

**TECHNICAL REPORT** 

## ON THE

## UPDATED MINERAL RESOURCE ESTIMATE FOR THE EAU CLAIRE GOLD DEPOSIT, CLEARWATER PROJECT, QUEBEC, CANADA

UTM NAD83 18U 444,200 m E; 5,785,400 m N LATITUDE 52° 13qN, LONGITUDE 75° 49qW

Prepared for:

Eastmain Resources Inc. 2400 . 120 Adelaide Street West Toronto, ON M5H 1T1

Report Date: October 25<sup>th</sup>, 2017 Effective Date: August 25<sup>th</sup>, 2017

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Company SGS Canada Inc. (%GGS+) SGS Canada Inc. (%GGS+)

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## 1 SUMMARY

SGS Canada Inc. (%GS+) was contracted by Eastmain Resources Inc. (%Eastmain+) to complete an updated mineral resource estimate for the Eau Claire Gold Deposit (%Eau Claire Deposit+) within the Clearwater Project (the %Croject+) located approximately 350 kilometres north of Chibougamau Québec, Canada, and to prepare a technical report written in support of the updated mineral resource estimate. The reporting of the updated mineral resource estimate complies with all disclosure requirements for mineral resources set out in the NI 43-101 Standards of Disclosure for Mineral Projects (2011). The classification of the updated mineral resource is consistent with CIM Definition Standards - For Mineral Resources and Mineral Reserves (2014).

Eastmain is a Canadian public company involved in mineral exploration and development. Eastmain common shares are listed on the Toronto Stock Exchange (%TSX+) under the symbol %ER+ and on the OTCQX under the symbol %EANRF+.

This technical report will be used by Eastmain in fulfillment of their continuing disclosure requirements under Canadian securities laws, including National Instrument 43-101. Standards of Disclosure for Mineral Projects (% 43-101+). The technical report is written in support of the updated resource estimate released by Eastmain on September 11<sup>th</sup>, 2017. Eastmain reported that the Eau Claire Deposit contained 826,000 ounces of gold (4.2 million tonnes at 6.16 g/t Au) in the Measured and Indicated category, and 465,000 ounces of gold (2.2 million tonnes at 6.49 g/t Au) in the Inferred category. The effective date of the resource estimate is August 25, 2017.

The updated mineral resource presented in this report was estimated by Allan Armitage, Ph.D., P. Geo, (% rmitage+) of SGS and Pit optimization was completed by Sabry Abdel Hafez, Ph. D, P.Eng. (% Jafez+), of SGS (% be Authors+). Armitage and Hafez are independent Qualified Persons as defined by NI 43-101.

#### 1.1 Property Description, Location, Access, and Physiography

The Eau Claire Deposit is located in the province of Quebec, approximately 800 kilometres north of Montreal and 350 kilometres north of Chibougamau. The deposit is located within the Project, which is readily accessible by road along the Route du Nord extending from Chibougamau onto the village of Nemiscau and via Hydro Quebect Eastmain 1 road network. The centre of the property is located at approximately 75.69 degrees longitude west and 52.23 degrees latitude north.

The Project is located north of the 52nd parallel (52°N) and as such is subject to the provisions of the James Bay and Northern Quebec Agreement (1975), and the Paix des Braves Agreement (2002). The Project falls within the Eeyou Istchee Territory of the Eastmain Cree First Nation, including trap lines held by Dr. Ted Moses (tallyman), and on Category II and III lands, as established under the James Bay and Northern Quebec Agreement.

The Project is 100 percent owned by Eastmain and comprises 385 contiguous claims with a total area of 20,068 hectares.

#### 1.2 History

Exploration on the property dates back to the early 1970s when SEREM Quebec Inc. (SEREM) and Société de développement de la Baie-James (SDBJ) completed airborne electromagnetic surveys and limited core drilling in search for volcanogenic massive base metal sulphide deposits. From 1984 to 1989, Westmin Resources Ltd. and Eastmain initiated a comprehensive gold and base metal exploration program covering the former Eastmain Greenstone Belt, including the drilling of 54 core boreholes (5,922 metres) from 1987 to 1989, which resulted in the discovery of a number of gold-bearing quartz-tourmaline veins. The presence of these veins (including veins currently known as VEIN B, C, D, F and G) demonstrated continuity in three dimensions within the upper portion of the Eau Claire Deposit. This was followed by exploration work managed by SOQUEM from 1996 to 2001, which included the additional drilling of 95 core boreholes



(19,639 metres) on the property. In 2002, SOQUEM reported an Indicated mineral resource of 258,678 ounces of gold contained within 972,900 tonnes grading 8.27 g/t Au (9.62 g/t Au uncut), and an Inferred resource of 60,233 ounces of gold contained within 508,665 tonnes grading 3.68 g/t Au (3.79 g/t Au uncut). These mineral resources are considered historical in nature and have been superseded by the mineral resources reported in Section 13 of this report.

In 2002, Eastmain became the sole operator of the project and has been actively exploring since. Up to 2017, Eastmain has completed multi-staged exploration programs including high definition airborne geophysical surveys, ground geophysical surveys, soil geochemical sampling, prospecting, geological mapping, and extensive core drilling, including 716 boreholes for a total of 242,965 metres.

The Eau Claire Deposit is contained within the La Grande volcano-plutonic Subprovince (2,752 to 2,696 Ma) of the Superior Province approximately 30 kilometres south of the contact with the metasedimentary Opinaca Subprovince (2700 to 2648 Ma). Portions of the La Grande Subprovince were formerly referred to as the Eastmain Greenstone Belt. Depending on the literature, the Eastmain Greenstone Belt has retained its title as a distinct greenstone belt lying within the La Grande Subprovince.

#### **1.3 Geology, Mineralization and Deposit Type**

The Eau Claire Deposit straddles the contact on the south limb of an antiform between lowermost felsic volcaniclastic rocks overlain by mafic volcanic flows. Gold-bearing quartz-tourmaline veins from the Eau Claire deposit crosscut the volcanic/sedimentary rock contact and in turn are crosscut by late northeast-trending mafic dikes. The contact between volcanic and sedimentary rocks is a marker horizon that forms a broad open fold along the north limb and a tight fold closure immediately west of Eau Claire, as well as an east-west trending south limb that has been traced to the east for several kilometres. The volcanic/sedimentary marker horizon is locally occupied by a sulphide-facies iron formation that occurs at the base of the mafic volcanic formation. The iron formation wraps around the fold nose. However, it is absent in the immediate area of the Eau Claire deposit. Iron formation occurs along the southern limb of the antiform east of Eau Claire and is locally isoclinally folded.

The Eau Claire Deposit is a structurally-controlled gold deposit. Mineralization occurs primarily in a series of sheeted en-echelon quartz-tourmaline veins; subordinate mineralization occurs as dissemination in the host rock. Carbonate occurs to varying degrees in the vein mineralization. The en-echelon pattern is hosted within a structural corridor and trends from the northwest to the southeast. Individual veins are up to 1 metre thick and extent for at least 100 metres along strike.

Veins are composed of quartz and tourmaline; the ratio between quartz with accessory calcite to tourmaline can vary from 100 percent quartz to 100 percent tourmaline. The quartz-tourmaline veins are massive, banded and/or brecciated. Pyrite, pyrrhotite, chalcopyrite and rare molybdenite generally constitute less than 1.5 percent of the composition of these veins. Commonly, brecciated veins contain angular blocks of tourmaline, ranging in size from less than one to more than 25 centimetres in size. Fragments are cemented by a quartz-carbonate matrix. Breccia textures locally form a %piano key+pattern with angular tourmaline blocks aligned perpendicular to the vein walls. This texture is due to protracted deformation that affected already formed veins and generated new veins (tension gash veins developed on pre-existing laminated veins). The piano key breccia has been observed throughout the deposit at all scales in tourmaline veins of less than 1 centimetre to more than 1 metre thick. A %adder vein+texture has also been observed in outcrop at the 450 West Zone consisting of massive tourmaline layers with quartz-carbonate %adders+ aligned perpendicular to the vein walls.

Gold mineralization also occurs within altered host rock without veining occurring as centimetre to several metre wide tourmaline-actinolite ± biotite ± calcite replacement zones around vein selvages.

The two major vein areas discovered to date (the 450 West and 850 West zones) form a crescent-shaped mineralized, surface projected footprint 1.8 kilometres long by more than 100 metres wide, which has been traced to date to a vertical depth of 900 metres. Veins within the 450 West zone typically strike 85 degrees



and dip 45 to 60 degrees to the south. Mineralization within the veins plunges steeply to the southeast, subparallel to an F2 fold axis. Veins within the 850 West zone typically strike 60 degrees and dip subvertically. Mineralization within this vein set plunges gently to the southwest.

Gold mineralization in the Eau Claire Deposit is structurally controlled and exhibits similar geological, structural and metallogenic characteristics to Archean Greenstone-hosted quartz-carbonate vein (lode) deposits. These deposits are also known as mesothermal, orogenic, lode gold, shear-zone-related quartz-carbonate or gold-only deposits.

#### **1.4 Mineral Processing and Metallurgical Testing**

In 2001 four 25-kilogram composite samples were taken separately from the P, JQ, R, and V16 veins and sent to COREM for metallurgical testing. This sampling provided preliminary information on density, grinding characteristics, grade, gold fineness, and gravimetric- and total gold recovery. The average specific gravity values of the stock samples varied between 2.87 and 2.99.

COREM completed a series of crushing, milling and flotation tests. A suite of accessory elements was found to be associated with the gold, which included silver, tellurium, bismuth and molybdenum. Final results indicated that on average 63 to 79 percent (%) of the gold in the samples could be extracted by gravity circuit and that 95.7% to 98.6% of the gold could be recovered by conventional cyanide extraction methods.

In 2010 Eastmain contracted the services of SGS Mineral Services (Lakefield Research) to evaluate the ore characteristics through mineralogy, chemical analyses and comminution testing, and to explore several processing avenues for the purpose of establishing a preliminary gold recovery flowsheet. The deportment and recovery of tellurium was also monitored in the program.

Four vein composites representing the P, JQ, R, and S veins and one master composite (an equally weighted blend of the four vein composites) were subjected to ore characterization, metallurgical and environmental testing. These composites were prepared from assay reject material in freezer storage at SGS (Lakefield) from analytical work completed in 2008.

The SGS test work completed on the master and vein composite samples indicated the following:

- Gravity separation will generate significant gold recovery in an industrial setting. Gold recoveries ranged from 30 to 45% in the master composite and up to 74% from the S vein composite.
- Flotation of the master composite gravity separation tailings, at grind sizes ranging from 121 to 65 m, resulted in excellent gold recovery for all of the tests conducted. Approximately 94% gold recovery was achieved at a P80 of 121 m while ~96% was achieved at P80 = 65 m.
- Gold recovery by gravity separation plus flotation ranged from 92% to 97% in the variability tests completed for the vein composites.
- Cyanide leaching of gravity separation tailing yielded an excellent gold response in all tests completed with approximately 95.7% of the gold being recovered in the gravity plus cyanidation flowsheet at 121 m for the master composite. Gold recoveries ranged from 95.6% from the R vein composite to 98.2% from the S vein composite.
- Flotation concentrate cyanidation yielded a unit gold extraction of 98.3% at a grind size of 121 m. Overall circuit gravity separation + flotation concentrate cyanidation yielded a gold extraction of 92.8%.
- The acid-base accounting and net acid generation tests completed on the various feed and tailing streams generated in the program clearly indicate that the samples will not generate acid mine drainage.

In 2017 Eastmain again contracted the services of SGS to complete additional metallurgical test work. The test program was completed on a metallurgical composite comprising both ore and waste-rock (mining dilution) representing the Eau Claire Deposit. 2017 test material returned gold grades of 6.56 g/t, 0.08 g/t, and 4.98 g/t, were reported for the Ore, HW-FW, and Master Composite, respectively.

Overall gold recovery by gravity separation + gravity tailing cyanidation in the 2017 program yielded results that compared very well to parallel testwork completed in 2010. Gold recovery from the 2010 Master Composite (at a 14.8 g/t Au head grade) was 95.7% with a final tailing grade of 0.66 g/t Au. In 2017 overall gold recovery from a head grade of 4.85 g/t Au was approximately 96%, with a final tailing grade of approximately 0.20 g/t Au.

#### 1.5 Resource Estimate

The current mineral resource estimate is an update to a 43-101 mineral resource estimate completed for Eastmain in 2015, the results of which were reported on April 27, 2015 (see Eastmain news release April 27, 2015, which is filed on SEDAR under Eastmains profile). The estimate was prepared by SRK Consulting (Canada) Inc. and is presented in a NI 43-101 Technical Report titled ‰echnical Report for the Eau Claire Gold Deposit, Clearwater Project, Quebec, Canada+dated June 11th, 2015 (effective date of April 27, 2015) and is filed on SEDAR under Eastmains profile.

Tellurium was quantified but not considered in the previous mineral resource estimate. It is also not considered in this updated mineral resource estimate. Tellurium as a by-product is not expected to have any material impact on resource estimation at this stage.

The updated mineral resource estimate for the Eau Claire Deposit is presented in Table 1-1 and includes an open pit and an underground mineral resource (Table 1-2).

Highlights of the Eau Claire Deposit Mineral Resource Estimate are as follows:

- The Eau Claire Deposit contains mineral resources of 825,000 ounces of gold (4.17 million tonnes at an average grade of 6.16 g/t Au) in the Measured and Indicated category, and 465,000 ounces of gold (2.23 million tonnes at an average grade 6.49 g/t Au) in the Inferred category.
- The open pit mineral resource includes, at a cut-off grade of 0.5 g/t Au, 233,000 ounces of gold (2.23 million tonnes at an average grade of 5.90 g/t Au) in the Measured and Indicated category, and 6,000 ounces of gold (39 thousand tonnes at an average grade of 4.78 g/t Au) in the Inferred category.
- The underground mineral resource includes, at a cut-off grade of 2.5 g/t Au, 593,000 ounces of gold (2.94 million tonnes at an average grade of 6.26 g/t Au) in the Measured and Indicated category, and 459,000 ounces of gold (2.19 million tonnes at an average grade of 6.52 g/t Au) in the Inferred category.

The pit optimization was completed by SGS using Whittleï software. A series of optimized pit shells was generated based on the optimization parameters outlined in Table 1-3. A conservative and balanced approach was applied when optimizing the open pit and underground scenario. A Whittle pit shell at a revenue factor of 0.5 was selected as the ultimate pit shell for the purposes of this mineral resource estimate. The corresponding strip ratio is 11.9:1 and the average open pit depth is approximately 150 m.

Category	Tonnes	Grade (g/t Au)	Contained Au (oz)
Measured	932,000	6.67	200,000
Indicated	3,238,000	6.01	626,000
Measured & Indicated	4,170,000	6.16	826,000
Inferred	2,227,000	6.49	465,000

## Table 1-1 Eau Claire Deposit 2017 Mineral Resource Estimate, August 25<sup>th</sup>, 2017

# Table 1-2Eau Claire Deposit 2017 Broken Out into an Open Pit and Underground<br/>Mineral Resource, August 25<sup>th</sup>, 2017

	Open Pit (surface to 150 m)			Underground (150 m – 860 m)			
Category	Tonnes	Grade (g/t Au)	Contained Au (oz)	Tonnes	Grade (g/t Au)	Contained Au (oz)	
Measured	618,000	6.69	133,000	314,000	6.64	67,000	
Indicated	610,000	5.10	100,000	2,628,000	6.22	526,000	
Meas & Ind	1,228,000	5.90	233,000	2,942,000	6.26	593,000	
Inferred	39,000	4.78	6,000	2,188,000	6.52	459,000	

- (1) Mineral resources which are not mineral reserves do not have demonstrated economic viability. All figures are rounded to reflect the relative accuracy of the estimate. Composites have been capped where appropriate.
- (2) Open pit mineral resources are reported at a cut-off grade of 0.5 g/t Au within a conceptual pit shell and underground mineral resources are reported at a cut-off grade of 2.5 g/t Au outside the conceptual pit shell. Cut-off grades are based on a gold price of US\$1,250 per ounce, a foreign exchange rate of US\$0.80, and a gold recovery of 95%.
- (3) The results from the pit optimization are used solely for the purpose of testing the %easonable prospects for economic extraction+by an open pit and do not represent an attempt to estimate mineral reserves. There are no mineral reserves on the Property. The results are used as a guide to assist in the preparation of a mineral resource statement and to select an appropriate resource reporting cut-off grade.

Parameter	Value	Unit
Gold Price	1,250/1,563	US\$/CDN\$ per ounce
Exchange Rate	0.80	\$US/\$CDN
Mining Cost	2.80 / 3.50	US\$/CDN\$ per tonne mined
Processing Cost	16.00 / 20.00	US\$/CDN\$ per tonne processed
General and Administrative	4.00 / 5.00	US\$/CDN\$ per tonne processed
Overall Pit Slope	50	Degrees
Gold Recovery	95	Percent (%)
Mining loss / Dilution (open pit)	5/5	Percent (%) / Percent (%)

#### Table 1-3 Whittle<sup>™</sup> Pit Optimization Parameters

#### 1.5.1 **Resource Estimation Parameters**

In order to complete an updated mineral resource estimate for the Eau Claire Deposit, a database comprising a series of comma delimited spreadsheets containing drill hole and channel information was provided by Eastmain. The database included hole and channel location information (NAD83 / UTM Zone 18U), survey data, assay data, lithology data and specific gravity data. The data was then imported into GEOVIA GEMS version 6.7.4 software for statistical analysis, block modeling and resource estimation. After an initial evaluation of the database, a number of drill holes and channels were removed that were located outside the Eau Claire Deposit area. As a result, the current database does not include all drill holes and channels completed on the Project.

The database comprises data for 867 surface drill holes and 426 channels, including 211 drill holes totalling 78,150 metres completed from 2015 to 2017 by Eastmain since the last mineral resource estimate on the Eau Claire Deposit. The database totals 176,061 drill core assay samples and 2,254 channel assay samples.

All geological data was reviewed and verified by the Authors as being accurate to the extent possible and to the extent possible all geologic information was reviewed and confirmed. The Authors feel that the assay sampling and extensive QA/QC sampling of core by Eastmain provides adequate and good verification of the data and believe the work to have been done within the guidelines of NI 43-101.

For the 2017 updated mineral resource estimate, a total of 142 3D grade controlled wireframe models, representing separate vein structures and vein clusters, were constructed and provided by Eastmain. The 3D grade controlled models were built by visually interpreting mineralized intercepts from cross sections using gold values. Polygons of mineral intersections (snapped to drill holes) were made on each cross section and these were wireframed together to create continuous resource wireframe models.

The polygons of mineral intersections were constructed on 25 m spaced sections (looking west) with a 12.5 m sectional influence. The sections were created perpendicular to the general strike of the mineralization. The grade control models were drawn using an approximate 1.0 g/t cut-off grade based on assay samples and a minimum mining width of approximately 2.0 metres. For those intersections that did not meet the minimum mining width requirement, the solid outline was drawn to take in waste from either side of intersections. The models were extended 12.5 to 25 metres beyond the last known intersection along strike and 25 . 50 metres up and down dip. The suite of 142 vein structures in the Eau Claire Deposit area extends for approximately 1,500 metres along strike and to a depth of up to 850 metres in the eastern end of the deposit area.

Modelling of the Eau Claire Deposit was subdivided into two zones: the 450 West and 850 West zones. In the 450 West zone, modelling defined four orientations of primary quartz-tourmaline veins; a well-defined east-west high grade vein system (450HGV), dipping moderately to the south; a series of northwest-southeast trending, moderately southwest-dipping veins (450NW) and; schist-hosted veins (HGS), a series of west-northwest-trending, moderately south-southwest dipping veins.

Vein modelling in the 850 West zone defined two primary vein systems: a distinct steep northeast-southwest primary vein set (850HG) that crosscuts an older shallow-to-moderately dipping northwest-southeast trending vein set (850SHLW).

In addition to the primary vein systems discussed above, a secondary set of domains referred to as 450EXTRA and 850EXTRA (previously referred to as % wein swarm domains+ in the resource estimate completed 2015) are defined as zones of intermittent veining and alteration, where drilling density is insufficient to model individual veins with confidence. Similar to the primary veins, the secondary EXTRA veins were modelled using an approximate 1.0 g/t cut-off grade based on assay samples and a minimum mining width of approximately 2.0 metres. Where intersections did not meet the minimum mining width requirement, the wire frame solid outline was drawn to take in waste from either side of intersections.

For the resource estimate a block model with block dimensions of 5 x 5 x 5 metres in the x (east), y (north) and z (level) directions was placed over the grade shells with only that portion of each block inside the shell recorded (as a percentage of the block) as part of the mineral resource estimate (% Block Model). The block size was selected based on borehole spacing, composite assay length, the geometry of the vein structures, and the selected starting mining method (Open Pit). The model was intersected with an overburden model and surface topography to exclude blocks, or portions of blocks, that extend above the bedrock surface.

Grades for Au (g/t) were interpolated into blocks by the Inverse Distance Cubed (ID3) method. Three passes were used to interpolate grade into all of the blocks in the grade shells (Table 14-8). For Pass 1 the search ellipse size (in metres) for all vein domains was set at  $20 \times 20 \times 5$  in the X, Y, Z direction; for Pass 2 the search ellipse size for each domain was set at  $45 \times 45 \times 15$ ; for Pass 3 the search ellipse size was set at  $100 \times 100 \times 20$ .

The confidence classification of the resource (Measured, Indicated and Inferred) is based on an understanding of geological controls of the mineralization, and the drill hole pierce point spacing in the resource area. Blocks were classified as Measured if they were populated with grade during Pass 1 and Indicated if they were populated with grade during Pass 2 of the interpolation procedure. The Pass 3 search ellipse size was set to assure all remaining blocks within the wireframe were assigned a grade. These blocks were classified as Inferred.

Assay samples were composited into 1.0 metre lengths. Grades were interpolated into blocks using a minimum of 6 and maximum of 10 composites to generate block grades during Pass 1 and Pass 2 (maximum of 3 sample composites per drill hole), and a minimum of 3 and maximum of 10 composites to generate block grades during pass 3.

A statistical analysis of the composite database within the Eau Claire Deposit 3D wireframe models was conducted to investigate the presence of high grade outliers which can have a disproportionately large influence on the average grade of a mineral deposit. High grade outliers in the composite data were investigated using statistical data, histogram plots, and cumulative probability plots of the 1.0 m composite data and was conducted by vein domain.

After review it was decided that capping of high grade composites to limit their influence during the grade estimation was necessary. A total of 39 composite samples were capped at grades from 10 (850EXTRA) to 120 g/t Au (450HGV), depending on their corresponding vein domain. The capped gold composites were used for grade interpolation into the Eau Claire Deposit block model.

For the updated mineral resource, Eastmain collected an additional 137 mineralized samples from the 450 zone veins for SG determinations. The average SG value of the 137 mineralized samples is 2.92. The current total database consists of 646 samples.

The 646 SG measurements ranged from 2.56 to 3.24 and averaged 2.92. The average grade of the 646 samples in the database is 6.15 g/t Au, ranging from 0.00 to 120 g/t (capped). Despite the high grade of a number of the samples, there appears to be little correlation of density value and gold grade.

The data was subdivided into samples from within the revised 450 zone vein domains and samples from outside the revised vein domains. Of the 646 samples, 364 samples are from with the 450 zone vein domains. The average SG of these samples is 2.91 with a range of 2.56 to 3.21; the average grade of these samples is 9.1 g/t Au (4 samples capped to 120 g/t Au). A total of 282 samples are from outside the vein domains and average 2.93 with a range of 2.63 to 3.24.

For the 2017 mineral resource estimate update an SG of 2.92 is used.

#### **1.6 Recommendations**

Eastmain will continue to drill the Eau Claire Deposit in late 2017 and into early 2018 with a focus on extending the known limits of the deposit. Renewed trenching and mapping will support drilling throughout the remainder of 2017. For the second half of 2017 and into 2018, a total of 15,000 metres of drilling is being budgeted to continue to focus on expanding and extending Eau Claire mineral resources, as well as exploring new targets as they develop. Currently, there are six active targets, including Clovis and Snake Lake within a 5 km radius of Eau Claire, identified for their geological similarities to the Eau Claire deposit along the Clearwater Deformation Zone.

Eastmain plans to use the additional drilling to update the current Mineral Resource Estimate and to incorporate this into a planned preliminary economic assessment (PEA) study expected to be completed in the first half of 2018. Improving the categorization of, and expanding the Eau Claire mineral resource should also be continued in 2018 as economic and technical studies proceed.

The 2015 technical report made recommendations for additional work to advance the Eau Claire deposit which Eastmain had deferred in favour of additional resource drilling in 2016. 2017. The Authors believe these recommendations are still valid. The recommendations include initiation of engineering, environmental, permitting, and other studies to help in evaluating the viability of an open pit and underground mine on the Clearwater property. The proposed work program should include:

- Rock and soil geotechnical and hydrogeology investigations
- Environmental baseline studies, permitting, and social or community impact assessment
- Conceptual trade off studies to evaluate to the optimal transition from open pit to underground mining
- A full PEA for the project
- Continued resource definition and exploration drilling

The total cost of the recommended work program is estimated at C\$10,900,000 million.

The Authors have reviewed the proposed program for further work on the Property and, in light of the observations made in this report, support the concepts as outlined by Eastmain as well as in the previous technical report. Given the prospective nature of the property, it is the Authorsqopinion that the Property merits further exploration and that proposed plans for further work are justified. The current proposed work program will help advance the Eau Claire Deposit towards a pre-development stage and will provide key inputs required to evaluate the economic viability of a mining project at a pre-feasibility level.

The Authors recommend that Eastmain conduct the further exploration as proposed, subject to funding and any other matters which may cause the proposed exploration program to be altered in the normal course of its business activities or alterations which may affect the program as a result of exploration activities themselves.

## 2 INTRODUCTION

SGS Canada Inc. (%GS+) was contracted by Eastmain Resources Inc. (%Eastmain+) to complete an updated mineral resource estimate for the Eau Claire Gold Deposit (%Eau Claire Deposit+) within the Clearwater Project (the %Project+) located approximately 350 kilometres north of Chibougamau Québec, Canada, and to prepare a technical report written in support of the updated mineral resource estimate. The reporting of the updated mineral resource estimate complies with all disclosure requirements for mineral resources set out in the NI 43-101 Standards of Disclosure for Mineral Projects (2011). The classification of the updated mineral Reserves (2014).

Eastmain is a Canadian public company involved in mineral exploration and development. Eastmaince common shares are listed on the Toronto Stock Exchange (ﷺSX+) under the symbol ﷺR+.

This technical report will be used by Eastmain in fulfillment of their continuing disclosure requirements under Canadian securities laws, including National Instrument 43-101. Standards of Disclosure for Mineral Projects (% 43-101+). The technical report is written in support of the updated resource estimate released by Eastmain on September 11<sup>th</sup>, 2017. Eastmain reported that the Eau Claire Deposit contained 826,000 ounces of gold (4.2 million tonnes at 6.16 g/t Au) in the Measured and Indicated category, and 465,000 ounces of gold (2.2 million tonnes at 6.49 g/t Au) in the Inferred category. The effective date of the resource estimate is August 25, 2017.

The updated mineral resource presented in this report was estimated by Allan Armitage, Ph.D., P. Geo, (% rmitage+) of SGS and Pit optimization was completed by Sabry Abdel Hafez, Ph. D, P.Eng.(% Jafez+), of SGS (% Le Authors+). Armitage and Hafez are independent Qualified Persons as defined by NI 43-101.

#### 2.1 Sources of Information

The data used in the estimation of the updated resource estimate and the development of this report was provided to SGS by Eastmain. Some information including the property history and regional and property geology has been sourced from a previous technical report and revised or updated as required. The Property was the subject of a recent technical report by SRK Consulting (Canada) Inc. (%RK+) and is presented in a NI 43-101 Technical Report titled %Lechnical Report for the Eau Claire Gold Deposit, Clearwater Project, Quebec, Canada+(%Le SRK Report+) dated June 11<sup>th</sup>, 2015 (effective date of April 27, 2015) and is filed on SEDAR under Eastmaincs profile. Parts of Sections 4 to 13 in this report have been excerpted or summarized from the SRK Report as is referenced throughout the text. Specific sections have been updated to include information on recent exploration work.

#### 2.2 Site Visit

Armitage visited the property on the 10<sup>th</sup> and 11<sup>th</sup> of July, 2017. Armitage examined several core holes, drill logs and assay certificates. Assays were examined against drill core mineralized zones. Armitage inspected the offices, core logging facilities/sampling procedures and core security. Armitage participated in a field tour of the property geology conducted by Eastmain employees Bill McGuinty (Vice President Exploration) and Manuel Ng Lai (Project Engineer).

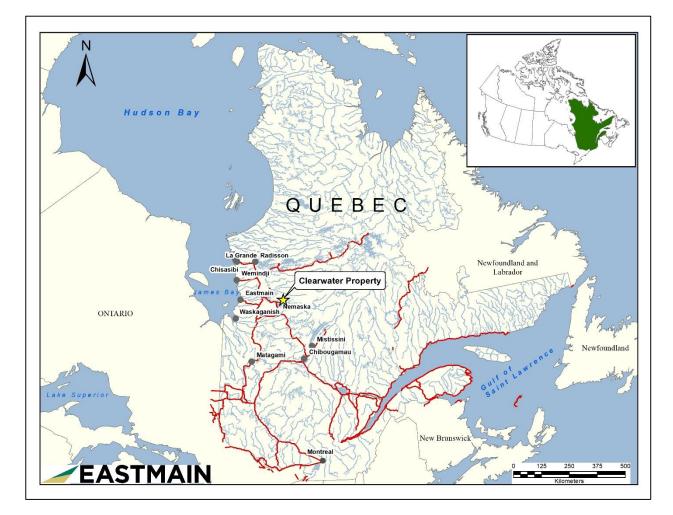
#### 3 Reliance on Other Experts

Information concerning claim status and ownership which are presented in Section 4 below have been provided to the Authors by Eastmain and have not been independently verified by the Authors. However, the Authors have no reason to doubt that the title situation is other than what is presented here.

## 4 PROPERTY DESCRIPTION AND LOCATION

The Eau Claire Deposit is located in the province of Quebec, approximately 800 kilometres north of Montreal and 350 kilometres north of Chibougamau (Figure 4-1). The deposit is located within the Project, which is readily accessible by road along the Route du Nord extending from Chibougamau onto the village of Nemiscau and via Hydro Quebec¢ Eastmain 1 road network. The centre of the property is located at approximately 75.69 degrees longitude west and 52.23 degrees latitude north.

The Project is located north of the 52nd parallel (52°N) and as such is subject to the provisions of the James Bay and Northern Quebec Agreement (1975), and the Paix des Braves Agreement (2002). The Project falls within the Eeyou Istchee Territory of the Eastmain Cree First Nation, including trap lines held by Dr. Ted Moses (tallyman), and on Category II and III lands, as established under the James Bay and Northern Quebec Agreement.



#### Figure 4-1 Property Location Map

#### 4.1 Mineral Tenure

The Project is 100 percent owned by Eastmain and comprises 385 contiguous claims with a total area of 20,068 hectares (Figure 4-2). The boundaries of the claims have not been legally surveyed. The mineral rights exclude surface rights, which belong to the Quebec government.

Under the Quebec laws for the James Bay area, claims or cells are map staked. The map-designated coordinates of the cells are the legal limits of said claims, the physical limits can be verified by consulting the Government of Quebecos Ministère de l'Énergie et des Ressources naturelles (MERN) GESTIM website.

A complete list of the mineral titles is presented in Appendix A. All claims are in good standing with expiry dates varying between August 8, 2019 and December 05, 2019, except for Claim 40101 which has an expiry date of March 31, 2018. All claims are owned by Eastmain, are in good standing, and sufficient work credits are available to renew all claims until 2019.

The mineral resources discussed herein are located within the claims with the following numbers: 1132621, 1132651, 1132622, 1132652, 1132623, 1132653, and 1132624, as shown in Figure 2 and Table 1.

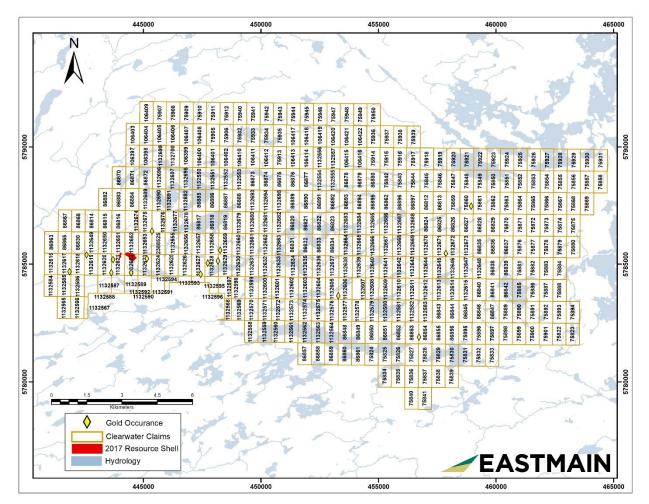


Figure 4-2 Clearwater Project Land Tenure Map

In Quebec, available mining lands are defined as geo-referenced polygons which can be applied for by holders of Quebec prospecting licenses through an online portal. The person identifies the claim (£licking) and pays the required fee online. In the case of mining claims that are expiring or to be cancelled, these lands are made available for acquisition at a designated future date and time, allowing for all interested parties to become aware when these lands are available. In the case of open lands or re-opened lands, the first person to complete the transaction receives the mineral tenure. Funds to for transactions with MERN such as claim acquisition and renewal may be deposited in advance in a dedicated account with the Ministry.

Once acquired, mineral rights are renewable bi-annually on the anniversary of acquisition. To meet the criteria to be renewed the claimholder must provide evidence that a sufficient value of current and historic exploration work was completed on the claim or nearby claims held by the claimholder or a partner. Exploration work is submitted in reports to MERN and the value of said work is banked against the claims where the work was performed. Renewals can use banked credits to support the renewal of a claim where the work was performed or for nearby adjacent claims. The claim under renewal must be located within a radius of 4.5 km from the centre of the claim from which the banked work credits will be taken.

Eastmain conducts exploration in work units such as geological mapping, diamond drilling and geophysical surveys to develop our properties and to comply with renewal requirements. To complete these units of work in a manner appropriate to good exploration practices the Corporation frequently incurs more than the minimum bi-annual work requirements for claim renewal. This gives the Corporation flexibility to bank and distribute excess work credits and thereby manage distribution of annual exploration budgets among properties over 2 to 4 year periods, expanding the number of acquisitions and properties that can be managed in the Corporations portfolio. As a result, exploration on any one or several Eastmain properties may not be budgeted in a given year other than required renewal fees.

To obtain a renewal, Eastmain must;

- Submit a renewal application, which must be received by MERN at least 60 days prior to the claim expiry date.
- Pay the required fees, which vary according to the surface area of the claim, its location and the date on which the application is received:
  - before the 60<sup>th</sup> day preceding the claim expiry date, the regular fees apply;
  - o in the 60 day period preceding the claim expiry date, the fees are doubled.
- Submit a renewal application form using a distribution of banked credits (and have it received) at least 60 days prior to the claim expiry date. Documents submitted in the 60 day period preceding the claim expiry date are subject to late submission penalties, or submit an assessment work report and declaration along with a distribution of the filed work credits.
- Comply with the other renewal conditions.
- If the required work was not performed or was insufficient to cover renewal of the claim, the claim holder may pay an amount equal to the double of the minimum cost of the work that should have been performed (cash-in-lieu).

Eastmain works diligently to manage its claims; using their banked work credits where possible and within the context of preserving credits for core property claim renewals; avoiding the un-timely loss of banked credits through expiry of claims which hold these credits and; avoiding late filing fees or situations where cash-in-lieu might occur.

The annual planning exercise for any one of the Corporations properties is subject to change during the year based on conditions such as:

- É improved exploration funding during the year;
- É a transaction whereby the purchaser of an Eastmain property assumes renewal responsibility;
- É improved outlook for mineral potential in the vicinity of the property; and
- É continued poor performance of commodity prices

These changes may cause the Corporation to allocate new funds or re-allocate saved funds to other projects, reduce a projector budget or bring about a decision to allow a property or some of its claims to lapse.

The following table (Table 4-1) is modified from the MERN website and outlines the general costs and commitments for claim management in Quebec in the region where Eastmain properties are located.

#### Table 4-1 Costs and Commitments for Claim Management in Quebec

North of the f	ifty-second d	egree of latitude				
Area of		of map-designated claims				
claim	1 to 150	Över 150*				
Less than 25 ha	\$30.61					
25 to 45 ha	\$110.16	5 X the registration fees				
45 to 50 ha	\$123.12	5 × the registration lees				
Over 50 ha	\$138.24					
		for an application covered				
	sheet, by the s	same person, on the same				
day.						
Claim renewal f						
North of the fift	y-second deg	ree of latitude				
				Area	of claim	
	Renewal ap	plied for	Less	25 to	45 to	Over
			than 25 ha	45 ha	50 ha	50 ha
			\$30.51	\$110.16	\$123.12	\$138.22
From 60 days be	fore the expiry	/ date to the expiry date: 2 $\lambda$	the registra	tion fees	I I	
		carried out on a claim or d	listributed f	rom another	claim*	
North of the fift	y-second deg	ree of latitude				
				Area of clain	n	
Va	lidity (bi annu	ual renewal)	Less than 25 ha	25 to 45 ha	Over 45 ha	
	1		\$31.20	\$78.00	\$87.75	
	2		\$104.00	\$260.00	\$292.50	
	3		\$208.00	\$520.00	\$585.00	
	3	4		\$780.00	\$877.50	
	4		\$312.00			
	4 5		\$416.00	\$1,040.00	\$1,170.00	
	4					

regulation. In 2015 and prior, minimum costs of \$1,200, \$1,800 and \$2,500 respectively

As cited in the Table 4-1, minimum costs of work required for claim renewals have been reduced by 35% per claim from 2015 levels for the years 2016 and 2017. MERN has created this change through a regulation of the Mining Act. In 2015 and prior, minimum costs of \$1,200 (now \$780), \$1,800 (now \$1,170) and \$2,500 (now \$1,625), respectively, were in force. There is commentary from the MERN that this is a temporary measure designed to assist clients with the current economic downturn in the industry. It is expected that 2015 levels will be re-instated in 2018 or a new schedule of costs will be introduced.

In the same year MERN announced increases to renewal fees of 8% in January 1<sup>st</sup>, 2016 and January 1<sup>st</sup>, 2017.

Also in 2015, MERN established an obligatory online Annual Report of Work which requires property owners to identify and report, in summary form, all activity related to a mineral claim during the calendar

year. Each claim must be reported including a <u>no</u> workqdesignation where no activity has occurred. Failure to complete the Annual Report of Work can result in penalties.

#### 4.2 Underlying Agreements

The Project is 100 percent owned by Eastmain. Their rights to the Project arise from a series of agreements executed between 1984 and 2011 (SRK, 2015).

Eastmain and Westmin Resources Ltd. (Westmin+) acquired the Project by permit staking in 1984 as part of a joint venture agreement with Eastmain holding 33.33 percent and Westmin holding 66.66 percent. The permit was converted to claims within five years of the first permitting. Subsequently, the Quebec government converted all staked claims of the Project into one or more map-designated claims. Unlike the perimeter of a staked claim, which is defined by posts staked in the ground, the map-designated claims perimeter is defined by the geographic coordinates as determined by the Quebec government. The basic claim unit is 30 seconds of latitude in a north-south direction and 30 seconds of longitude in an east-west direction. Depending on the latitude, the designated claim cells vary from 40 to 60 hectares in area.

In 1995, Eastmain and Westmin renegotiated the ownership of the property, resulting in equal parts being held by Eastmain and Westmin.

In 1995, Eastmain acquired the remaining 50 percent interest from Westmin for 200,000 common shares and a 3 percent net smelter return (%NSR+) royalty payable to Westmin. In the same year, SOQUEM Inc. (SOQUEM) acquired an option to earn a 50 percent interest in the Project from Eastmain in exchange for C\$2 million in work expenditures.

In October, 2001 Eastmain purchased the underlying Boliden-Westmin NSR for \$45,000

In 2002, Eastmain acquired an option to increase its ownership to 75% by completing \$2 million of work expenditures over a five year period.

In 2004, Eastmain acquired the option to increase its ownership to 100 percent by making payments of C\$500,000 in cash and 500,000 common shares. The option was subject to a 2 percent net NSR royalty held by SOQUEM. Eastmain had could buy back one-half of the NSR for C\$1 million at any time.

In 2011, Eastmain reached an agreement to purchase the entire 2 percent royalty from SOQUEM for a cash payment of C\$1 million and the issuance of 1 million common shares of Eastmain.

SGS is not aware of any other underlying agreements relevant to the Project.

#### 4.3 Permits and Authorization

Eastmain has obtained all necessary permits and certifications from government agencies to allow exploration on the property. The Permis d'intervention forestière en vue d'activitiès minières (Forest management permit for mining activities) is issued by the Ministère des Resources Naturelles et de la Faune (MRNF) to support exploration drilling and are applied for and renewed annually as are required for exploration drilling sites and access roads and requirements.

Other than the renewal of the Permis diantervention forestière en vue dactivités minières, SGS is unaware of any other significant factors and risks that may affect access, title, or the right, or ability to perform the exploration work recommended for the Clearwater property.

#### 4.4 Environmental Considerations

The Project, with the Eau Claire Deposit, is an undeveloped resource definition stage exploration project. The majority of the property cannot be accessed by road. The exploration work completed thus far has been limited primarily to drilling, trenching, geophysical surveys, and the construction of a 30 person camp established at the south western limit of Aupapiskach Lake.

The surface expression of the Eau Claire Deposit has been exposed along an area 200 metres long by 50 metres wide for the purpose of geological mapping and sampling. No underground or surface mining development has been completed.

As far as SGS is aware, the environmental liabilities related to the Project, if any, are negligible.

#### 4.5 Mining Rights in Quebec

As defined by the Ministère de l'Énergie et des Ressources naturelles (MERN) website (www.mrn.gouv.qc.ca) the claim is the only valid exploration right in Quebec. The claim gives the holder an exclusive right to search for mineral substances in the public domain, except within sand, gravel, clay and other loose deposits on the land subjected to the claim (SRK, 2015).

A claim can be obtained by map designation, henceforth the principal method for acquiring a claim, or by staking on lands that have been designated for this purpose. The accepted means to submit a notice of map designation for a claim is through GESTIM Plus (www.gestim.mines.gouv.qc.ca ).

