesser felsic volcaniclastics that host the copper-(gold) zone targeted by this drill program. This sequence was referred to as the "lower clastic metasediments" by Zhang (1998, 2015). Many of the horizons in this package are schistose and part of it was referred to as the Romios Shear Zone by Zhang (1998, 2015). The holes drilled in 2016 were longer than those from 1998 and 1999 and provide a better overall picture, especially when combined with the earlier drilling. Based on these drill sections it seems apparent that the least altered sections of the metasedimentary package consists predominantly of meta-siltstones, +/- varying amounts of fine-grained garnet, staurolite and sericite, with lesser intervals of intercalated sericite schist +/- varying amounts of garnet-staurolite and biotite (NB: all of the schists contain anywhere from 10-40% fine-grained quartz and feldspar but this is frequently omitted from the unit names in this text for the sake of brevity). These two lithologies are commonly hydrothermally altered to varying degrees over a ~100-160m wide interval resulting in much more coarse-grained garnetstaurolite-biotite and/or sericite schists. This alteration can be pervasive over tens of metres as well as focussed in narrow veins of intense alteration, typically <0.5m wide. These veins typically have a matrix of massive biotite +/- minor chlorite or sericite and are studded with up to 50% very coarse-grained garnets and/or medium grained staurolite. Both the pervasive and vein-type alteration are commonly accompanied by chalcopyrite+/- pyrrhotite mineralization in the form of thin seams along the foliation, discrete thin veinlets, and as fracture fillings in the coarsegrained garnets. This mineralization is locally accompanied by euhedral arsenopyrite crystals up to 3-4mm across. Pyrite is relatively rare. Local intervals of the sericite schists up to a few metres wide contain <1% disseminated euhedral magnetite crystals 1-2mm across. Typically there are no sulphides within these intervals.

Whether the aforementioned schists are truly part of a shear zone is now the subject of some debate and this will be reviewed later in the Discussion section.

Numerous small basaltic horizons occur throughout this metasedimentary package, e.g. there are ten in hole RGR-16-1 ranging from 0.4 to 5.7m in width. These basalts are quite uniform within and between drill holes. They are fine-grained, a moderately bright green colour, composed of ~60:40 amphibole:plagioclase, weakly foliated and generally quite "fresh" with only minor local biotite alteration. Contacts are sharp. There are no obvious flow textures and given the setting and thinness of these horizons they are assumed to be sills or dykes. There is commonly a clear increase in the intensity of alteration and mineralization near these basalts suggesting that

perhaps the hydrothermal fluids were locally focussed between these sills/dykes, and/or that the basalts were part of the heat source driving fluid circulation. Several of the basalt sills/dykes are themselves cut by thin dykes of olivine lamprophyre and some impressive clusters of these lamprophyre dykes locally cut the metasediments (e.g. 18 dykes, 1-40cm wide, occur between 320 and 346m in hole RGR-16-4). A small number of gabbro and ultramafic dykes were also encountered within the metasedimentary package.

**Banded Iron Formation**: Immediately overlying the "Lower Clastic Metasediments" is the main banded iron formation (BIF) on the property, equivalent to the "Northern Iron Formation" at Musselwhite that hosts the great majority of gold mineralization in that area. It has been dated at <2967 Ma at Musselwhite (McNicoll et al., 2013). Past ground and airborne magnetic surveys of the Romios property indicate that the BIF pinches and swells on a scale of 2-4 km although the conductive portions of it still provide a continuous EM response. This was illustrated in hole RGR-16-2 which drilled through a "pinch-out" in the main BIF and intersected a thin layer of sulphidic mudstone (similar to the "4H" at Musselwhite) but no oxide or other facies of the BIF. This pinch and swell pattern has been ascribed to a regional boudinage effect by Zhang (2015) and while this may be the case, there remains the possibility that the original basin architecture control has had an effect as well.

The main BIF has been intersected in 5 drill holes by Romios (98-8, 10, 11, 12 and 13) and varies from 39m to ~100m in width. It is exposed in numerous outcrops over a 3km interval from Atim Lake North to Lundmark Lake. A brief examination of the BIF east of Atim Lake North revealed that the iron formation consists almost entirely of well banded of chert > grunerite > magnetite. Very little of the magnetite-chert facies that dominates the BIF at Musselwhite, and none of the silicate facies which hosts the majority of the Musselwhite ore, crops out at Atim Lake South. Past mapping by the author north of Lundmark Lake revealed only this chert-rich facies as well. This chert-rich facies is rarely mineralized at Musselwhite; only in extremely tightly folded and fractured areas is it known to be mineralized. No such tight folding or fracturing was noted in the Atim Lake-Lundmark lake area in the author's brief visits. If the stratigraphy in the Lundmark-Akow Lake area is largely equivalent to that at Musselwhite, the favourable 4EA silicate facies would be expected to occur along the western margin of the BIF, if it is present at all. This unit is flanked by a relatively soft biotite-garnet schist ("4F") which itself is capped by a garnetiferous amphibolite facie ("4E) that is commonly mineralized itself. Although they have not been noted in outcrop, it is possible that these units are present but recessively weathered and therefore not exposed. None of the drill holes that tested the BIF went far enough west to be sure no 4EA, 4F or 4E was present. In fact, hole 98-13 ended in 4m of "mafic volcanics with up to 50% garnets" (a common early description of the 4E) and even hole 98-8 ended in 17m of "sediments with 2cm garnets". Further work is needed to examine any core still available from these holes to see if the favourable silicate facies are present, and to determine if any sections of the BIF are dominated by magnetite-rich oxide facies rather than the chert-dominant facies seen at Atim Lake – Lundmark Lake.

East of the main BIF, drilling by Romios typically intersected mafic metavolcanics and gabbro for up to 50m followed by fine-grained clastic metasediments. Presumably the volcanic rocks and some of the intercalated metasediments are part of the South Rim Assemblage (SRV) whereas the easternmost metasediments (in holes 98-8 and RGR16-2) may belong to the Eyapamikama assemblage.

Numerous small (Quartz)-Feldspar Porphyry (QFP) dykes occur throughout the area and cut all major members of the SRV. These dykes are generally weakly deformed, light to medium grey in colour, and contain ~20-40% seriate porphyritic feldspar phenocrysts, up to 2-3mm in length, and rare quartz phenocrysts, within a fine-grained groundmass of quartz-feldspar and minor biotite. These dykes cross-cut the stratigraphy at Musselwhite as well and have been dated at 2909 Ma (McNicoll et al., 2013).

## STRUCTURE

The presence or absence of major folds on the claims remains an important and largely unresolved issue. The author has not located any reference to actual folds in any of the previous mapping on this property, other than local secondary folds in the iron formation. Previous workers (e.g. Adams and North, 1985) have assumed the entire NCGB was a synform which repeated the volcanics and iron formations on the south rim onto the north rim. We now know that the South Rim and North Rim volcanics are roughly 100 million years different in ages and therefore cannot be folded repetitions. Similarly, a series of tight isoclinal folds have been assumed by some previous workers within the North Rim assemblage itself due to a series of parallel magnetic and conductive horizons and broad similarities in some exposed lithologies. Adams and North (1985) for example placed a tight synclinal axis about 130m west of and parallel to the iron formation along the western side of Akow Lake but presented no supporting field evidence and Zhang (2015) reports that deformation has obliterated virtually all indicators of younging directions ("tops").

While there remains the distinct possibility of major isoclinal folds being present on the Akow Lake grid, this cannot be assumed simply because of an apparent symmetry between various geophysical responses. Multiple stratigraphic horizons that may appear similar to each other occur within this same sequence of rocks in the Musselwhite area. Three major iron formations (BIF) occur in close succession at Musselwhite: the "Northern BIF", which hosts the bulk of the gold mineralization and is equivalent to the BIF along the west side of Akow Lake, and two thinner horizons known as the "Southern BIFs" which occur structurally below the Northern BIF. (N.B. The stratigraphy at Musselwhite is overturned and consequently units which are structurally lower are actually younger than those above). One of these Southern BIFs may be in the same stratigraphic positon as the partially defined EM conductors that occur about 100m east of the main BIF in the southwestern corner of Akow Lake. In addition, there are 4 thinner silicate facies BIFs structurally overlying the main BIFs and numerous thin and conductive chert-sulphide-mudstone horizons in the basaltic rocks below. Structurally above the main BIFs is a thick sequence of felsic volcanics and lesser volcaniclastics known as the "Felsic Wedge". The lower

portion of this felsic pile contains a prominent horizon(s) with abundant syngenetic pyrite. This horizon(s) is very similar to the 2 horizons of formational pyrite observed in drilling at Akow Lake west of the main BIF there. The mixed sequence of metasediments and lesser felsic volcaniclastics that host the copper-(gold) zone at Akow Lake is therefore likely to be the on-strike facies equivalent of the felsic wedge at Musselwhite. If these stratigraphic comparisons are valid, the overall younging direction in the North Rim volcanics at Akow Lake is to the east. Whether or not there are tight isoclinal folds within the metasediment package remains unknown. A concerted effort to locate top indicators should be made to answer this important question in order to determine if the rocks hosting the copper-(gold) zone are repeated to the west.

A fold nose was noted by the author on the SW shore of Akow Lake within the Eyapamikama metasediments. Bedding in these rocks trends approximately 250° and is cut at a high angle by a well-developed axial planar foliation striking 332°, dipping 88° east and plunging 15° SE. The high angle between foliation and bedding here, 82°, indicates that this outcrop occurs at a fold nose. Whether this folding pattern extends into the adjacent South Rim volcanics is unknown.

#### MINERALIZATION

The target of the early exploration work on claims in the Akow Lake area that began in the early to mid-1980s was gold-in-iron formation mineralization like that first found in 1962 by the Musselwhite brothers at Opapimiskan Lake, about 18 km to the south. Work on these showings intensified during the period from 1972 to 1989. The Musselwhite Mine opened in 1997 with reserves of 1.8 million ounces of gold, sufficient for ten years of production. A series of exploration successes increased these reserves significantly since that time. Production to the end of 2015 stood at 4.35 million ounces with reserves and resources of 2.07 Moz (Goldcorp Annual Report 2015 and earlier reports) putting Musselwhite into the "giant" class of gold deposits. Geological research by the mine's exploration geologists since 2003 combined with the work of numerous sponsored academic research partners has led to a model of ore formation different that is quite different than the typical "mineralized cross-cutting faults" that was in vogue in the 1980s. Gold at Musselwhite is now believed to be largely confined to high-strain zones along the most steeply dipping limbs of F2 folds (Biczok et al., 2012 and references therein). These high-strain zones are not fault or shear zones per se as they are confined to the steepest fold limbs, do not cross-cut stratigraphy, and developed during the folding process. The majority of the mineralization occurs in the garnet-grunerite dominant silicate facies ("4EA") of the Northern Iron Formation. During deformation, the grunerite matrix in this unit flowed in a ductile fashion whereas the more brittle garnets within it fractured and created space for the deposition from the gold bearing fluids. Mineralization is accompanied by the alteration of grunerite (ironrich amphibole) to ferrotschermakite, a more calcium-rich amphibole, as well as silicification, the formation of large, hydrothermal garnets, and the deposition of abundant pyrrhotite. Lesser ore zones occur in the chert-magnetite oxide facies BIF and minor mineralized zones are found in chert-dominant horizons but only in very tightly folded areas. The iron formation at Lundmark-Akow Lake has a dip close to vertical, a favourable setting, and has received less attention than other mineralized occurrences on the Romios claims. Only five holes have been drilled through

this BIF over a strike length of over 6km and its potential remains largely unknown in major intervals.

The first appreciable gold mineralization discovered on the Romios claims was the **Spence Showing** (Fig. 3), a series of five thin shear zones occurring at or near the contact between mafic volcanics and a quartz-feldspar porphyry (QFP) intrusion (Spence, 1997 and 1998). The shear zones are between 0.5 and 2.0 wide, pinch and swell along strike and do not exceed a few tens of metres in strike length (Zhang, 2015). High-grade gold values up to 38.6 oz/t were returned from selected grab samples (Spence, 1997) but subsequent close-spaced drilling of 7 holes in 1998 returned more modest values, typically in the range of 1-4 g/t Au over 0.5 to 3.2m (Spence, 1998). No further drilling, trenching or stripping has been done on this showing since 1988. Similar mineralized small faults/fractures occur at the contacts of QFPs on the north shore of Opapimiskan Lake but these too have very little limited extent.

A minor prospect named the "**Bishop Showing**" was discovered about 1km grid south of the Spence showing in 1997 (Spence, 1997a) following the discovery of an old trench in the area in 1996. The showing is described as being within a "weak iron formation" but there is little description given as to the width of the BIF and there is no indication on the magnetic surveys that a significant BIF is present under cover here. Out of 32 samples collected in 1997 only 2 returned anomalous values, the best being 705 ppb Au (Spence, 1997a). This showing was tested with drill hole 98-15 which intersected two thin intraformational BIFs <2m wide along with several thin sulphidic sedimentary horizons. The maximum gold value was 1.2 g/t Au from Po-Cp filled fractures in the volcanics. The thin BIFs returned a maximum value of only 544 ppb Au/0.6m.

The most unique and significant mineralization discovered to date on the Romios claims, and the subject of the drill program described herein, is the copper-(gold) zone discovered by drilling in 1998 (hole 98-9). It lies within a package of various metasedimentary garnet-staurolite-biotite-sericite schists originally discovered in a rusty outcrop and subsequently partially tested by drill hole 98-9 which was targeting an adjacent EM conductor. Follow-up drilling in 1999 with 5 holes intersected broad zones of low-grade copper-(gold) mineralization (e.g. 185m @ 0.06% Cu) which contained many narrow zones of higher grades of copper, gold and silver (e.g. 0.84m @.5% copper and 3.9 g/t Au in DDH 99-4 (Zhang, 1999 and 2015). Typically the mineralization is concentrated in highly altered, moderately mineralised intervals. The 1999 drilling traced the zone from Line 2+00S to Line 11+00S, a distance of 900m.

A particular section of the host package of schists was termed the "Romios Shear Zone" by Zhang (1999) who noted local dextral shear fabrics. While there is little doubt that these schists are strained to some degree (as are virtually all rocks in this belt), any implication that they were formed largely by shearing, or that the mineralization was generated by shearing, is not supported by the evidence observed in the recent drilling by this author. The setting and origin of these schists and the mineralization they host is discussed in more detail in the following sections.

## SUMMARY OF PREVIOUS WORK

The North Caribou Lake greenstone belt, which encompasses Romios' Akow – Lundmark Lake claims, has been the focus of extensive exploration work at various times since the discovery of significant gold-in-iron formation at Opapimiskan Lake by the Musselwhite brothers in 1973. This work culminated in the opening of the Musselwhite gold mine in 1997, however, regional exploration in the belt peaked in the 1980s and has been sporadic and localised since that time. A great deal of work, including major diamond drilling programs, was undertaken by various companies between the south side of Akow Lake and the north shore of Opapimiskan Lake with no economic discoveries. To the north of the Romios claims, a number of large claims blocks have been held by other companies at various times and the work on these included diamond drilling programs that extended onto the current Romios claims. Only the work relevant to the current Akow – Lundmark Lake claims held by Romios is summarised below.

1961-1963: Canadian Nickel (INCO) conducted the first recorded exploration work in the Akow Lake area (assessment report 53B09NW0012B1) which consisted of an airborne magneticelectromagnetic survey followed by packsack drilling of selected targets. 2 holes were spotted between the south side of Akow Lake and Dinnick Lake, presumably targeting the iron formations in the North Rim volcanics. One hole reached bedrock and intersected minor Py-Po in brecciated quartz and schist. There is no record of any drilling on the current Romios claims at that time. Five shallow packsack drill holes were drilled in the northwest part of the current Romios property but only reached bedrock. One of these drill holes intersected 74 feet of chert-magnetite iron formation. No assays were reported (Inco Ltd., 1963).

1981-1982: Cominco Ltd. Staked 80 claims covering an area similar to the current Romios land package. They carried out a 61 hole, 755 ft., overburden drilling program in the Akow Lake area (Szabo, 1982). The great majority of the 53 basalt till samples collected were taken at shallow depths along a single NNW trending line parallel to the west shore of Akow Lake and east (upice) of the "Romios Copper-Gold zone". Consequently, the results of Cominco's program are of little use in evaluating the potential of this zone as we now know it.

In 1983, Eldor Resources Ltd. drilled five diamond holes in the Doubtful Lake area between 2.5 and 6.5 km northwest of the current Romios claims NW limit. One hole intersected ~70m and another ~72m of oxide and lesser sulphide iron formation with minor disseminated pyrrhotite, pyrite, and chalcopyrite. No significant gold assays were reported.

1985: Moss Resources conducted VLF-EM ground surveys (Hodge, 1986), geological mapping and sampling (Adams and North, 1985) on their 92 claim Akow Lake – North property which covers an area extending south from the southern portion of Akow Lake. The VLF survey delineated both the main iron formation along the western shore of Akow Lake and the formational conductor 200m to the west of the BIF. The field work focussed on the iron formations extending north from Musselwhite and returned values less than 95ppb Au from these formations.

1985: A helicopter-borne magnetic and electromagnetic survey of the North Caribou Lake greenstone belt was conducted by Aerodat Limited on behalf of the Ontario Geological survey (OGS, 1985). The line spacing was 200m with a magnetometer height of 45m and the EM bird height of 30m above ground level. This survey clearly delineated the main BIF on the Romios claims as well as the nearby weak formational conductors which parallel the BIF on its west side and a cluster of weak magnetic highs and adjacent EM conductors along the west side of the claims.

1987: Claims covering the Akow-Lundmark Lake area were optioned from the Four Square syndicate by Power Exploration who conducted a program of line-cutting, VLF surveys, prospecting, stripping and trenching (Newman, 1987). Numerous samples of gossanous iron formation were sampled, returning a maximum gold value of 790 ppb.

1994-6: Romios Estates Ltd. stakes claims covering the Lundmark-Akow Lake area, including the claims held at present and transfers them to Romios Gold Resources Inc.

1996: Magnum Explorations Inc. was contracted by Romios Gold Resources Inc. to establish a cut grid west of Akow Lake and carry out magnetometer and VLF/EM surveys over this grid (Magnum Explorations Inc., 1996). A total of 51.3 km of gridlines and baselines were cut and 45.7 km of Mag/VLF surveys conducted. The main BIF along the western side of Akow Lake was partially outlined by the magnetic survey along with weaker features to the west and numerous VLF/EM responses were detected. Without corresponding geological control there was little effort made at this time to interpret the EM results.

1996: Under contract to Romios, Aero Surveys Inc. undertook a helicopter-borne magnetic survey of the Lundmark-Akow Lake area covering ~60 sq. km and a total of 1315 line km (Fiset, 1996). Flight lines were spaced 50m apart and the sensor bird flown at a height of 33m. The survey results were similar to those of the 1985 Aerodat survey but provided more detail of the magnetic features.

1997: Vytyl exploration services carried out a 150km ground magnetometer and Max-Min II Horizontal Loop EM survey (100m cable) on behalf of Romios. The survey was conducted over most of the grid extending from the south end of Akow Lake past the north end of Lundmark Lake and clearly delineated the main iron formation along the west shore of Akow Lake on both the Max-Min and magnetic surveys. A prominent Max-Min response was identified between 5+00E and 6+00E in the Akow Lake area which appears to correlate with the pyritic sericite schist intersected in holes RGR-16-1 and 2. A more complex but still quite persistent Max-Min response was also identified between the baseline and ~2+25W extending grid south from Atim Lake south and lying immediately east of the Spence showing. It appears that this conductive zone would have been missed by most of the past drilling in the Spence showing area, only holes 98-6 and 98-15 should have intersected it (see Figure 3). There is little in the available logs of these 2 holes to account for such a well-defined response other than a few scattered thin intraformational sulphidic sedimentary horizons which may have produced a combined response large enough to explain this conductor. A 1.5km gap in coverage exists from roughly the position of drill hole RGR-16-4 northwards and consequently the "Romios Shear Zone/Copper-Gold Zone" in this area was not surveyed and there is no discrete Max-Min response over the known locations of this zone.

1998: Geologists Ian Spence and Guowei Zhang spent 3 weeks mapping the Akow-Lundmark Lake area and supervising geophysical surveys and line-cutting contracted to IPTEC. This work improved the company's understanding of the iron formation stratigraphy and the geophysical response of various targets.

1998: Under a contract with Romios Gold Resources Inc., IPTEC, a division of Lone Pine Exploration Services Ltd., extended the Lundmark Lake grid to the north, cutting a total of 11.5 km of new lines. They then undertook a dipole-dipole IP/Resistivity survey of 2 areas, the Spence showing (Lines 1+00S to 3+00S) and the copper-gold zone discovered in drill hole 98-9 (covering a 500-700 m wide strip centred on 600E for 10 lines, 600S-1500S incl.). A 700x 400m gravity survey was also conducted in the vicinity of drill hole 98-9, as well as 11,172.5m of total field magnetometer and VLF geophysical surveys in areas of the Lundmark Lake and Akow Lake grids not previously covered. The IP survey identified a prominent chargeability high trending grid north-south which appears to correlate with a pyritic formational horizon (the western TEM response) as well as a subsidiary high on the eastern edge of the major response which may correlate with the copper-(gold) zone. A roughly linear residual gravity high, trending grid northsouth, was detected at ~6+50E from Line 10+00S to Line 14+00S. This high was tested by drill holes RGR-16-1 and 2. Although sulphide mineralisation was encountered in both holes it was insufficient to explain the gravity high. However, this high does correlate with the thick sequences of garnet-staurolite rich metasediments that host the copper-(gold) mineralization. Both staurolite and almandine garnet are relatively dense minerals, the former having a density of 3.7-3.8 gm/cc and the latter 4.3 gm/cc, versus an average density of 2.7 to 2.9 gm/cc for metamorphic rocks. The combined percentage of these minerals is commonly >40-50% of these rocks and seems a likely explanation for the gravity high.

As noted previously, two of the 1998 drill holes, 98-8 and 98-9, were believed to have suspect co-ordinates and these were indeed found to be incorrect by 150 to 250m when located in the field. They have been plotted in the correct locations on the maps in this report.

1998: J.B. Boniwell reviewed and interpreted existing geophysical survey data on the Romios claims.

2003: A large-loop Transient EM survey (TEM) was undertaken on the Akow Lake claims by Discovery Int'l Geophysics Inc. on behalf of Romios (Woods, 2003). The survey covered ~2.8km from the south side of Atim Lake (south) to the southern edge of Akow Lake. A prominent conductor was detected over the iron formation near the western shore of Akow Lake along with 2 long, formational–type parallel conductors ~150-200m and 350m to the west. Of more interest were a 400m long conductor between the 2 aforementioned formational conductors and several scattered, partially defined short conductors including two near the baseline on Line 9+00S.

These 2 latter conductors were the target of drill hole RGR-16-3 while holes RGR-16-1, 2 and 4 targeted the 2 formational conductors and the area between them, including the 400m conductor (holes 1 and 2).

2014: Geotech Ltd. undertook an airborne geophysical survey of the Lundmark-Akow Lake property on behalf of Romios using a versatile time domain electromagnetic (VTEMplus) system and a horizontal magnetic gradiometer (Geotech, 2014). A total of 262 line km were flown at a line spacing of 100m with the EM bird 40m above the ground and the magnetometers 48m above the ground. This survey outlined the main iron formation along the western side of Akow Lake and a weak-moderate magnetic high with flanking EM conductors roughly 750-1,000m to the west. It has been suggested by some workers that this western magnetic high is a folded repetition of the main BIF horizon, however, there is no evidence for this. Only one drill hole, 98-7, was drilled close to this magnetic feature and it intersected 33m of a magnetic ultramafic and a few thin intraformational BIFs. The nearby EM conductors are likely caused by more of these conductive intraformational sulphidic BIFs. Of more interest in the Geotech survey data is a weaker and shorter linear response in the area west of southern Akow Lake and 2-300m west of the main BIF. This response is coincident with the copper-gold zone identified in the 1998-9 and 2016 drill programs.

## 2016 DIAMOND DRILLING PROGRAM

The 2016 diamond drilling was contracted to Orbit Garant Drilling Inc. of Val d'Or, Quebec. The drill utilised was a helicopter-portable drill manufactured by Orbit Garant, model YHS-1000. As noted previously, the drill was mobilised from Val d'Or to a staging area at Mawley Lake on the "North Road" about 12km past (northwest) the turnoff to the Musselwhite mine and 53km SSW of Akow Lake. The drill and most of the related equipment was slung from Mawley Lake to Akow Lake with an A-Star B2 helicopter chartered from Forest Helicopters of Kenora, Ontario. Drill rods, core boxes, and some other items were flown in with a float-equipped Otter aircraft chartered from Osnaburgh Airways of Pickle Lake, Ontario. The better part of two days was required to move in the bulk of this equipment and the initial loads of diesel fuel. Thereafter, supply trips with fuel and core boxes were made with the Otter roughly every week.

The target area west of Akow Lake is for the most part heavily forested and drill pads were prepared in advance of moves by a two-man crew with chain saws. Typically the drill was shut down, prepped for the move, moved by helicopter in 2-4 hours, and resumed drilling at the new site within a 24 hour period.

The target and the results of each hole are discussed individually below. Drill logs are presented in Appendix One along and a list of abbreviations used in the logs and sections is included at the end of this report. Analytical techniques and assays are presented in Appendix Two and Whole Rock Analyses are presented in Appendix Three. The QAQC procedures and data verification results are presented in Appendix Four; no significant issues were found with the quality of the analyses. Cross-sections of each hole follow their descriptions below. Lithology names given to the various schists are based on their dominant mineralogy (most abundant and significant minerals first) followed by a probable protolith name in brackets in some cases. The intensity of the garnet-biotite alteration and quartz flooding/veining are rated on a scale from 1 to 5 (weakest to strongest) in the logs.

DRILL HOLE RGR-16-1

Collar: Line 10+00S, 8+70E. Azimuth: 250°. Dip: -60°

<u>TARGET</u>: The target of this hole was the depth extension of copper-(gold) mineralization previously intersected in holes 99-2 and 99-3 as well as the TEM and VTEM anomalies that flank and to some degree overly the copper-(gold) zone (see cross-section Fig. 6).

#### RESULTS:

#### LITHOLOGIES AND MINERALIZATION

Hole RGR-16-1 intersected a similar package of metasediments, schists, minor basaltic and ultramafic rocks and mineralized intervals as those in holes 99-2 and 99-3 (Fig. 6). The first 230m of this hole consisted largely of fine-grained clastic metasediments, primarily siltstones +/- garnet and staurolite, intercalated with minor sericite schist horizons and basalt, gabbro and ultramafic intervals.

From 230m to 362.8m the lithologies were dominated by relatively coarse-grained staurolitegarnet-biotite-(quartz-feldspar) schist, commonly with highly altered and weak-moderately mineralized zones scattered throughout. These schists are intercalated with minor intervals of siltstone +/-garnet-staurolite and locally they appear to grade into each other, suggesting that these coarse-grained schists were produced by the hydrothermal alteration of the local siltstones. The alteration is typically evidenced by a distinct coarsening of the staurolite, increasing from ~1-2mm up to 2-4mm, and garnet, increasing from a few mm often to a few cm. Both of these 2 minerals commonly increase noticeably in abundance as well as perfection of their crystal forms from the "fresh" siltstone to the altered schists; staurolite can reach 40-50% in some of the schists and the garnets especially become much more euhedral. Biotite also commonly increases in abundance in these schists, often forming a prominent fine-grained network of anastomosing folia that can make up 30-40% of the schists. The aforementioned alteration is relatively pervasive in the staurolite-garnet-biotite dominant schists but these minerals also occur as sometimes spectacular alteration veins typically a few tens of centimetres wide. The veins consist of massive black biotite studded with very coarse-grained euhedral garnets up to 3cm across and/or staurolite crystals a few mm across.

Chalcopyrite mineralization, +/- associated pyrrhotite, occurred intermittently throughout the aforementioned schists in several forms: as thin seams along the foliation planes, discrete veinlets <few mm wide, and as fracture-fillings or blebs in the hydrothermal garnets. The best mineralized interval was from 269.1 to 289.5m and returned a value of <u>0.22% Cu/14.8m</u> along

with 0.1 g/t Au. This interval returned the highest gold assay, 1,150ppb Au (1.1 g/t Au) and the highest copper assay, 1.31%.

Numerous narrow mineralized intervals occur intermittently throughout these schists but they are generally separated by completely barren schist or altered siltstone. For example, in the



Figure 6: Cross section DDH RGR-16-1

53.2m long interval from 307.3m to 360.5m there are 10 mineralized intervals ~1m to 3.5m long totalling 13.2m separated by barren intervals. When taken together these mineralized and barren zones average 504 ppm Cu over 53.2m, however, the best interval is a sub-economic 3.5m @ 0.21% Cu.

Minor arsenopyrite occurs both locally with the copper mineralization and by itself with no chalcopyrite. The arsenopyrite generally forms small euhedral crystals a few mm across concentrated in narrow bands adjacent to alteration zones/veins. It can reach up to 10% over 1cm but remains very low over any significant interval. There is no apparent correlation of gold grades with the arsenopyrite content (see drill log assay-mineralogy table).

Although virtually all anomalous gold values are within the envelope of hydrothermally altered schists, the correlation between gold and copper values from this hole is poor and erratic as was the case in holes 99-2 and 99-3 and the other holes drilled in 2016. For example, the highest copper value of 1.31% Cu was accompanied by a gold assay of only 256 ppb Au. There is no obvious correlation of gold grades with pyrrhotite % or any other sulphide mineral.

From 362.8m to the end of hole at 479m, the lithologies consisted largely of two siltstone horizons separated by a sericite schist with minor syngenetic pyrite layers. This pyritic schist is similar to that encountered at 194.7-209.2m in this hole and those in the "felsic wedge" at Musselwhite. No significant mineralization has ever been discovered in this horizon at Musselwhite or Akow Lake, maximum assays from the most pyritic interval in this hole were 226 ppb Au and 155 ppm Cu.

#### CORRELATION WITH GEOPHYSICAL TARGETS:

All anomalies and conductors from past ground and airborne surveys in the vicinity of this drill hole are plotted on Fig. 6. When projected to surface along with the geology of holes 99-2 and 99-3, it appears that the two pyritic sericite schist horizons can be correlated with the western and eastern TEM formational-type conductors. The central, shorter-strike length TEM response overlies the projection of the copper-(gold) zone to surface. This zone also corresponds to the gravity high measured in the 1998 survey and can be explained by the much higher concentration of two relatively dense minerals, garnet and staurolite, in the altered, mineralized schists. The 1998 IP survey revealed a prominent chargeability high centred at about 5+50E, which overlies the western pyritic schist formation, along with an apparent subsidiary response on its eastern shoulder. This latter response may correspond to the copper-(gold) zone but more work by a qualified geophysicist is required to determine the validity of this observation. The VTEM response shown on Fig. 6 adjacent to the gravity high is a ~500m long anomaly situated ~250m west of the main BIF position. At this time it appears to correlate with the copper-(gold) zone, however, once again more work is needed by a qualified geophysicist to confirm this possibility.

#### DRILL HOLE RGR-16-2

Collar: 12+60S, 9+50E. Azimuth: 252°. Dip: -57°

<u>TARGET</u>: The targets of hole RGR-16-2 were: 1) the on-strike and at-depth extension of copper-(gold) mineralization previously intersected partially in hole 99-8 on Line 12+00S as well as the three holes on Line 10+00S; 2) the TEM conductors flanking the copper-(gold) zone; and 3) the main BIF running along the west side of Akow Lake. Based on the magnetic signature of this BIF, it was expected to have largely pinched out in the area of this drill hole but it was hoped there would be some remnant present.

#### RESULTS:

#### LITHOLOGIES AND MINERALIZATION

Hole RGR-16-2 intersected a similar sequence of lithologies to that encountered in hole RGR-16-1 260m to the north-northwest with one exception, an unusual tourmalinite bearing sequence (Fig. 7). From the top of the hole to 269.6m the units are dominated by barren siltstone/ arenite +/- staurolite-garnet with several horizons of basalt and ultramafics. One 25m wide interval of staurolite-garnet bearing schist was encountered at 110.5m to 135.7m but the staurolite and garnet are sporadic throughout and more fine-grained that the clearly altered schists found deeper in this hole. No oxide or silicate-facies iron formations were encountered in this upper section even though it underlies the geophysical (EM) expression of the main regional BIF. However, a sulphidic mudstone was encountered from 103.5 to 105.0m and this closely resembles the structurally lowermost (stratigraphically uppermost) unit in the BIF at Musselwhite, known there as a 4H. It is a thinly bedded, <1cm, light to dark grey, cherty mudstone with 10-25% remobilised Py-Po filling fractures, breccia veins, etc. This unit can be correlated with the TEM response that traces the BIF at surface. This correlation suggests that the ultramafic intersected above the mudstone from 84.1 to 103.5m is the uppermost member of the South Rim assemblage and the fine-grained clastic metasediments above (east) of this belong to the younger Eyapamikama sediments. This sequence is similar to that encountered at Musselwhite between the OMU and the younger sediments.

From 269.9m to 495.1m the hole intersected thick sequences of variably altered and locally mineralized staurolite-garnet-biotite-sericite schists with lesser sericite schists and minor basalt. As was the case in hole RGR-16-1, the coarse-grained staurolite-garnet-biotite-sericite rich schists are intercalated with finer-grained versions of itself and minor intervals of relatively unaltered siltstone, suggesting that these coarse grained schists are altered siltstone or similar metasediments. Intervals of staur-gar-bio-ser schist occur from 283.2 and 293.5m and 316.5-339.3m but these are only weakly altered (fine-grained with much lower % of staurolite and garnet).



Figure 7: Cross section DDH RGR-16-2

The strongly altered, coarse grained schists were encountered from 358.5 to about 410m and it was here that the broadest mineralization was found. Cp-Po mineralization typically occurred in the most altered (coarse-grained garnets in massive biotite +/- qtz flooding) areas but some highly altered areas were barren. Mineralization was again best developed in the vicinity of the basalt and/or ultramafic dykes/sills. The most mineralized intervals are summarized below:

Drill Hole	FROM (metres)	TO (metres)	Core Length (m)	Core Cu % Au ngth (m) Avg. A		True Width (Approx.)
RGR-16-2	365.60	379.95	14.35	0.21	77	12.5 m
RGR-16-2	434.70	441.25	6.55	0.31	120	5.8 m
including	434.70	437.65	2.95	0.59	215	2.6 m

Less altered and mineralized schists with minor basalts dominated from ~410m to 495.1m but this interval included some of the most unusual and potentially significant rocks encountered in the 2016 drilling – a sequence of tourmalinite bearing sericite schist and massive tourmalinite veins.

TOURMALINITE ZONE: From 434.7 to 437.65m the hole encountered a white, fine-grained, siliceous, moderately schistose unit with ~30% streaky, discontinuous (sheared out) black layers ~0.5cm thick composed of a hard, very fine-grained black mineral presumed to be tourmalinite (3 samples of this material averaged 0.59% Boron, indicating a high tourmaline content). This unit was cut by 4 massive tourmalinite veins/bands 5-20cm wide containing 10-40% biotite, +/- chlorite, plus minor to 5% chalcopyrite, minor pyrrhotite, and a variable % of Arsenopyrite throughout, up to 10%/few cm. This interval returned some of the highest copper values from the 2016 program, 2.95m @ 0.58% Cu, along with elevated silver values, up to 29.5 ppm Ag; gold values ranged from 100 to 430 ppb Au. This interval was followed from 437.65 to 441.75m by a related unit of sericite-garnet-(staurolite)-Qtz-Fd Schist with 0.5% small tourmalinite spots < a few mm across and cut by a 25cm tourmalinite vein with ~3% chalcopyrite. Tourmalinite is an important part of mineralized hydrothermal systems in a number of mining centres and its presence at Akow Lake is considered potentially very significant. This will be expanded upon in the Discussion section.

Following these variably altered and mineralized schists the hole intersected a sericite-quartzfeldspar schist (felsic ash tuff) with minor syngenetic pyrite layers from 495.1 to the end of the hole at 528m.

Of particular geological interest in this hole was a 5cm wide band of folded sulphides at 5 cm 379.8m which suggests mineralization is pre- to early tectonic.

#### CORRELATION WITH GEOPHYSICAL TARGETS:

All anomalies and conductors from past ground and airborne surveys in the vicinity of this drill hole are plotted on Fig. 7. When projected up-dip to surface the sulphidic mudstone encountered

at 103.5 to 105.0m can be correlated with the TEM which marks the position of the main regional BIF. As was the case in hole RGR-16-1, the pyritic sericite schists, encountered at 269.6 to 276.0m and 495.1 to 528.0m can be correlated with the eastern and western formational-type TEM conductors respectively. The Gar-Bio-Staur-Qtz-Fd Schist encountered from 358.5 to 434.7m can be correlated with the central, shorter strike-length TEM conductor and the gravity high.

## DRILL HOLE RGR-16-3

Collar: 9+00S, 2+07E Azimuth: 252°. Dip: -45°

TARGET: The primary target of holes RGR-16-3 was a pair of partially defined TEM conductors located at 0+50E and 0+50W on Line 9+00S and L10+00S (Fig. 3). The position of the loops laid out in the 2003 TEM survey was such that these 2 conductors were only partially surveyed. The conductors are roughly coincident with two Max-Min HLEM conductors, identified in the 1997 survey by Vytyl Exploration Services, which are continuous over a considerable length. The western conductor extends north to the end of the survey at 17+00N and south to the end of the grid at 23+00S. The eastern conductor is more intermittent but appears to continue at least from 1+00N to 11+00S. A weak-moderate aeromagnetic high is evident in the 2003 Geotech survey in a narrow corridor along these conductors as well. There are no outcrops and no past drilling in a 400m wide zone between the baseline and the western edge of the "lower clastic sediments" on the entire Akow Lake grid. Drill hole RGR-16-3 was planned to be the first hole in this large untested area.

#### **RESULTS:**

#### LITHOLOGIES AND MINERALIZATION

Drill hole RGR-16-3 intersected three basic assemblages: 1) Dacitic volcanics with minor felsic ash tuff and intercalated siltstone from bedrock surface to a depth of 137.5m, 2) Siltstone from 137.5m to 192.45m, and 3) Basalt with thin beds of intercalated sediments and one gabbro intrusion (Fig. 8). Several thin feldspar-porphyry dykes occur throughout the basalt, including one at the siltstone-basalt contact. No appreciable mineralization was found in this hole. Two small quartz vein clusters returned weakly anomalous results, one up to 1080 ppb Au/40cm and the other 1040 ppm Cu and 329 ppb Au/70cm. Numerous thin beds of interflow metasediments, typically siltstone to pelitic but locally cherty, occur throughout the basalt and some carry appreciable pyrrhotite, up to 20% Po/40cm with trace to minor chalcopyrite. These beds returned a maximum copper value of 467 ppm Cu and in spite of being commonly highly deformed/sheared the maximum gold value returned was 622 ppb Au.

#### CORRELATION WITH GEOPHYSICAL TARGETS:

Although this hole did not intersect any appreciable mineralization or promising structures it provided useful geological information that helped to fill in a large unknown part of the



stratigraphic sequence as well as explain one, and possibly two, significant EM conductors on the property.

Figure 8: Cross section of DDH RGR-16-3

## DRILL HOLE RGR-16-4

Collar: 2+55N, 8+80E Azimuth: 252°. Dip: -45°

## TARGET

Drill hole RGR-16-4 was a step-out hole intended to test the position of the copper-(gold) zone between the two formational-type TEM conductors 450m north of the northernmost previous drilling (DDH 99-5) (see Fig. 3). The shorter-strike length TEM conductor that marks the copper-(gold) zone in the vicinity of holes RGR-16-1 and 2 is not evident in the northern part of the Akow Lake grid, however, given the uncertainty surrounding the EM response of this zone it was considered necessary to drill test this portion of the "lower clastic metasediments" for the copper-(gold) zone.

#### LITHOLOGIES AND MINERALIZATION

This hole intersected a sequence of fine-grained metasediments, sericite schist and various hydrothermally altered staurolite-garnet-biotite schists with intermittent copper-(gold) mineralization (Fig. 9). This package of rock types is quite similar to that in holes RGR-16-1 and 2 with perhaps a greater amount of sericite in many of the units. In spite of the lack of a corresponding TEM signature, this hole intersected four mineralized zones comparable in width, grade and style of mineralization to previous holes in the copper-(gold) zone (see table below).

Drill Hole	From (metres)	To (metres)	Core Length (m)	Cu % Avg.	Au ppb Avg.	True Width (m) (Approx.)
RGR-16-4	178.70	185.50	6.8	0.23	67	5.4
RGR-16-4	204.00	209.30	5.30	0.13	77	4.1
RGR-16-4	297.20	303.95	6.75	0.16	105	5.1
RGR-16-4	316.30	327.05	10.75	0.32	183	8.1

As was largely the case in holes RGR-16-1 and 2, this hole first intersected a sequence of finegrained clastic metasediments (arkose and siltstone), followed by sericite schist with minor pyrite and then a sericite-staurolite dominant schist ending at 159.3m. At that point began a series of 5 intervals of locally mineralized biotite-staurolite +/- garnet +/- sericite schists, 7 to 40m wide, which continued to 351.5m. These schist units were separated by generally narrower and barren horizons of basalt, siltstone and sericitic schists as well as a 45m wide interval of siltstone that was commonly altered to biotite-garnet-staurolite and mineralized in narrow seams. The alteration features in this major siltstone unit as well as the more mineralized biotite-staurolitegarnet dominant schists support the earlier observations that these schists are hydrothermally altered version of the siltstones. Following the last of the biotite-garnet +/- staurolite bearing schists at 351.5m, the hole intersected 54m of barren sericite>biotite-garnet +/- staurolite schists with trace pyrite, before ending in 14 m of a sericitic and garnetiferous siltstone.

Several features of particular geologic interest were noted in this hole:

- 1) A minor Z-fold at 129.2m indicates that the units to the east moved up relative to those to the west,
- A ptygmatic garnet vein ~1cm wide with minor Cp-Po throughout occurs at 192.2m; this folded vein suggests that at least some of the mineralization and garnet formation predates folding,
- 3) Thin coatings of Chalcopyrite line the foliation planes every few cm from 207.0-209.3m. These coatings tend to flank the veins of intense gar-bio-qtz alteration for ~20-90cm suggesting that this style of mineralization emanated from the veins.

4) Nineteen olivine lamprophyre dykes 1-40cm wide were intersected between 320.9 and 358.5m. This author has never seen so many lamprophyre dykes in such a small area. The association of lamprophyre dykes with deep-seated fault structures suggests that such a fault may have been present at some time.



Figure 9: Cross-section DDH RGR-16-4

#### CORRELATION WITH GEOPHYSICAL TARGETS:

In previous 2016 drill holes, i.e. RGR-16-1 and 2, the two "formational-type" TEM conductors tested by this drill hole, RGR-16-4, lined up well with pyritic sericite schist horizons. In this hole the correlation between the conductors and pyritic formations is not so apparent. The first interval of pyritic schist encountered from 89.7 to 107.8m appears to lie too far east of the TEM conductor whereas the copper-(gold) mineralized zones between 178 and 209m directly underlies the conductor (Fig. 9). The western TEM conductor does lie directly above a sericite schist, however, there was very little pyrite intersected in it. If projected up-dip to surface, the copper-(gold) zone at 316.3-327.05m would come within perhaps 40m of this conductor axis. The

position of the TEM conductor axes can have an uncertainty of +/- 25m (Bob Lo, pers. comm. 2016). Even though these two conductors correlate well with the pyritic schists farther south, the possibility that they have "switched over" to reflect different (mineralized) horizons is too important to overlook. A re-evaluation of the axis positions of both conductors from the original survey data is now required.

## LITHOGEOCHEMISTRY

The origin of the schists that host the copper-(gold) mineralization is an important question that has major implications for the true nature of this mineralization and the potential for discovering a higher-grade deposit. If the schists are simply products of a shear zone in a package of metasediments then it is unlikely there will be any large, significant zones of better mineralization along its length. If however, these schists were produced by strong hydrothermal alteration of the local metasediments then they are part of a widespread hydrothermal cell that may have deposited higher grade deposit(s) somewhere along its length. In an effort to provide some initial Lithogeochemical input into this question, twenty samples of core were sent for whole rock analysis to ActLabs in Thunder Bay, Ontario. Results and sample descriptions are presented in Appendix Three. A complete discussion of these results is beyond the scope of this report, however, several important features are evident in the data and are discussed below.

Samples were specifically selected to include metasediments that appeared to be unaltered, some that were partially altered to varying percentages of coarser-grained biotite, garnet, staurolite and sericite, and some that were highly altered to these minerals and often hosted Cu-(Au) mineralization nearby. The major oxides and Rb/Sr ratio of the metasediments and schists are presented in Table 2 below.

One of the most prominent lithogeochemical changes evident in rocks that have experienced significant amounts of fluid flow through them is a reduction in their sodium levels. Na<sub>2</sub>O levels in the freshest looking metasediments range from 0.22% to 2.01% whereas those in the schists range from 0.08 to 0.38%. Although there is considerable overlap in these value fields, the four lowest values, between 0.08 and 0.12%, are all within the most altered looking schists and are abnormally low, suggesting that these rocks have been subjected to significant hydrothermal fluid flow. The field evidence suggests that the schists are derived from hydrothermal alteration of a thick package of metasediments. The chemical composition of these rocks may be quite variable due to changes in the % of volcanic vs sedimentary input and this is evident in the wide range of sodium values of the siltstones for example. To overcome the heterogeneity of the original protoliths when looking for patterns in the altered rocks one can use ratios of minor elements that are particularly susceptible to fluid flow and generate large scale anomalies largely irrespective of the original major oxide content. One such ratio commonly used is Rb/Sr which reflects the addition of potassium and removal of calcium during fluid flow. Rb/Sr ratios of the unaltered siltstones range from 1.0 to 6.3 whereas those from the schists range up to 34.3, again suggesting that at least some of the schist have been greatly affected by hydrothermal fluid flow.

