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# NI 43-101 Technical Report on Mineral Resource Estimate and Preliminary Economic Assessment of the Montauban Gold Project, Québec

Prepared for:



#### Project Location

Latitude: 46° 45' 02" North; Longitude: 72°17' 05" West  
Province of Québec, CANADA



#### Prepared by the following Qualified Persons:

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|-----------------------------------------|----------------------------------------|
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| ▪                                       |                                        |
| ▪ <b>Effective Date:</b> March 02, 2023 | <b>Signature Date:</b> April 11, 2023. |

## Date and Signature Page

The PEA Report is effective as of the 02<sup>nd</sup> day of March 2023.

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April 11, 2023

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Evomine Consulting Inc.

April 11, 2023

## **CERTIFICATE OF QUALIFIED PERSON**

### **Claude Duplessis, P.Eng.**

This certificate applies to the NI 43-101 technical report titled "The Mineral Resource Estimate and Preliminary Economic Assessment of the Montauban Gold Project, Québec", dated April 11, 2023 with an effective date of March 2, 2023 (the "Technical Report"), prepared for ESGold Corp.

I, Claude Duplessis, P. Eng., as a co-author of the Technical Report, do hereby certify that:

1. I am a senior engineer and consultant with GoldMinds Geoservices Inc. with an office at 2999 Chemin Ste-Foy, Suite 200, Québec, Québec, Canada, G1X 1P7.
2. I am a graduate from the University of Québec in Chicoutimi, Québec in 1988 with a B.Sc.A in geological engineering and I have practiced my profession continuously since that time. I have worked as an engineer for a total of 30 years since my graduation.
3. I am a registered member of the Order of Engineers of Québec, (#45523) as well as in Ontario, Alberta and Newfoundland & Labrador.
4. My relevant experience for the purpose of the Technical Report is: Over 25 years of consulting in the field of exploration, mineral resource estimation, orebody modelling, engineering geology, mineral resource auditing, geotechnical engineering, mine planning and project economic analysis.
5. I have read the definition of "qualified person" set out in the NI 43-101 – Standards of Disclosure for Mineral Projects ("NI 43-101") and certify that, by reason of my education, affiliation with a professional association, and past relevant work experience, I fulfil the requirements to be a qualified person for the purposes of NI 43-101.
6. I am independent of the issuer applying all the tests in Section 1.5 of NI 43-101.
7. I am responsible and co-author for the preparation of Items for Items 19, 22, 24, and co-author for the preparation of Items 1, 2, 3, 12, 14, 16, 20, 21, 25, 26 & 27 of the Technical Report.
8. I visited the Property that is the subject of the Technical Report, on July 11, 2022, September 14, 2022, and November 14, 2022, as part of this current mandate.
9. I have had no prior involvement with the property that is the subject of the Technical Report.
10. I have read NI 43-101. The parts of the Technical Report for which I am responsible have been prepared following NI 43-101 rules and regulations.
11. As at the effective date of the Technical Report, to the best of my knowledge, information and belief, the parts of the Technical Report for which I am responsible contain all scientific and technical information that is required to be disclosed to make the parts of the Technical Report for which I am responsible not misleading.

Original signed and sealed on file this 11th day of April, 2023.

---

Claude Duplessis, P. Eng.



## **CERTIFICATE OF QUALIFIED PERSON**

**Daniel Dufort, P.Eng.**

This certificate applies to the NI 43-101 technical report titled "The Mineral Resource Estimate and Preliminary Economic Assessment of the Montauban Gold Project, Québec", prepared for ESGold Corp., dated April 11, 2023 with an effective date of March 02, 2023.