The term of a claim is two years from the day the claim is registered, and it can be renewed indefinitely providing the holder meets all the conditions set out in the Mining Act, including the obligation to invest a minimum amount required in exploration work determined by the regulation. The Act includes provisions to allow any amount disbursed to perform work in excess of the prescribed requirements to be applied to the subsequent terms of the claim.

Any claim holder to specific mineral substances as described under Section 5 of the Mining Act can obtain a mining lease. The application must demonstrate that the deposit is mineable to a standard acceptable to the Province (feasibility or similar). The surface area of a mining lease must not exceed 100 hectares unless the circumstances warrant an exception deemed acceptable by the MERN. A written application must be submitted that includes a report certified by a geologist or engineer describing the nature and extent of the deposit and its likely value. Mining leases have a duration of 20 years and are renewable by 10-year periods.

#### 5 ACCESSIBILITY, CLIMATE, LOCAL RESOURCES, INFRASTRUCTURE, AND PHYSIOGRAPHY

#### 5.1 Accessibility

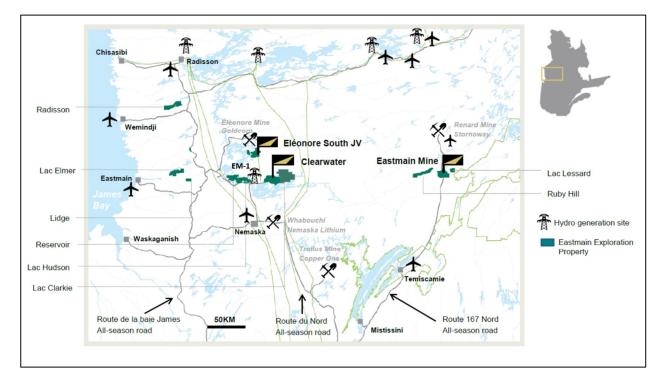
The Eau Claire deposit is located 350 kilometres north of the town of Chibougamau, and borders the northern shore of the EM-1 Hydro Quebec reservoir in the James Bay region (NTS Map sheet 33B04 and 33B05). The exploration camp is located 2.5 kilometres east of the Eau Claire deposit at 52.22 degrees north and 75.79 degrees west.

The property is accessible by the Route du Nord from the town of Chibougamau, which is a 350- kilometre long all-season gravel road extending from the town of Chibougamau to the Cree village of Nemaska (and onto Hydro Québec's installation at EM-1). Beyond EM-1, road access to the project involves crossing the Eastmain Reservoir and the EM-1 spillway via an all-season road installed by Hydro Québec.

#### 5.2 Local Resources and Infrastructure

The closest infrastructures to the Eau Claire deposit include a number of hydroelectric complexes and associated infrastructure, including the EM-1 hydroelectric complex. The EM-1 complex is located within 15 kilometres of the Eau Claire gold deposit. Hydro Québec has established a 600 man camp at EM-1 that includes fuel and medical services. More major necessities such as skilled labour and specialized equipment are sourced from Val-dopr or Chibougamau. Many services are now available through numerous Cree owned businesses and partnerships in Mistissini, Eastmain and Nemaska.

The property is 80 kilometres north of the Nemiscau airport and commercial air service is available from Montréal to Nemiscau on a regularly scheduled basis. The Eau Claire deposit may also be serviced by float plane from air bases located at Mistissini or Chibougamau. The property is located on the Eastmain Cree community territory. Dr. Ted Moses is the Tallyman for trapline area over the project and manages the hunting and fishing rights over a large area that encompasses the property.



#### Figure 5-1 Local Resources and Infrastructure for the Clearwater Project area

#### 5.3 Climate

The climate is typical of northern Quebec and is characterized by temperate to subarctic conditions. The average summer temperatures vary from 10 to 25 degrees Celsius during the day and 5 to 15 degrees Celsius at night (June to September). Winter temperatures range from -35 to -10 degrees Celsius. Winter season can start in late October and can continue until May. Precipitation varies during the year reaching an average of 2 metres annually, and is characterized by snow cover in the winter months and moderate rainfall in the summer months. Exploration activities can be carried out year round.

#### 5.4 Physiography

The property is located within the Canadian Shield and is characterized by many lakes, swamps, rivers, and low-lying terrain. The project is located in the boreal forest where forest fires are common. Vegetation



is typical of taiga, including areas dominated by sparse black spruce, birch, and poplar forests, in addition to large areas of peat bog devoid of trees.

Overburden is typically 3 to 4 metres thick, with the exception of isolated areas where overburden thickness can reach 20 metres. Numerous glacial eskers often reaching tens of kilometres in length can be seen of satellite images.

Rock outcrops are sparse due to the abundance of quaternary deposits and swamps. The topography of the area is subdued and characterized dominantly by lowlands, with few hills that attain elevations up to 330 metres above sea level (Figure 3). The area is drained by the Eastmain River, which now drains the Eastmain Reservoir located near the south margin of the property.

## 6 HISTORY

Exploration on the property dates back to the early 1970s when SEREM Quebec Inc. (SEREM) and Société de développement de la Baie-James (SDBJ) completed airborne electromagnetic surveys and limited core drilling in search for volcanogenic massive base metal sulphide deposits (SRK, 2015).

In 1984, Westmin and Eastmain initiated a comprehensive gold and base metal exploration program that covered the former Eastmain Greenstone Belt. From 1984 through 1989, Westmin and Eastmain completed a multi-staged exploration program which included airborne geophysical surveys, line cutting, geochemical rock and soil surveys, ground geophysical surveys, prospecting, geological mapping, and core drilling.

A property-wide airborne electromagnetic and magnetic survey contracted by Westmin formed the basis of a comprehensive exploration program that led to the discovery of the Eau Claire gold deposit in 1987. The joint venture conducted a systematic soil sampling program over all known electromagnetic anomalies on the property. Flagged and cut grids were completed on isolated electromagnetic anomalies along with prospecting, geological mapping, and rock sampling. A large gold-in-soil geochemical anomaly was detected in the south western portion of the property proximal to the outcropping gold-bearing quartz-tourmaline vein, currently identified as the B Vein in the 450 West zone.

Sampling and mapping was conducted on local area cut grids focussing on short strike-length airborne geophysical conductors. Westmin collected 1,036 rock samples that were assayed for gold only. The rock sample data ranges from less than 5 parts per billion to 22.2 g/t Au.

Soil surveys were completed over small, localized grids using a grub hoe to sample the soils Bhorizon. Samples were assayed for gold only.

Westmin completed a total of 54 core boreholes (5,922 metres) from 1987 to 1989, which resulted in the discovery of a number of gold-bearing quartz-tourmaline veins. The presence of these veins (including veins currently known as VEIN B, C, D, F and G) demonstrated continuity in three dimensions within the upper portion of the Eau Claire gold deposit.

The property was dormant from 1990 to 1995.

From 1996 through 2001, SOQUEM managed the exploration activities on the Clearwater property, which included ground geophysical surveys, line cutting, prospecting, geological mapping, trenching and core drilling. A comprehensive soil sampling program covered the entire property on a 100 by 500 metre grid. In 1996, SOQUEM commissioned Sigma Geophysics Inc. (Sigma) to complete ground magnetic and induced polarization (IP) surveys over four grid areas. The surveys were completed over the Rosemary, Eau Claire, Aupapiskach, and Natel areas. In total, Sigma completed 168.5 line kilometres of ground magnetic survey and 130.9 line kilometres of IP surveys. The magnetic data were collected on 100 metre line and 12.5 metre station spacing using an EDA Omniplus instrument.

Magnetic, resistivity, and chargeability data were presented on 1:5,000 scale map sheets for each grid area. The Eau Claire Deposit was not detected from the geophysical surveys.

Between 1996 and 2001, SOQUEM collected 556 rock samples for analysis. The principal area of interest defined by the SOQUEM rock sampling was the surface expression of the 450 West Zone. SOQUEM also found gold-bearing quartz-tourmaline veins 2 kilometres east of Eau Claire at the Snake Lake prospect.

In 1999, a back hoe was brought to the property to expedite surface trenching. Extensive surface trenching in 1999 exposed multiple high-grade, quartz-tournaline veins (currently known as VEIN P, JQ, R, and S) at the 450 West zone. Surface stripping demonstrated lateral continuity of these veins for up to 200 metres and variable thicknesses, from less than 0.5 metres to 3.2 metres. Systematic channel sampling across these veins at 5- to 10-metre intervals yielded gold intercepts ranging from less than 1.0 to 406.5 g/t Au. SOQUEM completed 95 core boreholes (19,639 metres) on the property between 1996 and 2001.

In 2002, SOQUEM reported an Indicated mineral resource of 258,678 ounces of gold contained within 972,900 tonnes grading 8.27 g/t Au (9.62 g/t Au uncut), and an Inferred resource of 60,233 ounces of gold contained within 508,665 tonnes grading 3.68 g/t Au (3.79 g/t Au uncut). These mineral resources are considered historical in nature and have been superseded by the mineral resources reported in Section 13 of this report.

In 2002, Eastmain became operator of the project and has been actively exploring since. Table 6-1 summarizes all historical work completed in the Clearwater property area. There has never been any production from the property.

Year	Company	Work Completed
1970's	SEREM/SDBJ	Airborne EM surveys, limited drilling (4 boreholes; 367 metres)
1984 – 1989	Westmin/Eastmain	Airborne geophysical surveys, geochemical rock and soil surveys, line cutting, ground geophysical surveys, prospecting, geological mapping and core drilling (54 boreholes; 5,922 metres), discovery of Eau Claire gold deposit
1996 – 2001	SOQUEM	Ground geophysical surveys, line cutting, prospecting, geological mapping, trenching and core drilling (95 boreholes, 19,639 metres)
2002 – Present	Eastmain	Extensive exploration work, described in Chapter 9 and 10, including 716 boreholes for a total of 242,965 metres drilled

#### Table 6-1 Previous Exploration Work in the Clearwater Property Area

## 7 GEOLOGICAL SETTING AND MINERALIZATION

#### 7.1 Regional Geology

The Eau Claire deposit is contained within the La Grande volcano-plutonic Subprovince (2,752 to 2,696 Ma) of the Superior Province approximately 30 kilometres south of the contact with the metasedimentary Opinaca Subprovince (2700 to 2648 Ma). Portions of the La Grande Subprovince were formerly referred to as the Eastmain Greenstone Belt. Depending on the literature, the Eastmain Greenstone Belt has retained its title as a distinct greenstone belt lying within the La Grande Subprovince.

The La Grande Subprovince consists of four volcanic cycles erupted between 2,752 and 2,705 Ma (Kauputauch, Natel, Anatacau-Pivert, and Komo-Kasak formations). The supracrustal rocks of the region are intruded by syn-volcanic (2747 to 2710 Ma) and post- or late-tectonic (2,697 to 2,618 Ma) tonalite-trondhjemite-granodiorite (TTG) suites.

The Eastmain Greenstone Belt consists of a 5- to 10-kilometre wide by 150-kilometre long succession of Archean bimodal volcanic rocks (Figure 7-1). The volcanic sequence includes lowermost mafic volcanic rocks overlain by felsic pyroclastic to volcaniclastic rocks, intercalated facies of iron formation, shaly and graphitic sedimentary units.

Metamorphic grade varies on a regional scale within the La Grande Subprovince from greenschist to amphibolite facies.

Geological studies completed throughout the region show evidence of multiple deformation events, including:

- A D1 event characterized by a penetrative foliation axial-planar to east-northeast- to northwesttrending F1 folds
- A D2 event characterized by an east-trending crenulation cleavage axial-planar to moderatelyplunging F2 folds

Metamorphic grade varies on a regional scale within the La Grande Subprovince from greenschist to amphibolite facies.

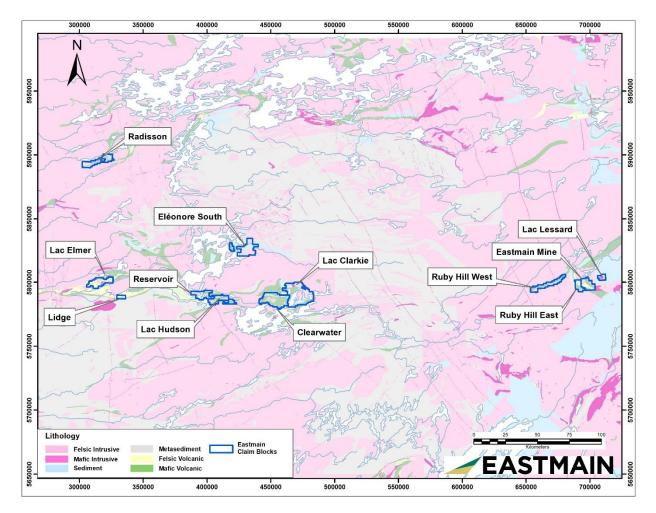


Figure 7-1 Regional Geological Setting of the Clearwater Project

#### 7.2 Property Geology

The Clearwater property is underlain by a bimodal volcanic sequence of mafic volcanic flows, felsic volcaniclastic rocks, sulphide iron formation, and graphitic metasedimentary rocks, intruded by a variety of felsic sub-volcanic plutons and dikes (Figure 7-2) (SRK, 2015). The volcano-sedimentary sequence has been folded into an east-west-trending, west-plunging antiform, located at the western end of the Clearwater property.

The Eau Claire deposit straddles the contact on the south limb of an antiform between lowermost felsic volcaniclastic rocks overlain by mafic volcanic flows. Gold-bearing quartz-tourmaline veins from the Eau Claire deposit crosscut the volcanic/sedimentary rock contact and in turn are crosscut by late northeast-trending mafic dikes. The contact between volcanic and sedimentary rocks is a marker horizon that forms a broad open fold along the north limb and a tight fold closure immediately west of Eau Claire, as well as an east-west trending south limb that has been traced to the east for several kilometres. The volcanic/sedimentary marker horizon is locally occupied by a sulphide-facies iron formation that occurs at the base of the mafic volcanic formation. The iron formation wraps around the fold nose. However, it is absent in the immediate area of the Eau Claire deposit. Iron formation occurs along the southern limb of the antiform east of Eau Claire and is locally isoclinally folded.

Due to the complex structural geology of the Eau Claire project, Eastmain commissioned SRK to complete property and deposit-scale structural studies in 2012 and 2014. Field-based studies reported evidence of four deformation episodes at the Clearwater property:

- D1 deformation characterized by S1 penetrative foliation, high strain zones, and isoclinal F1 folds
- D2 deformation characterized by S2 crenulation cleavage, southwest-plunging F2 folds, easttrending and northeast-trending shear zones
- D3 deformation characterized by northwest-trending crenulation cleavage, east-northeast-plunging F3 folds (only documented in the eastern part of the property), and northwest-trending shear zones
- D4 deformation characterized by two sets of brittle faults including northeast-trending sinistral and northwest-trending dextral strike-slip faults

A geological interpretation of aeromagnetic data over the Clearwater property revealed the following additional structural information:

- Kilometre-scale fold interference patterns occur on the property
- D1, D2, and D3 shear zones occur, and are preferentially developed, in mixed volcaniclastic and mafic volcanic rock sequences
- A major D2 east-west-trending structure occurs approximately 1 kilometre south of the Eau Claire gold deposit and can be traced laterally for more than 100 kilometres based on regional airborne magnetic survey data
- Several gold occurrences including the Eau Claire deposit and the Spider, Snake Lake, and Knight showings are distributed within this major east-west trending D2 structure

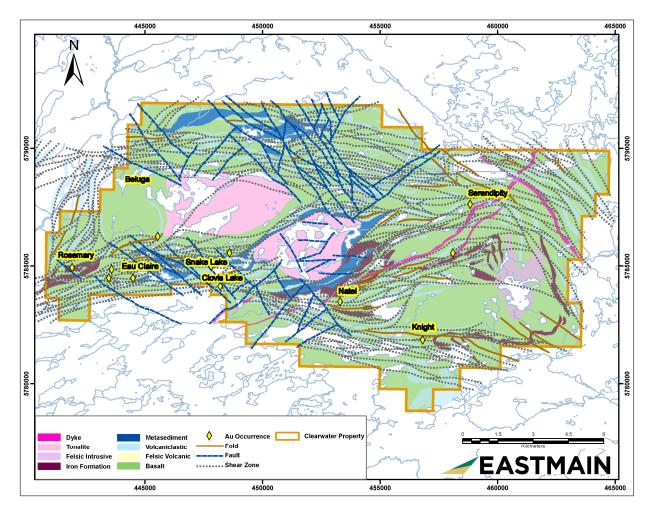


Figure 7-2 Overview of the Clearwater Property Geology

#### 7.3 Deposit Geology

The Eau Claire deposit is principally contained within a thick sequence of massive and pillowed mafic volcanic flows and felsic volcaniclastic rocks intruded by multiple phases of tonalite and felsic (quartz-feldspar) porphyry stocks, sills, and dikes.

A crescent-shape felsic porphyry dike swarm referred to as the Hangingwall Porphyry bounds the hanging wall (south) contact of the Eau Claire gold deposit. The overall shape of the Eau Claire gold deposit follows the contour of the felsic porphyry dike swarm. A second felsic porphyry dike swarm has invaded the western end of the Eau Claire gold deposit coincident with the F2 fold nose. This porphyry unit is referred to as the Western Porphyry.

The footwall rocks at Eau Claire consist of a thick sequence of east-west-trending, south-dipping felsic volcaniclastic, ash to lapilli tuff and sedimentary rocks including greywacke, siltstone, mudstone, and conglomerate and felsic quartz-feldspar porphyry dyke. These rocks predominate throughout the central portion of the property and are locally intercalated with mini-cycles of mafic volcanic rock and amphibolite (mafic metavolcanic) alternating with felsic volcaniclastic rocks.

Gold mineralization at the Eau Claire gold deposit is generally located within approximately EW trending structurally-controlled, high-grade en-echelon quartz-tourmaline QT veins (formerly named HGV) and adjacent altered wall rocks, as well as variable width ESE trending sheared and foliated schist zones, HGS veins, of altered gold-bearing rock. HGS zones are aligned parallel to the host rock foliation and interpreted to parallel the southern, or hanging wallhanging wall side of the deposit. The vein systems are predominantly hosted within a thick sequence of massive and locally pillowed mafic volcanic flows, interbedded with narrow intervals of volcaniclastic meta-sedimentary rocks. Both gold bearing vein sets may occur with as narrow intervals with tourmaline and develop into thick quartz-tourmaline veins with zoned tourmaline+/-actinolite+/-biotite+/-carbonate alteration halos which can measure up to several metres in thickness.

#### 7.4 Mineralization

The Eau Claire deposit is a structurally-controlled gold deposit. Mineralization occurs primarily in a series of sheeted en-echelon quartz-tourmaline veins; subordinate mineralization occurs as dissemination in the host rock. Carbonate occurs to varying degrees in the vein mineralization. The en-echelon pattern is hosted within a structural corridor and trends from the northwest to the southeast. Individual veins are up to 1 metre thick and extent for at least 100 metres along strike.

Veins are composed of quartz and tourmaline; the ratio between quartz with accessory calcite to tourmaline can vary from 100 percent quartz to 100 percent tourmaline. The quartz-tourmaline veins are massive, banded and/or brecciated. Pyrite, pyrrhotite, chalcopyrite and rare molybdenite generally constitute less than 1.5 percent of the composition of these veins. Commonly, brecciated veins contain angular blocks of tourmaline, ranging in size from less than one to more than 25 centimetres in size. Fragments are cemented by a quartz-carbonate matrix. Breccia textures locally form a %piano key+pattern with angular tourmaline blocks aligned perpendicular to the vein walls. This texture is due to protracted deformation that affected already formed veins and generated new veins (tension gash veins developed on pre-existing laminated veins). The piano key breccia has been observed throughout the deposit at all scales in tourmaline veins of less than 1 centimetre to more than 1 metre thick. A %adder vein+texture has also been observed in outcrop at the 450 West Zone consisting of massive tourmaline layers with quartz-carbonate %adders+ aligned perpendicular to the vein walls.

Gold occurs as isolated grains or as clusters of fine grained particles. Irregular to sub-angular shaped gold grains range in size from less than 10 micrometres to 1 millimetre. In rare instances, grains up to 1 centimetre in size have been observed. Locally, veins contain micrometre-size clusters of visible gold particles. Tellurobismuthite (Bi2 Te3) occurs throughout the deposit. Gold and tellurides occur within micro

fractures in quartz, interstitial to granular tourmaline grains, at the contact between massive aphanitic tourmaline and quartz bands, and along tourmaline laminations.

Gold mineralization also occurs within altered host rock without veining occurring as centimetre to several metre wide tourmaline-actinolite ± biotite ± calcite replacement zones around vein selvages.

The two major vein areas discovered to date (the 450 West and 850 West zones) form a crescent-shaped mineralized, surface projected footprint 1.8 kilometres long by more than 100 metres wide, which has been traced to date to a vertical depth of 900 metres. Veins within the 450 West zone typically strike 85 degrees and dip 45 to 60 degrees to the south. Mineralization within the veins plunges steeply to the southeast, sub-parallel to an F2 fold axis. Veins within the 850 West zone typically strike 60 degrees and dip subvertically. Mineralization within this vein set plunges gently to the southwest.

#### 7.4.1 **450 West Zone**

In the 450 West zone, auriferous quartz-tourmaline veins are primarily hosted within a sequence of mafic volcanic rocks, between a swarm of quartz-feldspar porphyry dikes in the Hanging wall and a felsic volcaniclastic unit in the footwall (Figure 7-3). Geological modelling of the 450 West zone has delineated three orientations of high-grade gold domains. A well-defined east-west QT vein system appears to crosscut a series of northwest and northwest-trending schist zones, both have been traced laterally across the 450 West zone for approximately 800 metres. Quartz-tourmaline veins and associated alteration zones also crosscut the contact between the mafic flows and felsic volcaniclastic rocks. Gold-bearing quartz-tourmaline veins also crosscut minor quartz-feldspar porphyry units within the basalt units.

Several high-grade, gold-bearing schist zones (domains HGS-01 to -04 as well as lesser NW domains) have been defined. These schist zones consist of wide zones of altered gold-bearing rock, which are aligned parallel to the host rock foliation, and follow the contour of a felsic porphyry dike swarm located on the southern or hanging wall side of the deposit. These high-grade schist zones appear to have subsequently been crosscut by east-west-trending, high-grade, gold-bearing QT, quartz-tourmaline laminated veins however the crosscutting relationships are not fully known.

The quartz-tourmaline veins P, JQ, R, and locally S, are well-exposed on the 450 West zone outcrop (Figure 4-1). There, at least three generations of auriferous veins occur: laminated veins with fault-fill vein texture localized along sheared limbs or hinges of F2 folds, folded quartz tourmaline veins emplaced parallel to the S1 foliation, and quartz tension gash veins and oblique extensional veins emplaced during the waning stage of the D2 deformation. The P Vein extends for a length of 160 metres containing an average grade of 11.1 grams gold per tonne across an average width of 2.53 metres. The adjacent JQ Vein extends on surface for a length of 195 metres containing an average grade of 11.3 grams gold per tonne across an average width of 3.09 metres. The R Vein has been exposed for a length of 95 metres containing an average grade of 19.3 grams gold per tonne over an average width of 2.41 metres.

Gold-bearing D1 foliation parallel mineralization has been observed within both the felsic volcaniclastic and mafic volcanic rocks. These foliation parallel gold-bearing intervals are crosscut by laminated and pianokey+ textured quartz-tourmaline veins. Massive tourmaline replacement zones were emplaced in the selvages of laminated veins by exploiting the strongly developed penetrative S1 foliation.

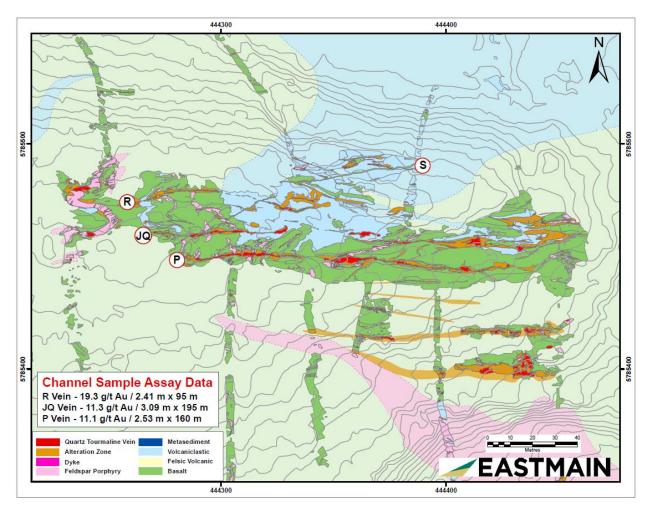
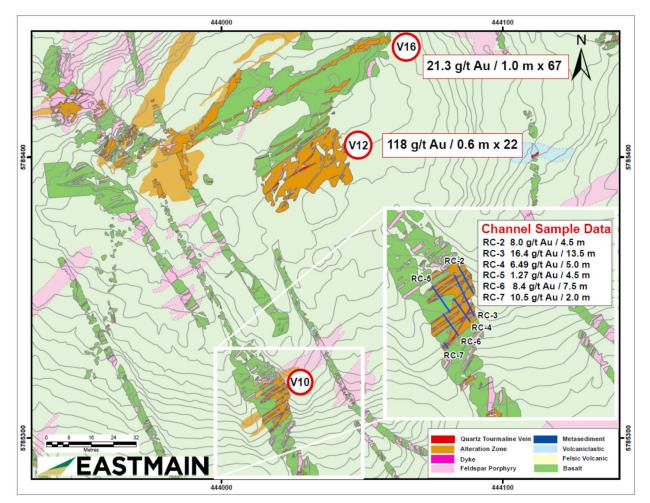


Figure 7-3 Detailed Geology of the 450 West Zone within the Eau Claire Gold Deposit

#### 7.4.2 850 West Zone

At the 850 West zone, auriferous quartz-tourmaline veins are hosted within a mafic volcanic sequence located west and stratigraphically and structurally above the 450 West zone. Veins within the 850 West zone strike 060 degrees and dip subvertically (Figure 7-4). This orientation is parallel to the axial plane of the pervasive F2 folding in this area. The 850 West zone contains multiple vein swarms crosscutting both mafic flows and quartz-feldspar porphyry within the basalt package. The spacing between the vein swarms is two or three times larger than the 450 West zone. Multi-staged gold-mineralization is evident within both trenching and drilling within the 850 West zone and the auriferous vein system of the 850 West zone is interpreted to be associated to the 450 West mineralizing event.

The intersection of the two sets of veins between the 450 West and 850 West zones is not exposed and is interpreted to be fault displaced and rotated along as shallow northwest trending west dipping fault. Definition drilling has intersected multiple high-grade gold bearing quartz-tourmaline veins and alteration zones down 300 metres from surface.



## Figure 7-4 Detailed Geology of the 850 West Zone

## 7.5 Alteration

Alteration zones associated with gold mineralization are often wider and volumetrically more extensive than the veins (SRK, 2015). The alteration halo ranges from 1 centimetre to several metres wide. Composition and mineralogy of the alteration zones bordering the veins varies according to the bulk composition of the host lithology. Where the veins are hosted by felsic to intermediate volcanic rocks or felsic porphyry, the alteration occurs as silicified and tourmaline-rich replacement zones, and as massive bands along the foliation. Veins hosted within the mafic volcanic rocks are characterized by a symmetrically zoned alteration pattern with an internal actinolite-tourmaline dominant mineral assemblage, and an external biotite-carbonate dominant assemblage. These alteration assemblages have been designated as schist zones (unit M8) utilizing the classification scheme of the Ministère de l'Énergie et des Resources Naturelles. These schist zones range from centimetre to several metres in thickness.

Both actinolite and tourmaline occur as non-foliated radiating prismatic and or fibrous aggregates and/or bands of acicular euhedral crystals. Biotite-carbonate assemblages occur more often as foliated, fine grained aggregates. Actinolite-tourmaline schist enveloping veins may be gradational with the quartz-tourmaline veins and contain gold. Gold-bearing veins and schist vary in composition from 100 percent quartz-tourmaline to 100 percent schist. It is common to observe significant amounts of gold within tourmaline and/or actinolite and/or biotite altered rock with little or no visible vein material. Wide intervals of biotite-carbonate rock often form an external alteration zone to the sheeted quartz-tourmaline veins within



mafic volcanic host lithologies. Both actinolite-tourmaline schist and biotite-carbonate schist represent the strike and dip continuation of the quartz-tourmaline vein system where structural attenuation may have boudinaged the veins.

## 8 DEPOSIT TYPES

Gold mineralization in the Eau Claire Deposit is structurally controlled and exhibits similar geological, structural and metallogenic characteristics to Archean Greenstone-hosted quartz-carbonate vein (lode) deposits. These deposits are also known as mesothermal, orogenic, lode gold, shear-zone-related quartz-carbonate or gold-only deposits (Dubé and Gosselin, 2007).

The following description of Greenstone-hosted quartz. carbonate vein deposits is extracted from Dubé and Gosselin (2007).

Greenstone-hosted quartz-carbonate vein deposits are structurally controlled, complex epigenetic deposits that are hosted in deformed and metamorphosed terranes. They consist of simple to complex networks of gold-bearing, laminated quartz-carbonate fault-fill veins in moderately to steeply dipping, compressional brittle-ductile shear zones and faults, with locally associated extensional veins and hydrothermal breccias. They are dominantly hosted by mafic metamorphic rocks of greenschist to locally lower amphibolite facies and formed at intermediate depths (5-10 km). Greenstone-hosted quartz-carbonate vein deposits are typically associated with iron-carbonate alteration. The relative timing of mineralization is syn- to late-deformation and typically post-peak greenschist-facies or syn-peak amphibolite facies metamorphism.

Gold is mainly confined to the quartz-carbonate vein networks but may also be present in significant amounts within iron-rich sulphidized wall rock. Greenstone-hosted quartz-carbonate vein deposits are distributed along major compressional to transpressional crustal-scale fault zones in deformed greenstone terranes of all ages, but are more abundant and significant, in terms of total gold content, in Archean terranes. However, a significant number of world-class deposits (>100 t Au) are also found in Proterozoic and Paleozoic terranes.

The main gangue minerals in greenstone-hosted quartz-carbonate vein deposits are quartz and carbonate (calcite, dolomite, ankerite, and siderite), with variable amounts of white micas, chlorite, <u>tourmaline</u>, and sometimes scheelite. The sulphide minerals typically constitute less than 5 to 10% of the volume of the orebodies. The main ore minerals are native gold with, in decreasing amounts, pyrite, pyrrhotite, and chalcopyrite and occur without any significant vertical mineral zoning. Arsenopyrite commonly represents the main sulphide in amphibolite-facies rocks and in deposits hosted by clastic sediments. Trace amounts of molybdenite and tellurides are also present in some deposits.

This type of gold deposit is characterized by moderately to steeply dipping, laminated fault-fill quartzcarbonate veins in brittle-ductile shear zones and faults, with or without fringing shallow-dipping extensional veins and breccias. Quartz vein textures vary according to the nature of the host structure (extensional vs. compressional). Extensional veins typically display quartz and carbonate fibres at a high angle to the vein walls and with multiple stages of mineral growth, whereas the laminated veins are composed of massive, fine-grained quartz. When present in laminated veins, fibres are subparallel to the vein walls.

Individual vein thickness varies from a few centimetres up to 5 metres, and their length varies from 10 up to 1000 m. The vertical extent of the orebodies is commonly greater than 1 km and reaches 2.5 km in a few cases.

The gold-bearing shear zones and faults associated with this deposit type are mainly compressional and they commonly display a complex geometry with anastomosing and/or conjugate arrays. The laminated quartz-carbonate veins typically infill the central part of, and are subparallel to slightly oblique to, the host structures. The shallow-dipping extensional veins are either confined within shear zones, in which case they are relatively small and sigmoidal in shape, or they extend outside the shear zone and are planar and laterally much more extensive.

Stockworks and hydrothermal breccias may represent the main mineralization styles when developed in competent units such as the granophyric facies of differentiated gabbroic sills, especially when developed at shallower crustal levels. Ore-grade mineralization also occurs as disseminated sulphides in altered

(carbonatized) rocks along vein selvages. Due to the complexity of the geological and structural setting and the influence of strength anisotropy and competency contrasts, the geometry of vein networks varies from simple (e.g. Silidor deposit), to fairly complex with multiple orientations of anastomosing and/or conjugate sets of veins, breccias, stockworks, and associated structures. Layer anisotropy induced by stiff differentiated gabbroic sills within a matrix of softer rocks, or, alternatively, by the presence of soft mafic dykes within a highly competent felsic intrusive host, could control the orientation and slip directions in shear zones developed within the sills; consequently, it may have a major impact on the distribution and geometry of the associated quartz-carbonate vein network. As a consequence, the geometry of the veins in settings with large competence contrasts will be strongly controlled by the orientation of the hosting bodies and less by external stress. The anisotropy of the stiff layer and its orientation may induce an internal strain different from the regional one and may strongly influence the success of predicting the geometry of the gold-bearing vein network being targeted in an exploration program.

The veins in greenstone-hosted quartz-carbonate vein deposits are hosted by a wide variety of host rock types; mafic and ultramafic volcanic rocks and competent iron-rich differentiated tholeiitic gabbroic sills and granitoid intrusions are common hosts. However, there are commonly district-specific lithological associations acting as chemical and/or structural traps for the mineralizing fluids as illustrated by tholeiitic basalts and flow contacts within the Tisdale Assemblage in Timmins. A large number of deposits in the Archean Yilgarn craton are hosted by gabbroic ("dolerite") sills and dykes as illustrated by the Golden Mile dolerite sill in Kalgoorlie, whereas in the Superior Province, many deposits are associated with porphyry stocks and dykes. Some deposits are also hosted by and/or along the margins of intrusive complexes (e.g. Perron-Beaufort/North Pascalis deposit hosted by the Bourlamaque batholith in Val d'Or. Other deposits are hosted by clastic sedimentary rocks (e.g. Pamour, Timmins).

The metallic geochemical signature of greenstone-hosted quartz-carbonate vein orebodies is Au, Ag, As, W, B, Sb, Te, and Mo, typically with background or only slightly anomalous concentrations of base metals (Cu, Pb, and Zn). The Au/Ag ratio typically varies from 5 to 10. Contrary to epithermal deposits, there is no vertical metal zoning. Palladium may be locally present.

At a district scale, greenstone-hosted quartz-carbonate vein deposits are associated with large-scale carbonate alteration commonly distributed along major fault zones and associated subsidiary structures. At a deposit scale, the nature, distribution, and intensity of the wall-rock alteration is controlled mainly by the composition and competence of the host rocks and their metamorphic grade.

Typically, the proximal alteration haloes are zoned and characterized – in rocks at greenschist facies – by iron-carbonatization and sericitization, with sulphidation of the immediate vein selvages (mainly pyrite, less commonly arsenopyrite).

Altered rocks show enrichments in CO2, K2O, and S, and leaching of Na2O. Further away from the vein, the alteration is characterized by various amounts of chlorite and calcite, and locally magnetite. The dimensions of the alteration haloes vary with the composition of the host rocks and may envelope entire deposits hosted by mafic and ultramafic rocks. Pervasive chromium- or vanadium-rich green micas (fuchsite and roscoelite) and ankerite with zones of quartzcarbonate stockworks are common in sheared ultramafic rocks. Common hydrothermal alteration assemblages that are associated with gold mineralization in amphibolite-facies rocks include biotite, amphibole, pyrite, pyrrhotite, and arsenopyrite, and, at higher grades, biotite/phlogopite, diopside, garnet, pyrrhotite and/or arsenopyrite, with variable proportions of feldspar, calcite, and clinozoisite. The variations in alteration styles have been interpreted as a direct reflection of the depth of formation of the deposits.

The alteration mineralogy of the deposits hosted by amphibolite-facies rocks, in particular the presence of diopside, biotite, K-feldspar, garnet, staurolite, andalusite, and actinolite, suggests that they share analogies with gold skarns, especially when they (1) are hosted by sedimentary or mafic volcanic rocks, (2) contain a calc-silicate alteration assemblage related to gold mineralization with an Au-As-Bi-Te metallic signature, and (3) are associated with granodiorite-diorite intrusions. Canadian examples of deposits hosted in amphibolite-facies rocks include the replacement-style Madsen deposit in Red Lake and the quartz-tourmaline vein and replacement-style Eau Claire deposit in the James Bay area.



## 9 EXPLORATION

Exploration work completed on the Project prior to 2015 is described in the technical report on the Project by SRK (2015). There has been no new surface exploration work except for diamond drilling completed on the Project since the SRK report. Recent diamond drilling is discussed below in section 10.

## 10 DRILLING

Drilling completed on the Project prior to 2015 is described in the technical report on the Project SRK (2015). Between 1976 and 2002, a total of 151 core boreholes (25,715 metres) were drilled throughout the Clearwater property by Westmin and SOQUEM, both joint venture partners with Eastmain at the time the work was completed. Between 2002 and 2013, 534 core boreholes (177,713 metres) were drilled by Eastmain. Since the last resource, 211 drill holes totalling 78,150 metres has been completed from 2015 to 2017 by Eastmain.

The following is a description of the drilling completed on the Project since the 2015 technical report.

#### 10.1 2015 Drill Program

Eastmain completed 29 drill holes (ER15-553 to -581) totalling 12,898 metres at Eau Claire in 2015. The drilling was focused on expanding Measured & Indicated Open Pit and Ramp Accessible Underground gold resources, within the upper portion (top third) of the Eau Claire Deposit.

Assay data from holes 553 to 573 confirms 45 gold-bearing intercepts ranging from 0.50 to 25.6 grams gold per tonne (g/t) over widths ranging from 2.0 to 11.5 metres (see Eastmain news release dated December 22, 2015 posted on SEDAR). Nineteen assay intervals exceeded cut-off grade for underground resources (2.5 g/t Au) at Eau Claire, with an average grade of 8.78 grams gold per tonne over an average width of 2.78 metres.

Significant Assay Intercepts include:

- 10.4 g/t Au over 2.0 m (Hole 553)
- 9.35 g/t Au over 3.0 m (Hole 556)
- 15.8 g/t Au over 2.0 m (Hole 557)
- 25.6 g/t Au over 2.0 m (Hole 561)
- 5.98 g/t Au over 4.5 m (Hole 566)
- 24.8 g/t Au over 2.0 m (Hole 568)
- 20.4 g/t Au over 3.0 m (Hole 570)
- 6.20 g/t Au over 5.5 m (Hole 572)

2015 drilling confirmed the continuation of gold mineralization laterally to the east Measured and Indicated gold resources identified in the SRK Report at Eau Claire. Several half-metre-wide high-grade vein intersections from ten of the drill holes reported herein contain very-fine-grade visible gold and range in grade from 24.5 to 98.8 g/t.

Infill core sampling of previous drill holes was also completed. Infill sampling confirmed a high-grade interval from hole ER08-131, which assayed 6.65 g/t Au over 5.0 metres, from within the JQ Vein at a depth of 66.0 metres. When combined with assay results from the adjacent P Vein, the intersection provides a composite interval grading 6.75 g/t Au across 13.8 metres, lying within the 450 West Zone. A total of 1,438 infill core samples were taken during the 2015 exploration program. Infill sampling of near-surface intervals within potential open-pit areas may contribute to current mineral resources.

#### 10.2 2016-2017 Drill Program

In August 2016, Eastmain announced an \$8.8 million, 63,300 metre drill program at the Clearwater Property. At Eau Claire, 49,500 metres of the program are planned to improve resource classification and confidence at the 450W Zone by infill drilling at shallow, pit-accessible depths (surface to 150 metre depth); infill of deeper veins (150 - 400 metre depth); and testing strike extensions of near surface high-grade veins within the known mineral resource and beyond the depositos current limits. Approximately 6,200 metre are planned to expand the 850W Zone mineralization as a result of step-out drilling and the infilling of inferred domains.

In addition, 7,600 metre of exploration drilling were allocated to test six additional mineralized zones on the Clearwater property. This phase of drilling targets near-surface mineralization where grab and trench sampling and limited drilling have reported numerous results ranging from 5 g/t to 30 g/t Au. The Snake Lake and Clovis Lake zones are the primary targets located 1.8 km and 3 km east of the Eau Claire deposit. Regional property drilling is also planned to test satellite targets including Natel (8 km east), Knight (13 km E), Serendipity (16 km E) and Beluga (5 km N).

As of August 25<sup>th</sup>, 2017, a total of 182 drill holes for 65,252 metres have been completed in 2016 (ER16-582 to -671) and 2017 (ER15-672 to -786). Significant drill intercepts of the 2016 and 2017 drilling are presented in Appendix B and summarized below. Company press releases issued October 24, 2016, December 1, 2016 and January 4, 2017, February 7, 2017, March 6, 2017, March 29, 2017, April 26, 2017, May 16, 2017, June 01, 2017, July 27, 2017 and August 30, 2017 provide further details related to results of exploration at the Eau Claire Deposit.