Sample	Hole RGR-	Depth (m)	Rock Type	SiO2	AI2O3	Fe2O3	MgO	CaO	Na2O	K20	TiO2	Rb/Sr
W1120453	16-1	262	Homog siltstone	67.4	15.08	4.33	1.51	5.06	2.01	2.49	0.44	1.01
W1120455	16-1	265.8	Staur-(Gar) siltstone	69.28	16.48	4.97	0.94	0.57	0.65	3.13	0.55	1.94
W1120458	16-1	363	Siltstone, f.g., minor Staur	77.31	12.41	3.69	0.79	0.69	0.26	2.85	0.23	6.20
W1120459	16-1	378.7	Staur. Siltstone, f.g., "fresh"	71.08	15.86	4.55	0.84	0.27	0.22	3.82	0.44	6.29
W1120467	16-4	210.5	Siltstone, no staur	64.76	14.91	8.01	1.75	3.84	0.32	3.22	0.46	3.66
W1120471	16-4	419	Sericitic siltstone, few % gar	63.21	15.88	6.58	2.58	5.47	1.04	2.39	0.63	1.27
W1120456	16-1	266.8	Gar-Staur Seds, weak alt'n	64.04	14.83	14.4	1.49	0.35	0.21	2.77	0.49	5.27
W1120452	16-1	54.7	Staur rich schist	70.01	17.91	6.08	0.7	0.37	0.6	0.85	0.68	0.55
W1120463	16-1	340.7	Staur-Bio-Gar-QF Schist (intermed between fresh and alt'd seds)	65.2	14.6	14.28	1.38	0.34	0.12	2.63	0.44	10.64
W1120457	16-1	359	C.g. Staur-Gar-Bio Schist	60.2	17.59	16.27	1.64	0.3	0.09	2.51	0.70	16.29
W1120466	16-4	178.4	Bio-Staur-Q-Fd-Bio Schist beside hydrothermal veins	68.23	14.46	10.95	1.43	0.34	0.12	2.64	0.41	9.10
W1120468	16-4	213.4	Gar-Staur Siltstone	62.8	15.25	13.87	1.89	0.29	0.08	2.67	0.47	34.33
W1120469	16-4	258.8	Ser-(Gar) Schist intercalated with alt'd siltstone	67.89	16.78	5.43	0.57	0.3	0.38	4.02	0.69	2.94
W1120470	16-4	397.5	Ser-Gar-Q-F-(Bio) Schist	65.53	14.06	11.51	1.33	0.41	0.23	3.54	0.41	7.08
W1120464	16-3	106.5	Gar-Ser-(Staur) Schist.	67.14	14.85	11.43	0.82	0.35	0.24	3.29	0.39	6.86
W1120460	16-1	382.4	Ser Schist/Felsic wedge tuff	63.53	15.59	7.88	0.57	0.66	0.37	4.71	0.64	4.97
W1120451	16-1	364	Felsic volcaniclastic schist	72.36	14.94	1.78	0.62	5.2	1.69	1.2	0.15	0.35

Table 2: Whole rock analyses of metasediments and schists

The Rb/Sr ratios are plotted versus the Na<sub>2</sub>O values in Fig. 10 below and indicate that ~6 of the schist samples, when compared to the metasediments, are highly depleted in sodium and have elevated Rb/Sr ratios indicative of high hydrothermal fluid flow. These samples, especially the 4 with the highest Rb/Sr values, are the coarse-grained staurolite-garnet varieties that also appear to have a hydrothermal origin based on their textural and mineralogical relationships in the core.



Figure 10: Rb/Sr versus Na<sub>2</sub>O

Although the number of samples is not great and further analysis of the data is needed, the preliminary interpretation of the lithogeochemical data supports the field interpretation that many of the staurolite-biotite-garnet schists were derived by the hydrothermal alteration of precursor metasediments.

## DISCUSSION

Results of the 2016 diamond drilling program, combined with those from the 1998 and 1999 programs have traced the copper-(gold) zone found in the "lower clastic metasediments" at Akow Lake a distance of 1.5km from 12+60S to 2+55N. The style and tenor of this mineralization remains similar along strike and over the approximately 300m maximum vertical extent tested (on Line 10+00S). The two pyritic sericite schist horizons which flank the copper-(gold) to the east and west, and are believed to correlate with two >2.8 km long "formational-type" TEM conductors, were intersected by three of the 2016 drill holes and found to be barren. No significant mineralization has been encountered in these horizons in past drilling at Akow Lake or 18km south at Musselwhite and they will not be discussed as potential targets any further.

The Copper-(Gold) Zone: There are three main styles of mineralization in this zone:

- 1. Thin seams and coatings of chalcopyrite along foliation planes.
- 2. As discrete veinlets of massive to semi-massive chalcopyrite +/- pyrrhotite, <1cm wide.
- 3. As fracture fillings and blebs in the coarse-grained, predominantly hydrothermal garnets.

Mineralization is typically found within pervasively and strongly altered biotite-staurolitegarnet+/-sericite schists and is commonly proximal to hydrothermal veins of massive biotite with varying % of coarse-grained garnets and medium-grained staurolite. These veins range from a few centimetres to a few tens of centimetres in width and frequently contain veinlets of massive chalcopyrite +/- pyrrhotite with local arsenopyrite concentrations along their margins. As was particularly evident in hole RGR-16-4, the chalcopyrite coatings/seams along the foliation planes are often concentrated within 1m of the hydrothermal veins, suggesting that at least some of this type of mineralization emanated outwards from these veins.

As noted in the lithogeochemistry section and the descriptions of the drill hole lithologies, the evidence at this point suggests that the schists were produced by the strong hydrothermal alteration of precursor metasediments at an early stage (pre-peak metamorphism). Geological features such as a 5cm wide band of folded sulphides (at 379.8m in hole 2) and a ptygmatic garnet vein ~1cm wide with minor Cp-Po throughout (at 192.2m in hole 4) supports this model and suggests that mineralization and garnet formation predates folding.

The presence of several metres of tourmalinite rich rocks and veins of tourmalinite with Cp-Po-(Asp) mineralization in hole RGR-16-2 is of particular significance. Tourmalinite such as this (massive fine-grained tourmaline resembling black chert) is typically a product of hydrothermal fluid flow or perhaps a hot spring setting in a marine setting. Two pertinent examples are the
Sullivan Pb-Zn deposit in B.C. and the Singhbhum Copper belt in Jharkhand, India, both of which are within predominantly sedimentary sequences that underwent major hydrothermal fluid flow leading to the formation of large ore deposits. In the Singhbhum belt, tourmalinite is found in the footwall rocks immediately under the Rakha copper mine and sericite schists are found in the hanging wall. If the copper-(gold) zone at Akow Lake has a similar history then the tourmalinite horizon encountered in DDH RGR-16-2 might lie close to the paleo-seafloor where the hydrothermal fluids vented and this stratigraphic level becomes a prime target for further exploration.

The alteration and mineralization associated with the >1.5km long copper-(gold) zone has some similarity to the "lower semi-conformable alteration zone" found beneath many massive sulphide deposits (e.g. Mattabi and the Geco deposits in Ontario and the Snow Lake camp in Manitoba, etc.). These alteration zones are essentially the aquifer that channeled hydrothermal fluids along a particular stratigraphic horizon below the sea-floor for several kilometres before they broke through and rose towards the sea-floor where they deposited the massive sulphides. These alteration zones can be weakly mineralized and are typically highly altered (typically with major sodium depletion, and variable enrichment in Mg, Fe, Ca, etc.). Once metamorphosed to amphibolite conditions these altered rocks commonly contain coarse-grained garnets, staurolite, biotite, etc. and have been mistaken for the "pipes" beneath VMS deposits. If the copper-(gold) zone at Akow Lake is indeed one of these "lower semi-conformable alteration zones" then it has potential to have 'vented" massive sulphides anywhere along its length. A review of the existing geophysical surveys along this zone is required to assess this possibility.

Drill hole RGR-16-3 intersected a thick sequence of dacitic volcanics in the "gap" between outcrops of basalt to the west and the "lower metasediments" to the east. We now have a general succession from basalts in the west to a central belt of dacitic volcanics followed by the "Lower Metasediment" and lesser felsic volcaniclastic package to the east. The abundance of sericite schists and sericite in this latter package could reflect either a felsic tuff input at sporadic intervals and/or weathering from the dacitic source area. The sericite schist horizon(s) that contain syngenetic pyrite are very similar to a horizon at Musselwhite known to be a felsic tuff.

Based on a comparison of the stratigraphy at Akow Lake with that at Musselwhite, it is now believed that the favourable silicate facies ("4EA") found at Musselwhite would lie along the western side of the main iron formation at Akow Lake if present. Exploration at Musselwhite has shown that the 4EA facies can come and go along strike and its absence in one area does not mean it will not reappear farther along strike. The iron formation at Lundmark-Akow Lake is exposed between Line 1300N and Line 4400N and only weakly anomalous gold mineralization has been reported in this area. However, the western contact of this BIF apparently has not been observed (Zhang, 1998) and this is the key section where any of the favourable silicate facies might occur. Only four drill holes, 98-10 and 98-13, were drilled in this interval. Hole 98-10, drilled from east to west, intersected cherty BIF before passing through the oxide facies and ending in 4m of "sediment" (Spence, 1998). The BIF at Musselwhite has at least 2 facies bordering the oxide

facies that might be logged as "sediments" by those unfamiliar with them, consequently intersecting 4m of "sediments" is not considered definitive proof that no 4EA exists nearby. Similarly, hole 98-13 penetrated thick sequences of iron formation and ended in 5m of "mafic volcanics with 50% garnets" (Spence, 1998). Garnetiferous mafic volcanics are rare at Musselwhite and it is possible that this unit is equivalent to one of the silicate facies found at the structural top/stratigraphic base of the BIF at Musselwhite.

# CONCLUSIONS AND RECOMMENDATIONS:

Drilling of the copper-(gold) zone at Akow Lake has revealed an impressive >1.5km long hydrothermal alteration zone with scattered mineralization throughout. Although none of the copper-(gold) intercepts are economic, they are encouraging in their persistence over such a long strike length and their association with highly altered schists that display signs of strong hydrothermal alteration (sodium depletion, elevated Rb/Sr ratios, etc.). This zone has many similarities to the "lower semi-conformable alteration zones" found under many massive sulphide deposits, including an area of mineralized tourmalinite that suggests this hydrothermal system may have vented at or near the paleo-seafloor. With this model in mind the following recommendations for further work are given:

- 1. The past geophysical surveys should be examined in detail to look for any indication of more massive sulphide accumulations adjacent to the package of schists hosting the copper-gold zone.
- 2. Further Lithogeochemical studies should be undertaken on core from all available drill holes to determine of the alteration zone shows any variation in intensity or chemical composition along or across strike that can be used to vector towards possible vent sites.
- 3. Careful field mapping should be undertaken in a concerted effort to locate "tops" indicators such as volcanic pillows and graded bedding. It is imperative to ascertain the presence or absence of any isoclinal folds that may have repeated the copper-(gold) zone and the enclosing schists.
- 4. The TEM survey data should be re-assessed by a qualified geophysicist to determine if the position of the conductors as reported by Discovery Geophysics is accurate in the northern part of the grid near drill hole RGR-16-4. Based on the results of this drill hole it appears possible that one or both of the "formational-type" TEM conductors in this area may have switched over from the formational pyrite horizons, which are quite weak in the north, to the copper-(gold) zone.
- 5. The small IP survey results completed around drill hole 98-9 should also be re-assessed by a qualified geophysicist to determine if the major chargeability high identified does correspond the western pyrite horizon and the subsidiary response on its western shoulder does correspond to the copper-(gold) zone. If this is the case, an effort should be made to design an IP or other type of geophysical survey that will detect and emphasise the mineralization in the copper-(gold) zone to a greater degree than past surveys.

- 6. Once the most suitable geophysical survey technique is determined, test lines should be surveyed over the recent drill hole sections to determine the precise response of the copper-(gold) zone and then step-out surveys should be done along strike and in particular over any areas of interest identified by the geophysicist from the past surveys. If at all possible, this survey should include the prominent VTEM anomaly underlying the southern portion of Atim Lake North.
- 7. Upon completion of the geological re-mapping, lithogeochemical studies and geophysical surveys/studies, any potential targets identified should be assessed with all of these factors in mind and drilled if warranted.

In addition to the copper-(gold) zone discussed above, the Akow-Lundmark Lake claims cover approximately 9km of the same banded iron formation (BIF) that hosts the Musselwhite gold deposit 18km to the south. This BIF has been tested by one drill near the southern end of the claims and 4 holes in the northern section. It is known to pinch and swell based on the aeromagnetic pattern and the only hole drilled through it in 2016 (RGR-16-2) was in an known pinch-out. Given the limited drilling so far and the variability inherent in this BIF, it is unknown if the silicate facies ("4EA") that hosts most of the mineralization at Musselwhite occurs on the Romios claims or not. To address this shortcoming the following steps are recommended:

- 1. The known BIF outcrops should be re-mapped by a geologist very familiar with the complex stratigraphy of this BIF as is evident at Musselwhite.
- 2. All available core from past drilling through this BIF should be re-examined by this same expert to see if any units flanking the obvious BIF that were mapped as "garnetiferous sediments" or "garnetiferous volcanics" are in fact one of the silicate iron formation facies.
- 3. A study of the strongest magnetic profiles over the BIF in areas of outcrop and no outcrop should be undertaken to compare the response over chert dominant exposures with potentially narrower portions of the BIF with equally high magnetic signatures that might reflect more magnetite dominant intervals. Oxide iron formation has potential to be mineralized itself, much more so than the cherty iron formations, and has a greater probability of grading into 4EA nearby.
- 4. If at all possible, any future drilling should include short holes through the BIF in the areas of the greatest magnetic highs. This may require a revision to the existing MoU with the North Caribou Lake First Nation which restricts drilling to an area >100m from Akow lake.

Respectfully submitted,

John Biczok

John L. Biczok, P.Geo.

#### STATEMENT OF QUALIFICATIONS

I, John Biczok, of the city of Greely, Ontario, do hereby swear and affirm that:

- 1. I am a Professional Geologist registered in good standing with the Association of Professional Geoscientists of Ontario (Membership #1493) (since 2007).
- 2. I have an Honours B.Sc. degree in Geology from Lakehead University in Thunder Bay, ON.
- 3. I was employed as an exploration geologist by several major mining companies on a full-time basis from 1979 to 2003 throughout central and western Canada and much of India. From 2003 to March 2015 I was employed as a geologist at the Musselwhite gold mine, initially as a project geologist, followed by a senior exploration geologist position and then as senior research geologist.
- 4. I am currently an independent consulting geologist and personally undertook the geological work and directly supervised the drill program described in this report.
- 5. I have no financial interest in Romios Gold Resources Inc. or the Lundmark-Akow Lake property.

Signed: \_\_\_\_ John Bicyok \_\_\_\_

Date: \_\_\_\_\_Nov. 23, 2016\_\_\_\_

# STATEMENT OF EXPENDITURES

ITEM	Amount
<b>Assays</b> (ActLabs): 279 samples for Cu and Au, plus 20 Whole Rock, etc.	\$ 10,261.82
Aircraft Charter: Osnaburgh Airways	\$ 29,720.00
Aircraft Charter: Weagamow Airways and SkyCare	\$ 5,267.59
Camp rental (North Caribou Camps, 1 month)	\$ 11,300.00
<b>Diamond Drilling</b> : 1826 m @ \$70/m plus mob/demob, crew moves, etc.	\$ 203,609.32
Fuel: Diesel fuel for drill	\$ 12,208.54
Fuel: Jet fuel for helicopter	\$ 18,604.43
Groceries:	\$ 10,328.29
Helicopter charter (Forest Helicopters, 90 hours + Pilot time)	\$ 136,154.14
Labour (2 Core cutters, drill pad clearance; 39 days total @ \$250/day, site inspector 1.5 days)	\$ 10,049.00
Labour (Camp cook) 28 days at \$300/day	\$ 8,400.00
Labour (Paramedic 32 days @ \$400/day, Sept 6th to Oct 7th)	\$ 12,800.00
<b>Labour</b> (Geologist: 39.1 days in field incl site visit in August, on-site drill supervision Sept 6 to Oct 7; 31.5 days prep for program plus report writing and drafting and management afterwards @ \$500/day)	\$ 35,820.00
EI & CPP	\$ 1,322.84
<b>Travel Costs</b> : Scheduled airline flights (Ottawa to Thunder Bay, Sioux Lookout, Round Lake, etc.	\$ 1,810.18
Truck Rental & Gas	\$ 3,127.28
Hotels	\$ 1,306.88
Meals during travel	\$ 307.07
Camp supplies, fuel	\$ 2,178.77
Services (core sawing, rental of core splitter)	\$ 600.00
TOTAL EXPENDITURES	\$ 515,176.15

NB: This cost summary does not include the costs of removing the drill and all related equipment from the site at some point. It is expected that the cost of the helicopter +/- fixed wing aircraft required to transport the drill to the road, plus labour and truck rental will be substantial, likely on the order of \$20k.

# Breakdown of expenses per claim

#### Total Expenditures: \$515,176.15

## Total cost per metre drilled: \$515,176.15 / 1,826m = \$282.13/m

Claim #	Holes Drilled	<b>Total Metres</b>	Cost @ \$282.13/m
1208993	RGR-16-3	399	\$112,571.35
1209235	RGR-16-4	420	\$118,496.16
1209237	RGR-16-1 & 2	1007	\$284,108.64
	Total	1826	\$515,176.15

AE	BREVIATIONS USED IN DR	RILL LOGS & SEC	TIONS
MINERA	LS & ROCK TYPES	GI	RAIN SIZE
amph	amphibole	f.g.	fine-grained
amph'd	amphibolitized	m.g.	medium-grained
Asp	arsenopyrite	c.g.	coarse-grained
bio	biotite		
bio'd	biotitized	TEXTUR	ES & FEATURES
bio'n	biotitization	alt'd	altered
Cc	calcite	alt'n	alteration
Ср	chalcopyrite	brx'd	brecciated
Dol	dolomite	fol'n	foliation
Fd	feldspar	fol'd	foliated
gar or gnt	garnet	frags	fragments
metaseds	metasediments	mod	moderate
Mt	magnetite	phenos	phenocrysts
Plag	plagioclase	Sil'n	silicification
Ро	pyrrhotite	Sil'd	silicified
Ру	pyrite	Str	strong
Qtz	quartz	Vn	vein
seds	sediments	Wk	Weak
Ser	sericite		
Staur	staurolite		
MIS	CELLANEOUS		
assoc'd	associated		
avg	average		
dca	degrees to core axis		

## Table 3: Abbreviations used in drill logs and sections

# LIST OF REFERENCES

Adams, J.H., and North, J.W., 1985. Report on Geological Mapping, Prospecting and Trenching. Akow Lake North Property. Assessment report on behalf of Moss Resources Ltd. and 635479 Ontario Ltd. AFRI file # 53B16SW0003.

Biczok, J., Hollings, P., Klipfel, P., Heaman, L., Maas, R., Hamilton, M., Kamo, S., and Friedman, R., 2012. Geochronology of the North Caribou greenstone belt, Superior Province Canada: Implications for tectonic history and gold mineralization at the Musselwhite mine: Precambrian Research, v. 192-195, p. 209-230.

Boniwell, J.B., 1998. Geophysical exploration in the Lundmark, Akow Lakes Area, Patricia Mining Division. Assessment report on behalf of Romios Gold Resources Inc. AFRI file # 53B16SW2005.

Breaks, F.W., Bartlett, J.R., DeKemp, E.A. and Osmani, I.A., 1986. Precambrian Geology of the Doubtful-Akow Lakes Area (Opapimiskan Lake Project), Kenora District (Patricia Portion); Ontario Geological Survey, Map P.2965, Geological series – Preliminary Map.

Breaks, F.W. Bartlett, J.R., de Kemp, E.A., Finamore, P.F., Jones, G.R., Macdonald, A.J., Shields, H.N., and Wallace, H., 1984. Opapimiskan Lake Project: Precambrian Geology, Quaternary Geology, and Mineral Deposits of the North Caribou Lake Area, District of Kenora, Patricia Portion. Ontario Geological Survey, Miscellaneous Paper 119, S49, pp. 258-273.

Breaks, F.W., Osmani, I.A., Bartlett, J.R., Finamore, P.F. and Wallace, H., 1985. Opapimiskan Lake Project: Precambrian and Quaternary Geology of the North Caribou Lake Area, District of Kenora, Patricia Portion. Ontario Geological Survey, Miscellaneous Paper 126, S54, p. 268-276.

Breaks, F.W., Osmani, I.A., and de Kemp, E.A., 1986. Opapimiskan Lake Project: Precambrian Geology pf the Opapimiskan-Forrester Lakes Area, District of Kenora, Patricia Portion. Ontario Geological Survey, Miscellaneous Paper 132, p. 368-378.

Breaks, F.W., Osmani, I.A., and de Kemp, E.A., 2001. Geology of the North Caribou Lake Area, northwestern Ontario. Ontario Geological Survey, Open File Report 6023, 80 p.

Davis, D.W., Stott, G.M., 2001. Geochronology of several greenstone belts in the Sachigo Subprovince, northwestern Ontario, #18 Project Unit 89-7. In: Baker, C.L., Kelly, R.I., Parker, J.R. (Eds.), Summary of Field Work and Other Activities 2001. Ontario Geological Survey Open File Report 6070, pp. 18-1–18-13.

Fiset, N., 1996. Report on a Helicopter-Borne Magnetic Survey, Lundmark-Akow Lakes for Romios Gold Resources Inc. Assessment Report filed on behalf of Romios Gold Resources Inc. AFRI file # 53B16SW0002.

Geotech, 2014. Report on a helicopter-borne Versatile Time Domain Electromagnetic (VTEM plus) and horizontal magnetic gradiometer geophysical survey, Lundmark-Akow Lake. Internal report on behalf of Romios Gold Resources Inc.

Hall, R.S. and Rigg, D.M. 1986. Geology of the West Anticline zone, Musselwhite prospect, Opapimiskan Lake, Ontario, Canada; in Proceedings of Gold '86, Konsult International, Toronto, Ontario, p.124-136.

Hodge, H., 1986. Report on VLF-EM and Magnetic Surveys, Akow Lake Property, District of Kenora, Patricia Mining Division, Northwestern Ontario. Assessment report by Moss Resources on behalf of 635479 Ontario Ltd. AFRI file # 53B16SW0004

Hollings, P., and Kerrich, R., 1999. Trace element systematics of ultramafic and mafic volcanic rocks from the 3 Ga North Caribou greenstone belt, northwestern Superior Province. Precambrian Research, v. 93, p. 257-279.

Kelly, C.J. and Schneider, D.A., 2015. Insights into the timing of mineralization and metamorphism in the North Caribou greenstone belt, western Superior Province, In: Targeted Geoscience Initiative 4: Contributions to the Understanding of Precambrian Lode Gold Deposits and Implications for Exploration, (ed.) B. Dubé and P. Mercier-Langevin; Geological Survey of Canada, Open File 7852, p. 245–253

OGS 1985: Airborne Electromagnetic and Total Intensity Magnetic Survey, Opapimiskan Lake Area, District of Kenora, Patricia Portion; by Aerodat Limited for Ontario Geological Survey, Geophysical/Geochemical Series, Maps 80735, 80736, 80737 and 80738; Scale 1:20 000. Survey and compilation March to July, 1985.

Magnum Explorations Inc., 1996. Report on the Magnetometer/VLF-EM Surveys, Lundmark/Akow Property, Akow-North Caribou Lake Area. Assessment Report for Romios Gold Resources Inc. AFRI file # 53B16SW0007.

McNicoll, V., Dubé, B., Biczok, J., Castonguay, S., Oswald, W., Mercier-Langevin, P., Skulski, T. and Malo, M., 2013. The Musselwhite gold deposit, North Caribou greenstone belt, Ontario: New high-precision U-Pb ages and their impact on the geological and structural setting of the deposit. GAC-MAC 2013 Winnipeg. Joint annual meeting of the Geological Association of Canada and the Mineralogical Association of Canada, Winnipeg, 2013. Program with Abstracts.

Newman, P., 1987. Report on Geological Mapping, Prospecting and Trenching, Four Square Property, District of Kenora, Patricia Mining Division, Northwestern Ontario. Assessment report for Power Explorations Ltd. AFRI file # 53B16SW0001. Oswald, W., Castonguay, S., Dubé, B, Mercier-Langevin, P., Malo, M., Biczok, J., and McNicoll, V.J., 2014 Targeted Geoscience Initiative 4. Lode Gold Deposits in Ancient Deformed and metamorphosed Terranes: Detailed Mapping of Key Stripped Outcrops in the Musselwhite Mine Area, Northwestern Ontario, and Implications for the Geological and Structural Setting of the Gold Mineralization. Summary of Field Work and Other Activities 2014, Ontario Geological Survey, Open File Report 6300, p.42-1 to 42-15.

Spence, I. (1997a): Report of the Mapping Program on the Akow-Lundmark Lake Property for Romios Gold resources Inc., July 21-30, 1997. Assessment report filed on behalf of Romios Gold Resources Inc. AFRI file # 53B16SW2003

Spence, I. (1997b): Report of the Mapping and Stripping Program on the Akow-Lundmark Lake Property. Assessment report filed on behalf of Romios Gold Resources Inc. AFRI file # 53B16SW2002

Spence, I., 1998. Report of the Mapping Program on the Akow-Lundmark Lake Property. Assessment report on behalf of Romios Gold Resources Inc. AFRI file # 53B16SW2006.

Szabo, N.L., 1982. Overburden Drilling, Akow Property, Opapimiskan Lake, Northwestern Ontario. Assessment report on behalf of Cominco Limited. AFRI file #53B16SW0005.

Thurston, P.C., Osmani, I.A., Stone, D., 1991. Northwestern Superior Province Review and Terrane Analysis: Geology of Ontario. Ontario Geological Survey, pp. 81–144.

Van Lankvelt, A., 2013. Protracted magmatism within the North Caribou Terrane, Superior Province: petrology, geochronology, and geochemistry of Meso- to Neoarchean TTG suites; M.Sc. Thesis, University of Ottawa, Ottawa, Ontario, 208 p.

Vickers, A., 1998. Geophysical map summary and digital data on the Lundmark-Akow Lake property, Northwestern Ontario, Patricia Division. Internal report for Romios Gold Resources Inc.

Vytyl Exploration Services Ltd., 1997. Report for Romios Gold Resources Inc., Magnetometer and Horizontal Loop EM Surveys, Lundmark-Akow Lake Area, Patricia Mining Division. Assessment report for Romios Gold Resources Inc. AFRI file # 53B16SW0009

Woods, D., 2003. Geophysical report on a large-loop Transient EM Survey, Lundmark-Akow Lake Project. Assessment report on behalf of Romios Gold Resources Inc., AFRI file # 53B16SW2007

Zhang, G., 1998. Report on field studies of structures and mechanical controls on auriferous hydrothermal-fluid flow in the Lundmark-Akow Lake area, Weagamow-North Caribou Lake greenstone belt, northwestern Ontario. Internal report for Romios Gold Resources

Zhang, G., 1999. Report of the 1999 Diamond Drilling Program on the Lundmark-Akow Lake Property, Northwestern Ontario. Assessment report on behalf of Romios Gold Resources Inc. AFRI file # 53B16SW2004.

# APPENDIX I: 2016 DIAMOND DRILL LOGS

**REPORT ON THE 2016 DIAMOND DRILLING PROGRAM** 

AT THE LUNDMARK-AKOW LAKE PROPERTY

**OF ROMIOS GOLD RESOURCES INC.** 

By John Biczok, P.Geo.

November, 2016

				DI	AMOND	DRILL	LOG										
СОМР	ANY:	Romios Gold Resources Inc.	LOCATION:	A	kow Lake	Proper	ty	LOGG	ED BY:	J. Bi	czok, P.G	leo.	HOL	E No.	F	RGR-16	5-1
DRILL CON	FRACTOR:	Orbit Garant Drilling Inc.	UTM (NAD 83)	(	570191E, 5	8502341	N	GRID C	O-ORDS		10+0	0S, 8+	70E		COLLA	AR DIP	-60°
CORE STO	ORED AT:	Near hole collar, SW Akow Lake area	FINAL DEPTH:	479m	CORE SIZE	NQ	START:	S	ept. 11, 201	16	FINISH:	Se	pt. 16, 20	016	AZIN	1UTH	250°
FROM	то	LITHOLOGICAL DE	SCRIPTION			Sample	From (m)	To (m)	Length	Au ppb	Cu ppm	% Ру	% Ср	% Po	% Asp	Gar-Bio Alt'n	Qtz Vn/ flooding
0.0	6.0	OVERBURDEN/CASING															
6.0	15.0	<ul> <li>5.0 BASALT</li> <li>Very fine-grained (f.g.), medium grey-green basalt composed of ~60:40</li> <li>Amphibole:Plagioclase. Well foliated but ~streaky and irregular with moderately strained. No sulphides.</li> <li>9.0-16.4m: Fault Zone. Basalt becomes increasingly sheared with deption</li> </ul>															
		local qtz veins <2cm. Moderately strained. No sulphides. <u>9.0-16.4m:</u> Fault Zone. Basalt becomes increasingly sheared with depth, broken and rubbly from 10-16.4m. Fault continues into ultramafic unit. Several qtz veins <7cm.			pth, quite nit.												
15.0	15.7	Several qtz veins <7cm.         V         ULTRAMAFIC         Very sheared, talcose ultramafic, light green in colour and amorphous.         Composed of light green talc and serpentine. 25% qtz veins <5cm. No         sulphides visible.															
15.7	40.5	40.5       SERICITE-STAUROLITE-GARNET-QUARTZ-FELDSPAR SCHIST         Homogenous section of light grey to off-white, diffusely banded (few mm to few cm) unit composed of fine-grained Quartz-Feldspar with variable % of f.         to m.g. sericite, <5 to ~30%, plus 1-10% f.g. to m.g. staurolite, 2-3% red garnets, anhedral to subhedral and 3-8mm across. Generally well foliated to weakly schistose. Garnets typically have symmetrical tails so far (no sign of rotation during any shearing). Lower Contact (LC) is gradational over 1m into darker, more biotite-rich unit below. Trace Chalcopyrite (Cp) in garnet tails a 38m, Trace Po at 38.3m. FOLIATION: 35° @ 20m, 34° @ 30m, 38° @ 38m.															

СОМР	ANY:	Romios Gold Resources Inc.	CATION:	Akow Lake	Propert	у	LOGGI	ED BY:	J. Bio	czok, P.G	ieo.	HOLE	E No.	F	RGR-16	5-1
FROM	то	LITHOLOGICAL DESCRIPT	TION		Sample	From (m)	To (m)	Length	Au ppb	Cu ppm	% Ру	% Ср	% Po	% Asp	Gar-Bio Alt'n	Qtz Vn/ flooding
		Assumed to be a felsic volcaniclastic sediment or	possibly a	feldspathic												
		arenite/siltstone originally.														
		27.75-27.9: Mafic to ultramafic dyke. Very f.g., >8	•80% amph.	,												
40.5	43.6	BIOTITE-QUARTZ-FELDSPAR-GARNET SCHIST (SIL	LTSTONE?)													
		Gradational contact from felsic unit above into th	his medium	-grey, more												
		pelitic(?) unit composed of ~30% f.g. biotite in a v	very f.g. ma	trix of Qtz-Fd with												
		~2% garnet porphyroblasts 4-7mm across. Local s	sericite rich	bands <5mm.												
		FOLIATION: 42° @ 41m.														
43.6	66.9	STAUROLITE-SERICITE-BIOTITE-QUARTZ-FELDSPA	AR SCHIST													
		Staurolite-rich unit. Light grey, well foliated with a	a ~variable	texture but most												
		has 20-40% equant, anhedral staurolite, ~1-3mm,	n, plus 10-15	5% m.g. biotite												
		books/flakes in a very f.g. matrix of sericite-quart	tz-feldspar.	No visible												
		sulphides. Upper contact obscured by rubble, Lov	er contact obscured by rubble, Lower Contact gradational c													
		20cm into Ser-Qtz-Fd schist. Little or no signs of h	hydrotherm	al alteration.												
		FOLIATION: 37°@ 55m, 45°@ 50m, 37°@ 61m.														
66.9	68.9	SERICITE-QUARTZ-FELDSPAR-(BIOTITE) SCHIST														
		Composed of 40-50% sericite, <3% bio, rest is Qtz	z-Fd. Foliati	on is strong, often												
		wavy, bordering on distorted with local shear fold	ds. UC grad	ational over												
		10cm, LC fairly sharp but bio'd.														
68.9	72.3	BASALT														
		F.g., ~60:40 amphibole:plagioclase, medium grey	/-green colo	our with brownish												
		sections due to moderate bio'n (~15-20% bio flak	kes). Well fo	bliated. Upper												
		Lontact snarp at 4/ to core axis (dca), Lower Cor	ntact grada	tional over												
	ļ	1/2111.FULIATION: 52 @ /Um, 45 @ /2m.														
72.3	90.8	GABBRO														
		Fairly ophitic gabbro, comprised of ~40% c.g. plag	gioclase gra	iins ~5mm in a												
		somewhat finer-grained amphibole dominant gro	oundmass.	Weakly												

СОМР	ANY:	Romios Gold Resources Inc.	CATION:	Akow Lake	Propert	у	LOGG	ED BY:	J. Bio	czok, P.G	eo.	HOLE	E No.	F	RGR-16	5-1
FROM	то	LITHOLOGICAL DESCRIPT	TION		Sample	From (m)	To (m)	Length	Au ppb	Cu ppm	% Ру	% Ср	% Po	% Asp	Gar-Bio Alt'n	Qtz Vn/ flooding
		magnetic and weakly foliated. UC and LC gradation	onal over 1,	<sup>2</sup> m. Coarse												
		grained from 72.3 to 77.7m. Medium-grained and	d non-magr	netic from 77.7-												
		90.8m. No significant quartz veins, sulphides or all	lteration. L	ower 2.5m is												
		highly strained and becomes f.g. as a result with n	mod bio'n.													
90.8	96.3	ULTRAMAFIC														
		Light greenish-grey unit composed almost entirely	ly of amorp	hous, pale green-												
		grey serpentine. Non-magnetic. Moderate, streak	ky foliation.	Minor basalt												
		interval from 93.8 to 95.2m. FOLIATION: 38° @ 92	2m.													
96.3	98.3	FELDSPAR PORPHYRY DYKE														
		Typical Fd porphyry dyke of this region. Light grey	y, hard, spo	tted with 20-30%												
		seriate porphyritic Fd phenos 2-6mm in a f.g., hard	rd groundm	ass of f.g. qtz-fd												
		and ~10-15% f.g. biotite. Weakly foliated with one	e ptygmati	c qtz vein.												
98.3	111.7	ULTRAMAFIC / SERPENTINITE														
		Mottled light grey serpentinite unit with f.g. white	e spots con	nposed of talc and												
		serpentine. Contains ~3% f.g. magnetite crystals a	and is mod-	strongly magnetic												
		until the last 2m. Locally abundant veins <1cm wic	ide of magr	nesite (?) // to												
		foliation. LC has a 10cm reaction zone forming an	n irregular n	nix of more c.g.												
		amphiboles. FOLIATION: 46° @ 100m.														
111.7	113.1	METASILTSTONE														
		Fairly typical f.g metasediment, mod-well foliated	ed with loca	al colour banding												
		due to changes in bio %. Avg ~30% biotite, rest is f	f.g. mix of	Fd>Qtz. Trace f.g.												
		garnets.														
113.1	130.6	STAUROLITE-RICH META-ARKOSE														
		Light grey to yellow-beige metasediment with <3%	% to 50% s	taurolite grains up												
		to 2mm, avg ~20-30% staur. Only ~5% biotite on a	average, re	st is f.g. Fd>Qtz.												
		Moderately well foliated, non-magnetic, no obvio	ous folds. T	he												

СОМР	ANY:	Romios Gold Resources Inc. LOCATIO	N: Akow Lake	e Propert	у	LOGGE	ED BY:	J. Bi	czok, P.G	ieo.	HOLE	E No.	l	RGR-16	<b>j-1</b>
FROM	то	LITHOLOGICAL DESCRIPTION		Sample	From (m)	To (m)	Length	Au ppb	Cu ppm	% Py	% Ср	% Po	% Asp	Gar-Bio Alt'n	Qtz Vn/ flooding
		staurolite is ~consistent in grain size and ~disseminate	d, not concentrated in												
		patches or any obvious alteration zones. One narrow,	1cm, band of chlorite												
		with c.g. garnets at 123m. One qtz vein, 20cm wide, at	118.2m. FOLIATION:												
		50° @ 119m, 58° @ 122m, 52° @ 127m.													
		120.6-121.2m: Sericite schist with mottled grey to beig	e banding; composed												
		largely of sericite.													
		123.0-124.5m: More pelitic section with 5% c.g. garnet	s in a dark grey matrix												
		of 25% bio, rest is Fd-Qtz.													
130.6	141.0	META-SILTSTONE													
		Medium grey colour due to 20% f.g. biotite. Most of th	is unit still has 10-20%	W1120002	131.0	132.0	1.0	2.5	23	0.02	0				
		f.g. staurolite and is weakly magnetic. From 131-137m	it has a green tinge due	W1120003	132.0	133.0	1.0	2.5	24	0.02	0				
		to weak overprint of pale amphibole +/- Trace Po and	Py. Po as thin streaks <1	W1120004	133.0	134.0	1.0	2.5	28	0.02	0				
		2mm thick along the foliation planes, most abundant f	rom 132-134.5m with	W1120005	134.0	135.0	1.0	2.5	37	0.02	0				
		40% green, amph'd bands with ~0.5% Po-Py. FOLIATIO	N: 55° @ 138.4m.												
141.0	148.0	BEDDED META-SILTSTONE													
		F.g., medium grey metasediment, well banded/beddeo	I now with beds up to												
		2cm thick, reflecting changes in bio% from <3% to 20-3	80%. Trace staur,												
		garnets. Unit has a pseudo "gritty" look due to slightly	larger Fd grains in the												
		bio rich matrix, prob a metamorphic feature. Several t	nin schistose felsic beds												
		<10cm throughout where sericite is dominant. FOLIAT	ON: 56° @ 146m.												
148.0	165.0	STAUROLITE-RICH META-SILTSTONE													
		Light grey, well bedded with beds <few cm="" com<="" td="" thick,=""><td>posed of varying % of</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></few>	posed of varying % of												
		staurolite, <1% to >25%, avg ~10-15%, plus 3% to 10%	biotite, 5-10% sericite,												
		rest is Qtz>Fd. Some intervals are more arkosic with lo	wer bio and higher												
		feldspar. Several garnet-rich, pelitic layers . Non-magn	etic and no significant												
		alteration or veining visible. FOLIATION: 54° @ 157m,	50° @162m.												

COMP	ANY:	Romios Gold Resources Inc. LOCAT	TION: Akow Lake	e Propert	y	LOGGE	ED BY:	J. Bio	czok, P.G	ieo.	HOLE	E No.	F	RGR-16	5-1
FROM	то		DN	Sample	From (m)	То (m)	Length	Au ppb	Cu ppm	% Py	% Ср	% Po	% Asp	Gar-Bio Alt'n	Qtz Vn/ flooding
		<u>153.7-154.1m</u> : Sericite schist, ~coarse-grained.													
		159.5-161.1m: Garnet rich with 20-25% pale pink, c	.g. garnets 3-8mm.												
		161.7-162.3m: Garnet-rich section with 20-25% gar	nets, 10-15% m.g. bio, rest												
		is Fd>Qtz.													
165.0	178.4	SILTSTONE, grey, banded													
		Distinctive, ~homogeneous metasediment with <2c	m thick bands light to												
		medium grey in colour. Only Tr staurolite now, 2-5%	6 m.g. garnets in a matrix												
		of 20-30% f.g. biotite, rest mainly Fd-Qtz. Non-magr	netic and no sulphides. UC												
		is gradational over 1-2m, LC is sharp. FOLIATION: 53	3° @ 170, 175m.												
178.4	179.1	ULTRAMAFIC / SERPENTINITE													
		Light green ultramafic composed of amorphous gree	en serpentine. Central												
		30cm is a carbonate (magnesite?) vein swarm, 80%	sheeted veins.												
179.1	185.7	META-SILTSTONE													
		Very homogeneous, featureless unit of well foliated	l, light grey metasediment												
		composed of ~30% f.g. biotite in a very f.g. matrix o	of Qtz-Fd. No staurolite, LC												
		gradational over 1m. FOLIATION: 53°.													
185.7	194.7	SILTSTONE, grey, banded													
		As per 165.0-178.4m. LC gradational over 1m. Trace	e Py in last 1m. FOLIATION:												
		57° at 191m.													
194.7	209.2	SERICITE-QUARTZ-FELDSPAR SCHIST (Felsic Ash Tu	ff)	W1120006	197.0	198.1	1.1	2.5	56	0.01	0	0.01			
		Appears to be the same unit as the lower part of the	e "felsic wedge"	W1120007	198.1	199.1	1.0	2.5	27	0.3	0	0.01			
		structurally overlying the BIF at Musselwhite. Light	grey to off-white,	W1120008	199.1	199.6	0.5	7	30	15	0	0.01			
		schistose unit composed of ~20-30% f.g. to m.g. ser	icite, rest is mainly Qtz-Fd.	W1120009	199.6	200.4	0.8	2.5	25	0.01	0	0.01			
		Distinctive feature is the bands of syngenetic pyrite	0.5-1cm thick containing	W1120011	200.4	201.0	0.6	2.5	45	0	0	0			
		30-40% Py grains 1-2mm across and forming a ~inte	erlocking network. Py	W1120012	201.0	202.7	1.7	8	40	0	0	0.3			
		bands concentrated in 1 zone 30cm thick with 15-20	0% Py.	W1120013	202.7	203.7	1.0	6	30	0	0	0.1			

СОМР	ANY:	Romios Gold Resources Inc. LOCATION: Ako	ow Lake F	Propert	у	LOGGE	ED BY:	J. Bio	czok, P.G	eo.	HOLE	E No.	F	RGR-16	5-1
FROM	то	LITHOLOGICAL DESCRIPTION		Sample	From (m)	То (m)	Length	Au ppb	Cu ppm	% Ру	% Ср	% Po	% Asp	Gar-Bio Alt'n	Qtz Vn/ flooding
		Scattered layers of Py <5mm thick throughout. Some portions are weak	kly												
		magnetic due to f.g. Po. Colour changes at 200.4m into a mottled medi	ium												
		grey due to lower sericite. FOLIATION: 45° @ 201m, 58° @ 206m.													
209.2	215.0	STAUROLITE-RICH META-SILTSTONE, grey, banded													
		Similar to previous intervals of this grey, banded unit but has up to 25%	% f.g. to												
		c.g. staurolite now. Matrix has 15-20% f.g. bio on avg, wraps around Qt	tz-Fd												
		grains. No amphibole visible here or any previous metaseds. 3 sericitic													
		intervals <50cm thick in upper part and a few scattered Py-Po seams <1	1cm.												
		Sharp contacts. FOLIATION: 57° @ 211m.													
215.0	231.0	META-SILTSTONE													
		Relatively homogeneous, diffusely banded, medium grey metased with	h locally												
		<2% m.g. to c.g. garnets and minor Py seams up to a few mm thick. 20-	-30%												
		f.g. bio, 5-10% sericite, only minor staurolite (5-10%) bearing intervals.	. LC												
		gradational over 1m. FOLIATION: 57° @ 211m, 222m, 231m.													
		216.3-217.0m: Basaltic dyke/sill(?). Medium green with local weak bio'	'n, mod												
		strained and foliated													
		<u>217.8-218.9m</u> : Basaltic dyke/sill(?) as above													
231.0	246.4	GARNET-STAUROLITE-SERICITE-BIOTITE-QTZ-FD SCHIST	w	/1120014	231.0	232.0	1.0	37	58	0	0	0.3			
		Somewhat heterogeneous package of metasediments but most has 2-1	10% w	/1120015	232.0	233.0	1.0	33	84	0	0	0.5			
		c.g. garnets and 10-20% f.g. staurolite in a variable matrix of f.g. Qtz-Fd	d and 🛛 w	/1120016	233.0	234.0	1.0	7	54	0.01	0	0.3			
		20-40% f.g. sericite and/or biotite. Scattered Po-Py-Cp-Asp mineralization	ion <sub>w</sub>	/1120017	234.0	235.0	1.0	69	377	0	0	3			
		throughout. Po typically as thin seams // to foliation, blebs in c.g. gar-b	pio-ser- <sub>W</sub>	/1120018	235.0	236.0	1.0	14	39	0	0	0.1			
		qtz alteration zones, plus a few veins up to 5cm wide. Cp occurs along v	with Po <sub>W</sub>	v1120019	236.0	237.0	1.0	60	403	0.1	0	0.1			
		in the habits above, plus as fracture fillings and blebs in c.g. hydrothern	mal w	/1120021	237.0	237.8	0.8	51	648	0	0.1	0.5			
		garnets. Asp occurs as disseminated euhedral grains in or near qtz-bio-	-gar w	v1120022	237.8	238.2	0.4	56	369	0	0	0.1	0.1		
		veins. Much of this unit is weakly magnetic due to f.g. Po throughout.	w	/1120023	238.2	238.7	0.5	12	400	0	0	0			
		FOLIATION: 58° @ 241m.	w	/1120024	238.7	240.0	1.3	35	174	0	0	0			
		236-241m: 5 or 6 veins/zones 2-10cm wide of strong hydrothermal alte	eration w	v1120025	240.0	240.9	0.9	2.5	132	0.01	0	0.2			
		consisting of c.g. euhedral garnets up to 3cm surrounded by	w	V1120026	240.9	241.2	0.3	22	249	0	0	0.2	0.1		