I, Daniel Dufort, P.Eng., as co-author of the Technical Report, do hereby certify that:

- a) I am a Mining engineer at GoldMinds Geoservices Inc. - 2999 Chemin Sainte-Foy, suite 200, Québec, Qc Canada G1X 1P7
- b) I am a graduate of Ecole Polytechnique of Montreal. I am a member of "L'Ordre des Ingénieurs du Québec registration number 33219 and also a retired member of Professional Engineers of Ontario registration number 100153253. My relevant experience includes over 44 years including 6 years as a mining engineer, 11 years as an explosive technical representative, 5 years as a mine manager, 15 years as mining consultant and the remaining years as a vice-president of an explosive company.
- c) I am a "Qualified Person" for purposes of National Instrument 43-101 ("NI 43-101").
- d) I have prepared, participated and written the Technical Report. I am responsible of item 16 and I am co-author of Items 1, 21,22, 25 and 26;
- e) I have not visited the Montauban Property;
- f) I am independent of the issuer as defined by Section 1.5 of NI 43-101;
- g) I have no prior involvement with the property that is the subject of the Technical Report.
- h) I have read NI 43-101. The sections of the Technical Report that I am responsible for have been prepared in compliance with NI 43-101.
- i) As at the effective date of the Technical Report, to the best of my knowledge, information, and belief, the parts of the Technical Report for which I am responsible, contains all scientific and technical information that is required to be disclosed to make the Technical Report not misleading.

Original Signed and sealed on file this 11th day of April 2023, Québec.

---

Daniel Dufort, P.Eng.,  
GoldMinds Geoservices Inc.

## **CERTIFICATE OF QUALIFIED PERSON**

### **Merouane Rachidi, P.Eng.**

This certificate applies to the NI 43-101 technical report titled “The Mineral Resource Estimate and Preliminary Economic Assessment of the Montauban Gold Project, Québec”, prepared for ESGold Corp., dated April 11, 2023, with an effective date of March 02, 2023.

I, Merouane Rachidi, P. Geo., Ph.D., as a co-author of the Technical Report, do hereby certify that:

1. I am a Geologist and consultant with GoldMinds Geoservices Inc. with an office at 2999 Chemin Ste- Foy, Suite 200, Québec, Québec, Canada, G1X 1P7.
2. I am a graduate from Laval University in Québec city (Ph.D., in Geology, 2012) and I have practiced my profession continuously since that time.
3. I am a member in good standing of the of the Ordre des Géologues du Québec, registration #1792, member of APGO registered #2998 and American Institute of Professional Geologists #12120.
4. My relevant experience for the purpose of the Technical Report is over eight years of consulting in the field of exploration, mineral resource estimation, 3D orebody modelling, geology, mineral resource estimation and mine planning.
5. I have read the definition of “qualified person” set out in the NI 43-101 – Standards of Disclosure for Mineral Projects (“NI 43-101”) and certify that, by reason of my education, affiliation with a professional association, and past relevant work experience, I fulfil the requirements to be a qualified person for the purposes of NI 43-101.
6. I am independent of the issuer applying all the tests in Section 1.5 of NI 43-101.
7. I am co-author and responsible for the preparation of Item 14. I am also co-author and responsible for the relevant parts of Items 1, 2, 4, 5, 9, 11, 12, 23, 25, 26 and 27 of the Technical Report.
8. I visited the Property that is the subject of the Technical Report, on September 14, 2022 and December 6-8, 2022.
9. I have had no prior involvement with the property that is the subject of the Technical Report.
10. I have read NI 43-101. The parts of the Technical Report for which I am responsible have been prepared following NI 43-101 rules and regulations.
11. As at the effective date of the Technical Report, to the best of my knowledge, information and belief, the parts of the Technical Report for which I am responsible contain all scientific and technical information that is required to be disclosed to make the parts of the Technical Report for which I am responsible not misleading.

Original signed and sealed on file this 11th day of April 2023.

---

Merouane Rachidi, Ph.D., P.Geo.

## **CERTIFICATE OF QUALIFIED PERSON**

### **John Langton, M.Sc., P.Geo.**

This certificate applies to the NI 43-101 technical report titled "The Mineral Resource Estimate and Preliminary Economic Assessment of the Montauban Gold Project, Québec", prepared for ESGold Corp., dated April 11, 2023, with an effective date of March 02, 2023.