#### Selected Drilling Highlights – 2016 and 2017

- ER16-583 10.2 g/t Au over 1.0 m
- ER16-584 79.7 g/t Au over 0.5 m and 11.5 g/t Au over 13.5 m, incl. 21.3 g/t Au over 5 m
- ER16-606 43.1 g/t Au over 2.0 m . incl. 96.8 g/t Au over 1.0 m
- ER16-617 15.8 g/t Au over 3.5 m . incl. 66.6 g/t Au over 0.7 m
- ER16-602 35.3 g/t Au over 0.7 m
- ER16-608 67.7 g/t Au over 2.4 m (vertical depth . 216 m) and 6.17 g/t Au over 5.3 m
- ER16-617 15.8 g/t Au over 3.5 m (vertical depth . 171 m) including 66.6 g/t Au over 0.8 m
- ER16-620 6.74 g/t Au over 6.6 m (vertical depth . 118 m) including 31.3 g/t over 1.0 m
- ER16-662 17.0 g/t Au over 7.1 m, incl. 54.6 g/t Au over 0.7 m, at a vertical depth of 302 m
- ER16-621 20.2 g/t Au over 1.5 m, incl. 49.1 g/t Au over 0.5 m, at a vertical depth of 235 m
- ER16-645 14.6 g/t Au over 1.7 m, incl. 12.4 g/t Au over 1.0 m, at a vertical depth of 270 m
- ER16-632 5.79 g/t Au over 4.1 m, incl. 11.9 g/t Au over 1.6 m, at a vertical depth of 256 m
- ER17-674 8.31 g/t Au over 13.3 m, incl. 11.4 g/t Au over 8.8 m; 4.28 g/t Au over 2.3 m at a vertical depth of 233 m; 11.4 g/t Au over 2.5 m, incl. 45.5 g/t Au over 0.5 m at a vertical depth of 245 m
- ER16-666 8.95 g/t Au over 4.6 m, incl. 20.4 g/t Au over 1.8 m at a vertical depth of 296 m
- ER16-658 5.6 g/t Au over 11.3 m, incl. 11.9 g/t Au over 2.3 m and incl. 7.82 g/t Au over 3.9 m, at a vertical depth of 366 m
- ER17-681 3.02 g/t Au over 11.0 m, incl. 4.48 g/t Au over 6.0 m at a vertical depth of 122 m
- Near surface (maximum vertical depth of 100 m) results:
  - o ER17-695 14.1 g/t Au over 6.2 m, incl. 73.1 g/t Au over 1.0 m
  - ER17-702 50.4 g/t Au over 0.5 m and 2.87 g/t Au over 0.6 m
  - ER17-700 4.80 g/t Au over 4.0 m and 6.29 g/t Au over 0.5 m



- ER17-686 4.89 g/t Au over 4.5 m and 3.50 g/t Au over 2.0 m
- Shallow underground (vertical depth 100 300 m) results:
  - o ER17-689 47.4 g/t Au over 1.5 m
  - o ER17-696 26.8 g/t Au over 2.5 m, incl. 54.9 g/t Au over 1.0 m, 19.5 g/t Au over 1.3 m
  - o ER16-648 29.3 g/t Au over 1.0 m
- Shallow underground (vertical depth 100 400 m) results:
  - ER17-697 . 43.7 g/t Au over 2.0 m, incl. 73.4 g/t Au over 1.0 m
  - ER17-706 . 6.54 g/t Au over 9.0 m, incl. 16.7 g/t Au over 2.5 m, incl. 66.6 g/t Au over 0.5 m
  - $\circ$   $\,$  ER17-711 .  $\,$  9.98 g/t Au over 5.0 m, incl. 33.7 g/t Au over 1.0 m, 11.9 g/t Au over 1.0 m  $\,$
  - ER17-703. 9.77 g/t Au over 3.5 m, 7.78 g/t Au over 2.9 m, and 70.7 g/t Au over 0.6 m
- Near surface (maximum vertical depth of 100 m) results:
  - ER17-708 . 20.0 g/t Au over 2.1 m, and 63.4 g/t Au over 0.5 m
  - $\circ$   $\,$  ER17-712 . 4.37 g/t Au over 5.0 m, and 10.1 g/t Au over 1.0 m  $\,$
  - ER17-705 . 16.2 g/t Au over 1.6 m
- Near surface (maximum vertical depth of 100 m) results:
  - $\circ$   $\,$  ER17-718 . 30.6 g/t Au over 4.9 m, incl. 254 g/t Au over 0.5 m  $\,$
  - ER17-713 . 20.7 g/t Au over 2.2 m, and 46.4 g/t Au over 0.7 m
  - ER17-736 . 72.6 g/t Au over 0.5 m
  - o ER17-717 . 37.7 g/t Au over 0.9 m, 32.8 g/t Au over 0.5 m 3.44 g/t Au over 4.3 m
- Shallow underground (vertical depth 100 300 m) results:
  - $\circ$  ~ ER17-723 . 42.3 g/t Au over 3.7 m, incl. 206 g/t Au over 0.5 m
  - ER17-723 . 51.8 g/t Au over 0.5 m
  - o ER17-734 . 5.66 g/t Au over 6.8 m, incl. 17.9 g/t Au over 1.0 m
  - $\circ$   $\,$  ER16-725 . 63.4 g/t Au over 0.5 m, and 31.6 g/t Au over 0.7 m  $\,$
- Near surface (maximum vertical depth of 100 m) results:
  - $\circ$   $\,$  ER17-727 . 34.5 g/t Au over 1.5 m, incl. 50.0 g/t Au over 0.5 m
  - o ER17-730 . 48.8 g/t Au over 0.5 m
  - ER17-757 . 21.8 g/t Au over 1.1 m, incl. 37.4 g/t Au over 0.6 m
- Shallow underground (vertical depth 100 400 m) results:
  - ER17-720 . 10.2 g/t Au over 8.5 m, incl. 24.3 g/t Au over 2.0 m
  - o ER17-744 . 5.36 g/t Au over 5.4 m, incl. 13.3 g/t Au over 1.9 m
  - ER17-729 . 6.10 g/t Au over 3.5 m, incl. 10.8 g/t Au over 1.5 m
- ER17-776. Drilled along High-Grade Schist (HGS)-02 vein over 143 m and includes multiple major intercepts:
  - $\circ~~$  6.25 g/t Au over 4.5 m, incl. 9.36 g/t Au over 1.5 m
  - o 15.3 g/t Au over 6.0 m, incl. 41.6 g/t Au over 2.0 m
  - o 3.98 g/t Au over 8.3 m, incl. 8.70 g/t Au over 2.5 m
  - o 7.09 g/t Au over 35.8 m, incl. 9.23 g/t Au over 13.7 m, incl. 12.8 g/t Au over 4.5 m
- ER17-774 30.8 g/t Au over 4.1 m
  - Intersected an HGS vein at 529 m depth, located 300 m below and down-dip from the nearest HGS vein
  - Represents either a new HGS vein at depth, or an extension of a known HGS vein at depth and to the east



- New shallow visible gold mineralization in quartz veining identified approximately 1.0 km SE of Eau Claires 450W Zone outcrop
  - ER17-771 226 g/t Au over 0.5 m . vertical depth of 69 m
- High Grade Schist (%HGS+) drilling using an oblique, shear parallel hole confirmed the predicted locations of HGS-02 and HGS-04 veins in the updated resource model ER17-777 - 5.84 g/t Au over 16.8 m, including 55.5 g/t Au over 0.5 m
  - ER17-777 8.71 g/t Au over 5.5 m, incl. 64.0 g/t Au over 0.5 m
  - ER17-777 3.38 g/t Au over 10.2 m, incl. 6.36 g/t Au over 2.5 m
  - Other Deep Domain exploration highlights include:
    - o ER17-786 34.6 g/t Au over 1.1 m
    - ER17-782 15.9 g/t Au over 2.1 m, incl. 28.1 g/t Au over 1.1 m
    - o ER17-775 2.50 g/t Au over 10.1 m incl. 11.5 g/t Au over 0.5 m

## 10.3 Drill Hole Spotting, Drill Hole Survey

All drill holes were initially spotted using a simple hand held GPS system. On a regular basis during the ongoing drilling program, final drill hole collars are surveyed by Eastmain personnel using a Trimble R6 Model 3 multi-channel, multi-frequency GPS receiver, antenna, and data-link radio system. All drill hole locations were planned and recorded in UTM NAD83 Zone 18U coordinate space.

#### **10.4** Down Hole Orientation Surveys

For the 2015 to 2017 drill programs, Eastmain used a Reflex TN14 gyrocompass was used to align the drill rig to the correct azimuth and dip. For down hole surveying Eastmain used a Reflex EZ-TRAC XTF downhole survey tool.

# 11 SAMPLE PREPARATION, ANALYSES, AND SECURITY

Sample preparation, analyses and security for the Project prior to 2015 is described in the technical report on the Project by SRK (2015).

## **11.1 Drill Core Sampling and Security**

During core-logging, the logging geologist is responsible for determining appropriate sample intervals and boundaries.

#### Core Sampling Cutting and Retention

Prior to the 2016-17 CW drill program, Eastmain drilled core was sampled in 50 cm or 100 cm lengths, 100 cm generating the largest reasonable sample weight for delivery to assay labs. Beginning in 2016, sampling lengths were allowed to vary at the loggers discretion as follows;

- sample intervals to <u>floatqup</u> to the maximum reasonable HQ sampling size of one metre and maintain a rigid lower sample limit of 50 cm.
- As the logger sets out samples along core they will assure that the last sample before the vein ends at the vein (zone) contact. As no sample should be longer that 1 m, the logger may need to adjust the last two samples above the vein to accommodate an odd length (ex. 1.3 m between last 1 m sample and vein . split to two samples at 0.7 m and 0.6 m).
- Similarly, on leaving the vein (using a 0.5 m sampling section) the last sample may be adjusted to up to 1 m to meet the footwall contact (ex. interval from last 0.5 m sample to FW contact is 0.7 m . take a 0.7 m sample.



Departing the vein zone or altered zone, continue on the regular 1 m interval.

During the geological and geotechnical logging procedures, core orientation data is collected. A core orientation line is drawn along the core as a marker for the **%**ottom+of the core. This line orientation is drawn from ACTIII tool derived markings placed at the end of core runs by the drillers at the drill. While logging, this line is generally at the top of the core.

Before core sample cutting, in order to protect the orientation line, the core is rotated counterclockwise (%down+) in the box so that the line parallels the rim of the core groove in the box. The cutter removes the core and places the core the same way (line to his left) and cuts the core at 90 degrees to the location of the core orientation line. The cutter then replaces the sawn core halves in the box the same way they were removed, orientation line against the ±owerqrim of the core groove in the box.

The sampler subsequently removes the sample halves without the core orientation line and places these in the designated bags for the laboratory and rotates the half with the orientation line flat in the box, protecting the line for future use. The % ight half+of the core is always sample.

As a result of this orientation protection procedure, samples are not always cut perpendicular to the main foliation or bedding (i.e. not cut along the major axis of the ellipse formed by the lithological plane intersecting the core). There is some concern that a sampling bias (more vein / less vein) might result in any given length of core. However, most drilling is planned to be as perpendicular as possible to the strike of bedding and structure, given that holes by necessity enter the zone oblique to dip, as a result, core cuts as true as is possible and sample cutting should generally be as close to the major ellipsoid axis as possible. In areas where there is deformation that causes the ellipsoid axis to rotate away from the core orientation line and a more oblique sample is taken, there is no perception that it is regular enough or pervasive enough that a general assay vs cutting bias exists.



Core orientation line rolled % hown+to groove edge. Cut line in yellow.

Sample intervals are chosen based on alteration, veining and sulphide content which was sometimes coincident with lithological changes. All samples are recorded to the nearest 0.1 metre with ends identified with grease pencil.

Core is cut in half by a segmented diamond blade. Both halves are placed back in the core tray. An assay tag is stapled onto the tray of the wooden core box at the end of each sample. Once the whole core is cut, half of each sample was placed in an appropriately-labelled plastic bag which contains an assay tag. The labelled bag containing the sample and the assay tag is submitted to the laboratory for analysis.

Sample bags were sealed with tape, and placed into standard fibre rice shipping bags, weighing approximately 10 kg when shipped. The bags were then sealed with fibre or electric tape.

The samples were transported by truck and/or ATV to the storage pad and stored in a locked container. Every Thursday the samples were driven from the storage container via a Cree Express truck, directly to the ALS Chemex Labs, located in Sudbury, Ontario, for crushing and sample preparation.

# **11.2 Sample Preparation**

Sample processing is carried out ALS¢ lab in Sudbury where all rock and core samples are dried followed by crushing the entire sample to better than 70% passing through a 2 mm screen. A split of up to 1,000 g is taken and pulverized to better than 85 % passing a 75 micron screen. This method is appropriate for rock chip or drill samples. The pulps were then air-freighted to the ALS Global laboratory in Vancouver, Canada

# 11.3 Drill Core Assay Analysis and Geochemistry

Since 2002, Eastmain has an established Analytical Quality Assurance Program to control and assure the analytical quality of assays in its exploration programs. This protocol includes the systematic addition of blank samples and certified standards to each batch of samples sent for analysis at commercial laboratories. Blank samples are used to check for possible contamination in laboratories, while certified standards determine the analytical accuracy and precision of the laboratory procedure. Generally, check sample inserts approximate 5% of sample flow from project sites. For 2016, approximately 10% of the sample stream delivered to the assay laboratories for the Clearwater Project are for QA/QC

Pulp (inline split of 100-150 g) and coarse reject (inline split of 250-500 g) lab duplicates are also acquired by the primary lab at a rate of 2 each per hundred samples submitted and shipped to a second independent lab for further sample QA/QC.

The Corporations main assay contractor is ALS Chemex. Once received by ALS, samples were weighed, dried and finely crushed to better than 70% passing 2 mm (Tyler 10 mesh). A split of 1,000 grams was taken using a riffle splitter and pulverized to better than 85% passing a 75 micron (Tyler 200 mesh) screen (package PREP-31B).

Over time the Eastmain fire assay protocol has evolved at its projects. All samples were initially assayed for gold using a conventional fire assay procedure with and inductively coupled plasma . atomic emission spectrometry (ICP-AES) finish on 50-gram sub-samples (package code Au-ICP22). The detection limits of this method are 1 parts per billion (ppb) to 10 grams gold per tonne (g/t Au). Samples containing more than 500 ppb Au are re-assayed using a second 50-gram aliquot by fire assay with an atomic absorption spectroscopy (AAS) finish on (package code Au-AA24). The detection limits of this method are 5 ppb to 10 g/t Au.

Samples containing more than 5.0 g/t gold are re-assayed twice using a fire assay with a gravimetric finish (package code Au-GRA22) with detection limits of 50 ppb to 1,000 g/t gold.

In 2016, the AU-ICP22 procedure was discontinued and all samples were immediately tested with Au-AA24. Additionally, no secondary assay of >10.0 g/t Au samples is currently undertaken.

All samples are also analyzed for a suite of 47 trace elements using inductively coupled plasma (ICP) methods. The element suite includes, among others; silver, bismuth, copper, cadmium, cobalt, lead, nickel, zinc, arsenic, antimony, manganese, molybdenum, tellurium, vanadium and barium. A prepared 0.50-gram sample was digested with perchloric, nitric and hydrofluoric acids. The residue was dissolved in nitric and hydrochloric acids and diluted to a final volume with de-ionized water. The resulting solution was analyzed by inductively coupled plasma-atomic emission spectrometry (ICP-AES). Base metal concentrations that exceed detection limits (usually > 1%) and silver are re-analysed via dilution and re-analysed by inductively



coupled plasma - mass spectrometry (ICP-MS). Results were corrected for spectral inter-element interference.

## 11.4 Specific Gravity

Eastmain submitted 137 sample pulps from 2016 core samples (representing NQ-size half core) to ALS Minerals of North Vancouver for Specific Gravity determinations by pycnometry (see section 14.6 for results).

## 11.5 Quality Assurance and Quality Control (QA/QC) of 2015 Core Samples

The results of the 2015 QA/QC program (June 2015 through December 2015) have been written up by Eastmain and reviewed by the Authors. The results of the QA/QC program are detailed in Appendic C.

#### 11.5.1 Lab QA/QC

Internal QA/QC samples were used by ALS to detect and measure the magnitude of laboratory error associated with the measurement of gold and other elements in each sample. Tracking the QC data allowed an acceptable degree of confidence in the assay values to be maintained by monitoring the performance of the lab on these reference samples of known composition. Laboratory quality control results were reported by ALS on separate certificates, as well as digitally with the sample assay results.

The laboratory routinely completes duplicate analyses of random samples. The duplicate assay data is used by the laboratory for internal quality control monitoring, to provide an estimate of the reproducibility related to the uncertainties inherent in the analytical method and homogeneity of the pulps. The precision, or relative percent difference calculated for the pulp duplicates (that is the likeness of the second cut to the first) is expected to be less than 10%. This means that at the 95% confidence level (or 19 times out of 20) the duplicate pulp assay will be +/- 10% of the original assay. Duplicate assay results falling outside these acceptable limits may indicate that pulverizing specifications should be changed, or that alternative methods, such as screened metallics for gold, should be considered. Duplicate assays also give a good idea of the extent of variability being dealt with on a given deposit. The results of the ALS internal duplicate sampling, conducted from June 2015 through December 2015, are satisfactory.

As conveyed above, ALS Labs analyses internal blanks and standards as part of their own, independent QA/QC program. An analysis of the results for Au-ICP22, Au-GRA22, ME-MS61, and S-IR08, the first two reporting gold in ppb, the third silver in ppm, and the fourth sulphur in percent, show that results are all within acceptable industry parametres. A review of the results for the 47 elements analyzed on top of silver, for the ME-MS61 method, are also within acceptable industry parametres.

## 11.5.2 Eastmain QA/QC

In addition to the ALS internal QC protocol, Eastmain inserted blanks and control standards with channel and drill core sample collections throughout the 2015 exploration program as part of the QA/QC procedure. Blanks and standards underwent the same sample preparation and analysis as the rock samples with which they were delivered. For drill core samples, an effort was made to insert one blank and one standard at regular intervals with every 50 samples sent for assay. Standards were included in channel sample collections less frequently. A total of 222 standards and 218 blanks were submitted to the laboratory for quality assurance purposes, which together comprise 4.1% of all drill core and channel samples assayed in 2015.

The results of the 2015 QA/QC program on the Project are presented in Appendix C. The results indicate there are no significant issues with the drill core assay data. The data verification programs undertaken on the data collected from the Project support the geological interpretations, and the analytical and database quality, and therefore data can support mineral resource estimation.

# 11.6 QA/QC of 2016 - 2017 Core Samples

The results of the 2016-2017 (October 2016 through February 2017) QA/QC program have been written up by Eastmain and reviewed by the Authors. The results of the QA/QC program are detailed in Appendix D.

## 11.6.1 Lab QA/QC

As for 2015, internal QA/QC samples were used by ALS to detect and measure the magnitude of laboratory error associated with the measurement of gold and other elements in each sample. The results of the ALS internal duplicate sampling, conducted from October 2016 through February 2017, are satisfactory.

#### 11.6.2 Eastmain QA/QC

Eastmain inserted blanks and control standards during drill core sample collections throughout the 2016 drill program as part of the QA/QC procedure. Blanks and standards underwent the same sample preparation and analysis as the drill samples with which they were delivered. An effort was made to insert one blanks and two standards at regular intervals with every 50 samples sent for assay. Standards were inserted where the sample numbers ended in  $\pounds 0q \pounds 5q \pounds 0q$  and  $\pounds 5q$ and blanks were inserted where the sample number ended in  $\pounds 7q$  A total of 911 standards and 522 blanks were submitted to the laboratory for quality assurance purposes, which together comprise 6.5% of all drill core samples assayed in 2016.

The results of the 2016 QA/QC program on the Project are presented in Appendix D. The results indicate there are no significant issues with the drill core assay data. The data verification programs undertaken on the data collected from the Project support the geological interpretations, and the analytical and database quality, and therefore data can support mineral resource estimation.

## 11.7 QA/QC of 2017 Core Samples

The results of the 2017 (February 2017 through June 2017) QA/QC program have been written up by Eastmain and reviewed by the Authors. The results of the QA/QC program are detailed in Appendix E.

## 11.7.1 Lab QA/QC

As for 2016-2017, internal QA/QC samples were used by ALS to detect and measure the magnitude of laboratory error associated with the measurement of gold and other elements in each sample. The results of the ALS internal duplicate sampling, conducted from February 2017 through June 2017, are satisfactory.

## 11.7.2 Eastmain QA/QC

Eastmain inserted blanks and control standards during drill core sample collections throughout the 2017 drill program as part of the QA/QC procedure. Blanks and standards underwent the same sample preparation and analysis as the drill samples with which they were delivered. An effort was made to insert one blanks and two standards at regular intervals with every 50 samples sent for assay. Standards were inserted where the sample numbers ended in  $\pounds 0q \pounds 5q \pounds 0q$  and  $\pounds 5q$ and blanks were inserted where the sample number ended in  $\pounds 7q$  A total of 1,273 standards and 695 blanks were submitted to the laboratory for quality assurance purposes, which together comprise 6.6% of all drill core samples assayed in this program.

The results of the 2017 QA/QC program on the Project are presented in Appendix E. The results indicate there are no significant issues with the drill core assay data. The data verification programs undertaken on the data collected from the Project support the geological interpretations, and the analytical and database quality, and therefore data can support mineral resource estimation.

# 12 DATA VERIFICATION

Data Verification for the Project prior to 2015 is described in the technical report on the Project by SRK (2015).

With respect to the 2015 to 2017 drill programs, all geological data has been reviewed and verified by the Authors as being accurate to the extent possible and to the extent possible all geologic information was reviewed and confirmed. The Authors did not conduct check sampling of the core. Armitage visually inspected the core on site and a number of the significant gold intercepts from the 2015 and the 2017 drill programs.

The Authors consider that the assay sampling and extensive QA/QC sampling of core by Eastmain provides adequate and good verification of the data and the Authors believe the work to have been done within the guidelines of NI 43-101.



# 13 MINERAL PROCESSING AND METALLURGICAL TESTING

Metallurgical testing was previously completed on Eau Claire mineralization by COREM in 2001 and by SGS in 2007. The results of this work is summarized below and is presented in more detail in the previous 43-101 report by SRK, 2015.

# 13.1 2010 COREM Metallurgical Testing

In 2001 four 25-kilogram composite samples were taken separately from the P, JQ, R, and V16 veins and sent to COREM for metallurgical testing. This sampling provided preliminary information on density, grinding characteristics, grade, gold fineness, and gravimetric- and total gold recovery. The average specific gravity values of the stock samples varied between 2.87 and 2.99.

COREM completed a series of crushing, milling and flotation tests. A suite of accessory elements was found to be associated with the gold, which included silver, tellurium, bismuth and molybdenum. Final results indicated that on average 63 to 79 percent (%) of the gold in the samples could be extracted by gravity circuit and that 95.7% to 98.6% of the gold could be recovered by conventional cyanide extraction methods. The assay data from the metallurgical samples correlated very well with surface channel assay results. The studies also indicated that most gold grains were extremely fine thereby necessitating a finer mill-grind for full recoveries.

# 13.2 2010 SGS Minerals Metallurgical Testing

In 2010 Eastmain contracted the services of SGS Mineral Services (Lakefield Research) to evaluate the ore characteristics through mineralogy, chemical analyses and comminution testing, and to explore several processing avenues for the purpose of establishing a preliminary gold recovery flowsheet. The deportment and recovery of tellurium was also monitored in the program.

Four vein composites representing the P, JQ, R, and S veins and one master composite (an equally weighted blend of the four vein composites) were subjected to ore characterization, metallurgical and environmental testing. These composites were prepared from assay reject material in freezer storage at SGS (Lakefield) from analytical work completed in 2008.

The SGS test work completed on the master and vein composite samples indicated the following:

Mineralization Characterization

- Calculated and direct gold grades showed significant variation in the master and vein composites ranging from approximately 11 g/t Au in Vein JQ and R to approximately 38 g/t Au in Vein S.
- In terms of acid generating potential, the samples indicated very low risk.
- The Bond ball mill work indices ranged from 10.2 (Vein S) to 11.1 (Vein P). These samples are considered to be soft in ball mill grindability terms.
- A brief mineralogical examination of the four vein composites revealed that pyrrhotite is the principal sulphide mineral with minor amounts of pyrite and chalcopyrite.

Metallurgical Testing

- Gravity separation will generate significant gold recovery in an industrial setting. Gold recoveries ranged from 30 to 45% in the master composite and up to 74% from the S vein composite.
- Tellurium did concentrate to some extent along with the gold in the gravity separation. Approximately 7% recovery in the JQ vein composite up to a maximum of 25% in the S vein composite.



- Flotation of the master composite gravity separation tailings, at grind sizes ranging from 121 to 65 m, resulted in excellent gold recovery for all of the tests conducted. Approximately 94% gold recovery was achieved at a P80 of 121 m while ~96% was achieved at P80 = 65 m.
- Gold recovery by gravity separation plus flotation ranged from 92% to 97% in the variability tests completed for the vein composites.
- Further development of the flotation option, including optimizing primary grind size, improving conditions to achieve higher tellurium recovery, further investigating rougher concentrate cleaning and the impact of regrinding on cleaner circuit performance is strongly recommended.
- Tellurium recovery was significant in rougher flotation, ranging from a low of 77% from the JQ vein composite to a maximum of 87% from the S vein composite.
- Cyanide leaching of gravity separation tailing yielded an excellent gold response in all tests completed with approximately 95.7% of the gold being recovered in the gravity plus cyanidation flowsheet at 121 m for the master composite. Gold recoveries ranged from 95.6% from the R vein composite to 98.2% from the S vein composite.
- Flotation concentrate cyanidation yielded a unit gold extraction of 98.3% at a grind size of 121 m. Overall circuit gravity separation + flotation concentrate cyanidation yielded a gold extraction of 92.8%.

Environmental

• The acid-base accounting and net acid generation tests completed on the various feed and tailing streams generated in the program clearly indicate that the samples will not generate acid mine drainage.

# 13.3 2017 SGS Minerals Metallurgical Testing

In 2017 Eastmain contracted the services of SGS Mineral Services (Lakefield Research) to complete additional metallurgical test work. The test program was completed on a metallurgical composite comprising both ore and waste-rock (mining dilution) representing the Eau Claire Deposit (SGS, 2017). Ore characterization testing including broad spectrum chemical analysis, baseline acid mine drainage testing, comminution (ball mill grindability) testing, mineralogy, bulk mineralogy by QEM-RMS (QEMSCAN) rapid mineral scan), and chemical head analysis. Metallurgical testing included gravity separation and investigation of flotation and cyanide leaching. A waste rock sample was subjected to baseline acid mine drainage testing. The following is a summary of the conclusions and recommendations of SGS (2017) as presented in the executive summary. The summary by SGS includes comparisons to the 2010 test work.

The testwork encompassed:

- The chemical and mineralogical characterization of ore and potential dilution from hanging wall and foot wall (HW-FW) contact areas;
- The chemical, comminution, and metallurgical evaluation of a 4:1 blend of ore and HW-FW dilution material (Master Composite); and
- The environmental characterization of waste rock (herein referred to as the ARD Composite) and process tailing solids (cyanide leached Master Composite).

Figures 9-1 and 9-2 locate the metallurgical (gold recovery) testwork samples used in the 2010 testwork (red shading) and those that comprised the Ore, HW-FW and blended Master Composite material used in the 2017 program (blue shading).

2017 test material returned gold grades of 6.56 g/t, 0.08 g/t, and 4.98 g/t, were reported for the Ore, HW-FW, and Master Composite, respectively, in the 2017 program. Silver reported as <2 g/t in all samples.

Sulphide sulphur grades were 0.99%, 0.28%, and 0.84% in the Ore, HW-FW, and Master Composite, respectively.

Gold grades in the 2010 testwork were 18.6 g/t in the Master Composite and 11.1 g/t, 14.0 g/t, 10.9 g/t, and 37.7 g/t in the JQ, P, R, and S Vein Composites, respectively. Silver grades averaged approximately 5 g/t in the Vein and Master Composites. Sulphide sulphur grade ranged from approximately 0.5% in Vein S to approximately 0.9% in Vein R.

Acid mine drainage testing in the 2017 program (acid-base accounting {ABA} and net acid generation {NAG}), indicated that the ARD (waste rock) Composite may be net acid generating and that the Master Composite process tailing is likely not an acid generator. The results were not absolute in either case. The tests completed on the Vein Composites in 2010 indicated very low potential for acid generation, however, based on the visuals presented above and selectivity in the 2010 material, these samples should not be considered representative of the entire resource.

The 2017 Bond ball mill work index of the Master Composite of 11.2 kWh/t (metric), fell into the moderately soft category of hardness in terms of ball mill grindability. The Vein Composites tested in 2010 ranged from 10.2-11.1 kWh/t, putting all material tested at the 33rd percentile of hardness or lower, according to an SGS database of similar tests.

Mineralogical data generated for the Ore and HW-FW Composites compared well with the similar studies completed in 2010 on the Vein Composites. In most cases, pyrrhotite was identified as the primary sulphide, with accompanying lesser amounts of pyrite and much less chalcopyrite. The Ore Composite contained approximately 1.5% pyrrhotite and approximately half as much pyrite, while the HW-FW Composite had approximately equal masses of pyrrhotite and pyrite, at 0.22% and 0.28%, respectively.

An FLSmidth (Knelson) gravity recoverable gold (GRG) test indicated a reasonably high GRG value for the Master Composite at 39%. Batch gravity separation testing on the composite yielded 24% gold recovery. Batch gravity separation testing in the 2010 program gave generally higher gold recoveries, ranging from 37% (R Vein) to approximately 74% (S Vein). The 2010 Master Composite yielded an average gold recovery of 37.6%. The likely reasons for the better performance of the vein samples in the 2010 testwork are their much higher gold grades and their greater proportion of coarse gold as indicated in the comparative screened metallic sieve oversize (about 18.5% in the 2010 testwork and approximately 4% in the 2017 Master Composite). Further gravity separation testing is recommended to generate data which may be used in a circuit modelling exercise as well as a preliminary design exercise.

All flotation and cyanidation testwork was conducted on gravity separation tailing.

Rougher flotation testing in the 2017 program indicated a significant issue with slimes generation in grinding, leading to fouling of the rougher concentrates. The slimes, which had the visual appearance of talc, are thought to be related to the amphibole content of the material. It should be noted that, while the amphibole content of the 2010 material was similar, the slimes issue was not observed. Master Composite mass pulls were significantly higher in the 2017 program (approximately 18-25% at P80¢ in the 94-107 m range) than in the 2010 testwork (approximately 5-10% at P80¢ in the 81-121 m range). The Vein Composites (2010) yielded approximately 11% or less mass pull in all cases. The addition of carboxymethyl cellulose (CMC) reduced mass pull to a more reasonable 7.5-9.5%. Reagent schemes in the two programs were otherwise the same.

# Figure 13-1 Longitudinal Section Illustrating Samples Selected for 2010 and 2017 Test Programs (from SGS, 2017)

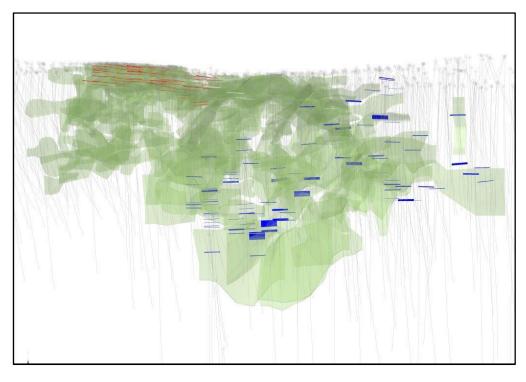
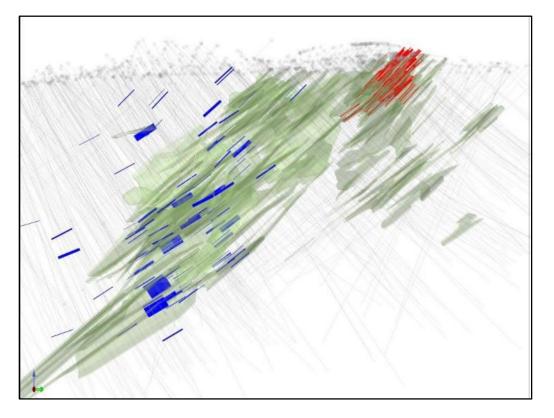


Figure 13-2 Transverse Section Illustrating Samples Selected for 2010 and 2017 Test Programs (from SGS, 2017)





A primary grind P80 of approximately 100-110 m was selected as optimal for flotation in the 2010 program. Overall (gravity + flotation) gold recoveries of approximately 93% or higher were typically achieved with the 2010 Master Composite when ground to that size range. Vein Composite gold recoveries were similar. In the 2017 program, however, the new Master Composite yielded overall gravity plus flotation gold recoveries of only approximately 80-85%, at the same grind same size range. Grinding to P80 = 58 m or finer was required to achieve overall gold recoveries of >90%.

Cleaner flotation tests in the 2017 program yielded excellent final concentrate gold grades (approximately 120 g/t) and mass rejection. Final mass recovery, in three cleaning stages, was in the 2.1-2.4% range. In tests without rougher concentrate regrinding prior to cleaning, gold recoveries to the third cleaner concentrate were approximately 78% (overall gravity + cleaner flotation), and these improved to approximately 83% with regrinding. In similar tests completed in 2010, gravity + cleaner flotation gold recoveries, at similar mass pulls were in the 88-91% range, albeit from much higher grade feed material.

Given the comparatively disappointing flotation performance observed in the 2017 program versus the 2010 work, and considering the relatively high value of the ore, attention was refocused on whole ore cyanide leaching of Master Composite gravity separation tailing.

In tests completed at primary grind P80 sizes ranging from of 95 to 49 m, applying conditions as in the 2010 testwork, gold extractions of 92-95% (gravity + cyanidation) were achieved in 48 hours. There appeared to be no clear correlation between P80 and gold extraction. All subsequent testwork was conducted at the approximately 48 m P80 grind size.

Additional tests evaluating preaeration, lead nitrate addition, higher cyanide dosage (0.75 g/L versus 0.5 g/L NaCN), and high free lime (2 g/L CaO) concentration were completed. Increasing cyanide concentration had a positive effect on final gold extraction. Preaeration with lead nitrate had a positive effect on leach kinetics, with leaching being essentially complete sometime between 8 and 24 hours. In tests without preaeration and lead nitrate, leaching appeared to continue beyond 24 hours. Increasing cyanide concentration, from 0.5 to 0.75 g/L NaCN, following preaeration with lead nitrate, resulted in the maximum gold extraction (96-97%) being achieved, in only 8 hours of leaching. Tests completed with preaeration and lead nitrate resulted in significant reductions in cyanide consumption, from approximately 1.3 - 0.2 kg/t (NaCN per tonne of leach feed basis). A similar effect was noted in the 2010 testwork, with even lower consumptions being noted (0.10 - 0.14 kg/t).

Leach kinetics were dramatically reduced in the high CaO tests using the baseline 0.5 g/L NaCN concentration (i.e. 87% leach extraction after 24 hours). Increasing the cyanide concentration to 0.75 g/L NaCN, following preaeration with lead nitrate, in a test with high CaO, resulted in leach kinetics and a final gold extraction similar to the tests with high cyanide and preaeration with lead nitrate. The high CaO protocol appeared to offer no benefit. This procedure was tested because the Clearwater material is known to contain tellurium mineralisation and high solution CaO has been shown to enhance gold leaching from telluride minerals in some cases. The evidence suggests that the gold in the Clearwater ore is probably not materially associated with tellurium minerals. It should be noted that tellurium assayed at 8 g/t in the 2017 Master Composite and, owing to limitations in the analytical method or matrix interference from the material, at <50 g/t in the 2010 samples.

Overall gold recovery by gravity separation + gravity tailing cyanidation yielded results in the 2017 program that compared very well to parallel testwork completed in 2010. Gold recovery from the 2010 Master Composite (at a 14.8 g/t Au head grade) was 95.7% with a final tailing grade of 0.66 g/t Au. In 2017 overall gold recovery from a head grade of 4.85 g/t Au was approximately 96%, with a final tailing grade of approximately 0.20 g/t Au.

Despite the head analyses that indicated <0.05% graphitic carbon (C(g)) in the samples, it was noted that gold extraction appeared to decrease somewhat as leach retention times were extended. Literature on the subject describes other potential preg-robbing constituents, including certain clay species and sulphide surfaces. The observed effect was not detected in all tests and so cannot be absolutely verified. It is recommended that the preg-robbing potential of the Clearwater material be evaluated.

Further cyanidation tests are recommended to optimize pulp density, preaeration time and lead nitrate requirement, cyanide concentration and leach retention time. Once leach parameters have been optimized, preliminary gold recovery circuit modelling (CIP versus CIL) and preliminary design criteria should be established.

Further to the recommended testwork described above, it is very important that variability of the ore body with respect to comminution requirements and gravity/cyanidation metallurgical response be established. This work will depend on having a detailed understanding of the orebody in terms of lithology, pit boundaries and mining schedule.

# 14 MINERAL RESOURCE ESTIMATES

# 14.1 Introduction

This mineral resource estimate is an update to a 43-101 mineral resource estimate completed for Eastmain in 2015, the results of which were reported on April 27, 2015 (see Eastmain news release April 27, 2015, which is filed on SEDAR under Eastmain¢ profile). The estimate was prepared by SRK Consulting (Canada) Inc. (% RK+) and is presented in a NI 43-101 Technical Report titled % chnical Report for the Eau Claire Gold Deposit, Clearwater Project, Quebec, Canada+ dated June 11<sup>th</sup>, 2015 (effective date of April 27, 2015) and is filed on SEDAR under Eastmain¢ profile.

Tellurium was quantified but not considered as a grade equivalent for estimation purposes in the previous mineral resource estimate. It is not considered for the updated mineral resource estimate. Due to its price volatility, Tellurium as a by-product is not shown to have any material impact or significant economic benefit to the project at this stage.

The SRK Eau Claire mineral resource statement describes a measured and indicated (%M&I+) mineral resource of 7.2 Mt at an average grade of 4.09 g/t Au containing 951,000 ozs of gold. An additional 5.1 Mt at an average grade of 3.88 g/t Au, are classified as inferred mineral resources, containing 633,000 ozs of gold. The mineral resource estimate includes an open pit mineral resource reported at a cut-off grade of 0.5 g/t Au within a conceptual pit shell and an underground mineral resource reported at a cut-off grade of 2.5 g/t Au outside the conceptual pit shell.

Completion of the updated mineral resource involved the assessment of a drill hole database, updated three-dimensional (3D) mineral resource models, and available written reports. Armitage visited the property on the 10<sup>th</sup> and 11<sup>th</sup> of July, 2017. The effective date of the updated mineral resource estimate is August 25<sup>th</sup>, 2017.

Inverse Distance Cubed (%D<sup>3</sup>+) restricted to mineralized domains was used to Interpolate gold grades (g/t Au) into a block model. Measured, Indicated and Inferred mineral resources are reported in the summary tables in Section 14-10. The mineral resource estimate takes into consideration that the Eau Claire Deposit will be mined by both open pit and underground mining methods.

# 14.2 Drill Hole Database

In order to complete an updated mineral resource estimate for the Eau Claire Deposit, a database comprising a series of comma delimited spreadsheets containing drill hole and channel information was provided by Eastmain. The database included hole and channel location information (NAD83 / UTM Zone 18U), survey data, assay data, lithology data and specific gravity data. The data was then imported into GEOVIA GEMS version 6.7.4 software (%GEMS+) for statistical analysis, block modeling and resource estimation. After an initial evaluation of the database, a number of drill holes and channels were removed that were located outside the Eau Claire Deposit area. As a result, the current database does not include all drill holes and channels completed on the Project.

A summary of the drill hole and channel database is presented in Table 14-1. The database comprises data for 867 surface drill holes and 426 channels and includes 211 drill holes completed from 2015 to 2017 by Eastmain, completed since the last mineral resource estimate on the Eau Claire Deposit (Figure 14-1 to Figure 14-3). The database totals 176,061 drill core assay samples and 2,254 channel assay samples.

In addition to the digital database, Eastmain provided three-dimensional (3D), grade controlled wireframe models representing the vein structures, in DXF format (Figure 14-1 to Figure 14-3), as well as a digital elevation model and a 3D model of the overburden cover.

Drilling Period	Company	# of Surface Drill Holes	Metres of Surface Drilling	# of Channels	Metres of Channel Sampling
1976	SEREM/SDBJ	4	367		
1984-1989	Westmin/ Eastmain	53	5,919		
1996 - 2001	SOQUEM	80	17,689	196	284
2001 – 2013	Eastmain	519	171,928	230	1,061
2015	Eastmain	29	12,898		
2016	Eastmain	70	22,601		
2017	Eastmain	112	42,651		
Total		867	274,054	426	1,345

# 14.3 Mineral Resource Modelling and Wireframing

For the 2017 updated mineral resource estimate for the Eau Claire Deposit, a total of 142 3D grade controlled wireframe models, representing separate vein structures and vein clusters, were constructed and provided by Eastmain (Figure 14-1 to Figure 14-3). The 3D grade controlled models were built by visually interpreting mineralized intercepts from cross sections using gold values. Polygons of mineral intersections (snapped to drill holes) were made on each cross section and these were wireframed together to create continuous resource wireframe models in GEOVIA Surpacï version 6.2 software. The wireframes were imported into GEMS.

The polygons of mineral intersections were constructed on 25 m spaced sections (looking west) with a 12.5 m sectional influence. The sections were created perpendicular to the general strike of the mineralization. The grade control models were drawn using an approximate 1.0 g/t cut-off grade based on assay samples and a minimum mining width of approximately 2.0 metres. For those intersections that did not meet the minimum mining width requirement, the solid outline was drawn to take in waste from either side of intersections. The models were extended 12.5 to 25 metres beyond the last known intersection along strike and 25 . 50 metres up and down dip. The suite of 142 vein structures in the Eau Claire Deposit area extends for approximately 1,500 metres along strike and to depths of up to 850 metres in the eastern end of the deposit area.

As with the previous mineral resource estimate by SRK, modelling of the Eau Claire Deposit was subdivided into two zones: the 450 West and 850 West zones. In the 450 West zone, modelling defined four orientations of primary quartz-tourmaline veins; a well-defined east-west high grade vein system (450HGV), dipping moderately to the south; a series of northwest-southeast trending, moderately southwest-dipping veins (450NW) and; schist-hosted veins (HGS), and a series of west-northwest-trending, moderately south-southwest dipping veins.

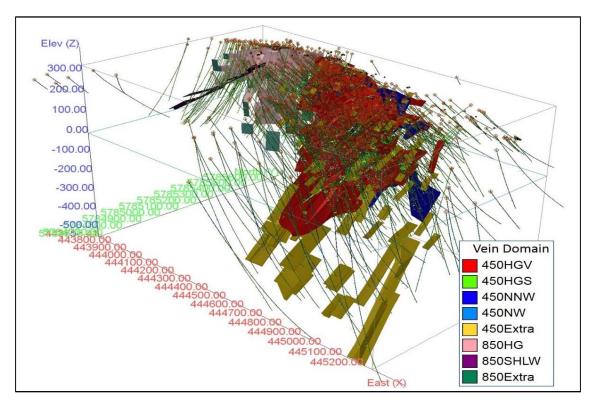
Vein modelling in the 850 West zone defined two primary vein systems: a distinct steep northeast-southwest primary vein set (850HG) that crosscuts an older shallow-to-moderately dipping northwest-southeast trending vein set (850SHLW).

In addition to the primary vein systems discussed above, a secondary set of domains referred to as 450EXTRA and 850EXTRA (previously referred to as % wein swarm domains+by SRK) are defined as zones of intermittent veining and alteration, where drilling density is insufficient to model individual veins with confidence. Similar to the primary veins, the secondary veins were modelled using an approximate 1.0 g/t cut-off grade based on assay samples and a minimum mining width of approximately 2.0 metres. Where intersections did not meet the minimum mining width requirement, the wire frame solid outline was drawn to take in waste from either side of intersections.



It should be noted that the % wein swarm domains+of SRK (54 in the 450 West zone and 19 in the 850 West zone) were modelled using logged vein/alteration intervals and gold assay values at a threshold of 0.1 g/t Au. The SRK models were much more extensive than the revised secondary vein models used for the current mineral resource.