COMP	ANY:	Romios Gold Resources Inc.	LOCATION:	Akow Lak	e Propert	y	LOGG	ED BY:	J. Bi	czok, P.G	ieo.	HOLE	E No.	F	RGR-16	<b>j-1</b>
FROM	то	LITHOLOGICAL DES	LITHOLOGICAL DESCRIPTION sive black biotite up to 1cm wide. Variably mineralised with up 1 0.2% Po, minor Py and rare Asp.		Sample	From (m)	То (m)	Length	Au ppb	Cu ppm	% Py	% Ср	% Po	% Asp	Gar-Bio Alt'n	Qtz Vn/ flooding
		massive black biotite up to 1cm wide. Varial	bly mineralised	with up to 0.1%	W1120027	241.2	242.2	1.0	44	269	0	0.05	0.1			
		Cp, 0.2% Po, minor Py and rare Asp.			W1120028	242.2	243.0	0.8	32	287	0	0.1	0.2			
		240.2-240.9m: Relatively fresh, f.g., grey silt	stone.		W1120029	243.0	243.8	0.8	23	431	0.2	0.1	0.1			
		242.5-246.4m: 25% c.g. gar-bio alteration zo	ones with 0.1 to	0.5% Cp and 0 to	W1120031	243.8	244.8	1.0	47	667	0	0.5	0			
		0.3% Po.			W1120032	244.8	245.9	1.1	140	1230	0	0.5	0.3			
					W1120033	245.9	246.4	0.5	106	1800	0	0.3	0			
246.4	248.0	BASALT DYKE/SILL														
		As per previous basalts. Very homog, f.g., w	eak-moderatel	y foliated, very												
		even medium green colour. Contains amph	and plag at ~60	):40 ratio. UC												
		sharp, // to foliation at 65°, LC obscured by	alteration for f	ew cm.												
248.0	249.9	GARNET-STAUROLITE-BIOTITE>SERICITE-Q	TZ-FD SCHIST		W1120034	248.0	249.0	1.0	40	858	0	0.4	0.3			
		Similar to previous interval of this unit but ^	'35% of the last	: 1m is strongly qtz	W1120035	249.0	249.9	0.9	32	1350	0.1	0.5	0.2			
		flooded with zones of 30-80% c.g. garnets u	up to 2 cm acro	ss surrounded by												
		massive f.g black biotite containing hydrot	hermal m.g. sta	aurolite grains.												
		Upper 40cm has 15% garnets up to 1.5cm, i	n zone of 50% l	pio and 25% staur,												
		rest is f.g. qtz-fd. Approx 1/2% Cp and 0.2-0	.3% Po.													
		248.4-249.0m: Little or no staur here and or	nly 5% garnets.													
249.9	250.5	BASALT and OLIVINE LAMPROPHYRE DYKE	S													
		Basalt dyke 60cm wide cut by a 5cm olivine	lamprophyre d	yke.												
250.5	254.5	GARNETIFEROUS META-SILTSTONE														
		Light grey, well foliated metasediment. Mat	rix composed o	of ~30% f.g. biotite,			ļ									
		rest mainly f.g. Qtz-Fd. Contains trace staur	olite and <2 to	~25% garnets, avg			ļ									
		~/%, between 3 and 8mm wide. No mineral	lization evident	and only one small			ļ									
		nydrothermal alteration zone <th>ULIATION: 55</th> <th>at 253m.</th> <th>L</th> <th></th>	ULIATION: 55	at 253m.	L											
		<u>251.9-252.9m</u> : Basalt dyke/sill.			ļ											

СОМР	ANY:	Romios Gold Resources Inc.	CATION: Akow Lake	Propert	y	LOGGE	ED BY:	J. Bi	czok, P.G	eo.	HOLI	E No.	F	RGR-16	5-1
FROM	то	LITHOLOGICAL DESCRIPT	TION	Sample	From (m)	To (m)	Length	Au ppb	Cu ppm	% Ру	% Ср	% Po	% Asp	Gar-Bio Alt'n	Qtz Vn/ flooding
254.5	258.8	BASALT DYKE/SILL													
		As before, a homogeneous, medium green, f.g. b	asalt; weak to moderate												
		foliation. LC sharp at 63°.													
258.8	265.5	META-SILTSTONE													
		Light beige-grey, ~consistent, even textured unit	with only weak, vague												
		banding/bedding. Well foliated. Contains ~15% f.	.g. biotite in a matrix of f.g.												
		Qtz-Fd. Spotted with 1-2%, disseminated white g	rains, 1-2mm, of feldspar (?),												
		probably metamorphic in origin (?). LC gradationa	al over 10cm. FOLIATION: 63°												
		@ 264m.													
265.5	269.1	STAUROLITE-(GARNET) META-SILTSTONE													
		Similar to unit above but now has zones with 10-2	20% f.g staurolite and 0 to												
		15% medium to c.g. garnets. Last 1m is "plain" sil	ltstone. FOLIATION: 58° @												
		268m.													
269.1	289.5	GARNET-STAUROLITE-BIOTITE-QTZ-FELDSPAR +/	/- SERICITE SCHIST	W1120036	269.0	270.0	1.0	33	1130	0	0.2	0.4		3	0
		Much of this unit is pervasively, hydrothermally a	altered to more c.g. garnet	W1120037	270.0	270.8	0.8	9	294	0.1	0	0.1		1	0
		and staurolite than the usual precursor and cut b	by alteration veins/zones of	W1120038	270.8	271.6	0.8	22	161	0	0	0.3		3	0
		very c.g. garnets surrounded by massive biotite +	-/- sericite books to 1cm, +	W1120039	271.6	272.8	1.2	12	299	0	0	0		0.5	0
		local chlorite, + local qtz flooding. Typically conta	ins 30% m.g. staurolite and	W1120041	272.8	273.7	0.9	10	354	0	0.1	0.2		3	0
		10-20% c.g. garnets 5-20mm, in a matrix of 30-40	0% f.g. to m.g. biotite, rest is	W1120042	273.7	274.7	1.0	45	541	0	0	0.3		4	1
		mainly Qtz-Fd. Scattered thin seams of Cp and/or	r Po throughout, generally <1-	W1120043	274.7	275.0	0.3	1150	5240	0	0.6	0.1		5	5
		2mm wide, and as fracture fillings and blebs in th	ne garnets and local qtz veins.	W1120044	275.0	275.8	0.8	15	622	0	0	0		1	0
		Max Cp is ~3-5%/30cm. FOLIATION: 62 @ 278 ar	nd 280m.	W1120045	275.8	276.9	1.1	25	1360	0	0.3	0		1	0
				W1120046	276.9	277.9	1.0	24	447	0	0	0		0.5	0
				W1120047	277.9	278.6	0.7	247	1730	0.01	0.3	0.01		3	1
		274.7-275.0m: Almost complete replacement by	~50% hydrothermal garnets	W1120048	278.6	279.2	0.6	19	881	0	0	0		0	0
		up to 1cm surrounded by massive f.g biotite and	d quartz flooding. Thin seams	W1120049	279.2	280.2	1.0	34	1360	0	0	0		4	1
		and small grains of Cp throughout.		W1120051	280.2	281.2	1.0	101	6060	0.01	0.8	1		4	1
				W1120052	281.2	281.9	0.7	55	1350	0	0	0		1	0
				W1120053	281.9	282.4	0.5	256	13100	0.1	5	0.1		5	5

COMP	ANY:	Romios Gold Resources Inc. LOCATIO	ON: Akow Lake	e Propert	y	LOGG	ED BY:	J. Bi	czok, P.G	eo.	HOLE	E No.	F	RGR-16	5-1
FROM	то		N	Sample	From (m)	То (m)	Length	Au ppb	Cu ppm	% Py	% Ср	% Po	% Asp	Gar-Bio Alt'n	Qtz Vn/ flooding
		282.0-282.07m: 7cm Quartz vein with large blebs of Cp-(Po	o) up to 2cm; ~5% Cp	W1120054	282.4	282.9	0.5	34	2240	0	0.3	0		1	0
		overall. Minor Asp crystals, Py and Po.		W1120055	282.9	283.6	0.7	48	2110	0.2	0.1	0		0	0
				W1120056	283.6	284.4	0.8	72	3210	0.1	1	0.2		5	2
				W1120057	284.4	285.4	1.0	25	742	0	0.1	0		1	0
				W1120058	285.4	286.2	0.8	78	2180	0	0.2	0		1	0
				W1120059	286.2	287.0	0.8	2.5	202	0	0	0		0	0
				W1120061	287.0	288.0	1.0	28	535	0	0.1	0.1		0.5	1
				W1120062	288.0	288.9	0.9	381	2450	0	0.2	0.2		4	1
				W1120063	288.9	289.5	0.6	49	1450	0	0.2	0.1		1	0
289.5	290.7	SERICITE-QUARTZ-FELDSPAR-(STAUROLITE-GARNET)	)- SCHIST												
		Mottled white to grey schist composed of >50% m.g.	sericite, scattered												
		garnets ~1cm, <5% f.g. to m.g. staurolite, rest mainly	Qtz-Fd. A few scattered												
		blebs of Cp-Po <5mm but barren in between. UC ~sha	arp over 5cm, LC sharp at												
		65°.													
290.7	296.4	BASALT		W1120064	291.0	291.6	0.6	33	62	0	0	0.01	0		
-		Similar to previous basalts but has minor to 2%, f.g t	to m.g disseminated	W1120065	291.6	292.6	1.0	49	294	0	0.01	0	0.2		
-		arsenopyrite crystals in zones up to 1.3m long and un	nusual black	W1120066	292.6	293.3	0.7	16	70	0	0	0	0		
		veins\fracture fillings of sphalerite up to 1cm wide. N	/lax is ~10-15% Asp over	W1120067	293.3	294.0	0.7	24	149	0	0	0	0		
		one 15cm zone. No obvious hydrothermal alteration	to explain the Asp. Only	W1120068	294.0	294.6	0.6	496	1440	0	0	0	0		
		weak foliation. A few scattered blebs and one sphale	rite vein ~5mm below							-	-	-	-		
		294.6m.													
296.4	305.7	I SERICITE-STAUROLITE-QUARTZ-FELDSPAR-(BIOTITE-	GARNET)- SCHIST												
		Light grev to off-white schist composed of 10-20% m.	.g. staurolite, ~20%												
		sericite, rest is f.g. Qtz-Fd with minor bio and garnets	. Trace Po. LC is												
		gradational and interfingered over 2-3m. FOLIATION:	57° @ 299m.												
305.7	362.8	I STAUROLITE-BIOTITE-GARNET-OUARTZ-FFLDSPAR-(9	SERICITE) SCHIST	W1120069	307.3	308.0	0.7	71	2850	0	3.5	0	0	1	0
		Well foliated to schistose unit. medium grev in colo	our, composed of ~10 to	W1120071	309.6	310.6	1.0	128	4220	0	0.7	0.1	0	5	2
		30% m.g. staurolite, 10-15% c.g. garnets, in a mat	rix of 20-30% bio, rest	W1120072	310.6	311.3	0.7	47	905	0	0.5	0.5	0	1	0

COMP	ANY:	Romios Gold Resources Inc.	LOCATION:	Akow Lake	e Propert	y	LOGG	ED BY:	J. Bi	czok, P.G	ieo.	HOLE	E No.	F	RGR-16	5-1
FROM	то	LITHOLOGICAL DES	CRIPTION		Sample	From (m)	То (m)	Length	Au ppb	Cu ppm	% Ру	% Ср	% Po	% Asp	Gar-Bio Alt'n	Qtz Vn/ flooding
		mainly Qtz-Fd. Locally sericite is > biotite. Se	everal Ser+Garn	et schist intervals	W1120073	321.65	322.65	1.0	52	1500	0	0.5	0	0	1	1
		up to 50cm wide. Also several zones to 70cm	n of intense hy	drothermal gar-bio-	W1120074	324.25	325.25	1.0	90	2130	0	0.4	0	0	2	2
		qtz flooding alteration. Scattered thin zones	, 70cm wide, ra	arely to 1.5m, of	W1120075	335.15	336.15	1.0	56	1020	0	0.3	0	0	1	0
		strong gar-bio alteration with minor Cp belo	w 311.3m. Sca	ttered small	W1120076	338.90	339.20	0.3	158	779	0	0.3	0	0.01	4	2
		intervals of trace to minor Py-Po-Cp through	nout this unit, u	sually <3-4cm wide	W1120077	339.2	339.9	0.7	20	85	0	0	0	0	0	0
		and >2m apart (not sampled). Most is non-n	nagnetic, some	is weakly magnetic	W1120078	339.9	340.5	0.6	107	1240	0.2	0.3	0	0	2	0
		due to very f.g. Po. FOLIATION: 63° @ 327m	60° @ 343m, 5	57° @ 350m.	W1120254	343.2	344.1	0.9	71	606	0	0.1	0	0.05	1	0
					W1120255	344.1	345.0	0.9	19	879	0	0.05	0	0	1	0
		356.1-356.65m: 3 Gar-Bio-Po-(Cp) veins, 1-4	cm wide.		W1120079	345.0	346.0	1.0	147	5120	0	1.5	0	0	3	1
					W1120081	346.0	346.7	0.7	55	1320	0	0.3	0	0.01	1	0
					W1120082	350.4	351.0	0.6	24	410	0.2	0	0	0.05	1	1CM QV
					W1120083	355.0	356.1	1.1	78	1090	0	0.1	0	0	1	0
					W1120084	356.1	356.65	0.55	78	1040	0	0.1	1.5	0	2	4 cm QV
					W1120085	359.4	360.0	0.6	120	3260	0	0.1	0	0	1	1
					W1120086	360.0	360.5	0.5	83	5890	0	0.5	0	0	1	1
362.8	380.5	META-SILTSTONE (+/- Garnet-Staurolite)														
		Pronounced change in texture and mineralo	gy from the un	it above. This												
		section is much more homogeneous, f.g., we	ell foliated and	weakly banded												
		siltstone. Matrix consists of 10-20% f.g. bio,	0-10% f.g. stau	rolite, rest is very												
		f.g. Qtz-Fd. Spotted with 2-10% garnet porp	hyroblasts up t	o 1cm, avg 5mm.												
		Only minor, local signs of hydrothermal alte	ration (e.g. c.g.	garnets and												
		massive biotite). Trace Py-Po. Previous unit	may be altered	version of this												
		siltstone? FOLIATION: 61° @ 369m, 67° @ 3	78m, 65° @ 380	0m.												
380.5	418.4	SERICITE-(GARNET) QUARTZ-FELDSPAR SCH	IIST (Felsic Vol	caniclastics)	W1120087	387.3	388.5	1.2	16	376	0.1	0	4	0		2 cm QV
		Fairly homogeneous, mottled to light grey/c	off-white schist	composed of 30-	W1120088	398.1	398.9	0.8	96	70	0	0	0	0.1		
		40% m.g. to c.g. sericite in a siliceous matrix	. 0-15% m.g. to	c.g. subhedral												
		garnets, 3-6mm, scattered in some areas. M	linor sedimenta	ary layers with 20-	W1120089	410.3	411.6	1.3	226	155		0				
		30% m.g. staurolite. Resembles the "felsic w	vedge" of tuffs a	and volcaniclastic	W1120091	411.6	411.9	0.3	155	22		0				
		sediments that structurally overlies the BIF a	at Musselwhite	. Distinctive												
		syngenetic Pyrite layers scattered throughout	ut, up to 20-309	% f.g. to m.g.												
		Py/10cm and numerous thin intervals with <	<3% Po.													

COMP	ANY:	Romios Gold Resources Inc.	LOCATION:	Akow Lake	Propert	y	LOGG	ED BY:	J. Bi	czok, P.G	leo.	HOLE	E No.	F	GR-1٤	5-1
FROM	то	LITHOLOGICAL DES	CRIPTION		Sample	From (m)	To (m)	Length	Au ppb	Cu ppm	% Ру	% Ср	% Po	% Asp	Gar-Bio Alt'n	Qtz Vn/ flooding
		Po. Local qtz veins 10-20cm with Tr Asp. Asp equant crystals 1-2mm over 1-2m sections. A 0.5 to 1% dissem'd Magnetite crystals 1-2mr gradational over 1m. FOLIATION: 63° @ 391,	also as Trace o A few intervals n instead of su 402 and 414m	disseminated 1-2m wide with Iphides. LC 1.												
		413.4-413.7m: Basaltic dyke.														
A10 A	470.4															
	479.4	Well bedded, fairly homogeneous metasedir psammitic and medium to dark grey more pe thick. Darker beds have ~20% f.g. bio, lighter lighter beds have syngenetic Pyrite and mino Well foliated, planar bedded, only minor dist up to 10cm with hydrothermal biotite. Mino 424-426m. FOLIATION: 73° @ 421m, 67° @ 4 452m, 60° @ 456m, 65° @ 468m, 62° @ 477	mating off-white, wmm to a few cm 0%. Some of the may be ash tuffs. scattered qtz veins o 1cm especially at ad 444m, 58° @													
		432.4-432.9m: Basaltic dyke. Moderate bio'r	1. intorval with 1	0.20% coricito												
		probable felsic tuff input.	Interval with 1	0-20% sencile,												
		<u>469.4-472m</u> : Lighter coloured, more felsic in probable felsic tuff input.	robable feisic tuff input. <u>69.4-472m</u> : Lighter coloured, more felsic interval with 10-20% sericite, robable felsic tuff input.				REFLEX	( TESTS								
	470 4	End Of Hal	•				<u>DEPTH</u>	<u>DIP</u>								
	479.4	End Of Hole					108m 201m	57.2 -52.1 -47.4								
		Core stored in cross piles near old camp si shore of Akow Lake. 670219 E, S	End Of Hole e stored in cross piles near old camp site and hole RGR-16-001 o shore of Akow Lake. 670219 E, 5850251 N (NAD 83).				282m 393m 479m	-42.9 -35.9 -32.3								

COMPANY:       Romios Gold Resources Inc.       LOCATION:       Akow Lake Property       LOGGED BY:       J. Biczok, P.Geo.       HOLE No.       RGR-16-2         DRILL CONTRACTOR:       Orbit Garant       UTM (NAD 83)       670371 E, 5850035 N       GRID CO-ORDS       12+605, 9+50E       AZIMUTH       25         CORE STORED AT:       Akow Lake, SW shore       FINAL DEPTH:       528m       CORE SIZE       NQ       STARTED:       Sept. 16, 2016       FINISHED:       Sept. 21, 2016       COLLAR DIP       -5'         FROM       TO       LITHOLOGICAL DESCRIPTION       Sample       From (m)       To (m)       Length       Au ppb       Cu       y       % Po       % Asp       Gar-Bio Alt'n       flood         0.0       9.0       Casing. Glacial till and organic overburden.       Sample       From (m)       To (m)       Length       Au ppb       Cu       y       y       Active       Att'n       flood         7.8       10.5       BASALT       Interview of flood f	
DRILL CONTRACTOR:       Orbit Garant       UTM (NAD 83)       670371 E, 5850035 N       GRID CO-ORDS       12+60S, 9+50E       AZIMUTH       25         CORE STORED AT:       Akow Lake, SW shore       FINAL DEPTH:       528m       CORE SIZE       NQ       STARTED:       Sept. 16, 2016       FINISHED:       Sept. 21, 2016       COLLAR DIP       -5         FROM       TO       LITHOLOGICAL DESCRIPTION       Sample       From (m)       To (m)       Length       Au ppb       Cu       ppm       % Py       % Cp       % Po       % Asp       Gar-Bio Alt'n flood         0.0       9.0       Casing. Glacial till and organic overburden.	
CORE STORED AT:       Akow Lake, SW shore       FINAL DEPTH:       528m       CORE SIZE       NQ       STARTED:       Sept. 16, 2016       FINISHED:       Sept. 21, 2016       COLLAR DIP       -5         FROM       TO       LITHOLOGICAL DESCRIPTION       sample       From (m)       To (m)       Length       Au ppb       Cu ppm       % Py       % Cp       % Po       % Asp       Gar-Bio Alt'n       flood         0.0       9.0       Casing. Glacial till and organic overburden.       Image: Comparison of the ppm       Image: Comparison of the ppm       % Py       % Cp       % Po       % Asp       Gar-Bio Alt'n       flood         7.8       10.5       BASALT       Image: Comparison of the ppm       Ima	2
FROM       TO       LITHOLOGICAL DESCRIPTION       sample       From (m)       To (m)       Length       Au ppb       Cu ppm       % Py       % Cp       % Po       % Asp       Gar-Bio Alt'n       Quz food         0.0       9.0       Casing. Glacial till and organic overburden.       - <th>7</th>	7
0.0       9.0       Casing. Glacial till and organic overburden.       Image: constant of the second seco	√n/ Jing
7.8       10.5       BASALT       Image: constraint of the second seco	
Fine grained, amphibolite facies basalt.       Image: constant of the second seco	
10.5       18.1       ARENITE (Eyapamikama Sediments ?)       Image: Constant of the second sector of the second second sector of the second sector of the second	
10.5       18.1       ARENITE (Eyapamikama Sediments ?)         Quartzose metasediment with ~5-15% f.g. biotite in a hard, siliceous       Imatrix. Light grey, weak-mod foliation, fairly homogeneous. Broken         Imatrix. Light grey, weak-mod foliation, fairly homogeneous. Broken       Imatrix Light grey, weak-mod foliation, fairly homogeneous. Broken	
Quartzose metasediment with ~5-15% f.g. biotite in a hard, siliceous       matrix. Light grey, weak-mod foliation, fairly homogeneous. Broken	
matrix. Light grey, weak-mod foliation, fairly homogeneous. Broken	
minor rust. Foliation: F7 dos at 16m	
18.1 21.0 BASALT	
Medium grey-green, weak & irregular foliation due to alignment of	
vague amphibole grains in a lighter matrix.	
21.0 84.1 ARENITE	
Fairly homog, light grey, siliceous f.g. metasediment with 5-10%	
biotite and ~10% sericite in a quartzose matrix. Well foliated. No	
visible amphiboles. Locally Ser>Bio. 2 small olivine lamprophyre	
dykes. Foliation: 41° at 28m, 45° at 50m, 48° at 60m, 53° at 65m.	
63.7-64.0: Olivine Lamprophyre Dyke. Typical of these dykes in this	
largely altered to composed mainly of ovoid onlying grains up to a few min,	
Indigery altered to serpentine, with 5-10% interstitial califie and inition in the second sec	

COMPANY:	Romi	os Gold Resources Inc.	LOCATION:	Akow Lake Property	LOGGE	D BY:		J. Biczol	k, P.Geo	-	Н	IOLE N	0.		RGR-1	6-2
FROM	то	LITHC	DLOGICAL DESC	RIPTION	Sample	From (m)	To (m)	Length	Au ppb	Cu ppm	% Py	% Ср	% Po	% Asp	Gar-Bio Alt'n	Qtz Vn/ flooding
		73.9-74.2: Olivine Lamprop	ohyre Dyke, as a	above.												
84.1	103.5			L'a fra fluor a la dal												
		Fairy highly strained, hard	to see grains bu	It is "soft, probably												
		composed of serpentine; c	contains several	large clots of tourmaline,												
		typical of UNI in this area.	weak blotite al	th. Lower portion may be												
		basalt but core if badly bro	oken and rubbly	. Foliation: 45 deg at 85m.												
		93.0-93.4: Sulphidic Mudst	tone/Interflow S	Sediment	W1120092	93	93.4	0.4	148	26	5	0	0			10 cm QV
		Dark grey, hard, cherty lay	er with 1cm Py	blebs forming a fracture	W1120093	93.4	94.1	0.7	120	22	0.01	0	0.01			
		network a few cm wide. 10	Ocm sheeted qt	z vein.												
		94.1-94.6: Sulphidic Muds	<u>l-94.6:</u> Sulphidic Mudstone/Interflow Sediment Ily bedded, convoluted, ~hard cherty unit but with f.g. green				94.6	0.5	149	106	10	0	1			
		Thinly bedded, convoluted	inly bedded, convoluted, ~hard cherty unit but with f.g. green													
		volcanic layers too. 10cm s	<i>ı-</i> (Po).													
103.5	105.0	SULPHIDIC MUDSTONE/IN	ITERFLOW SED		W1120095	103.6	104.3	0.7	44	82	5	0	15			
		Thinly bedded, <1cm, light	to dark grey, c	herty mudstone with 10-	W1120096	104.3	105	0.7	47	390	10	0	10			
		25% remobilised Py-Po filli	ing fractures, br	reccia veins, etc.												
105.0	110.5	SILTSTONE. Turbiditic														
		Thinly bedded. 1-10mm. d	ark grev to off-	white rhythmic lavers.												
		possibly turbiditic. Consist	s of ~10-15% f.g	. biotite, rest is f.g. Qtz-Fd.												
		Minor hydrothermal garne	et formation. Ur	oper contact (UC) grades	-											
		into mudstone, Lower Con	, tact (LC) gradat	ional over 1-2m. Bedding &												
		foliation 62° at 106m. 20cr	m of F2 folds at	107m, axis at 45 dca,												
		indicates east side moved	dicates east side moved up.													
110.5	135.7	GARNET-BIOTITE-QUARTZ	-FELDSPAR +/-	STAUROLITE SCHIST												
		Variable unit but overall it	is light grey wit	h a f.g. matrix of 10-15%												
		bio, rest Qtz-Fd, and ~50%	, rest Qtz-Fd, and ~50% of it has intervals of 10-20% f.g													

COMPANY:	Romi	os Gold Resources Inc.	LOCATION:	Akow Lake Property	LOGGE	D BY:		J. Biczo	k, P.Geo	-	н	IOLE N	0.		RGR-1	6-2
FROM	то	LITHO	DLOGICAL DESC	RIPTION	Sample	From (m)	To (m)	Length	Au ppb	Cu ppm	% Py	% Ср	% Po	% Asp	Gar-Bio Alt'n	Qtz Vn/ flooding
		anhedral staurolite, and 1/	/2 has 10-20% n	nedium to coarse-grained												
		garnets 3-8mm. Sericite lo	cally <bio. td="" well<=""><td>foliated, often wavy with</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></bio.>	foliated, often wavy with												
		minor folds. Non-mag, no	sulphides. Lowe	er 2m is more of an arenite.												
		LC marked by 15cm bio rea	action zone. Fol	iation: 67° @ 112m, 54° @												
135.7	144.8	BASALT														
		Typical basalt for this area	, medium greer	a, f.g., mod foliated with												
		60:40 amph:plag. Weak-m	od bio'n along f	foliation. Minor Cc veins, no												
		qtz. 10cm Fd Porph dyke a	t 137.8m. LC is	sharp with porph dyke, UC is												
		15cm reaction zone.														
			· -													
144.8	145.7															
		Typical Fd porph dyke for t	this area with 2	0-30% seriate porphyritic Fd												
		phenos up to a few mm in	nos up to a few mm in f.g. groundmass of Qtz-Fd, only mino al moderate strain zones.													
		Local moderate strain zone	cal moderate strain zones.													
145.7	151.7	UI TRAMAFIC (SERPENTIN	ITF)													
14317	1911/	Upper and lower 50cm are	e green, amorph	ous serpentinite that												
		grades into a core of grey.	talcose schist t	hat is moderately distorted												
		and strained.														
151.7	269.6	STAUROLITE ARENITE/SIL	TSTONE													
		F.g., light grey to locally br	own (due to sta	aur) fairly siliceous												
		metasediment composed of	of 5-15% biotite	e, 5-20% anhedral staurolite,												
		in a siliceous matrix. Staur	olite locally up t	to 35%, giving a brown												
		colour, e.g. @156m. Locall	y sericite rich, p	prob felsic ash tuff layers?,												
		<1/2m. Generally only a va	gue, diffuse be	dding/layering. Local												
		pervasive f.g green amph	alt'n with mind	or garnets (common alt'n in												
		local metaseds). Numerou	s intervals look	more "c.g." due to hi %, 20-												
		50%, of vague Fd aggregat	es/ porphyrobla	asts, e.g. 192-196m, 219-												
		230m. Lower contact grad	es over 1m into	sericite schist. FOLIATION:												
		43°	Pag	e 3 of 10												

COMPANY:	Romi	os Gold Resources Inc.	LOCATION:	Akow Lake Property	LOGGE	D BY:		J. Biczo	k, P.Geo	-	Н	IOLE N	о.		RGR-1	6-2
FROM	то	LITHC	LOGICAL DESC	RIPTION	Sample	From (m)	To (m)	Length	Au ppb	Cu ppm	% Ру	% Ср	% Po	% Asp	Gar-Bio Alt'n	Qtz Vn/ flooding
		@190, 45° @ 198m to 222	m, 46° @ 219-2	230m.												
		<u>191-200m</u> : 3% garnets.														
		201-205m: Sericite schist.														
269.6	276.0	SERICITE SCHIST (FELSIC A	SH TUFF?)													
		Off-white, well foliated to	schistose unit c	composed largely of med to												
		c.g. sericite, ~30-40%, rest	is very f.g. Qtz-	Fd and 1-2% pale, anhedral												
		garnets to 7mm. Lower co	ntact contains	ocal syngenetic pyrite layers												
		<1cm, <1% overall. LC grad	lational over 1-	2m, FOLIATION: 46° @272,												
		276m.														
276.0	280.9	STAUROLITE-GARNET-SER	ICITE SCHIST (S	SILTSTONE)												
		Light grey, well foliated to	schistose unit v	with vague layering and												
		patches of med to c.g. Fd p	porphyroblasts	(?) as before. 0-5% anhedral												
		garnets up to 8mm, 5-10%	f.g. staurolite.													
280.9	283.2	QUARTZ VEIN														
		White qtz vein(s) with 10%	6 diffuse red pa	tches to 3cm and 2-3% Py	W1120097	280.9	281.8	0.9	14	66	1	0	0	0		60%
		blebs and fracture fillings.	From 281.8 to	282.7m is one continuous	W1120098	281.8	282.7	0.9	17	90	2	0	0	0		95%
		vein followed by 2 smaller	veins to 283.2	making up 60% of core.	W1120099	282.7	283.2	0.5	6	42	0.01	0	0	0		60%
283.2	293.5															
		variable section of light to	medium grey,	weil banded to non-banded												
		metasediment with <5 to 3	30% biotite, 0-2	20% fine to m.g. staurolite, 2-												
		3% garnets, minor sericite,	, rest is f.g. Qtz-	+d. Local prominent bands												
		ot 20-30% med-c.g. stauro	lite in a white,	siliceous matrix. Minor Py												
		seams. FOLIATION: 51°@	288m.													
202 5	205.0	ΡΛΕΛΙΤ														
293.5	295.9	Another typical basalt for t	this area modi	im groop fig modificited	-							<u> </u>				ļ
		with CO.40 amphabala Ma	uns area, mean	ani green, i.g., mou ionated												ļ
		Twith 60:40 amph:plag. We	<u>ak-mou dio n, «</u>	LU-15%, along Par	e 4 of 10											

COMPANY:	Romi	os Gold Resources Inc.	LOCATION:	Akow Lake Property	LOGGE	D BY:		J. Biczo	k, P.Geo	-	Н	IOLE N	0.		RGR-1	6-2
FROM	то	LITHC	DLOGICAL DESC	RIPTION	Sample	From (m)	To (m)	Length	Au ppb	Cu ppm	% Ру	% Ср	% Po	% Asp	Gar-Bio Alt'n	Qtz Vn/ flooding
		foliation. Contacts sharp b	out ~irregular.													
295.9	316.5	SERICITE-(BIOTITE) +/- GA	RNET QUARTZ	FELDSPAR SCHIST												
		Well banded in light to me	edium grey colo	urs, bands ~1-2cm thick, due												
		to variation in sericite vs b	iotite %. Light l	ayers composed of 30-40%												
		sericite, rest mainly qtz-fd	. Darker layers													
		are 20-30% bio, rest mainl	y qtz-fd. ~1/2 h	as 1-2% med-c.g. garnets.												
		Layers may have been alte	ernating silty an	d arenitic (or felsic ash)												
		layers. FOLIATION: 55° @2	298m, 46° @ 30	4m, 47° @ 315m												
		<u>310.8-311.0m</u> : Bed of syng	genetic pyrite-p	yrrhotite in mudstone.	W1120101	310.8	311.1	0.3	265	2380	15		20	0	0	0
316.5	339.3	GARNET-BIOTITE-STAURO	DLITE QUARTZ-F	ELDSPAR +/- SERICITE SCHIS	W1120102	321.1	321.6	0.5	126	814	0.01	0.01	0	0	5	5
		Fairly heterogeneous unit,	ly heterogeneous unit, generally well foliated, non-banded				322.6	1.0	45	686	0.01	0.01	0	0	1	0
		composed of 30% fine to r	nposed of 30% fine to m.g. biotite, 10-20% f.g. anhedral stat				323.8	1.2	6	185	0	0	0	0	5	0
		(locally to 40%), rest main	cally to 40%), rest mainly Qtz-Fd. Spotted with 3-5% medium				324.8	1.0	22	942	0.01	0.1	0	0	2	1
		very c.g. garnets up to 1.5	cm; most garne	ets look metamorphic but	W1120106	324.8	325.8	1.0	7	419	0.01	0	0	0	1	0
		there are some local hydro	othermal garne <sup>.</sup>	t-biotite veins, e.g.												
		@322.2m, spectacular 20c	cm vein of 40%	garnets to 3cm in massive	W1120107	327.2	328.2	1.0	1330	2570	0.3	0.6	0	0	1	1
		biotite with 15cm qtz flood	ded margin. In s	spite of this locally strong	W1120108	328.2	328.6	0.4	160	1600	0.01	0.2	0	0	1	0
		alteration chalcopyrite and	d pyrrhotite cor	ntents are low, only a few												
		narrow bands <2cm with ເ	up to 10% sulph	ides and minor fracture	W1120109	331.6	332.3	0.7	47	745	0.1	0	0	0	0	1
		filling Cp in some of the ga	rnets. Upper co	ontact gradational over	W1120111	332.3	332.8	0.5	169	3310	0.1	0.2	0.3	0	2	2
		50cm. Lower few metres is	s more of a typi	cal siltstone with minor gar-												
		bio-staur alteration. FOLIA	ATION: 46 @ 32	0, 323 and 336m.												
			_													
339.3	343.8	ULTRAMAFIC DYKE/SILL									<u> </u>	<u> </u>				
		Very homogeneous, light-	med green, ver	y f.g. ultramafic composed of												
		serpentine (coats every fra	acture plane) bi	ut still fairly hard so probably												
		some original pyx, etc. Cor	ntacts // to folia	ition, no reaction margins.												
				Pag	e 5 of 10											

COMPANY:	Romi	os Gold Resources Inc.	LOCATION:	Akow Lake Property	LOGGE	D BY:		J. Biczol	k, P.Geo	•	н	OLE N	Э.		RGR-1	6-2
FROM	то	LITHO	LOGICAL DESC	RIPTION	Sample	From (m)	To (m)	Length	Au ppb	Cu ppm	% Py	% Ср	% Po	% Asp	Gar-Bio Alt'n	Qtz Vn/ flooding
343.8	349.2	SILTSTONE			W11200254	343.2	344.1	0.9	71	606	0	0.1	0	0.05		
		Light grey, generally non-b	anded metased	diment composed of ~30%	W11200255	344.1	345.0	0.9	19	879	0	0.05	0	0		
		f.g. biotite, rest mainly Qtz	-Fd and trace g	arnets. One sericite schist												
		layer at 346.5m flanked by	syngenetic Pyr	ite-Pyrrhotite for a few cm.												
		FOLIATION: 59° @348m.														
															ļ]	
349.2	350.6	ULTRAMAFIC DYKE/SILL														
		As per ultramafic above. Sl	harp contacts, r	no reaction margins.									-			
250.0	250 5														┟────┦	
350.6	358.5	Light grov anon handed m	NE Notacodimont v	with 20, 20% fig biotite local											┟────┦	
		m g garnets un to 20% but	t typically 1-2%	Last 1m is much lighter and												
		more sericitic													iI	
			E SETICILIC.													
358.5	434.7	ARNET-BIOTITE-STAUROLITE QUARTZ-FELDSPAR SCHIST (SILTSTONE)		SPAR SCHIST (SILTSTONE)	W1120252	358.5	359.2	0.7	107	3040	0	0.3	0	0		
		Heterogeneous package of	f metasediment	ts but dominant unit is a	W1120253	359.2	360.0	0.8	12	423	0	0.1	0	0		
		medium to c.g., ~non-band	ded, well foliate	ed, ~hard and competent	W1120112	360.0	361.0	1.0	19	1300	0.05	0.05	0	0	5	1
		unit. It is composed of 10-2	20% c.g. <i>,</i> <1-2cı	n, subhedral garnets in a	W1120113	365.6	366.6	1.0	144	5330	0.05	0.5	0	0	3	0
		matrix of 20% m.g. staurol	ite, 20-30% f.g.	bio, rest mainly Qtz-Fd.	W1120114	366.6	367.3	0.7	58	3850	0	0.3	0	0	3	1
		Only minor local zones wit	h any sericite. T	This more c.g. unit is	W1120115	367.3	368.4	1.1	24	1710	0	0.2	0	0	1.5	0
		intercalated with a more s	tandard, largely	y unaltered siltstone and	W1120251	368.4	369.0	0.6	10	561	0	0.1	0	0	0.5	0
		finer grained versions of its	self. This associ	ation suggests that the c.g.	W1120116	369.0	369.9	0.9	22	942	0.05	0.05	0	0	0	0
		gar-staur-bio schists are a	hydrothermal a	lteration product of the	W1120117	369.9	370.2	0.3	22	864	0.05	0	0	0	0	20 cm QV
		siltstones. Cp-Po mineralis	ation is typicall	y in the most altered (c.g.	W1120118	370.2	371.0	0.8	43	1850	0	0.2	0	0	3	0
		garnets in massive biotite	+/- qtz flooding	) areas but some highly	W1120119	3/1.0	372.0	1.0	54	2090	0	0.3	0	0		0
		altered areas are barren to	oo. Mineralisati	on is again best developed	W1120121	372.0	3/3.0	1.0	95	2010	0	0.2	0	0	3	0
		in the vicinity of the basalt	the vicinity of the basalt and/or ultramafic dykes/sills. 5 cm band		W1120122	373.0	374.0	1.0	122	1/80	0.05	0.2	0	0	3	0
		folded sulphides at 379.8m	olded sulphides at 379.8m suggests mineralisation is pre- to early		W1120123	374.0	375.0	1.0	36	1490	0.05	0.5	0	0	2	0
		tectonic. FOLIATION: 47°	@ 354m, 62°@	361.5m, 66° @ 374m, 70° @	**1120124	373.0	370.0	1.0	50	1750			0			•
		378m. Erratic foliation sug	gests this interv	val may be sheared as well.												
		+	. Erratic foliation suggests this interval may be sheared													

COMPANY:	Romi	os Gold Resources Inc.	LOCATION:	Akow Lake Property	LOGGE	D BY:		J. Biczol	k, P.Geo	).	н	OLE N	<b>D</b> .		RGR-1	6-2
FROM	то	LITHO	LOGICAL DESC	RIPTION	Sample	From (m)	To (m)	Length	Au ppb	Cu ppm	% Py	% Ср	% Po	% Asp	Gar-Bio Alt'n	Qtz Vn/ flooding
		From ~399m onwards the	unit is lighter c	oloured with more sericite	W1120125	376.0	377.1	1.1	148	2340	0.05	0.4	0.05	0	1	0
		and less bio. Still scattered	l veins/bands of	f intense c.g. garnet-massive	W1120126	377.1	377.8	0.7	41	1250	0	0.2	0	0	1	0
		Bio and Qtz alteration, ger	nerally <5cm wi	de,	W1120127	377.8	378.55	0.8	11	452	0	0.05	0	0	1	0
		spaced every 1-2m, plus m	any small diffu	se patches of c.g. gar +/-	W1120128	378.55	379.45	0.9	36	1510	0	0.2	0	0	1	0
		silicification but now less C	Cp overall, less t	hin seams of Cp along	W1120129	379.45	379.65	0.2	10	137	0	0	0	0	0	15 cm QV
		foliation and less in the alt	eration veins. S	ome massive bio-gar veins	W1120131	379.65	379.95	0.3	604	13100	0.05	0.7	0.5	0	3	0
		have 5-10 % chlorite + seri	cite books. Froi	m 410 to 429m there are	W1120132	389.3	390.0	0.7	20	1290	0.05	0.3	0	0	3	3
		fewer alteration veins and	thev are <5cm	but still see numerous	W1120133	390.0	391.0	1.0	7	138	0.05	0.05	0	0	1	0
		intervals <1m wide with ve	erv thin seams o	of Cp along the foliation.	W1120134	397.1	398.1	1.0	27	1950	0		0	0	5	0
		Picked the best portions fo	or sampling		W1120135	398.1	399.0	0.9	6	95	0		0	0	1	0
		FOLIATION: 62° @ 394m, 61	°@ 410m, 63°@	420m, 68° @ 432m, 62° @	W1120136	399.0	400.0	1.0	2.5	579	0		0	0	1	0
		443m.			W1120137	400.0	401.0	1.0	63	1850	0		0	0	3	0
		<u>393-396m:</u> trace Py, rare A	sp and Py.		W1120138	402.0	403.0	1.0	49	1280	0.05	0.2	0	0	3	2
		432.3-432.5m: Ultramafic	amphibolite dy	ke composed of >90%	W1120139	403.0	404.1	1.1	55	1120	0.05	0.5	0	0	2	1
		amphibole, cut by several	d fractures <1cm wide.	W1120141	410.1	411.0	0.9	170	1960	0	0.3	0	0	1	1	
				W1120142	411.0	411.7	0.7	23	119	0	0	0	0	0.05	1	
				W1120143	411.7	412.3	0.6	86	2260	0	0.4	0	0	3	1	
					W1120144	414.4	415.4	1.0	56	1770	0	0.2	0.05	0	1	0
					W1120145	415.4	415.85	0.5	62	1120	0	0.1	0	0	0	8 cm QV
					W1120146	417.0	417.7	0.7	53	1130	0	0.2	0	0	1	0
					W1120147	417.7	418.7	1.0	17	1030	0	0.05	0	0	1	0
					W1120148	418.7	419.4	0.7	19	1120	0	0.1	0	0	1	0
					W1120149	419.4	420.0	0.6	7	133	0	0	0	0	0	5 cm QV
					W1120151	420.0	420.7	0.7	9	531	0	0.4	0	0	3	1
					W1120152	420.7	421.8	1.1	14	247	0	0	0	0	0	0
					W1120153	421.8	422.8	1.0	204	1540	0.05	0.3	0	0.05	0	0
					W1120154	422.8	423.7	0.9	15	421	0	0.2	0	0	1	0
					W1120155	423.7	424.8	1.1	17	229	0	0.05	0	0.5	1	3 cm QV
					W1120156	424.8	425.9	1.1	31	464	0	0.1	0	0	1	0
				W1120157	425.9	426.6	0.7	139	861	0	0.1	0	0.3	1	0	
					W1120158	426.6	427.4	0.8	110	681	0	0.1	0	0	0.5	0
			Pas	w1120159	427.4	428.0	0.6	588	2190	0	1.0	0	0.1	4	1	

COMPANY:	Romi	os Gold Resources Inc.	LOCATION:	Akow Lake Property	LOGGE	D BY:		J. Biczol	k, P.Geo	-	н	IOLE No	э.		RGR-1	6-2
FROM	то	LITHO	LOGICAL DESC	RIPTION	Sample	From (m)	To (m)	Length	Au ppb	Cu ppm	% Py	% Ср	% Po	% Asp	Gar-Bio Alt'n	Qtz Vn/ flooding
					W1120161	428.0	428.9	0.9	45	676	0	0.1	0	0.1	2	1
					W1120162	433.1	434.1	1.0	32	585	0.05	0.05	0	0	1	0
					W1120163	434.1	434.7	0.6	23	150	0	0	0	0	0	0
434.7	437.65	TOURMALINITE EXHALITE	(?) with Cp-Po	-Asp												
		Very unusual unit. General	lly a white, f.g.,	siliceous, moderately												
		schistose matrix with ~30%	℅ streaky, disco	ntinuous (sheared out) black												
		layers ~0.5cm thick compo	sed of a hard,	very f.g. black mineral,												
		presumably tourmaline. W	/ithin this are 4	massive tourmalinite												
		veins/bands 5-20cm wide	containing 10-4	0% biotite, +/- chlorite. Also												
		has variable % of Asp throu	ughout, up to 1	0%/few cm. (Boron assays												
		indicate hi % of tourmaline														
		<u>434.7-435.0:</u> Several qtz ve	eins 2-10cm wit	h tourmaline rich bands 2-	W1120164	434.7	435.0	0.3	430	1350	0	0	0	10	1	5
		5cm. 4 cm of semi-massive	e c.g. Asp; 2-3%	Asp and minor Cp-Py	W1120165	435.0	435.9	0.9	100	2040	0.05	0.3	0	1	0	0
		nroughout.														
		<u>435.9-436.3:</u> Largest tourn	naline-sulphide	zone, 20 cm of massive	W1120166	435.9	436.3	0.4	278	13200	0	5	0	0.2	0	0
		tourmaline. 5% chalcopyri	te, 15% patchy	silica, 10% garnets up to												
		1cm. 29 ppm Ag and 0.57%	6 Boron.													
		<u>436.3-436.7:</u> typical streak	y black tourma	linite layers in white matrix,	W1120167	436.3	437.0	0.7	194	6200	0	0.2	0	0	0	0
		+ 5cm tourmalinite vein wi	ith 5mm margiı	ns of Po and minor Cp. 15.6												
		ppm Ag and 0.71% Boron.														
		<u>437.0-437.65:</u> as above wit	th 7cm tourma	inite vein, scattered blebs of	W1120168	437.0	437.7	0.6	259	8420	0	0	0	1	0	0
		Cp <1cm. 23 ppm Ag and 0	).49% Boron.													
437.65	441.75	SERICITE-GARNET-(STAUROLITE)-QUARTZ-FELDSPAR SCHIST (+ tourmalir spots)		LDSPAR SCHIST (+ tourmaline												
		Gradational over 1/2m from the matrix of unit above into this unit.		funit above into this unit.												
		Light grey, well foliated, no	on-banded unit	with a matrix of ~30% f.g.	W1120169	437.65	438.6	1.0	26	918	0	0	0	0	0	0
		sericite, rest mainly Qtz-Fo	l with minor bi	otite, <5% f.g. staurolite,	W1120171	438.6	439.6	1.0	14	191	0	0	0	0	0	0
		and <0.5% black spots 1-2r	mm presumed	to be tourmaline.	W1120172	439.6	440.6	1.0	9	137	0	0	0	0	0	0
		Overprinted by 10-20% pa	le pink garnet p	orphyroblasts up to 8mm.	W1120173	440.6	441.0	0.4	12	780	0	0	0	0	0	0
			Pas	e 8 of 10												