I, John Langton, M.Sc., P. Geo., as a co-author of the Technical Report, do hereby certify that:

1. I am a Geologist and consultant with JPL GeoServices Inc. with an office at 133 Graveyard Hill, Stanley, New Brunswick, Canada, E6B 1T9.
2. I am a graduate of Queen's University, Kingston, Ontario (M.Sc. in Geological Sciences, 1993) and I have practiced my profession continuously since that time.
3. I am a member in good standing of the of the Ordre des Géologues du Québec, registration #1231 and of APEGNB, registration #8766.
4. My relevant experience for the purpose of the Technical Report is over eight years of consulting in the field of mineral exploration and assessment.
5. I have read the definition of "qualified person" set out in the NI 43-101 – Standards of Disclosure for Mineral Projects ("NI 43-101") and certify that, by reason of my education, affiliation with a professional association, and past relevant work experience, I fulfil the requirements to be a qualified person for the purposes of NI 43-101.
6. I am independent of the issuer applying all the tests in Section 1.5 of NI 43-101.
7. I am co-author and responsible for the preparation of Item 2-11. I am also co-author and responsible for the relevant parts of Items 1 and 24 to 27 of the Technical Report.
8. I visited the Property that is the subject of the Technical Report, on November 13, 2021.
9. I co-authored the 2019 technical report (Jourdain et al., 2019) on the Project that is the subject of this Technical Report.
10. I have read NI 43-101. The parts of the Technical Report for which I am responsible have been prepared following NI 43-101 rules and regulations.
11. As at the effective date of the Technical Report, to the best of my knowledge, information and belief, the parts of the Technical Report for which I am responsible contain all scientific and technical information that is required to be disclosed to make the parts of the Technical Report for which I am responsible not misleading.

Original signed and sealed on file this 11th day of April 2023.

---

John Langton, M.Sc., P.Geo.

## **CERTIFICATE OF QUALIFIED PERSON**

### **Edmond St-Jean, P.Eng.**

This certificate applies to the NI 43-101 technical report titled "The Mineral Resource Estimate and Preliminary Economic Assessment of the Montauban Gold Project, Québec", prepared for ESGold Corp., dated April 11, 2023, with an effective date of March 02, 2023.

I, Edmond St-Jean, Eng. (OIQ, no. 45495) do hereby certify that:

1. I am an Engineer employed as Manager of Laboratoire LTM Inc, at 1140 4<sup>th</sup> street Val-D'Or, Quebec, and performed the tests with which the design of the circuit is prepared. I own St-Jean Consultants Inc. and work actively on the Montauban project.
2. I received a Bachelor's Degree in Mining Engineering from Laval University (Québec, QC) in 1986.
3. I have over 37 years of experience as a mining engineer. I have extensive experience in mineral processing and mill design. I have two patents for mineral process and environment. I have worked for 29 years for Laboratoire LTM Inc.
4. I have read the definition of "qualified person" set out in National Instrument 43-101 ("NI 43-101") and certify that by reason of my education, affiliation with a professional association (as defined in NI 43-101) and past relevant work experience, I fulfil the requirements to be a "qualified person" for the purposes of NI 43-101.
5. This certificate applies to the Report titled "The Mineral Resource Estimate and Preliminary Economic Assessment of the Montauban Gold Project, Québec", (the "Technical Report").
6. I am co-author and responsible for the preparation of Item 13 and 17. I am also co-author and responsible for the relevant parts of Items 1, 21, 25, 26 and 27 of the Technical Report.
7. I am independent of the issuer applying all the tests in Section 1.5 of NI 43-101 and I have never had any prior involvement with the property that is the subject of the Technical Report.
8. I visited the Property that is the subject of the Technical Report, on October 25, 2022, as part of this current mandate.
9. I am not aware of any material fact or material change with respect to the subject matter of the Technical Report that is not reflected in the Report and that the omission to disclose would make the Report misleading.
10. I have read NI 43-101 respecting standards of disclosure for mineral projects, as well as Form 43-101F1, and the Technical Report has been prepared in accordance with NI 43-101.

Original signed and sealed on file this 11th day of April 2023.

---

Edmond St-Jean, Ing.