# Figure 14-1 Isometric View Looking Northwest Showing the Distribution of all Surface Drill Holes and Channels Completed in the Eau Claire Deposit Area, and the Eau Claire Deposit Vein Structure Models





# Figure 14-2Isometric View Looking Northwest Showing the Distribution of 2015 to 2017Surface Drill Holes, and the Eau Claire Deposit Vein Structure Models

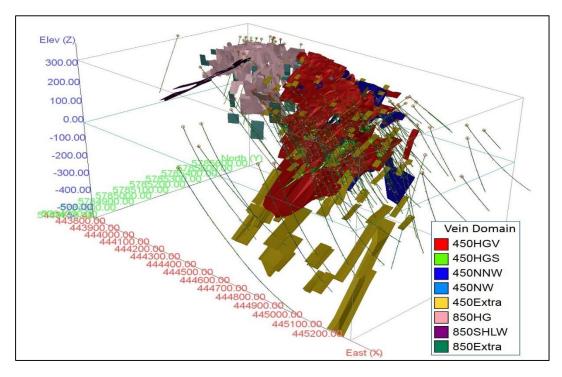
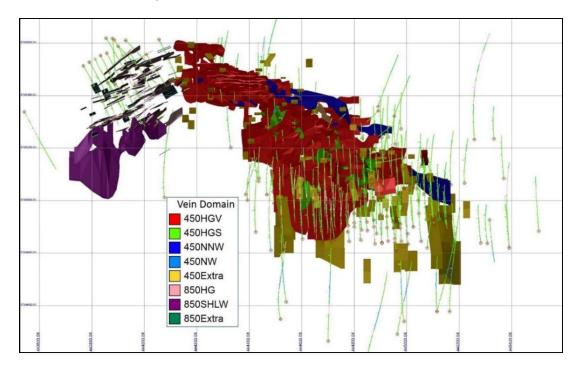


Figure 14-3 Plan View Showing the Distribution of 2015 to 2017 Surface Drill Holes, and Vertical Projection of Eau Claire Deposit Vein Structure Models



Vein Zone	High Grade Gold Vein Structure	Vein Domain	Rock Code	# of Vein Models	Domain Volume	Domain Tonnage
450 West Zone	450 E-W High Grade Veins	450HGV	95	82	2,164,668	6,364,124
	450 NW High Grade Schist Veins	450HGS	110	3	344,613	1,013,162
	450 NW High Grade Veins	450NW	130	3	67,402	198,162
	450 WNW High Grade Veins	450WNW	120	6	443,640	1,304,302
	450 EW Secondary Intermittent Veins	450EXTRA	91	1	1,095,543	3,220,896
850 West Zone	850 NE High Grade Veins	850HG	140	43	558,047	1,640,658
	850 Shallow West Veins	850SHLW	150	3	118,042	347,044
	850 NE Secondary Intermittent Veins	850EXTRA	96	1	104,247	306,486
		Total:		142	4,896,202	14,394,834

 Table 14-2
 Eau Claire Deposit - Vein Structure and Vein Domain Description

# 14.4 Compositing

The assay sample database available for the revised resource modelling totalled 219,642 assays representing 232,891 metres of core. Of these assays, 12,914 assays from 690 drill holes and 276 channels occur within the Eau Claire Deposit mineral domains. A statistical analysis of the drill core and channel assay data from within the mineralized domains is presented in (Table 14-3). Average width of the drill core sample intervals is 0.61, within a range of 0.10 metres to 1.60 metres; the average width of the channel assay samples is 0.57, within a range of 0.22 to 2.00 metres. Of the total assay population approximately 98 % are 1.00 metres or less with approximately 24% of the samples from 0.55 to 1.00 metres in length. To minimize the dilution and over smoothing due to compositing, a composite length of 1.00 metres was chosen as an appropriate composite length for the resource estimation. Figure 14-4 and Figure 14-5

Figure 14-4 shows the relationship between assay length and gold grade. As is shown on Figure 14-5, higher grade assays are typically shorter in length (< 1.0 m). For this reason, it was decided to composite the assay data prior to carrying out the capping analysis.

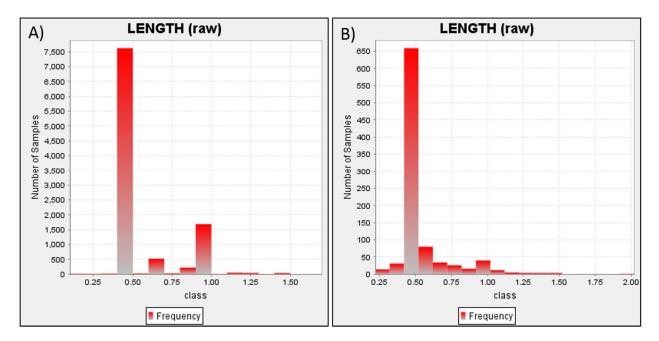
One metre composites for gold were generated starting from the collar of each hole. Un-assayed intervals were given a value of 0.001 g/t Au. Composites were then constrained to the mineral domains. The constrained composites were extracted to point files for statistical analysis and capping studies. The constrained composites were grouped based on the vein domain (rock code) of the constraining wireframe model.

A total of 7,356 composite sample points occur within the resource wire frame models (Table 14-4). These values were used to interpolate grade into resource blocks.

Table 14-3	Statistical Analysis of the Drill Core and Channel Assay Data from Within the
	Eau Claire Deposit Mineral Domains

Variable	Drill Core	Channels
Total # Assay Samples	10,306	930
Average Sample Length	0.61 m	0.57 m
Minimum and Maximum Length	0.0 to 1.6 m	0.0 to 2.0 m
Total Sample Length	6,252 m	526 m
Minimum Grade	0.00 g/t	0.00 g/t
Maximum Grade	2,540 g/t	407 g/t
Mean	4.57 g/t	12.4 g/t
Median	0.76 g/t	2.42 g/t
Variance	824	1,086
Standard Deviation	28.7 g/t	32.9 g/t
Coefficient of variation	6.28	2.65
97.5 Percentile	32.7 g/t	83.2 g/t

# Figure 14-4 Sample length histogram for A) Drill Core B) and Channel Assay Samples from Within the Eau Claire Deposit Mineral Domains



# Figure 14-5 Assay Sample Length versus Assay Value of Drill Core (A) and Channel (B) Samples from Within the Eau Claire Deposit Mineral Domains

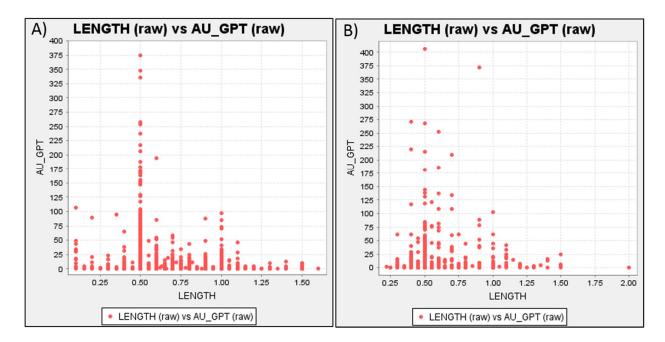


Table 14-4Summary of the 1.0 metre Composite Data Constrained by the Eau Claire<br/>Mineral Resource Models (Drill Hole and Channel Samples)

Variable	Gold
Total # of Composites	7,356
Average Composite Length	1.00 m
Minimum value	0.00 g/t
Maximum value	1,270 g/t
Mean	4.75 g/t
Median	1.13 g/t
Variance	598
Standard Deviation	24.5 g/t
Coefficient of variation	5.15
97.5 Percentile	29.1 g/t

Variable			Gold (g/t)		
450 Vein Domains	450HGV	450HGS	450NW	450WNW	450EXTRA
Total # of Composites	3,565	526	109	1,260	761
Average Sample Length	1.00 m	1.00 m	1.00 m	1.00 m	1.00 m
Minimum value	0.00	0.00	0.00	0.00	0.00
Maximum value	252	68.6	46.4	1,270	168
Mean	5.12	4.84	2.91	4.85	4.55
Median	1.11	1.75	0.94	0.83	1.94
Variance	206	65.5	31.9	2,581	82.1
Standard Deviation	14.4	8.09	5.65	50.8	9.06
Coefficient of variation	2.81	1.67	1.94	10.5	1.99
97.5 Percentile	35.1	29.2	18.2	21.6	27.9

Table 14-5	Summary of the 1.0 metre Composite Da	a Subdivided by Vein Domain
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Variable		Gold				
	850HG	850SHLW	850EXTRA			
Total # of Composites	869	178	88			
Average Sample Length	1.00 m	1.00 m	1.00 m			
Minimum value	0.00	0.00	0.00			
Maximum value	372	32.5	58.7			
Mean	4.30	1.22	3.28			
Median	0.97	0.43	1.59			
Variance	348	8.66	48.1			
Standard Deviation	18.7	2.94	6.93			
Coefficient of variation	4.33	2.42	2.11			
97.5 Percentile	22.7	9.11	19.7			

# 14.5 Grade Capping

A statistical analysis of the composite database within the Eau Claire Deposit 3D wireframe models (the %esource+population) was conducted to investigate the presence of high grade outliers which can have a disproportionately large influence on the average grade of a mineral deposit. High grade outliers in the composite data were investigated using statistical data (Table 14-5), histogram plots, and cumulative probability plots of the 1.0 m composite data. The statistical analysis was conducted by vein domain and was completed using Geovia GEMS 6.7.4 software

After review it is the Authors opinion that capping of high grade composites to limit their influence during the grade estimation is necessary. A summary of grade capping values by Vein Domain is presented in. A total of 39 composite samples were capped. The capped gold composites were used for grade interpolation into the Eau Claire Deposit block model.

Vein Domain	Total # of Composites	Capping Value Au (g/t)	# of Capped Composites	Mean of Raw Composites	Mean of Capped Composites	CoV of Raw Composites	CoV of Capped Composites	Capping Percentile
450HGV	3,565	120	10	5.12	4.97	2.81	2.54	99.71
450HGS	526	45	2	4.84	4.75	1.67	1.58	99.52
450NW	109	45	1	2.91	2.89	1.94	1.92	99.52
450WNW	1,260	45	6	4.85	2.86	10.5	2.05	99.52
450EXTRA	761	45	2	4.55	4.34	1.99	1.52	99.67
850HG	869	40	11	4.30	3.12	4.33	2.04	98.79
850SHLW	178	10	3	1.22	1.09	2.42	1.73	98.59
850EXTRA	88	10	4	3.28	2.49	2.11	1.04	95.44

 Table 14-6
 Gold Grade Capping Summary by Vein Domain

# 14.6 Specific Gravity

For the 2015 mineral resource estimate completed by SRK, the specific gravity (%G+) database contained 512 measurements. Eastmain had submitted 512 full sample length, HQ-size half core samples to SGS for SG determinations by pycnometry. Of the 512 samples, 493 of the measurements were from within the 450 zone veins with the remaining 19 samples from waste rocks. No SG data was collected from the 850 zone veins. The SG data from the 450 zone veins had a mean value of 2.92. For the mineral resource estimate, a value of 2.92 was assigned to the 450 zone vein domains as well to the 850 zone vein domains as the two areas are mineralogically and lithologically similar. The remaining 19 SG measurements, primarily from basalt also averaged 2.92. As a result all geological or waste domains were assigned an SG value of 2.92.

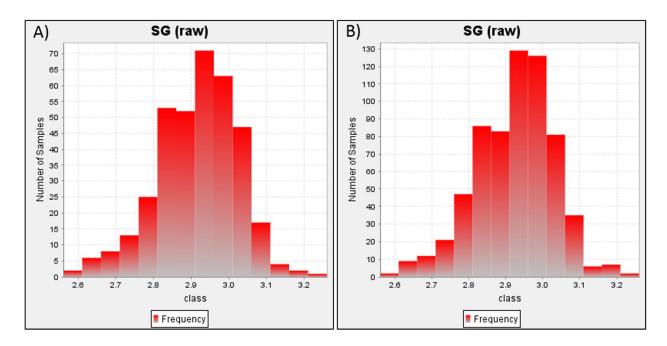
For the updated mineral resource, Eastmain collected an additional 137 mineralized samples from the 450 zone veins for SG determinations. Eastmain submitted the full sample length, NQ-size half core samples to ALS Minerals of North Vancouver for SG determinations by pycnometry. The average SG value of the 137 mineralized samples is 2.92. The total database now consists of 649 samples. After reviewing the database, it was decided that 3 anomalously low samples (< 2.50) be removed from the database, bringing the total to 646 samples.

The 646 SG measurements ranged from 2.56 to 3.24 and averaged 2.92 (Figure 14-6). The average grade of the 646 samples in the database is 6.15 g/t Au, ranging from 0.00 to 120 g/t (capped). Despite the high grade of a number of the samples, there appears to be little correlation of density value and gold grade (Figure 14-7).

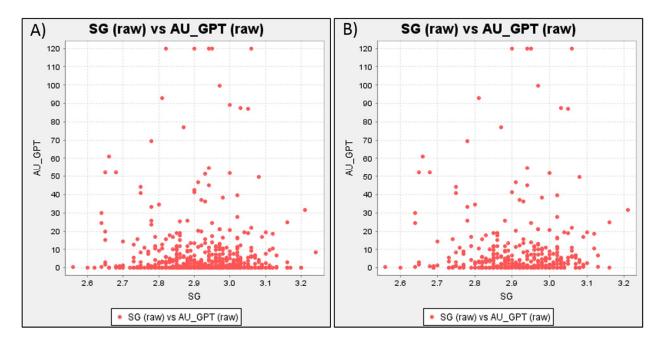
The data was subdivided into samples from within the revised 450 zone vein domains and samples from outside the revised vein domains. Of the 646 samples, 364 samples are from with the 450 zone vein domains. The average SG of these samples is 2.91 with a range of 2.56 to 3.21; the average grade of these samples is 9.1 g/t Au (4 samples capped to 120 g/t Au). A total of 282 samples are from outside the vein domains and average 2.93 with a range of 2.63 to 3.24.

For the 2017 mineral resource estimate update an SG of 2.92 is used.

# Figure 14-6 Histogram of Specific Gravity A) All Samples and B) Samples from Within the Vein Domains



# Figure 14-7 Specific Gravity versus Gold Grade for A) All Samples and B) Samples from within the Vein Domains (Samples capped at 120 g/t Au)



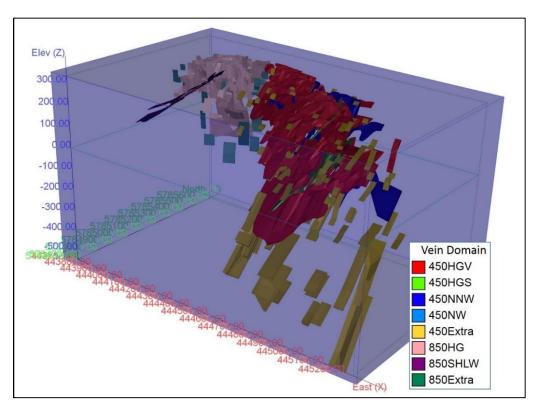
# 14.7 Block Model Parameters

The Eau Claire Deposit wire frames were used to constrain composite values chosen for interpolation, and the mineral blocks reported in the estimate of the mineral resource. A block model within NAD83 / UTM Zone 18U (Table 14-7) space (no rotation) (Figure 14-8) with block dimensions of 5 x 5 x 5 metres in the x (east), y (north) and z (level) directions was placed over the grade shells with only that portion of each block inside the shell recorded (as a percentage of the block) as part of the mineral resource estimate (% Block Model). The block size was selected based on borehole spacing, composite assay length, the geometry of the vein structures, and the selected starting mining method (Open Pit). At the scale of the Eau Claire Deposit this provides a reasonable block size for discerning grade distribution, while still being large enough not to mislead when looking at higher cut-off grade distribution within the model. The model was intersected with an overburden model and surface topography to exclude blocks, or portions of blocks, that extend above the bedrock surface.

# Table 14-7 Deposit Block Model Geometry

Model Name	UH Deposit					
woder name	X (North)	Y (East)	Z (Level)			
Origin (NAD83 / UTM Zone 17U)	443650	5784650	340			
Extent	325	210	180			
Block Size	5	5	5			
Rotation (counter clockwise)		0°				

# Figure 14-8 Isometric View Looking Northwest Showing the Eau Claire Deposit Mineral resource Block Model and Vein Structures



# 14.8 Grade Interpolation

A 3D semi-variography analysis of mineralized points by vein domain was completed for several of the larger vein structures including the 450HGV and 850HG vein structures using Geovia GEMS 6.7.4 software. The analysis did not determine search ellipses of sufficient quality to be used for geostatistical grade estimation (Ordinary Kriging). A search ellipse for each of the vein domains was interpreted based on drill hole (Data) spacing, and orientation and size of the resource wireframe models (Table 14-8). The search ellipse axes are generally oriented to reflect the observed preferential long axis (geological trend) of the vein structures and the observed trend of the mineralization down dip.

Grades for Au (g/t) were interpolated into blocks by the Inverse Distance Cubed (ID<sup>3</sup>) method. Three passes were used to interpolate grade into all of the blocks in the grade shells (Table 14-8). For Pass 1 the search ellipse size (in metres) for all vein domains was set at 20 x 20 x 5 in the X, Y, Z direction; for Pass 2 the search ellipse size for each domain was set at 45 x 45 x 15; for Pass 3 the search ellipse size was set at 100 x 100 x 20. Blocks were classified as Measured if they were populated with grade during Pass 1 and Indicated if they were populated with grade during Pass 2 of the interpolation procedure. The Pass 3 search ellipse size was set to assure all remaining blocks within the wireframe were assigned a grade. These blocks were classified as Inferred.

Grades were interpolated into blocks using a minimum of 6 and maximum of 10 composites to generate block grades during Pass 1 and Pass 2 (maximum of 3 sample composites per drill hole), and a minimum of 3 and maximum of 10 composites to generate block grades during pass 3 (Table 14-8).

		450HGV			450HGS	
Parameter	Pass 1	Pass 2	Pass 3	Pass 1	Pass 2	Pass 3
	Measured	Indicated	Inferred	Measured	Indicated	Inferred
Search Type	Ellipsoid			Ellipsoid		
Principle Azimuth	180°			235°		
Principle Dip	-40°			-45°		
Intermediate Azimuth	270°			325°		
Anisotropy X	20	45	100	20	45	100
Anisotropy Y	20	45	100	20	45	100
Anisotropy Z	5	15	20	5	15	20
Min. Samples	6	6	3	6	6	3
Max. Samples	10	10	10	10	10	10
Min. Drill Holes	2	2	1	2	2	1
		450NW		_	 450WNW	-
Parameter	Measured	Indicated	Inferred	Measured	Indicated	Inferred
Search Type	Ellipsoid	malcatea	interred	Ellipsoid	maicated	interred
Principle Azimuth	235°			195°		
Principle Dip	-45°			-45°		
Intermediate Azimuth	325°			285°		
Anisotropy X	20	45	100	20	45	100
	20	45	100	20	45	100
Anisotropy Y	5	45	20	5	45	20
Anisotropy Z			-	-		-
Min. Samples	6	6	3	6	6	3
Max. Samples	10	10	10	10	10	10
Min. Drill Holes	2	2	1	2	2	1
Parameter	Measured	450EXTRA Indicated	Inferred	Measured	850HG Indicated	Inferred
Search Type	Ellipsoid	muicateu	Interreu	Ellipsoid	muicateu	interreu
	180°			155°		
Principle Azimuth	-40°			85°		
Principle Dip						
Intermediate Azimuth	270°	45	100	245°	45	100
Anisotropy X	20	45	100	20	45	100
Anisotropy Y	20	45	100	20	45	100
Anisotropy Z	5	15	20	5	15	20
Min. Samples	6	6	2	6	6	3
Max. Samples	10	10	10	10	10	10
Min. Drill Holes	2	2	1	2	2	1
Parameter		850SHLW			850EXTRA	
c 1 <del>T</del>	Measured	Indicated	Inferred	Measured	Indicated	Inferred
Search Type	Ellipsoid			Ellipsoid		
Principle Azimuth	235°			155°		
Principle Dip	-35°			85°		
Intermediate Azimuth	155°			245°		
Anisotropy X	20	45	100	20	45	100
Anisotropy Y	20	45	100	20	45	100
Anisotropy Z	5	15	20	5	15	20
Min. Samples	6	6	3	6	6	2
Max. Samples	10	10	10	10	10	10
Min. Drill Holes	2	2	1	2	2	1

# Table 14-8 Grade Interpolation Parameters by Vein Domain

## **14.9** Mineral Resource Classification Parameters

The updated Measured, Indicated and Inferred mineral resource estimate presented in this Technical Report were prepared and disclosed in compliance with all disclosure requirements for mineral resources set out in the NI 43-101 Standards of Disclosure for Mineral Projects (2011). The classification of the updated mineral resource is consistent with CIM Definition Standards - For Mineral Resources and Mineral Reserves (2014), including the critical requirement that all mineral resources % ave reasonable prospects for eventual economic extraction+.

A Mineral Resource is a concentration or occurrence of solid material of economic interest in or on the Earths crust in such form, grade or quality and quantity that there are reasonable prospects for eventual economic extraction.

The location, quantity, grade or quality, continuity and other geological characteristics of a Mineral Resource are known, estimated or interpreted from specific geological evidence and knowledge, including sampling.

#### Measured Mineral Resource

A Measured Mineral Resource is that part of a Mineral Resource for which quantity, grade or quality, densities, shape, and physical characteristics are estimated with confidence sufficient to allow the application of Modifying Factors to support detailed mine planning and final evaluation of the economic viability of the deposit.

Geological evidence is derived from detailed and reliable exploration, sampling and testing and is sufficient to confirm geological and grade or quality continuity between points of observation.

A Measured Mineral Resource has a higher level of confidence than that applying to either an Indicated Mineral Resource or an Inferred Mineral Resource. It may be converted to a Proven Mineral Reserve or to a Probable Mineral Reserve.

Mineralization or other natural material of economic interest may be classified as a Measured Mineral Resource by the Qualified Person when the nature, quality, quantity and distribution of data are such that the tonnage and grade or quality of the mineralization can be estimated to within close limits and that variation from the estimate would not significantly affect potential economic viability of the deposit. This category requires a high level of confidence in, and understanding of, the geology and controls of the mineral deposit.

#### Indicated Mineral Resource

An <u>indicated</u> Mineral Resourceqis that part of a Mineral Resource for which quantity, grade or quality, densities, shape and physical characteristics can be estimated with a level of confidence sufficient to allow the appropriate application of technical and economic parameters, to support mine planning and evaluation of the economic viability of the deposit. Geological evidence is derived from adequately detailed and reliable exploration, sampling and testing and is sufficient to assume geological and grade or quality continuity between points of observation.

An Indicated Mineral Resource has a lower level of confidence than that applying to a Measured Mineral Resource and may only be converted to a Probable Mineral Reserve.

Mineralization may be classified as an Indicated Mineral Resource by the Qualified Person when the nature, quality, quantity and distribution of data are such as to allow confident interpretation of the geological framework and to reasonably assume the continuity of mineralization. The Qualified Person must recognize the importance of the Indicated Mineral Resource category to the advancement of the feasibility of the project. An Indicated Mineral Resource estimate is of sufficient quality to support a Preliminary Feasibility Study which can serve as the basis for major development decisions.

#### Inferred Mineral Resource

An Inferred Mineral Resource is that part of a Mineral Resource for which quantity and grade or quality are estimated on the basis of limited geological evidence and sampling. Geological evidence is sufficient to imply but not verify geological and grade or quality continuity.

An Inferred Mineral Resource has a lower level of confidence than that applying to an Indicated Mineral Resource and must not be converted to a Mineral Reserve. It is reasonably expected that the majority of Inferred Mineral Resources could be upgraded to Indicated Mineral Resources with continued exploration.

An Inferred Mineral Resource is based on limited information and sampling gathered through appropriate sampling techniques from locations such as outcrops, trenches, pits, workings and drill holes. Inferred Mineral Resources must not be included in the economic analysis, production schedules, or estimated mine life in publicly disclosed Pre-Feasibility or Feasibility Studies, or in the Life of Mine plans and cash flow models of developed mines. Inferred Mineral Resources can only be used in economic studies as provided under NI 43-101.

There may be circumstances, where appropriate sampling, testing, and other measurements are sufficient to demonstrate data integrity, geological and grade/quality continuity of a Measured or Indicated Mineral Resource, however, quality assurance and quality control, or other information may not meet all industry norms for the disclosure of an Indicated or Measured Mineral Resource. Under these circumstances, it may be reasonable for the Qualified Person to report an Inferred Mineral Resource if the Qualified Person has taken steps to verify the information meets the requirements of an Inferred Mineral Resource.

## 14.10 Mineral Resource Statement

The general requirement that all mineral resources have **%**easonable prospects for economic extraction+ implies that the quantity and grade estimates meet certain economic thresholds and that the mineral resources are reported at an appropriate cut-off grade taking into account extraction scenarios and processing recoveries. In order to meet this requirement, SGS considers that the Eau Claire Deposit mineralization is amenable for open pit and underground extraction.

In order to determine the quantities of material offering **%**easonable prospects for economic extraction+by an open pit, Whittleï pit optimization software and reasonable mining assumptions to evaluate the proportions of the block model (Measured, Indicated and Inferred blocks) that could be **%**easonably expected+to be mined from an open pit were used. The pit optimization was completed by SGS. The pit optimization parameters used are summarized in Table 14-9. A conservative and balanced approach was applied when optimizing the open pit and underground scenario. A Whittle pit shell at a revenue factor of 0.5 was selected as the ultimate pit shell for the purposes of this mineral resource estimate. The corresponding strip ratio is 11.9:1 and the average open pit depth is approximately 150 m.

The reader is cautioned that the results from the pit optimization are used solely for the purpose of testing the %easonable prospects for economic extraction+ by an open pit and do not represent an attempt to estimate mineral reserves. There are no mineral reserves on the Property. The results are used as a guide to assist in the preparation of a mineral resource statement and to select an appropriate resource reporting cut-off grade.

The updated mineral resource estimate for the Eau Claire Deposit is presented in Table 14-10 and includes an open pit and an underground mineral resource (Table 14-11) (Figure 14-9 and Figure 14-10).

Highlights of the Eau Claire Deposit Mineral Resource Estimate are as follows:

- The Eau Claire Deposit contains mineral resources of 825,000 ounces of gold (4.17 million tonnes at an average grade of 6.16 g/t Au) in the Measured and Indicated category, and 465,000 ounces of gold (2.23 million tonnes at an average grade 6.49 g/t Au) in the Inferred category.
- The open pit mineral resource includes, at a cut-off grade of 0.5 g/t Au, 233,000 ounces of gold (2.23 million tonnes at an average grade of 5.90 g/t Au) in the Measured and Indicated category, and 6,000 ounces of gold (39 thousand tonnes at an average grade of 4.78 g/t Au) in the Inferred category.
- The underground mineral resource includes, at a cut-off grade of 2.5 g/t Au, 593,000 ounces of gold (2.94 million tonnes at an average grade of 6.26 g/t Au) in the Measured and Indicated category, and 459,000 ounces of gold (2.19 million tonnes at an average grade of 6.52 g/t Au) in the Inferred category.

## Table 14-9Whittle™ Pit Optimization Parameters

Parameter	Value	Unit
Gold Price	1,250/1,563	US\$/CDN\$ per ounce
Exchange Rate	0.80	\$US/\$CDN
Mining Cost	2.80 / 3.50	US\$/CDN\$ per tonne mined
Processing Cost	16.00 / 20.00	US\$/CDN\$ per tonne milled
General and Administrative	4.00 / 5.00	US\$/CDN\$ per tonne of feed
Overall Pit Slope	50	Degrees
Gold Recovery	95	Percent (%)
Mining loss / Dilution (open pit)	5/5	Percent (%) / Percent (%)

#### Table 14-10 Eau Claire Deposit 2017 Mineral Resource Estimate, August 25<sup>th</sup>, 2017

Category	Tonnes	Grade (g/t Au)	Contained Au (oz)
Measured	932,000	6.67	200,000
Indicated	3,238,000	6.01	626,000
Measured & Indicated	4,170,000	6.16	826,000
Inferred	2,227,000	6.49	465,000

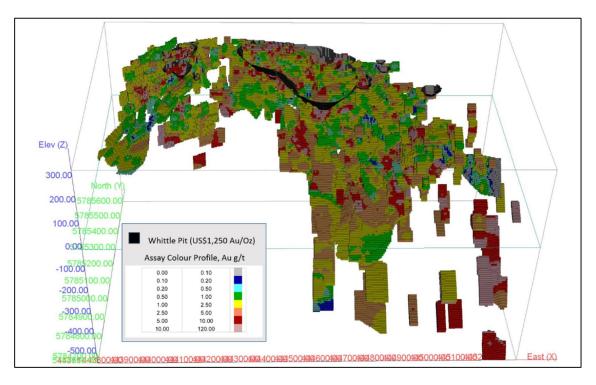
# Table 14-11Eau Claire Deposit 2017 Broken Out into an Open Pit and Underground<br/>Mineral Resource, August 25th, 2017

	Open Pit (surface to 150 m)		Underground (150 m – 860 m)			
Category	Tonnes	Grade (g/t Au)	Contained Au (oz)	Tonnes	Grade (g/t Au)	Contained Au (oz)
Measured	618,000	6.69	133,000	314,000	6.64	67,000
Indicated	610,000	5.10	100,000	2,628,000	6.22	526,000
Meas & Ind	1,228,000	5.90	233,000	2,942,000	6.26	593,000
Inferred	39,000	4.78	6,000	2,188,000	6.52	459,000

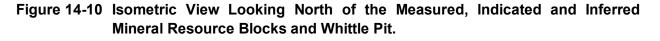
(1) Mineral resources which are not mineral reserves do not have demonstrated economic viability. All figures are rounded to reflect the relative accuracy of the estimate. Composites have been capped where appropriate.

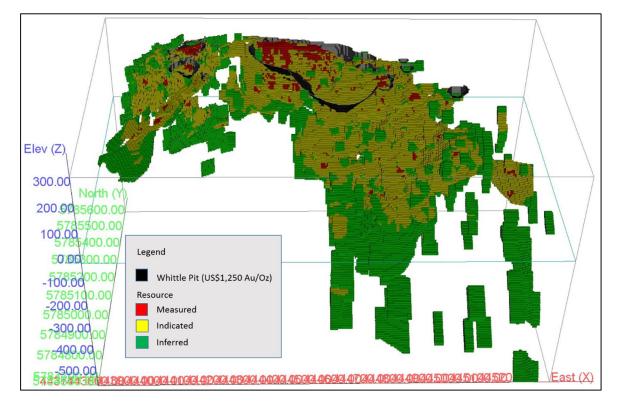
- (2) Open pit mineral resources are reported at a cut-off grade of 0.5 g/t Au within a conceptual pit shell and underground mineral resources are reported at a cut-off grade of 2.5 g/t Au outside the conceptual pit shell. Cut-off grades are based on a gold price of US\$1,250 per ounce, a foreign exchange rate of US\$0.80, and a gold recovery of 95%.
- (3) The results from the pit optimization are used solely for the purpose of testing the %easonable prospects for economic extraction+by an open pit and do not represent an attempt to estimate mineral reserves. There are no mineral reserves on the Property. The results are used as a guide to assist in the preparation of a mineral resource statement and to select an appropriate resource reporting cut-off grade.

# Figure 14-9 Isometric View Looking North of the Eau Claire Deposit Mineral Resource Block Grades and Whittle Pit.









# 14.11 Model Validation and Sensitivity Analysis

The total volume of the Eau Claire Deposit resource blocks in the mineral resource model, at a 0.0 g/t Au cut-off grade value compared well to the total volume of the vein structures with the total volume of the block model being 2.87% lower than the total volume of the vein structures (Table 14-2). Visual checks of block grades gold against the composite data on vertical section showed good correlation between block grades and drill intersections.

A comparison of the average gold composite grade with the average gold grade of all the Au blocks in the block model, a 0.0 g/t Au cut-off grade was completed and is presented in Table 14-13. The block model average grade is approximately 15% lower than the average capped composite grade likely as a result of smoothing during grade interpolation.

For comparison purposes, additional grade models were generated using the inverse distance squared weighting (ID2) and nearest neighbour (NN) interpolation methods. The results of these models are compared to the ID3 models at various cut-off grades in a series of grade/tonnage graphs shown in Figure 14-11. In general the ID2 and ID3 models show similar results and both are more conservative and smoother than the NN model. For models well-constrained by wireframes and well-sampled (close spacing of data), ID2 should yield very similar results to other interpolation methods such ID3 or Ordinary Kriging.



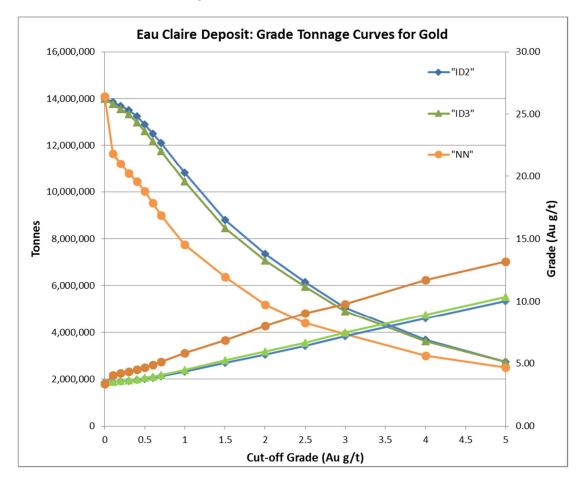
# Table 14-12 Comparison of Block Model Volume with the Total Volume of the Vein Structures

Deposit	Total Domain Volume	Block Model Volume	Difference %
Eau Claire Deposit	14,394,834	13,981,000	2.87%

# Table 14-13 Comparison of Average Composite Grades with Block Model Grades

Deposit	Variable	Total	AU (g/t)
Eau Claire Deposit	Composites	7,356	4.75
	Composites Capped	7,356	4.15
	Blocks	148,662	3.50

# Figure 14-11 Comparison of Inverse Distance Cubed ("ID<sup>3</sup>"), Inverse Distance Squared ("ID<sup>2</sup>") & Nearest Neighbour ("NN") Models for the Global Mineral Resource (In-Pit and Underground)



## 14.11.1 Sensitivity to Cut-off Grade

The Eau Claire Deposit mineral resource has been estimated at a range of cut-off grades presented in Table 14-14 to demonstrate the sensitivity of the resource to cut-off grades. The current mineral resources are reported at a cut-off grade of 0.5 g/t Au within a conceptual pit shell and underground mineral resources are reported at a cut-off grade of 2.5 g/t Au outside the conceptual pit shell.

Open Pit <sup>(1)</sup>									
		Measure	ed	Indicated			Inferred		
Cut-off	Tannaa	Au	Contained	Tannaa	Au	Contained	Tannaa	Au	Contained
Au g/t	Tonnes	(g/t)	Au (oz)	Tonnes	(g/t)	Au (oz)	Tonnes	(g/t)	Au (oz)
0.0	647,000	6.39	133,000	650,000	4.78	100,000	41,000	4.55	6,000
0.1	647,000	6.39	133,000	648,000	4.80	100,000	41,000	4.55	6,000
0.2	644,000	6.42	133,000	646,000	4.81	100,000	41,000	4.55	6,000
0.3	636,000	6.50	133,000	640,000	4.86	100,000	40,000	4.67	6,000
0.4	627,000	6.60	133,000	628,000	4.95	100,000	40,000	4.67	6,000
0.5	618,000	6.69	133,000	610,000	5.10	100,000	39,000	4.78	6,000
0.6	606,000	6.77	132,000	597,000	5.21	100,000	38,000	4.91	6,000
0.7	593,000	6.92	132,000	580,000	5.31	99,000	38,000	4.91	6,000
1.0	557,000	7.31	131,000	541,000	5.63	98,000	34,000	4.57	5,000
1.5	503,000	7.98	129,000	476,000	6.27	96,000	30,000	5.18	5,000
2.0	452,000	8.67	126,000	428,000	6.76	93,000	27,000	5.76	5,000
2.5	407,000	9.40	123,000	388,000	7.21	90,000	21,000	7.40	5,000
				Undergr	ound <sup>(1)</sup>				
		Measure	ed		Indicated	t l		Inferred	k
Cut-off	Tonnos	Au	Contained	Toppos	Au	Contained	Toppos	Au	Contained
Au g/t	Tonnes	(g/t)	Au (oz)	Tonnes	(g/t)	Au (oz)	Tonnes	(g/t)	Au (oz)
0.5	700,000	3.69	83,000	6,379,000	3.34	686,000	4,264,000	4.03	552,000
0.6	668,000	3.86	83,000	6,111,000	3.47	681,000	4,160,000	4.12	551,000
0.7	640,000	3.98	82,000	5,840,000	3.60	676,000	4,067,000	4.20	549,000
1.0	558,000	4.46	80,000	5,070,000	4.02	655,000	3,674,000	4.56	539,000
1.5	442,000	5.28	75,000	3,984,000	4.77	611,000	3,023,000	5.27	512,000
2.0	368,000	6.00	71,000	3,225,000	5.49	569,000	2,582,000	5.88	488,000
2.5	314,000	6.64	67,000	2,628,000	6.22	526,000	2,188,000	6.52	459,000
3.0	265,000	7.39	63,000	2,173,000	6.94	485,000	1,718,000	7.57	418,000
4.0	198,000	8.64	55,000	1,514,000	8.46	412,000	1,327,000	8.79	375,000
5.0	152,000	10.03	49,000	1,132,000	9.84	358,000	1,010,000	10.19	331,000

Table 14-14	Eau Claire Deposit Mineral Resource at Various Gold Cut-off Grades
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(1) Open pit mineral resources are reported at a cut-off grade of 0.5 g/t Au within a conceptual pit shell and underground mineral resources are reported at a cut-off grade of 2.5 g/t Au outside the conceptual pit shell. Values in this table reported above and below the cut-off grades should not be misconstrued with a Mineral Resource Statement. The values are only presented to show the sensitivity of the block model estimates to the selection of cut-off grade. All values are rounded to reflect the relative accuracy of the estimate and numbers may not add due to rounding.

## 14.11.2 Sensitivity to Metal Price

A price sensitivity analysis was prepared using a downside scenario gold price of US\$1,150/oz as well as an upside scenario at US\$1,350/oz. Whittleï pit optimization was completed using the same optimization parameters as for the mineral resource estimate except for changing the gold price. The results of the sensitivity analysis are presented in Table 14-15. Table 14-15 and

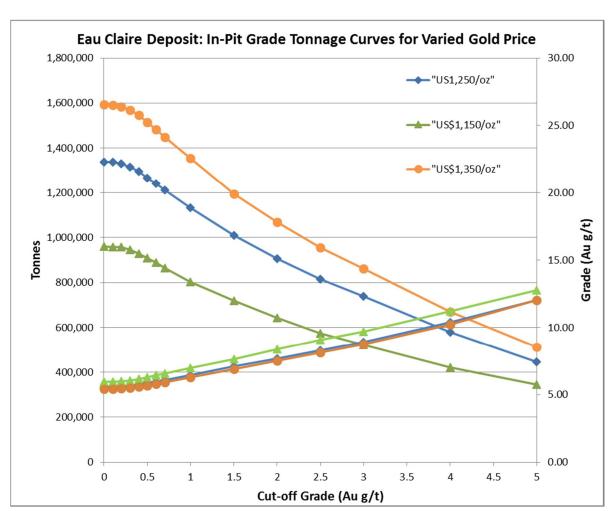
Figure 14-12 demonstrate that the Eau Claire Deposit in-pit mineral resource estimate is sensitive to a  $\pm$  US\$100 change in gold price.

# Table 14-15In-PitMineralResourcesEstimatedatUS\$1,150/oz,US\$1,250/ozandUS\$1,350/ozGold Price and Reported at a 0.5 g/tAu Cut-off Grade

Gold Price	Tormos	Gold <sup>(1)</sup>				
US\$/oz	Tonnes	Grade (g/t)	Ozs			
	-	Measured				
\$1,150	566,000	6.92	126,000			
\$1,250	618,000	6.67	133,000			
\$1,350	647,000	6.55	136,000			
		Indicated				
\$1,150	321,000	5.20	54,000			
\$1,250	610,000	5.01	100,000			
\$1,350	815,000	5.09	133,000			
	Inferred					
\$1,150	21,000	5.53	4,000			
\$1,250	39,000	4.78	6,000			
\$1,350	52,000	3.97	7,000			

(1) Open pit mineral resources are reported at a cut-off grade of 0.5 g/t Au within a conceptual pit shell and underground mineral resources are reported at a cut-off grade of 2.5 g/t Au outside the conceptual pit shell. Cut-off grades are based on a gold price of US \$1,250 per ounce, Values in this table reported at a gold price of US \$1,150 and US \$1,350 are provided as an upside and down side scenario for in-pit resources only without changing cut-off grade or other parameters. These values should not be misconstrued as a current Mineral Resource Statement.





# Figure 14-12 Comparison of the In-Pit Eau Claire Deposit Mineral Resource Estimate at Varied Gold Price

# 14.12 Comparison to Previous Mineral Resource Estimate

A comparison of the current Eau Claire Deposit updated mineral resource estimate (combined open pit and underground) and the 2015 mineral resource estimate completed by SRK is presented in Table 14-16. The updated mineral resource estimate has resulted in an overall drop in tonnes (approximately 52%) and ounces (approximately 18%) in the deposit; however, the grade in the deposit shows a significant increase of approximately 57%. The resulting updated mineral resource estimate is informed by much improved and stringent 3D resource wire frame modeling and better understanding of the deposit derived from significant increases in drilling density.

# Table 14-16Comparison of the 2015 and 2017 Eau Claire Deposit Mineral ResourceEstimates, Combined In-pit and Underground.

Cut-off Grade (Au g/t)	Tonnes <sup>(1)</sup>	Au (g/t)				
		Grade	Ozs			
		Measured				
2017 Mineral Resource	932,000	6.67	200,000			
2015 Mineral Resource	970,000	7.29	227,000			
% Difference	-3.9	-8.5	-11.9			
	Indicated					
2017 Mineral Resource	3,238,000	6.01	626,000			
2015 Mineral Resource	6,255,000	3.60	724,000			
% Difference	-48	+67	-13.5			
Inferred						
2017 Mineral Resource	2,227,000	6.49	465,000			
2015 Mineral Resource	5,072,000	3.88	633,000			
% Difference	-56	+67	-26.5			

(1) Open pit mineral resources are reported at a cut-off grade of 0.5 g/t Au within a conceptual pit shell and underground mineral resources are reported at a cut-off grade of 2.5 g/t Au outside the conceptual pit shell.