COMPANY:	Romi	os Gold Resources Inc.	LOCATION:	Akow Lake Property	LOGGE	D BY:		J. Biczo	k, P.Geo	).	F	IOLE N	0.		RGR-1	6-2
FROM	то	LITHO	LOGICAL DESC	RIPTION	Sample	From (m)	To (m)	Length	Au ppb	Cu ppm	% Py	% Ср	% Po	% Asp	Gar-Bio Alt'n	Qtz Vn/ flooding
		441.0-441.25m: Massive b	lack Tourmaline	e-Garnet vein as before with	W1120174	441.0	441.25	0.3	186	5900	0	3	0	0	0	0
		~3% chalcopyrite blebs and	d layers of pure	sericite containing 3%	W1120175	441.25	441.75	0.5	46	500	0	0	0	0	0	0
		staurolite crystals up to 3n	nm.													
441.75	442.05	BASALT DYKE/SILL														
		Medium green, moderatel	y foliated basal	t composed of ~60:40												
		amph:plag. No visible alter	ration. Sharp co	ntacts at 65 dca.												
442.05	449.4	STAUROLITE-BIOTITE-GARNE	ET-QUARTZ-FELD	SPAR-(SERICITE) SCHIST												
		Grades into schist above o	ver 1/2m. Cons	ists of ~20% bio, 20-30% f.g.												
		staur, in a siliceous matrix	spotted with 5-	10% anhedral garnets up to												
		1cm. Minor local sericite ri	ich layers. Trace	e Pyrite from 444-448m but												
		only rare Cp specks. Lower	contact straine	ed and qtz veined.												
		FOLIATION: 47° @ 449m.	<u>TION: 47° @ 449m.</u> <u>m</u> : Ptygmatic quartz vein.													
		<u>447.0m</u> : Ptygmatic quartz	<u>Om</u> : Ptygmatic quartz vein.													
		-														
449.4	457.0	BASALT SILL/ DYKE														
		Homogeneous, medium gr	ey-green, f.g., ı	moderately foliated												
		basalt, ~60:40 amph:plag.	Contacts obscu	red by shearing and qtz												
		veining for 10-20cm.														
457.0	495.1	SERICITE-STAUROLITE-GARN	ET-BIOTITE- QU	ARTZ-FELDSPAR SCHIST												
		Another heterogeneous m	ixed package o	f locally altered												
		metasediments, possibly w	vith local felsic	volcanic input (now sericite												
		rich schists). Composed pro	edominantly of	~20-30% sericite, 10% f.g.												
		staurolite, 5-10% fine to c.	g. anhedral gar	nets and variable % of												
		biotite from 0 to 20%. Rest	otite from 0 to 20%. Rest is f.g. Qtz-Fd. Biotite locally >sericite, s													
		intervals with >50% Ser. FC	DLIATION: 68° @	፬ 477m, 58° @ 482m.												
		458.1-458.5m: Biotite alter	red area (T.W>	~10cm) with diffuse qtz	W1120176	457.0	458.1	1.1	14	232	0	0	0	0	0	0
		flooding and 2 Cp>Po veins	s/networks. Clo	se to basalt sill.	W1120177	458.1	458.5	0.4	109	6510	0	5	2		4	3
		458.5-483m: Trace Py, Po,	Asp only, typica	Illy in very thin seams	w1120178 e 9 of 10	458.5	459.5	1.0	13	279	0	0.01	0	0	0.05	0

COMPANY:	Romi	os Gold Resources Inc.	LOCATION:	Akow Lake Property	LOGGE	D BY:		J. Biczo	k, P.Geo		н	OLE N	0.		RGR-1	6-2
FROM	то	LITHO	LOGICAL DESC	RIPTION	Sample	From (m)	To (m)	Length	Au ppb	Cu ppm	% Py	% Ср	% Po	% Asp	Gar-Bio Alt'n	Qtz Vn/ flooding
		along foliation planes, ~1-2	2m apart with c	only rare sulphide grains in												
		between. Max is 2-3% Po o	or Py over 7cm	but no Cp visible.												
		<u>483-488m: </u> More numerou	ıs thin, 1-3cm, g	gar-bio-qtz alteration zones	W1120179	484.2	485.0	0.8	35	273	0	0	0.3	0	2	2 cm QV
		every 20-30cm with minor	Asp crystals to	3mm. Scattered Po seams 3-	W1120181	485.0	486.0	1.0	78	94	0.05	0	0.2	0	2	3 cm QV
		5mm wide and trace Py. B	est portions sar	npled.	W1120182	486.0	487.1	1.1	85	79	0	0	0.1	0.03	1	0
					W1120183	487.1	488.00	0.9	48	102	0	0	0	0	0	0
		<u>490.1-495.1m:</u> 0.5% Magn	etite x'ls 1-2mn	n dissem'd in the schist.												
495.1	528.0	SERICITE-QUARTZ-FELDSP	AR SCHIST with	n Py (Felsic Tuff)	W1120184	495.5	496.00	0.5	80	440	0	0	0	0	0	0
		Very similar to the "felsic v	similar to the "felsic wedge" structurally overlying the			496.0	496.30	0.3	110	571	0	0	0	0	0	0
		Musselwhite BIF. Consists	of ~30% fine to	m.g. sericite, rest is mainly												
		Qtz-Fd with variable % of t	pedded syngene	etic Pyrite and Pyrrhotite.												
		Max concentrations are up	o to 20%-30% P	y-(Po) over 10-20cm, ~1-2%												
		Py overall. No visible hydro	othermal altera	tion and only a few thin qtz												
		veins.				REFLEX	TESTS									
		FOLIATION: 58° @ 516m,	62° @ 518m.			DEPTH	DIP									
						21	-57									
	528.0		END OF HOLE			120	-54.7									
						210	-52.3									
		Core stored in cross piles	near old camp	site and hole RGR-16-001 on		312	-48.1									
		SW shore of Akow I	tored in cross piles near old camp site and hole RGR-16- SW shore of Akow Lake. 670219 E, 5850251 N (NAD 83)				-44.3									

DIAMOND DRILL LOG																		
COMPANY: Romios Gold Resources Inc. LOCATION: Akow Lake Prop					perty		LOGGED BY:		J. Bi	czok, P.(	Geo.	HOLE No.			5-3			
DRILL CONTRACTOR: Orbit Garant UTM		UTM (NAD 83)		669552E,	52E, 5850043N			GRID CO-ORDS			9+00	)S, 2+07E			AZIMUTH		252	
CORE STORED AT: Ak		Akow Lake, SW shore	FINAL DEPTH:	399m	CORE SIZE	STARTED:		Sept. 22, 2016		FINISHED:		Sept. 26, 2016			COLLAR DIP		-45	
FROM	то	TO LITHOLOGICAL DESCRIPTION				Sample	From (m)	To (m)	Length	Au ppb	Cu ppm	% Py	% Ср	% Po	% Asp	Gar-Bio Alt'n	Qtz Vn/ flooding	
0.0	15.0 CASING																	
	Overburden.																	
15.0	15.0 90.3 INTERMEDIATE TO FELSIC VOLCANIC FLOWS																	
	Core is badly broken to 23m and intermittently to 38m. Generally a																	
	~homogeneous, light grey, ~hard, brittle and massive unit with no																	
	layering and a weak to mod foliation. Quite f.g., almost amorphous,																	
	and hard to see mineralogy but mainly Qtz-Fd and only minor																	
	amphibole; overprinted locally by a weak biotite alteration. 1-2%																	
	white spots composed of qtz and white mica, 3-7mm wide,																	
	throughout. Look like ~deformed amygdules but some line up along fractures. Unit appears to be a dacite or rhyodacite. FOLIATION: 48°																	
	@ 32m, @ 38m, 53° @ 23m, 62° @ 38, 54 and 61m.																	
	<u>66-69m</u> : Possible tuff layer with scattered thin, <6mm, layers of syngenetic Pyrite at 68m.																	
90.3	96.0	INTERFLOW SEDIMENT	S/SILTSTONE															
		Light beige-grey, well for	oliated, f.g. met	asedimen	nt, fairly													
		homogeneous with littl	e or no bedding	g or other	banding. Cons	sists of												
		15-20% biotite, rest is v	very f.g Qtz-Fd	mainly. N	/linor, f.g gree	en												
	amph alteration veins <1cm and 2 thin pyritic layers, <6mm, within a																	
couple of thin sericite schist lavers (felsic ash tuff?) 1-2 cm thick.																		
								ļ				ļ						
96.0	108.0	INTERMEDIATE TO FEL	SIC VOLCANIC F	LOWS (D	acite)								ļ					
		As before, a very f.g.	Dacite. Hard un	it, slightly	lighter colour	than							ļ					
	before. Possible Fd phenos visible locally. Lower Contact																	

COMPANY:	Romic	Romios Gold Resources Inc.		Akow Lake Prop	Akow Lake Property		LOGGED BY:		J. Biczok, P.Geo.			HOLE No.		RGR-16-3		
FROM	то	LITHOLOGICAL DESCRIPTION		Sample	From (m)	To (m)	Length	Au ppb	Cu ppm	% Py	% Ср	% Po	% Asp	Gar-Bio Alt'n	Qtz Vn/ flooding	
		obscured by 5cm Qtz vein. Dacite composition confirmed by whole														
		rock analysis, sample W														
108.0	117.0	FELSIC ASH-(CRYSTAL) TUFF														
		Fairly homogeneous unit, pale grey, fairly hard and siliceous.														
		_Composed largely of very f.g. Qtz-Fd with 10-15% f.g. biotite.														
		Mineralogy suggests dacite or rhyodacite. Moderate foliation. Local														
		clusters of green amph+bio alteration veinlets. FOLIATION: 52°														
		116.0-116.3m: Interesting area of white bleaching 30cm wide laced														
		with 10-15% angular fractures, 2-8mm wide, filled with massive														
		biotite.														
117.0	129.7															
117.0	120.7	As per 96-108m LC sharp at 60° but also interfingered at 129m														
128.7	133.3	METAPELITE/SILTSTONE														
		Medium to dark grey-b	rown unit, fairl	/ homogeneous, well foliated												
		but little or no primary bedding. Composed of 20-30% f.g. biotite in a														
		very f.g. Qtz-Fd matrix. Overprinted locally by pale green amphibole														
		alteration bands and streaks 1cm wide (common in metasediments														
		in this region). LC obscured by 20 cm Qtz vein. FOLIATION: 63 deg at														
		133m.														
133.5	137.5	FELSIC ASH TUFF														
		Light grey, very f.g. silic	eous unit with	streaky white banding due to												
		sericitization in high strain zones. Composed largely of very fine-														
		grained Quartz and Feldspar, only minor sericite and biotite overall														
		and Trace disseminated Pyrite. Locally up to 1% feldspar crystals														
		<1mm.														

COMPANY:	Romic	Romios Gold Resources Inc. LOCATION: Akow Lake J		Akow Lake Prop	operty		LOGGED BY:		J. Biczok, P.Geo.			HOLE No.		RGR-16-3		
FROM	то	LITHOLOGICAL DESCRIPTION				From (m)	To (m)	Length	Au ppb	Cu ppm	% Ру	% Ср	% Po	% Asp	Gar-Bio Alt'n	Qtz Vn/ flooding
137.5	192.45	METAPELITE/SILTSTONE														
		As per 128.7-133.5m. 3														
		matrix of Qtz-Fd. Minor														
		garnets. Local felsic volo														
		dissem'd Py, primarily between 154-155m. LC gradational over														
		20cm. FOLIATION: 68 deg at 138, 146m.														
		141.9-143.0m: Serpentinised ultramafic. Rather bright green in														
		colour, ~schistose. Contacts sharp and // to foliation.														
		149.4-156.0: Sulphidic Sediments. 6 beds, 30-80cm thick, of light				149.4	149.7	0.3	11	41	5	0	0	0		
		grey, f.g. metasediments composed of sericite-qtz-feldspar-biotite, rather soft with ~well developed bedded syngenetic Pyrite and				150.9	151.7	0.8	6	43	2	0	0	0		
						153.7	154.25	0.6	55	180	8	0	0	0		
		minor Pyrrhotite. Each Py rich layer typically 10-20cm. Sampled the				154.25	154.65	0.4	13	31	1.5	0	0	0		50%
		best ones. 30cm qtz vein at 154.5m. Minor late shear zones <1-2m														
		wide, with 10-20% calci	ite veinlets.													
		<u>171.25-171.7m</u> : 2-3 Arsenopyrite-Quartz veins, <1cm, with c.g. Asp				171.25	171.7	0.4	1080	NA				2.5		
		crystal rich margins up t	to 3-4mm and <i>i</i>	Asp veinlets. 2-3% Asp overall.												
192.45	196.4	FELDSPAR PORPHYRY D	DYKE													
		As per previous dykes; o	only minor stra	ned/sericitized intervals.												
196.4	217.5	BASALI														
		Medium green-grey, f.g	g., moderately f	oliated basalt with up to 10%												
		thin calcite veinlets ove	er 2-3m and // t	o foliation in sheared												
		intervals. Local pillow selvages <1cm wide (composed m.g. dark														
		amph and biotite).														
	224.0															
217.5	221.8		S (SILISIONE)													
		Well foliated siltstone w	vith 20-30% f.g.	biotite, rest Qtz-Fd mainly.												
		No real bedding except for the lowermost 20cm which is														
Romic	s Gold Resources Inc.	LOCATION:	Akow Lake Pro	perty		LOGG	ED BY:	J. Bi	czok, P.(	Geo.	HOLE	E No.		RGR-16	5-3	
--------	---	---	--	--	--	---	--	---	---	---	---	---	--	---	---	
то	LITI	HOLOGICAL DE	SCRIPTION	Sample	From (m)	To (m)	Length	Au ppb	Cu ppm	% Ру	% Ср	% Po	% Asp	Gar-Bio Alt'n	Qtz Vn/ flooding	
	more pelitic and has 5%	6 m.g. garnets.	Trace disseminated Py.													
	FOLIATION: 65° @ 218n	n.														
264.0	BASALT															
	As per previous basalt.	Scattered qtz v	eins <20cm wide, no													
	significant alteration vis	sible. FOLIATIO	N: 63° @ 234m, 257m.													
	<u>230.25-230.8m</u> : 3 qtz ve	eins up to 20cm	n wide forming 80% of this	W1120192	230.25	230.8	0.6	< 5	NA	0.05	0	0.2				
	interval.															
267.45	FELDSPAR PORPHYRY D	DYKE														
	Same as previous FP dy	kes here and th	iose at Musselwhite (which													
	have been shown to cro	oss-cut stratigra	aphy). Contains 15-													
	20% seriate porphyritic	Fa prenos up 1	o 3mm in a nard, light grey													
	groundmass of very f.g.	Qtz-Fd. Contac	ts sharp and // to rollation.													
					1											
270.3	BASALT															
	As before. Medium green	basalt with ~20-	30% visible f.g. feldspar.													
277.7	FELDSPAR PORPHYRY D	DYKE														
	As per previous FP dyke	es. Pervasive we	eak foliation at 65 dca. 3 qtz													
	veins up to 6cm. Local r	ninor Py-Po.														
	<u>273.1-273.52m:</u> 2 irregu	ular, boudinage	d qtz veins up to 6cm. <1% Po	W1120193	273.1	273.5	0.4	<5	28	0.05	0	0.2	0		20%	
	along edge of one vein,	in wallrock sliv	ers. Tr Py.													
294.5	BASALT															
	As perore, a moderately	y prignt green k	basait, f.g., moderately foliated													
	but only minor bio'n. Co	omposed largel	y of f.g. amphibole and ~20%													
	visible telospar. Several	intertiow sedir	nentary layers composed of													
	meta-sitistone or pelite	consisting of 2	0-30% biotite, 1-2% fine to c.g.	•												
	Romio TO 264.0 264.0 267.45 277.7 277.7 2794.5	Romios Gold Resources Inc.TOLITITOLITImore pelitic and has 5%FOLIATION: 65°@ 218rFOLIATION: 65°@ 218r264.0BASALTAs per previous basalt. significant alteration vis230.25-230.8m: 3 qtz vi interval.230.25-230.8m: 3 qtz vi interval.267.45FELDSPAR PORPHYRY I Same as previous FP dy have been shown to cross 20% seriate porphyritic groundmass of very f.g.270.3BASALTAs before. Medium green As before. Medium green 273.1-273.52m: 2 irregi along edge of one vein, along edge of one vein, visible feldspar. Several meta-siltstone or pelite garnets in very f.g. mat	Romios Gold Resources Inc.       LOCATION:         TO       LITHOLOGICAL DES         more pelitic and has 5% m.g. garnets.       FOLIATION: 65° @ 218m.         Z64.0       BASALT         As per previous basalt. Scattered qtz versignificant alteration visible. FOLIATION         230.25-230.8m: 3 qtz veins up to 20cm interval.         Z67.45       FELDSPAR PORPHYRY DYKE         Same as previous FP dykes here and the have been shown to cross-cut stratigrate 20% seriate porphyritic Fd phenos up to groundmass of very f.g. Qtz-Fd. Contacted 20% seriate porphyritic Fd phenos up to groundmass of very f.g. Qtz-Fd. Contacted 20% seriate porphyritic Fd phenos up to groundmass of very f.g. Qtz-Fd. Contacted 20% seriate porphyritic Fd phenos up to groundmass of very f.g. Qtz-Fd. Contacted 20% seriate porphyritic Fd phenos up to groundmass of very f.g. Qtz-Fd. Contacted 20% seriate porphyritic Fd phenos up to groundmass of very f.g. Qtz-Fd. Contacted 20% seriate porphyritic Fd phenos up to groundmass of very f.g. Qtz-Fd. Contacted 20% seriate porphyritic Fd phenos up to 20% seriate porphyritic Fd phenos up	Romi>Gold Resources Inc.       LOCATION:       Akow Lake Prop         TO       LITHOLOGICAL DESCRIPTION         more pelitic and has 5% m.g. garnets. Trace disseminated Py.       FOLIATION: 65° @ 218m.         FOLIATION: 65° @ 218m.       FOLIATION: 65° @ 218m.         264.0       BASALT         As per previous basalt. Scattered qtz veins <20cm wide, no         significant alteration visible. FOLIATION: 63° @ 234m, 257m.         230.25-230.8m: 3 qtz veins up to 20cm wide forming 80% of this         interval.         interval.         Same as previous FP dykes here and those at Musselwhite (which have been shown to cross-cut stratigraphy). Contains 15-         20% seriate porphyritic Fd phenos up to 3mm in a hard, light grey groundmass of very f.g. Qtz-Fd. Contacts sharp and // to foliation.         270.3       BASALT         As before. Medium green basalt with ~20-30% visible f.g. feldspar.         277.7       FELDSPAR PORPHYRY DYKE         As per previous FP dykes. Pervasive weak foliation at 65 dca. 3 qtz         veins up to 6cm. Local minor Py-Po.         273.1-273.52m: 2 irregular, boudinaged qtz veins up to 6cm. <1% Po along edge of one vein, in wallrock slivers. Tr Py.         294.5       BASALT         As before, a moderately bright green basalt, f.g., moderately foliated but only minor bio'n. Composed largely of f.g. amphibole and ~20% visible feldspar. Several interflow sedimentary layers composed of meta-si	Romios Gold Resources Inc.       LOCATION:       Akow Lake Property         TO       LITHOLOGICAL DESCRIPTION       Sample         more pelitic and has 5% m.g. garnets. Trace disseminated Py.       []         FOLLATION: 65° @ 218m.       []         FOLLATION: 65° @ 218m.       []         As per previous basalt. Scattered qtz veins <20cm wide, no       []         significant alteration visible. FOLLATION: 63° @ 234m, 257m.       []         230.25-230.8m:       3 qtz veins up to 20cm wide forming 80% of this interval.       []         267.45       FELDSPAR PORPHYRY DYKE       []         Same as previous FP dykes here and those at Musselwhite (which have been shown to cross-cut stratigraphy). Contains 15-       []         20% seriate porphyritic Fd phenos up to 3mm in a hard, light grey groundmass of very f.g. Qtz-Fd. Contacts sharp and // to foliation.       []         270.3       BASALT       []         As before. Medium green basalt with ~20-30% visible f.g. feldspar.       []         277.7       FELDSPAR PORPHYRY DYKE       []         As per previous FP dykes. Pervasive weak foliation at 65 dca. 3 qtz       []         273.1-273.52m: 2 irregular, boudinaged qtz veins up to 6cm. <1% PO       []         273.1-273.52m: 2 irregular, boudinaged qtz veins up to 6cm. <1% PO       []         273.1-273.52m: 2 irregular, boudinaged qtz veins up to 6cm.	Romios Gold Resources Inc.       LOCATION:       Akow Lake Property         TO       LITHOLOGICAL DESCRIPTION       Sample       From (m)         more pelitic and has 5% m.g. garnets. Trace disseminated Py.       -       -         FOLIATION: 65°@ 218m.       I       -       -         264.0       BASALT       I       -       -         As per previous basalt. Scattered qtz veins <20cm wide, no       III       -       -         3ignificant alteration visible. FOLIATION: 63°@ 234m, 257m.       W1120192       230.25         230.25-230.8m: 3 qtz veins up to 20cm wide forming 80% of this interval.       W1120192       230.25         Same as previous FP dykes here and those at Musselwhite (which have been shown to cross-cut stratigraphy). Contains 15-       IIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIII	Romios Gold Resources Inc.LOCATION:Akow Lake PropertyL0GGTOLITHOLOGICAL DESCRIPTIONSampleFrom (m)To (m)more pelitic and has 5% m.g. garnets. Trace disseminated Py.IIFOLLATION: 65° @ 218III264.0BASALTIIIAs per previous basalt. Scattered qtz veins <20cm wide, no significant alteration visible. FOLIATION: 63° @ 234m, 257m.III230.25-230.8m: 3 qtz veins up to 20cm wide forming 80% of this interval.w1120192230.25230.80I230.25-230.8m: 3 qtz veins up to 20cm wide forming 80% of this interval.w1120192230.25230.80I267.45FELDSPAR PORPHYRY DYKEIIIIISame as previous FP dykes here and those at Musselwhite (which have been shown to cross-cut stratigraphy). Contains 15-IIII20% seriate porphyritic Fd phenos up to 3mm in a hard, light grey groundmass of very f.g. Qtz-Fd. Contacts sharp and // to foliation.IIII270.3BASALTIII <th>Romios Gold Resources Inc.     LOCATION:     Akow Lake Property     LOGGED BY:       TO     LITH-LOGICAL DESCRIPTION     Sample     From (m)     To (m)     length       more pelitic and has 5% m.g. garnets. Trace disseminated Py.     I     I     I     I       FOLIATION: 65° @ 218     I     I     I     I     I       Z640     BASALT     I     I     I     I     I       Significant alteration visible. FOLIATION: 63° @ 234m, 257m.     I     I     I     I       230.25-230.8m: 3 qtz veins up to 20cm wide forming 80% of this interval.     w112012     230.25     230.8     0.6       interval.     I     I     I     I     I     I     I       230.25-230.8m: 3 qtz veins up to 20cm wide forming 80% of this interval.     w112012     230.25     230.8     0.6       Interval.     I     I     I     I     I     I     I       267.45     FELDSPAR PORPHYRY DYKE     I     I     I     I     I       Same as previous FP dykes here and those at Musselwhite (which have been shown to cross-cut stratigraphy). Contains 15-     I     I     I     I       270.3     BASALT     I     I     I     I     I     I       270.3     BASALT     I</br></th> <th>Romios Gold Resources Inc.     LOCATION:     Akow Lake Property     LOGGED BY:     J. Bis       TO     LITHOLOGICAL DESCRIPTION     Sample     From (m)     Inc length     Au pph       more pelitic and has 5% m.g. garnets. Trace disseminated Py.     Image (m)     Image (m)<th>Romiss Gold Resources Inc.LOCATION:Akow Lake PropertyLOGGED BY:J. Bizzok, P. (TOUITHOLOGICAL DESCRIPTIONSampleFrom (m)To (m)LengthAu OppCu ppbDmore pelitic and has 5% m.g. garnets. Trace disseminated Py. FOLIATION: 65° @ 218II<!--</th--><th>Nomios Gold Resources Inc.LOCATION:Akow Lake PropertyLOGGED BY:J. Bitzok, P.G.:TOLITH-LOGICAL DESCRIPTIONSampleForm (m)To (m)Length (m)Au ppCu pp% Py ppmore pelitic and has 5% m.g. garnets. Trace disseminated Py. FOLIATION: 65° @ 218IC</th><th>Romios Gold Resources Inc.       LOCATION:       Akow Lake Property       LOGGED BY:       J. Biczok, P.Ge.       HOLL         TO       LITH-UGGIAL DESCRIPTION       Sample       from (m)       To (m)       lend       Au ppp       Qu ppm       No       No<th>Note     Note     Allow Lake Property     LOGGE DBY:     J. Biczok, J-G-O     HOLL No.       TO     UITHOLOGICAL DESCRIPTION     sample     more pelitic and has 5% mg, garnets. Trace disseminated Py.     image and transformed and transformed Py.     image and transformed Py.<th>Noise       Control (Carlon)       Advan Lake Property       LOGGED BY       J. Bit Zok, P.Geo.       HOLL No.       No.       No.      &lt;</th><th>Nome     Colume     Colume</th></th></th></th></th>	Romios Gold Resources Inc.     LOCATION:     Akow Lake Property     LOGGED BY:       TO     LITH-LOGICAL DESCRIPTION     Sample     From (m)     To (m)     length       more pelitic and has 5% m.g. garnets. Trace disseminated Py.     I     I     I     I       FOLIATION: 65° @ 218     I     I     I     I     I       Z640     BASALT     I     I     I     I     I       Significant alteration visible. FOLIATION: 63° @ 234m, 257m.     I     I     I     I       230.25-230.8m: 3 qtz veins up to 20cm wide forming 80% of this interval.     w112012     230.25     230.8     0.6       interval.     I     I     I     I     I     I     I       230.25-230.8m: 3 qtz veins up to 20cm wide forming 80% of this interval.     w112012     230.25     230.8     0.6       Interval.     I     I     I     I     I     I     I       267.45     FELDSPAR PORPHYRY DYKE     I     I     I     I     I       Same as previous FP dykes here and those at Musselwhite (which 	Romios Gold Resources Inc.     LOCATION:     Akow Lake Property     LOGGED BY:     J. Bis       TO     LITHOLOGICAL DESCRIPTION     Sample     From (m)     Inc length     Au pph       more pelitic and has 5% m.g. garnets. Trace disseminated Py.     Image (m)     Image (m) <th>Romiss Gold Resources Inc.LOCATION:Akow Lake PropertyLOGGED BY:J. Bizzok, P. (TOUITHOLOGICAL DESCRIPTIONSampleFrom (m)To (m)LengthAu OppCu ppbDmore pelitic and has 5% m.g. garnets. Trace disseminated Py. FOLIATION: 65° @ 218II<!--</th--><th>Nomios Gold Resources Inc.LOCATION:Akow Lake PropertyLOGGED BY:J. Bitzok, P.G.:TOLITH-LOGICAL DESCRIPTIONSampleForm (m)To (m)Length (m)Au ppCu pp% Py ppmore pelitic and has 5% m.g. garnets. Trace disseminated Py. FOLIATION: 65° @ 218IC</th><th>Romios Gold Resources Inc.       LOCATION:       Akow Lake Property       LOGGED BY:       J. Biczok, P.Ge.       HOLL         TO       LITH-UGGIAL DESCRIPTION       Sample       from (m)       To (m)       lend       Au ppp       Qu ppm       No       No<th>Note     Note     Allow Lake Property     LOGGE DBY:     J. Biczok, J-G-O     HOLL No.       TO     UITHOLOGICAL DESCRIPTION     sample     more pelitic and has 5% mg, garnets. Trace disseminated Py.     image and transformed and transformed Py.     image and transformed Py.<th>Noise       Control (Carlon)       Advan Lake Property       LOGGED BY       J. Bit Zok, P.Geo.       HOLL No.       No.       No.      &lt;</th><th>Nome     Colume     Colume</th></th></th></th>	Romiss Gold Resources Inc.LOCATION:Akow Lake PropertyLOGGED BY:J. Bizzok, P. (TOUITHOLOGICAL DESCRIPTIONSampleFrom (m)To (m)LengthAu OppCu ppbDmore pelitic and has 5% m.g. garnets. Trace disseminated Py. FOLIATION: 65° @ 218II </th <th>Nomios Gold Resources Inc.LOCATION:Akow Lake PropertyLOGGED BY:J. Bitzok, P.G.:TOLITH-LOGICAL DESCRIPTIONSampleForm (m)To (m)Length (m)Au ppCu pp% Py ppmore pelitic and has 5% m.g. garnets. Trace disseminated Py. FOLIATION: 65° @ 218IC</th> <th>Romios Gold Resources Inc.       LOCATION:       Akow Lake Property       LOGGED BY:       J. Biczok, P.Ge.       HOLL         TO       LITH-UGGIAL DESCRIPTION       Sample       from (m)       To (m)       lend       Au ppp       Qu ppm       No       No<th>Note     Note     Allow Lake Property     LOGGE DBY:     J. Biczok, J-G-O     HOLL No.       TO     UITHOLOGICAL DESCRIPTION     sample     more pelitic and has 5% mg, garnets. Trace disseminated Py.     image and transformed and transformed Py.     image and transformed Py.<th>Noise       Control (Carlon)       Advan Lake Property       LOGGED BY       J. Bit Zok, P.Geo.       HOLL No.       No.       No.      &lt;</th><th>Nome     Colume     Colume</th></th></th>	Nomios Gold Resources Inc.LOCATION:Akow Lake PropertyLOGGED BY:J. Bitzok, P.G.:TOLITH-LOGICAL DESCRIPTIONSampleForm (m)To (m)Length (m)Au ppCu pp% Py ppmore pelitic and has 5% m.g. garnets. Trace disseminated Py. FOLIATION: 65° @ 218IC	Romios Gold Resources Inc.       LOCATION:       Akow Lake Property       LOGGED BY:       J. Biczok, P.Ge.       HOLL         TO       LITH-UGGIAL DESCRIPTION       Sample       from (m)       To (m)       lend       Au ppp       Qu ppm       No       No <th>Note     Note     Allow Lake Property     LOGGE DBY:     J. Biczok, J-G-O     HOLL No.       TO     UITHOLOGICAL DESCRIPTION     sample     more pelitic and has 5% mg, garnets. Trace disseminated Py.     image and transformed and transformed Py.     image and transformed Py.<th>Noise       Control (Carlon)       Advan Lake Property       LOGGED BY       J. Bit Zok, P.Geo.       HOLL No.       No.       No.      &lt;</th><th>Nome     Colume     Colume</th></th>	Note     Note     Allow Lake Property     LOGGE DBY:     J. Biczok, J-G-O     HOLL No.       TO     UITHOLOGICAL DESCRIPTION     sample     more pelitic and has 5% mg, garnets. Trace disseminated Py.     image and transformed and transformed Py.     image and transformed Py. <th>Noise       Control (Carlon)       Advan Lake Property       LOGGED BY       J. Bit Zok, P.Geo.       HOLL No.       No.       No.      &lt;</th> <th>Nome     Colume     Colume</th>	Noise       Control (Carlon)       Advan Lake Property       LOGGED BY       J. Bit Zok, P.Geo.       HOLL No.       No.       No.      <	Nome     Colume     Colume	

COMPANY:	Romio	os Gold Resources Inc.	LOCATION:	Akow Lake Proj	perty		LOGGI	ED BY:	J. Bio	czok, P.O	Geo.	HOLE	E No.		RGR-16	5-3
FROM	то	LITH	HOLOGICAL DE	SCRIPTION	Sample	From (m)	To (m)	Length	Au ppb	Cu ppm	% Ру	% Ср	% Po	% Asp	Gar-Bio Alt'n	Qtz Vn/ flooding
		Metaseds commonly ov	verprinted by b	ands of green amph-(calcite)-												
		garnet alteration and co	ontain minor Po	and Trace Cp. The metaseds												
		are more highly strained	d than the basa	lts. The Po locally extends	W1120194	283.00	283.2	0.2	186	222	0.05	0.05	1			
		from the metaseds for 2	20cm into the a	djacent basalt. 2 most												
		sulphidic intervals same	oled.													
		<u>288.4-288.9m</u> : Interflov	v metasedimen	t for first 20cm, rest is	W1120195	288.4	288.9	0.5	622	254	0	0.05	5			
		sheared basalt with mir	nor Po.													
294.5	301.5	GABBRO									ļ					
		Freshest gabbro consist	s of ~70% equa	int, dark green to black												
		amphibole (+pyx?) grair	ns, 3-7mm, witl	n ~30% f.g. interstitial feldspar.							ļ					
		Upper contact is sharp a	and lower cont	act is sheared over several												
		metres but definite cha	<u>nge into basalt</u>	by ~301.5m.												
301.5	399.0	BASALI		· · · · · · · · · · · · · · · · · · ·												
		As per previous basalt, i	this one has nu	merous interflow sedimentary												
		horizons, probably meta	a-pelites or silt	stones, with ~10-30% m.g. to												
		c.g. garnets in a f.g. mat	trix of bio-qtz-f	d. Some local overprinting of												
		the sedimentary units b	y green amphi	bole alteration and												
		biotitisation of the basa	lt where shear	ed can make it difficult to												
		discern contacts. Sedim	entary units ha	ve local Po and trace Cp, Asp.												
		Up to 15% Po/10cm inte	ervals. Sampled	I most sulphide rich sections.												
		FOLIATION: 70° @ 344n	n, 67° @ 370m,	72° @ 390m.												
		207 0 207 9m: Car Bio	Ed Otz cohist/n	actanolita Last 20cm is		207.0	207.0	0.0	<u> ۲</u>	107	0	0.05	-			
		charad bacalt Minar P	IC is sharp	W1120196	307.0	307.8	0.8	< 5	101	0	0.05	5				
		207 8-208 75m Car Bio	owith Bo concentrated on	W/1120107	207 0	200 7	0.0	20	2/5	0	0	0 5				
		<u>1307.0-300.73111</u> . 0df-Blu		e with PO concentrated off	W1120197	507.8	306.7	0.9	20	545	0	U	0.5			
		linargins for 20-300m as	LU-LO% SUIN alita	ser network/biebs and seams.												
		211 Q-212 6m. Epidemar	cally up to 15% staurolite.													
		<u>307.0-307.8m:</u> Gar-Bio- sheared basalt. Minor P <u>307.8-308.75m</u> : Gar-Bio margins for 20-30cm as Locally up to 15% stauro <u>311.9-313.6m</u> : Feldspar	Fd-Qtz schist/n o in first 10cm o rich metapelit ~10-15% string olite.	netapelite. Last 30cm is UC is sharp. e with Po concentrated on ger network/blebs and seams.	W1120196 W1120197	307.0 307.8	307.8 308.7	0.8	< 5	167 345	0	0.05	5			

COMPANY:	Romic	os Gold Resources Inc.	LOCATION:	Akow Lake Prop	oerty		LOGG	ED BY:	J. Bi	czok, P.O	Geo.	HOLE	E No.		RGR-16	5-3
FROM	то	LITH	HOLOGICAL DE	SCRIPTION	Sample	From (m)	To (m)	Length	Au ppb	Cu ppm	% Py	% Ср	% Po	% Asp	Gar-Bio Alt'n	Qtz Vn/ flooding
		40% Fd phenos. Adjacer	nt volcanics are	sheared, bio'd and qtz veined												
		but no significant sulphi	ides.													
		<u>326.95-327.4m:</u> Cherty	Po-rich exhalite	e. Siliceous interflow unit with	W1120198	326.95	327.4	0.4	36	467	0	0.1	20			
		thin layers of Po, 1-3mn	n, and remobili	sed veins of Po up to 8mm.												
		Overall ~20% Po. Trace	Cp mixed with	the Po.												
		<u>357.6-358.4m:</u> Basalt ac	djacent to quar	tz vein below, has several Po	W1120199	357.6	358.4	0.8	48	825	0	0.1	0.2			
		veinlets, 1-3mm, ~0.2%	Po and Trace C	p.												
		<u>358.4-358.9m:</u> 20cm qt:	z vein with ~7%	Po filling network of fractures	W1120201	358.4	358.9	0.5	20	1160	0	0.1	7			
		up to 1cm wide. Also so	me Po veins up	to 1cm wide in												
		adjacent basalt at the U	IC and 30% Po/	10cm at the LC												
		Additional small horizor	ns of interflow	metasediments with Tr-minor												
		Po at 370, 377 and 380r	n.													
		<u>377.4-377.85m</u> : Interflo	w metapelitic s	sediments and minor cherty	W1120202	377.4	377.9	0.45	272	434	0	0	8			
		layers <5mm thick, fold	ed and disrupte	ed. 6cm zone with 40% Po.												
		Minor Po throughout. C	Overall ~7-10%	Po.												
		<u>378.8-379.5m:</u> Mixed zo	one of 2 qtz vei	ns, 3-8cm, cut by Po veinlets	W1120203	378.8	379.5	0.7	329	1040	0	0	2			
		<1cm wide. Also one mo	ottled vein 20c	m wide with minor Po.												
	399.0	End of Hole	End of Hole													
				<u>DEPTH</u>	DIP											
		Core stored in cross-pile	R-16-1, SW shore of Akow	27m	-45.8											
		Lake at 670219E, 5850251N (NAD 83)				-42.8										
						-39.9										

					DIAMO	ND [	DRILL LO	)G										
COMPANY:	Roi	nios Gold Resources Inc.	LOCATION:		Akow Lake	e Pro	perty		LOGG	ED BY:	J. Bio	zok, P.(	Geo.	HOL	E No.		RGR-1	6-4
DRILL CONTRA	ACTOR:	Orbit Garant	UTM (NAD 83)		669658E, 5	58513	376N		GRID C	O-ORDS		2+55	N, 8+8	0E		AZIN	/UTH	252
CORE STOP	RED AT:	Akow Lake, SW shore	FINAL DEPTH:	420m	CORE SIZE	NQ	STAR	TED:	Sept. 2	7,2106	FINIS	HED:	0c	t. 4, 20	16	COLL	AR DIP	-45
FROM	то	LITH	OLOGICAL DESC	RIPTION			Sample	From (m)	To (m)	Length	Au ppb	Cu ppm	% Ру	% Ср	% Po	% Asp	Gar-Bio Alt'n	Qtz Vn /flooding
0.0	54.0	OVERBURDEN / CASING																
		Sand and boulder till. bro	ken bedrock in la	ast 3m.														
		,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,																
51.0	82.0	META-ARKOSE																
		Pale grey, well foliated an	nd generally well	bedded, 1-2	20mm,													
		metasediment. Composed	d of alternating o	off-white lay	yers of f.g.													
		Fd>Qtz, with minor stauro	olite plus 10-15%	6 f.g. sericite	e, and mediur	m												
		grey to brown layers of 20	0-30% staurolite,	. 15-20% sei	ricite, Trace													
		garnets to 8mm, Fd>Qtz a	and only minor b	or more peliti	с													
		layers with 30% biotite clo	ots to 6mm. No o	ration other	than													
		serpentine coating fractu	res in the upper	few metres	. Lower conta	act						ļ						
		gradational over 30cm. FC	OLIATION: 47°@	59m, 55° @	🥺 64m, 45° @	)												
		78m																
	-	54.9-55.43m: 4 qtz veins,	2-20cm, make u	p 60% of se	ction, brown	and	W1120204	54.90	55.43	0.53	2.5	188	0.2	0	0	0	0	60%
		red coloration due to Fe c	oxides?, minor Py	/ blebs.														
82.0	95 7	SERICITE SCHIST (Ealsic A	ch Tuff2)															
02.0	85.7	Pale grey to off-white Sof	ft friable verv s	chistose uni	it composed (	of												
		$30 \text{ to } >60\% \text{ fine to c } \sigma$ set	ricite rest is mai	nlv Ed-Otz	it composed (	01												
		50 to 20070 mile to e.g. set		iny i a Qtz.														
85.7	89.7	META-ARKOSE																
		As above. Lower contact g	gradational over	10cm. FOL	IATION: 57° @	@ 86r												
		88.8m: Rusty water seam	a few cm thick.															
89.7	107.8	SERICITE SCHIST (Felsic A																
Very similar to the felsic wedge that structurally overlies the BIF at					t	W1120205	102.3	102.9	0.6	54	52	8	0	0	0	0	0	
		Musselwhite, both contai	n abundant laye	rs of synger	netic,		W1120206	102.9	103.6	0.7	42	55	0.2	0	0	0	0	0

COMPANY:	Ron	nios Gold Resources Inc.	LOCATION:	Akow Lake Pro	perty		LOGG	ED BY:	J. Bic	zok, P.C	Geo.	HOL	E No.		RGR-1	6-4
FROM	то	LITHC		RIPTION	Sample	From (m)	To (m)	Length	Au ppb	Cu ppm	% Py	% Ср	% Po	% Asp	Gar-Bio Alt'n	Qtz Vn /flooding
		barren pyrite. This unit is r	nore sericitic an	d schistose overall, varies	W1120207	103.6	104.1	0.5	55	78	0.4	0	0	0	0	0
		from ~30% to >80% m.g. s	ericite, rest mai	nly Qtz-Fd. Off-white in												
		colour, with local grey ban	ds with very f.g	. black mineral, prob biotite.												
		Pyrite layers/beds are up t	o 1cm thick wit	h ~30-50% pyrite grains,												
		often ~interconnected, fla	nked by thinner	· layers <few mm<="" th=""><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th></few>												
		concentrated in layers <50	ocm thick. Scatte	ered staurolite bearing layers												
		<3cm thick with <20% stau	ur. Sampled rich	nest pyrite layer, more Py at												
		92m, 96m, 101.5m, 106.5	and 115.7m. FO	LIATION: 55° @ 95m, 48° @												
		96m														
107.8	123.0			1												
		Similar to previous sedime	entary unit but n	low medium grey. Well												
		foliated and bedded (~2cm	n beds) with dar	ker bands having 25-30% f.g.												
		bio and <1% medium to c.	g. garnets. Light	er bands have <10% bio,												
		often ser>bio. FOLIATION:	52° @108m, 58	s° @111m, 59° @ 119m.												
		118.4-122.0m: Secondary	green amph-Cc	alteration band cutting the												
		siltstone. Composed of >8	0% green f.g. an	nph. minor Cc.												
123.0	127.5	SERICITE SCHIST (Felsic As	h Tuff?)								0.1					
		As before. Minor dissemir	nated Py throug	hout and 7cm Py rich band												
		at Lower Contact. FOLIATI	ON: 45° @127n	n.												
127.5	138.6	SERICITE-BIOTITE-QUARTZ	RICITE-BIOTITE-QUARTZ-FELDSPAR-(GARNET) SCHIST								0.1					
		Similar to previous siltston	nilar to previous siltstone units but more sericitic now, ser>>bio													
		0% Ser, 1-2% m.g. garnets, minor bio, rest is mainly Fd-Qtz. Proba		st is mainly Fd-Qtz. Probably												
		much more felsic volcanic	input into these	e seds than before, contains												
		several sericite rich memb	ers. Minor Py la	yers to 5cm. FOLIATION: 48°												
		<u>127.5-129.5</u> : Bio>Ser giving	7.5-129.5: Bio>Ser giving a darker grey colour													

COMPANY:	Ron	nios Gold Resources Inc.	LOCATION:	Akow Lake Pro	perty		LOGG	ED BY:	J. Bic	zok, P.G	Geo.	HOL	E No.		RGR-1	6-4
FROM	то	LITHC	DLOGICAL DESCI	RIPTION	Sample	From (m)	To (m)	Length	Au ppb	Cu ppm	% Py	% Ср	% Po	% Asp	Gar-Bio Alt'n	Qtz Vn /flooding
		<u>129.2m:</u> Well developed Z	-fold (assuming	one is looking down regional												
		plunge to the south), indic	ates east side m	oved up. Fold axis at 20° to												
		core axis. Prominent subh	orizontal crenula	ation cleavage in adjacent												
		schist.														
				_												
138.6	156.6	SERICITE-STAUROLITE-QU	ARTZ-FELDSPAF	R SCHIST +/- Bio-Gar												
		Light grey, well foliated, fa	intly layered/be	dded metasediment(?)												
		composed of ~30% sericite	e, 5% staurolite,	<1% m.g. garnets, minor												
		bio, rest is mainly Qtz-Fd.	Local garnet por	phyroblasts to 1cm along												
		thin seams of qtz veining,	amph alteration	, etc. Scattered thin seams												
		every 1-2m of Po +/- Cp, <	1cm thick, no m	ineralization between these												
		seams.														
		143.0-147.0m: Lighter gre	y and more schi	stose with a higher sericite												
		Content, up to 50%. Bio interval $\sim$ 1.40 m s	creases in last le	ew metres. LC sharp at 48.												
		FULIATION: 53 @ 148m, 1	152m.													
156.6	159.3	BASALT														
		Typical basalt for this area	, medium green	, f.g., >60% amph, rest												
		mainly plag. LC sharp, // to	o foliation. No vi	sible volcanic features in												
		any of these units, assume	ed to be dykes o	r sills.												
159.3	166.5	BIOTITE-STAUROLITE-GAR	RNET-QUARTZ-F	ELDSPAR SCHIST												
		Similar to previous interse	ctions of this un	it. Composed of ~30-40%												
		f.g. biotite, ~10-15% f.g. st	aurolite, 0-5% g	arnets up to 2cm, rest												
		mainly Qtz-Fd; minor seric	itic sections. Sca	attered hydrothermal												
		alteration veins/seams, me	ost are 1-2cm w	ide but a few up to 7cm,												
		every 1-2m. Little or no su	Iphides between	n these veins. Sampled best												
		intervals (which tend to be	units). FOLIATION: 53° @													
		162m. 63° @ 165m.													-	
		<u>162.8-163.6m</u> : 4 Po veins/breccia networks to 7cm with associated			W1120208	162.8	163.6	0.8	26	1400	0	0.2	6		1	1
		c.g. garnets, minor Cp.														
	l	103.8-104.4 <u>m</u> : Basait		Page	3 of 10											