## **CERTIFICATE OF QUALIFIED PERSON**

### **Claude Bissonnette, P.Eng.**

This certificate applies to the NI 43-101 technical report titled “The Mineral Resource Estimate and Preliminary Economic Assessment of the Montauban Gold Project, Québec”, prepared for ESGold Corp., dated April 11, 2023, with an effective date of March 02, 2023.

I, Claude Bissonnette, P. Eng., as a co-author of the Technical Report, do hereby certify that:

1. I am a professional engineer with Alphard Group Inc. with its head office at 5570 Avenue Casgrain (suite 101), Montreal (QC) H2T 1X9, Canada.
2. I am a graduate from University of Sherbrooke (Bachelor’s degree in Mechanical Engineering, 1985 and I have practiced my profession continuously since that time.
3. I am a member in good standing of the of the Ordre des ingénieurs du Québec, registration #41893.
4. My relevant experience for the purpose of the Technical Report is over 37 years of consulting in the field of mechanical process equipment and piping engineering.
5. I have read the definition of “qualified person” set out in the NI 43-101 – Standards of Disclosure for Mineral Projects (“NI 43-101”) and certify that, by reason of my education, affiliation with a professional association, and past relevant work experience, I fulfill the requirements to be a qualified person for the purposes of NI 43-101.
6. I am independent of the issuer applying all the tests in Section 1.5 of NI 43-101.
7. I am co-author and responsible for the preparation of Item 18. I am also co-author and responsible for the relevant parts of Items 1, 25, 26 and 27 of the Technical Report. I was also the author of the Request for a certificate of authorization (2012 and 2013) for the former owner. I also prepared the Restoration plan (2014), as well as the 2022 Restoration plan update.
8. I visited the Property that is the subject of the Technical Report several times in 2022.
10. I have read NI 43-10. The items of the Technical Report for which I am responsible have been prepared following NI 43-101 rules and regulations.
11. As at the effective date of the Technical Report, to the best of my knowledge, information and belief, the parts of the Technical Report for which I am responsible contain all scientific and technical information that is required to be disclosed to make the parts of the Technical Report for which I am responsible not misleading.

Original signed and sealed on file this 11th day of April 2023.

---

Claude Bissonnette, P. Eng.

## CERTIFICATE OF QUALIFIED PERSON

**Francis Gagnon, P.Eng., M.Sc.A.**

This certificate applies to the NI 43-101 technical report titled "The Mineral Resource Estimate and Preliminary Economic Assessment of the Montauban Gold Project, Québec", prepared for ESGold Corp., dated April 11, 2023, with an effective date of March 02, 2023.

I, Francis Gagnon, P. Eng.,M.A.Sc., as a co-author of the Technical Report, do hereby certify that:

1. I am a professional engineer with Alphard Group Inc. with its head office at 5570 Avenue Casgrain (suite 101), Montreal (QC) H2T 1X9, Canada.
2. I am a graduate from Ecole Polytechnique de Montréal in Montreal (Bachelor's degree in Geological Engineering, 1994 and M.A.Sc. in Mineral Engineering, 1998) and I have practiced my profession continuously since that time.
3. I am a member in good standing of the of the Ordre des ingénieurs du Québec, registration #115531.
4. My relevant experience for the purpose of the Technical Report is over 28 years of consulting in the field of geotechnics, hydrogeology tailing ponds and confinement works engineering.
5. I have read the definition of "qualified person" set out in the NI 43-101 – Standards of Disclosure for Mineral Projects ("NI 43-101") and certify that, by reason of my education, affiliation with a professional association, and past relevant work experience, I fulfil the requirements to be a qualified person for the purposes of NI 43-101.
6. I am independent of the issuer applying all the tests in Section 1.5 of NI 43-101.
7. I am co-author and responsible for the preparation of Item 18. I am also co-author and responsible for the relevant parts of Items 1, 25, 26 and 27 of the Technical Report. I was also the author of the Request for a certificate of authorization (2012 and 2013) for the former owner and also prepared the Restoration plan (2014), as well as the 2022 Restoration plan update.
8. I visited the Montauban Property that is the subject of the Technical Report numerous times between 2011 and 2013.
10. I have read NI 43-101. The parts of the Technical Report for which I am responsible have been prepared following NI 43-101.
11. As at the effective date of the Technical Report, to the best of my knowledge, information and belief, the parts of the Technical Report for which I am responsible contain all scientific and technical information that is required to be disclosed to make the parts of the Technical Report for which I am responsible not misleading.