# 14.13 Disclosure

All relevant data and information regarding the Project are included in other sections of this Technical Report. There is no other relevant data or information available that is necessary to make the technical report understandable and not misleading.

## **15 Mineral Reserve Estimates**

There are no mineral reserve estimates stated on this project. This section does not apply to the Technical Report.

# **16 MINING METHODS**

# **17 RECOVERY METHODS**

# **18 PROJECT INFRASTRUCTURE**

# **19 MARKET STUDIES AND CONTRACTS**

# 20 ENVIRONMENTAL STUDIES, PERMITTING AND SOCIAL OR COMMUNITY IMPACT

# 21 CAPITAL AND OPERATING COSTS

# 22 ECONOMIC ANALYSIS

### 23 ADJACENT PROPERTIES

There is no information on properties adjacent to the Property necessary to make the technical report understandable and not misleading

#### 24 OTHER RELEVANT DATA AND INFORMATION

There is no other relevant data or information available that is necessary to make the technical report understandable and not misleading. To the Authorsq knowledge, there are no significant risks and uncertainties that could reasonably be expected to affect the reliability or confidence in the exploration information or mineral resource estimate.

#### 25 CONCLUSIONS

SGS was contracted by Eastmain Resources Inc. to complete an updated mineral resource estimate for the Eau Claire Gold Deposit and to prepare a technical report written in support of the updated mineral resource estimate.

The current Mineral Resource Estimate is an update to a 43-101 Mineral Resource Estimate completed for Eastmain in 2015, the results of which were reported on April 27, 2015 (see Eastmain news release April 27, 2015, which is filed on SEDAR under Eastmains profile). The estimate was prepared by SRK Consulting (Canada) Inc. and is presented in a NI 43-101 Technical Report titled ‰echnical Report for the Eau Claire Gold Deposit, Clearwater Project, Quebec, Canada+dated June 11, 2015 (effective date of April 27, 2015) and is filed on SEDAR under Eastmains profile.

Tellurium was quantified but not considered in the previous mineral resource estimate. It is also not considered in this updated mineral resource estimate. Tellurium as a by-product is not anticipated to have any material impact on the resource estimation results.

The updated mineral resource presented in this report was estimated by Allan Armitage, Ph.D., P. Geo, of SGS and Pit optimization was completed by Sabry Abdel Hafez, Ph. D, P.Eng, of SGS. Armitage and Hafez are independent Qualified Persons as defined by NI 43-101. The reporting of the updated Mineral Resource Estimate complies with all disclosure requirements for mineral resources set out in the NI 43-101 Standards of Disclosure for Mineral Projects (2011). The classification of the updated mineral resource is consistent with CIM Definition Standards - For Mineral Resources and Mineral Reserves (2014).

The updated resource was released by Eastmain on September 11, 2017 (see Eastmain news release dated September 11<sup>th</sup>, 2017, which is filed on SEDAR under Eastmain¢ profile). The updated mineral resource estimate (Table 14-10 and Table 14-11) includes an open pit and an underground mineral resource.

Highlights of the Eau Claire Deposit Mineral Resource Estimate are as follows:

- The Eau Claire Deposit contains mineral resources of 825,000 ounces of gold (4.17 million tonnes at an average grade of 6.16 g/t Au) in the Measured and Indicated category, and 465,000 ounces of gold (2.23 million tonnes at an average grade 6.49 g/t Au) in the Inferred category.
- The open pit mineral resource includes, at a cut-off grade of 0.5 g/t Au, 233,000 ounces of gold (2.23 million tonnes at an average grade of 5.90 g/t Au) in the Measured and Indicated category, and 6,000 ounces of gold (39 thousand tonnes at an average grade of 4.78 g/t Au) in the Inferred category.
- The underground mineral resource includes, at a cut-off grade of 2.5 g/t Au, 593,000 ounces of gold (2.94 million tonnes at an average grade of 6.26 g/t Au) in the Measured and Indicated category, and 459,000 ounces of gold (2.19 million tonnes at an average grade of 6.52 g/t Au) in the Inferred category.

The pit optimization was completed by SGS using Whittleï software. A series of optimized pit shells was generated based on the optimization parameters outlined in Table 14-9. A conservative and balanced approach was applied when optimizing the open pit and underground scenario. A Whittle pit shell at a revenue factor of 0.5 was selected as the ultimate pit shell for the purposes of this mineral resource estimate. The corresponding strip ratio is 11.9:1 and the average open pit depth is approximately 150 m.

In order to complete an updated mineral resource estimate for the Eau Claire Deposit, a database comprising a series of comma delimited spreadsheets containing drill hole and channel information was provided by Eastmain. The database included hole and channel location information (NAD83 / UTM Zone

18U), survey data, assay data, lithology data and specific gravity data. The data was then imported into GEOVIA GEMS version 6.7.4 software for statistical analysis, block modeling and resource estimation. After an initial evaluation of the database, a number of drill holes and channels were removed that were located outside the Eau Claire Deposit area. As a result, the current database does not include all drill holes and channels completed on the Project.

The database comprises data for 867 surface drill holes and 426 channel samples, including 211 drill holes totalling 78,150 metres completed from 2015 to 2017 by Eastmain since the last Mineral Resource Estimate on the Eau Claire Deposit. The database totals 176,061 drill core assay samples and 2,254 channel assay samples.

The focus of the 2015 to 2017 drill programs by Eastmain consisted mainly of infill drilling used to:

- expand the understanding of the mineralizing controls at Eau Claire,
- confirm the current geological interpretation and test the limits and continuity of mineralized envelope, and
- improve drill spacing to show continuity between veins and increase overall confidence in the deposit.

In addition to the digital database, Eastmain provided three-dimensional (3D), grade controlled wireframe models representing the vein structures, in DXF format, as well as a digital elevation model and a 3D model of the overburden cover. All DXF models were imported into GEMS.

All geological data was reviewed and verified by the Authors as being accurate to the extent possible and to the extent possible all geologic information was reviewed and confirmed. The Authors feel that the assay sampling and extensive QA/QC sampling of core by Eastmain provides adequate and good verification of the data and believe the work to have been done within the guidelines of NI 43-101.

For the 2017 updated mineral resource estimate, a total of 142 3D grade controlled wireframe models, representing separate vein structures and vein clusters, were constructed and provided by Eastmain. The 3D grade controlled models were built by visually interpreting mineralized intercepts from cross sections using gold values. Polygons of mineral intersections (snapped to drill holes) were made on each cross section and these were wireframed together to create continuous resource wireframe models.

The polygons of mineral intersections were constructed on 25 m spaced sections (looking west) with a 12.5 m sectional influence. The sections were created perpendicular to the general strike of the mineralization. The grade control models were drawn using an approximate 1.0 g/t cut-off grade based on assay samples and a minimum mining width of approximately 2.0 metres. For those intersections that did not meet the minimum mining width requirement, the solid outline was drawn to take in waste from either side of intersections. The models were extended 12.5 to 25 metres beyond the last known intersection along strike and 25 . 50 metres up and down dip. The suite of 142 vein structures in the Eau Claire Deposit area extends for approximately 1,500 metres along strike and to depths of up to 850 metres in the eastern end of the deposit area.

Modelling of the Eau Claire Deposit was subdivided into two zones: the 450 West and 850 West zones. In the 450 West zone, modelling defined four orientations of primary quartz-tourmaline veins; a well-defined east-west high grade vein system (450HGV), dipping moderately to the south; a series of northwest-southeast trending, moderately southwest-dipping veins (450NW) and; schist-hosted veins (HGS), a series of west-northwest-trending, moderately south-southwest dipping veins.

Vein modelling in the 850 West zone defined two primary vein systems: a distinct steep northeast-southwest primary vein set (850HG) that crosscuts an older shallow-to-moderately dipping northwest-southeast trending vein set (850SHLW).

In addition to the primary vein systems discussed above, a secondary set of domains referred to as 450EXTRA and 850EXTRA (previously referred to as ‰ein swarm domains+ in the resource estimate completed 2015 are defined as zones of intermittent veining and alteration, where drilling density is insufficient to model individual veins with confidence. Similar to the primary veins, the secondary EXTRA veins were modelled using an approximate 1.0 g/t cut-off grade based on assay samples and a minimum mining width of approximately 2.0 metres. Where intersections did not meet the minimum mining width requirement, the wire frame solid outline was drawn to take in waste from either side of intersections.

For the resource estimate a block model with block dimensions of  $5 \times 5 \times 5$  metres in the x (east), y (north) and z (level) directions was placed over the grade shells with only that portion of each block inside the shell recorded (as a percentage of the block) as part of the mineral resource estimate (% Block Model). The block size was selected based on borehole spacing, composite assay length, the geometry of the vein structures, and the selected starting mining method (Open Pit). The model was intersected with an overburden model and surface topography to exclude blocks, or portions of blocks, that extend above the bedrock surface.

Grades for Au (g/t) were interpolated into blocks by the Inverse Distance Cubed ( $ID^3$ ) method. Three passes were used to interpolate grade into all of the blocks in the grade shells (Table 14-8). For Pass 1 the search ellipse size (in metres) for all vein domains was set at 20 x 20 x 5 in the X, Y, Z direction; for Pass 2 the search ellipse size for each domain was set at 45 x 45 x 15; for Pass 3 the search ellipse size was set at 100 x 100 x 20.

The confidence classification of the resource (Measured, Indicated and Inferred) is based on an understanding of geological controls of the mineralization, and the drill hole pierce point spacing in the resource area. Blocks were classified as Measured if they were populated with grade during Pass 1 and Indicated if they were populated with grade during Pass 2 of the interpolation procedure. The Pass 3 search ellipse size was set to assure all remaining blocks within the wireframe were assigned a grade. These blocks were classified as Inferred.

Assay samples were composited into 1.0 metre lengths. Grades were interpolated into blocks using a minimum of 6 and maximum of 10 composites to generate block grades during Pass 1 and Pass 2 (maximum of 3 sample composites per drill hole), and a minimum of 3 and maximum of 10 composites to generate block grades during pass 3.

A statistical analysis of the composite database within the Eau Claire Deposit 3D wireframe models was conducted to investigate the presence of high grade outliers which can have a disproportionately large influence on the average grade of a mineral deposit. High grade outliers in the composite data were investigated using statistical data, histogram plots, and cumulative probability plots of the 1.0 m composite data and was conducted by vein domain.

After review it was decided that capping of high grade composites to limit their influence during the grade estimation was necessary. A total of 39 composite samples were capped at grades from 10 (850EXTRA) to 120 g/t Au (450HGV), depending on their corresponding vein domain. The capped gold composites were used for grade interpolation into the Eau Claire Deposit block model.

For the updated mineral resource, Eastmain collected an additional 137 mineralized samples from the 450 zone veins for SG determinations. The average SG value of the 137 mineralized samples is 2.92. The current total database consists of 646 samples.

The 646 SG measurements ranged from 2.56 to 3.24 and averaged 2.92. The average grade of the 646 samples in the database is 6.15 g/t Au, ranging from 0.00 to 120 g/t (capped). Despite the high grade of a number of the samples, there appears to be little correlation of density value and gold grade.

The data was subdivided into samples from within the revised 450 zone vein domains and samples from outside the revised vein domains. Of the 646 samples, 364 samples are from with the 450 zone vein domains. The average SG of these samples is 2.91 with a range of 2.56 to 3.21; the average grade of these



samples is 9.1 g/t Au (4 samples capped to 120 g/t Au). A total of 282 samples are from outside the vein domains and average 2.93 with a range of 2.63 to 3.24.

For the 2017 mineral resource estimate update an SG of 2.92 is used.

#### 26 RECOMMENDATIONS

Eastmain will continue to drill the Eau Claire Deposit in late 2017 and into early 2018 with a focus on extending the known limits of the deposit. Renewed trenching and mapping will support drilling throughout the remainder of 2017. For the second half of 2017 and into 2018, a total of 15,000 metres of drilling is being budgeted to continue to focus on expanding and extending Eau Claire mineral resources, as well as exploring new targets as they develop. Currently, there are six active targets, including Clovis and Snake Lake within a 5 km radius of Eau Claire, identified for their geological similarities to the Eau Claire deposit along the Clearwater Deformation Zone.

Eastmain plans to use the additional drilling to update the current mineral resource and to incorporate this into a planned preliminary economic assessment (PEA) study expected to be completed in the first half of 2018. Improving the categorization of, and expanding the Eau Claire mineral resource should also be continued in 2018 as economic and technical studies proceed.

The 2015 technical report made recommendations for additional work to advance the Eau Claire deposit which Eastmain had deferred in favour of additional resource drilling in 2016. 2017. The Authors believe these recommendations are still valid. The recommendations include initiation of engineering, environmental, permitting, and other studies to help in evaluating the viability of an open pit and underground mine on the Clearwater property. The proposed work program should include:

- Rock and soil geotechnical and hydrogeology investigations
- Environmental baseline studies, permitting, and social or community impact
- Conceptual trade off study to evaluate at a PEA level to optimize the switch from the open pit to the underground
- A full PEA for the project
- Continued resource definition and exploration drilling

The total cost of the recommended work program is estimated at C\$10,900,000 million (Table 26-1).

#### Table 26-1 Recommended 2017/2018 Work Program by Eastmain

Item	Cost in Cdn\$
Resource Identification Drilling 2017 (>400 m depth) 15,000 m	\$3,000,000
Resource Improvement (> 400 m depth) drilling 30,000 m	\$6,000,000
Trenching/Assays Clearwater property wide targets	\$250,000
Clearwater property wide target drilling 5,000 m	1,000,000
Initial geotechnical studies	\$100,000
Environmental Baseline Studies	\$150,000
Updated Resource Estimate	\$50 <i>,</i> 000
Preliminary Economic Assessment and Related Studies	\$350,000
Total:	\$10,900,000

The Authors have reviewed the proposed program for further work on the Property and, in light of the observations made in this report, supports the concepts as outlined by Eastmain as well as SRK. Given the prospective nature of the property, it is the Authorc opinion that the Property merits further exploration and that proposed plans for further work are justified. The current proposed work program will help advance the

Eau Claire Deposit towards a pre-development stage and will provide key inputs required to evaluate the economic viability of a mining project at a pre-feasibility level.

The Authors recommend that Eastmain conduct the further exploration as proposed, subject to funding and any other matters which may cause the proposed exploration program to be altered in the normal course of its business activities or alterations which may affect the program as a result of exploration activities themselves.

#### 27 References

Dubé, B. and Gosselin, P. 2007. Greenstone-hosted quartz-carbonate vein deposits. In Goodfellow, W.D., ed. Mineral Deposits of Canada: A Synthesis of Major Deposit-Types, District Metallogeny, the Evolution of Geological Provinces, and Exploration Methods. Geological Association of Canada, Mineral Deposits Division, Special Publication No. 5, pp.49-73.

SGS Mineral Services, 2010. An Investigation of The Recovery of Gold and Tellurium from Clearwater Project Samples, prepared for Eastmain Resources Inc. Project 12228-001 . Final Report October 4, 2010, 102 p.

SGS Mineral Services, 2017. An Investigation into Gold Recovery from Clearwater Project Samples, prepared for Eastmain Resources Inc. Project 15524-001. Final Report September 27, 2017, 133 p.

SRK Consulting (Canada) Inc., 2017. Technical Report for the Eau Claire Gold Deposit, Clearwater Project, Quebec, Report Prepared for Eastmain Resources Inc. June 11, 2015, 143 p.



#### 28 DATE AND SIGNATURE PAGE

This report titled % ECHNICAL REPORT ON THE UPDATED MINERAL RESOURCE ESTIMATE FOR THE EAU CLAIRE GOLD DEPOSIT, CLEARWATER PROJECT, QUEBEC, CANADA+dated October 25<sup>th</sup>, 2017 (the % echnical Report+) for Eastmain Resources Inc. was prepared and signed by the following authors:

The effective date of the report is August 25th, 2017. The date of the report is October 25, 2017.

Signed by:

Qualified Persons Allan Armitage, Ph.D., P. Geo., Sabry Abdel Hafez, Ph.D, P.Eng. Company SGS Canada Inc. (%GGS+) SGS Canada Inc. (%GGS+)



# 29 CERTIFICATES OF QUALIFIED PERSONS

#### **QP CERTIFICATE – ALLAN ARMITAGE**

To Accompany the Report titled **%echnical Report on the Updated Mineral Resource Estimate for the Eau Claire Gold Deposit, Clearwater Project, Quebec, Canada**" dated October 25th, 2017 (the %echnical Report+) for Eastmain Resources Inc.

I, Allan E. Armitage, Ph. D., P. Geol. of 62 River Front Way, Fredericton, New Brunswick, hereby certify that:

- 1. I am a Senior Resource Geologist with SGS Canada Inc., 10 de la Seigneurie E blvd., Unit 203 Blainville, QC, Canada, J7C 3V5 (www.geostat.com).
- 2. I am a graduate of Acadia University having obtained the degree of Bachelor of Science Honours in Geology in 1989, a graduate of Laurentian University having obtained the degree of Masters of Science in Geology in 1992 and a graduate of the University of Western Ontario having obtained a Doctor of Philosophy in Geology in 1998.
- 3. I have been employed as a geologist for every field season (May October) from 1987 to 1996. I have been continuously employed as a geologist since March of 1997.
- 4. I have been involved in mineral exploration and resource modeling for gold, silver, copper, lead, zinc, nickel, and uranium in Canada, Mexico, Honduras, Chile, Cuba and Peru at the grass roots to advanced exploration stage since 1991, including resource estimation since 2006.
- 5. I am a member of the Association of Professional Engineers, Geologists and Geophysicists of Alberta and use the title of Professional Geologist (P.Geol.) (License No. 64456; 1999), I am a member of the Association of Professional Engineers and Geoscientists of British Columbia and use the designation (P.Geo.) (Licence No. 38144; 2012), and I am a member of The Association of Professional Geoscientists of Ontario (APGO) and use the designation (P.Geo.) (Licence No. 2829; 2017),
- 6. I have read the definition of "Qualified Person" set out in National Instrument 43-101 (% 43-101") and certify that by reason of my education, affiliation of my professional association and past relevant work experience, I fulfill the requirements to be a "Qualified Person".
- 7. I am responsible for all sections of the Technical Report.
- 8. I visited the Clearwater Project on the 10<sup>th</sup> and 11<sup>th</sup> of July, 2017.
- 9. I have had no prior involvement in the Clearwater Project.
- 10. I am independent of Eastmain Resources Inc.as defined by Section 1.5 of NI 43-101.
- 11. As of the date of this certificate, to the best of my knowledge, information and belief, the Technical Report contains all scientific and technical information that is required to be disclosed to make the Technical Report not misleading.
- 12. I have read NI 43-101 and Form 43-101F1 (the ‰orm+), and the Technical Report has been prepared in compliance with NI 43-101 and the Form.

Signed and dated this 25<sup>th</sup> day of October, 2017 at Fredericton, New Brunswick.

"signed and sealed"

Allan Armitage, Ph. D., P. Geo., SGS Canada Inc.

#### Sabry Abdel Hafez, PhD, P.Eng.

I, Sabry Abdel Hafez, PhD, P.Eng., of Vancouver, British Columbia, Canada, do hereby certify:

- I am a Senior Mining Engineer with SGS Canada Inc. with a business address at Suite 203, 10 de la seigneurie E., Blainville, Quebec, J7C 3V5.
- This certificate applies to the technical report entitled % ECHNICAL REPORT ON THE UPDATED MINERAL RESOURCE ESTIMATE FOR THE EAU CLAIRE GOLD DEPOSIT, CLEARWATER PROJECT, QUEBEC, CANADA+dated October 25th, 2017 (the % echnical Report+) for Eastmain Resources Inc.
- I am a graduate of Assiut University (BSc Mining Engineering, 1991; MSc Mining Engineering, 1996; PhD Mineral Economics, 2000). I am a member in good standing of the Association of Professional Engineers and Geoscientists of British Columbia (#34975). My relevant experience includes more than 19 years of experience in the evaluation of mining projects, advanced financial analysis, and mine planning and optimization. My capabilities range from conventional mine planning and evaluation to the advanced simulation-based techniques that incorporate both market and geological uncertainties. I have been involved in technical studies of several base metals, gold, coal, and aggregate mining projects in Canada and abroad. I am a Qualified Person+for purposes of National Instrument 43-101 (the Vastrument+).
- I have not completed a personal inspection of the Property.
- I am responsible for the pit optimization component throughout the Technical Report.
- I am independent of Eastmain Resources Inc. as defined by Section 1.5 of the Instrument.
- I have had no prior involvement in the Clearwater Project.
- I have read the Instrument and the sections of the Technical Report that I am responsible for have been prepared in compliance with the Instrument.
- As of the date of this certificate, to the best of my knowledge, information, and belief, the sections of Technical Report that I am responsible for contain all scientific and technical information that is required to be disclosed to make the Technical Report not misleading.

Signed and dated the 25<sup>th</sup> day of October 2017 at Vancouver, British Columbia.

"signed and sealed"

Sabry Abdel Hafez, PhD, P.Eng. Senior Mining Engineer SGS Canada Inc.

# **APPENDIX A**

Mineral Tenure Information (Received from Eastmain on September 18, 2017) Claims containing the Mineral Resource are shown in bold print



	NTS Sheet	Title No	Status	Date of Registration	Expiry Date	Area (Ha)	Excess Work (C\$)	Required Work (C\$)	Required Fees (C\$)
	33B04	40101	Active	26-Oct-15	31-Mar-18		\$-		, <i>,</i> ,
1	33B04	1132558	Active	2-Aug-05	19-Apr-19	52.81	45,145.84	1,625.00	148.48
2	33B04	1132559	Active	2-Aug-05	19-Apr-19	52.81	49,031.01	1,625.00	148.48
3	33B04	1132560	Active	2-Aug-05	19-Apr-19	52.81	48,033.76	1,625.00	148.48
4	33B04	1132561	Active	2-Aug-05	19-Apr-19	52.81	44,411.91	1,625.00	148.48
5	33B04	1132562	Active	2-Aug-05	19-Apr-19	52.81	39,957.12	1,625.00	148.48
6	33B04	1132563	Active	2-Aug-05	19-Apr-19	52.81	46,377.04	1,625.00	148.48
7	33B04	1132564	Active	2-Aug-05	19-Apr-19	52.81	42,870.86	1,625.00	148.48
8	33B04	1132565	Active	2-Aug-05	19-Apr-19	52.8	44,678.90	1,625.00	148.48
9	33B04	1132566	Active	2-Aug-05	19-Apr-19	52.8	50,356.83	1,625.00	148.48
10	33B04	1132567	Active	2-Aug-05	19-Apr-19	15.28	14,670.81	650.00	32.77
11	33B04	1132568	Active	2-Aug-05	19-Apr-19	27.05	20,293.12	1,625.00	118.32
12	33B04	1132569	Active	2-Aug-05	19-Apr-19	52.8	43,855.77	1,625.00	148.48
13	33B04	1132570	Active	2-Aug-05	19-Apr-19	52.8	51,577.47	1,625.00	148.48
14	33B04	1132571	Active	2-Aug-05	19-Apr-19	52.8	40,519.49	1,625.00	148.48
15	33B04	1132572	Active	2-Aug-05	19-Apr-19	52.8	45,307.37	1,625.00	148.48
16	33B04	1132573	Active	2-Aug-05	19-Apr-19	52.8	52,341.04	1,625.00	148.48
17	33B04	1132574	Active	2-Aug-05	19-Apr-19	52.8	48,124.22	1,625.00	148.48
18	33B04	1132575	Active	2-Aug-05	19-Apr-19	52.8	46,942.07	1,625.00	148.48
19	33B04	1132576	Active	2-Aug-05	19-Apr-19	52.8	50,076.85	1,625.00	148.48
20	33B04	1132577	Active	2-Aug-05	19-Apr-19	52.8	43,357.17	1,625.00	148.48
21	33B04	1132578	Active	2-Aug-05	19-Apr-19	52.8	42,569.96	1,625.00	148.48
22	33B04	1132579	Active	2-Aug-05	19-Apr-19	52.8	37,463.10	1,625.00	148.48
23	33B04	1132580	Active	2-Aug-05	19-Apr-19	52.8	37,410.27	1,625.00	148.48
24	33B04	1132581	Active	2-Aug-05	19-Apr-19	52.8	37,627.04	1,625.00	148.48
25	33B04	1132582	Active	2-Aug-05	19-Apr-19	52.8	37,712.33	1,625.00	148.48
26	33B04	1132583	Active	2-Aug-05	19-Apr-19	52.8	36,375.27	1,625.00	148.48
27	33B04	1132584	Active	2-Aug-05	19-Apr-19	52.79	41,721.29	1,625.00	148.48
28	33B04	1132585	Active	2-Aug-05	19-Apr-19	52.79	56,038.02	1,625.00	148.48
29	33B04	1132586	Active	2-Aug-05	19-Apr-19	52.79	79,627.50	1,625.00	148.48
30	33B04	1132587	Active	2-Aug-05	19-Apr-19	46.6	46,164.37	1,625.00	132.24
31	33B04	1132588	Active	2-Aug-05	19-Apr-19	43.63	79,055.14	1,625.00	118.32
32	33B04	1132589	Active	2-Aug-05	19-Apr-19	43.26	34,352.40	1,625.00	118.32
33	33B04	1132590	Active	2-Aug-05	19-Apr-19	42.9	41,072.26	1,625.00	118.32
34	33B04	1132591	Active	2-Aug-05	19-Apr-19	42.53	38,495.29	1,625.00	118.32
35	33B04	1132592	Active	2-Aug-05	19-Apr-19	42.18	80,734.29	1,625.00	118.32
36	33B04	1132593	Active	2-Aug-05	19-Apr-19	25.31	36,067.09	1,625.00	118.32
37	33B04	1132594	Active	2-Aug-05	19-Apr-19	15.84	72,417.75	650.00	32.77
38	33B04	1132595	Active	2-Aug-05	19-Apr-19	15.5	152,213.76	650.00	32.77
39	33B04	1132596	Active	2-Aug-05	19-Apr-19	32.05	392,243.04	1,625.00	118.32
40	33B04	1132597	Active	2-Aug-05	19-Apr-19	46.8	158,407.10	1,625.00	132.24
41	33B04	1132598	Active	2-Aug-05	19-Apr-19	52.79	61,887.46	1,625.00	148.48
42	33B04	1132599	Active	2-Aug-05	19-Apr-19	52.79	46,331.23	1,625.00	148.48
43	33B04	1132600	Active	2-Aug-05	19-Apr-19	52.79	45,215.44	1,625.00	148.48
44	33B04	1132601	Active	2-Aug-05	19-Apr-19	52.79	42,240.74	1,625.00	148.48
45	33B04	1132602	Active	2-Aug-05	19-Apr-19	52.79	43,478.89	1,625.00	148.48
46	33B04	1132603	Active	2-Aug-05	19-Apr-19	52.79	47,280.91	1,625.00	148.48
47	33B04	1132604	Active	2-Aug-05	19-Apr-19	52.79	47,512.18	1,625.00	148.48
48	33B04	1132605	Active	2-Aug-05	19-Apr-19	52.79	43,924.48	1,625.00	148.48
49	33B04	1132606	Active	2-Aug-05	19-Apr-19	52.79	49,929.70	1,625.00	148.48
50	33B04	1132607	Active	2-Aug-05	19-Apr-19	52.79	50,257.67	1,625.00	148.48



	NTS Sheet	Title No	Status	Date of Registration	Expiry Date	Area (Ha)	Excess Work (C\$)	Required Work (C\$)	Required Fees (C\$)
51	33B04	1132608	Active	2-Aug-05	19-Apr-19	52.79	42,550.89	1,625.00	148.48
52	33B04	1132609	Active	2-Aug-05	19-Apr-19	52.79	47,530.75	1,625.00	148.48
53	33B04	1132610	Active	2-Aug-05	19-Apr-19	52.79	40,694.29	1,625.00	148.48
54	33B04	1132611	Active	2-Aug-05	19-Apr-19	52.79	40,131.03	1,625.00	148.48
55	33B04	1132612	Active	2-Aug-05	19-Apr-19	52.79	37,487.33	1,625.00	148.48
56	33B04	1132613	Active	2-Aug-05	19-Apr-19	52.79	38,485.67	1,625.00	148.48
57	33B04	1132614	Active	2-Aug-05	19-Apr-19	52.79	38,834.55	1,625.00	148.48
58	33B04	1132615	Active	2-Aug-05	19-Apr-19	52.79	36,279.63	1,625.00	148.48
59	33B04	1132616	Active	2-Aug-05	19-Apr-19	52.78	43,120.92	1,625.00	148.48
60	33B04	1132617	Active	2-Aug-05	19-Apr-19	52.78	62,882.34	1,625.00	148.48
61	33B04	1132618	Active	2-Aug-05	19-Apr-19	52.78	245,501.29	1,625.00	148.48
62	33B04	1132619	Active	2-Aug-05	19-Apr-19	52.78	68,779.03	1,625.00	148.48
63	33B04	1132620	Active	2-Aug-05	19-Apr-19	52.78	1,001,393.74	1,625.00	148.48
64	33B04	1132621	Active	2-Aug-05	19-Apr-19	52.78	10,366,432.70	1,625.00	148.48
65	33B04	1132622	Active	2-Aug-05	19-Apr-19	52.78	15,692,122.54	1,625.00	148.48
66	33B04	1132623	Active	2-Aug-05	19-Apr-19	52.78	10,798,407.96	1,625.00	148.48
67	33B04	1132624	Active	2-Aug-05	19-Apr-19	52.78	860,017.97	1,625.00	148.48
68	33B04	1132625	Active	2-Aug-05	19-Apr-19	52.78	219,185.40	1,625.00	148.48
69	33B04	1132626	Active	2-Aug-05	19-Apr-19	52.78	1,601,860.93	1,625.00	148.48
70	33B04	1132627	Active	2-Aug-05	19-Apr-19	52.78	448,221.58	1,625.00	148.48
71	33B04	1132628	Active	2-Aug-05	19-Apr-19	52.78	256,661.46	1,625.00	148.48
72	33B04	1132629	Active	2-Aug-05	19-Apr-19	52.78	1,408,078.11	1,625.00	148.48
73	33B04	1132630	Active	2-Aug-05	19-Apr-19	52.78	55,518.51	1,625.00	148.48
74	33B04	1132631	Active	2-Aug-05	19-Apr-19	52.78	48,950.63	1,625.00	148.48
75	33B04	1132632	Active	2-Aug-05	19-Apr-19	52.78	45,717.47	1,625.00	148.48
76	33B04	1132633	Active	2-Aug-05	19-Apr-19	52.78	46,144.03	1,625.00	148.48
77	33B04	1132634	Active	2-Aug-05	19-Apr-19	52.78	45,562.57	1,625.00	148.48
78	33B04	1132635	Active	2-Aug-05	19-Apr-19	52.78	43,560.24	1,625.00	148.48
79	33B04	1132636	Active	2-Aug-05	19-Apr-19	52.78	46,001.88	1,625.00	148.48
80	33B04	1132637	Active	2-Aug-05	19-Apr-19	52.78	44,274.64	1,625.00	148.48
81	33B04	1132638	Active	2-Aug-05	19-Apr-19	52.78	45,839.06	1,625.00	148.48
82	33B04	1132639	Active	2-Aug-05	19-Apr-19	52.78	41,714.62	1,625.00	148.48
83	33B04	1132640	Active	2-Aug-05	19-Apr-19	52.78	42,001.94	1,625.00	148.48
84	33B04	1132641	Active	2-Aug-05	19-Apr-19	52.78	39,981.27	1,625.00	148.48
85	33B04	1132642	Active	2-Aug-05	19-Apr-19	52.78	42,236.23	1,625.00	148.48
86	33B04	1132643	Active	2-Aug-05	19-Apr-19	52.78	44,706.24	1,625.00	148.48
87	33B04 33B04	1132644	Active	2-Aug-05	19-Apr-19	52.78	61,526.78	1,625.00	148.48
88	33B04	1132645	Active	2-Aug-05	19-Apr-19	52.78	62,572.04	1,625.00	148.48 148.48
89 90	33B04	1132646 1132647	Active	2-Aug-05 2-Aug-05	19-Apr-19 19-Apr-19	52.78 52.78	54,903.10	1,625.00 1,625.00	148.48
90	33B04	1132648	Active Active	2-Aug-05 2-Aug-05	19-Apr-19	52.78	39,475.93 36,763.36	1,625.00	148.48
91	33B04	1132649	Active	2-Aug-05 2-Aug-05	19-Apr-19	52.78	46,211.74	1,625.00	148.48
92	33B04	1132650	Active	2-Aug-05 2-Aug-05	19-Apr-19	52.77	98,142.64	1,625.00	148.48
94	33B04	1132651	Active	2-Aug-05	19-Apr-19	52.77	5,076,642.00	1,625.00	148.48
95	33B04	1132652	Active	2-Aug-05	19-Apr-19	52.77	2,163,753.58	1,625.00	148.48
96	33B04	1132653	Active	2-Aug-05	19-Apr-19	52.77	619,886.38	1,625.00	148.48
97	33B04	1132655	Active	2-Aug-05	19-Apr-19	52.77	153,939.53	1,625.00	148.48
98	33B04	1132656	Active	2-Aug-05	19-Apr-19	52.77	47,198.06	1,625.00	148.48
99	33B04	1132657	Active	2-Aug-05	19-Apr-19	52.77	226,781.93	1,625.00	148.48
100	33B04	1132658	Active	2-Aug-05	19-Apr-19	52.77	80,056.17	1,625.00	148.48
101	33B04	1132659	Active	2-Aug-05	19-Apr-19	52.77	107,611.60	1,625.00	148.48



	NTS Sheet	Title No	Status	Date of Registration	Expiry Date	Area (Ha)	Excess Work (C\$)	Required Work (C\$)	Required Fees (C\$)
102	33B04	1132660	Active	2-Aug-05	19-Apr-19	52.77	54,217.43	1,625.00	148.48
103	33B04	1132661	Active	2-Aug-05	19-Apr-19	52.77	53,339.43	1,625.00	148.48
104	33B04	1132662	Active	2-Aug-05	19-Apr-19	52.77	47,106.94	1,625.00	148.48
105	33B04	1132663	Active	2-Aug-05	19-Apr-19	52.77	43,045.42	1,625.00	148.48
106	33B04	1132664	Active	2-Aug-05	19-Apr-19	52.77	46,002.48	1,625.00	148.48
107	33B04	1132665	Active	2-Aug-05	19-Apr-19	52.77	42,806.63	1,625.00	148.48
108	33B04	1132666	Active	2-Aug-05	19-Apr-19	52.77	41,583.04	1,625.00	148.48
109	33B04	1132667	Active	2-Aug-05	19-Apr-19	52.77	43,179.32	1,625.00	148.48
110	33B04	1132668	Active	2-Aug-05	19-Apr-19	52.77	42,227.26	1,625.00	148.48
111	33B04	1132669	Active	2-Aug-05	19-Apr-19	52.77	42,227.26	1,625.00	148.48
112	33B04	1132670	Active	2-Aug-05	19-Apr-19	52.77	42,362.26	1,625.00	148.48
113	33B04	1132671	Active	2-Aug-05	19-Apr-19	52.77	42,524.96	1,625.00	148.48
114	33B04	1132672	Active	2-Aug-05	19-Apr-19	52.77	47,180.92	1,625.00	148.48
115	33B04	1132673	Active	2-Aug-05	19-Apr-19	52.77	41,822.26	1,625.00	148.48
116	33B04	1132674	Active	2-Aug-05	19-Apr-19	52.76	57,660.28	1,625.00	148.48
117	33B04	1132675	Active	2-Aug-05	19-Apr-19	52.76	59,197.55	1,625.00	148.48
118	33B04	1132676	Active	2-Aug-05	19-Apr-19	52.76	64,720.71	1,625.00	148.48
119	33B04	1132677	Active	2-Aug-05	19-Apr-19	52.76	63,289.24	1,625.00	148.48
120	33B04	1132678	Active	2-Aug-05	19-Apr-19	52.76	62,427.39	1,625.00	148.48
121	33B04	1132679	Active	2-Aug-05	19-Apr-19	52.76	56,596.53	1,625.00	148.48
122	33B04	1132680	Active	2-Aug-05	19-Apr-19	52.76	52,391.82	1,625.00	148.48
123	33B04	1132681	Active	2-Aug-05	19-Apr-19	52.76	81,526.74	1,625.00	148.48
124	33B04	1132682	Active	2-Aug-05	19-Apr-19	52.76	55,500.18	1,625.00	148.48
125	33B04	1132683	Active	2-Aug-05	19-Apr-19	52.76	46,921.79	1,625.00	148.48
126	33B04	1132684	Active	2-Aug-05	19-Apr-19	52.76	50,323.84	1,625.00	148.48
127	33B04	1132685	Active	2-Aug-05	19-Apr-19	52.76	59,347.39	1,625.00	148.48
128	33B04	1132686	Active	2-Aug-05	19-Apr-19	52.76	51,395.98	1,625.00	148.48
129	33B04	1132687	Active	2-Aug-05	19-Apr-19	52.76	43,128.57	1,625.00	148.48
130	33B04	1132688	Active	2-Aug-05	19-Apr-19	52.76	44,999.65	1,625.00	148.48
131	33B04	1132689	Active	2-Aug-05	19-Apr-19	52.75	55,087.39	1,625.00	148.48
132	33B04	1132690	Active	2-Aug-05	19-Apr-19	52.75	49,036.13	1,625.00	148.48
133	33B04	1132691	Active	2-Aug-05	19-Apr-19	52.75	45,598.09	1,625.00	148.48
134	33B04	1132692	Active	2-Aug-05	19-Apr-19	52.75	48,514.12	1,625.00	148.48
135	33B04	1132693	Active	2-Aug-05	19-Apr-19	52.75	48,818.03	1,625.00	148.48
136	33B04	1132694	Active	2-Aug-05	19-Apr-19	52.75	46,710.08	1,625.00	148.48
137	33B04	1132695	Active	2-Aug-05	19-Apr-19	52.75	40,997.96	1,625.00	148.48
138	33B04	1132696	Active	2-Aug-05	19-Apr-19	52.74	51,512.06	1,625.00	148.48
139	33B04	1132697	Active	2-Aug-05	19-Apr-19	52.74	46,864.03	1,625.00	148.48
140	33B04	1132698	Active	2-Aug-05	19-Apr-19	52.74	47,150.68	1,625.00	148.48
141	33B05	1132699	Active	2-Aug-05	19-Apr-19	52.73	66,168.14	1,625.00	148.48
142	33B05	1132700	Active	2-Aug-05	19-Apr-19	52.73	87,812.16	1,625.00	148.48
143	33B04	75822	Active	15-Jun-05	14-Jun-19	52.81	0.00	1,625.00	148.48
144	33B04	75823	Active	15-Jun-05	14-Jun-19	52.81	0.00	1,625.00	148.48
145	33B04	75824	Active	15-Jun-05	14-Jun-19	52.82	1,722.96	1,625.00	148.48
146	33B04	75825	Active	15-Jun-05	14-Jun-19	52.82	0.00	1,625.00	148.48
147	33B04	75826	Active	15-Jun-05	14-Jun-19	52.82	0.00	1,625.00	148.48
148	33B04	75827	Active	15-Jun-05	14-Jun-19	52.82	0.00	1,625.00	148.48
149	33B04	75828	Active	15-Jun-05	14-Jun-19	52.82	1,367.96	1,625.00	148.48
150	33B04	75829	Active	15-Jun-05	14-Jun-19	52.82	0.00	1,625.00	148.48
151	33B04	75830	Active	15-Jun-05	14-Jun-19	52.82	3,812.69	1,625.00	148.48
152	33B04	75831	Active	15-Jun-05	14-Jun-19	52.82	0.00	1,625.00	148.48