COMPANY:	Ror	nios Gold Resources Inc.	LOCATION:	Akow Lake Pro	operty		LOGG	ED BY:	J. Bio	zok, P.C	Geo.	HOL	E No.		RGR-1	6-4
FROM	то	LITHC	DLOGICAL DESC	RIPTION	Sample	From (m)	To (m)	Length	Au ppb	Cu ppm	% Py	% Ср	% Po	% Asp	Gar-Bio Alt'n	Qtz Vn /flooding
		165.8-166.3m: 20cm wide	zone of alterati	on with 2 bands, 20 cm	W1120209	165.8	166.3	0.5	353	2970	0	0.4	0.5		1	0.5
		wide, of garnets up to 2cm	n with bio, qtz fl	ooding and Cp, plus 2 cm of												
		green amph and garnets.														
166.5	169.6	BASALT														
		Typical basalt. Minor inter	vals of weak bio	'n, lower 1m is more												
		strained.														
169.6	210.0	BIOTITE-STAUROLITE-QUA	ARTZ-FELDSPAR	-GARNET SCHIST												
		Generally a light grey, wel	I foliated to schi	stose unit, locally layered in												
		shades of grey due to varia	able bio %. Com	posed of ~35% f.g. bio, 20%												
		anhedral f.g. staur, 2-3% a	nhedral garnets	, up to 2cm, rest mainly Qtz-												
		Fd. Cut by a number of hy	drothermal vein	s composed of very c.g.												
		garnets up to 3cm in a ma	trix of massive f	.g. biotite +/- staurolite +/-												
		qtz flooding +/- Cp-Po min	eralization. Also	scattered qtz veins to 10												
		cm with minor c.g. garnet-	-bio alteration. 1	he alteration + Cp-Po veins												
		occur every 1-2m but incre	ease in number	from ~181.7 to 187m with												
		veins every 30-100cm alor	ng with more thi	n seams of Cp-Po along the												
		foliation. Great example o	f this at 183.3-1	83.7: 40% medium to c.g												
		staurolite in massive f.g. b	iotite matrix wit	h a few garnets 2-4cm, + Cp-												
		Po. FOLIATION: 53° @ 176	5m, 50° @ 185m	, 48° @ 170m.	W1120211	174.0	174.9	0.9	10	932	0.05	0.1	0.05	0	0.5	0.5
		-			W1120212	174.9	175.3	0.4	35	2790	0	0.7	0.7	0	3	5
		<u>1/8./-1/9.6m</u> : 8cm cluste	r of Gar-Bio-Cp-	Po veins.	W1120213	178.7	179.6	0.9	17	1300	0	0.3	0.3	0	2	0.5
		<u>181.0-182.6m</u> : Sericite sch	hist interval with	3 irregular Qtz-Fd-Po-Cp	W1120214	179.6	180.0	0.4	2.5	473	0	0	0	0	0	0
		veins 1-5cm wide in last /	Ucm.		W1120215	180.0	181.0	1.0	27	1170	0	0.3	0.01	0	1	0
		<u>184.5-185.5m</u> : Numerous	thin seams of C	b and/or Po, <1-2mm thick,	W1120216	181.0	181.9	0.9	2.5	361	0.05	0	0.05	0	0.5	0
		along the foliation, especie	ally in first 40cm	. Several qtz flooded bands	W1120217	181.9	182.6	0.7	40	3700	0	0.5	1.5	0		2
		With c.g. garnets but no Cr	). 		W1120218	182.6	183.2	0.6	8	360	0	0	0	0	0.5	0
		<u>186.5-187.3m</u> : 3 bands of	massive black b	io with 20% c.g garnets and	W1120219	183.2	183.8	0.6	400	1400		3	0.1	0	5	0
		15% staur, no sulphides.			W1120221	183.8	184.5	0.7	52	1400	0.05	0.1	0.1	0	0.5	0
		<u>192.2m</u> : Ptygmatic garnet	t vein ~1cm wide	e with minor Cp-Po	W1120222	184.5	185.5	1.0	101	2020	0	0.3	0.2	0	1	1

COMPANY:	Ror	nios Gold Resources Inc.	LOCATION:	Akow Lake Pro	perty		LOGG	ED BY:	J. Bic	zok, P.O	Geo.	HOLI	E No.		RGR-1	6-4
FROM	то	LITHC	DLOGICAL DESC	RIPTION	Sample	From (m)	To (m)	Length	Au ppb	Cu ppm	% Py	% Ср	% Po	% Asp	Gar-Bio Alt'n	Qtz Vn /flooding
		throughout, taken as REP s	sample. Suggest	s mineralization and garnet												
		formation predates folding	g, at least in part	t.												
		Variety of textures to this	point but still m	ainly Bio-Staur-Gar Schist to												
		200m. Only scattered narr	ow seams of Po	+/- Cp from 189-207m.	W1120223	198.2	199.1	0.9	7	518	0	0.1	0.7			
		Sampled best portions.														
		<u>199.4-201.5m</u> : Mainly a bi	otitic siltstone, r	no garnets or staur.	W1120224	204.0	204.4	0.4	301	1330	0	0.2	4	0	4	1
		206.45-207.3m: Qtz vein/f	loods with stror	g gar-bio +/- minor Cp-Po, 5-	W1120225	204.4	205.0	0.6	36	575	0	0.05	0.05	0	1	0
		10 cm wide. Host rock ~fre	esh.		W1120226	205.0	206.0	1.0	20	417	0	0.05	0	0	0	0
		207.0-209.3m: Start of ver	y thin coatings o	of Cp along foliation	W1120227	206.0	206.45	0.45	10	626	0	0	0.1	0	0	0
		planes every few cm. Thes	e tend to flank t	he veins of intense gar-bio-	W1120228	206.45	207.0	0.55	11	893	0	0.2	0	0	4	3
		qtz alteration for ~20-90cr	n.		W1120229	207.0	207.9	0.9	15	1050	0	0	0.05	0	0	0
		207.9-208.4m: Quartz veir	n ~40cm wide wi	th large fragments of	W1120231	207.9	208.4	0.5	2.5	105	0	0.05	0	0	1	large vein
		altered wallrock to 10cm o	composed of qtz	and gemmy, m.g. equant	W1120232	208.4	208.8	0.4	16	820	0	0.2	0	0	0	0
		staurolite			W1120233	208.8	209.3	0.5	427	6550	0	2	0.1	0	5	5
		208.4-208.8m: Thin seams	on foliation planes, <0.2%													
		<u>208.8-209.3m</u> : 20cm qtz v	ein with >50% v	ery c.g. garnets, 3-4cm,												
		minor biotite selvages and	l scattered blebs	of Cp plus fracture filling												
		veins to 1cm in one spot. \	/ein flanked by 2	20cm of thin Cp coatings												
		along foliation.														
		Best Cp mineralization so f	far is in biotite-s	taurolite rich altered (?)												
		metaseds, the plain siltsto	ne is largely bar	ren.												
210.0	255.0	SILTSTONE with hydrothe	rmal alteration													
		Basically this is a biotite rid	ch (30%) siltston	e with 1-2% m.g. garnets,												
		rest is f.g. Qtz-Fd. Overprir	nted commonly	by hydrothermal, fairly												
		pervasive hydrothermal bi	arnet-f.g. staurolite													
		alteration and cut by veins	n massive biotite with													
		staurolite, Cp and Po. No mineralization or staurolite until 211.7m		staurolite until 211.7m												
		which is 10cm before the first appearance of the alteration veins.														
		211.8-220.0m: Appears to be the same siltstone protolith but has			W1120234	213.9	214.6	0.7	408	1900	0	0.1	0.3	0	0	0
		medium to verv c.g. garne	red throughout. plus	W1120235	214.6	215.6	1.0	89	198	0	0.3	3	0	0	0	
	8	,,,,,,,,		Page	5 of 10	-		-	-		-	-	-	-		

COMPANY:	Ron	nios Gold Resources Inc.	LOCATION:	Akow Lake Pro	perty		LOGG	ED BY:	J. Bic	zok, P.G	Geo.	HOL	E No.		RGR-1	6-4
FROM	то	LITHC	DLOGICAL DESC	RIPTION	Sample	From (m)	To (m)	Length	Au ppb	Cu ppm	% Py	% Ср	% Po	% Asp	Gar-Bio Alt'n	Qtz Vn /flooding
		10-20% f.g. staur, and a fe	w veins of very	c.g. garnet-bio +/-Qtz +/-Cp-						•••						
		Po +/- staur up to 20cm w	vide every 20 to	150cm. Scattered narrow Po-												
		(Cp)-Garnet veins a few m	m to 6cm wide	at 223.8m, 223.8m, 224.3m,												
		227m etc.														
		Scattered narrow Po-(Cp)-	Garnet veins a f	ew mm to 6cm wide at	W1120237	235.05	235.55	0.5	157	422	0	0.2	0.3	0.05	5	1
		223.8m, 223.8m, 224.3m,	227m, etc. but i	no Cp-Po in between.												
		C.g. ragged garnets to 3cr	n with bio alt'n,	scattered massive bio veins	W1120238	236.5	236.8	0.3	35	650	0	0	0	0.1	4	0
		to 6cm with up to 30% m.	g. staur, and sca	ttered thin Cp-Po+/-Asp											<b></b>	
		veinlets from 235.05-235.	55m, 236.5-239.	0m, 240-241m, and 244.8-	W1120236	246.6	247.2	0.6	77	126	0	0.05	0	0	0	0.99
		250.5m. FOLIATION: 52° @	🦻 211m, 47° @ 2	26m, 43° @ 231 and 244m.	W1120239	247.2	247.7	0.5	75	1650	0.1	0.05	0	0.1	0	0
		250.6-251.0 and 258-261.3	<u>3m</u> : Scattered, in	ntercalated intervals of	W1120241	248.55	249.2	0.6	223	505	0	0.2	0.05	0	0	0
		sericite schist which grade	es in/out of the r	netaseds.											<b></b>	
255.0	276.0															
233.0	270.0	Annears to be a hydrother	rmally altered m	atasiltstone Consists of 20-											E	2
		Appears to be a right other	and annedral gar	nets in a matrix of 30-40%	W1120242	262.50	263.00	0.50	266	13000	0	0.5	0.1	0	5	5
		$f \sigma$ to m $\sigma$ biotite 10-30%	cu, anneurai gai 6 f σ to m σ stai	rolite locally minor sericite												
		mixed with the high rest is	f σ Otz-Ed Bio-	Gar alteration is locally												
		strong but not in discrete	veins just a few	minor hio-staur veins											<b> </b>	
		<6mm Only Trace sulphid	les in small natcl	nes throughout Remnant												
		siltstone at 267 4-268 8m	IC and IIC are s	vradational over 10-20cm											<b> </b>	
		$[COUNTION: 20^{\circ} @ 268m]$													<b> </b>	
		10LIATION. 39 @208111.														
276.0	282.2	SILTSTONE	LTSTONE													
		Typical light grey, well foli	ated but poorly	bedded metasediment												
		composed of ~20% f.g. bic	otite, ~5% very p	ale garnets, rest is Qtz-Fd.												
		FOLIATION: 45° @ 280m.	LIATION: 45° @ 280m.													
																·
282.2	307.7	GARNET-BIOTITE-STAURC	RNET-BIOTITE-STAUROLITE-QUARTZ-FELDSPAR-(SERICITE)													
		Most likely an altered	version of the si	ltstone above. Has ~weak												

COMPANY:	Ror	nios Gold Resources Inc.	LOCATION:	Akow Lake Pro	operty		LOGG	ED BY:	J. Bic	zok, P.C	Geo.	HOL	E No.		RGR-1	6-4
FROM	то	LITHC		RIPTION	Sample	From (m)	To (m)	Length	Au ppb	Cu ppm	% Py	% Ср	% Po	% Asp	Gar-Bio Alt'n	Qtz Vn /flooding
		development of hydrothe	rmal (?) garnet,	biotite, f.g. staurolite. Most												
		garnets are associated wit	h thin seams/ve	ins of massive biotite, some												
		with thin qtz veins parallel	l to foliation. Po	ssible relict bedding evident,												
		a few cm thick. Up to 299.	5m there are or	ly a few scattered thin												
		veins/bands of the really s	trong c.g. garne	t-massive biotite +/- Cp-Po												
		alteration. all < few cm wi	de.		W1120243	297.2	298.0	0.8	77	1740	0	0.2	0.05	0	1	0
		<u>298.75-299.7m</u> : 3 c.g. garr	net>>bio alterati	ion veins 3, 6 and ~15cm	W1120244	298.0	298.8	0.75	45	1070	0	0.05	0.05	0	1	0
		wide, with fracture contro	lled Cp-(Po) up	to 15% in the biggest	W1120245	298.8	299.7	0.95	149	4000	0	3	0.05	0	5	1
		garnets.			W1120246	299.7	300.7	0.95	66	2050	0	0.3	0.05	0	1	0
		<u>300.8-303.0m</u> : Lighter colo	oured, more ser	icitic interval.												
		<u>302.95-303.45m:</u> Spectacu	lar vein of 50-6	0% c.g. garnets, often ~2cm,	W1120247	302.7	303.0	0.3	21	251	0	0.05	0.05	0	0	0
		in f.g. massive black biotite	e-(chlorite) mati	rix. More chl than usual,	W1120248	303.0	303.5	0.5	748	4450	0	2	0.3	0	6	1
		either as dissem flakes in t	the bio or formi	ng 5mm cores of the veins.	W1120249	303.5	304.0	0.5	59	625	0	0.1	0.05	0	2	0
		Some bands to 4cm of 30-	70% f.g. to m.g.	garnets. Only minor qtz,												
		confined to one spot. Cp a	s short													
		fracture fillings in/beside t	he garnets, con	centrated up to 7%/10cm in												
		one section. 2-3% Po in th	e garnets and m	atrix.												
		<u>305.5-307.0m</u> : Ser>Bio, m	ore felsic interva	al.												
307.7	308.55	BASALT														
		Typical f.g., green basalt b	ut has a 1cm sh	ear on UC with minor Cp												
		vein and a 3cm shear on L	C with 3% Cp se	ams and dissem'd grains												
		plus minor Cp along foliati	on planes in adj	acent schist for another												
		10cm.														
308.6	320.0	SERICITE>BIOTITE GARNE	QUARTZ-FELDSPAR SCHIST													
		One of the lighter coloure	nits composed of ~30%													
		sericite, <10% biotite, ~10% pale red, c.g. garnets, 10-20% f.g.														
		staurolite. Rest mainly qtz-fd. Has numerous thin seams of Cp locally			W1121501	309.5	310.5	1	398	4920	0	0.6	0.2	0	2	1
		along the foliation planes,	fined bands, 2-10cm wide,	W1121502	310.5	311.5	1	145	2240	0	0.6	0.2	0	2	1	
		of c.g. garnets, bio and Qt	z-Fd. Strongest a	alteration	W1121503	311.5	312.0	1	40	756	0	0.1	0.05	0	1	1

COMPANY:	Ron	nios Gold Resources Inc.	LOCATION:	Akow Lake Pro	operty		LOGG	ED BY:	J. Bic	zok, P.C	Geo.	HOL	E No.		RGR-1	6-4
FROM	то	LITHC	DLOGICAL DESCI	RIPTION	Sample	From (m)	To (m)	Length	Au ppb	Cu ppm	% Py	% Ср	% Po	% Asp	Gar-Bio Alt'n	Qtz Vn /flooding
		and mineralization centree	d at 317.2-317.6	4m.			_ ` '									
		315.7-317.2m: Increasing	% of thin Cp sea	ms and fracture fillings in	W1121504	315.7	316.3	0.6	8	646	0	0.1	0	0	1	0
		the garnets. <0.1% in first	60cm increasing	; to ~1%.	W1121505	316.3	317.2	0.9	122	4840	0	1.2	0	0	4	1
		<u>317.2-317.64m:</u> Most min	eralized section.	Ser schist with ~30%	W1121506	317.2	317.6	0.44	941	19800	0.05	6	0	0	6	5
		garnets to 5cm surrounde	d by biotite rims	. Some Qtz flooding. Cp in	W1121507	317.6	318.8	1.11	78	8300	0	3	0.3	0	3	0
		long fracture nets in garne	ets and qtz flood	ed areas.	W1121508	318.8	319.4	0.65	140	2250	0	0.05	0.2	0.4	1	0
		<u>317.64-318.75m</u> : 6-7 thin :	seams and veins	of Cp along foliation, plus	W1121509	319.4	320.0	0.55	30	578	0	0.1	0.2	0	1	0
		veins of c.g. garnet with up	p to 7% Cp over	4-5cm intervals.	W1121511	320.0	321.0	1.05	16	743	0	0.2	0.05	0	3	0
		<u>318.75-319.4m</u> : Same alte	ered rock unit, no	ot so c.g. now, but has lines	W1121512	321.0	322.0	1	58	854	0	0.3	0.05	0	1	0
		of f.g. to m.g. Asp crystals	along foliation a	nd in fractured garnets.	W1121513	322.0	323.0	1	8	308	0	0.1	0.1	0	1	0
320.0	351.5	BIOTITE GARNET-STAUROLI	TE-QUARTZ-FELD	SPAR-(SERICITE) SCHIST	W1121514	324.4	325.3	0.95	282	2190	0.05	0.4	0.05	0	1	0
		Fairly homogenous metase	edimentary unit	as before except darker	W1121515	325.3	326.3	1	24	286	0	0.1	0	0	1	0
		grey now due to a ~pervas	sive network of t	hin biotite seams/networks.	W1121516	326.3	327.1	0.75	1160	7530	0	0.4	0	0	4	0
		Scattered hydrothermal bi	iotite-c.g. garnet	alteration veins/bands with												
		minor Cp up to 10cm. LC g	gradational													
		over 1m. Numerous olivin	e lamprophyre o	lykes.												
		<u>320.9-327.8m</u> : 5 olivine la	mprophyre dyke	es, 1cm to 10cm wide. // to												
		foliation.														
		<u>325.8m</u> : 6cm basalt dyke.						ļ								
		<u>328.6-328.9m:</u> Olivine lam	prophyre dyke													
		<u>329.1-334.1m</u> : 6 olivine la	mprophyre dyke	s. 2-40cm wide.												
		329-333.6m: Continuation	of Bio-Gar-Stau	r schist/metased with minor												
		Cp mineralization scattere	zones 2-3cm wide with ~3%													
		Cp but barren in between.														
		<u>333.6-334.75m</u> : Unusual s	rker grey. ~1/2 is patchy,	W1121517	333.6	334.5	0.9	1270	2730	0	0.5	0	0	5	3	
		massive f.g. biotite but stil	eared metaseds in between.	W1121518	334.5	334.8	0.75	2550	1360	0	0.05	0	0	5	12cm QV	
		4 x-cutting qtz veins to 3cr	m. Cut by 3cm ol	iv lamp dyke, a few veins of												
		pure biotite. Last 12cm is sheeted qtz vein with 3 bands of bio-gar 1			W1121519	338.4	339.0	0.6	52	1550	0.05	0.1	0	0	2	2
		2cm. Locally up to 3% Cp/2	2cm.	Page	W1121521 8 of 10	339.0	339.9	0.9	460	2270	0	0.5	0.1	0	4	4

COMPANY:	Ror	nios Gold Resources Inc.	LOCATION:	Akow Lake Pro	perty		LOGG	ED BY:	J. Bic	zok, P.G	Geo.	HOLI	E No.		RGR-1	6-4
FROM	то	LITHC	OLOGICAL DESC	RIPTION	Sample	From (m)	To (m)	Length	Au ppb	Cu ppm	% Py	% Ср	% Po	% Asp	Gar-Bio Alt'n	Qtz Vn /flooding
		<u>340.0-341.8m:</u> 4 olivine la	mprphyre dykes	, 1-5cm, ~irregular and x-			(,			PP···						
		cutting foliation.		_												
		344.6-346.8m: Basalt, typi	ical green, f.g., v	eakly-moderately foliated												
		unit. 1cm oliv lamp dyke c	uts lower margi	n.												
351.5	377.3	SERICITE>BIOTITE GARNE	T-STAUROLITE-	QUARTZ-FELDSPAR SCHIST												
		Back into a more felsic, se	ricitic section wi	th minor intervals of												
		bio>ser. Still composed of	~30% sericite, <	10% biotite, ~10% pale red,												
		c.g. garnets, 10-20% f.g. st	taurolite. Rest m	ainly qtz-fd. Minor Cp in												
		narrow seams/alteration b	bands <1-2cm w	ide.												
		FOLIATION: 57 @ 351, 53°	'@ 362, 48° @ 3	70m.												
		<u>355.75-355.95m</u> : 12 cm Q	tz vein with 25%	green amph network, ~10%	W1121522	355.8	356.0	0.2	1400	25100	0.05	10	0	0	0	5
		Cp, minor Po	nor Po <u>358.5m:</u> Basalt with 6cm oliv lamp dyke at LC. 10cm of upp				357.0	1	225	2070	0	0.2	0	0.05	0	0
		<u>358.2-358.5m:</u> Basalt with	- <u>358.5m:</u> Basalt with 6cm oliv lamp dyke at LC. 10cm of upp													
		margin is highly altered to	<u>2-358.5m:</u> Basalt with 6cm onv famp dyke at LC. 10cm of uppe gin is highly altered to c.g. gar-bio with 1-2% Cp.													
		<u>358.5-359.2m:</u> 10cm Qtz v	vein with 25% ba	nds/network patches of f.g.												
		green amph and a networ	k of Cp-(Po) veir	s/fracture fillings, up to 50%												
		Cp/2cm, ~10% overall. Fol	lowed by 20cm	Ser Schist and 10cm of very												
		c.g. garnets with minor As	p and Cp.													
		<u>368.0-369.0m</u> : More of th	e original, relict	feldspathic arenite is visible,												
		only minor garnets.														
		<u>370.0-371.0m</u> : As above, S	Ser>bio, only mi	nor, scattered Cp.												
		<u>371.0-377.0m:</u> 10-15% m. <sub>{</sub>	g. garnets up to	2cm in the grey metased												
		(bio-staur-gar schist) matr	ix. Little or no o	ovious hydrothermal												
		alteration except for a few	v bio-gar bands/	veins <2-3cm wide and one												
		larger one at 375m.														
		374.8-375.3m: 7cm of mas	ssive biotite witl	n 25% c.g. garnets, ~5% Cp in	W1121524	374.8	375.3	0.5	350	10200	0	1.5	0	0	5	5
		veinlets to 7mm. Flanked	by strong gar-bi	o alt'n and qtz vein/flooding												
		for 10cm with 1-2% Cp. Ov	verall ~1-2% Cp.													
		<u>375.3-377.3m:</u> ~1% dissen	ninated Magnet	te crystals ~1mm across. No												
		sulphides except for mino	r grains on marg	ins of Qtz Veins.												
			des except for minor grains on margins of Qtz veins.													

COMPANY:	Ron	nios Gold Resources Inc.	LOCATION:	Akow Lake Pro	perty		LOGG	ED BY:	J. Biczok, P.Geo.			HOL	E No.	RGR-16-4		
FROM	то	LITHC	DLOGICAL DESCI	RIPTION	Sample	From (m)	To (m)	Length	Au ppb	Cu ppm	% Py	% Ср	% Po	% Asp	Gar-Bio Alt'n	Qtz Vn /flooding
377.3	378.9	BASALT					. /									
		Typical basalt for this area	, f.g., green, am	oh:plag ~60:40. Contacts												
		obscured by shearing and	bio'n for 10cm a	nd 20-30cm of irregular qtz												
		veins with locally strong ga	ar-bio alteration	. Tr Py.												
378.9	406.0	SERICITE-GARNET-QUART	Z-FELDSPAR-(BI	OTITE) SCHIST												
		Relatively homogeneous s	ection of well fo	liated, fairly schistose unit,												
		assumed to be derived fro	m a metasedim	ent, probably a feldspathic												
		arenite originally. Compos	ed of ~30% f.g. t	o m.g. sericite in sinuous												
		folia, <5% to 25% f.g. to m	.g. garnets, mine	or biotite, rest is mainly Qtz-												
		Fd. No staurolite in ~90% o	of this section. S	everal areas with f.g.												
		disseminated Magnetite c	rystals giving a r	noderately magnetic												
		signature. Local minor sea	ms of Py and/or	Po, some with up to 15%												
		Po/8cm but this appears to	o be syngenetic	and likely barren. LC												
		gradational over 1m. FOLI	ATION: 68° @ 38	88m, 54° @ 392m, 58° @												
		404m	<u> </u>													
		<u> 348.75-385.0m</u> : Basalt. Ma	argins sheared a	nd bio'd for 5-7cm.												
			0.011 707 0.15													
406.0	420.0	GARNETIFEROUS SERICITI	CSILISIONE													
		Distinct change into this m	nore metasedim	entary looking unit. It is f.g.,					<b> </b>							
		well foliated and has ~wel	I developed bed	ding 2-3cm thick. Still					<b> </b>							
		composed of ~30% sericite	e with 1-5% garr	ets a few mm to 1cm on												
		average, local staurolite ri	ch layers 3-5cm	thick with ~sharp and												
		distinct contacts. Only mir	<u>nor staur elsewh</u>	ere. Rest is			тгото									
		mainly Qtz-Fd with minor	bio. No significa	nt sulphides and only a few		KEFLEX	IESIS									
		minor bands of gar-bio alt	eration. FOLIATI	UN: 58 @ 413m, 54 @		Douth	Dim									
		418m.				Ceptn										
	420.0	End of Hole				150m	-44.5									
	420.0					20/11/	-40.5									
		Core stored in cross niles n	pear old camp sit	e and hole RGR-16-001 on		312m	-34 5									
		SM shore of Akow Lake 6	70219 F 585025	1 N (ΝΔΠ 83)		420m	-30.7									
		JVV SHOLE UJ AKUVV LUKE. UJ	10219 L, J03023		0	42011	-30.7				I					

# **APPENDIX TWO: ANALYTICAL TECHNIQUES AND RESULTS**

# ANALYTICAL TECHNIQUES USED BY ACTIVATION LABORATORIES

All gold assays, copper analyses, whole rock analyses and specialty analyses such as the boron assays were performed on behalf of Romios by Activation Laboratories (ActLabs) in Thunder Bay, Ontario, or in the case of the boron analyses, at their main laboratory in Ancaster, Ontario. All gold values were determined by fire assay (ActLabs code 1A2) and copper was determined by ICP analysis (code 1E3)

These two techniques and the sample crushing procedure are described below briefly from information on ActLabs website.

**Sample Crushing and Pulverising Code Rx 1**: The samples are crush such that up to 90% passes through a 2mm sieve, followed by splitting the sample down to 250g which is then pulverized (mild steel) to 95% passing 105u.

# **Gold Fire Assay 1A2-ICP**

A sample size of 5 to 50 grams can be used but the routine size is 30 g for rock pulps, soils or sediments (exploration samples). The sample is mixed with fire assay fluxes (borax, soda ash, silica, litharge) and with Ag added as a collector and the mixture is placed in a fire clay crucible, the mixture is preheated at 850°C, intermediate 950 °C and finish 1060 °C, the entire fusion process should last 60 minutes. The crucibles are then removed from the assay furnace and the molten slag (lighter material) is carefully poured from the crucible into a mould, leaving a lead button at the base of the mould. The lead button is then placed in a preheated cupel which absorbs the lead when cupelled at 950°C to recover the Ag (doré bead) + Au. The Ag doré bead is then digested in hot (95°C) HNO3 + HCl. After cooling for 2 hours the sample solution is analyzed for Au by ICP-OES using a Varian 735 ICP.

# Copper Analysis by 1E3 - Aqua Regia - ICP

0.5 g of sample is digested with aqua regia for 2 hours at 95 °C. The sample is cooled and then diluted with deionized water. The samples are then analyzed using an Agilent 700 series ICP for the 38 element suite. QC for the digestion is 15% for each batch, 2 method reagent blanks, 6 inhouse controls, 8 sample duplicates and 5 certified reference materials. An additional 20% QC is performed as part of the instrumental analysis to ensure quality in the areas of instrumental drift.



# Innovative Technologies

Date Submitted:27-Sep-16Invoice No.:A16-09895Invoice Date:24-Oct-16Your Reference:Akow Lake

Romios Gold Resources Inc. 20 Toronto St. Suite 1220 Toronto Ontario M5C 2B8 Canada

ATTN: John Biczok

# **CERTIFICATE OF ANALYSIS**

75 Core samples were submitted for analysis.

The following analytical package(s) were requested:

Code 1A2-Tbay Au - Fire Assay AA (QOP Fire Assay Tbay) Code 1E-Tbay Aqua Regia ICP(AQUAGEO)

#### REPORT A16-09895

This report may be reproduced without our consent. If only selected portions of the report are reproduced, permission must be obtained. If no instructions were given at time of sample submittal regarding excess material, it will be discarded within 90 days of this report. Our liability is limited solely to the analytical cost of these analyses. Test results are representative only of material submitted for analysis.

Notes:

If value exceeds upper limit we recommend reassay by fire assay gravimetric-Code 1A3

Values which exceed the upper limit should be assayed for accurate numbers.

CERTIFIED BY:

Emmanuel Eseme , Ph.D. Quality Control

ACTIVATION LABORATORIES LTD.

Analyte Symbol	Cu	Au
Unit Symbol	ppm	ppb
Lower Limit	1	5
Method Code	AR-ICP	FA-AA
W-1120-001	1	< 5
W-1120-002	23	< 5
W-1120-003	24	< 5
W-1120-004	28	< 5
W-1120-005	37	< 5
W-1120-006	56	< 5
W-1120-007	27	< 5
W-1120-008	30	7
W-1120-036	1130	33
W-1120-037	294	9
W-1120-038	161	22
W-1120-039	299	12
W-1120-040	< 1	< 5
W-1120-041	354	10
W-1120-042	541	45
W-1120-043	5240	1150
W-1120-044	622	15
W-1120-045	1360	25
W-1120-046	447	24
W-1120-047	1730	247
W-1120-048	881	19
W-1120-049	1360	34
W-1120-050	25	3510
W-1120-051	6060	101
W-1120-052	1350	55
W-1120-053	> 10000	256
W-1120-054	2240	34
W-1120-055	2110	48
W-1120-056	3210	72
W-1120-057	742	25
W-1120-058	2180	78
W-1120-059	2100	/0
W-1120-060	202	< 5
W-1120-061	525	20
W-1120-062	2450	381
W-1120-063	1/50	100
W-1120-064	0041	49
W-1120-065	204	/0
W-1120-005	294	49
W-1120-000	1/0	24
W 1120 069	149	406
W 1120-008	1440	490
W 1120-009	2850	0440
W-1120-070	23	3440
W-1120-071	4220	128
W-1120-072	905	4/
W-1120-073	1500	52
vv-1120-074	2130	90
vv-1120-075	1020	56

Analyte Symbol	Cu	Au
Unit Symbol	ppm	ppb
Lower Limit	1	5
Method Code	AR-ICP	FA-AA
W-1120-076	779	158
W-1120-077	85	20
W-1120-078	1240	107
W-1120-079	5120	147
W-1120-080	9	< 5
W-1120-081	1320	55
W-1120-082	410	24
W-1120-083	1090	78
W-1120-084	1040	78
W-1120-085	3260	120
W-1120-086	5890	83
W-1120-090	25	3520
W-1120-092	148	26
W-1120-093	120	22
W-1120-094	149	106
W-1120-095	44	82
W-1120-096	47	390
W-1120-097	66	14
W-1120-098	90	17
W-1120-099	42	6
W-1120-100	1	< 5
W-1120-101	2380	265
W-1120-102	814	126
W-1120-103	686	45
W-1120-104	185	6
W-1120-105	942	22
W-1120-106	419	7

Analyte Symbol	Cu	Au
Unit Symbol	ppm	ppb
Lower Limit	1	5
Method Code	AR-ICP	FA-AA
GXR-1 Meas	1220	
GXR-1 Cert	1110	
GXR-4 Meas	6580	
GXB-4 Cert	6520	
GXB-6 Meas	73	
GXP 6 Cort	66.0	
	00.0	070
OREAS 203 Meas		8/2
OREAS 203 Cert		8/1.000
OREAS 203 Meas		877
OREAS 203 Cert		871.000
OREAS 203 Meas		876
OREAS 203 Cert		871.000
SdAR-M2 (U.S.G.S.)	261	
Meas		
SdAR-M2 (U.S.G.S.)		
Cert	236.0000	
OREAS		519
251(FA-Anaster)		
		504
251(FA-Anaster) Cert		504
OBEAS		512
251(FA-Anaster)		512
Meas		
OREAS		504
251(FA-Anaster) Cert		
OREAS		522
251(FA-Anaster)		
Meas		50.4
OREAS 251(EA-Anaster) Cert		504
231(I A-Anaster) Cert	20	
W-1120-008 Orig	30	
W-1120-008 Dup	30	
W-1120-037 Orig		9
W-1120-037 Dup		8
W-1120-047 Orig		209
W-1120-047 Dup		285
W-1120-048 Orig	874	
W-1120-048 Dup	888	
W-1120-057 Orig		24
W-1120-057 Dup		25
W-1120-062 Orig	2470	
W-1120-062 Dun	2430	
W-1120-072 Orig		50
W 1120-072 Olig		30
w 1120-072 Dup	05	43
vv-1120-0/7 Orig	85	20
W-1120-077 Split PREP DUP	100	6
W-1120-082 Orig		30
W-1120-082 Dup		17
W-1120-084 Orig	1050	
	1000	

Analyte Symbol	Cu	Au
Unit Symbol	ppm	ppb
Lower Limit	1	5
Method Code	AR-ICP	FA-AA
W-1120-084 Dup	1020	
W-1120-096 Orig		431
W-1120-096 Dup		348
W-1120-102 Orig	817	126
W-1120-102 Dup	811	125
Method Blank	< 1	
Method Blank	< 1	
Method Blank		< 5



# Innovative Technologies

 Date Submitted:
 27-Sep-16

 Invoice No.:
 A16-09895 (i)

 Invoice Date:
 02-Nov-16

 Your Reference:
 Akow Lake

Romios Gold Resources Inc. 20 Toronto St. Suite 1220 Toronto Ontario M5C 2B8 Canada

ATTN: John Biczok

# **CERTIFICATE OF ANALYSIS**

78 Core samples were submitted for analysis.

The following analytical package(s) were requested:

Code 1A2-Tbay Au - Fire Assay AA (QOP Fire Assay Tbay) Code 1E-Tbay Aqua Regia ICP(AQUAGEO)

#### REPORT A16-09895 (i)

This report may be reproduced without our consent. If only selected portions of the report are reproduced, permission must be obtained. If no instructions were given at time of sample submittal regarding excess material, it will be discarded within 90 days of this report. Our liability is limited solely to the analytical cost of these analyses. Test results are representative only of material submitted for analysis.

Notes:

If value exceeds upper limit we recommend reassay by fire assay gravimetric-Code 1A3

Values which exceed the upper limit should be assayed for accurate numbers.

CERTIFIED BY:

Emmanuel Eseme , Ph.D. Quality Control

ACTIVATION LABORATORIES LTD.

Activation Laboratories Ltd.

Analyte Symbol	Cu	Ag	Cd	Cu	Mn	Мо	Ni	Pb	Zn	AI	As	В	Ва	Be	Bi	Ca	Co	Cr	Fe	Ga	Hg	к	La
Unit Symbol	%	ppm	%	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	%	ppm	ppm	%	ppm							
Lower Limit	0.001	0.2	0.5	1	5	1	1	2	2	0.01	2	10	10	0.5	2	0.01	1	1	0.01	10	1	0.01	10
Method Code	ICP- OES	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP							
W-1120-043		9.6	1.1	5110	1580	2	20	< 2	15	4.12	24	< 10	33	< 0.5	67	0.46	35	17	12.7	< 10	3	1.24	15
W-1120-051		6.3	0.8	6050	376	1	16	< 2	17	3.36	84	< 10	56	< 0.5	7	0.26	63	16	8.21	< 10	3	1.47	20
W-1120-053	1.31																						
W-1120-056		3.0	0.5	3230	680	< 1	14	< 2	11	3.61	100	< 10	197	< 0.5	9	0.42	35	19	9.69	< 10	3	1.23	23
W-1120-071		10.9	2.4	4230	748	< 1	17	17	46	2.65	166	28	90	< 0.5	49	0.30	33	16	7.48	< 10	2	0.90	24
W-1120-079		10.5	1.6	5120	449	2	7	4	104	2.15	136	12	90	< 0.5	21	0.17	33	9	5.77	< 10	2	0.90	16
W-1120-086		12.3	2.3	5870	758	< 1	16	5	47	2.74	31	< 10	91	< 0.5	13	0.28	28	14	7.37	< 10	3	1.15	45
W-1120-101		9.6	5.0	2560	852	< 1	43	6	157	1.67	80	< 10	< 10	< 0.5	8	0.11	45	10	15.0	< 10	2	0.56	17
W1120-166A	0.408																						
W1120-056B		48.9	> 2000	3800	98	< 1	12	1560	> 10000	0.05	339	< 10	< 10	< 0.5	14	0.04	88	3	7.96	20	5	< 0.01	< 10
W1120-101B		49.7	> 2000	3720	96	< 1	9	1520	> 10000	0.04	341	< 10	< 10	< 0.5	13	0.04	82	3	8.06	20	6	< 0.01	< 10

Analyte Symbol	Mg	Na	Р	S	Sb	Sc	Sr	Ti	Th	Те	TI	U	V	W	Y	Zr
Unit Symbol	%	%	%	%	ppm	ppm	ppm	%	ppm							
Lower Limit	0.01	0.001	0.001	0.01	2	1	1	0.01	20	1	2	10	1	10	1	1
Method Code	AR-ICP															
W-1120-043	0.95	0.045	0.053	0.95	3	6	3	0.19	< 20	7	< 2	< 10	64	< 10	8	42
W-1120-051	0.83	0.064	0.059	0.80	4	6	5	0.19	< 20	< 1	< 2	< 10	56	< 10	8	50
W-1120-053																
W-1120-056	0.83	0.052	0.062	0.48	4	5	2	0.19	< 20	2	< 2	< 10	47	< 10	9	43
W-1120-071	0.46	0.049	0.069	0.74	< 2	6	3	0.15	< 20	3	< 2	< 10	39	< 10	10	39
W-1120-079	0.36	0.062	0.047	0.97	2	2	5	0.11	< 20	2	< 2	< 10	24	< 10	7	50
W-1120-086	0.62	0.059	0.070	1.19	3	5	5	0.17	< 20	1	< 2	< 10	51	< 10	11	55
W-1120-101	0.41	0.058	0.031	9.26	7	2	5	0.04	< 20	< 1	< 2	< 10	16	< 10	6	31
W1120-166A																
W1120-056B	0.03	0.013	0.002	9.61	12	< 1	< 1	< 0.01	< 20	4	< 2	< 10	2	12	1	9
W1120-101B	0.03	0.013	0.002	11.6	15	< 1	< 1	< 0.01	< 20	2	2	< 10	2	13	1	9

QC

## Activation Laboratories Ltd.

Analyte Symbol	Cu	Ag	Cd	Cu	Mn	Мо	Ni	Pb	Zn	Al	As	В	Ba	Be	Bi	Ca	Co	Cr	Fe	Ga	Hg	К	La
Unit Symbol	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	%	ppm	ppm	%	ppm
Lower Limit	0.001	0.2	0.5	1	5	1	1	2	2	0.01	2	10	10	0.5	2	0.01	1	1	0.01	10	1	0.01	10
Method Code	ICP- OES	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP
GXR-1 Meas		31.1	2.6	1190	809	14	36	570	609	0.34	396	11	292	0.7	1450	0.79	5	6	24.0	< 10	5	0.03	< 10
GXR-1 Cert		31.0	3.30	1110	852	18.0	41.0	730	760	3.52	427	15.0	750	1.22	1380	0.960	8.20	12.0	23.6	13.8	3.90	0.050	7.50
GXR-4 Meas		3.9	0.5	6710	146	306	41	41	67	2.76	103	< 10	68	1.3	29	0.94	14	55	3.27	10	< 1	1.56	50
GXR-4 Cert		4.0	0.860	6520	155	310	42.0	52.0	73.0	7.20	98.0	4.50	1640	1.90	19.0	1.01	14.6	64.0	3.09	20.0	0.110	4.01	64.5
CZN-3 Meas	0.678																						
CZN-3 Cert	0.685																						
CZN-3 Meas	0.693																						
CZN-3 Cert	0.685																						
GXR-6 Meas		0.4	< 0.5	73	1130	2	28	85	123	7.06	233	< 10	776	0.8	3	0.13	12	83	5.99	20	3	1.03	< 10
GXR-6 Cert		1.30	1.00	66.0	1010	2.40	27.0	101	118	17.7	330	9.80	1300	1.40	0.290	0.180	13.8	96.0	5.58	35.0	0.0680	1.87	13.9
MP-1b Meas	3.02																						
MP-1b Cert	3.069																						
MP-1b Meas	3.00																						
MP-1b Cert	3.069																						
CCU-1d Meas	23.9																						
CCU-1d Cert	23.93																						
CCU-1d Meas	23.9																						
CCU-1d Cert	23.93																						
CPB-2 Meas	0.123																						
CPB-2 Cert	0.1213																						
CPB-2 Meas	0.122																						
CPB-2 Cert	0.1213																						
PTC-1b Meas	7.92																						
PTC-1b Cert	7.97																						
PTC-1b Meas	7.94																						
PTC-1b Cert	7.97																						
SdAR-M2 (U.S.G.S.) Meas			5.5	250		14	46	741	801				116	4.8	< 2		12	9		< 10	1		46
SdAR-M2 (U.S.G.S.) Cert			5.1	236.00 00		13.3	48.8	808	760				990	6.6	1.05		12.4	49.6		17.6	1.44		46.6
Method Blank		< 0.2	< 0.5	< 1	< 5	< 1	< 1	< 2	< 2	< 0.01	< 2	< 10	< 10	< 0.5	< 2	< 0.01	< 1	< 1	< 0.01	< 10	< 1	< 0.01	< 10
Method Blank	< 0.001																						
Method Blank	< 0.001																						

Analyte Symbol	Mg	Na	Р	S	Sb	Sc	Sr	Ti	Th	Те	TI	U	V	W	Y	Zr
Unit Symbol	%	%	%	%	ppm	ppm	ppm	%	ppm							
Lower Limit	0.01	0.001	0.001	0.01	2	1	1	0.01	20	1	2	10	1	10	1	1
Method Code	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP
GXR-1 Meas	0.13	0.063	0.044	0.19	86	1	169	< 0.01	< 20	16	< 2	31	73	142	24	14
GXR-1 Cert	0.217	0.0520	0.0650	0.257	122	1.58	275	0.036	2.44	13.0	0.390	34.9	80.0	164	32.0	38.0
GXR-4 Meas	1.63	0.143	0.126	1.67	6	7	67	0.13	< 20	1	< 2	< 10	79	12	11	10
GXR-4 Cert	1.66	0.564	0.120	1.77	4.80	7.70	221	0.29	22.5	0.970	3.20	6.20	87.0	30.8	14.0	186
CZN-3 Meas																
CZN-3 Cert																
CZN-3 Meas																
CZN-3 Cert																
GXR-6 Meas	0.41	0.112	0.035	0.01	4	20	24		< 20	< 1	< 2	< 10	171	< 10	5	8
GXR-6 Cert	0.609	0.104	0.0350	0.0160	3.60	27.6	35.0		5.30	0.0180	2.20	1.54	186	1.90	14.0	110
MP-1b Meas																
MP-1b Cert																
MP-1b Meas																
MP-1b Cert																
CCU-1d Meas																
CCU-1d Cert																
CCU-1d Meas																
CCU-1d Cert																
CPB-2 Meas																
CPB-2 Cert																
CPB-2 Meas																
CPB-2 Cert																
PTC-1b Meas																
PTC-1b Cert																
PTC-1b Meas																
PTC-1b Cert																
SdAR-M2 (U.S.G.S.) Meas						2	20		< 20			< 10	18	< 10	18	8
SdAR-M2 (U.S.G.S.) Cert						4.1	144		14.2			2.53	25.2	2.8	32.7	259
Method Blank	< 0.01	0.013	< 0.001	< 0.01	< 2	< 1	< 1	< 0.01	< 20	< 1	< 2	< 10	< 1	< 10	< 1	< 1
Method Blank																
Method Blank																
	-	-	-		-	-	-	-		-	-	-	-	-		



# Innovative Technologies

Date Submitted:27-Sep-16Invoice No.:A16-09895-ReAssayInvoice Date:11-Nov-16Your Reference:Akow Lake

Romios Gold Resources Inc. 20 Toronto St. Suite 1220 Toronto Ontario M5C 2B8 Canada

ATTN: John Biczok

# **CERTIFICATE OF ANALYSIS**

78 Core samples were submitted for analysis.

The following analytical package(s) were requested:

Code 1E-Tbay Aqua Regia ICP(AQUAGEO)

#### REPORT A16-09895-ReAssay

This report may be reproduced without our consent. If only selected portions of the report are reproduced, permission must be obtained. If no instructions were given at time of sample submittal regarding excess material, it will be discarded within 90 days of this report. Our liability is limited solely to the analytical cost of these analyses. Test results are representative only of material submitted for analysis.

Notes:

Values which exceed the upper limit should be assayed for accurate numbers.

CERTIFIED BY:

Emmanuel Eseme , Ph.D. Quality Control

ACTIVATION LABORATORIES LTD.