Original signed and sealed on file this 11th day of April 2023.

---

Francis Gagnon, P. Eng., M.A.Sc.

## **CERTIFICATE OF QUALIFIED PERSON**

### **Stephen Coates, P.Eng.**

This certificate applies to the NI 43-101 technical report titled "The Mineral Resource Estimate and Preliminary Economic Assessment of the Montauban Gold Project, Québec", dated April 11, 2023, with an effective date of March 2, 2023 (the "Technical Report"), prepared for ESGold Corp.

I, Stephen Coates, P. Eng., as a co-author of the Technical Report, do hereby certify that:

1. I am a Partner at Evomine Consulting Inc. located at 419 rue des Hirondelles, Beloeil, Quebec, Canada, J3G 6G8.
2. I am a graduate from McGill University located in Montreal, Quebec with a bachelor's degree in mining engineering.
3. I am a registered member of l'Ordre des Ingéneurs du Québec (#5047905).
4. My relevant work experience includes 10 years in mining operations, technical study delivery, mine financing and strategic consulting.
5. I have read the definition of "qualified person" set out in the NI 43-101 – Standards of Disclosure for Mineral Projects ("NI 43-101") and certify that, by reason of my education, affiliation with a professional association, and past relevant work experience, I fulfil the requirements to be a qualified person for the purposes of NI 43-101.
6. I am independent of the issuer applying all the tests in Section 1.5 of NI 43-101.
7. I am responsible and co-author for the preparation of Items for Items 20 and co-author for the preparation of Items 1, 25, 26 & 27 of the Technical Report.
8. I visited the Property that is the subject of the Technical Report, on October 25, 2022, and November 14, 2022, as part of this current mandate.
9. I have had no prior involvement with the property that is the subject of the Technical Report.
10. The parts of the Technical Report for which I am responsible have been prepared following NI 43-101 rules and regulations.
11. As at the effective date of the Technical Report, to the best of my knowledge, information and belief, the parts of the Technical Report for which I am responsible contain all scientific and technical information that is required to be disclosed to make the parts of the Technical Report for which I am responsible not misleading.

Original signed and sealed on file this 11th day of April, 2023.

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Stephen Coates, P. Eng.

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## 1. SUMMARY

### 1.1 Introduction

ESGold Corp (“ESGold”, or “the Issuer”), is a public company trading under the symbol “ESAU” on the Canadian Securities Exchange (CSE), with Canadian corporate offices located at 1500 – 1055 West Georgia Street, Vancouver, BC V6E 4N7.

In September of 2022, ESGold retained several geological and engineering firms to coordinate on producing a National Instrument 43-101 technical report on a mineral resource estimate and Preliminary Economic Assessment (the “PEA Report”) on the Montauban Gold Project (the “Project”).

The purpose of the PEA Report is to provide ESGold's Board of Directors with an independent review of the Project, and to provide recommendations for further exploration.

The PEA Report presents a positive tailings-reprocessing operation with attractive economics and sets the table for the rejuvenation of Montauban-les-mines community through the proactive remediation of the legacy mine tailings in the area. The PEA Report comprises the first cornerstone of ESGold's strategy to revive the area's 100-year mining history.