	NTS Sheet	Title No	Status	Date of Registration	Expiry Date	Area (Ha)	Excess Work (C\$)	Required Work (C\$)	Required Fees (C\$)
153	33B04	75832	Active	15-Jun-05	14-Jun-19	52.82	0.00	1,625.00	148.48
154	33B04	75833	Active	15-Jun-05	14-Jun-19	52.82	0.00	1,625.00	148.48
155	33B04	75834	Active	15-Jun-05	14-Jun-19	52.83	0.00	1,625.00	148.48
156	33B04	75835	Active	15-Jun-05	14-Jun-19	52.83	984.44	1,625.00	148.48
157	33B04	75836	Active	15-Jun-05	14-Jun-19	52.83	0.00	1,625.00	148.48
158	33B04	75837	Active	15-Jun-05	14-Jun-19	52.83	0.00	1,625.00	148.48
159	33B04	75838	Active	15-Jun-05	14-Jun-19	52.83	0.00	1,625.00	148.48
160	33B04	75839	Active	15-Jun-05	14-Jun-19	52.83	0.00	1,625.00	148.48
161	33B04	75840	Active	15-Jun-05	14-Jun-19	52.84	0.00	1,625.00	148.48
162	33B04	75841	Active	15-Jun-05	14-Jun-19	52.84	0.00	1,625.00	148.48
163	33B04	75842	Active	15-Jun-05	14-Jun-19	52.74	9,148.08	1,625.00	148.48
164	33B04	75843	Active	15-Jun-05	14-Jun-19	52.74	16,687.86	1,625.00	148.48
165	33B04	75844	Active	15-Jun-05	14-Jun-19	52.74	4,040.31	1,625.00	148.48
166	33B04	75845	Active	15-Jun-05	14-Jun-19	52.74	9,877.93	1,625.00	148.48
167	33B04	75846	Active	15-Jun-05	14-Jun-19	52.74	6,055.95	1,625.00	148.48
168	33B04	75847	Active	15-Jun-05	14-Jun-19	52.74	2,993.73	1,625.00	148.48
169	33B04	75848	Active	15-Jun-05	14-Jun-19	52.74	0.00	1,625.00	148.48
170	33B04	75849	Active	15-Jun-05	14-Jun-19	52.74	495.80	1,625.00	148.48
171	33B04	75850	Active	15-Jun-05	14-Jun-19	52.74	0.00	1,625.00	148.48
172	33B04	75851	Active	15-Jun-05	14-Jun-19	52.74	0.00	1,625.00	148.48
173	33B04	75852	Active	15-Jun-05	14-Jun-19	52.74	0.00	1,625.00	148.48
174	33B04	75853	Active	15-Jun-05	14-Jun-19	52.74	0.00	1,625.00	148.48
175	33B04	75854	Active	15-Jun-05	14-Jun-19	52.74	0.00	1,625.00	148.48
176	33B04	75855	Active	15-Jun-05	14-Jun-19	52.74	0.00	1,625.00	148.48
177	33B04	75856	Active	15-Jun-05	14-Jun-19	52.74	0.00	1,625.00	148.48
178	33B04	75857	Active	15-Jun-05	14-Jun-19	52.74	0.00	1,625.00	148.48
179	33B04	75858	Active	15-Jun-05	14-Jun-19	52.74	0.00	1,625.00	148.48
180	33B04	75859	Active	15-Jun-05	14-Jun-19	52.75	2,049.62	1,625.00	148.48
181	33B04	75860	Active	15-Jun-05	14-Jun-19	52.75	67,541.72	1,625.00	148.48
182	33B04	75861	Active	15-Jun-05	14-Jun-19	52.75	0.00	1,625.00	148.48
183	33B04	75862	Active	15-Jun-05	14-Jun-19	52.75	0.00	1,625.00	148.48
184	33B04	75863	Active	15-Jun-05	14-Jun-19	52.75	72,851.23	1,625.00	148.48
185	33B04	75864	Active	15-Jun-05	14-Jun-19	52.75	0.00	1,625.00	148.48
186	33B04	75865	Active	15-Jun-05	14-Jun-19	52.75	1,843.11	1,625.00	148.48
187	33B04	75866	Active	15-Jun-05	14-Jun-19	52.75	0.00	1,625.00	148.48
188	33B04	75867	Active	15-Jun-05	14-Jun-19	52.75	5,258.18	1,625.00	148.48
189	33B04	75868	Active	15-Jun-05	14-Jun-19	52.75	0.00	1,625.00	148.48
190	33B04	75869	Active	15-Jun-05	14-Jun-19	52.75	0.00	1,625.00	148.48
191	33B04	75870	Active	15-Jun-05	14-Jun-19	52.76	82,851.51	1,625.00	148.48
192	33B04	75871	Active	15-Jun-05	14-Jun-19	52.76	24,735.01	1,625.00	148.48
193	33B04	75872	Active	15-Jun-05	14-Jun-19	52.76	0.00	1,625.00	148.48
194	33B04	75873	Active	15-Jun-05	14-Jun-19	52.76	0.00	1,625.00	148.48
195	33B04	75874	Active	15-Jun-05	14-Jun-19	52.76	0.00	1,625.00	148.48
196	33B04	75875	Active	15-Jun-05	14-Jun-19	52.76	0.00	1,625.00	148.48
197	33B04	75876	Active	15-Jun-05	14-Jun-19	52.77	0.00	1,625.00	148.48
198	33B04	75877	Active	15-Jun-05	14-Jun-19	52.77	0.00	1,625.00	148.48
199	33B04	75878	Active	15-Jun-05	14-Jun-19	52.77	5,477.19	1,625.00	148.48
200	33B04	75879	Active	15-Jun-05	14-Jun-19	52.77	2,337.93	1,625.00	148.48
201	33B04	75880	Active	15-Jun-05	14-Jun-19	52.77	0.00	1,625.00	148.48
202	33B04	75881	Active	15-Jun-05	14-Jun-19	52.78	0.00	1,625.00	148.48
203	33B04	75882	Active	15-Jun-05	14-Jun-19	52.78	287.80	1,625.00	148.48

	NTS Sheet	Title No	Status	Date of Registration	Expiry Date	Area (Ha)	Excess Work (C\$)	Required Work (C\$)	Required Fees (C\$)
204	33B04	75883	Active	15-Jun-05	14-Jun-19	52.78	0.00	1,625.00	148.48
205	33B04	75884	Active	15-Jun-05	14-Jun-19	52.78	0.00	1,625.00	148.48
206	33B04	75885	Active	15-Jun-05	14-Jun-19	52.79	0.00	1,625.00	148.48
207	33B04	75886	Active	15-Jun-05	14-Jun-19	52.79	819.84	1,625.00	148.48
208	33B04	75887	Active	15-Jun-05	14-Jun-19	52.79	0.00	1,625.00	148.48
209	33B04	75888	Active	15-Jun-05	14-Jun-19	52.79	0.00	1,625.00	148.48
210	33B04	75889	Active	15-Jun-05	14-Jun-19	52.8	0.00	1,625.00	148.48
211	33B04	75890	Active	15-Jun-05	14-Jun-19	52.8	0.00	1,625.00	148.48
212	33B04	75891	Active	15-Jun-05	14-Jun-19	52.8	2,548.89	1,625.00	148.48
213	33B04	75892	Active	15-Jun-05	14-Jun-19	52.8	0.00	1,625.00	148.48
214	33B04	75893	Active	15-Jun-05	14-Jun-19	52.8	0.00	1,625.00	148.48
215	33B04	75894	Active	15-Jun-05	14-Jun-19	52.8	0.00	1,625.00	148.48
216	33B04	75895	Active	15-Jun-05	14-Jun-19	52.81	5,653.87	1,625.00	148.48
217	33B04	75896	Active	15-Jun-05	14-Jun-19	52.81	3,682.34	1,625.00	148.48
218	33B04	75897	Active	15-Jun-05	14-Jun-19	52.81	0.00	1,625.00	148.48
219	33B04	75898	Active	15-Jun-05	14-Jun-19	52.81	0.00	1,625.00	148.48
220	33B04	75899	Active	15-Jun-05	14-Jun-19	52.81	3,616.47	1,625.00	148.48
221	33B04	75900	Active	15-Jun-05	14-Jun-19	52.81	2,910.48	1,625.00	148.48
222	33B04	75901	Active	15-Jun-05	14-Jun-19	52.81	3,275.21	1,625.00	148.48
223	33B05	75905	Active	15-Jun-05	14-Jun-19	52.72	2,179.97	1,625.00	148.48
224	33B05	75906	Active	15-Jun-05	14-Jun-19	52.72	3,786.46	1,625.00	148.48
225	33B05	75907	Active	15-Jun-05	14-Jun-19	52.71	28,846.65	1,625.00	148.48
226	33B05	75908	Active	15-Jun-05	14-Jun-19	52.71	23,388.15	1,625.00	148.48
227	33B05	75909	Active	15-Jun-05	14-Jun-19	52.71	10,374.15	1,625.00	148.48
228	33B05	75910	Active	15-Jun-05	14-Jun-19	52.71	9,186.91	1,625.00	148.48
229	33B05	75911	Active	15-Jun-05	14-Jun-19	52.71	2,023.13	1,625.00	148.48
230	33B05	75912	Active	15-Jun-05	14-Jun-19	52.71	7,074.74	1,625.00	148.48
231	33B05	75913	Active	15-Jun-05	14-Jun-19	52.73	2,103.29	1,625.00	148.48
232	33B05	75914	Active	15-Jun-05	14-Jun-19	52.73	24,827.08	1,625.00	148.48
233	33B05	75915	Active	15-Jun-05	14-Jun-19	52.73	11,918.62	1,625.00	148.48
234	33B05	75916	Active	15-Jun-05	14-Jun-19	52.73	17,241.75	1,625.00	148.48
235	33B05	75917	Active	15-Jun-05	14-Jun-19	52.73	0.00	1,625.00	148.48
236	33B05	75918	Active	15-Jun-05	14-Jun-19	52.73	4,860.58	1,625.00	148.48
237	33B05	75919	Active	15-Jun-05	14-Jun-19	52.73	470.94	1,625.00	148.48
238	33B05	75920	Active	15-Jun-05	14-Jun-19	52.73	6,538.76	1,625.00	148.48
239	33B05	75921	Active	15-Jun-05	14-Jun-19	52.73	29,237.16	1,625.00	148.48
240	33B05	75922	Active	15-Jun-05	14-Jun-19	52.73	28,501.65	1,625.00	148.48
241	33B05	75923	Active	15-Jun-05	14-Jun-19	52.73	14,269.80	1,625.00	148.48
242	33B05	75924	Active	15-Jun-05	14-Jun-19	52.73	0.00	1,625.00	148.48
243	33B05	75925	Active	15-Jun-05	14-Jun-19	52.73	0.00	1,625.00	148.48
244	33B05	75926	Active	15-Jun-05	14-Jun-19	52.73	0.00	1,625.00	148.48
245	33B05	75927	Active	15-Jun-05	14-Jun-19	52.73	0.00	1,625.00	148.48
246	33B05	75928	Active	15-Jun-05	14-Jun-19	52.73	0.00	1,625.00	148.48
247	33B05	75929	Active	15-Jun-05	14-Jun-19	52.73	0.00	1,625.00	148.48
248	33B05	75930	Active	15-Jun-05	14-Jun-19	52.73	0.00	1,625.00	148.48
249	33B05	75931	Active	15-Jun-05	14-Jun-19	52.73	0.00	1,625.00	148.48
250	33B05	75932	Active	15-Jun-05	14-Jun-19	52.72	6,037.92	1,625.00	148.48
251	33B05	75933	Active	15-Jun-05	14-Jun-19	52.72	332.59	1,625.00	148.48
252	33B05	75934	Active	15-Jun-05	14-Jun-19	52.72	2,979.73	1,625.00	148.48
253	33B05	75935	Active	15-Jun-05	14-Jun-19	52.72	2,142.48	1,625.00	148.48
254	33B05	75936	Active	15-Jun-05	14-Jun-19	52.72	15,237.53	1,625.00	148.48



	NTS Sheet	Title No	Status	Date of Registration	Expiry Date	Area (Ha)	Excess Work (C\$)	Required Work (C\$)	Required Fees (C\$)
255	33B05	75937	Active	15-Jun-05	14-Jun-19	52.72	865.65	1,625.00	148.48
256	33B05	75938	Active	15-Jun-05	14-Jun-19	52.72	585.94	1,625.00	148.48
257	33B05	75939	Active	15-Jun-05	14-Jun-19	52.72	0.00	1,625.00	148.48
258	33B05	75940	Active	15-Jun-05	14-Jun-19	52.71	3,292.47	1,625.00	148.48
259	33B05	75941	Active	15-Jun-05	14-Jun-19	52.71	1,280.46	1,625.00	148.48
260	33B05	75942	Active	15-Jun-05	14-Jun-19	52.71	4,104.08	1,625.00	148.48
261	33B05	75943	Active	15-Jun-05	14-Jun-19	52.71	1,594.19	1,625.00	148.48
262	33B05	75944	Active	15-Jun-05	14-Jun-19	52.71	1,437.32	1,625.00	148.48
263	33B05	75945	Active	15-Jun-05	14-Jun-19	52.71	1,437.32	1,625.00	148.48
264	33B05	75946	Active	15-Jun-05	14-Jun-19	52.71	1,437.32	1,625.00	148.48
265	33B05	75947	Active	15-Jun-05	14-Jun-19	52.71	3,656.98	1,625.00	148.48
266	33B05	75948	Active	15-Jun-05	14-Jun-19	52.71	16,071.50	1,625.00	148.48
267	33B05	75949	Active	15-Jun-05	14-Jun-19	52.71	5,026.33	1,625.00	148.48
268	33B05	75950	Active	15-Jun-05	14-Jun-19	52.71	0.00	1,625.00	148.48
269	33B04	2388525	Active	23-Jul-13	22-Jul-19	52.77	128,966.90	585.00	148.48
270	33B04	1132550	Active	2-Aug-05	8-Aug-19	52.74	0.00	1,625.00	148.48
271	33B04	1132551	Active	2-Aug-05	8-Aug-19	52.74	9,764.25	1,625.00	148.48
272	33B04	1132552	Active	2-Aug-05	8-Aug-19	52.74	5,080.99	1,625.00	148.48
273	33B04	1132553	Active	2-Aug-05	8-Aug-19	52.74	12,697.66	1,625.00	148.48
274	33B04	1132554	Active	2-Aug-05	8-Aug-19	52.74	0.00	1,625.00	148.48
275	33B04	1132555	Active	2-Aug-05	8-Aug-19	52.74	30,273.52	1,625.00	148.48
276	33B05	1132556	Active	2-Aug-05	8-Aug-19	52.73	13,981.99	1,625.00	148.48
277	33B05	1132557	Active	2-Aug-05	8-Aug-19	52.73	14,232.07	1,625.00	148.48
278	33B04	86812	Active	12-Sep-05	11-Sep-19	52.75	897.58	1,625.00	148.48
279	33B04	86813	Active	12-Sep-05	11-Sep-19	52.75	0.00	1,625.00	148.48
280	33B04	86814	Active	12-Sep-05	11-Sep-19	52.76	0.00	1,625.00	148.48
281	33B04	86815	Active	12-Sep-05	11-Sep-19	52.76	0.00	1,625.00	148.48
282	33B04	86816	Active	12-Sep-05	11-Sep-19	52.76	0.00	1,625.00	148.48
283	33B04	86817	Active	12-Sep-05	11-Sep-19	52.76	27,369.19	1,625.00	148.48
284	33B04	86818	Active	12-Sep-05	11-Sep-19	52.76	8,142.03	1,625.00	148.48
285	33B04	86819	Active	12-Sep-05	11-Sep-19	52.76	9,417.55	1,625.00	148.48
286	33B04	86820	Active	12-Sep-05	11-Sep-19	52.76	11,344.04	1,625.00	148.48
287	33B04	86821	Active	12-Sep-05	11-Sep-19	52.76	2,090.18	1,625.00	148.48
288	33B04	86822	Active	12-Sep-05	11-Sep-19	52.76	0.00	1,625.00	148.48
289	33B04	86823	Active	12-Sep-05	11-Sep-19	52.76	675.18	1,625.00	148.48
290	33B04	86824	Active	12-Sep-05	11-Sep-19	52.76	7,419.32	1,625.00	148.48
291	33B04	86825	Active	12-Sep-05	11-Sep-19	52.76	1,138.77	1,625.00	148.48
292	33B04	86826	Active	12-Sep-05	11-Sep-19	52.76	11,708.50	1,625.00	148.48
293	33B04	86827	Active	12-Sep-05	11-Sep-19	52.76	9,497.08	1,625.00	148.48
294	33B04	86828	Active	12-Sep-05	11-Sep-19	52.76	0.00	1,625.00	148.48
295	33B04	86829	Active	12-Sep-05	11-Sep-19	52.76	71,771.72	1,625.00	148.48
296	33B04	86830	Active	12-Sep-05	11-Sep-19	52.77	0.00	1,625.00	148.48
297	33B04	86831	Active	12-Sep-05	11-Sep-19	52.77	0.00	1,625.00	148.48
298	33B04	86832	Active	12-Sep-05	11-Sep-19	52.77	0.00	1,625.00	148.48
299	33B04	86833	Active	12-Sep-05	11-Sep-19	52.77	0.00	1,625.00	148.48
300	33B04	86834	Active	12-Sep-05	11-Sep-19	52.77	0.00	1,625.00	148.48
301	33B04	86835	Active	12-Sep-05	11-Sep-19	52.77	0.00	1,625.00	148.48
302	33B04	86836	Active	12-Sep-05	11-Sep-19	52.77	324.46	1,625.00	148.48
303	33B04	86837	Active	12-Sep-05	11-Sep-19	52.77	339.90	1,625.00	148.48
304	33B04	86838	Active	12-Sep-05	11-Sep-19	52.78	0.00	1,625.00	148.48
305	33B04	86839	Active	12-Sep-05	11-Sep-19	52.78	0.00	1,625.00	148.48



	NTS Sheet	Title No	Status	Date of Registration	Expiry Date	Area (Ha)	Excess Work (C\$)	Required Work (C\$)	Required Fees (C\$)
306	33B04	86840	Active	12-Sep-05	11-Sep-19	52.79	0.00	1,625.00	148.48
307	33B04	86841	Active	12-Sep-05	11-Sep-19	52.79	423.97	1,625.00	148.48
308	33B04	86842	Active	12-Sep-05	11-Sep-19	52.79	22.22	1,625.00	148.48
309	33B04	86843	Active	12-Sep-05	11-Sep-19	52.79	6,796.22	1,625.00	148.48
310	33B04	86844	Active	12-Sep-05	11-Sep-19	52.8	0.00	1,625.00	148.48
311	33B04	86845	Active	12-Sep-05	11-Sep-19	52.8	0.00	1,625.00	148.48
312	33B04	86846	Active	12-Sep-05	11-Sep-19 11-Sep-19	52.8	2,007.61	1,625.00	148.48
312	33B04	86847	Active	12-Sep-05	11-Sep-19	52.8	0.00	1,625.00	148.48
313	33B04	86848	Active	12-Sep-05	11-Sep-19	52.81	5,760.02	1,625.00	148.48
314	33B04	86849		12-Sep-05	11-Sep-19 11-Sep-19	52.81	5,232.08		148.48
	33B04 33B04	86850	Active		11-Sep-19 11-Sep-19	52.81	0.00	1,625.00 1,625.00	148.48
316	33B04	86851	Active Active	12-Sep-05 12-Sep-05	11-Sep-19 11-Sep-19	52.81	2,831.68	1,625.00	148.48
317	33B04					52.81			
318		86852	Active	12-Sep-05	11-Sep-19		634.16	1,625.00	148.48
319	33B04	86853	Active	12-Sep-05	11-Sep-19	52.81	2,677.44	1,625.00	148.48
320	33B04	86854	Active	12-Sep-05	11-Sep-19	52.81	41,442.00	1,625.00	148.48
321	33B04	86855	Active	12-Sep-05	11-Sep-19	52.81 52.81	16,050.72	1,625.00	148.48
322	33B04	86856	Active	12-Sep-05	11-Sep-19 11-Sep-19	52.81	14,797.32	1,625.00	148.48
323	33B04	86857	Active	12-Sep-05		52.82	0.00	1,625.00	148.48
324	33B04	86858	Active	12-Sep-05	11-Sep-19		721.33	1,625.00	148.48
325	33B04	86859	Active	12-Sep-05	11-Sep-19	52.82	4,789.84	1,625.00	148.48
326	33B04	86860	Active	12-Sep-05	11-Sep-19	52.82	1,489.17	1,625.00	148.48
327	33B04	86861	Active	12-Sep-05	11-Sep-19	52.82	1,245.30	1,625.00	148.48
328	33B04	86862	Active	12-Sep-05	11-Sep-19	52.75	15,409.74	1,625.00	148.48
329	33B04	86863	Active	12-Sep-05	11-Sep-19	52.77	0.00	1,625.00	148.48
330	33B04	86865	Active	12-Sep-05	11-Sep-19	52.77	0.00	1,625.00	148.48
331	33B04	86867	Active	12-Sep-05	11-Sep-19	52.76	0.00	1,625.00	148.48
332	33B04	86868	Active	12-Sep-05	11-Sep-19	52.76	0.00	1,625.00	148.48
333	33B04	86870	Active	12-Sep-05	11-Sep-19	52.74	700.23	1,625.00	148.48
334	33B04	86871	Active	12-Sep-05	11-Sep-19	52.74	30,414.19	1,625.00	148.48
335	33B04	86872	Active	12-Sep-05	11-Sep-19	52.74	5,683.65	1,625.00	148.48
336	33B04	86873	Active	12-Sep-05	11-Sep-19	52.74	1,431.00	1,625.00	148.48
337	33B04	86874	Active	12-Sep-05	11-Sep-19	52.74	3,167.08	1,625.00	148.48
338	33B04	86875	Active	12-Sep-05	11-Sep-19	52.74	4,385.78	1,625.00	148.48
339	33B04	86876	Active	12-Sep-05	11-Sep-19	52.74	24,360.18	1,625.00	148.48
340	33B04	86877	Active	12-Sep-05	11-Sep-19	52.74	15,422.79	1,625.00	148.48
341	33B04	86878	Active	12-Sep-05	11-Sep-19	52.74	42,659.08	1,625.00	148.48
342	33B04	86879	Active	12-Sep-05	11-Sep-19	52.74	9,239.99	1,625.00	148.48
343	33B04	86880	Active	12-Sep-05	11-Sep-19	52.74	17,705.50	1,625.00	148.48
344	33B04	86882	Active	12-Sep-05	11-Sep-19	52.75	0.00	1,625.00	148.48
345	33B04	86883	Active	12-Sep-05	11-Sep-19	52.75	0.00	1,625.00	148.48
346	33B04	86884	Active	12-Sep-05	11-Sep-19	52.75	19,067.73	1,625.00	148.48
347	33B04	86885	Active	12-Sep-05	11-Sep-19	52.75	13,909.26	1,625.00	148.48
348	33B04	86886	Active	12-Sep-05	11-Sep-19	52.75	6,477.28	1,625.00	148.48
349	33B04	86887	Active	12-Sep-05	11-Sep-19	52.75	18,269.69	1,625.00	148.48
350	33B04	86888	Active	12-Sep-05	11-Sep-19	52.75	9,198.19	1,625.00	148.48
351	33B04	86889	Active	12-Sep-05	11-Sep-19	52.75	6,358.82	1,625.00	148.48
352	33B04	86890	Active	12-Sep-05	11-Sep-19	52.75	16,965.55	1,625.00	148.48
353	33B04	86891	Active	12-Sep-05	11-Sep-19	52.75	5,135.97	1,625.00	148.48
354	33B04	86892	Active	12-Sep-05	11-Sep-19	52.75	19,256.76	1,625.00	148.48
355	33B04	86893	Active	12-Sep-05	11-Sep-19	52.75	5,240.81	1,625.00	148.48
356	33B04	86894	Active	12-Sep-05	11-Sep-19	52.75	0.00	1,625.00	148.48



	NTS Sheet	Title No	Status	Date of Registration	Expiry Date	Area (Ha)	Excess Work (C\$)	Required Work (C\$)	Required Fees (C\$)
357	33B04	86895	Active	12-Sep-05	11-Sep-19	52.75	5,092.13	1,625.00	148.48
358	33B04	86896	Active	12-Sep-05	11-Sep-19	52.75	10,735.61	1,625.00	148.48
359	33B04	86897	Active	12-Sep-05	11-Sep-19	52.75	1,346.53	1,625.00	148.48
360	33B05	106397	Active	6-Dec-05	5-Dec-19	52.73	7,869.44	1,625.00	148.48
361	33B05	106398	Active	6-Dec-05	5-Dec-19	52.73	22,855.32	1,625.00	148.48
362	33B05	106399	Active	6-Dec-05	5-Dec-19	52.73	29,084.32	1,625.00	148.48
363	33B05	106400	Active	6-Dec-05	5-Dec-19	52.73	24,457.59	1,625.00	148.48
364	33B05	106401	Active	6-Dec-05	5-Dec-19	52.73	14,885.82	1,625.00	148.48
365	33B05	106402	Active	6-Dec-05	5-Dec-19	52.73	21,003.48	1,625.00	148.48
366	33B05	106403	Active	6-Dec-05	5-Dec-19	52.72	3,267.11	1,625.00	148.48
367	33B05	106404	Active	6-Dec-05	5-Dec-19	52.72	6,615.49	1,625.00	148.48
368	33B05	106405	Active	6-Dec-05	5-Dec-19	52.72	63,607.84	1,625.00	148.48
369	33B05	106406	Active	6-Dec-05	5-Dec-19	52.72	11,604.52	1,625.00	148.48
370	33B05	106407	Active	6-Dec-05	5-Dec-19	52.72	18,493.24	1,625.00	148.48
371	33B05	106408	Active	6-Dec-05	5-Dec-19	52.72	1,621.47	1,625.00	148.48
372	33B05	106409	Active	6-Dec-05	5-Dec-19	52.71	11,206.43	1,625.00	148.48
373	33B05	106410	Active	6-Dec-05	5-Dec-19	52.73	7,004.08	1,625.00	148.48
374	33B05	106411	Active	6-Dec-05	5-Dec-19	52.73	3,886.88	1,625.00	148.48
375	33B05	106412	Active	6-Dec-05	5-Dec-19	52.73	3,761.62	1,625.00	148.48
376	33B05	106413	Active	6-Dec-05	5-Dec-19	52.73	3,383.01	1,625.00	148.48
377	33B05	106414	Active	6-Dec-05	5-Dec-19	52.73	27,024.73	1,625.00	148.48
378	33B05	106415	Active	6-Dec-05	5-Dec-19	52.73	12,222.74	1,625.00	148.48
379	33B05	106416	Active	6-Dec-05	5-Dec-19	52.73	14,519.64	1,625.00	148.48
380	33B05	106417	Active	6-Dec-05	5-Dec-19	52.72	11,025.99	1,625.00	148.48
381	33B05	106418	Active	6-Dec-05	5-Dec-19	52.72	11,060.80	1,625.00	148.48
382	33B05	106419	Active	6-Dec-05	5-Dec-19	52.72	1,621.47	1,625.00	148.48
383	33B05	106420	Active	6-Dec-05	5-Dec-19	52.72	4,175.31	1,625.00	148.48
384	33B05	106421	Active	6-Dec-05	5-Dec-19	52.72	2,324.89	1,625.00	148.48
385	33B05	106422	Active	6-Dec-05	5-Dec-19	52.72	35,351.70	1,625.00	148.48
		385 CI	C Claims	s + 1 BNE		20067.55	59,704,311.18	621,660.00	56,543.91

# **APPENDIX B**

Highlights from Eau Claire Drilling Results



Туре	Drill Hole	From (m)	To (m)	Interval (m)	Gold Assay (g/t)	Vertical Depth (m)	Zone
Step-out	ER16-582	188.1	188.6	0.5	5.7	166.0	450 W
Infill	ER16-583	232.6	233.1	0.5	2.4	186.5	
		291.6	292.1	0.5	2.7	231.5	450 W
		320.6	321.6	1.0	10.2	253.5	
Infill	ER16-584	114.3	114.8	0.5	3.1	98.0	
		278.1	280.1	2.0	2.4	238.0	
		287.5	288.5	1.0	4.0	246.0	
		291	304.5	13.5	11.5	254.0	450.00
		Incl. 299.0	304	5.5	21.3		450 W
		Incl. 299.5	301.5	2.0	31.9		-
		310.5	311	0.5	79.7	265.0	
		317.5	318.6	1.1	4.6	271.0	
Infill	ER16-586	75.4	76.9	1.5	2.0	64.5	
		Incl. 76.4	76.9	0.5	3.8		-
		130.5	132	1.5	2.3	109.5	
		Incl. 130.5	131	0.5	5.9		-
		134.5	135.5	1.0	2.7	112.5	1
		152.5	153.5	1.0	8.9	127.5	450 W
		160	160.5	0.5	7.5	133.5	
		173.2	176.7	3.5	1.7	145.5	-
		Incl. 173.2	174.2	1.0	4.3		-
		228.3	231.3	3.0	1.2	191.5	
Infill	ER16-587	130.8	133	2.2	1.4	109.0	
		Incl. 130.8	131.3	0.5	3.3		
		174.8	176	1.2	2.5	144.0	450 W
		228.1	229.1	1.0	5.4	188.0	-
Infill	ER16-588	248.3	251.5	3.2	3.1	195.0	
		Incl. 248.3	251.5	1.5	6.2		450 W
		286.9	287.4	0.5	4.0	224.0	_
Infill	ER16-589	46	47	1.0	2.4	40.0	
		106.5	107	0.5	3.3	92.0	_
		109.5	110	0.5	3.9	95.0	-
		155.5	156.5	1.0	2.7	135.0	450 W
		211	213	2.0	2.1	182.0	1
		Incl. 211.0	212	1.0	3.9		1
		227.7	229.2	1.5	1.1	193.0	
Infill	ER16-591	232	234.1	2.1	2.8	197.0	450 W
		incl. 233.1	234.1	1.0	5.0	107.0	
		242.1	246.5	4.4	2.0	200.0	
Infill	FR16-593	incl. 245.5	246.5	1.0	4.1	200.0	450 W
	ER16-593	269.5	240.5	0.5	15.2	220.0	-30 00

Туре	Drill Hole	From (m)	To (m)	Interval (m)	Gold Assay (g/t)	Vertical Depth (m)	Zone
		271.5	276	4.5	1.0	228.0	
		incl.275.0	275.5	0.5	3.8		
		305	306	1.0	4.5	246.0	
		203	204.5	1.5	0.6	154.0	
L., <b>f</b> :11		208.5	209	0.5	13.6	158.0	450.14
Infill	ER16-595	269.6	270.6	1.0	3.2	202.0	450 W
		303.5	304.2	0.7	3.1	225.0	
	5046 500	13.6	14.1	0.5	4.2	9	450.14
Infill	ER16-598	196.3	198	1.7	1.2	137.0	450 V
Infill	ER16-601	42.4	44.5	2.1	0.9	36.0	450 V
		110.8	113.8	3.0	1.1	92.0	
		221.5	222.2	0.7	35.3	182.0	
Infill	ER16-602	270	271.9	1.9	3.0	221.0	450 V
		incl. 270.0	270.5	0.5	7.2		
Infill	ER16-605	209.5	210	0.5	2.1	159.0	450 V
		156.6	158.6	2.0	2.9	135.0	
		166.6	167.1	0.5	1.3	143.0	
		219.6	221.9	2.3	43.1	188.0	450 W
		incl. 220.2	221.2	1.0	96.8		
Infill	ER16-606	224	225	1.0	3.6	192.0	
		248	248.7	0.7	2.3	211.0	
		273.2	273.7	0.5	1.6	233.0	
		275.6	276.2	0.6	1.4	235.0	
		190.6	193.6	3.0	6.4	164.0	
Infill	ER16-608	incl. 192.1	192.6	1.0	26.4		450 V
		197.1	197.6	0.5	2.0	168.0	
Infill	ER16-609	184	185	1.0	1.5	142.0	450 V
		51.3	51.8	0.5	7.1	48.0	
		61.3	61.8	0.5	4.1	57.0	-
Infill	ER16-610	142	144	2.0	1.1	132.0	450 V
		149	150	1.0	1.4	138.0	-
		187	187.5	0.5	4.7	172.0	
		203.5	205.1	1.6	2.0	183.0	
		216	216.5	0.5	1.1	194.0	 
Infill	ER16-613	240.4	245	4.6	4.0	218.0	450 V
		incl. 240.4	241.4	1.0	7.9		1
		144	146.6	2.6	2.8	115.0	
Infill	ER16-614	incl. 144.5	145.5	1.0	4.1		450 V
		103.5	104.2	0.7	3.2	75.0	
Infill	ER16-616	128.3	130	1.7	2.2	92.0	450 V
Infill	ER16-617	78.3	78.8	0.5	1.2	66.0	450 W

Туре	Drill Hole	From (m)	To (m)	Interval (m)	Gold Assay (g/t)	Vertical Depth (m)	Zone
		111.9	117.5	5.5	1.1	97.0	
		152	152.5	0.5	2.8	128.0	
		202.1	205.6	3.5	15.8	171.0	
		incl. 204.8	205.6	0.8	66.6		
		211.2	211.7	0.5	8.9	178.0	
		223.2	224.2	1.0	8.5	189.0	
		260.8	261.8	1.0	2.7	220.0	
		197	197.7	0.7	7.5	171.0	
		238.9	240	1.1	3.6	207.0	
		262	267	5.0	5.1	229.0	
Infill	ER16-597	Incl. 263.0	264.5	1.5	11.1		450 W
		272.3	276.5	4.2	2.7	237.0	
		Incl. 274.5	275	0.5	16.5		
		300	300.6	0.6	21.8	259.0	
		190.6	193.6	3.0	6.4	164.0	
		Incl. 192.1	192.6	0.5	26.4		
		197.1	197.6	0.5	2.0	169.0	450 W
		223.1	224.2	1.1	9.1	190.0	
		231.2	236.5	5.3	6.2	199.0	
		Incl. 231.2	231.7	0.5	15.7		
Infill	ER16-608	Incl. 233.0	233.5	0.5	20.9		
		243.6	246.2	2.6	6.3	208.0	
		Incl. 245.6	246.2	0.6	15.9		
		252.8	255.2	2.4	67.7	216.0	
		Incl. 252.8	254.7	1.9	85.1		
		264.4	265.1	0.7	27.0	225.0	
		270.8	273.1	2.3	3.9	231.0	
		92	94.4	2.4	7.6	80.0	
		Incl. 92.0	93	1.0	16.6		
		197.8	198.3	0.5	5.4	170.0	
		205.2	205.8	0.6	4.8	177.0	
Infill	ER16-612	209.5	210	0.5	15.7	180.0	450 W
		243.5	244.2	0.7	9.8	210.0	
		249	249.5	0.5	7.6	215.0	-
		259	260	1.0	27.2	223.0	1
		265	265.5	0.5	14.7	226.0	1
		112.9	117	4.1	1.1	97.0	
		202.1	205.6	3.5	15.8	171.0	1
Infill	ER16-617	Incl. 204.8	205.6	0.8	66.6		450 W
		211.2	211.7	0.5	8.9	178.0	
		223.2	224.2	1.0	8.5	189.0	1



Туре	Drill Hole	From (m)	To (m)	Interval (m)	Gold Assay (g/t)	Vertical Depth (m)	Zone
		260.8	261.8	1.0	2.7	220.0	
Infill	ER16-619	83.5	84	0.5	4.0	70.0	450 W
		183.7	184.2	0.5	16.3	153.0	
		192.2	193.5	1.3	2.5	160.0	
		263.5	264	0.5	28.5	219.0	
	ER16-620	127	128	1.0	2.4	103.0	450 W
L., <b>f</b> :11		229.2	235.8	6.6	6.7	188.0	
Infill		Incl. 229.2	230.2	1.0	31.3		
		Incl. 234.8	235.8	1.0	10.0		
	ER16-624	87	87.5	0.5	3.3	78.0	450 W
		102.8	103.4	0.6	3.6	92.0	
		114	116.5	2.5	1.9	103.0	
Infill		247	247.5	0.5	4.5	219.0	
		257.2	257.9	0.7	25.0	229.0	
		294.3	294.9	0.6	16.0	261.0	
	ER16-625	200	201	1.0	4.1	162.0	450 W
		260.9	262.9	2.0	4.4	211.0	
		Incl. 261.4	261.9	0.5	11.0		
Infill		291.7	305	13.3	2.2	239.0	
		Incl. 291.7	294.8	3.1	4.3		
		304	305	1.0	7.1	244.0	
Infill	ER16-628	215.5	216.2	0.7	3.5	166.0	450 W
	ER16-631	259	259.5	0.5	17.7	213.0	450 W
		263.6	264.2	0.6	2.9	217.0	
		275.1	275.8	0.7	4.5	227.0	
Infill		284.6	285.7	1.1	3.7	234.0	
		289.7	290.6	0.9	2.4	239.0	
		322.8	323.3	0.5	3.4	266.0	
Infill	ER16-621	265.7	267.2	1.5	20.2	235.0	450 W
		incl. 266.2	266.7	0.5	49.1		
		279	281	2.0	9.2	247.0	
		incl. 279.0	280	1.0	16.4		
Infill	ER16-629	267.8	269.8	2.0	6.1	232.0	450 W
Infill	ER16-632	273.1	277.2	4.1	5.8	256.0	450 W
		incl. 275.1	276.7	1.6	11.9		
Infill	ER16-635	349.6	350.3	0.7	16.0	300.0	450 W
Infill	ER16-639	344.2	345.2	1.0	12.4	290.0	450 W
Infill	ER16-642	336	340.4	4.4	4.7	275.0	450 W
		incl. 337.5	338	0.5	10.7		
Infill	ER16-644	189	191.1	2.1	4.8	159.0	- 450 W
		incl. 190.1	190.6	0.5	11.2		



Туре	Drill Hole	From (m)	To (m)	Interval (m)	Gold Assay (g/t)	Vertical Depth (m)	Zone
Infill		310.3	318	7.7	2.4	245.0	450 W
		incl. 316.3	317.4	1.1	8.1		
	– ER16-645 –	346.2	347.9	1.7	14.6	270.0	
		355	356	1.0	12.4	278.0	
step-out	ER16-646	245.2	250	4.8	2.3	200.0	450 W
Infill	ER16-649	164.2	165.2	1.0	11.3	126.0	450 W
		169.7	174.1	4.4	4.9	132.0	
		incl. 169.7	170.6	0.7	19.1		
Infill	ER16-655	352.9	354	1.1	11.5	286.0	450 W
		incl. 353.5	354	0.5	20.0		
step-out	5016 650	31	33	2.0	10.6	24.0	450 W
	ER16-659	incl. 32.0	33	1.0	15.5		
Infill		354.4	361.5	7.1	17.0	302.0	#REF!
	ER16-662	incl. 358.5	359.2	0.7	54.6		#REF!
	_	365	366.5	1.5	6.9	309.0	#REF!
Infill	ER16-658	341.6	342.1	0.5	20.6	296.0	450 W
		381.8	393.1	11.3	5.6	336.0	
		incl. 381.8	384.1	2.3	11.9		
		with 383.5	384.1	0.5	34.6		
		and incl. 389.2	393.1	3.9	7.8		
		with 390.0	390.6	0.6	16.8		
		and incl. 392.1	393.1	1.0	17.3		
		433	435	2.0	8.5	376.0	
Infill	ER16-666	323.8	328	4.3	5.4	274.0	450 W
		incl. 323.8	325.4	1.7	8.9		
		350	354.6	4.6	9.0	296.0	
		incl. 350.0	350.8	0.8	19.4		
		and 352.8	354.6	1.8	20.4		
Infill	ER16-668	327.4	328.3	0.9	20.6	281.0	450 W
		346.8	348.3	1.5	9.9	298.0	
Infill	ER16-669	251	252	1.0	23.6	225.0	450 W
Infill	ER16-671	65.9	67.2	1.3	15.8	46.0	450 W
		incl. 66.4	67.2	0.8	23.2		
Infill	ER17-672	105.6	106.6	1.0	4.1	80.0	
		118.4	119.9	1.5	6.8	90.0	450 W
		incl. 118.9	119.4	0.5	19.2		1
Infill	ER17-673	352	357.9	5.9	3.6	315.0	- 450 W
		incl. 352.6	354	1.4	9.1		
Infill	ER17-674	313.5	326.8	13.3	8.3	233.0	450 W



Туре	Drill Hole	From (m)	To (m)	Interval (m)	Gold Assay (g/t)	Vertical Depth (m)	Zone
		incl. 313.5	315.8	2.3	4.3		
		incl. 318.0	326.8	8.8	11.4		
		335.2	337.7	2.5	11.4	245.0	
		incl. 335.7	336.2	0.5	45.5		
Infill		134	138.4	4.4	2.6	93.0	
		incl. 134.0	134.5	0.5	11.8		
	ED17 C01	and 137.4	138.4	1.0	5.5		450.14
	ER17-681	174	185	11.0	3.0	122.0	450 W
		incl. 179.0	185	6.0	4.5		
		and 183.5	185	1.5	8.8		
Infill	ER17-690	374.6	375.1	0.5	16.7	353.0	450 W
Infill		238.3	239.3	1.0	6.8	196.0	
		incl. 238.3	238.8	0.5	10.5		1
	ER17-692	306.5	310	3.5	2.6	249.0	450 W
	_	incl. 307.0	309	2.0	4.1		
Infill	ER16-590	61.5	63	1.5	5.5	53.8	450 W
infill	ER16-648	178	179	1.0	29.3	167.1	450 W
Infill	ER16-682	348.3	348.8	0.5	7.8	304.3	450 W
Infill		38.5	39	0.5	3.1	31.8	
	_	52.4	58.7	6.3	2.0	45.8	
	ER17-684	incl. 54.9	56.4	1.5	5.4		450 W
	—	77.8	79	1.2	8.6	63.8	
infill	ER17-685	293.3	296.1	2.8	8.7	251.7	450 W
Infill		50.4	51.7	1.3	2.5	36.4	
	—	58.1	62.6	4.5	4.9	42.4	
	ER17-686	incl. 58.1	59.6	1.5	10.2		450 W
	—	87.4	89.4	2.0	3.5	61.4	
Infill		208.3	208.8	0.5	22.0	170.3	
	-	260	264	4.0	5.5	212.3	
	ER17-687	incl. 260.0	261.7	1.7	12.3		450 W
	_	291.5	293	1.5	9.7	235.3	
Infill		174.5	176	1.5	47.4	132.4	
	ER17-689	180.5	181	0.5	11.4	137.4	450 W
Infill		104	105.5	1.5	6.5	78.3	
	ER17-691	112.2	114.9	2.7	2.6	85.3	450 W
		128.9	130.4	1.5	2.8	97.3	
Infill		67.6	68.6	1.0	6.1	46.0	
	ER17-693	81	81.5	0.5	7.5	56.0	450 W
Infill		293	293.5	0.5	56.9	251.2	
	ER17- 694	360.5	370.2	9.7	3.0	313.2	450 W
		incl. 366.0	367.5	1.5	17.1	515.2	

Туре	Drill Hole	From (m)	To (m)	Interval (m)	Gold Assay (g/t)	Vertical Depth (m)	Zone
Infill		9.2	9.7	0.5	3.9	8.1	
		14.4	14.9	0.5	11.2	12.1	
	ER17-695	38.9	45.1	6.2	14.1	34.1	450 W
		incl. 38.9	39.9	1.0	73.1		
		61.1	62	0.9	6.0	49.1	
Infill		242.1	243.6	1.5	6.1	196.5	
		incl. 242.1	242.6	0.5	14.9		
	ER17-696	264.5	267	2.5	26.8	215.5	450 W
		incl. 265.5	266.5	1.0	54.9		
		280.9	282.2	1.3	19.5	228.5	
Infill		19.6	23.8	4.2	3.2	19.4	
	-	incl. 19.6	20.6	1.0	8.3		1
	ER17-699	379.2	385.2	6.0	4.7	336.4	450 W
	-	incl. 382.1	382.7	0.6	35.8		
Infill		16.2	20.2	4.0	4.8	12.0	
	ER17-700	incl. 16.2	17	0.8	14.2		450 W
		38.7	39.2	0.5	6.3	26.0	
Infill		258.5	260.5	2.0	5.4	211.9	
	-	267.5	273.5	6.0	4.4	220.9	
	- ER17-701 -	incl. 267.5	268.5	1.0	15.2		450 W
		326.2	330	3.8	3.1	297.9	-
Infill	ER17-702	64.3	64.8	0.5	50.4	27.9	
Infill	ER17-704	119.4	120.9	1.5	16.0	84.9	450 W
		130	141.8	11.8	1.3	102.0	
		incl. 130.0	132	2.0	2.3	10210	850 W
Infill	ER17-697	370.2	372.2	2.0	43.7	267.0	
		incl. 370.2	371.2	1.0	73.4		_
		408.6	412.1	3.5	9.8	379.0	
		incl. 408.6	409.2	0.6	54.5		_
infill	ER17-703	424	426.9	2.9	7.8	393.0	450 W
		incl. 424.0	425.3	1.3	16.0	333.0	130 11
		447.8	448.3	0.6	70.7	413.0	
		10.7	11.2	0.5	9.1	8.0	
		31.2	31.7	0.5	9.3	22.0	
		36	38.2	2.2	6.2	26.0	-
infill	ER17-705	incl. 36.5	37	0.5	21.7	20.0	450 W
		53.7	54.7	1.0	4.9	38.0	4
		63.1	64.7	1.0	4.9	45.0	-
	+					-	
infill		288.5	297.5	9.0	6.5	247.0	450 W
infill	ER17-706	incl. 288.5	291	2.5 0.5	16.7		