	_
Analyte Symbol	Cu
Unit Symbol	ppm
Lower Limit	1
Method Code	AR-ICP
W-1120-001	< 1
W-1120-002	23
W-1120-003	23
W-1120-004	25
W-1120-005	34
W-1120-006	56
W-1120-007	27
W-1120-008	29
W-1120-036	1150
W-1120-037	283
W-1120-038	162
W-1120-039	299
W-1120-040	2200
W-1120-041	329
W-1120-042	530
W-1120-043	5070
W-1120-044	598
W-1120-045	1300
W-1120-046	438
W-1120-047	1680
W-1120-048	867
W-1120-049	1360
W-1120-050	2220
W-1120-051	5930
W-1120-052	1240
W-1120-053	> 10000
W-1120-054	2200
W-1120-055	2060
W-1120-056	3290
W-1120-057	723
W-1120-058	2210
W-1120-059	197
W-1120-060	2230
W-1120-061	532
W-1120-062	2370
W-1120-063	1400
W-1120-064	59
W-1120-065	296
W-1120-066	68
W-1120-067	147
W-1120-068	1410
W-1120-069	2820

Analyte Symbol	Cu
Unit Symbol	ppm
Lower Limit	1
Method Code	AR-ICP
W-1120-070	2240
W-1120-071	4170
W-1120-072	886
W-1120-073	1490
W-1120-074	2100
W-1120-075	987
W-1120-076	772
W-1120-077	84
W-1120-078	1230
W-1120-079	5190
W-1120-080	2240
W-1120-081	1310
W-1120-082	407
W-1120-083	1090
W-1120-084	1090
W-1120-085	3370
W-1120-086	5970
W-1120-090	2240
W-1120-092	142
W-1120-093	121
W-1120-094	150
W-1120-095	44
W-1120-096	49
W-1120-097	64
W-1120-098	88
W-1120-099	40
W-1120-100	2290
W-1120-101	2640
W-1120-102	817
W-1120-103	655
W-1120-104	182
W-1120-105	915
W-1120-106	420

\_

Analyte Symbol	Cu
Unit Symbol	ppm
Lower Limit	1
Method Code	AR-ICP
GXR-1 Meas	1200
GXR-1 Cert	1110
GXR-4 Meas	6400
GXR-4 Cert	6520
GXR-6 Meas	72
GXR-6 Cert	66.0
SdAR-M2	248
(U.S.G.S.) Meas	
SdAR-M2	236.00
(U.S.G.S.) Cert	00
W-1120-040 Orig	2190
W-1120-040 Dup	2210
W-1120-054 Orig	2240
W-1120-054 Dup	2160
W-1120-067 Orig	150
W-1120-067 Dup	144
W-1120-077 Orig	84
W-1120-077 Split	99
PREP DUP	
W-1120-080 Orig	2260
W-1120-080 Dup	2220
Method Blank	< 1
Method Blank	< 1



# Innovative Technologies

Date Submitted:06-Oct-16Invoice No.:A16-10366Final1Invoice Date:01-Nov-16Your Reference:Akow Lake

Romios Gold Resources Inc. 20 Toronto St. Suite 1220 Toronto Ontario M5C 2B8 Canada

ATTN: John Biczok

# **CERTIFICATE OF ANALYSIS**

88 Core samples were submitted for analysis.

The following analytical package(s) were requested:

Code 1A2-Tbay Au - Fire Assay AA (QOP Fire Assay Tbay) Code 1E-Tbay Aqua Regia ICP(AQUAGEO) Code 1E3-Tbay Aqua Regia ICP(AQUAGEO)

#### REPORT A16-10366Final1

This report may be reproduced without our consent. If only selected portions of the report are reproduced, permission must be obtained. If no instructions were given at time of sample submittal regarding excess material, it will be discarded within 90 days of this report. Our liability is limited solely to the analytical cost of these analyses. Test results are representative only of material submitted for analysis.

#### Notes:

If value exceeds upper limit we recommend reassay by fire assay gravimetric-Code 1A3

Values which exceed the upper limit should be assayed for accurate numbers.

CERTIFIED BY:

Emmanuel Eseme , Ph.D. Quality Control

ACTIVATION LABORATORIES LTD.

### Activation Laboratories Ltd.

Analyte Symbol	Au	Ag	Cd	Cu	Mn	Мо	Ni	Pb	Zn	Al	As	в	Ва	Be	Bi	Ca	Co	Cr	Fe	Ga	Hg	к	La
Unit Symbol	ddd	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	%	ppm	ppm	%	ppm
Lower Limit	5	0.2	0.5	1	5	1	1	2	2	0.01	2	10	10	0.5	2	0.01	1	1	0.01	10	1	0.01	10
Method Code	FA-AA	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP
W1120-009	< 5			25																			
W1120-010	3380			2220																			
W1120-011	< 5			45																			
W1120-012	8			40																			
W1120-013	6			30																			
W1120-107	1330			2570																			
W1120-108	160			1600																			
W1120-109	47			745																			
W1120-110	3280			2230																			
W1120-111	169			3310																			
W1120-112	19			1300																			
W1120-113	144			5330																			
W1120-114	58			3850																			
W1120-115	24			1710																			
W1120-116	22			942																			
W1120-117	22			864																			
W1120-118	43			1850																			
W1120-119	54			2090																			
W1120-120	< 5			10																			
W1120-121	95			2010																			
W1120-122	91			1780																			
W1120-123	132			1090																			
W1120-124	36			1490																			
W1120-125	148			2340																			
W1120-126	41			1250																			
W1120-127	11			452																			
W1120-128	36			1510																			
W1120-129	10			137																			
W1120-130	3300			2170																			
W1120-131	604			> 10000																			
W1120-132	20			1290																			
W1120-133	7			138																			
W1120-140	< 5			3																			
W1120-141	170			1960																			
W1120-142	23			119																			
W1120-143	86			2260																			
W1120-144	56			1770																			
W1120-145	62			1120																			
W1120-146	53			1130																			
W1120-147	17			1030																			
W1120-148	19			1120																			
W1120-149	7			133																			
W1120-150	3100			2140																			
W1120-151	9			531																			
W1120-152	14			247																			
W1120-153	204			1540																			
W1120-191	1080																						
W1120-192	< 5																						
	1					1																	

### Activation Laboratories Ltd.

Analyte Symbol	Au	Ag	Cd	Cu	Mn	Mo	Ni	Pb	Zn	Al	As	В	Ba	Be	Bi	Ca	Co	Cr	Fe	Ga	Hg	к	La
Unit Symbol	ppb	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	%	ppm	ppm	%	ppm
Lower Limit	5	0.2	0.5	1	5	1	1	2	2	0.01	2	10	10	0.5	2	0.01	1	1	0.01	10	1	0.01	10
Method Code	FA-AA	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP
W1120-193	< 5			28																			
W1120-194	186	18.5	86.1	222	1730	< 1	126	3690	7280	6.19	7	< 10	122	< 0.5	4	4.40	34	200	6.80	10	3	0.71	< 10
W1120-195	622			254																			
W1120-196	< 5			167																			
W1120-197	28			345																			
W1120-198	36			467																			
W1120-199	48			825																			
W1120-202	272			434																			
W1120-203	329			1040																			
W1120-204	< 5			188																			
W1120-162	32	1.2	< 0.5	585	334	15	14	10	15	2.77	197	< 10	179	< 0.5	6	0.18	12	17	5.94	< 10	2	1.52	20
W1120-163	23	0.3	0.7	150	378	< 1	10	7	7	1.93	638	98	117	< 0.5	8	0.19	13	32	4.65	< 10	1	0.86	< 10
W1120-164	430	3.0	0.7	1350	275	< 1	14	8	12	1.52	> 10000	34	47	< 0.5	38	0.16	307	32	6.74	< 10	< 1	0.62	< 10
W1120-165	100	4.4	0.8	2040	368	2	6	6	13	1.56	4250	129	71	< 0.5	17	0.18	66	16	4.58	< 10	< 1	0.56	< 10
W1120-166	278	29.5	4.2	> 10000	443	1	38	6	90	1.43	932	29	23	< 0.5	35	0.25	60	14	14.0	< 10	3	0.54	< 10
W1120-167	194	15.6	2.7	6200	271	20	8	8	55	0.58	440	174	36	< 0.5	139	0.21	33	52	3.42	< 10	< 1	0.15	< 10
W1120-168	259	23.2	3.0	8420	376	37	11	10	58	1.34	> 10000	30	50	< 0.5	135	0.31	556	19	7.31	< 10	< 1	0.56	< 10
W1120-169	26	2.3	< 0.5	918	459	1	7	9	8	2.73	197	25	126	< 0.5	10	0.20	15	16	4.18	< 10	< 1	1.09	27
W1120-170	3370	1.0	< 0.5	2280	808	< 1	31	57	249	3.05	9	< 10	114	0.8	10	0.45	19	47	5.62	< 10	4	0.50	40
W1120-250A	< 5			4																			
W1120-251	10			561																			
W1120-252	107			3040																			
W1120-253	12			423																			
W1120-190	3460			2300																			
W1120-200	< 5			2																			
W1120-201	20			1160																			
W1120-166B																							

Analyte Symbol	Mg	Na	Р	S	Sb	Sc	Sr	Ti	Th	Те	TI	U	V	W	Y	Zr	Cu
Unit Symbol	%	%	%	%	ppm	ppm	ppm	%	ppm	%							
Lower Limit	0.01	0.001	0.001	0.01	2	1	1	0.01	20	1	2	10	1	10	1	1	0.001
Method Code	AR-ICP	ICP-OES															
W1120-009																	
W1120-010																	
W1120-011																	
W1120-012																	
W1120-013																	
W1120-107																	
W1120-108																	
W1120-109																	
W1120-110																	
W1120-111																	
W1120-112																	
W1120-113																	
W1120-114																	
W1120-115																	
W1120-116																	
W1120-117																	
W1120-118																	
W1120-119																	
W1120-120																	
W1120-121																	
W1120-122																	
W1120-123																	
W1120-124																	
W1120-125																	
W1120-126																	
W1120-127																	
W1120-128																	
W1120-129																	
W1120-130																	
W1120-131																	1.31
W1120-132																	
W1120-133																	
W1120-140																	
W1120-141																	
W1120-142																	
W1120-143																	
W1120-144																	
W1120-145																	
W1120-146																	
W1120-147																	
W1120-148																	
W1120-149																	
W1120-150																	
W1120-151																	
W1120-152																	
W1120-153																	
W1120-191			1														
W1120-192	1		İ	l	l						l						
	1	1	1	i	İ	1		1	1		1						

Analyte Symbol	Mg	Na	Р	S	Sb	Sc	Sr	Ti	Th	Те	TI	U	V	W	Y	Zr	Cu
Unit Symbol	%	%	%	%	ppm	ppm	ppm	%	ppm	%							
Lower Limit	0.01	0.001	0.001	0.01	2	1	1	0.01	20	1	2	10	1	10	1	1	0.001
Method Code	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	ICP-OES
W1120-193																	
W1120-194	1.58	0.588	0.037	1.44	15	22	55	0.24	< 20	< 1	< 2	< 10	213	< 10	10	4	
W1120-195																	
W1120-196																	
W1120-197																	
W1120-198																	
W1120-199																	
W1120-202																	
W1120-203																	
W1120-204																	
W1120-162	0.65	0.067	0.052	0.38	4	4	4	0.17	< 20	< 1	< 2	< 10	36	< 10	9	47	
W1120-163	0.43	0.048	0.047	0.19	< 2	4	3	0.12	< 20	< 1	< 2	< 10	26	< 10	9	38	
W1120-164	0.30	0.041	0.031	2.20	7	3	3	0.07	< 20	5	< 2	< 10	19	< 10	5	36	
W1120-165	0.28	0.044	0.042	0.95	3	3	3	0.07	< 20	1	< 2	< 10	12	< 10	7	51	
W1120-166	0.38	0.024	0.069	7.21	6	2	2	0.07	< 20	< 1	< 2	< 10	14	14	7	34	1.32
W1120-167	0.11	0.027	0.053	1.37	< 2	2	2	0.04	< 20	2	< 2	< 10	6	< 10	8	53	
W1120-168	0.35	0.027	0.101	2.86	7	3	2	0.07	< 20	2	< 2	< 10	20	< 10	11	31	
W1120-169	0.32	0.076	0.048	0.30	< 2	3	4	0.10	< 20	< 1	< 2	< 10	18	< 10	10	39	
W1120-170	1.51	0.034	0.069	0.39	4	4	16	0.20	< 20	< 1	< 2	< 10	36	< 10	21	25	
W1120-250A																	
W1120-251																	
W1120-252																	
W1120-253																	
W1120-190																	
W1120-200																	
W1120-201																	
W1120-166B																	0.418

QC

Analyte Symbol	Au	Cu	Aq	Cd	Cu	Mn	Мо	Ni	Pb	Zn	AI	As	В	Ва	Be	Bi	Ca	Co	Cr	Fe	Ga	Ha	к
Linit Symbol	nnh	nom	nom	nom	nom	nnm	npm	nom	nnm	nom	%	npm	npm	nnm	nnm	nom	%	nom	nom	%	nnm	nom	%
Lower Limit	5	1	0.2	0.5	1	5	1	1	2	2	0.01	2	10	10	0.5	2	0.01	1	1	0.01	10	1	0.01
Method Code	FA-AA	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	- AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP
GXR-1 Meas		1180	30.1	2.4	1190	812	14	35	628	667	0.37	398	11	438	0.8	1350	0.79	6	7	24.6	< 10	4	0.03
GXR-1 Cert	<u> </u>	1110	31.0	3.30	1110	852	18.0	41.0	730	760	3.52	427	15.0	750	1.22	1380	0,960	8.20	12.0	23.6	13.8	3.90	0.050
GXB-4 Meas	<u> </u>	6500	3.7	0.00	6470	144	302	36	45	65	2.87	102	< 10	80	1.4	20	0.000	17	56	3 24	10	<pre>0.00</pre>	1.80
GXB-4 Cert	<u> </u>	6520	4.0	0.860	6520	155	310	42.0	52.0	73.0	7 20	98.0	4 50	1640	1 90	19.0	1.01	14.6	64.0	3.09	20.0	0.110	4.01
CZN-3 Meas	<u> </u>	0020	4.0	0.000	0020	100	010	42.0	02.0	70.0	7.20	00.0	4.00	1040	1.00	10.0	1.01	14.0	04.0	0.00	20.0	0.110	4.01
CZN-3 Cert			<u> </u>	<u> </u>					───	<u> </u>						<b>├</b> ───┤	<u> </u>			<u> </u>		├──┤	$ \longrightarrow$
GXR 6 Moas		71	0.2	< 0.5	72	1100		24	01	110	7.41	254	< 10	1000	0.0	- 2	0.12	12	92	6.10	20		1 10
GXR 6 Cort	<u> </u>	66.0	1.20	1 00	66.0	1010	2.40	24	101	110	17.41	204	< 10	1200	1.40	0.200	0.13	12.0	00	5.50	20	0.0690	1.13
MR 1b Moac		00.0	1.50	1.00	00.0	1010	2.40	27.0	101	110	17.7	330	9.00	1300	1.40	0.230	0.100	13.0	30.0	5.56	33.0	0.0000	1.07
MP 1b Cort	<u> </u>		<u> </u>	──	<b>├</b> ───		──	──	┼───	┼───						┢───┦			───	├───	├───	┢──┤	
	<u> </u>		┝───	<u> </u>				<u> </u>		<u> </u>						┢────┘				<u> </u>		┝──┦	
CCU-1d Meas			┝───	<u> </u>					───	───						<b>└───</b> ┘				<u> </u>		┢──┤	
CCO-10 Cert	<u> </u>		<u> </u>	<u> </u>		<u> </u>		<u> </u>	───	<u> </u>						┢────┘	<sup> </sup>	<u> </u>		<u> </u>		┢───┦	
CPB-2 Meas	──	┢────	──	──	<b> </b> '	──	───	──	──	──						┟───┘	<b>├</b> ────	──	<b> </b> '	───	───	┢───┦	
CPB-2 Cert	──	<u> </u>	──	──	<b> </b> '	──	───	──	──	──						┢───┘	<b>└───</b> └	──	<b> </b> '	───	<u> </u>	┢───┛	
PTC-1b Meas	<u> </u>		<u> </u>	<u> </u>	<u> </u>		<u> </u>	<u> </u>		<u> </u>						ļ/	<u> </u>		'	<u> </u>		$\square$	
PTC-1b Cert	<u> </u>		<u> </u>	<u> </u>		<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>						$\square$	<u> </u>	<u> </u>		<u> </u>	<u> </u>	$\square$	
SdAR-M2 (U.S.G.S.) Meas		258		5.8	260		14	44	840	807				164	5.2	< 2		14	10		< 10	2	
SdAR-M2 (U.S.G.S.) Cert		236.0000		5.1	236.0000		13.3	48.8	808	760				990	6.6	1.05		12.4	49.6		17.6	1.44	
OREAS	525							1	1														
251(FA-Anaster) Meas																							1
OREAS 251(FA-Anaster) Cert	504																						1
OREAS 251(FA-Anaster) Meas	531																						
OREAS 251(FA-Anaster) Cert	504																						1
OREAS 251(FA-Anaster) Meas	523																						
OREAS 251(FA-Anaster) Cert	504																						1
W1120-111 Orig	166						1														1		
W1120-111 Dup	171			<u> </u>					<u> </u>	<u> </u>												<b>├</b> ──┤	
W1120-114 Oria		3880		<u> </u>					<u> </u>	<u> </u>													
W1120-114 Dup		3830																				<b>├</b> ──┤	
W1120-121 Orig	93																					<u>├</u> ──┤	
W1120-121 Dup	97			-																		<b>├</b> ──┤	
W1120-128 Orig		1520		<u> </u>				<u> </u>	<u> </u>	<u> </u>						┟───┦				<u> </u>		├	
W1120-128 Dup		1500	<u> </u>	<u> </u>	<u> </u>			<u> </u>	<u> </u>	<u> </u>						┢────┦						├───┤	
W1120-131 Orig	610			<u> </u>				<u> </u>	<u> </u>	<u> </u>						┟───┦				<u> </u>		├──┤	
W1120-131 Dup	598		<u> </u>	<u> </u>	<u> </u>			<u> </u>	<u> </u>							┢───┤				<u> </u>		┝──┥	
W1120-147 Orig		1050	<u> </u>	<u> </u>	<u> </u>			<u> </u>	┝───							┢───┦				<u> </u>		├──┤	
W1120-147 Olig	<u> </u>	1010	───	╂────	┨──────		───	───	╂────	╂────						┟────┦			<b>├</b> ────'	├───	───	┟───┤	
W1120-147 Dup	10	1010	<u> </u>	──	┥────	<u> </u>	───	<u> </u>	──	╂────						┝───┦	<b>├</b> ────	<u> </u>	<b>├───</b> '	├───	───	┢───┦	
W1120-152 Olig	15		<u> </u>	<u> </u>	<u> </u>		<u> </u>	<u> </u>	<u> </u>	<u> </u>										<u> </u>		┢───┦	
W1120-152 Dup	15		10.5	00.1	000	1700	. 1	100	2000	7000	0.10		. 10	100	.05		4.40		000	0.00	10		0.71
W1120-194 Ong	───	<u> </u>	18.5	80.1	222	1/30	< 1	120	3690	7280	6.19	1	< 10	122	< 0.5	4	4.40	34	200	0.80	10	3	0.71
WI120-194 Split		1	20.3	89.9	221	1810	< 1	127	3850	/580	6.27	4	< 10	129	< 0.5	3	4.54	34	205	6.95	10	3	0.71

### Activation Laboratories Ltd.

Analyte Symbol	Au	Cu	Ag	Cd	Cu	Mn	Мо	Ni	Pb	Zn	AI	As	В	Ba	Be	Bi	Ca	Co	Cr	Fe	Ga	Hg	К
Unit Symbol	ppb	ppm	%	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	%	ppm	ppm	%								
Lower Limit	5	1	0.2	0.5	1	5	1	1	2	2	0.01	2	10	10	0.5	2	0.01	1	1	0.01	10	1	0.01
Method Code	FA-AA	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP
PREP DUP				1																			
W1120-199 Orig	42																						
W1120-199 Dup	54																						
W1120-203 Orig		1040																					
W1120-203 Dup		1030																					
W1120-168 Orig	283																						
W1120-168 Dup	234																						
W1120-253 Orig	12																						
W1120-253 Dup	12																						
Method Blank	< 5																						
Method Blank	< 5																						
Method Blank	< 5																						
Method Blank	< 5																						
Method Blank	< 5																						
Method Blank		< 1																					
Method Blank		< 1																					
Method Blank			< 0.2	< 0.5	< 1	< 5	< 1	< 1	< 2	< 2	< 0.01	< 2	< 10	11	< 0.5	< 2	< 0.01	< 1	< 1	< 0.01	< 10	< 1	< 0.01
Method Blank																							

QC

Analyte Symbol	La	Mg	Na	Р	S	Sb	Sc	Sr	Ti	Th	Te	TI	U	V	W	Y	Zr	Cu
Unit Symbol	ppm	%	%	%	%	ppm	ppm	ppm	%	ppm	%							
Lower Limit	10	0.01	0.001	0.001	0.01	2	1	1	0.01	20	1	2	10	1	10	1	1	0.001
Method Code	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	ICP-OES
GXR-1 Meas	< 10	0.14	0.064	0.048	0.22	79	1	184	< 0.01	< 20	9	< 2	31	77	137	25	15	
GXR-1 Cert	7.50	0.217	0.0520	0.0650	0.257	122	1.58	275	0.036	2.44	13.0	0.390	34.9	80.0	164	32.0	38.0	
GXR-4 Meas	51	1.71	0.137	0.134	1.82	3	8	74	0.14	< 20	2	< 2	< 10	81	12	11	10	
GXR-4 Cert	64.5	1.66	0.564	0.120	1.77	4.80	7.70	221	0.29	22.5	0.970	3.20	6.20	87.0	30.8	14.0	186	
CZN-3 Meas																		0.693
CZN-3 Cert																		0.685
GXR-6 Meas	< 10	0.43	0.108	0.037	0.02	5	21	26		< 20	2	3	< 10	172	< 10	5	10	
GXR-6 Cert	13.9	0.609	0.104	0.0350	0.0160	3.60	27.6	35.0		5.30	0.0180	2.20	1.54	186	1.90	14.0	110	
MP-1b Meas																		3.00
MP-1b Cert																		3.069
CCU-1d Meas																		23.9
CCU-1d Cert																		23.93
CPB-2 Meas																		0.122
CPB-2 Cert																		0.1213
PTC-1b Meas																		7.94
PTC-1b Cert																		7.97
SdAR-M2 (U.S.G.S.) Meas	51						3	23		< 20			< 10	19	< 10	19	8	
SdAR-M2 (U.S.G.S.) Cert	46.6						4.1	144		14.2			2.53	25.2	2.8	32.7	259	
OREAS 251(FA-Anaster) Meas																		
OREAS 251(FA-Anaster) Cert																		
OREAS 251(FA-Anaster) Meas																		
OREAS 251(FA-Anaster) Cert																		
OREAS 251(FA-Anaster) Meas																		
OREAS 251(FA-Anaster) Cert																		
W1120-111 Orig																		
W1120-111 Dup																		
W1120-114 Orig																		
W1120-114 Dup																		
W1120-121 Orig																		
W1120-121 Dup																		
W1120-128 Orig																		
W1120-128 Dup																		
W1120-131 Orig																		
W1120-131 Dup																		
W1120-147 Orig																		
W1120-147 Dup																		
W1120-152 Orig																		
W1120-152 Dup																		
W1120-194 Orig	< 10	1.58	0.588	0.037	1.44	15	22	55	0.24	< 20	< 1	< 2	< 10	213	< 10	10	4	
W1120-194 Split	< 10	1.62	0.600	0.037	1.46	15	23	55	0.25	< 20	1	< 2	< 10	220	< 10	10	4	
Analyte Symbol	La	Mg	Na	Р	S	Sb	Sc	Sr	Ti	Th	Те	TI	U	V	W	Y	Zr	Cu
----------------	--------	--------	--------	---------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	--------	---------
Unit Symbol	ppm	%	%	%	%	ppm	ppm	ppm	%	ppm	%							
Lower Limit	10	0.01	0.001	0.001	0.01	2	1	1	0.01	20	1	2	10	1	10	1	1	0.001
Method Code	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	ICP-OES
PREP DUP																		
W1120-199 Orig																		
W1120-199 Dup																		
W1120-203 Orig																		
W1120-203 Dup																		
W1120-168 Orig																		
W1120-168 Dup																		
W1120-253 Orig																		
W1120-253 Dup																		
Method Blank																		
Method Blank																		
Method Blank																		
Method Blank																		
Method Blank																		
Method Blank																		
Method Blank																		
Method Blank	< 10	< 0.01	0.011	< 0.001	< 0.01	< 2	< 1	< 1	< 0.01	< 20	< 1	< 2	< 10	< 1	< 10	< 1	< 1	
Method Blank																		< 0.001

Quality Analysis ...



### Innovative Technologies

Date Submitted:07-Oct-16Invoice No.:A16-10422Final1Invoice Date:01-Nov-16Your Reference:Akow Lake

Romios Gold Resources Inc. 20 Toronto St. Suite 1220 Toronto Ontario M5C 2B8 Canada

ATTN: John Biczok

# **CERTIFICATE OF ANALYSIS**

114 Core samples were submitted for analysis.

The following analytical package(s) were requested:

Code 1A2-Tbay Au - Fire Assay AA (QOP Fire Assay Tbay) Code 1E-Tbay Aqua Regia ICP(AQUAGEO) Code 1E3-Tbay Aqua Regia ICP(AQUAGEO)

#### REPORT A16-10422Final1

This report may be reproduced without our consent. If only selected portions of the report are reproduced, permission must be obtained. If no instructions were given at time of sample submittal regarding excess material, it will be discarded within 90 days of this report. Our liability is limited solely to the analytical cost of these analyses. Test results are representative only of material submitted for analysis.

#### Notes:

If value exceeds upper limit we recommend reassay by fire assay gravimetric-Code 1A3

Values which exceed the upper limit should be assayed for accurate numbers.

CERTIFIED BY:

Emmanuel Eseme , Ph.D. Quality Control

ACTIVATION LABORATORIES LTD.

1201 Walsh Street West, Thunder Bay, Ontario, Canada, P7E 4X6 TELEPHONE +807 622-6707 or +1.888.228.5227 FAX +1.905.648.9613 E-MAIL Tbay@actlabs.com ACTLABS GROUP WEBSITE www.actlabs.com

Activation Laboratories Ltd.

Analyte Symbol	Cu	Au	Ag	Cd	Cu	Mn	Мо	Ni	Pb	Zn	AI	As	В	Ba	Be	Bi	Ca	Со	Cr	Fe	Ga	Hg	К
Unit Symbol	%	daa	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	%	ppm	mqq	%
Lower Limit	0.001	5	0.2	0.5	1	5	1	1	2	2	0.01	2	10	10	0.5	2	0.01	1	1	0.01	10	1	0.01
Method Code	ICP-OES	FA-AA	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP
W1120-088		96			70																		
W1120-089		226			155																		
W1120-090		3460			22																		
W1120-091		155			53																		
W1120-153B		3540			22																		
W1120-154		15			421																		
W1120-155		17			229																		
W1120-156		31			464																		
W1120-158		110			681																		
W1120-160		< 5			< 1																		
W1120-161		45			676																		
W1120-170B		3630			22																		
W1120-171		14			191																		
W1120-172		9			137																		
W1120-173		12			780																		
W1120-175		46			500																		
W1120-176		14			232																		
W1120-177		109	15.4	7.9	6720	176	1	19	6	174	2.98	785	< 10	67	< 0.5	22	0.53	21	10	5.77	< 10	3	1.15
W1120-178		13			279									-									
W1120-179		35			273																		
W1120-180		< 5			3																		
W1120-181		78			94																		
W1120-182		85			79																		
W1120-183		48			102																		
W1120-184		80			440																		
W1120-185		110			571																		
W1120-186		11			41																		
W1120-187		6			43																		
W1120-188		55			180																		
W1120-189		13			31																		
W1120-204B		< 5			< 1																		
W1120-205		54			52																		
W1120-206		42			55																		
W1120-207		55			78																		
W1120-208		26			1400																		
W1120-209		353			2970																		
W1120-210		3440			2270																		
W1120-211		10			932																		
W1120-212		35			2790																		
W1120-213		17			1300																		
W1120-214		< 5			473																		
W1120-215		27			1170																		
W1120-216		< 5			361																		
W1120-217		40			3700																		
W1120-218		8			360																		
W1120-219	1.16	400			> 10000																		
W1120-220		< 5			13	1															1		
W1120-221		52			1400																		
						i				I	1	i									i		

Activation Laboratories Ltd.

Analyte Symbol	Cu	Au	Aa	Cd	Cu	Mn	Мо	Ni	Pb	Zn	AI	As	в	Ва	Be	Bi	Ca	Co	Cr	Fe	Ga	Ha	к
Linit Symbol	%	nnh	nom	nnm	nnm	nom	nnm	nnm	nom	nnm	%	nom	- nnm	nnm	nnm	nnm	%	nnm	nom	%	nnm	nnm	%
Lower Limit	0.001	5	0.2	0.5	1	5	1	1	2	2	0.01	2	10	10	0.5	2	0.01	1	1	0.01	10	1	0.01
Method Code	ICP-OES	FA-AA	AB-ICP	AB-ICP	AB-ICP	AB-ICP	AB-ICP	AB-ICP	AB-ICP	AB-ICP	AB-ICP	AB-ICP	AB-ICP	AB-ICP	AB-ICP	AB-ICP	AB-ICP	AB-ICP	AB-ICP	AB-ICP	AB-ICP	AB-ICP	AB-ICP
W1120-222		101	AITHO	AITIO	2020	AITHO	AITIO	AITIO	Arrior	AIFIOI	AITIO	AITIO	AITIO	AITIO	AITIO	AITIO	AIFIOI	AITEIO	AITIO	AITIO	AITIO	AIFIOI	AITIO
W1120-223		7			518																		
W1120-223		301			1330																		
W1120-224		301			575																		
W1120-225		30			417																		
W1120-220		20			417																		
W1120-227		10			626																		
W1120-228		11			893																		
W1120-229		15			1050							l			l						l		
W1120-230		3470			2280																		
W1120-231		< 5			105																		
W1120-232		16			820																		
W1120-233		427			6550																		
W1120-234		408			1900																		
W1120-235		89			198																		
W1120-236		77			126																		
W1120-239		75			1650																		
W1120-240		< 5			3																		
W1120-241		223			505																		
W1120-242	1.30	266			> 10000																		
W1120-243		77			1740																		
W1120-244		45			1070																		
W1120-246		66			2050																		
W1120-247		21			251																		
W1120-249		59			625																		
W1120-250B		3300			2220																		
W1121-501		398			4920																		
W1121-502		145			2240																		
W1121-503		40			756																		
W1121-510		< 5			3																		
W1121-511		16			743																		
W1121-512		58			854																		
W1121-513		8			308																		
W1121-514		282			2190																		
W1121-515		24			286																		
W1121-516		1160			7530																		<u> </u>
W1121-517		1270			2730																		
W1121-518		2550			1360																		
W1121-519		52			1550																		
W1121-520		3500			22																		
W1121-520		460			2270																		
W1121-521	0.51	400			10000																		
W1121-522	2.01	1400			> 10000																		
W1121-523	1.00	225			> 10000																		
W1121-924	1.02	350		0.5	> 10000	000					0.05	4070	4.0	000			0.00		07	0.00	4.0		1 70
W1120-237	<b> </b>	15/	0.8	< 0.5	422	389		26	< 2	6	3.25	10/0	< 10	222	< 0.5	6	0.36	26	37	6.63	< 10	< 1	1./0
W1120-238		35	1.0	< 0.5	650	362	<1	34	< 2	31	4.81	3060	< 10	254	< 0.5	6	0.88	22	4/	8.42	10	< 1	1./2
W1120-245	I	149	7.1	0.6	3980	408	2	8	4	13	2.99	26	< 10	167	< 0.5	17	0.17	25	14	7.18	< 10		1.41
W1120-157		139	3.3	< 0.5	861	317	2	5	11	3	2.64	1830	< 10	177	< 0.5	18	0.14	21	12	4.10	< 10	< 1	1.19
W1120-159	I	588	4.8	0.5	2190	380	< 1	9	6	6	2.75	5560	< 10	147	< 0.5	58	0.16	213	10	6.03	< 10	< 1	1.14
1	•						•				•	•		•						•			

Analyte Symbol	Cu	Au	Ag	Cd	Cu	Mn	Мо	Ni	Pb	Zn	Al	As	В	Ва	Be	Bi	Ca	Co	Cr	Fe	Ga	Hg	К
Unit Symbol	%	ppb	ppm	%	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	%	ppm	ppm	%							
Lower Limit	0.001	5	0.2	0.5	1	5	1	1	2	2	0.01	2	10	10	0.5	2	0.01	1	1	0.01	10	1	0.01
Method Code	ICP-OES	FA-AA	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP
W1120-174		186	13.9	0.8	5900	522	3	12	6	13	3.47	4030	13	178	< 0.5	32	0.23	162	11	6.23	< 10	< 1	1.52
W1120254		71			606																		
W1120255		19			879																		
W1120134		27			1950																		
W1120135		6			95																		
W1120136		< 5			579																		
W1120137		63			1850																		
W1120138		49			1280																		
W1120139		55			1120																		
W1120140		< 5			3																		
W1120-166C	0.406		50.6	> 2000	3810	98	< 1	11	1540	> 10000	0.05	353	< 10	< 10	< 0.5	10	0.04	85	3	8.24	20	6	< 0.01

Analyte Symbol	La	Mg	Na	Р	S	Sb	Sc	Sr	Ti	Th	Te	TI	U	V	W	Y	Zr
Unit Symbol	ppm	%	%	%	%	ppm	ppm	ppm	%	ppm							
Lower Limit	10	0.01	0.001	0.001	0.01	2	1	1	0.01	20	1	2	10	1	10	1	1
Method Code	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP
W1120-088																	
W1120-089																	
W1120-090																	
W1120-091																	
W1120-153B																	
W1120-154																	
W1120-155																	
W1120-156																	
W1120-158																	
W1120-160																	
W1120-161																	
W1120-170B																	
W1120-171																	
W1120-172																	
W1120-173																	
W1120-175																	
W1120-176																	
W1120-177	20	0.59	0.171	0.043	1.83	3	3	9	0.11	< 20	< 1	4	< 10	28	< 10	5	62
W1120-178																	
W1120-179																	
W1120-180																	
W1120-181																	
W1120-182																	
W1120-183																	
W1120-184																	
W1120-185																	
W1120-186																	
W1120-187																	
W1120-188																	
W1120-189																	
W1120-204B																	
W1120-205																	
W1120-206																	
W1120-207																	
W1120-208	1																
W1120-209	1	İ		i i													
W1120-210																	
W1120-211																	
W1120-212																	
W1120-213																	
W1120-214																	
W1120-215	1			1													
W1120-216	1																
W1120-217																	
W1120-218																	
W1120-219																	
W1120-220																	
W1120-221																	
· · ·	I	<u> </u>													┢────┦		

Analyte Symbol	La	Mg	Na	Р	S	Sb	Sc	Sr	Ti	Th	Те	TI	U	V	W	Y	Zr
Unit Symbol	ppm	%	%	%	%	ppm	ppm	ppm	%	ppm							
Lower Limit	10	0.01	0.001	0.001	0.01	2	1	1	0.01	20	1	2	10	1	10	1	1
Method Code	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP
W1120-222																	
W1120-223																	
W1120-224																	
W1120-225																	
W1120-226																	
W1120-227																	
W1120-228																	
W1120-229																	
W1120-230																	
W1120-231																	
W1120-232																	
W1120-233																	
W1120-234																	
W1120-235																	
W1120-236																	
W1120-239																	
W1120-240																	
W1120-241																	
W1120-242																	
W1120-243																	
W1120-244																	
W1120-246																	
W1120-247																	
W1120-249																	
W1120-250B																	
W1121-501																	
W1121-502																	
W1121-503																	
W1121-510																	
W1121-511																	
W1121-512																	
W1121-513																	
W1121-514																	
W1121-515																	
W1121-516																	
W1121-517																	
W1121-518																	
W1121-519																	
W1121-520																	
W1121-521																	
W1121-522																	
W1121-523																	
W1121-524																	
W1120-237	25	0.96	0.078	0.058	0.72	< 2	7	10	0.17	< 20	2	4	< 10	52	< 10	8	64
W1120-238	21	1.99	0.124	0.062	0.47	3	8	19	0.17	< 20	< 1	< 2	< 10	73	< 10	5	25
W1120-245	31	0.64	0.076	0.046	0.70	3	3	7	0.16	< 20	< 1	< 2	< 10	29	< 10	7	31
W1120-157	31	0.32	0.073	0.047	0.40	2	2	5	0.09	< 20	< 1	< 2	< 10	21	< 10	7	30
W1120-159	22	0.35	0.068	0.044	1.01	4	3	5	0.09	< 20	2	< 2	< 10	23	< 10	6	30
	1																

Analyte Symbol	La	Mg	Na	Р	S	Sb	Sc	Sr	Ti	Th	Те	TI	U	V	w	Y	Zr
Unit Symbol	ppm	%	%	%	%	ppm	ppm	ppm	%	ppm							
Lower Limit	10	0.01	0.001	0.001	0.01	2	1	1	0.01	20	1	2	10	1	10	1	1
Method Code	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP
W1120-174	28	0.64	0.077	0.071	0.86	< 2	4	5	0.13	< 20	< 1	< 2	< 10	30	< 10	10	47
W1120254																	
W1120255																	
W1120134																	
W1120135																	
W1120136																	
W1120137																	
W1120138																	
W1120139																	
W1120140				1													
W1120-166C	< 10	0.03	0.014	0.002	10.9	14	< 1	< 1	< 0.01	< 20	3	< 2	< 10	2	12	1	10

### Activation Laboratories Ltd.

Analyta Symbol	Cu	A.,	Cu	40	Cd	Cu	Mn	Mo	NI	Dh	Zn	A1	10	D	Po	Po	D:	Ca	Co	Cr	Fo	Co	Цa
Analyte Symbol	Cu	Au	Cu	Ag	Ca	Cu	IVIN	IVIO		PD	Zn	AI	AS	ь	Ба	Бе	ы	Ua	00	Cr	ге	Ga	пg
Unit Symbol	%	ррв	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	%	ppm	ppm
Lower Limit	0.001	5	1	0.2	0.5	1	5	1	1	2	2	0.01	2	10	10	0.5	2	0.01	1	1	0.01	10	1
Method Code	ICP-OES	FA-AA	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP
GXR-1 Meas			1180	31.1	2.6	1190	809	14	36	570	609	0.34	396	11	292	0.7	1450	0.79	5	6	24.0	< 10	5
GXR-1 Cert			1110	31.0	3.30	1110	852	18.0	41.0	730	760	3.52	427	15.0	750	1.22	1380	0.960	8.20	12.0	23.6	13.8	3.90
GXR-1 Meas				28.6	2.5	1190	780	15	33	617	635	0.34	379	< 10	438	0.7	1430	0.75	4	6	22.8	< 10	4
GXR-1 Cert				31.0	3.30	1110	852	18.0	41.0	730	760	3.52	427	15.0	750	1.22	1380	0.960	8.20	12.0	23.6	13.8	3.90
GXR-4 Meas			6780	3.9	0.5	6710	146	306	41	41	67	2.76	103	< 10	68	1.3	29	0.94	14	55	3.27	10	< 1
GXR-4 Cert			6520	4.0	0.860	6520	155	310	42.0	52.0	73.0	7.20	98.0	4.50	1640	1.90	19.0	1.01	14.6	64.0	3.09	20.0	0.110
GXR-4 Meas				3.5	< 0.5	6450	139	327	35	42	63	2.73	98	< 10	87	1.4	26	0.89	13	55	3.03	10	< 1
GXR-4 Cert				4.0	0.860	6520	155	310	42.0	52.0	73.0	7.20	98.0	4.50	1640	1.90	19.0	1.01	14.6	64.0	3.09	20.0	0.110
CZN-3 Meas	0.693																						
CZN-3 Cert	0.685																						
GXR-6 Meas			73	0.4	< 0.5	73	1130	2	28	85	123	7.06	233	< 10	776	0.8	3	0.13	12	83	5.99	20	3
GXR-6 Cert			66.0	1.30	1.00	66.0	1010	2.40	27.0	101	118	17.7	330	9.80	1300	1.40	0.290	0.180	13.8	96.0	5.58	35.0	0.0680
GXR-6 Meas				0.4	< 0.5	73	1090	2	24	95	116	7.23	241	< 10	985	0.8	3	0.13	12	81	5.81	20	3
GXR-6 Cert				1.30	1.00	66.0	1010	2.40	27.0	101	118	17.7	330	9.80	1300	1.40	0.290	0.180	13.8	96.0	5.58	35.0	0.0680
MP-1b Meas	3.00							-		-						-							
MP-1b Cert	3.069																						
CCU-1d Meas	23.9																						
CCU-1d Cert	23.93																						
CPB-2 Meas	0 122																						
CPB-2 Cert	0.1213																						
PTC-1h Meas	7 9/																						
PTC 1b Cort	7.07																						
	7.57		256		55	250		14	46	741	901				116	10	. 0		10	0		. 10	1
Meas			200		5.5	250		14	40	741	801				116	4.8	< 2		12	9		< 10	'
SdAB-M2 (U.S.G.S.)					5.1			13.3	48.8	808	760				990	6.6	1.05		12.4	49.6		17.6	1.44
Cert			236.0000			236.0000																	
SdAR-M2 (U.S.G.S.) Meas					5.3	260		15	44	884	800				159	5.1	< 2		14	11		< 10	2
SdAR-M2 (U.S.G.S.) Cert					5.1	236.0000		13.3	48.8	808	760				990	6.6	1.05		12.4	49.6		17.6	1.44
OREAS		504																					
Meas																							
OREAS 251(FA-Anaster) Cert		504																					
OREAS		544																					
251(FA-Anaster) Meas																							
OREAS 251(FA-Anaster) Cert		504																					
OREAS		518																					
251(FA-Anaster) Meas																							
OREAS 251(FA-Anaster) Cert		504																					
W1120-160 Orig		< 5																					
W1120-160 Dup		< 5																					
W1120-171 Orig			194																				
W1120-171 Dup			189																				
W1120-179 Orig		35																					
W1120-179 Dup		34																					
			İ 👘						İ 👘			Ì	i i	İ 👘									

	_			_		-				_	_	_	_	_		_		-	_				
Analyte Symbol	Cu	Au	Cu	Ag	Cd	Cu	Mn	Мо	Ni	Pb	Zn	Al	As	В	Ва	Be	Bi	Ca	Co	Cr	Fe	Ga	Hg
Unit Symbol	%	ppb	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	%	ppm	ppm
Lower Limit	0.001	5	1	0.2	0.5	1	5	1	1	2	2	0.01	2	10	10	0.5	2	0.01	1	1	0.01	10	1
Method Code	ICP-OES	FA-AA	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP
W1120-186 Orig			41																				
W1120-186 Dup			40																				
W1120-189 Orig		14																					
W1120-189 Dup		12																					
W1120-213 Orig			1330																				
W1120-213 Dup			1270																				
W1120-218 Orig		8																					
W1120-218 Dup		8																					
W1120-223 Orig		7	518																				
W1120-223 Split		11	541																				
PREP DUP			•																				
W1120-226 Orig			414																				
W1120-226 Dup			419																				
W1120-228 Orig		11																					
W1120-228 Dup		10																					
W1120-240 Orig		< 5																					
W1120-240 Dup		< 5																					
W1121-503 Orig			748																				
W1121-503 Dup			764																				
W1121-512 Orig		52																					
W1121-512 Dup		64																					
W1121-522 Orig		1400																					
W1121-522 Dup		1400																					
W1121-523 Orig			1980																				
W1121-523 Dup			2160																				
W1120134 Orig		26																					
W1120134 Dup		28																					
W1120140 Orig		< 5																					
W1120140 Dup		< 5																					
W1120-166C Orig				50.3	> 2000	3760	97	< 1	10	1530	> 10000	0.05	348	< 10	< 10	< 0.5	9	0.04	85	2	8.17	20	7
W1120-166C Dup				50.9	> 2000	3860	98	< 1	12	1540	> 10000	0.05	358	< 10	< 10	< 0.5	10	0.04	84	3	8.31	20	5
Method Blank		< 5																					
Method Blank		< 5																					
Method Blank		< 5																					
Method Blank		< 5																					
Method Blank		< 5																					
Method Blank		< 5																					
Method Blank	1	< 5	1	1	1	1	1	1	1	1	1			1	1	1			1				
Method Blank			< 1																				
Method Blank	1		< 1	1	1	1	1	1	1	1	Ì	1	1	İ	1	1	1		1	1	1		
Method Blank				< 0.2	< 0.5	< 1	< 5	< 1	< 1	< 2	< 2	< 0.01	< 2	< 10	11	< 0.5	< 2	< 0.01	< 1	< 1	< 0.01	< 10	< 1
Method Blank	1	< 5		1	1	1	1	1	i –	1	1	1	1	1	i –	1	1	1	1	l			
Method Blank				< 0.2	< 0.5	< 1	< 5	< 1	< 1	< 2	< 2	< 0.01	< 2	< 10	< 10	< 0.5	< 2	< 0.01	< 1	< 1	< 0.01	< 10	< 1
Method Blank	< 0.001		l				1			İ			1		1			1			l		

Analyte Symbol	к	La	Mg	Na	Р	S	Sb	Sc	Sr	Ti	Th	Te	TI	U	V	w	Y	Zr
Unit Symbol	%	ppm	%	%	%	%	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Lower Limit	0.01	10	0.01	0.001	0.001	0.01	2	1	1	0.01	20	1	2	10	1	10	1	1
Method Code	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP
GXR-1 Meas	0.03	< 10	0.13	0.063	0.044	0.19	86	1	169	< 0.01	< 20	16	< 2	31	73	142	24	14
GXR-1 Cert	0.050	7.50	0.217	0.0520	0.0650	0.257	122	1.58	275	0.036	2.44	13.0	0.390	34.9	80.0	164	32.0	38.0
GXR-1 Meas	0.03	< 10	0.13	0.063	0.045	0.21	86	1	169	< 0.01	< 20	11	< 2	33	72	141	24	14
GXR-1 Cert	0.050	7.50	0.217	0.0520	0.0650	0.257	122	1.58	275	0.036	2.44	13.0	0.390	34.9	80.0	164	32.0	38.0
GXR-4 Meas	1.56	50	1.63	0.143	0.126	1.67	6	7	67	0.13	< 20	1	< 2	< 10	79	12	11	10
GXR-4 Cert	4.01	64.5	1.66	0.564	0.120	1.77	4.80	7.70	221	0.29	22.5	0.970	3.20	6.20	87.0	30.8	14.0	186
GXR-4 Meas	1.73	52	1.64	0.132	0.129	1.74	2	7	71	0.13	< 20	< 1	< 2	< 10	76	12	11	10
GXR-4 Cert	4.01	64.5	1.66	0.564	0.120	1.77	4.80	7.70	221	0.29	22.5	0.970	3.20	6.20	87.0	30.8	14.0	186
CZN-3 Meas																		
CZN-3 Cert																		
GXR-6 Meas	1.03	< 10	0.41	0.112	0.035	0.01	4	20	24		< 20	< 1	< 2	< 10	171	< 10	5	8
GXR-6 Cert	1.87	13.9	0.609	0.104	0.0350	0.0160	3.60	27.6	35.0		5.30	0.0180	2.20	1.54	186	1.90	14.0	110
GXR-6 Meas	1.15	< 10	0.42	0.106	0.036	0.01	4	20	25		< 20	< 1	4	< 10	168	< 10	5	10
GXR-6 Cert	1.87	13.9	0.609	0.104	0.0350	0.0160	3.60	27.6	35.0		5.30	0.0180	2.20	1.54	186	1.90	14.0	110
MP-1b Meas																		
MP-1b Cert																		
CCU-1d Meas																		
CCU-1d Cert																		
CPB-2 Meas																		
CPB-2 Cert																		
PTC-1b Meas																		
PTC-1b Cert																		
SdAR-M2 (U.S.G.S.) Meas		46						2	20		< 20			< 10	18	< 10	18	8
SdAR-M2 (U.S.G.S.) Cert		46.6						4.1	144		14.2			2.53	25.2	2.8	32.7	259
SdAR-M2 (U.S.G.S.) Meas		51						3	23		< 20			< 10	19	< 10	19	7
SdAR-M2 (U.S.G.S.) Cert		46.6						4.1	144		14.2			2.53	25.2	2.8	32.7	259
OREAS 251(FA-Anaster) Meas																		
OREAS 251(FA-Anaster) Cert																		
OREAS 251(FA-Anaster) Meas																		
OREAS 251(FA-Anaster) Cert																		
OREAS 251(FA-Anaster) Meas																		
OREAS 251(FA-Anaster) Cert																		
W1120-160 Orig																		
W1120-160 Dup																		
W1120-171 Orig																		
W1120-171 Dup																		
W1120-179 Orig																		
W1120-179 Dup																		
		1													1			

Analyte Symbol	к	La	Mg	Na	Р	S	Sb	Sc	Sr	Ti	Th	Te	TI	U	V	W	Y	Zr
Unit Symbol	%	ppm	%	%	%	%	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Lower Limit	0.01	10	0.01	0.001	0.001	0.01	2	1	1	0.01	20	1	2	10	1	10	1	1
Method Code	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP	AR-ICP
W1120-186 Orig																		
W1120-186 Dup																		
W1120-189 Orig																		
W1120-189 Dup																		
W1120-213 Orig																		
W1120-213 Dup																		
W1120-218 Orig																		
W1120-218 Dup																		
W1120-223 Orig																		
W1120-223 Split																		
PREP DUP																		
W1120-226 Orig																		
W1120-226 Dup																		
W1120-228 Orig																		
W1120-228 Dup																		
W1120-240 Orig																		
W1120-240 Dup																		
W1121-503 Orig																		
W1121-503 Dup																		
W1121-512 Orig																		
W1121-512 Dup																		
W1121-522 Orig																		
W1121-522 Dup																		
W1121-523 Orig																		
W1121-523 Dup																		
W1120134 Orig																		
W1120134 Dup																		
W1120140 Orig																		
W1120140 Dup																		
W1120-166C Orig	< 0.01	< 10	0.03	0.013	0.002	10.9	14	< 1	< 1	< 0.01	< 20	1	2	< 10	2	12	1	9
W1120-166C Dup	< 0.01	< 10	0.03	0.016	0.002	10.9	13	< 1	< 1	< 0.01	< 20	4	< 2	< 10	2	13	2	10
Method Blank																		
Method Blank																		
Method Blank																		
Method Blank																		
Method Blank																		
Method Blank	1						1											
Method Blank																		
Method Blank																		
Method Blank																		
Method Blank	< 0.01	< 10	< 0.01	0.012	< 0.001	< 0.01	< 2	< 1	< 1	< 0.01	< 20	< 1	< 2	< 10	< 1	< 10	< 1	< 1
Method Blank																		
Method Blank	< 0.01	< 10	< 0.01	0.013	< 0.001	< 0.01	< 2	< 1	< 1	< 0.01	< 20	< 1	< 2	< 10	< 1	< 10	< 1	< 1
Method Blank																		

Quality Analysis ...