PEA Highlights:

- Pre-tax net present value (NPV) (discount rate 5%) of C\$ 14.08M, internal rate of return (IRR) of 42.6% and payback of less than 2 years;
- After-tax NPV (discount rate 5%) of C\$ 6.99M, IRR of 23.4% and payback of less than 2 years;
- Assumed gold (Au) price \$1750US/Oz, silver (Ag) price \$21US/Oz and \$200US/t of mica concentrate with a CAD/USD exchange rate of 1.35;
- 4 years of mine life with 923,000 tonnes of tailings at 0.41 g/t Au & 33.34 g/t Ag and the recovery of 57,187t of mica;
- Revenue of C\$ 62.2M;
- Life of Mine capital of C\$ 17.04M;
- Operation cost per tonne of tailing at C\$ 29

### 1.2 Contributors

The PEA Report was authored by: Claude Duplessis, Daniel Dufort and Merouane Rachidi of Goldminds Geoservices (“GMG”); Edmond St-Jean of Laboratoire LTM Inc.; John Langton of JPL GeoServices Inc.; Claude Bissonnete and Francis Gagnon of Groupe Alphard Engineering Inc. (“Alphard”); and Stephen Coates of Evomine Consulting Inc. (“Evomine”) (the “Authors”), at the request of Jean-Yves Therien (CEO & Director) and Paul Mastantuono (COO & Director) of ESGold Corp (“ESGold”).

### **1.3 Project Location and Description**

The Montauban property (the “Property”) comprises 96 mineral claims in National Topographic Survey (NTS) map sheet 311/16 covering 3,526.97 hectares (35.27 square kilometres) in the Capitale-Nationale Administrative Region of Quebec, Canada, and is held 100% by ESGold. The Property is in southern Quebec, 120 km west of Quebec City and 80 km northeast of Trois-Rivieres.

The Project comprises five (5) principal tailings sites: Anacon Lead 1, Anacon Lead 2, Tétreault 1 and Tétreault 2 (the “Montauban tailings”), and the Notre-Dame-de-Montauban tailings, all of which were generated during the processing of ore from the historic underground Montauban Mine, which hosted a gold-rich VMS deposit.

The Project calls for the excavation and pumping of tailings material to the on-site mill at the Anacon Lead 1 site for recovery of coarse micas into a sellable concentrate, followed by regrinding and cyanidation, recovery by Merrill Crow, and production of dore bars.

The PEA considers a conventional truck and shovel sand pit operation with the exception of having a pumping box where the tailings will be mixed with water and pumped to the mill, reducing the consumption of fuel and required equipment for the Project. In short, the mineralized material is excavated and will be discharged on grizzly, then put in slurry and pumped to the mill. The mill will be in operation full time over 9 months of the year (April-December).

### **1.4 Geology**

The Property is underlain by the Grenville Province, which borders the southeast part of the Canadian Shield and extends southwest-northeast for more than 2,000 km over widths varying from 300 km to 600 km. The Grenville Province exposes the interior of an ancient mountain belt and comprises a mosaic of geological terranes that record the Paleoproterozoic through Neoproterozoic crustal growth and continental margin collision events that took place during the assembly of the Rodinia supercontinent.

### **1.5 Mineral Resource Estimates**

The Mineral Resource Estimate (MRE) for the Montauban tailings project is based on historical data, recent (2022) SONIC drilling data, and surface sampling of the Notre-Dame-de-Montauban tailings in November 2022.

The drill hole database contained 352 valid drill hole collars, with a total meterage of 1,654.04 m and 1,170 assay intervals totaling 1,498.05 m. For the Notre-Dame-de-Montauban tailing a total of 35 test pits and trenches totaling 77.44 m were excavated. A total of 112 samples were sent for Au, Ag and multi-element analysis. Blanks and Standards were inserted into the sample streams for QAQC purposes.

Estimated mineral resources for the Montauban and the Notre-Dame-de-Montauban tailings are summarized in **Table 1-1**.

indicated resources are 7,800 Au ounces and 610,350 Ag ounces (603,700 tonnes grading 0.4 g/t Au and 31.4 g/t Ag), inferred resources are 4,200 ounces gold and 379,100 ounces silver (319,300 tonnes grading 0.41 g/t Au and 36.9 g/t Ag).

Mica separation tests were carried out on 32 core samples obtained from six holes from the Anacon Lead 1 and three holes from the Tétreault 2 tailings sites to calculate recoverable estimates (**Table 1-2**).