Туре	Drill Hole	From (m)	To (m)	Interval (m)	Gold Assay (g/t)	Vertical Depth (m)	Zone
		and 295.5	297.5	2.0	6.7		
		302.1	305	2.9	7.0	256.0	
		incl. 302.1	303.1	1.0	17.9		
infill	ER17-707	244.5	245.1	0.6	52.5	213.0	450 W
		14.8	15.3	0.5	9.6	12.0	
		19.2	21.3	2.1	20.0	16.0	
infill	ER17-708	37.5	40.2	2.7	3.4	30.0	450 W
		incl. 39.7	40.2	0.5	10.0		
		47.1	47.6	0.5	63.4	37.0	
		325.5	330.5	5.0	10.0	275.0	
infill	ER17-711	incl. 326.5	327.5	1.0	33.7		450 W
		and 329.5	330.5	1.0	11.9		
	5547 749	97.6	102.6	5.0	4.4	68.0	450.14
infill	ER17-712	incl. 101.6	102.6	1.0	10.1		450 W
	5047 745	239	245.5	6.5	5.2	179.0	450.14
Infill	ER17-715	incl. 242.5	245.5	3.5	8.5		450 W
		47.7	49.9	2.2	20.7		
infill	ER17-713	incl. 49.2	49.9	0.7	46.4	37.0	450 W
		27.9	28.8	0.9	37.7	21.0	
	ER17-717	51.4	51.9	0.5	32.8	38.0	
infill		111.2	115.5	4.3	3.4		450 W
		incl. 114.5	115	0.5	12.7	- 80.0	
		44	46.15	2.2	9.2	32.0	<u> </u>
		51.5	53.2	1.7	12.1	37.0	
infill	ER17-718	95	99.9	4.9	30.6	69.0	450 W
		incl. 95.0	96.5	1.5	97.9		
		incl. 96.0	96.5	0.5	254.0	-	
		99.8	100.3	0.5	51.8	81.0	
		194.2	197.9	3.7	42.3		
		incl. 194.2	194.7	0.5	206.0	155.0	
infill	ER17-723	217.8	218.3	0.5	22.9	172.0	450 W
		225.3	228	2.7	6.4		-
		incl. 226.1	226.8	0.7	19.9	179.0	
		353.8	354.5	0.7	31.6	324.0	
		421	421.5	0.5	63.4	384.0	-
infill	ER17-725	431	432.7	1.7	11.4		450 W
		incl. 431	431.5	0.5	23.1	394.0	
		275.2	282	6.8	5.7		
infill	ER17-734	incl. 278.0	279	1.0	17.9	197.0	450 W
infill	ER17-736	88.3	88.8	0.5	72.6	65.0	450 W
infill	ER17-740	277.5	279.5	2.0	9.3	230.0	450 W



Туре	Drill Hole	From (m)	To (m)	Interval (m)	Gold Assay (g/t)	Vertical Depth (m)	Zone
		incl. 278.5	279	0.5	20.0		
		291.3	295.8	4.5	3.6	254.0	
		incl. 291.3	291.8	0.5	12.1	251.0	
	5047 742	311.5	313.5	2.0	10.7	200.0	1
infill	ER17-742	incl. 311.5	312	0.5	38.0	266.0	450 W
		332.5	335	2.5	10.1	205.0	
		incl. 334.0	335	1.0	19.8	285.0	
infill	ER17-746	272	272.6	0.6	41.3	200.0	450 W
infill	ER17-716	407.8	408.8	1.0	23.7	347.0	850 W
infill	ER17-737	360.7	362.7	2.0	6.5	326.0	850 W
	5543 340	116.4	117.9	1.5	17.5	102.0	050.14
infill	ER17-743	incl. 116.4	116.9	0.5	37.3	103.0	850 W
		367.4	371	3.6	6.0	228.0	
		incl. 370.4	371	0.6	18.9	328.0	
		387.2	389.9	2.7	4.2		450 W
infill	ER17-720	incl. 388.7	389.9	1.2	7.5	345.0	
		435	443.5	8.5	10.2		
		incl. 440.5	442.5	2.0	24.3	388.0	
		36	37	0.5	38.1	25.0	
infill	ER17-727	48	49.5	1.5	34.5		450 W
		incl. 48.0	48.5	0.5	50.0	34.0	
		364	366.9	2.9	6.8		
		incl. 364.0	365	1.0	16.5	319.0	
infill	ER17-729	415	418.5	3.5	6.1		450 W
		incl. 415.5	417	1.5	10.8	362.0	
		421.5	428	6.5	2.7	370.0	
infill	ER17-730	41	41.5	0.5	48.8	32.0	450 W
		232.6	233.6	1.0	10.4	206.0	
infill	ER17-744	324.8	330.2	5.4	5.4		450 W
		incl. 324.8	326.7	1.9	13.3	288.0	
		11.1	12.2	1.1	21.8		
infill	ER17-757	incl. 11.6	12.2	0.6	37.4	9.0	450 W
		367.5	374.3	6.8	2.5		
infill	ER17-741	incl. 372.3	373.3	1.0	6.8	326.0	850 W
		17.5	19.6	2.1	8.2		
infill	ER17-756	incl. 17.5	18	0.5	29.1	13.0	850 W
		172	172.5	0.5	21.3	127.0	
		235.1	238.7	3.6	2.9		1
HGS (down	ER17-776	incl. 235.1	237.1	2.0	4.2	174.0	450 W
plunge)		260.8	265.3	4.5	6.3		
		incl. 261.8	263.3	1.5	9.4	193.0	

Туре	Drill Hole	From (m)	To (m)	Interval (m)	Gold Assay (g/t)	Vertical Depth (m)	Zone
		291	297	6.0	15.3	245.0	
		incl. 291.0	293	2.0	41.6	215.0	
		318.3	326.6	8.3	4.0	226.0	
		incl. 318.3	320.8	2.5	8.7	236.0	
		345.2	381	35.8	7.1		
		incl. 353.8	367.5	13.7	9.2		
		and incl. 360.3	363.8	3.5	19.5	265.0	
		incl. 370.5	372	1.5	12.8		
		incl. 373.5	378	4.5	8.7		
HGS (down plunge)	ER17-770	279	280	1.0	35.8	205.0	450 W
		86.6	92.8	6.2	2.7	66.0	
HGS (down	ER17-773	incl. 87.6	89.6	2.0	8.5	66.0	450 W
plunge)	LK17-773	229	230	1.0	9.0	168.0	430 W
		262	262.5	0.5	31.7	192.0	
Deep Domain	ER17-774	570.5	574.6	4.1	30.8	529.0	450 W
Infill		28.1	38	9.9	1.1	26.0	850 W
111111	ER17-753	incl. 37.0	38	1.0	3.3	20.0	850 W
	ER17-771	69.7	70.2	0.5	226.0	69.0	450 W
Deep Swarm		515.5	516.5	1.0	14.4	455.0	
		634.7	636	1.3	7.7	548.0	
Doop Swarm	ER17-775	604	614	10.1	2.5	- 547.0	450 W
Deep Swarm	EK17-775	incl. 609.0	610	0.5	11.5	547.0	
Deep Swarm	ER17-778	760.4	766.7	6.3	2.0	642.0	450 W
Deep Swarm	EK17-770	incl. 762.6	763.7	1.1	5.3	042.0	450 W
	ER17-782	608	610.1	2.1	15.9	556.0	450.04
Deep Swarm	EK17-782	incl. 609.0	610.1	1.1	28.1	550.0	450 W
Deep Swarm	ER17-786	386.2	387.3	1.1	34.6	366.0	450 W
Deep Swarm	EK17-700	723	724	1.0	11.8	665.0	450 W
		89	90	1.0	13.5	81.0	
Exploration	ER17-780	99.5	102	2.5	4.9	90.0	850 W
		421.8	422.3	0.5	27.5	382.0	
		432.9	442.1	9.2	2.6		
Exploration	ER17-783	incl. 432.9	433.6	0.7	10.8	395.0	450 W
		incl. 440.0	440.6	0.6	10.8		
		159.5	164	4.5	3.5	157.0	
		173.5	176	2.5	3.7	169.0	
HGS	ER17-777	184.5	201.3	16.8	5.8		450 W
		incl. 187.0	187.5	0.5	55.5	187.0	
		and 193.5	194	0.5	25.5	1	



Туре	Drill Hole	From (m)	To (m)	Interval (m)	Gold Assay (g/t)	Vertical Depth (m)	Zone
		211.2	213.2	2.0	12.4	205.0	
		218.5	221	2.5	7.9	213.0	
		231.6	233.2	1.6	20.3	225.0	
		266.5	276.7	10.2	3.4	263.0	
		incl. 270.5	273	2.5	6.4	205.0	
		314	319.5	5.5	8.7	307.0	
		incl. 314.0	315.5	0.5	64.0	507.0	

# **APPENDIX C**

Results of the 2015 QA/QC Program



# ALS Laboratory Quality Control

Internal Quality Control (QC) samples were used by ALS Chemex Labs to detect and measure the magnitude of laboratory error associated with the measurement of gold and other elements in each sample. Tracking QC data allows an acceptable degree of confidence in assay values to be maintained by monitoring the performance of the lab with these reference samples of known composition. Laboratory quality control results conducted internally by the lab are reported by ALS on separate certificates, as well as digitally with the sample assay results.

#### **Duplicate Sampling**

The laboratory routinely completes duplicate analyses of random samples. The duplicate assay data is used by the laboratory for internal quality control monitoring, to provide an estimate of the reproducibility related to the uncertainties inherent in the analytical method and homogeneity of the pulps. The precision, or relative percent difference calculated for the pulp duplicates (that is the likeness of the second cut to the first) is expected to be less than 10%. This means that at the 95% confidence level (or 19 times out of 20) the duplicate pulp assay will be +/- 10% of the original assay. Duplicate assay results falling outside these acceptable limits may indicate that pulverizing specifications should be changed, or that alternative methods, such as Metallic Screen Analysis for gold, should be considered. Duplicate assays also give a good idea of the extent of variability being dealt with on a given deposit. The results of the ALS internal duplicate sampling, conducted from June 2015 through December 2015, are satisfactory.

#### Standard and Blank Sampling

As conveyed above, ALS Chemex Labs analyses internal blanks and standards as part of their own, independent QA/QC program. A summary of results for Au-ICP22, Au-GRA22, ME-MS61, and S-IR08 assay methods, the first two reporting gold in ppb, the third silver in ppm, and the fourth sulphur in percent, show that results are all within acceptable industry parameters. A review of the results for the 47 elements analyzed on top of silver, for the ME-MS61 method, are also within acceptable industry parameters.

### Eastmain Data Verification

In addition to the ALS Chemex internal QC protocol, Eastmain inserted blanks and control standards with channel and drill core sample collections throughout the 2015 exploration program as part of the QA/QC procedure. Blanks and standards underwent the same sample preparation and analysis as the rock samples with which they were delivered. For drill core samples, an effort was made to insert one blank and one standard at regular intervals with every 50 samples sent for assay. Standards were included in channel sample collections less frequently. A total of 222 standards and 218 blanks were submitted to the laboratory for quality assurance purposes, which together comprise 4.1% of all drill core and channel samples assayed in 2015.

#### Laboratory Performance for Blanks

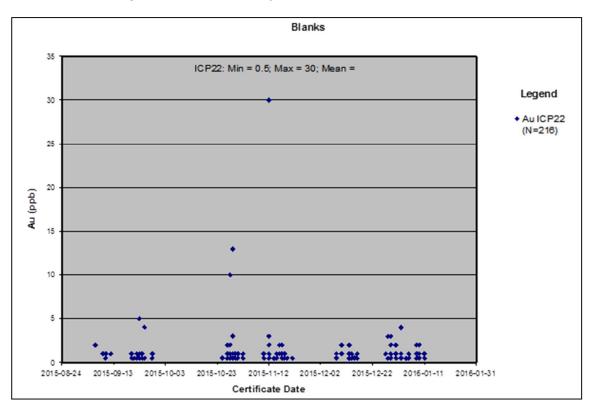
Barren coarse material (% blank+) is submitted with samples for crushing and pulverizing to test for possible contamination in the laboratory assay procedure. Eastmain utilized standard cement bricks as blanks, which have an assumed Au value of zero.

The failure threshold for the blanks is set at 50 ppb. A value of 0.5 ppb (half the detection limit) is used for all assay results of below detection limit+.

Blank samples are deemed to have resulted in a quality control failure if their assay values exceeded 50 ppb. Elevated values for blanks may suggest that there has been contamination or sample crosscontamination during preparation. Elevated values may also indicate sources of contamination in the fire assay procedure (contaminated reagents or crucibles) or sample solution carry-over during instrumental finish.



A total of 218 blanks were submitted to ALS during the 2015 exploration program (Figure C-1). They were used for statistical analysis in the quality control procedure. One of the 218 blanks resulted in quality control failure with a value of 0.161 g/t Au (sample #P921300) returning the highest Au value returned from a blank. This failure can be explained by contamination at the preparation stage as the two previous samples (#P921298 and #P921299) returned values of 37.7 g/t and 10.0 g/t Au respectively. Another blank sample returned a value of 0.043 g/t Au (#R381700) which was below the failure threshold and can also be explained by preparation contamination as the previous sample #R381699 returned 1.0g/t Au. These values are considered acceptable with a failure rate lower than 5%. Analysis of the blanks suggests that there was very little gold contamination during processing at the laboratory. Results were satisfactory.





# Laboratory Performance for Control Standards

Certified reference materials (CRM or RM) are submitted with samples for assay as control standards to identify any possible assay problems with specific sample batches or long term biases in the overall dataset. Seven distinct reference materials were used throughout the 2015 exploration program with random distribution. The standards were deemed to have resulted in a quality control failure if the RMs Au assay results fell outside  $\pm$  three standard deviations of its certified value. Table C-1 below displays a list of RM's used along with their expected grade and distribution data.

	Co	ontrol Standard Statistics	5	
Ref. Material	-3 Std Dev. (ppm)	Certified Value (ppm)	+3 Std Dev. (ppm)	Frequency
OREAS 10c	6.12	6.60	7.08	29
OREAS 12a	11.07	11.79	12.51	29
OREAS 15d	1.433	1.559	1.685	8
OREAS 17c	2.79	3.04	3.29	51
OREAS 19a	5.19	5.49	5.79	16
OREAS 2Pd	0.795	0.89	0.975	10
OREAS 60b	2.24	2.57	2.90	4
OREAS 62d	9.51	10.50	11.49	10
OREAS 6Pc	1.34	1.52	1.70	12
OREAS 202	0.674	0.752	0.83	5
OREAS 204	0.926	1.043	1.16	48
Total:				222

Table C-1 List of Eastmain's 2105 Standards

The CRMs were manufactured by Ore Research & Exploration Pty Ltd (ORE), in Australia, and were distributed in Canada through Analytical Solutions Ltd, Toronto. These ORE standards are certified in accordance with International Standards Organization (ISO) recommendations. The Performance Gates for the CRMs used at the Clearwater project are available on the Analytical Solutions Ltd. website (www.explorationgeochem.com).

A total of 222 standards were submitted to ALS during the 2015 exploration program. All standards underwent either fire assay with an ICP-finish, atomic absorption spectroscopy and/or fire assay with a gravimetric-finish. No numerical data is available for individual assays that, for a given analytical method, returned either  $\pm$ Non-Sufficient Sample (NSS)qpr assayed  $\pm$ above the upper detection limitq These individual assays have been removed from the QC data and calculation and are not considered failures. A total of 32 analyses were removed from the dataset due to non-sufficient material. The removed assays have not been included in the total number of assays received, as they document only a lack a material, with no implications regarding the overall accuracy of the laboratory analytical methods. To limit the non-sufficient samples, CRM known to be above the detection limits of a particular analytical method (Oreas19a) were not analyzed with fire assay with an ICP finish, but sent directly to atomic absorption since the expected value of the standard is 5.18 g/t Au. For similar reasons, Oreas 12a and Oreas 62d were sent directly to fire assay with a gravimetric finish since their expected values are 11.79 g/t and 10.50 g/t Au respectively.

A total of 373 individual assay results were returned from 222 eligible standards. Eight graphs have been plotted to show the ICP22, AA24 and GRA22 assay data for each of the eight RM's used. The results of these assays are presented in Figures C-2 to C-13.

The average assay values from Au-ICP22, Au-AA24 and Au-GRA22 were 98.6%, 100.7% and 100.3% of their certified values respectively. The weighted average of these % of expected values over all three assay methods is 99.9%. These values are within acceptable industry parameters and indicate no significant lab bias. Additionally, results from a linear regression performed on a graph comparing expected values to observed values over the complete dataset confirm a very strong 1-to-1 correlation, with ICP22, AA24 and GRA22 slope values of 0.9967, 0.9902 and 0.9728 respectively, and R squared values of 0.9988, 0.9981 and 0.99846 respectively.

A total of 11 failures occurred: 5 from ICP22, 2 from AA24 and 4 from GRA22. This represents a combined failure rate of 2.9% for all CRM assay results. The total QC failure rate, when reviewing both blanks and standards, is 2.2%. The failures appear to have a relatively even distribution over time, with no clustered



occurrences to suggest specific incidences of lab contamination. These results are within acceptable industry parameters and reveal no indication of long term bias or systematic contamination.

The sample population of the reference materials Oreas 202 and Oreas 60b are too small to generate reliable statistical conclusions. A weak low gold value bias was observed from the fire assay results with an ICP finish (ICP22) for standards Oreas 15d and Oreas 2Pd and a high gold value bias was noted from the atomic absorption spectroscopy (AA24) results for standards Oreas 17c and Oreas 2Pd. All of these bias remain within acceptable deviation from the expected average.

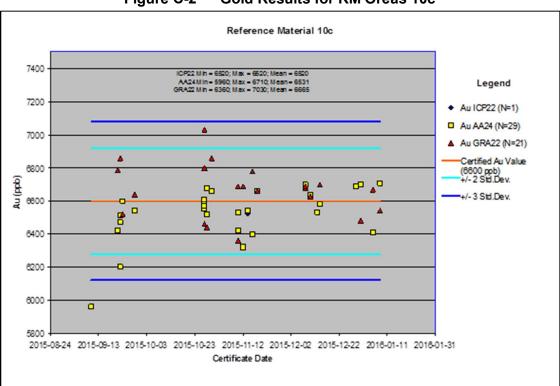
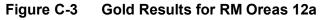
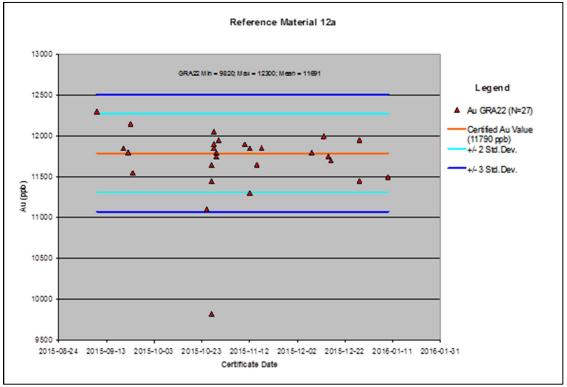


Figure C-2 Gold Results for RM Oreas 10c







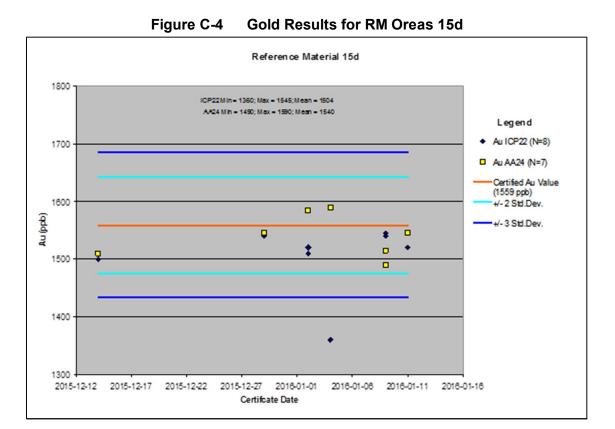
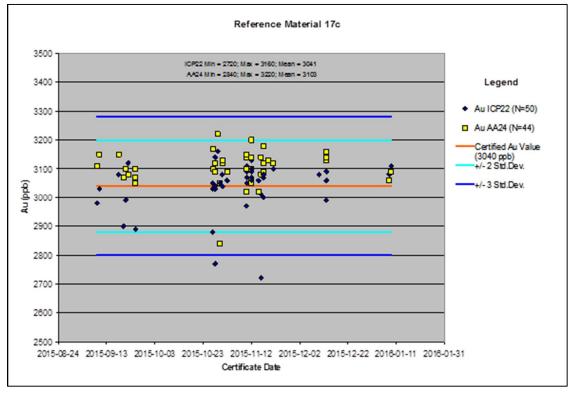


Figure C-5 Gold Results for RM Oreas 17c







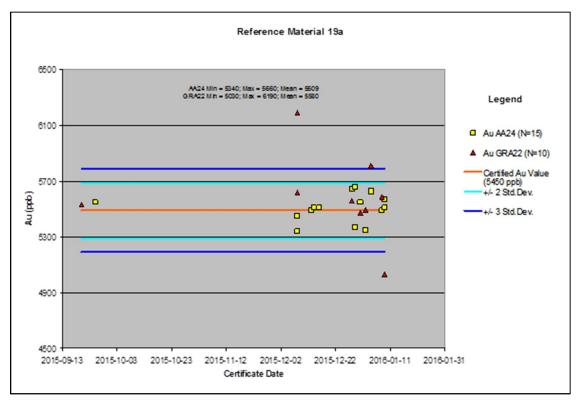
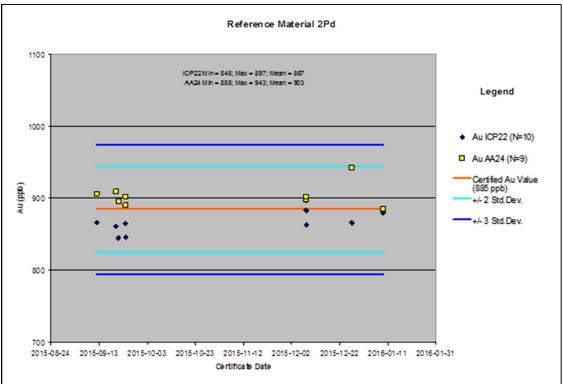
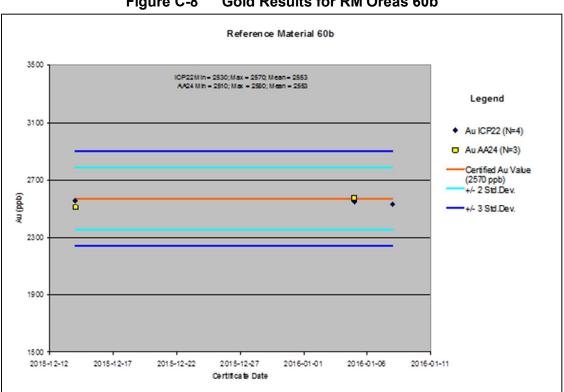


Figure C-6 Gold Results for RM Oreas 19a

Figure C-7 Gold Results for RM Oreas 2Pd









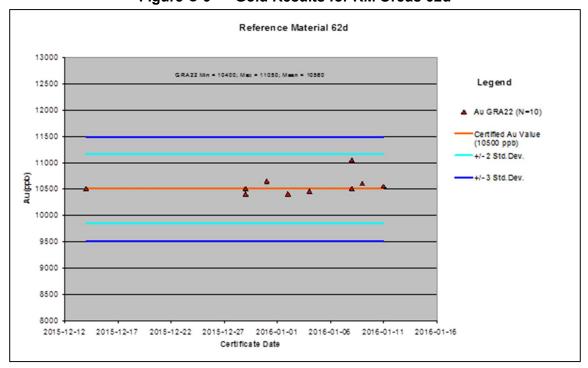


Figure C-8 Gold Results for RM Oreas 60b

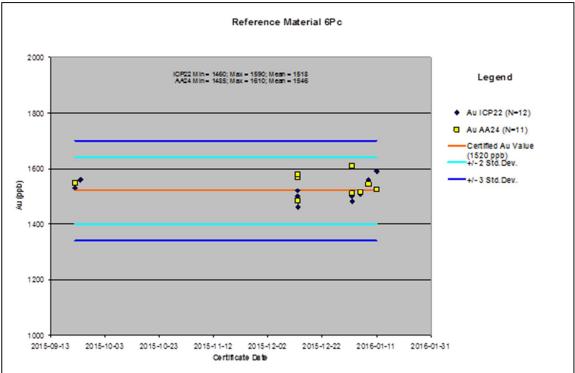
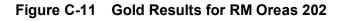
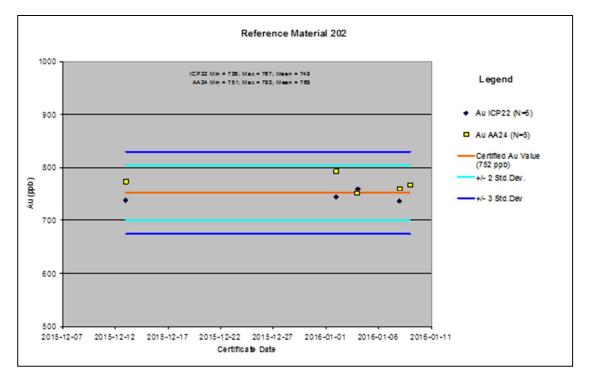


Figure C-10 Gold Results for Oreas RM 6Pc







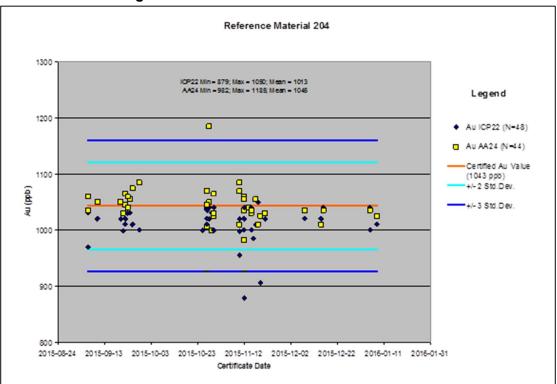
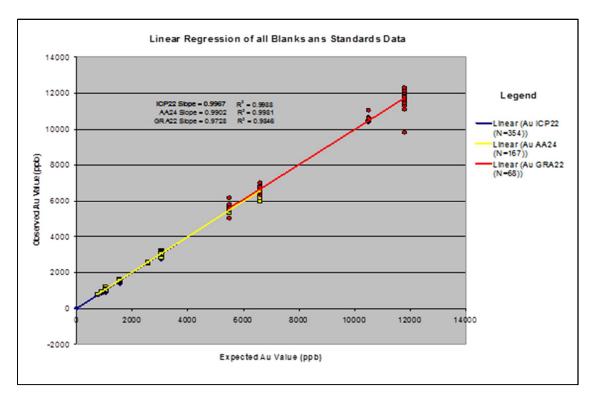


Figure C-12 Gold Results for RM Oreas 204

Figure C-13 Expected vs Observed Au Values for all Reference Material





## Laboratory Performance and Duplicated Samples

A total of 278 duplicates that had been analysed by ALS in Sudbury were randomly selected and sent to Activation Laboratories Ltd. (Actlabs) in Sudbury for re-analysis to test lab variability. The samples consisted of 143 pulp duplicates and 135 reject duplicates. The pulp duplicates show a strong correlation between the two laboratories with slope values of 0.9674 and R squared values of 0.9922 (Figure C-14).

The graph representing the rejects displays a weaker correlation between the two laboratories. The variability can be explained by the different preparations performed at each lab or by the gold nugget effect. Figure C-15 presents all the rejects with slope values of 0.3172 and R squared values of 0.3473.

There is a possibility that mismatched sampling occurred between Q806835 and Q806885. Sample number Q806835 returned a value of 3.6 g/t Au from Actlabs and a value of 1.14 g/t Au from ALS while sample number Q806885 returned a value of 0.75 g/t Au from Actlabs and a value of 3.64 g/t from ALS. A mix up between samples would account for the differences in the values received (Figure C-16).

Removing these samples from the dataset due to the supporting evidence that suggests that the error occurred as a handling process and not a laboratory process present a graph with a slope value of 0.2834 and a R squared value of 0.6586 (Figure C-17).

If all rejects with values > 1.0 g/t Au were removed from the dataset a graph presenting a slope value of 1.0063 and R squared value of 0.8623 is obtained (Figure 18). The trend line suggests that the variability between the two laboratories increases with the grade implying that the differences could be explained by the nugget effect of the gold mineralization. Because of their low statistical representation (n=4), the reject duplicates returning gold assays > 1.0 g/t Au should be re-assayed to eliminate the possibility that the variability is due to laboratory processes.



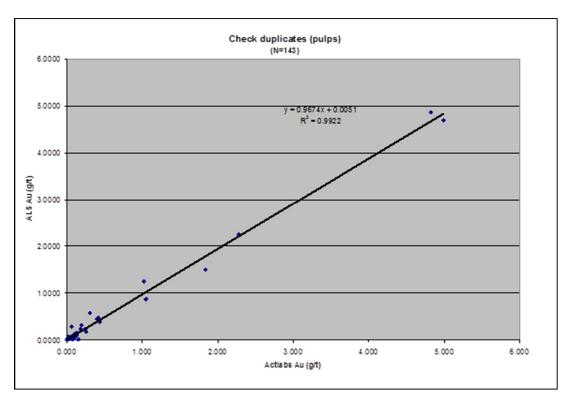
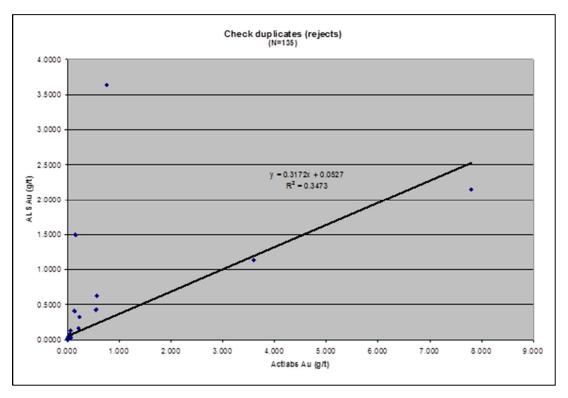


Figure C-14 Duplicate checks for pulps (ALS/Actlabs)







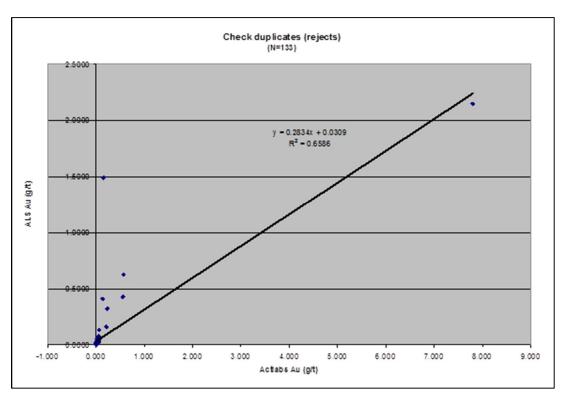
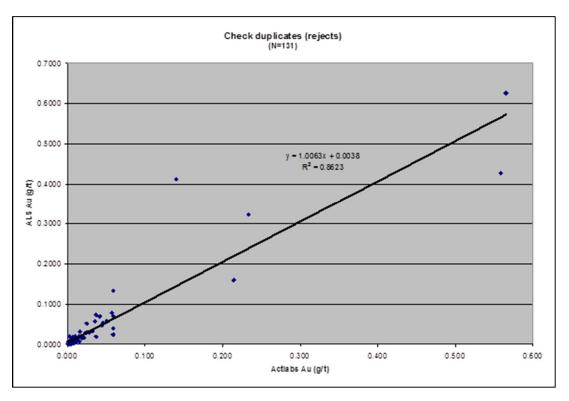


Figure C-16 Duplicate check for rejects (ALS/Actlabs)







# **APPENDIX D**

Results of the 2016 QA/QC Program

# Laboratory Quality Control

Internal QC samples were used by ALS to detect and measure the magnitude of laboratory error associated with the measurement of gold and other elements across the sample stream. Tracking the QC data allowed an acceptable degree of confidence in the assay values to be maintained by monitoring the performance of the lab on these reference samples of known composition. Laboratory quality control results were reported by ALS on separate certificates, as well as digitally with the sample assay results.

#### Duplicate Sampling . Primary Lab

The laboratory routinely completes duplicate analyses of random samples. The duplicate assay data is used by the laboratory for internal quality control monitoring, to provide an estimate of the reproducibility related to the uncertainties inherent in the analytical method and homogeneity of the pulps. The precision, or relative percent difference calculated for the pulp duplicates (that is the likeness of the second cut to the first) is expected to be less than 10%. This means that at the 95% confidence level (or 19 times out of 20) the duplicate pulp assay will be +/- 10% of the original assay. Duplicate assay results falling outside these acceptable limits may indicate that pulverizing specifications should be changed, or that alternative methods, such as Screened Metallic Analysis for gold, should be considered. Duplicate assays also give a good idea of the extent of variability being dealt with on a given deposit. The results of the ALS internal duplicate sampling, conducted from October 2016 through February 2017, are satisfactory.

#### Standard and Blank Sampling

As conveyed above, ALS Chemex Labs analyses internal blanks and standards as part of their own, independent QAQC program. A summary of results for Au-ICP22, Au-GRA22, ME-MS61, and S-IR08, the first two reporting gold in ppb, the third silver in ppm, and the fourth sulphur in percent, show that results are all within acceptable industry parameters. A review of the results for the 47 elements analyzed in addition to silver, for the ME-MS61 method, are also within acceptable industry parameters.

# **Eastmain Data Verification**

In addition to the ALS internal QC protocol, Eastmain inserted blanks and control standards during drill core sample collections throughout the 2016 drill program as part of the QA/QC procedure. Blanks and standards underwent the same sample preparation and analysis as the drill samples with which they were delivered. An effort was made to insert one blanks and two standards at regular intervals with every 50 samples sent for assay. Standards were inserted where the sample numbers ended in  $\pm 00q \pm 5q \pm 00q$  and  $\pm 5q$  and blanks were inserted where the sample number ended in  $\pm 7q$  A total of 911 standards and 522 blanks were submitted to the laboratory for quality assurance purposes, which together comprise 6.5% of all drill core samples assayed in 2016.

#### Laboratory Performance for Blanks

Barren coarse material (% blank) is submitted with samples for crushing and pulverizing to test for possible contamination in the laboratory assay procedure. Eastmain utilized standard cement bricks as blanks, which have an assumed Au value of zero.

Additional blanks were inserted following any sample that contained visible gold (VG). This served as a measure to determine contamination and carry over at the lab as well as a method to reduce or eliminate carry over by utilizing the blank to effectively clean the preparation equipment and vessels. Where this blank insertion interfered with the placement of a regular control standard, that standard would be displaced to the sample number immediately following the blank.

The failure threshold for the blanks is set at 50 ppb, 10x the lower detection limit. A value of 2.5 ppb (half the detection limit) is used for all assay results of **%**elow detection limit+.



Blank samples are deemed to have resulted in a quality control failure if their assay values exceeded 50 ppb, although any sample exceeding a warning level of 30ppb was inspected. Elevated values for blanks may suggest that there has been contamination or sample cross-contamination during preparation. Elevated values may also indicate sources of contamination in the fire assay procedure (contaminated reagents or crucibles) or sample solution carry-over during instrumental finish.

A total of 522 blanks were submitted to ALS laboratories during the 2016 exploration program. They were used for statistical analysis in the quality control procedure. There were 7 results exceeding a warning level and of these, 3 exceeded 50 ppb and constituted a failure (Figure D-1). A summary of these seven samples is in table D-1.

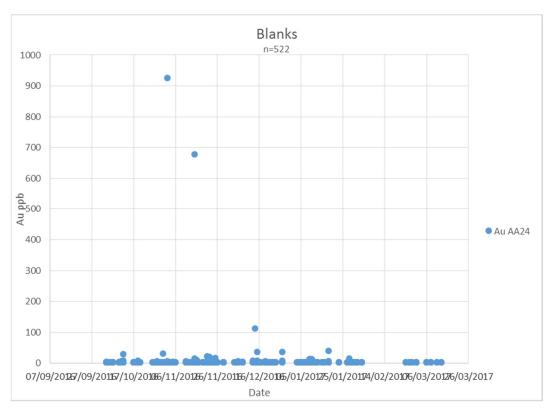
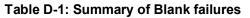


Figure D-1: Au Assay Results from Blank Samples 2016



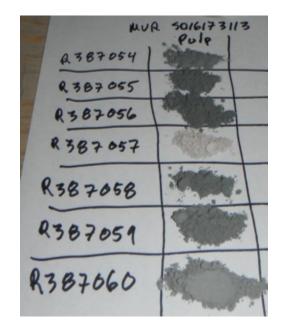
Sample #	QA/QC	Au-AA24 ppb	Certificate #	Cert. Date	Disposition
R385884	Brick	32	SD16173134	10/31/2016	Previous sample 35.3 g/t. 0.09% carryover
R387057	Brick	926	SD16173113	11/2/2016	Unexplained contamination. Details below
R388667	Brick	678	VO16175799	11/15/2016	Previous sample 98.6 g/t. 0.7% carryover
R394915	Brick	113	SD16208348	12/14/2016	Previous sample 16.9 g/t. 0.66% carryover
V270415	Brick	36	SD16208341	12/15/2016	Previous sample 11.2 g/t. 0.32% carryover
V270884	Brick	36	SD16213628	12/27/2016	Previous sample 19.1 g/t. 0.18% carryover
V280057	Brick	40	SD16229111	1/18/2017	Previous sample was .46g/t which would be an 8% carryover. Two samples previous was 19.9 g/t which would be a 0.2 % carryover. Possible sample switch, or crushing out of order. Low impact error, no further action required.



ALS labs Precision and Accuracy Expectationsqstates Some carryover is to be expected in routine sample preparation. For routine protocols, with samples of similar weights, it is usually expected to be in the range of 0.5 to 1.0%+. With the exception of R387057, carryover is within this tolerance and expected. Sample R387057 had an abnormal Au level and a request was made to the lab for re-analysis of this and surrounding samples. The lab reported the following:

We have completed a re-assay from pulp and reject material for sample R387057 and a few surrounding samples by the Au-AA24 method; please find attached a comparison of original and re-assay results. For the re-analysis from reject we inserted spare brick sample "G" for sample R387057.

Overall the re-assay results displayed variability, reporting both higher and lower than the original results. During the original analysis sample R387057 was re-checked as one of our QC checks, and the initial result further confirms the variability (376ppb). The pulp re-assay result is still elevated therefore there does not appear to be an obvious analytical issue causing the elevation. The spare brick that was inserted for sample R387057 reported less than the detection limit. There was no remaining reject material for the original sample to re-prep and re-analyze to confirm an issue occurred during sample preparation, however based on the results of the surrounding samples carryover from these samples is an unlikely cause of the elevation. There also does not appear to be a mix-up as surrounding samples reported within similar magnitudes between analyses. We checked the sample labels and colors of the pulp material and could not find any evidence of an error, as shown below.



Possible sources of contamination considered and investigated were the presence of gold jewelry in the core-shack, use of a blank used to ±dressqthe saw blade and possible insertion of a standard instead of a blank. Follow up with geologists and technicians showed protocols regarding jewelry and blank preparation were being followed, and the received weight of sample R387057 confirmed the correct blank was submitted. Cause of this failure is undetermined.

In all, 99.4% of the blanks submitted were under the acceptable limits, and it is assumed that no significant contamination occurred during the sample preparation, delivery, and laboratory analysis.

# Laboratory Performance for Control Standards

Certified reference materials (CRM or RM) are submitted with samples for assay as control standards to identify any possible assay problems with specific sample batches or long term biases in the overall dataset. Thirteen distinct reference materials were used throughout the 2016 drilling program with random distribution. The standards were chosen to fall within five ranges of Au content to most effectively test the labs performance across a range of grades typical for the project. The standards were deemed to have resulted in a quality control failure if the RMos Au assay results fell outside ± three standard deviations of its certified value. Additionally, ALS Chemex states *%a general, we have an agreement that Geochem methods should have 10% precision and Assay methods 5%*+and these levels of confidence were taken into consideration when evaluating failures and the appropriate action to be taken. Table D-2 displays a list of RM's used along with their expected grade and distribution data.

Reference Material	-3 Std. Dev. (ppm)	Certified Value (ppm)	+ 3 Std. Dev. (ppm)	n
Oreas 202	0.674	0.752	0.830	143
Oreas 2Pd	0.795	0.885	0.975	19
Oreas 204	0.926	1.043	1.160	105
Oreas 205	1.085	1.244	1.403	39
Oreas 6Pc	1.340	1.520	1.700	29
Oreas 15d	1.433	1.559	1.685	11
Oreas 17c	2.800	3.040	3.280	18
Oreas 215	3.249	3.540	3.831	182
Oreas 19a	5.190	5.490	5.790	17
Oreas 210	5.034	5.490	5.946	166
Oreas 10c	6.120	6.600	7.080	4
Oreas 62d	9.510	10.500	11.490	31
Oreas 12a	11.070	11.790	12.510	147
Total:				911

The CRM's were manufactured by *Ore Research & Exploration Pty Ltd (ORE)*, in Australia, and were distributed in Canada through *Analytical Solutions Ltd*, Toronto. These ORE standards are certified in accordance with International Standards Organization (ISO) recommendations. The Performance Gates applied for the Clearwater project are available on the Analytical Solutions Ltd. website (www.explorationgeochem.com).

CRMs are submitted to the lab in sealed 60g foil pouches with any identifiable markings removed or obscured. In order to preserve the workflow and to reduce the occurrence of non-sufficient sample events, RMs that had a certified value >5000 ppb had 2 x 60g pouches submitted for a total of 120g of RM.

A total of 911 standards were submitted to ALS during the 2016 drilling program. All standards underwent fire assay with an AA finish and fire assay with a gravimetric-finish where the initial result was >5000 ppb or over limit. No numerical data is available for individual assays that, for a given analytical method, returned either Non-Sufficient Sample (NSS)qor assayed above the upper detection limitq These individual assays have been removed from the QC data and calculation and are not considered failures. A total of 33 analyses were removed from the dataset due to non-sufficient material. The removed assays have not been included in the total number of assays received, as they document only a lack a material, with no implications regarding the overall accuracy of the laboratory analytical methods.