### Innovative Technologies

Date Submitted:11-Oct-16Invoice No.:A16-10480Invoice Date:26-Oct-16Your Reference:Akow Lake

Romios Gold Resources Inc. 20 Toronto St. Suite 1220 Toronto Ontario M5C 2B8 Canada

ATTN: John Biczok

# **CERTIFICATE OF ANALYSIS**

32 Rock samples were submitted for analysis.

The following analytical package(s) were requested:

Code 1A2-Tbay Au - Fire Assay AA (QOP Fire Assay Tbay) Code 1E-Tbay Aqua Regia ICP(AQUAGEO)

#### REPORT A16-10480

This report may be reproduced without our consent. If only selected portions of the report are reproduced, permission must be obtained. If no instructions were given at time of sample submittal regarding excess material, it will be discarded within 90 days of this report. Our liability is limited solely to the analytical cost of these analyses. Test results are representative only of material submitted for analysis.

Notes:

If value exceeds upper limit we recommend reassay by fire assay gravimetric-Code 1A3

Values which exceed the upper limit should be assayed for accurate numbers.

CERTIFIED BY:

Emmanuel Eseme , Ph.D. Quality Control

ACTIVATION LABORATORIES LTD.

1201 Walsh Street West, Thunder Bay, Ontario, Canada, P7E 4X6 TELEPHONE +807 622-6707 or +1.888.228.5227 FAX +1.905.648.9613 E-MAIL Tbay@actlabs.com ACTLABS GROUP WEBSITE www.actlabs.com

Analyte Symbol	Au	Cu	Cu
Unit Symbol	ppb	ppm	%
Lower Limit	5	1	0.001
Method Code	FA-AA	AR-ICP	ICP-OES
W1120014	37	58	
W1120015	33	84	
W1120016	7	54	
W1120017	69	377	
W1120018	14	39	
W1120019	60	403	
W1120020	< 5	4	
W1120021	51	648	
W1120022	56	369	
W1120023	12	400	
W1120024	35	174	
W1120025	< 5	132	
W1120026	22	249	
W1120027	44	269	
W1120028	32	287	
W1120029	23	431	
W1120030	3560	2220	
W1120031	47	667	
W1120032	140	1230	
W1120033	106	1800	
W1120034	40	858	
W1120035	32	1350	
W1120087	16	376	
W1120100	3500	22	
W1120248	748	4450	
W1121504	8	646	
W1121505	122	4840	
W1121506	941	> 10000	1.98
W1121507	78	8300	
W1121508	140	2250	
W1121509	30	578	
W1121510	< 5	13	

Analyte Symbol	Au	Cu	Cu
Unit Symbol	ppb	ppm	%
Lower Limit	5	1	0.001
Method Code	FA-AA	AR-ICP	ICP-OES
GXR-1 Meas		1210	
GXR-1 Cert		1110	
GXR-4 Meas		6590	
GXR-4 Cert		6520	
CZN-3 Meas			0.685
CZN-3 Cert			0.685
GXR-6 Meas		71	
GXR-6 Cert		66.0	
MP-1b Meas			3.02
MP-1b Cert			3.069
CCU-1d Meas			23.9
CCU-1d Cert			23.93
CPB-2 Meas			0.124
CPB-2 Cert			0.1213
PTC-1b Meas			7.93
PTC-1b Cert			7.97
SdAR-M2 (U.S.G.S.)		252	
Meas			
SdAR-M2 (U.S.G.S.)			
Cert	547	236.0000	
OREAS 251(FA-Anaster)	517		
Meas			
OREAS	504		
251(FA-Anaster) Cert			
W1120023 Orig	12		
W1120023 Dup	11		
W1120026 Orig		250	
W1120026 Dup		248	
W1120033 Orig	107		
W1120033 Dup	104		
W1121505 Orig		4870	
W1121505 Dup		4810	
W1121508 Orig	133		
W1121508 Dup	146		
Method Blank	< 5		
Method Blank	< 5		
Method Blank		< 1	
Method Blank			< 0.001

Report Number: A16- 10366		
Report Date: 3/11/2016		
Analyte Symbol	В	Mass
Unit Symbol	ppm	g
Detection Limit	2	
Analysis Method	PGNAA	PGNAA
W1120-166	5660	1.07
W1120-167	7110	1.05
W1120-168	4870	1.08

# APPENDIX THREE: LITHOGEOCHEMICAL SAMPLE DESCRIPTIONS, ANALYTICAL PROCEDURES AND RESULTS

Samples submitted to ActLabs for lithogeochemical analysis were analysed by ActLabs procedure 4-Litho which is a combination of 2 packages: **Code 4B (lithium metaborate/tetraborate fusion ICP whole rock)** and **Code 4B2 (trace element ICP/MS).** 

### 4B - Lithium Metaborate/Tetraborate Fusion - ICP

Samples are prepared and analyzed in a batch system. Each batch contains a method reagent blank, certified reference material and 17% replicates. Samples are mixed with a flux of lithium metaborate and lithium tetraborate and fused in an induction furnace. The molten melt is immediately poured into a solution of 5% nitric acid containing an internal standard, and mixed continuously until completely dissolved (~30 minutes). The samples are run for major oxides and selected trace elements (Code 4B) on a combination simultaneous/sequential Thermo Jarrell-Ash ENVIRO II ICP or a Varian Vista 735 ICP. Calibration is performed using 7 prepared USGS and CANMET certified reference materials. One of the 7 standards is used during the analysis for every group of ten samples.

### 4B2 - Research - Lithium Metaborate/Tetraborate Fusion - ICP/MS

Samples fused under code 4B2 are diluted and analyzed by Perkin Elmer Sciex ELAN 6000, 6100 or 9000 ICP/MS. Three blanks and five controls (three before the sample group and two after) are analyzed per group of samples. Duplicates are fused and analyzed every 15 samples. Instrument is recalibrated every 40 samples.

For further details on which elements are analyzed by each of the above procedures, detection limits for each element, etc. see the ActLabs website Lithogeochemistry section.

## APPENDIX THREE: Lithogeochemical sample descriptions

Sample	Hole RGR-	Depth (m)	Rock Type
W1120166	16-2	436	Tourmalinite. Largest tourmaline-sulphide zone, 20 cm of massive tourmaline. 5% chalcopyrite, 15% patchy silica, 10% garnets up to 1cm. 29 ppm Ag and 0.57% Boron.
W1120167	16-2	436.5	Tourmalinite: typical part of this unit with ~30% streaky black tourmalinite layers, 1cm thick in white siliceous matrix. 15.6 ppm Ag and 0.71% Boron
W1120168	16-2	437.4	Tourmalinite. typical part of this unit with ~30% streaky black tourmalinite layers, 1cm thick in white siliceous matrix with 7cm tourmalinite vein. 23 ppm Ag and 0.49% Boron.
W1120451	16-1	364	Sericite-Feldspar-Quartz Schist derived from felsic volcaniclastic metasediment. 25% Ser, <5% Bio, Tr garnets.
W1120452	16-1	54.7	Staurolite-rich Fd-Qtz schist. 25% brown anhedral staur 1-2mm, ~15% Ser.
W1120453	16-1	262	Homogenous siltstonecomposed of 25-30% f.g. Bio, rest Fd-Qtz. Light grey, little of no banding. Righ above Gar-Bio unit.
W1120455	16-1	265.8	Staur-(Gar) siltstone, 10-20% f.g. Staur, minor f.g. garnets, Tr Ser, <5% Bio, rest f.g. Fd- Qtz. Pale beige-grey, well foliated.
W1120456	16-1	266.8	Gar-Staur-Bio-Ser-Qtz-Fd Schist with weak hydrothermal alteration. 25% Bio, 15% m.g. Staur, 5-7% garnets, 3-6mm, local hi % sericite.
W1120457	16-1	359	C.g. Staur-Gar-Bio Schist. 30% Staur 1-3mm, 25-30% Bio, 3% c.g. Garnets, 2 thin seams of bio alt'n.
W1120458	16-1	363	Siltstone, f.g., minor Staur <3%. 10-15% Bio, minor Ser, <1% Garnets.
W1120459	16-1	378.7	Siltstone/meta arkose, f.g., "fresh". 25% Ser, 15% Staur, Tr Gar, minor Bio, rest Fd-Qtz.
W1120460	16-1	382.4	Ser Schist/Felsic wedge tuff. 50% Ser, 5% f.g. Pyrite. Rest is Fd-Qtz
W1120461	16-2	57.7	Andesite. Very f.g. intermediate volcanic, med grey, massive, minor bio'n.
W1120462	16-1	331.5	Dacite. Similar to -461 but even less mafic minerals. ~amorphous, hard, only Tr mafics visible. 1% Fd phenos <2mm.
W1120463	16-1	340.7	Staur-Bio-Gar-QF Schist (intermed between fresh and alt'd seds). 30% Staur 1-3mm, 30% Bio 1-2mm, 5% Gar, 2-8mm. No obvious hydro. Alt'n but the Staur is more c.g. than normal seds.
W1120464	16-3	106.5	Gar-Ser-(Staur) Schist. 20-30% c.g. subhedral garnets wrapped by Sericite, ~30%. 0-15% Staur, f.g. Prob alt'd metased?
W1120465	16-4	166.8	Basalt. F.g., ~bright green,mod foliation, <5% bio'n. 60-70% dark green amph, ~prismatic grains ~1mm., rest Fd.
W1120466	16-4	178.4	Bio-Staur-Q-Fd-Bio Schist beside hydrothermal veins. 30-35% fine to m.g. Bio in thin folia, 20-25% anhedral pale Staur 2-3mm, rest is very f.g. Qtz-Fd and 2-3% medium to c.g. Garnet porphyroblasts. Looks relatively unaltered.
W1120467	16-4	210.5	Siltstone, no staur. 30% Bio, f.g., ~1/3 in folia. Rest is f.g. Qtz-Fd & <1/2% garnets <5mm.
W1120468	16-4	213.4	Gar-Staur-Bio Siltstone. 40-50% Bio, 20% Staur <2mm, rest is Qtz-Fd with ~5% garnets up to 1cm. Compare to #467, fresher protolith of this schist?
W1120469	16-4	258.8	Ser-(Gar) Schist intercalated with alt'd siltstone. <1 Garnets up to 5mm, 2-3% staur grains <5mm, 60-70% fine to m.g. Ser. Rest Qtz-Fd.
W1120470	16-4	397.5	Ser-Gar-Q-F-(Bio) Schist. >50% Swer, 5-10% Chjlorite in short folia <2mm thick, 1-2% dissem'd Mt crystals, f.g., rest is Qtz-Fd with 10-15% anhedral garnets 3-4mm.
W1120471	16-4	419	Garnetiferous siltstone, weakly bedded, ~homog. 40% f.g. Bio, rest Qtz-Fd, <1% gar

Quality Analysis ...



### Innovative Technologies

Date Submitted:
06-Oct-16

Invoice No.:
A16-10366Final2

Invoice Date:
07-Nov-16

Your Reference:
Value Action (Va

Romios Gold Resources Inc. 20 Toronto St. Suite 1220 Toronto Ontario M5C 2B8 Canada

ATTN: John Biczok

# **CERTIFICATE OF ANALYSIS**

88 Core samples were submitted for analysis.

The following analytical package(s) were requested:

Code 4LITHO (11+) Major Elements Fusion ICP(WRA)/Trace Elements Fusion ICP/MS(WRA4B2)

#### REPORT A16-10366Final2

This report may be reproduced without our consent. If only selected portions of the report are reproduced, permission must be obtained. If no instructions were given at time of sample submittal regarding excess material, it will be discarded within 90 days of this report. Our liability is limited solely to the analytical cost of these analyses. Test results are representative only of material submitted for analysis.

Notes:

We recommend using option 4B1 for accurate levels of the base metals Cu, Pb, Zn, Ni and Ag. Option 4B-INAA for As, Sb, high W >100ppm, Cr >1000ppm and Sn >50ppm by Code 5D. Values for these elements provided by Fusion ICP/MS, are order of magnitude only and are provided for general information. Mineralized samples should have the Quant option selected or request assays for values which exceed the range of option 4B1. Total includes all elements in % oxide to the left of total.

CERTIFIED BY:

Emmanuel Eseme , Ph.D. Quality Control

ACTIVATION LABORATORIES LTD.

41 Bittern Street, Ancaster, Ontario, Canada, L9G 4V5 TELEPHONE +905 648-9611 or +1.888.228.5227 FAX +1.905.648.9613 E-MAIL Ancaster@actlabs.com ACTLABS GROUP WEBSITE www.actlabs.com

Activation Laboratories Ltd.

Analyte Symbol	SiO2	AI2O3	Fe2O3( T)	MnO	MgO	CaO	Na2O	K2O	TiO2	P2O5	LOI	Total	Sc	Be	V	Ba	Sr	Y	Zr	Cr	Co	Ni	Cu
Unit Symbol	%	%	%	%	%	%	%	%	%	%	%	%	ppm          ppm	ppm	ppm								
Lower Limit	0.01	0.01	0.01	0.001	0.01	0.01	0.01	0.01	0.001	0.01		0.01	1	1	5	2	2	1	2	20	1	20	10
Method Code	FUS- ICP	FUS- ICP	FUS- ICP	FUS- ICP	FUS- ICP	FUS- ICP	FUS- ICP	FUS- ICP	FUS- ICP	FUS- ICP	FUS- ICP	FUS- ICP	FUS- ICP	FUS- ICP	FUS- ICP	FUS- ICP	FUS- ICP	FUS- ICP	FUS- ICP	FUS- MS	FUS- MS	FUS- MS	FUS- MS
W1120-166																							
W1120-167																							
W1120-168																							
W1120-451	72.36	14.94	1.78	0.089	0.62	5.20	1.69	1.20	0.149	0.04	0.86	98.93	2	< 1	23	227	122	3	69	40	2	< 20	10
W1120-452	70.01	17.91	6.08	0.068	0.70	0.37	0.60	0.85	0.679	0.26	1.05	98.56	16	< 1	91	51	29	17	184	60	19	30	40
W1120-453	67.40	15.08	4.33	0.077	1.51	5.06	2.01	2.49	0.443	0.15	1.34	99.89	8	1	59	490	94	13	153	40	10	< 20	30
W1120-455	69.28	16.48	4.97	0.082	0.94	0.57	0.65	3.13	0.548	0.15	1.93	98.75	11	< 1	85	499	47	14	169	40	12	< 20	60
W1120-456	64.04	14.83	14.40	0.143	1.49	0.35	0.21	2.77	0.488	0.14	0.80	99.65	9	< 1	72	399	22	12	154	40	15	< 20	70
W1120-457	60.20	17.59	16.27	0.063	1.64	0.30	0.09	2.51	0.697	0.18	0.88	100.4	14	1	113	250	7	19	182	50	26	< 20	80
W1120-458	77.31	12.41	3.69	0.067	0.79	0.69	0.26	2.85	0.234	0.07	1.76	100.1	4	< 1	26	388	15	6	130	20	5	< 20	< 10
W1120-459	71.08	15.86	4.55	0.052	0.84	0.27	0.22	3.82	0.438	0.13	2.10	99.36	8	1	63	517	21	14	160	30	9	< 20	30
W1120-460	63.53	15.59	7.88	0.032	0.57	0.66	0.37	4.71	0.642	0.18	5.55	99.71	12	1	106	538	29	22	167	50	21	30	30
W1120-461	63.63	15.18	5.87	0.096	2.67	6.18	1.06	2.05	0.573	0.15	1.74	99.20	12	1	90	350	145	17	138	80	15	30	20
W1120-462	69.15	14.97	3.60	0.058	1.02	3.82	3.42	2.02	0.348	0.10	2.31	100.8	5	< 1	40	472	162	12	147	30	7	< 20	20
W1120-463	65.20	14.60	14.28	0.084	1.38	0.34	0.12	2.63	0.437	0.13	0.73	99.93	8	< 1	66	239	11	16	137	50	51	20	130
W1120-464	67.14	14.85	11.43	0.110	0.82	0.35	0.24	3.29	0.392	0.11	1.36	100.1	6	< 1	50	429	14	16	146	< 20	17	< 20	330

Activation Laboratories Ltd.

Analyte Symbol	Zn	Ga	Ge	As	Rb	Nb	Мо	Ag	In	Sn	Sb	Cs	La	Ce	Pr	Nd	Sm	Eu	Gd	Tb	Dy	Ho	Er
Unit Symbol	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Lower Limit	30	1	1	5	2	1	2	0.5	0.2	1	0.5	0.5	0.1	0.1	0.05	0.1	0.1	0.05	0.1	0.1	0.1	0.1	0.1
Method Code	FUS- MS	FUS- MS	FUS- MS	FUS- MS	FUS- MS	FUS- MS	FUS- MS	FUS- MS	FUS- MS	FUS- MS	FUS- MS	FUS- MS	FUS- MS	FUS- MS	FUS- MS	FUS- MS	FUS- MS	FUS- MS	FUS- MS	FUS- MS	FUS- MS	FUS- MS	FUS- MS
W1120-166																							
W1120-167																							
W1120-168																							
W1120-451	< 30	18	< 1	< 5	43	1	< 2	< 0.5	< 0.2	< 1	< 0.5	0.8	4.7	9.7	1.13	4.3	1.0	0.48	0.9	0.1	0.6	0.1	0.3
W1120-452	< 30	22	1	< 5	16	9	< 2	< 0.5	< 0.2	< 1	< 0.5	< 0.5	36.0	70.7	7.54	26.2	4.6	1.22	4.0	0.6	3.6	0.7	1.9
W1120-453	< 30	18	< 1	16	95	7	< 2	< 0.5	< 0.2	< 1	< 0.5	1.4	28.5	52.2	5.42	18.9	3.3	0.92	2.8	0.4	2.5	0.5	1.4
W1120-455	80	19	1	6	91	7	< 2	< 0.5	< 0.2	2	< 0.5	0.8	27.0	52.3	5.38	19.5	3.6	0.93	3.4	0.5	2.8	0.5	1.6
W1120-456	70	18	1	< 5	116	6	< 2	< 0.5	< 0.2	5	< 0.5	2.2	26.1	49.6	5.08	18.3	3.1	0.60	2.8	0.4	2.3	0.4	1.3
W1120-457	70	21	1	< 5	114	9	< 2	0.6	< 0.2	15	< 0.5	1.4	36.8	70.5	7.49	26.5	4.7	1.41	3.9	0.6	3.7	0.7	2.2
W1120-458	< 30	16	< 1	172	93	4	< 2	< 0.5	< 0.2	1	< 0.5	0.6	21.5	37.1	3.61	12.6	2.0	0.58	1.7	0.2	1.1	0.2	0.6
W1120-459	< 30	20	< 1	40	132	7	< 2	< 0.5	< 0.2	1	< 0.5	0.9	36.1	66.6	6.68	22.8	3.8	0.96	3.3	0.5	2.8	0.5	1.5
W1120-460	< 30	19	< 1	63	144	8	< 2	0.5	< 0.2	1	1.0	0.7	43.8	83.0	8.87	31.5	4.9	1.28	4.3	0.7	4.0	0.8	2.4
W1120-461	100	17	1	< 5	59	7	< 2	< 0.5	< 0.2	< 1	< 0.5	1.0	27.1	52.9	5.59	20.5	3.7	0.95	3.5	0.5	3.2	0.6	1.9
W1120-462	70	18	< 1	16	63	5	< 2	< 0.5	< 0.2	< 1	0.6	1.1	28.7	50.2	4.95	17.6	3.0	0.69	2.5	0.4	2.2	0.4	1.3
W1120-463	40	16	1	151	117	8	< 2	< 0.5	< 0.2	13	< 0.5	1.3	27.7	50.9	5.17	17.7	3.3	0.64	2.9	0.5	3.1	0.6	1.8
W1120-464	< 30	17	< 1	10	96	8	< 2	< 0.5	< 0.2	11	< 0.5	0.8	35.3	62.9	6.52	22.0	3.9	0.68	3.0	0.5	2.8	0.5	1.5

Analyte Symbol	Tm	Yb	Lu	Hf	Та	W	TI	Pb	Bi	Th	U	В	Mass
Unit Symbol	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	g
Lower Limit	0.05	0.1	0.01	0.2	0.1	1	0.1	5	0.4	0.1	0.1	2	
Method Code	FUS- MS	FUS- MS	FUS- MS	FUS- MS	FUS- MS	FUS- MS	FUS- MS	FUS- MS	FUS- MS	FUS- MS	FUS- MS	PGNAA	PGNAA
W1120-166												5660	1.07
W1120-167												7110	1.05
W1120-168												4870	1.08
W1120-451	< 0.05	0.3	0.05	1.8	0.1	1	0.1	11	< 0.4	1.4	0.6		
W1120-452	0.26	1.9	0.30	4.3	0.8	< 1	< 0.1	6	< 0.4	8.1	2.5		
W1120-453	0.19	1.4	0.22	3.6	0.7	1	0.4	10	< 0.4	7.7	2.3		
W1120-455	0.22	1.5	0.24	3.9	0.7	2	0.4	12	< 0.4	6.6	1.8		
W1120-456	0.20	1.3	0.23	3.7	0.6	3	0.6	9	< 0.4	5.8	1.5		
W1120-457	0.32	2.2	0.35	4.5	0.8	3	0.5	8	0.5	10.7	2.8		
W1120-458	0.09	0.6	0.09	3.0	0.5	5	0.4	7	0.7	7.6	2.1		
W1120-459	0.22	1.5	0.25	3.9	0.9	3	0.6	10	< 0.4	12.6	3.9		
W1120-460	0.34	2.3	0.36	4.0	0.7	8	0.5	9	0.9	10.5	3.0		
W1120-461	0.29	2.0	0.32	3.3	0.7	< 1	0.3	18	< 0.4	7.6	2.2		
W1120-462	0.19	1.3	0.21	3.2	0.8	< 1	0.3	14	< 0.4	11.4	3.8		
W1120-463	0.26	1.6	0.26	3.2	0.7	5	0.6	6	1.9	8.4	2.5		
W1120-464	0.21	1.5	0.25	3.4	0.7	10	0.5	7	0.5	11.9	3.7		

Analyte Symbol	SiO2	AI2O3	Fe2O3( T)	MnO	MgO	CaO	Na2O	K2O	TiO2	P2O5	Sc	Be	V	Ва	Sr	Y	Zr	Cr	Со	Ni	Cu	Zn	Ga
Unit Symbol	%	%	%	%	%	%	%	%	%	%	ppm          ppm	ppm	ppm	ppm	ppm								
Lower Limit	0.01	0.01	0.01	0.001	0.01	0.01	0.01	0.01	0.001	0.01	1	1	5	2	2	1	2	20	1	20	10	30	1
Method Code	FUS- ICP	FUS- ICP	FUS- ICP	FUS- ICP	FUS- ICP	FUS- ICP	FUS- ICP	FUS- ICP	FUS- ICP	FUS- ICP	FUS- ICP	FUS- ICP	FUS- ICP	FUS- ICP	FUS- ICP	FUS- ICP	FUS- ICP	FUS- MS	FUS- MS	FUS- MS	FUS- MS	FUS- MS	FUS- MS
NIST 694 Meas	11.61	1.94	0.76	0.010	0.35	42.79	0.91	0.56	0.120	30.22			1625										
NIST 694 Cert	11.2	1.80	0.790	0.0116	0.330	43.6	0.860	0.510	0.110	30.2			1740										
DNC-1 Meas	46.61	18.00	9.71	0.150	10.08	11.44	1.86	0.21	0.470	0.07	31		151	103	146	15	36	280	59	250	110	70	14
DNC-1 Cert	47.15	18.34	9.97	0.150	10.13	11.49	1.890	0.234	0.480	0.070	31		148	118	144.0	18.0	38	270	57	247	100	70	15
GBW 07113 Meas	72.76	12.24	3.18	0.140	0.15	0.61	2.49	5.42	0.270	0.04	5	4	< 5	499	41	46	379						
GBW 07113 Cert	72.8	13.0	3.21	0.140	0.160	0.590	2.57	5.43	0.300	0.0500	5.00	4.00	5.00	506	43.0	43.0	403						
LKSD-3 Meas																		90	31	50	40	140	
LKSD-3 Cert																		87.0	30.0	47.0	35.0	152	
TDB-1 Meas																		260		90	340	160	
TDB-1 Cert																		251		92	323	155	
SY-2 Meas																				-			
SY-2 Cert																							
SY-3 Meas																							
SY-3 Cert																							
W-2a Meas	52.48	15.37	10.69	0.170	6.30	11.04	2.21	0.62	1.050	0.13	36	< 1	267	174	194	19	92	90	43	70	110	80	18
W-2a Cert	52.4	15.4	10.7	0.163	6.37	10.9	2.14	0.626	1.06	0.130	36.0	1.30	262	182	190	24.0	94.0	92.0	43.0	70.0	110	80.0	17.0
SY-4 Meas	50.12	20.30	6 15	0 110	0.51	8.21	7 04	1.68	0 290	0.12	2	3	10	353	1194	118	540						
SY-4 Cert	49.9	20.69	6.21	0 108	0.54	8.05	7 10	1 66	0.287	0 131	11	26	80	340	1191	119	517						
CTA-AC-1 Meas		20.00	0.21	0.100	0.01	0.00			0.207	0.101		2.0	0.0	0.0			0.1		< 1			40	
CTA-AC-1 Cert																			2 72			38.0	
BIB-1a Meas	46 78	15 69	11 24	0 170	9 79	13 43	1 76	0.01	0 970	0.01	43	< 1	320	8	112	14	19	390	54	170	140	70	16
BIB-1a Cert	47.96	15 50	11.30	0 175	9 700	13.30	1.82	0.030	0.96	0.021	44	0.58	310	6	110	16	18	370	52	170	125	70	16
NCS DC86312	17.00	10.00	11.00	0.170	0.700	10.00	1.02	0.000	0.00	0.021		0.00	010				10	0/0	02		120		10
Meas																							
NCS DC86312 Cert																							
NCS DC70009 (GBW07241) Meas																			3	< 20	1040	100	17
NCS DC70009 (GBW07241) Cert																			3.7	2.8	960	100	16.5
OREAS 100a (Eusion) Meas																			17		180		
OREAS 100a																			18.1		169		
(Fusion) Cert																							
OREAS 101a																			47		450		
(Fusion) Meas																							
OREAS 101a (Fusion) Cert																			48.8		434		
OREAS 101b																			45		430		
OBEAS 101h																			17		116		
(Fusion) Cert																			47		410		

### Activation Laboratories Ltd.

Analyte Symbol	SiO2	AI2O3	Fe2O3( T)	MnO	MgO	CaO	Na2O	K2O	TiO2	P2O5	Sc	Be	V	Ba	Sr	Y	Zr	Cr	Co	Ni	Cu	Zn	Ga
Unit Symbol	%	%	%	%	%	%	%	%	%	%	ppm          ppm	ppm	ppm	ppm	ppm								
Lower Limit	0.01	0.01	0.01	0.001	0.01	0.01	0.01	0.01	0.001	0.01	1	1	5	2	2	1	2	20	1	20	10	30	1
Method Code	FUS- ICP	FUS- ICP	FUS- ICP	FUS- ICP	FUS- ICP	FUS- ICP	FUS- ICP	FUS- ICP	FUS- ICP	FUS- ICP	FUS- ICP	FUS- ICP	FUS- ICP	FUS- ICP	FUS- ICP	FUS- ICP	FUS- ICP	FUS- MS	FUS- MS	FUS- MS	FUS- MS	FUS- MS	FUS- MS
JR-1 Meas																			< 1	< 20		< 30	18
JR-1 Cert																			0.83	1.67		30.6	16.1
W1120-168 Orig																							
W1120-168 Dup																							
W1120-464 Orig	67.30	14.74	11.35	0.110	0.81	0.35	0.24	3.28	0.390	0.11	6	< 1	51	428	14	17	144	30	17	< 20	350	40	18
W1120-464 Dup	66.97	14.97	11.51	0.110	0.82	0.35	0.24	3.30	0.394	0.11	6	< 1	50	429	14	15	148	< 20	16	< 20	310	< 30	15
Method Blank																		< 20	< 1	< 20	< 10	< 30	< 1
Method Blank																							

### Activation Laboratories Ltd.

Analyte Symbol	Ge	As	Rh	Nb	Mo	Αα	In	Isn	Ish	Cs	La	Ce	Pr	Nd	ISm	Fu	Gd	Th	Πv	Hο	Fr	Tm	Yh
Linit Symbol	nnm	nnm	nnm	nnm	nnm	nom -		Innm		Innm	Innm	nnm	nnm	Innm	Innm	nnm	nnm	nnm	nnm	nnm	nnm	nnm	Innm
Lower Limit	1	5	2	1	2	0.5	0.2	1	0.5	0.5	0 1	0 1	0.05	0 1	0 1	0.05	0 1	0 1	0.1	0 1	0 1	0.05	0 1
Method Code	· FUS-	FUS-	FUS-	FUS-	FUS-	FUS-	FUS-	FUS-	FUS-	FUS-	FUS-	FUS-	FUS-	FUS-	FUS-	FUS-	FUS-	FUS-	FUS-	FUS-	FUS-	FUS-	IFUS-
	MS	MS	MS	MS	MS	MS	MS	MS	MS	MS	MS	MS	MS	MS	MS	MS	MS	MS	MS	MS	MS	MS	MS
NIST 694 Meas	İ	1					1	1	1	1	1	Í T		1	1	Ì			1				
NIST 694 Cert																							$\square$
DNC-1 Meas			1		, , , , , , , , , , , , , , , , , , ,			1	1	1	3.9			5.4		0.64							2.1
DNC-1 Cert			1					1	1	1	3.6			5.20		0.59							2.0
GBW 07113 Meas									1			1											[ ]
GBW 07113 Cert																							$\square$
LKSD-3 Meas		26	73		< 2	3.1		2	1	2.2	52.2	98.5		45.3	8.3	1.50			5.2	İ			2.8
LKSD-3 Cert		27.0	78.0		2.00	2.70		3.00		2.30	52.0	90.0		44.0	8.00	1.50			4.90				2.70
TDB-1 Meas			22					1	1	1	17.1	40.1		24.4		2.10							3.4
TDB-1 Cert			23					1	1	1	17	41	1	23	1	2.1							3.4
SY-2 Meas			1		, , , , , , , , , , , , , , , , , , ,			1	1	1	1	1		1									$\square$
SY-2 Cert									1	1	1			1									$\square$
SY-3 Meas			1					1	1	1	1	1		1	1								$\square$
SY-3 Cert			1		, , , , , , , , , , , , , , , , , , ,			1	1	1	1	1		1									$\square$
W-2a Meas	2		21	8	< 2			1	1	1	11.0	23.9		13.1	3.3	1.10		0.6		0.8			2.1
W-2a Cert	1.00		21.0	7.90	0.600			1	1	1	10.0	23.0		13.0	3.30	1.00		0.630		0.760			2.10
SY-4 Meas			1					1	1	1	1	1		1									$\square$
SY-4 Cert			1					1	1	1	1	1		1	1								(
CTA-AC-1 Meas			1					1	1	1	> 2000	> 3000		1100	155	43.1	120	12.9					11.7
CTA-AC-1 Cert								1	1	1	2176	3326		1087	162	46.7	124	13.9					11.4
BIR-1a Meas			1					1	1	1	0.7	1		2.4			2.1		3.8				(
BIR-1a Cert											0.63			2.5			2.0		4				$\square$
NCS DC86312								1	1	1	> 2000	196		1640			234	34.0	184	38.2	97.8	14.8	94.4
Meas				<b></b> '	<u> </u>																		
NCS DC86312				1	[ '						2360	190		1600			225.0	34.6	183	36	96.2	15.1	87.79
Cert	ļ.,		L	<b> </b> '	<b> </b> '	$\vdash$		───	<u> </u>	<u> </u>			<u> </u>		<u> </u>		L						<b></b>
NCS DC70009	11	66	505	1 '	1 '	1.7	1.0		3.0	40.1	25.2	63.6	8.30	34.3	12.7		15.7	3.2	22.6	4.6	14.0	2.40	1
Meas				1 '	'	1											1				'		1
NCS DC70009 (GBW07241) Cert	11.2	69.9	500			1.8	1.3		3.1	41	23.7	60.3	7.9	32.9	12.5		14.8	3.3	20.7	4.5	13.4	2.2	
OREAS 100a (Fusion) Meas					25						263	468	50.8	157	23.5	4.04	23.6	3.7	25.4	4.9	15.0	2.45	16.2
OREAS 100a (Fusion) Cert					24.1						260	463	47.1	152	23.6	3.71	23.6	3.80	23.2	4.81	14.9	2.31	14.9
OREAS 101a			1		21			1	1	1	817	1420	140	428	53.2	8.64		5.4	34.0	6.8	20.7	3.00	í —
(Fusion) Meas				<u> </u>	<u> </u>																		L
OREAS 101a				1	21.9	1					816	1396	134	403	48.8	8.06	1	5.92	33.3	6.46	19.5	2.90	1
(Fusion) Cert		<u> </u>	<u> </u>	<b> </b> '	<u> </u>	<b> </b>	<b></b>	──	──	───				<u> </u>	<u> </u>		┣───	<u> </u>					1 10.0
(Fusion) Meas				<u> </u>	19						818	1430	129	393	51.0	8.30		5.3	32.8	6.5	19.4	2.80	18.3
OREAS 101b (Fusion) Cert					20.9						789	1331	127	378	48	7.77		5.37	32.1	6.34	18.7	2.66	17.6
JR-1 Meas	2	16	251	15	3	<u> </u>	< 0.2	3	1.1	19.6	20.5	47.2	5.80	25.3	6.3	0.32		1.0	6.1		3.9	0.69	4.9

### Activation Laboratories Ltd.

Analyte Symbol	Ge	As	Rb	Nb	Мо	Ag	In	Sn	Sb	Cs	La	Ce	Pr	Nd	Sm	Eu	Gd	Tb	Dy	Ho	Er	Tm	Yb
Unit Symbol	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Lower Limit	1	5	2	1	2	0.5	0.2	1	0.5	0.5	0.1	0.1	0.05	0.1	0.1	0.05	0.1	0.1	0.1	0.1	0.1	0.05	0.1
Method Code	FUS-	FUS-	FUS-	FUS-	FUS-	FUS-	FUS-	FUS-	FUS-	FUS-	FUS-	FUS-	FUS-	FUS-	FUS-	FUS-	FUS-	FUS-	FUS-	FUS-	FUS-	FUS-	FUS-
	MS	MS	MS	MS	MS	MS	MS	MS	MS	MS	MS	MS	MS	MS	MS	MS	MS	MS	MS	MS	MS	MS	MS
JR-1 Cert	1.88	16.3	257	15.2	3.25		0.028	2.86	1.19	20.8	19.7	47.2	5.58	23.3	6.03	0.30		1.01	5.69		3.61	0.67	4.55
W1120-168 Orig																							
W1120-168 Dup																							
W1120-464 Orig	< 1	12	102	8	< 2	< 0.5	< 0.2	11	< 0.5	0.8	36.8	65.8	6.87	22.7	4.2	0.72	3.1	0.5	3.0	0.5	1.6	0.22	1.6
W1120-464 Dup	< 1	8	89	7	< 2	< 0.5	< 0.2	10	< 0.5	0.7	33.7	59.9	6.18	21.4	3.7	0.64	2.9	0.5	2.7	0.5	1.4	0.20	1.4
Method Blank	< 1	< 5	< 2	< 1	< 2	< 0.5	< 0.2	< 1	< 0.5	< 0.5	< 0.1	< 0.1	< 0.05	< 0.1	< 0.1	< 0.05	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.05	< 0.1
Method Blank																							

Analyte Symbol	Lu	Hf	Та	W	TI	Pb	Bi	Th	U	В	Mass	LOI	Total
Unit Symbol	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	g	%	%
Lower Limit	0.01	0.2	0.1	1	0.1	5	0.4	0.1	0.1	2			0.01
Method Code	FUS- MS	FUS- MS	FUS- MS	FUS- MS	FUS- MS	FUS- MS	FUS- MS	FUS- MS	FUS- MS	PGNAA	PGNAA	FUS- ICP	FUS- ICP
NIST 694 Meas	1	İ	1			1							
NIST 694 Cert													
DNC-1 Meas						6							
DNC-1 Cert						6.3							
GBW 07113 Meas													
GBW 07113 Cert													
LKSD-3 Meas	0.43	4.5	0.7					10.4	4.4				
LKSD-3 Cert	0.400	4.80	0.700					11.4	4.60				
TDB-1 Meas													
TDB-1 Cert													
SY-2 Meas										90			
SY-2 Cert										88.0			
SY-3 Meas										106			
SY-3 Cert										107			
W-2a Meas	0.32		0.4	< 1	< 0.1		< 0.4		0.5				
W-2a Cert	0.330		0.500	0.300	0.200		0.0300		0.530				
SY-4 Meas													
SY-4 Cert													
CTA-AC-1 Meas		1.2	2.4					21.7	4.3				
CTA-AC-1 Cert		1.13	2.65					21.8	4.4				
BIR-1a Meas						< 5							
BIR-1a Cert						3							
NCS DC86312 Meas	13.1							23.5					
NCS DC86312 Cert	11.96							23.6					
NCS DC70009 (GBW07241) Meas	2.44			2130	1.9			29.3					
NCS DC70009 (GBW07241) Cert	2.4			2200	1.8			28.3					
OREAS 100a (Fusion) Meas	2.37							52.8	141				
OREAS 100a (Fusion) Cert	2.26							51.6	135				
OREAS 101a (Fusion) Meas	2.72							37.1	433				
OREAS 101a (Fusion) Cert	2.66							36.6	422				
OREAS 101b (Fusion) Meas	2.76							37.4	407				
OREAS 101b (Fusion) Cert	2.58							37.1	396				
JR-1 Meas	0.77	4.3	1.9		1.4	20	0.5	27.3	9.1				

Analyte Symbol	Lu	Hf	Та	W	TI	Pb	Bi	Th	U	В	Mass	LOI	Total
Unit Symbol	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	g	%	%
Lower Limit	0.01	0.2	0.1	1	0.1	5	0.4	0.1	0.1	2			0.01
Method Code	FUS-	FUS-	FUS-	FUS-	FUS-	FUS-	FUS-	FUS-	FUS-	PGNAA	PGNAA	FUS-	FUS-
	MS	MS	MS	MS	MS	MS	MS	MS	MS			ICP	ICP
JR-1 Cert	0.71	4.51	1.86		1.56	19.3	0.56	26.7	8.88				
W1120-168 Orig										4810	1.09		
W1120-168 Dup										4930	1.07		
W1120-464 Orig	0.28	3.6	0.7	10	0.5	7	0.5	12.4	3.9			1.36	100.1
W1120-464 Dup	0.22	3.2	0.7	9	0.5	7	0.5	11.3	3.4			1.36	100.1
Method Blank	< 0.01	< 0.2	< 0.1	< 1	< 0.1	< 5	< 0.4	< 0.1	< 0.1				
Method Blank										< 2	1.00		

Quality Analysis ...



### Innovative Technologies

Date Submitted:07-Oct-16Invoice No.:A16-10422Final2Invoice Date:07-Nov-16Your Reference:Akow Lake

Romios Gold Resources Inc. 20 Toronto St. Suite 1220 Toronto Ontario M5C 2B8 Canada

ATTN: John Biczok

# **CERTIFICATE OF ANALYSIS**

114 Core samples were submitted for analysis.

The following analytical package(s) were requested:

Code 4LITHO (1-10) Major Elements Fusion ICP(WRA)/Trace Elements Fusion ICP/MS(WRA4B2)

#### REPORT A16-10422Final2

This report may be reproduced without our consent. If only selected portions of the report are reproduced, permission must be obtained. If no instructions were given at time of sample submittal regarding excess material, it will be discarded within 90 days of this report. Our liability is limited solely to the analytical cost of these analyses. Test results are representative only of material submitted for analysis.

Notes:

We recommend using option 4B1 for accurate levels of the base metals Cu, Pb, Zn, Ni and Ag. Option 4B-INAA for As, Sb, high W >100ppm, Cr >1000ppm and Sn >50ppm by Code 5D. Values for these elements provided by Fusion ICP/MS, are order of magnitude only and are provided for general information. Mineralized samples should have the Quant option selected or request assays for values which exceed the range of option 4B1. Total includes all elements in % oxide to the left of total.

CERTIFIED BY:

Emmanuel Eseme , Ph.D. Quality Control

ACTIVATION LABORATORIES LTD.

41 Bittern Street, Ancaster, Ontario, Canada, L9G 4V5 TELEPHONE +905 648-9611 or +1.888.228.5227 FAX +1.905.648.9613 E-MAIL Ancaster@actlabs.com ACTLABS GROUP WEBSITE www.actlabs.com

Activation Laboratories Ltd.

Analyte Symbol	SiO2	AI2O3	Fe2O3( T)	MnO	MgO	CaO	Na2O	K2O	TiO2	P2O5	LOI	Total	Sc	Be	V	Cr	Co	Ni	Cu	Zn	Ga	Ge	As
Unit Symbol	%	%	%	%	%	%	%	%	%	%	%	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Lower Limit	0.01	0.01	0.01	0.001	0.01	0.01	0.01	0.01	0.001	0.01		0.01	1	1	5	20	1	20	10	30	1	1	5
Method Code	FUS- ICP	FUS- ICP	FUS- ICP	FUS- ICP	FUS- ICP	FUS- ICP	FUS- ICP	FUS- ICP	FUS- ICP	FUS- ICP	FUS- ICP	FUS- ICP	FUS- ICP	FUS- ICP	FUS- ICP	FUS- MS	FUS- MS	FUS- MS	FUS- MS	FUS- MS	FUS- MS	FUS- MS	FUS- MS
W1120-465	51.65	11.30	11.23	0.212	10.41	11.30	0.43	0.39	0.484	0.05	1.09	98.79	34	< 1	189	850	40	210	60	90	11	< 1	167
W1120-466	68.23	14.46	10.95	0.076	1.43	0.34	0.12	2.64	0.405	0.14	0.91	100.2	6	1	48	40	12	< 20	400	70	14	< 1	< 5
W1120-467	64.76	14.91	8.01	0.135	1.75	3.84	0.32	3.22	0.458	0.11	1.12	100.2	10	1	73	70	13	30	60	30	16	< 1	< 5
W1120-468	62.80	15.25	13.87	0.103	1.89	0.29	0.08	2.67	0.471	0.11	0.74	98.60	10	1	77	70	16	30	90	240	17	1	16
W1120-469	67.89	16.78	5.43	0.059	0.57	0.30	0.38	4.02	0.689	0.18	2.05	98.59	14	< 1	111	70	11	< 20	20	60	17	< 1	94
W1120-470	65.53	14.06	11.51	0.194	1.33	0.41	0.23	3.54	0.405	0.14	2.28	99.63	7	< 1	57	40	129	< 20	120	40	19	1	792
W1120-471	63.21	15.88	6.58	0.131	2.58	5.47	1.04	2.39	0.627	0.16	0.95	100.7	15	< 1	113	40	16	30	40	40	17	< 1	18

Activation Laboratories Ltd.