A total of 1,060 individual assay results were returned from 911 eligible standards. Thirteen graphs have been plotted to show the AA24 and GRA22 assay data for each of the thirteen RM's used. The results of these assays are presented in Figures D-2 to D-14. A summary of the assay data for all standards is presented in Tables D-2 and D-3. The assay values are given for both analysis methods; Au-AA24 and Au-GRA22. The number of assay failures for each RM is included at the end of Table D-3. Only the results that pass quality control are included in the % of expected, standard deviation and weighted average calculations.

The average assay values from Au-AA24 and Au-GRA22 were 99.1%, and 100.6% of their certified values respectively. The weighted average of these % of expected values over all assay methods is 102.7%. These values are within acceptable industry parameters and indicate no significant lab bias. Additionally, results from a linear regression performed on a graph comparing expected values to observed values over the complete dataset confirm a very strong 1-to-1 correlation, with AA24 and GRA22 slope values of 0.9899, and 0.9897 respectively, and R squared values of 0.9978, and 0.9901 respectively. Results are plotted in Figure D-15.

A weak low bias using the AA24 method was observed during the periods of November 14<sup>th</sup> - November 23<sup>rd</sup> and January 17<sup>th</sup> - January 31<sup>st</sup>. Follow up with the lab suggests a fluxing issue that did not affect the submitted core samples. ALS Chemix**q** response is below:

We investigated the observed low bias in November 2016 and January 2017 by reviewing the control charts for our QAQC samples as well as our analytical logs for your samples fused and analyzed by the Au-AA24 method. Based on our investigation we believe the root cause of the low recovery for your QC samples is related to fluxing.

During the fluxing process each sample is tested with acid. The reaction is observed to determine if reagent additions are necessary in order to help decompose the matrix and ultimately ensure an adequate Pb button is produced from the fusion. Based on the reactions, your QC samples required an addition of base flux reagents (niter and litharge) to account for the silica content and low sulphides. We suspect that the reported low Au recoveries were therefore due to the reactions not being identified and therefore these fluxing adjustments not being made. Your regular samples should not have been affected as they did not display the same acid reactions as the QC samples; generally the flux composition should be appropriate for the majority of samples.

For the noted time periods for the observed bias (November 2016 and January 2017) our control charts do not show an overall low bias for our QC samples. We suspect some of the fluxing issues may be related to new staff hired in January. We will be following up by conducting further fluxing training with the technicians. The focus will be on enhancing their fluxing skills for different matrices and ensure they are not rushing when performing the acid tests so the appropriate fluxing adjustments are made.

A total of 32 failures occurred: 16 from AA24 and 16 from GRA22. This represents a combined failure rate of 3.0% for all CRM assay results. The total QC failure rate, when reviewing both blanks and standards, is 2.5%. The failures appear to have a relatively even distribution over time, with no clustered occurrences to suggest specific incidences of lab contamination other than those previously described. Additionally, when compared to the labs tolerance expectation, the number of failures drops to 17:13 from Au-AA24 and 4 from Au-GRA22 for an overall failure rate of 1.5%. These results are within acceptable industry parameters and reveal no indication of long term bias or systematic contamination.

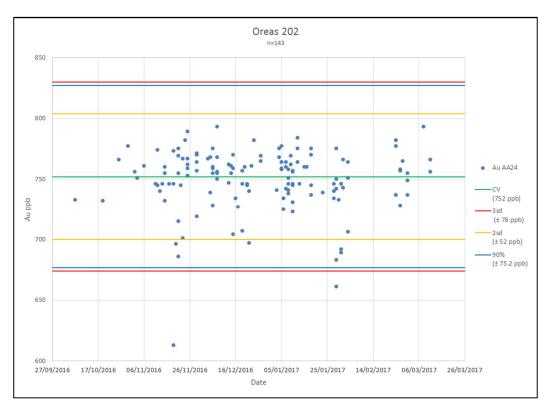
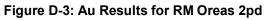
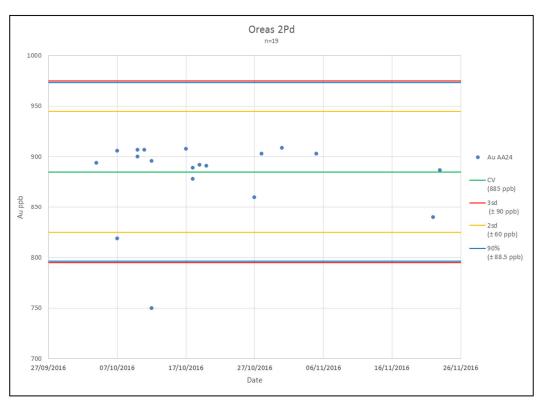


Figure D-2: Au Results for RM Oreas 202







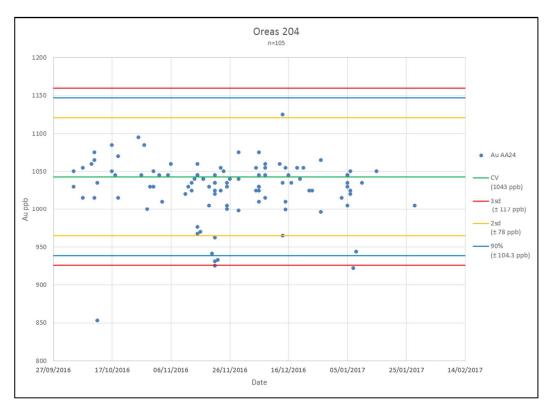
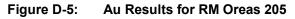
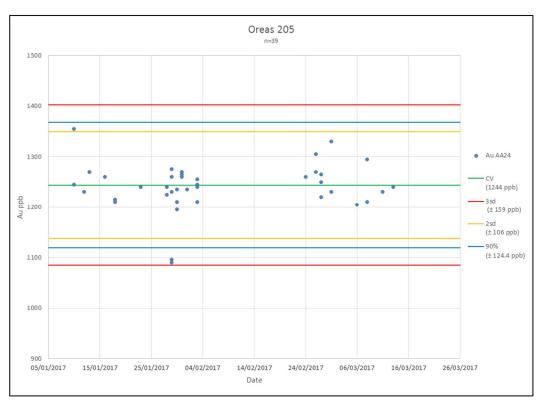


Figure D-4: Au Results for RM Oreas 204







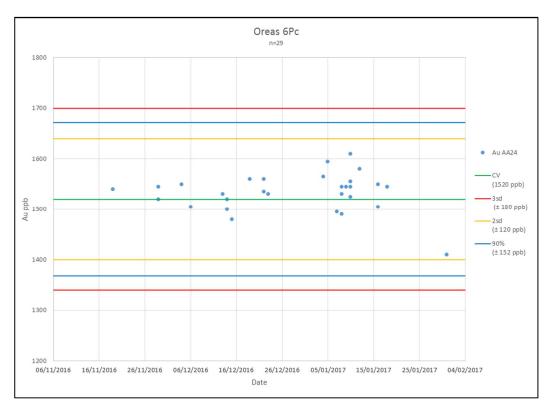
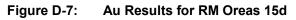
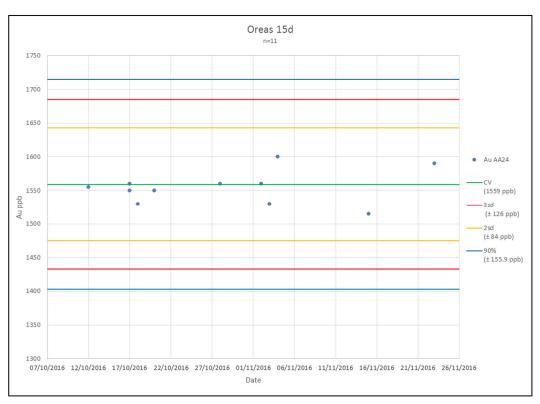


Figure D-6: Au Results for RM Oreas 6Pc







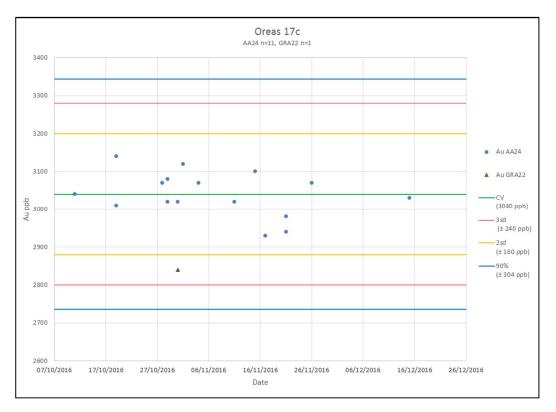
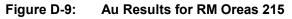
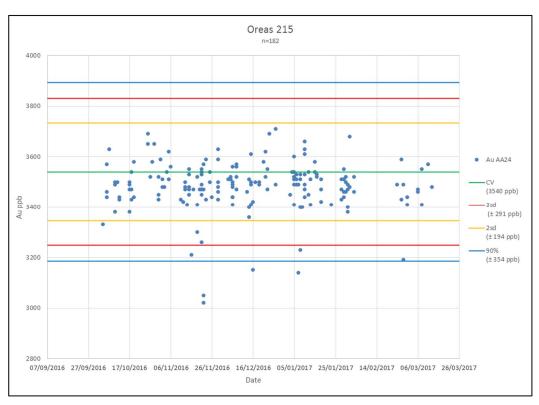


Figure D-8: Au Results for RM Oreas 17c





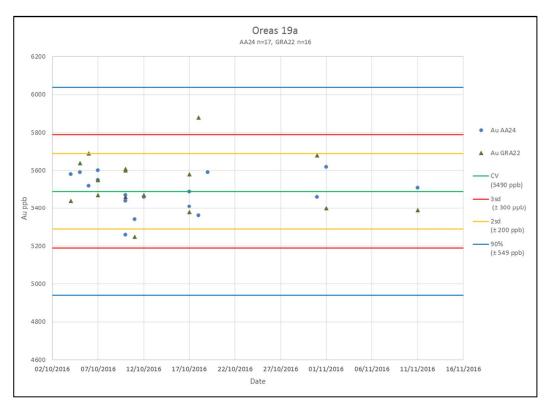
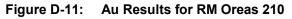
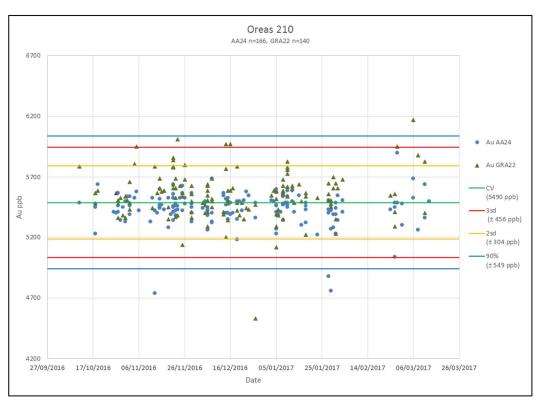


Figure D-10: Au Results for RM Oreas 19a





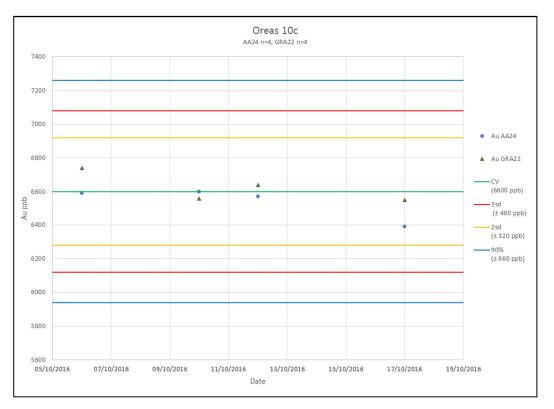
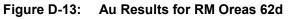
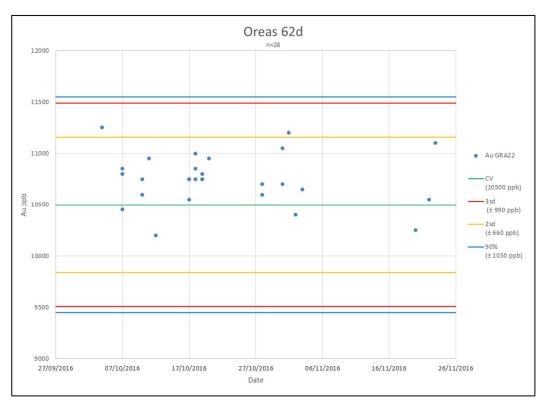


Figure D-12: Au Results for RM Oreas 10c







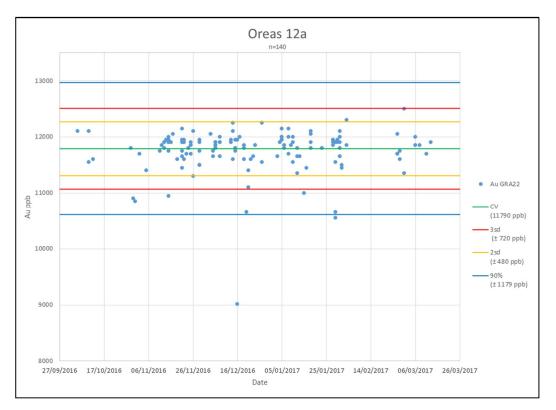
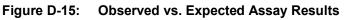
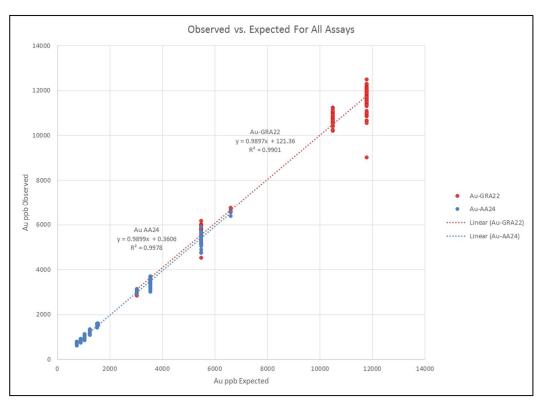


Figure D-14: Au results for RM Oreas 12a







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RM	Expected	d Au (g/t)		AA24 A	Au (ppm)	% of	N	Au-GRA22	2 Au (ppm)	% of	N
KIVI	Average	Std. Dev.	N	Average	Std. Dev.	Expected	IN	Average	Std. Dev.	Expected	IN
202	0.75	0.0	143	0.75	0.0	99.7%	143				0
2Pd	0.89	0.0	19	0.88	0.0	99.5%	19				0
204	1.04	0.0	105	1.03	0.0	98.5%	105				0
205	1.24	0.1	39	1.24	0.0	99.7%	39				0
6Pc	1.52	0.1	29	1.53	0.0	100.9%	29				0
15d	1.56	0.0	11	1.55		99.7%	11				0
17c	3.04	0.1	17	3.04	0.1	100.0%	16	2.84		93.4%	1
215	3.54	0.1	182	3.48	0.1	98.4%	182				0
19a	5.49	0.1	33	5.49	0.1	99.9%	17	5.53	0.2	100.7%	16
210	5.49	0.2	306	5.44	0.1	99.1%	166	5.55	0.2	101.1%	140
10c	6.60	0.2	8	6.54	0.1	99.1%	4	6.62	0.1	100.3%	4
62d	10.50	0.3	28				0	10.75	0.3	102.4%	28
12a	11.79	0.2	140				0	11.75	0.4	99.7%	140
Total			1060	Weighte	d Average	99.1%	731	Weighte	d Average	100.6%	329

#### Table D-2:Summary of RM Data for AA24 and GRA22 Analysis

Table D-3:	Summary of RM Data for AA24 and GRA22 Analysis
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RM	Expected Au (g/t)			Combined Au (ppm)		% of		
	Average	Std. Dev.	Ν	Average	Std. Dev.	Expected	Mislabels	Failures
202	0.75	0.0	143	0.76	0.0	101.1%		2
2Pd	0.89	0.0	19	0.93	0.0	105.1%		1
204	1.04	0.0	105	1.06	0.0	101.4%		3
205	1.24	0.1	39	1.24	0.0	99.7%		0
6Pc	1.52	0.1	29	1.53	0.0	100.9%		0
15d	1.56	0.0	11	1.55		99.7%		0
17c	3.04	0.1	17	3.03	0.1	99.6%		0
215	3.54	0.1	182	3.62	0.1	102.3%		7
19a	5.49	0.1	33	5.68	0.1	103.4%		1
210	5.49	0.2	306	5.68	0.2	103.4%		10
10c	6.60	0.2	8	6.58	0.1	99.7%		0
62d	10.50	0.3	28	10.75	0.3	102.4%		0
12a	11.79	0.2	140	12.46	0.4	105.7%		8
Total	1060		Weighted Average		102.7%	0	32	

### Laboratory Performance and Duplicated Samples

Random coarse reject and pulp samples that were analysed by ALS in Sudbury were sent to Activation Laboratories (ActLabs) in Ancaster Ontario for re-analysis to test lab variability. Additionally, random samples were sieve tested by ActLabs to evaluate the sample preparation performed by ALS.

Coarse rejects: Sample numbers ending in \$5, and £5qhad an inline split of 250-500 g preserved at the primary lab and sent in batches to the secondary lab. These underwent the same pulverization specifications and procedures and were analyzed for Au using the same methods as the primary lab.

Pulp: Sample numbers ending in d,5, and £5qhad an inline split of 100-150 g preserved at the primary lab and sent in batches to the secondary lab. These were analyzed for Au using the same methods as the primary lab.

A total of 785 duplicates that had been analysed by ALS were sent to ActLabs. The samples consisted of 396 pulp duplicates and 389 reject duplicates.

When reviewing the results, it was observed a probable sample switch had occurred with 2 of the pulp duplicates and those have been removed from the analysis as they represent a handling error and do not have an adverse effect on the results. These samples are shown in Table D-4 and were run sequentially at ActLabs which further supports the likelihood of a sample switch.

	Au-AA2	4 ppb	Au-GRA22		
Sample	ActLabs	ALS	ActLabs	ALS	
R388965	>5000	5	91.2		
R389515	10	>10000		10700	

Table D-4: Sample switch at ActLabs

The pulp duplicates graph (Figure D-16) shows a strong correlation between the two laboratories with slope values of 1.0553 and R squared values of 0.9913.

The reject duplicates graph (Figure D-17) shows a slightly weaker correlation between the two laboratories with slope values of 0.9354 and R squared values of 0.8633. This increased variability may be attributed to differences in lab preparation or the nugget effect.

When viewed as distinct data sets, <1000 ppb and >1000ppb (Figure D-18), the R squared values of 0.9176 and 0.5845 respectively demonstrate that variability increases with grade. Distribution remains normal which is consistent with the nugget effect and is not viewed as erroneous results by either lab.

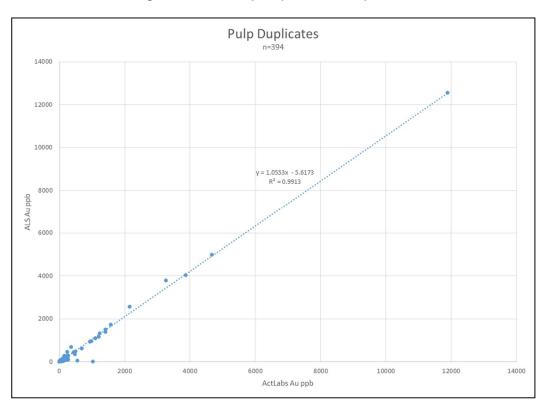


Figure D-16: Pulp Duplicates Comparison

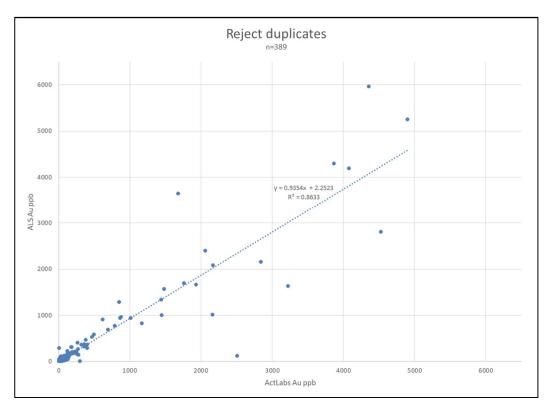
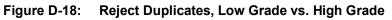
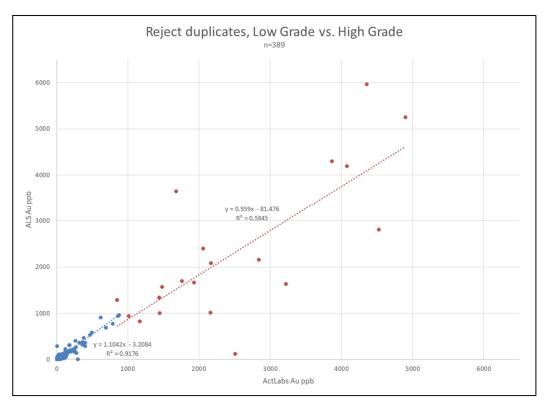


Figure D-17: Reject Duplicates Comparison







# APPENDIX E

Results of the 2017 QA/QC Program

# Laboratory Quality Control

Internal QC samples were used by ALS to detect and measure the magnitude of laboratory error associated with the measurement of gold and other elements across the sample stream. Tracking the QC data allowed an acceptable degree of confidence in the assay values to be maintained by monitoring the performance of the lab on these reference samples of known composition. Laboratory quality control results were reported by ALS on separate certificates, as well as digitally with the sample assay results.

### Duplicate Sampling . Primary Lab

The laboratory routinely completes duplicate analyses of random samples. The duplicate assay data is used by the laboratory for internal quality control monitoring, to provide an estimate of the reproducibility related to the uncertainties inherent in the analytical method and homogeneity of the pulps. The precision, or relative percent difference calculated for the pulp duplicates (that is the likeness of the second cut to the first) is expected to be less than 10%. This means that at the 95% confidence level (or 19 times out of 20) the duplicate pulp assay will be +/- 10% of the original assay. Duplicate assay results falling outside these acceptable limits may indicate that pulverizing specifications should be changed, or that alternative methods, such as screened metallic for gold, should be considered. Duplicate assays also give a good idea of the extent of variability being dealt with on a given deposit. The results of the ALS internal duplicate sampling, conducted from February 2017 through June 2017, are satisfactory.

### Standard and Blank Sampling

As conveyed above, ALS analyses internal blanks and standards as part of their own, independent QAQC program. A summary of results for Au-ICP22, Au-GRA22, ME-MS61, and S-IR08, the first two reporting gold in ppb, the third silver in ppm, and the fourth sulphur in percent, show that results are all within acceptable industry parameters. A review of the results for the 47 elements analyzed on top of silver, for the ME-MS61 method, are also within acceptable industry parameters.

# **Eastmain Data Verification**

In addition to the ALS internal QC protocol, Eastmain inserted blanks and control standards during drill core sample collections throughout the 2017 drill program as part of the QA/QC procedure. Blanks and standards underwent the same sample preparation and analysis as the drill samples with which they were delivered. An effort was made to insert one blanks and two standards at regular intervals with every 50 samples sent for assay. Standards were inserted where the sample numbers ended in  $\pm 00q \pm 5q \pm 00q$  and  $\pm 5q$  and blanks were inserted where the sample number ended in  $\pm 07q$  and  $\pm 7q$  A total of 1273 standards and 695 blanks were submitted to the laboratory for quality assurance purposes, which together comprise 6.6% of all drill core samples assayed in this program.

### Laboratory Performance for Blanks

Barren coarse material (% blank+) is submitted with samples for crushing and pulverizing to test for possible contamination in the laboratory assay procedure. Eastmain utilized standard cement bricks as blanks, which have an assumed Au value of zero.

Additional blanks were inserted following any sample that contained VG. This served as a measure to determine contamination and carry over at the lab as well as a method to reduce or eliminate carry over by utilizing the blank to effectively clean the preparation equipment and vessels. Where this blank insertion interfered with the placement of a regular control standard, that standard would be displaced to the sample number immediately following the blank.

The failure threshold for the blanks is set at 50 ppb, 10x the lower detection limit. A value of 2.5 ppb (half the detection limit) is used for all assay results of **%**elow detection limit+.

Blank samples are deemed to have resulted in a quality control failure if their assay values exceeded 50 ppb, although any sample exceeding a warning level of 30 ppb was inspected. Elevated values for blanks may suggest that there has been contamination or sample cross-contamination during preparation. Elevated values may also indicate sources of contamination in the fire assay procedure (contaminated reagents or crucibles) or sample solution carry-over during instrumental finish.

A total of 695 blanks were submitted to ALS laboratories during this exploration program. They were used for statistical analysis in the quality control procedure. There were 15 results exceeding a warning level and of these, 9 exceeded 50 ppb and constituted a failure. A summary of these fifteen samples is in Table E-1.

ALS labs Precision and Accuracy Expectationsquares Some carryover is to be expected in routine sample preparation. For routine protocols, with samples of similar weights, it is usually expected to be in the range of 0.5 to 1.0%+.

In all, 98.7% of the blanks submitted were under the acceptable limits, and it is assumed that no significant contamination occurred during the sample preparation, delivery, and laboratory analysis.

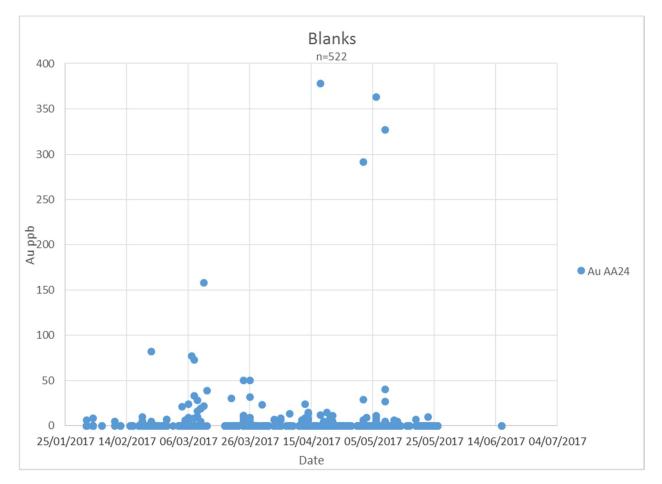


Figure E-1: Au Assay Results from Blank Samples 2017

		Au-AA24			
Sample #	QA/QC	ppb	Certificate #	Cert. Date	Disposition
V282057	Brick	82	SD17016725	2/22/2017	Previous sample 9.87 g/t. 0.83% carryover.
V289900	Brick	77	SD17031406	3/7/2017	Previous sample 50.4 g/t. 0.15% carryover.
V291629	Brick	73	SD17026601	3/8/2017	Previous sample 94.7 g/t. 0.08% carryover.
V291184	Brick	33	SD17031462	3/8/2017	Previous sample 4.36 g/t. 0.76% carryover.
					Two samples prior 9.53 g/t for .41% carry over.
V288107	Brick	39	SD17023192	3/12/2017	Likely crushing out of sequence
V289347	Brick	158	SD17031480	3/11/2017	Previous sample 9.83 g/t. 1.61% carryover.
V292289	Brick	50	SD17041390	3/24/2017	Previous sample 63.4 g/t. 0.08% carryover.
V290269	Brick	50	SD17041424	3/26/2017	Previous sample 18.35 g/t. 0.27% carryover.
V298807	Brick	32	SD17041636	3/26/2017	Previous sample 13.85 g/t. 0.23% carryover.
V287505	Brick	378	SD17047290	4/18/2017	Previous sample 254 g/t. 0.15% carryover.
V303150	Brick	11950	SD17057966	5/1/2017	Mislabel - confirmed by rcvd weight
V296763	Brick	292	SD17052431	5/2/2017	Previous sample 206 g/t. 0.14% carryover.
V297742	Brick	363	SD17052539	5/6/2017	Previous sample 37 g/t. 0.98% carryover.
V299485	Brick	40	SD17057962	5/9/2017	Previous sample 38.1 g/t. 0.1% carryover.
V299304	Brick	327	SD17057962	5/9/2017	Previous sample 39.6 g/t. 0.83% carryover.

# Table E-1: Summary of Blank failures

# Laboratory Performance for Control Standards

Certified reference materials (CRM or RM) are submitted with samples for assay as control standards to identify any possible assay problems with specific sample batches or long term biases in the overall dataset. Thirteen distinct reference materials were used throughout the 2016 drilling program with random distribution. The standards were chosen to fall within five ranges of Au content to most effectively test the labs performance across a range of grades typical for the project. The standards were deemed to have resulted in a quality control failure if the RMc Au assay results fell outside ± three standard deviations of its certified value. Additionally, ALS Chemex states *We general, we have an agreement that Geochem methods should have 10% precision and Assay methods 5%*+ and these levels of confidence were taken into consideration when evaluating failures and the appropriate action to be taken. Table E-2 displays a list of RM's used along with their expected grade and distribution data.

Reference Material	-3 Std. Dev. (ppm)	Certified Value (ppm)	+ 3 Std. Dev. (ppm)	n
202	0.67	0.75	0.83	272
204	0.93	1.04	1.16	1*
222	1.12	1.22	1.32	145
205	1.09	1.24	1.40	108
215	3.25	3.54	3.83	251
210	5.03	5.49	5.95	409
12a	11.07	11.79	12.51	117
229	11.49	12.11	12.73	151
Total:				1454

Table E-2: Standards used during 2017 Drilling Program
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\* mislabelled

The CRM's were manufactured by *Ore Research & Exploration Pty Ltd (ORE)*, in Australia, and were distributed in Canada through *Analytical Solutions Ltd*, Toronto. These ORE standards are certified in accordance with International Standards Organization (ISO) recommendations. The Performance Gates applied for the Clearwater project are available on the Analytical Solutions Ltd. website (www.explorationgeochem.com).

CRMs are submitted to the lab in sealed 60g foil pouches with any identifiable markings removed or obscured. In order to preserve the workflow and to reduce the occurrence of non-sufficient sample events, RMs that had a certified value >5000 ppb had 2 x 60g pouches submitted for a total of 120g of RM.

A total of 1273 standards were submitted to ALS laboratory during the 2017 drilling program. All standards underwent fire assay with an AA finish and fire assay with a gravimetric-finish where the initial result was >5000 ppb or over limit. No numerical data is available for individual assays that, for a given analytical method, returned either Non-Sufficient Sample (NSS)qor assayed above the upper detection limitq These individual assays have been removed from the QC data and calculation and are not considered failures. The removed assays have not been included in the total number of assays received, as they document only a lack a material, with no implications regarding the overall accuracy of the laboratory analytical methods.

A total of 1454 individual assay results were returned from 1273 eligible standards. Seven graphs have been plotted to show the AA24 and GRA22 assay data for each of the seven eligible RM's used. The results of these assays are presented in Figures E-2 to E-9. A summary of the assay data for all standards is presented in Tables E-2 and E.3. The assay values are given for both analysis methods; Au-AA24 and Au-GRA22. The number of assay failures for each RM is included at the end of Table E-3. Only the results that

pass quality control are included in the % of expected, standard deviation and weighted average calculations.

The average assay values from Au-AA24 and Au-GRA22 were 99.0%, and 99.4% of their certified values respectively. The weighted average of these % of expected values over all assay methods is 99.1%. These values are within acceptable industry parameters and indicate no significant lab bias. Additionally, results from a linear regression performed on a graph comparing expected values to observed values over the complete dataset confirm a very strong 1-to-1 correlation, with AA24 and GRA22 slope values of 0.9896, and 0.9787 respectively, and R squared values of 0.9948, and 0.9912 respectively. Results are plotted in Figure 11.9.

A weak low bias for RM Oreas 229 was observed and follow up with the lab suggests a fluxing issue that did not affect the submitted core samples. ALS Chemexs summary response is below:

### Summary

The OREAS-229 reference material used by Eastmain Resources Inc displayed a low bias of ~2.6% compared to the expected value when analyzed by the Au-GRA22 method. The matrix of the material is such that it requires extra litharge and niter with the base flux to ensure a complete decomposition during the fire assay fusion. The regular samples do not require the same flux adjustment as the matrix is different and therefore are not believed to have been similarly underreported. Details of the investigation are provided below.

A total of 70 failures occurred: 35 from AA24 and 35 from GRA22. This represents a combined failure rate of 4.8% for all CRM assay results. The total QC failure rate, when reviewing both blanks and standards, is 3.9%. The failures appear to have a relatively even distribution over time, with no clustered occurrences to suggest specific incidences of lab contamination other than those previously described. When removing the errors attributed to the known bias in Oreas 229, the overall failure rate is 2.98%. These results are within acceptable industry parameters and reveal no indication of long term bias or systematic contamination.

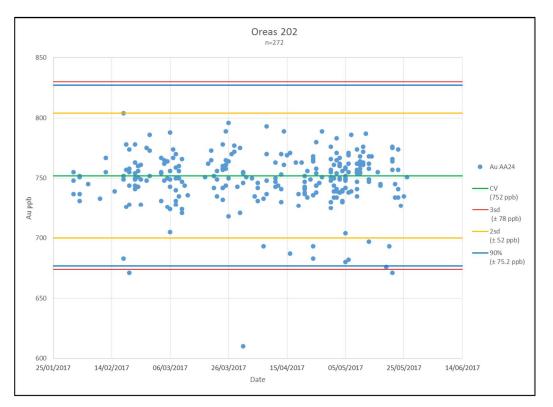
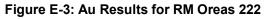
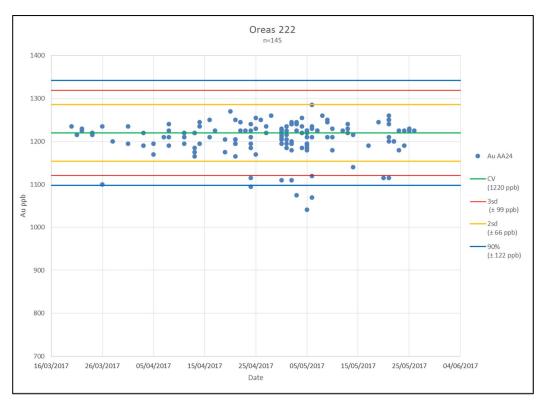


Figure E-2: Au Results for RM Oreas 202





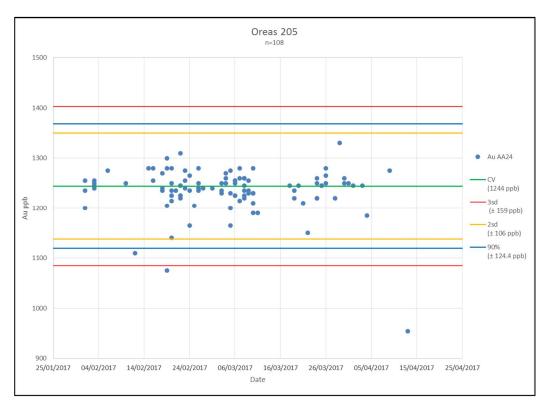
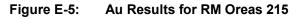
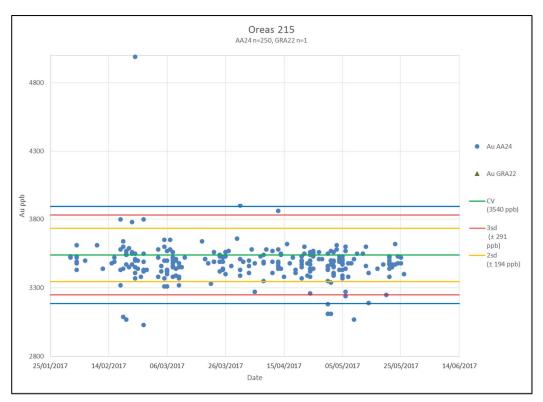


Figure E-4: Au Results for RM Oreas 205







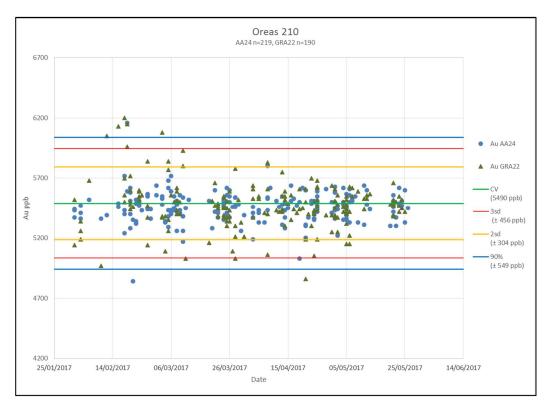
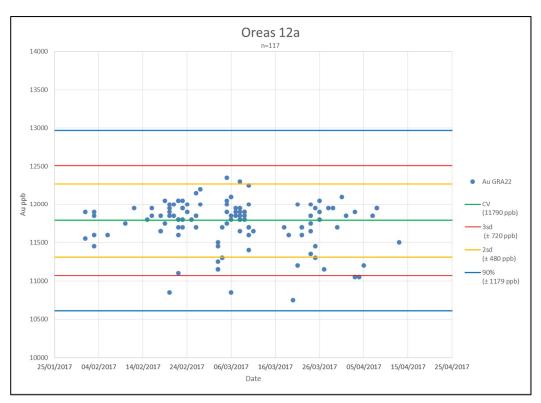




Figure E-7: Au Results for RM Oreas 12a



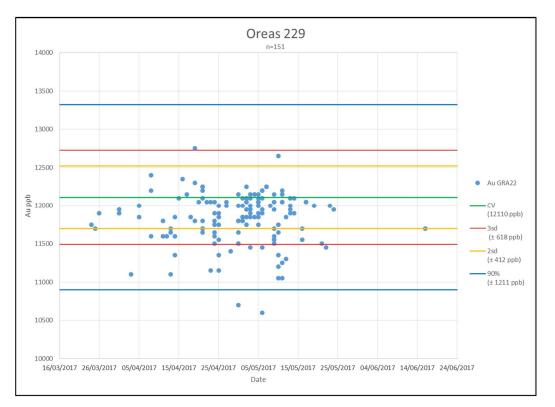
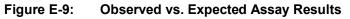
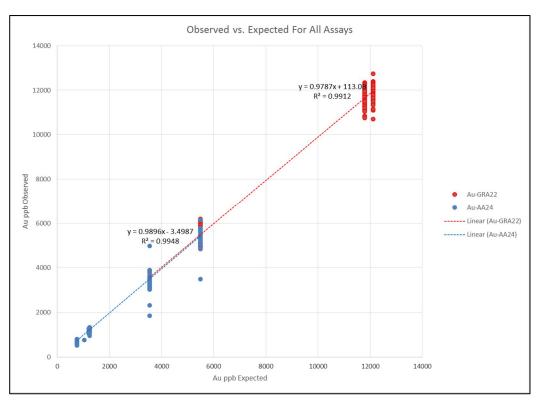


Figure E-8: Au Results for RM Oreas 229







RM	Expected Au (g/t)			AA24 Au (ppm)		% of	Ν	Au-GRA22 Au (ppm)		% of	N
RIVI	Average	Std. Dev.	Ν	Average	Std. Dev.	Expected	N	Average	Std. Dev.	Expected	N
202	0.75	0.0	272	0.75	0.0	99.4%	272				0
204	1.04	0.0	0								0
222	1.22	0.0	145	1.21	0.0	99.0%	145				0
205	1.24	0.1	108	1.24	0.0	99.3%	108				0
215	3.54	0.1	251	3.47	0.2	98.1%	250	3.89		109.9%	1
210	5.49	0.2	409	5.45	0.2	99.2%	219	5.51	0.5	100.3%	190
12a	11.79	0.2	117					11.74	0.3	99.6%	117
229	12.11	0.2	151					11.85	0.3	97.8%	151
Total	1453		Weighted Average		99.0%	994	Weighted Average		99.4%	459	

### Table E-2:Summary of RM Data for AA24 and GRA22 Analysis

### Table E-3:Summary of RM Data for AA24 and GRA22 Analysis

RM	Expecte	d Au (g/t)		Combined Au (ppm)		% of		
LINI	Average	Std. Dev.	Ν	Average	Std. Dev.	Expected	Mislabels	Failures
202	0.75	0.0	272	0.75	0.0	99.4%		5
204	1.04	0.0	0				1	0
222	1.22	0.0	145	1.21	0.0	99.0%		11
205	1.24	0.1	108	1.24	0.0	99.3%		2
215	3.54	0.1	251	3.47	0.2	98.1%	1	14
210	5.49	0.2	409	5.48	0.3	99.7%		14
12a	11.79	0.2	117	11.74	0.3	99.6%		5
229	12.11	0.2	151	11.85	0.3	97.8%		19
Total	1453			Weighte	d Average	99.1%	2	70

### Laboratory Performance and Duplicated Samples

Random coarse reject and pulp samples that were analysed by ALS in Sudbury were sent to Activation Laboratories (ActLabs) in Ancaster Ontario for re-analysis to test lab variability. Additionally, random samples were sieve tested by ActLabs to evaluate the sample preparation performed by ALS.

Coarse rejects: Sample numbers ending in \$5, and £5qhad an inline split of 250-500 g preserved at the primary lab and sent in batches to the secondary lab. These underwent the same pulverization specifications and procedures and were analyzed for Au using the same methods as the primary lab.

Pulp: Sample numbers ending in d 5, and £5qhad an inline split of 100-150 g preserved at the primary lab and sent in batches to the secondary lab. These were analyzed for Au using the same methods as the primary lab.

A total of 1138 duplicates that had been analysed by ALS were sent to ActLabs. The samples consisted of 567 pulp duplicates and 571 reject duplicates.

The pulp duplicates graph (Figure E-10) shows a strong correlation between the two laboratories with slope values of 1.0359 and R squared values of 0.9972.

The reject duplicates graph (Figure E-11) shows a slightly weaker correlation between the two laboratories with slope values of 1.1121 and R squared values of 0.9642. This increased variability can be attributed to differences in lab preparation or the nugget effect.



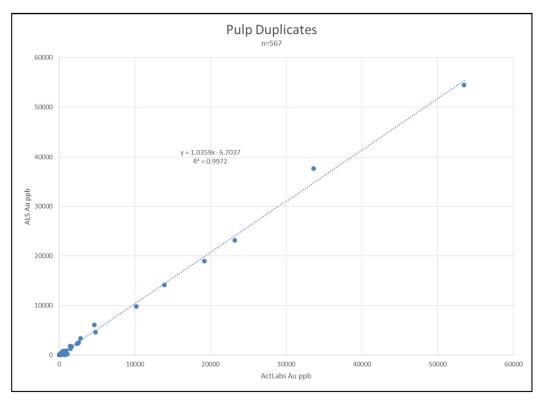


Figure E-10: **Pulp Duplicates Comparison** 