Analyte Symbol	Rb	Sr	Y	Zr	Nb	Mo	Ag	In	Sn	Sb	Cs	Ва	La	Ce	Pr	Nd	Sm	Eu	Gd	Tb	Dy	Ho	Er
Unit Symbol	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Lower Limit	2	2	1	2	1	2	0.5	0.2	1	0.5	0.5	2	0.1	0.1	0.05	0.1	0.1	0.05	0.1	0.1	0.1	0.1	0.1
Method Code	FUS- MS	FUS- ICP	FUS- ICP	FUS- ICP	FUS- MS	FUS- MS	FUS- MS	FUS- MS	FUS- MS	FUS- MS	FUS- MS	FUS- ICP	FUS- MS	FUS- MS	FUS- MS	FUS- MS	FUS- MS	FUS- MS	FUS- MS	FUS- MS	FUS- MS	FUS- MS	FUS- MS
W1120-465	12	52	11	52	2	< 2	< 0.5	< 0.2	< 1	1.7	< 0.5	171	7.3	14.8	1.70	6.6	1.8	0.55	2.1	0.4	2.3	0.5	1.5
W1120-466	91	10	11	148	6	< 2	< 0.5	< 0.2	5	< 0.5	1.0	302	25.8	47.7	4.99	17.0	3.0	0.75	2.5	0.4	2.1	0.4	1.1
W1120-467	117	32	14	136	5	< 2	< 0.5	< 0.2	2	< 0.5	0.7	581	25.2	47.3	4.92	17.4	3.2	0.89	2.9	0.4	2.7	0.5	1.5
W1120-468	103	3	14	146	5	< 2	< 0.5	< 0.2	7	< 0.5	0.9	331	25.1	47.5	4.99	17.2	3.1	0.66	2.9	0.5	2.7	0.6	1.7
W1120-469	106	36	17	156	6	< 2	< 0.5	< 0.2	11	< 0.5	0.6	670	39.9	76.8	8.26	28.8	4.8	1.00	3.7	0.6	3.3	0.7	2.0
W1120-470	85	12	15	153	8	< 2	< 0.5	< 0.2	5	< 0.5	< 0.5	359	34.9	63.8	6.48	22.5	3.5	1.08	3.0	0.5	2.7	0.5	1.5
W1120-471	108	85	16	142	6	< 2	< 0.5	< 0.2	1	< 0.5	1.7	291	20.0	39.5	4.23	15.9	3.1	0.96	3.1	0.5	3.2	0.6	1.9

Report: A16-10422

Results

Analyte Symbol	Tm	Yb	Lu	Hf	Та	W	TI	Pb	Bi	Th	U
Unit Symbol	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Lower Limit	0.05	0.1	0.01	0.2	0.1	1	0.1	5	0.4	0.1	0.1
Method Code	FUS- MS	FUS- MS	FUS- MS	FUS- MS	FUS- MS	FUS- MS	FUS- MS	FUS- MS	FUS- MS	FUS- MS	FUS- MS
W1120-465	0.22	1.4	0.22	1.4	0.2	< 1	< 0.1	6	0.8	2.4	0.7
W1120-466	0.17	1.1	0.19	3.6	0.6	1	0.4	6	0.8	7.8	2.4
W1120-467	0.24	1.7	0.26	3.3	0.6	2	0.7	7	< 0.4	8.2	2.3
W1120-468	0.25	1.7	0.26	3.5	0.6	< 1	0.7	6	1.5	8.4	2.5
W1120-469	0.30	2.0	0.32	3.8	0.6	7	0.6	23	< 0.4	11.3	2.9
W1120-470	0.22	1.3	0.18	4.0	0.7	11	0.2	15	0.6	10.7	3.0
W1120-471	0.29	1.8	0.30	3.5	0.4	1	0.6	7	< 0.4	4.8	1.3

Analyte Symbol	SiO2	Al2O3	Fe2O3( T)	MnO	MgO	CaO	Na2O	K2O	TiO2	P2O5	LOI	Total	Sc	Be	V	Cr	Co	Ni	Cu	Zn	Ga	Ge	As
Unit Symbol	%	%	%	%	%	%	%	%	%	%	%	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Lower Limit	0.01	0.01	0.01	0.001	0.01	0.01	0.01	0.01	0.001	0.01		0.01	1	1	5	20	1	20	10	30	1	1	5
Method Code	FUS- ICP	FUS- ICP	FUS- ICP	FUS- ICP	FUS- ICP	FUS- ICP	FUS- ICP	FUS- ICP	FUS- ICP	FUS- ICP	FUS- ICP	FUS- ICP	FUS- ICP	FUS- ICP	FUS- ICP	FUS- MS	FUS- MS	FUS- MS	FUS- MS	FUS- MS	FUS- MS	FUS- MS	FUS- MS
NIST 694 Meas	11.61	1.94	0.76	0.013	0.35	42.79	0.91	0.56	0.121	30.22					1625								
NIST 694 Cert	11.2	1.80	0.790	0.0116	0.330	43.6	0.860	0.510	0.110	30.2					1740								
DNC-1 Meas	46.61	18.00	9.71	0.145	10.08	11.44	1.86	0.21	0.471	0.07			31		151	280	59	250	110	70	14		
DNC-1 Cert	47.15	18.34	9.97	0.150	10.13	11.49	1.890	0.234	0.480	0.070			31		148	270	57	247	100	70	15		
GBW 07113 Meas	70.46	12.87	3.19	0.140	0.15	0.60	2.31	5.33	0.290	0.05			5	4	6								
GBW 07113 Cert	72.8	13.0	3.21	0.140	0.160	0.590	2.57	5.43	0.300	0.0500			5.00	4.00	5.00								
GBW 07113 Meas	72.76	12.24	3.18	0.143	0.15	0.61	2.49	5.42	0.270	0.04			5	4	< 5								
GBW 07113 Cert	72.8	13.0	3.21	0.140	0.160	0.590	2.57	5.43	0.300	0.0500			5.00	4.00	5.00								
LKSD-3 Meas									1							90	31	50	40	140			26
LKSD-3 Cert																87.0	30.0	47.0	35.0	152			27.0
TDB-1 Meas																260		90	340	160			
TDB-1 Cert																251		92	323	155			
W-2a Meas	52.48	15.37	10.69	0.166	6.30	11.04	2.21	0.62	1.053	0.13			36	< 1	267	90	43	70	110	80	18	2	
W-2a Cert	52.4	15.4	10.7	0.163	6.37	10.9	2.14	0.626	1.06	0.130			36.0	1.30	262	92.0	43.0	70.0	110	80.0	17.0	1.00	
SY-4 Meas	50.12	20.30	6.15	0.107	0.51	8.21	7.04	1.68	0.287	0.12			2	3	10								
SY-4 Cert	49.9	20.69	6.21	0.108	0.54	8.05	7.10	1.66	0.287	0.131			1.1	2.6	8.0								
CTA-AC-1 Meas																	< 1			40			
CTA-AC-1 Cert																	2.72			38.0			
BIR-1a Meas	46.78	15.69	11.24	0.171	9.79	13.43	1.76	0.01	0.971	0.01			43	< 1	320	390	54	170	140	70	16		
BIR-1a Cert	47.96	15.50	11.30	0.175	9.700	13.30	1.82	0.030	0.96	0.021		1	44	0.58	310	370	52	170	125	70	16		
NCS DC86312 Meas																							
NCS DC86312 Cert																							
NCS DC70009 (GBW07241) Meas																	3	< 20	1040	100	17	11	66
NCS DC70009 (GBW07241) Cert																	3.7	2.8	960	100	16.5	11.2	69.9
OREAS 100a (Fusion) Meas																	17		180				
OREAS 100a (Fusion) Cert																	18.1		169				
OREAS 101a (Fusion) Meas																	47		450				
OREAS 101a (Fusion) Cert																	48.8		434				
OREAS 101b																	45		430				
OREAS 101b (Fusion) Cert																	47		416				
JB-1 Meas		<u> </u>	<u> </u>						<u> </u>			+	1		<u> </u>		< 1	< 20		< 30	18	2	16
JB-1 Cert		<u> </u>	<u> </u>						<u> </u>			+	<u> </u>		<u> </u>		0.83	1.67		30.6	16.1	1.88	16.3
		───	───	<b>├</b> ───┤	$\vdash$				<u> </u>	<u> </u>			+		<b>├</b> ──		0.00	1.07	<u> </u>	50.0	10.1	1.00	10.3

### Activation Laboratories Ltd.

Analyte Symbol	SiO2	AI2O3	Fe2O3(	MnO	MgO	CaO	Na2O	K2O	TiO2	P2O5	LOI	Total	Sc	Be	V	Cr	Co	Ni	Cu	Zn	Ga	Ge	As
			T)																				
Unit Symbol	%	%	%	%	%	%	%	%	%	%	%	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Lower Limit	0.01	0.01	0.01	0.001	0.01	0.01	0.01	0.01	0.001	0.01		0.01	1	1	5	20	1	20	10	30	1	1	5
Method Code	FUS-	FUS-	FUS-	FUS-	FUS-	FUS-	FUS-	FUS-	FUS-	FUS-	FUS-	FUS-	FUS-	FUS-	FUS-	FUS-	FUS-	FUS-	FUS-	FUS-	FUS-	FUS-	FUS-
	ICP	ICP	ICP	ICP	ICP	ICP	ICP	ICP	ICP	ICP	ICP	ICP	ICP	ICP	ICP	MS	MS	MS	MS	MS	MS	MS	MS
W1120-467 Orig	64.76	14.91	8.01	0.135	1.75	3.84	0.32	3.24	0.458	0.13	1.12	98.69	10	1	74	70	13	30	60	30	16	< 1	< 5
W1120-467 Split PREP DUP	65.49	14.91	8.04	0.129	1.78	3.92	0.32	3.24	0.460	0.15	1.10	99.55	10	1	74	70	13	30	70	30	16	< 1	< 5
W1120-467 Orig	65.69	15.18	8.21	0.136	1.76	3.94	0.32	3.22	0.469	0.11	1.12	100.2	10	1	73								
W1120-467 Split PREP DUP	63.31	15.65	8.32	0.133	1.81	4.01	0.33	3.32	0.480	0.13	1.10	98.58	10	1	76								
Method Blank																< 20	< 1	< 20	< 10	< 30	< 1	< 1	< 5

### Activation Laboratories Ltd.

Analyte Symbol	Rb	Sr	Y	Zr	Nb	Мо	Aa	In	Sn	Sb	Cs	Ва	La	Ce	Pr	Nd	Sm	Eu	Gd	Tb	Dv	Ho	Er
Unit Symbol	mag	maa	maa	maa	mag	ppm	ppm	maa	maa	maa	maa	mag	maa	maa	maa	mag	ppm	mag	ppm	ppm	ppm	maa	mag
Lower Limit	2	2	1	2	1	2	0.5	0.2	1	0.5	0.5	2	0.1	0.1	0.05	0.1	0.1	0.05	0.1	0.1	0.1	0.1	0.1
Method Code	- FUS-	- FUS-	FUS-	- FUS-	FUS-	- FUS-	FUS-	FUS-	FUS-	FUS-	FUS-	FUS-	FUS-	FUS-	FUS-	FUS-	FUS-	FUS-	FUS-	FUS-	FUS-	FUS-	FUS-
	MS	ICP	ICP	ICP	MS	MS	MS	MS	MS	MS	MS	ICP	MS	MS	MS	MS	MS	MS	MS	MS	MS	MS	MS
NIST 694 Meas																							
NIST 694 Cert																							
DNC-1 Meas		146	15	36								103	3.9			5.4		0.64					
DNC-1 Cert		144.0	18.0	38								118	3.6			5.20		0.59					
GBW 07113 Meas		40	44	387								499											
GBW 07113 Cert		43.0	43.0	403								506											
GBW 07113 Meas		41	46	379								499											
GBW 07113 Cert		43.0	43.0	403								506											
LKSD-3 Meas	73					< 2	3.1		2		2.2		52.2	98.5		45.3	8.3	1.50			5.2		
LKSD-3 Cert	78.0					2.00	2.70		3.00		2.30		52.0	90.0		44.0	8.00	1.50			4.90		
TDB-1 Meas	22												17.1	40.1		24.4		2.10					
TDB-1 Cert	23												17	41		23		2.1					
W-2a Meas	21	194	19	92	8	< 2						174	11.0	23.9		13.1	3.3	1.10		0.6		0.8	
W-2a Cert	21.0	190	24.0	94.0	7.90	0.600						182	10.0	23.0		13.0	3.30	1.00		0.630		0.760	
SY-4 Meas		1194	118	540								353											
SY-4 Cert		1191	119	517								340											
CTA-AC-1 Meas													> 2000	> 3000		1100	155	43.1	120	12.9			
CTA-AC-1 Cert													2176	3326		1087	162	46.7	124	13.9			
BIR-1a Meas		112	14	19								8	0.7			2.4			2.1		3.8		
BIR-1a Cert		110	16	18								6	0.63			2.5			2.0		4		
NCS DC86312 Meas													> 2000	196		1640			234	34.0	184	38.2	97.8
NCS DC86312 Cert													2360	190		1600			225.0	34.6	183	36	96.2
NCS DC70009 (GBW07241) Meas	505						1.7	1.0		3.0	40.1		25.2	63.6	8.30	34.3	12.7		15.7	3.2	22.6	4.6	14.0
NCS DC70009 (GBW07241) Cert	500						1.8	1.3		3.1	41		23.7	60.3	7.9	32.9	12.5		14.8	3.3	20.7	4.5	13.4
OREAS 100a (Fusion) Meas						25							263	468	50.8	157	23.5	4.04	23.6	3.7	25.4	4.9	15.0
OREAS 100a (Fusion) Cert						24.1							260	463	47.1	152	23.6	3.71	23.6	3.80	23.2	4.81	14.9
OREAS 101a (Fusion) Meas						21							817	1420	140	428	53.2	8.64		5.4	34.0	6.8	20.7
OREAS 101a						21.9							816	1396	134	403	48.8	8.06		5.92	33.3	6.46	19.5
(Fusion) Cert																							
OREAS 101b (Fusion) Meas						19							818	1430	129	393	51.0	8.30		5.3	32.8	6.5	19.4
OREAS 101b (Fusion) Cert						20.9							789	1331	127	378	48	7.77		5.37	32.1	6.34	18.7
JR-1 Meas	251				15	3		< 0.2	3	1.1	19.6		20.5	47.2	5.80	25.3	6.3	0.32		1.0	6.1		3.9
JR-1 Cert	257				15.2	3.25		0.028	2.86	1.19	20.8		19.7	47.2	5.58	23.3	6.03	0.30		1.01	5.69		3.61
W1120-467 Orig	117	32	14	136	5	< 2	< 0.5	< 0.2	2	< 0.5	0.7	584	25.2	47.3	4.92	17.4	3.2	0.89	2.9	0.4	2.7	0.5	1.5
QC

#### Activation Laboratories Ltd.

### Report: A16-10422

Analyte Symbol	Rb	Sr	Y	Zr	Nb	Mo	Ag	In	Sn	Sb	Cs	Ва	La	Ce	Pr	Nd	Sm	Eu	Gd	Tb	Dy	Ho	Er
Unit Symbol	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Lower Limit	2	2	1	2	1	2	0.5	0.2	1	0.5	0.5	2	0.1	0.1	0.05	0.1	0.1	0.05	0.1	0.1	0.1	0.1	0.1
Method Code	FUS-	FUS-	FUS-	FUS-	FUS-	FUS-	FUS-	FUS-	FUS-	FUS-	FUS-	FUS-	FUS-	FUS-	FUS-	FUS-	FUS-	FUS-	FUS-	FUS-	FUS-	FUS-	FUS-
	MS	ICP	ICP	ICP	MS	MS	MS	MS	MS	MS	MS	ICP	MS	MS	MS	MS	MS	MS	MS	MS	MS	MS	MS
W1120-467 Split PREP DUP	116	31	13	121	4	2	< 0.5	< 0.2	2	< 0.5	0.7	570	24.9	46.3	4.77	17.2	3.2	0.88	2.9	0.4	2.6	0.5	1.5
W1120-467 Orig		32	14	140								581											
W1120-467 Split PREP DUP		33	14	120								588											
Method Blank	< 2				< 1	< 2	< 0.5	< 0.2	< 1	< 0.5	< 0.5		< 0.1	< 0.1	< 0.05	< 0.1	< 0.1	< 0.05	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1

Report:	A16-10422
---------	-----------

Unit Symbol     ppm <th< th=""><th>Analyte Symbol</th><th>Tm</th><th>Yb</th><th>Lu</th><th>Hf</th><th>Та</th><th>W</th><th>ТΙ</th><th>Pb</th><th>Bi</th><th>Th</th><th>U</th></th<>	Analyte Symbol	Tm	Yb	Lu	Hf	Та	W	ТΙ	Pb	Bi	Th	U
Lower Limit     0.05     0.1     0.01     0.2     0.1     1     0.1     5     0.4     0.1     0.1       Method Code     FUS- MS     FUS     FUS- FUS     FUS     FUS     FUS     FUS     FUS     FUS     FUS     FUS     FUS     FUS     FUS     FUS     FUS     FUS     F	Unit Symbol	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Method Code     FUS- MS	Lower Limit	0.05	0.1	0.01	0.2	0.1	1	0.1	5	0.4	0.1	0.1
NIST 694 Meas     NIST 694 Cert     NIST 604 Cert     NIST 694 Cert     NIST 694	Method Code	FUS- MS	FUS- MS	FUS- MS	FUS- MS	FUS- MS	FUS- MS	FUS- MS	FUS- MS	FUS- MS	FUS- MS	FUS- MS
NIST 694 Cert     Image: Second seco	NIST 694 Meas											
DNC-1 Meas     2.1     6       DNC-1 Cert     2.0     6.3     6.3       GBW 07113 Meas     6.3     6.3     6.3       GBW 07113 Meas     6.3     6.3     6.3       GBW 07113 Meas     6.3     6.3     6.3       GBW 07113 Meas     6.3     6.3     6.3       GBW 07113 Meas     6.3     6.3     6.3       GBW 07113 Meas     2.8     0.43     4.5     0.7     10.4     4.4       LKSD 3 Meas     2.8     0.43     4.5     0.7     11.4     4.60       USD 3 Meas     2.8     0.43     4.5     0.7     11.4     4.60       USD 3 Meas     2.1     0.32     0.4     <1<<0.1	NIST 694 Cert											
DNC-1 Cert     2.0     6.3        GBW 07113 Meas     . </td <td>DNC-1 Meas</td> <td></td> <td>2.1</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>6</td> <td></td> <td></td> <td></td>	DNC-1 Meas		2.1						6			
GBW 07113 Meas     Image: Constraint of the sector	DNC-1 Cert		2.0						6.3			
GBW 07113 Cert     GBW 07113 Meas     GBW 0711 Meas     GBW 0711 Meas     GBW 0711 Meas     GBW 0711 Meas     GBW 0711 Meas     GBW 0711 Meas     GBW 0711 Meas     GBW 0711 Meas     GBW 071 Meas     GBW 0721 Meas     GBW 0721 Meas	GBW 07113 Meas											
GBW 07113 Meas     Image: CBW 07113 Cert     Image: CBW 07113 Cert     Image: CBW 07113 Cert     Image: CBW 07113 Cert     Image: CBW 07113 Cert     Image: CBW 07113 Cert     Image: CBW 07113 Cert     Image: CBW 07113 Cert     Image: CBW 0724 1 Cert     Image: CBW 0724 1 Cert     Image: CBW 0724 1 Cert     Image: CBW 0724 1 Cert     Image: CBW 0724 1 Cert     Image: CBW 0724 1 Cert     Image: CBW 0724 1 Cert     Image: CBW 0724 1 Cert     Image: CBW 0724 1 Cert     Image: CBW 0724 1 Cert     Image: CBW 0724 1 Cert     Image: CBW 0724 1 Cert     Image: CBW 0724 1 Cert     Image: CBW 0724 1 Cert     Image: CBW 0724 1 Cert <thimage: 0724="" 1="" cbw="" cert<="" th="">     Image: CBW 072</thimage:>	GBW 07113 Cert											
GBW 07113 Cert     Image: Constraint of the sector	GBW 07113 Meas											
LKSD-3 Meas     2.8     0.43     4.5     0.7     10.4     4.4       LKSD-3 Cert     2.70     0.400     4.80     0.700     11.4     4.60       TDB-1 Meas     3.4             W2a Meas     2.1     0.32     0.4     <1<	GBW 07113 Cert											
LKSD-3 Cert     2.70     0.400     4.80     0.700     11.4     4.60       TDB-1 Meas     3.4	LKSD-3 Meas		2.8	0.43	4.5	0.7					10.4	4.4
$\begin{array}{c c c c c c c c c c c c c c c c c c c $	LKSD-3 Cert		2.70	0.400	4.80	0.700					11.4	4.60
$\begin{array}{c c c c c c c c c c c c c c c c c c c $	TDB-1 Meas		3.4									
W-2a Meas     2.1     0.32     0.4     <1     < 0.1     < 0.4     0.5       W-2a Cert     2.10     0.330     0.500     0.300     0.200     0.0300     0.530       SY-4 Meas                530       SY-4 Cert	TDB-1 Cert		3.4									
W-2a Cert     2.10     0.330     0.500     0.300     0.0300     0.530       SY-4 Meas	W-2a Meas		2.1	0.32		0.4	< 1	< 0.1		< 0.4		0.5
SY-4 Meas <t< td=""><td>W-2a Cert</td><td></td><td>2.10</td><td>0.330</td><td></td><td>0.500</td><td>0.300</td><td>0.200</td><td></td><td>0.0300</td><td></td><td>0.530</td></t<>	W-2a Cert		2.10	0.330		0.500	0.300	0.200		0.0300		0.530
SY-4 Cert     Image: Constraint of the sector of t	SY-4 Meas											
CTA-AC-1 Meas     11.7     1.2     2.4     21.7     4.3       CTA-AC-1 Cert     11.4     1.13     2.65     21.8     4.4       BIR-1a Meas       3         BIR-1a Cert      3      23.5         NCS DC86312     14.8     94.4     13.1     23.6      23.6        NCS DC86312     15.1     87.79     11.96      21.0     23.6       23.6       23.6        23.6       23.6        23.6       23.6        23.6        23.6        23.6        23.6       23.6        23.6        24.6      20.0     1.8     28.3       20.6      <	SY-4 Cert											
CTA-AC-1 Cert     11.4     1.13     2.65     21.8     4.4       BIR-1a Meas       3       3        3        3        3        3        3        3        3        3        3        3        3        3        3        3       3        3       3        3       3       3       3       3       3       3       3       3     3<	CTA-AC-1 Meas		11.7		1.2	2.4					21.7	4.3
BIR-1a Meas	CTA-AC-1 Cert		11.4		1.13	2.65					21.8	4.4
BIR-1a Cert     3     3       NCS DC86312     14.8     94.4     13.1     23.5       NCS DC86312     15.1     87.79     11.96     23.6       Cert     23.0     23.6     23.6       NCS DC70009     2.40     2.44     2130     1.9     29.3       (GBW07241)     Meas     2130     1.9     28.3     28.3       (GBW07241) Cert     2.45     16.2     2.37     2200     1.8     28.3       (GBW07241) Cert     2.45     16.2     2.37     22.0     1.8     28.3       (GBW07241) Cert     0REAS 100a     2.45     16.2     2.37     2.37     2.31     14.9     2.26       (Fusion) Meas     2.31     14.9     2.26     37.1     433       OREAS 101a     3.00     2.72     37.1     433     36.6     422       (Fusion) Meas     0     2.66     37.1     433     37.4     407       OREAS 101a     2.90     2.66     37.6     37.4     407 <	BIR-1a Meas								< 5			
NCS DC86312 Meas     14.8     94.4     13.1     23.5       NCS DC86312 Cert     15.1     87.79     11.96     2130     23.6       NCS DC70009 Cert     2.40     2.44     2130     1.9     29.3       NCS DC70009 Cert     2.40     2.44     2200     1.8     28.3       NCS DC70009 (GBW07241) Cert     2.45     16.2     2.37     28.3     28.3       OREAS 100a (Fusion) Cert     2.45     16.2     2.37     28.3     52.8     141       OREAS 100a (Fusion) Cert     2.31     14.9     2.26     51.6     135       OREAS 101a (Fusion) Cert     3.00     2.72     37.1     433       OREAS 101a (Fusion) Cert     2.80     18.3     2.76     37.1     433       OREAS 101b (Fusion) Cert     2.80     18.3     2.76     37.1     37.4     407       OREAS 101b (Fusion) Cert     2.66     17.6     2.58     37.1     396       JR-1 Meas     0.69     4.9     0.77     4.3     1.9     1.4     20     0.	BIR-1a Cert								3			
NCS DC86312 Cert     15.1     87.79     11.96     23.6       NCS DC70009 (GBW07241)     2.40     2.44     2130     1.9     29.3       NCS DC70009 (GBW07241) Cert     2.40     2.44     2200     1.8     28.3       NCS DC70009 (GBW07241) Cert     2.45     16.2     2.37     20.0     1.8     28.3       OREAS 100a (Fusion) Meas     2.45     16.2     2.37     14.9     2.26     51.6     135       OREAS 100a (Fusion) Meas     2.31     14.9     2.26     135     37.1     433       OREAS 101a (Fusion) Meas     3.00     2.72     14.3     36.6     422       OREAS 101a (Fusion) Meas     2.80     18.3     2.76     37.4     407       OREAS 101b (Fusion) Meas     2.86     18.3     2.76     37.4     37.1     396       OREAS 101b (Fusion) Cert     2.66     17.6     2.58     37.1     396       JR-1 Meas     0.69     4.9     0.77     4.3     1.9     1.4     20     0.5     27.3     9.1	NCS DC86312 Meas	14.8	94.4	13.1							23.5	
NCS DC7009 (GBW07241) Meas     2.40     2.44     2130     1.9     29.3       NCS DC7009 (GBW07241) Cert     2.2     2.4     2200     1.8     28.3       NCS DC7009 (GBW07241) Cert     2.45     16.2     2.37     2.31     14.9     2.26       OREAS 100a (Fusion) Cert     2.31     14.9     2.26     2.72     37.1     433       OREAS 101a (Fusion) Meas     3.00     2.72     2.72     37.1     433       OREAS 101a (Fusion) Cert     2.90     2.66     36.6     422       OREAS 101a (Fusion) Cert     2.90     2.66     37.1     433       OREAS 101a (Fusion) Cert     2.90     2.66     37.1     433       OREAS 101b (Fusion) Cert     2.80     18.3     2.76     37.4     407       OREAS 101b (Fusion) Cert     2.66     17.6     2.58     37.1     396       JR-1 Meas     0.69     4.9     0.77     4.3     1.9     1.4     20     0.5     27.3     9.1       JR-1 Cert     0.67     4.55     0.71	NCS DC86312 Cert	15.1	87.79	11.96							23.6	
NCS DC7009 (GBW07241) Cert     2.2     2.4     2200     1.8     28.3       OREAS 100a (Fusion) Meas     2.45     16.2     2.37       52.8     141       OREAS 100a (Fusion) Meas     2.31     14.9     2.26       51.6     135       OREAS 101a (Fusion) Meas     3.00     2.72        37.1     433       OREAS 101a (Fusion) Meas     2.90     2.66        36.6     422       OREAS 101a (Fusion) Cert     2.80     18.3     2.76       37.4     407       OREAS 101b (Fusion) Meas     2.66        37.1     396       OREAS 101b (Fusion) Cert     2.66     17.6     2.58      37.1     396       JR-1 Meas     0.69     4.9     0.77     4.3     1.9     1.4     20     0.5     27.3     9.1       JR-1 Cert     0.67     4.55     0.71     4.51     1.86     1.56     19.3     0.56     26	NCS DC70009 (GBW07241) Meas	2.40		2.44			2130	1.9			29.3	
OREAS 100a (Fusion) Meas     2.45     16.2     2.37     52.8     141       OREAS 100a (Fusion) Cert     2.31     14.9     2.26     51.6     135       OREAS 101a (Fusion) Meas     3.00     2.72     37.1     433       OREAS 101a (Fusion) Meas     2.90     2.66     36.6     422       OREAS 101a (Fusion) Cert     2.80     18.3     2.76     37.4     407       OREAS 101b (Fusion) Meas     2.66     37.4     37.4     407       OREAS 101b (Fusion) Cert     2.66     37.1     396       OREAS 101b (Fusion) Cert     2.66     17.6     2.58     37.1     396       JR-1 Meas     0.69     4.9     0.77     4.3     1.9     1.4     20     0.5     27.3     9.1       JR-1 Cert     0.67     4.55     0.71     4.51     1.86     1.56     19.3     0.56     26.7     8.88       W1120-467 Orig     0.24     1.7     0.26     3.3     0.6     2     0.7     7     <0.4	NCS DC70009 (GBW07241) Cert	2.2		2.4			2200	1.8			28.3	
OREAS 100a (Fusion) Cert     2.31     14.9     2.26     51.6     135       OREAS 101a (Fusion) Meas     3.00     2.72     37.1     433       OREAS 101a (Fusion) Meas     2.90     2.66     36.6     422       OREAS 101b (Fusion) Cert     2.80     18.3     2.76     37.4     407       OREAS 101b (Fusion) Meas     2.66     17.6     2.58     37.1     396       OREAS 101b (Fusion) Cert     2.66     17.6     2.58     37.1     396       JR-1 Meas     0.69     4.9     0.77     4.3     1.9     1.4     20     0.5     27.3     9.1       JR-1 Cert     0.67     4.55     0.71     4.51     1.86     1.56     19.3     0.56     26.7     8.88       W1120-467 Orig     0.24     1.7     0.26     3.3     0.6     2     0.7     7     <0.4	OREAS 100a (Fusion) Meas	2.45	16.2	2.37							52.8	141
OREAS 101a (Fusion) Meas     3.00     2.72     37.1     433       OREAS 101a (Fusion) Meas     2.90     2.66     36.6     422       OREAS 101b (Fusion) Cert     2.80     18.3     2.76     37.4     407       OREAS 101b (Fusion) Meas     2.66     17.6     2.58     37.1     396       OREAS 101b (Fusion) Cert     2.66     17.6     2.58     37.1     396       JR-1 Meas     0.69     4.9     0.77     4.3     1.9     1.4     20     0.5     27.3     9.1       JR-1 Cert     0.67     4.55     0.71     4.51     1.86     1.56     19.3     0.56     26.7     8.88       W1120-467 Orig     0.24     1.7     0.26     3.3     0.6     2     0.7     7     <0.4	OREAS 100a (Fusion) Cert	2.31	14.9	2.26							51.6	135
OREAS 101a (Fusion) Cert     2.90     2.66     36.6     422       OREAS 101b (Fusion) Meas     2.80     18.3     2.76     37.4     407       OREAS 101b (Fusion) Meas     2.66     17.6     2.58     37.1     396       OREAS 101b (Fusion) Cert     2.66     17.6     2.58     37.1     396       JR-1 Meas     0.69     4.9     0.77     4.3     1.9     1.4     20     0.5     27.3     9.1       JR-1 Cert     0.67     4.55     0.71     4.51     1.86     1.56     19.3     0.56     26.7     8.88       W1120-467 Orig     0.24     1.7     0.26     3.3     0.6     2     0.7     7     <0.4	OREAS 101a (Fusion) Meas	3.00		2.72							37.1	433
OREAS 101b (Fusion) Meas     2.80     18.3     2.76     Image: Constraint of the state	OREAS 101a (Fusion) Cert	2.90		2.66							36.6	422
OREAS 101b (Fusion) Cert     2.66     17.6     2.58     37.1     396       JR-1 Meas     0.69     4.9     0.77     4.3     1.9     1.4     20     0.5     27.3     9.1       JR-1 Cert     0.67     4.55     0.71     4.51     1.86     1.56     19.3     0.56     26.7     8.88       W1120-467 Orig     0.24     1.7     0.26     3.3     0.6     2     0.7     7     < 0.4	OREAS 101b (Fusion) Meas	2.80	18.3	2.76							37.4	407
JR-1 Meas     0.69     4.9     0.77     4.3     1.9     1.4     20     0.5     27.3     9.1       JR-1 Cert     0.67     4.55     0.71     4.51     1.86     1.56     19.3     0.56     26.7     8.88       W1120-467 Orig     0.24     1.7     0.26     3.3     0.6     2     0.7     7     < 0.4	OREAS 101b (Fusion) Cert	2.66	17.6	2.58							37.1	396
JR-1 Cert     0.67     4.55     0.71     4.51     1.86     1.56     19.3     0.56     26.7     8.88       W1120-467 Orig     0.24     1.7     0.26     3.3     0.6     2     0.7     7     < 0.4	JR-1 Meas	0.69	4.9	0.77	4.3	1.9		1.4	20	0.5	27.3	9.1
W1120-467 Orig 0.24 1.7 0.26 3.3 0.6 2 0.7 7 < 0.4 8.2 2.3	JR-1 Cert	0.67	4.55	0.71	4.51	1.86		1.56	19.3	0.56	26.7	8.88
	W1120-467 Orig	0.24	1.7	0.26	3.3	0.6	2	0.7	7	< 0.4	8.2	2.3

QC

Activation Laboratories Ltd.

Analyte Symbol	Tm	Yb	Lu	Hf	Та	W	TI	Pb	Bi	Th	U
Unit Symbol	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Lower Limit	0.05	0.1	0.01	0.2	0.1	1	0.1	5	0.4	0.1	0.1
Method Code	FUS- MS	FUS- MS	FUS- MS	FUS- MS	FUS- MS	FUS- MS	FUS- MS	FUS- MS	FUS- MS	FUS- MS	FUS- MS
W1120-467 Split PREP DUP	0.22	1.6	0.25	2.6	0.5	2	0.7	7	< 0.4	8.0	2.3
W1120-467 Orig											
W1120-467 Split PREP DUP											
Method Blank	< 0.05	< 0.1	< 0.01	< 0.2	< 0.1	< 1	< 0.1	< 5	< 0.4	< 0.1	< 0.1

APPENDIX FOUR: QAQC PROCEDURE AND RESULTS

# APPENDIX FOUR: QAQC PROCEDURE AND RESULTS

In order to ensure that the copper and gold analyses were accurate throughout the program a number of standard QAQC steps were followed. These steps are in addition to those followed by the laboratory used (ActLabs in Thunder Bay, Ontario). ActLabs inserts blanks, a variety of standards, and a number of duplicates into the sample stream. No issues were noted with any of the results from the ActLabs QAQC samples.

The first step in QAQC is to ensure that there is no gold or copper contamination of the samples in transit between the field and the laboratory or during the crushing and pulverizing stages or any of the subsequent stages of the analyses at the lab. To do this a small boulder of barren aplite (a fine-grained granitoid with very low content of mafic minerals and no visible sulphides, quartz veins, alteration, etc.) was located on site and broken into small pieces. Samples of this material were then inserted into the sample stream as a "blank" at a rate of one for every twenty samples. All copper analyses and gold assays of these blanks returned very low values and confirm that there was no contamination of the core samples at any stage of the process. Results are presented in the table below. Gold assay results were all below detection limits (<5 ppb Au) while copper values ranged from <1 ppm to 13 ppm and are charted below. The copper values remained consistently low over the span of the four batches of samples analysed.

Lab Report #	Sample #	BLANK (Au ppb)	BLANK (Cu ppm)
A16-09895	W-1120001	< 5	1
A16-09895	W-1120040	< 5	<1
A16-09895	W-1120060	< 5	2
A16-09895	W-1120080	< 5	9
A16-09895	W-1120100	< 5	1
A16-10366	W1120120	< 5	10
A16-10366	W1120140	< 5	3
A16-10366	W1120200	< 5	2
A16-10366	W1120250A	< 5	4
A16-10422	W1120140	< 5	3
A16-10422	W1120160	< 5	<1
A16-10422	W1120180	< 5	3
A16-10422	W1120204B	< 5	<1
A16-10422	W1120220	< 5	13
A16-10422	W1120240	<5	3
A16-10422	W1121510	< 5	3
A16-10480	W1120020	< 5	4
A16-10480	W1121510	< 5	13

#### **GOLD ASSAYS & COPPER ANALYSES OF GRANITE BLANKS**



<u>GOLD STANDARDS</u>: To ensure that the gold assays were accurate, a gold standard was inserted in the field at a rate of one per every twenty core samples (consequently every tenth sample was either a granite blank or a standard). The standard used was RockLabs Reference Material OxK119 which is composed of basalt and feldspar minerals mixed with finely divided gold. The recommended gold content as determined after multiple assays by RockLabs is 3,604 ppb Au with a standard deviation of 105 ppb. The acceptable range of values is taken as the recommended value plus/minus 2x the standard deviation. The results of the assayed standards from this program are listed and charted below.

Lab Report #A16-	Sample #	Au Standard ppb			
9895	W-1120050	3510			
9895	W-1120070	3440			
9895	W-1120090	3520			
10366	W1120150	3100			
10366	W1120010	3380			
10366	W1120110	3280			
10366	W1120130	3300			
10366	W1120170	3370			
10366	W1120190	3460			
10422	W1120090	3460			
10422	W1120153B	3540			
10422	W1120170B	3630			
10422	W1120210	3440			
10422	W1120230	3470			
10422	W1120250B	3300			
10422	W1121520	3500			
10480	W1120030	3560			
10480	W1120100	3500			

#### GOLD ASSAYS OF STANDARD OxK119



Out of the 18 gold standards assayed only one was over the recommended value of 3,604 ppb and barely so (3,630 ppb), seven were more than one standard deviation (Std Dev) below that value and six were more than two Std Dev below it. On average, the results are 183 ppb or 5% below the recommended value. Under normal circumstances the number of assays more than 2 x Std Dev too low would be of some concern, however, as it turned out the gold values from the mineralized zones tested by this program averaged much lower than the recommended value of this standard. The average gold value of the zones is only <215 ppb so a 5% variation is insignificant. Recommended average values of the 2 gold standards inserted by ActLabs as part of their routine procedure, OREAS 203 and OREAS 251, turned out to be closer to the upper range of gold values encountered in the mineralized zones, i.e. 871 ppb Au and 504 ppb Au respectively. Results of assays from standard OREAS 203 were within 6 ppb of the recommended value of 871 ppb Au. Results of assays from standard OREAS 251 were within 40 ppb of the recommended value of 871 ppb Au and the variance averaged only 3%. These results are tabulated below.

Lab Report #	OREAS 203	(871 ppb Au)	OREAS 251 (504 ppb Au)			
	Actual Assay	% Variance	Actual Assay	% Variance		
A16-09895	872	0.1%	519	3%		
A16-09895	877	0.7%	512	2%		
A16-09895	876	0.6%	522	4%		
A16-10422			504	0%		
A16-10422			544	8%		
A16-10422			518	3%		
A16-10480			517	3%		
	Within 1-6 ppb	0.5% avg	Within 0-40 ppb	3% avg		

The good agreement between the lab results and the recommended value for standard OREAS 203, and the fact that it falls within the range of typical higher gold values returned from the mineralized zones at Akow Lake, makes it a good choice for the company gold standard for any future work on this property.

COPPER STANDARD: To ensure that the copper analyses were accurate through all the sample batches submitted, a copper standard was inserted into the sample sequence after the samples had been assayed for gold and before they were sent for copper analysis. The gold standard sample was removed from the sample stream at this stage and replaced by copper standard OREAS 922 which has a recommended value of 2,122 ppm Cu with a standard deviation of 86.4 ppm. Results of the analyses of this standard are charted and listed below.



Lab Report #A16-	Sample #	OREAS 922 Standard (2,122 pm Cu)				
		Actual Result	% Variation			
10366	W1120150	2140	1%			
10366	W1120010	2220	5%			
10366	W1120110	2230	5%			
10366	W1120130	2170	2%			
10366	W1120170	2280	7%			
10366	W1120190	2300	8%			
10422	W1120210	2270	7%			
10422	W1120230	2280	7%			
10422	W1120250B	2220	5%			
10480	W1120030	2220	5%			
9895 repeat	W1120040	2200	4%			
9895 repeat	W1120050	2220	5%			
9895 repeat	W1120060	2230	5%			
9895 repeat	W1120070	2240	6%			
9895 repeat	W1120080	2240	6%			
9895 repeat	W1120090	2240	6%			
9895 repeat	W1120100	2290	8%			
	Average	2235	5%			

#### ANALYSES OF COPPER STANDARD OREAS 922

The results of the analyses on the 17 samples of copper standard OREAS 922 were all slightly higher than the accepted average value of 2,122 ppm Cu, ranging from 1% to 8% higher and averaging 5% or 106 ppm Cu higher, but all samples except two fell within 2 x Std Dev of the accepted average for this material.

The standards inserted in the sample stream by ActLabs have a wide range of accepted values from 66 to 6850 ppm. Results of these analyses are tabulated below and fall within 0% to 11% of the accepted values with the least variance among the more copper rich samples (e.g. GRX-4 and CZN-3).

Report #	GXR-1 (1110 ppm Cu)	GXR-4 (6520 ppm Cu)	GXR-6 (66 ppm Cu)	SdAR (236 ppm Cu)	CZN-3 (6850 ppm Cu)	CPB-2 (1213 ppm Cu)
A16-09895	1220	6580	73			
A16-09895						
A16-09895						
A16-10422	1180	6780	73	256		
A16-10422						
A16-10422						
A16-10480	1210	6590	71	252	6850	1240
	70-110 ppm higher	60-260 ppm higher	5-7 ppm higher	16-20 ppm higher	Spot on	27 ppm higher
	6 to 10% higher	1 to 4% higher	8 to 11% higher	7 to 8% higher	0% variance	2% higher

Due to the time constraints during the mobilization phase of this program and the need for a quick turnaround on the first batch of samples, a procedure for inserting the copper standards in the sample stream was not in place by the time of the first analyses. To compensate for this, all samples from that batch (A16-09895) were re-analysed for copper a second time with seven copper standards inserted throughout. These results are included in the table and chart of OREAS 922 results discussed above and are very similar to results from the other batches. This repeat analysis provided the opportunity to conduct a duplicate test of the lab as well. The graphs below compare the results of the original copper analyses with those from the repeat analyses, the first over the entire range of values and the second with an emphasis on the more numerous lower values below 2,000 ppm.



The correlation between results from the original and repeat copper analyses is excellent with a correlation coefficient of 0.9987. There is no obvious bias evident in either graph towards a higher or lower value in the repeat analyses with respect to the overall amount of copper. The individual results are listed in the table below.

Report	Original	Repeat		Report	Original	Repeat		
Number: A16- 09895	24/10/2016	11/11/2016	% Variance (Abs. Value)	Number: A16- 09895	24/10/2016	11/11/2016	% Variance (Abs. Value)	
Sample No.	Cu ppm	Cu ppm		Sample No.	Cu ppm	Cu ppm		
W1120002	23	23	0%	W1120066	70	68	3%	
W1120003	24	23	4%	W1120067	149	147	1%	
W1120004	28	25	11%	W1120068	1440	1410	2%	
W1120005	37	34	8%	W1120069	2850	2820	1%	
W1120006	56	56	0%	W1120071	4220	4170	1%	
W1120007	27	27	0%	W1120072	905	886	2%	
W1120008	30	29	3%	W1120073	1500	1490	1%	
W1120036	1130	1150	-2%	W1120074	2130	2100	1%	
W1120037	294	283	4%	W1120075	1020	987	3%	
W1120038	161	162	-1%	W1120076	779	772	1%	
W1120039	299	299	0%	W1120077	85	84	1%	
W1120041	354	329	7%	W1120078	1240	1230	1%	
W1120042	541	530	2%	W1120079	5120	5190	-1%	
W1120043	5240	5070	3%	W1120081	1320	1310	1%	
W1120044	622	598	4%	W1120082	410	407	1%	
W1120045	1360	1300	4%	W1120083	1090	1090	0%	
W1120046	447	438	2%	W1120084	1040	1090	-5%	
W1120047	1730	1680	3%	W1120085	3260	3370	-3%	
W1120048	881	867	2%	W1120086	5890	5970	-1%	
W1120049	1360	1360	0%	W1120092	148	142	4%	
W1120051	6060	5930	2%	W1120093	120	121	-1%	
W1120052	1350	1240	8%	W1120094	149	150	-1%	
W1120054	2240	2200	2%	W1120095	44	44	0%	
W1120055	2110	2060	2%	W1120096	47	49	-4%	
W1120056	3210	3290	-2%	W1120097	66	64	3%	
W1120057	742	723	3%	W1120098	90	88	2%	
W1120058	2180	2210	-1%	W1120099	42	40	5%	
W1120059	202	197	2%	W1120101	2380	2640	-11%	
W1120061	535	532	1%	W1120102	814	817	0%	
W1120062	2450	2370	3%	W1120103	686	655	5%	
W1120063	1450	1400	3%	W1120104	185	182	2%	
W1120064	62	59	5%	W1120105	942	915	3%	
W1120065	294	296	-1%	W1120106	419	420	0%	
						Average	2%	

Average

The average difference between the 56 original and repeat analyses is only 2%. The range of variances is only 0 to 5% for all but 4 of the samples. Those 4 samples show a maximum variance of 11%. Overall the reproducibility of the copper analyses is considered excellent.

## SAMPLE SPLITTING PROCEDURES:

Drill core from this program was logged under a temporary shelter close to the site of hole RGR-16-1. Core samples were delineated with coloured markers at appropriate intervals by the author and split using a manual core splitter at that site. Typically the worker splitting the core was given one box of core at a time with the sample bags marked and inserted at the beginning of each interval. The author then inspected the split (half) core remaining in the box and the bagged samples once each box was finished. Several boxes of core that was deemed too schistose to split effectively with the manual splitter were transported to Thunder Bay by the author at the end of the job and sawn under the authors supervision at a contract core sawing service there.

Bagged samples were places in woven plastic sacks and sealed with zip ties before shipment to the laboratory. The final 3 batches of samples were transported in a truck directly to the lab by the author at the end of the job.