**Table 1-1: The mineral resources estimation for the Montauban and the Notre-Dame-de-Montauban tailings**

Montauban tailings	Au (g/t)	Ag (g/t)	AuEq (g/t)	Tonnes	Au Oz	Ag Oz	AuOz eq
<b>Indicated</b>	<b>0.40</b>	<b>31</b>	<b>0.78</b>	<b>603 700</b>	<b>7 800</b>	<b>610 350</b>	<b>15 000</b>
<b>Inferred</b>	<b>0.34</b>	<b>28</b>	<b>0.67</b>	<b>292 000</b>	<b>3 150</b>	<b>258 900</b>	<b>6 400</b>
Notre-Dame-de-Montauban tailings	Au (g/t)	Ag (g/t)	AuEq (g/t)	Tonnes	Au Oz	Ag Oz	AuOz eq
<b>Inferred</b>	<b>1.21</b>	<b>137</b>	<b>2.84</b>	<b>27 300</b>	<b>1 050</b>	<b>120 200</b>	<b>2 500</b>
<b>Total Indicated</b>	<b>0.40</b>	<b>31.45</b>	<b>0.77</b>	<b>603 700</b>	<b>7 800</b>	<b>610 350</b>	<b>15 000</b>
<b>Total Inferred</b>	<b>0.41</b>	<b>36.93</b>	<b>0.87</b>	<b>319 300</b>	<b>4 200</b>	<b>379 100</b>	<b>8 900</b>

**Table 1-2: Mica Resource**

	Micas (%)	Tonnes	Micas (t)
Inferred Mica AL1	9	571,900	51,500
Inferred Mica Tétreault_2	4	142,900	5,700
<b>Total Micas Inferred</b>	<b>8.0</b>	<b>714,800</b>	<b>57,200</b>

## 1.6 Mining & Processing

The operational design is to bring material from the tailings pile to a pump box near the processing plant, which will be installed in an existing building at the Anacon Lead 1 site. The designed process will feed tailings to the processing plant for a four-year total of 923,000 metric tonnes. The contractor at the mining operation will operate on a 9-month operation basis from April to December (inclusive) to avoid the winter season.

No drilling or blasting is required, as the material is already of a screen size. The material will be excavated by a shovel or loader into a 14 cubic metre capacity truck and unloaded near the pump box (plumper). A second loader will feed the material to the plumper.

Supporting infrastructure on site will include a small administrative building, warehouse, fuel tank, spare generator and various sea can for material storage. Employees will stay at the village and do not need on-site accommodation.

Tests indicate that the most efficient processing involves the following steps: sieving the feed to 100 Mesh, the coarse fraction goes to the Humphrey spiral

which separates the sample into light, intermediate and heavy fractions. The intermediate fraction is passed three times through Humphrey's spiral and the light fraction is passed one last time through Humphrey's spiral. This method produces a mica concentrate with a mass pull varying from 4 to 9 %. The remaining material in ground and feed into the cyanidation tank for 48 hours with 3 grams of sodium cyanide, zinc powder is used for the cement which is thereafter melt to produce the bars. The average recovery for gold is 92% and 77% for silver.

## 1.7 Environment, Permitting and Social

It is of public knowledge that the Montauban region has a high environmental legacy of contamination by historical tailings and it is the objective of ESGold to correct the situation by removing as much tailings as possible from these lands and stabilize them into a new tailings site.

ESGold is fully permitted for its mill and most of its tailings' tonnage. It is important to mention that the Municipality has approached the company and requested the removal of tailings adjacent to the legacy railway track and its inclusion into the plan. ESGold is in close collaboration with the Municipality and the Ministry of Environment.

The community is supportive of the project as it will remove tailings and creates jobs and local opportunities. As per discussions with the municipality a formal agreement was signed and a Net Smelter Return (NSR) royalty of 1% will be paid to the municipality.

## 1.8 Capital Costs

The PEA is based on a capital cost summary, in accordance with AACE Class 5 guidelines with an estimated accuracy of +/- 35% (**Table 1-3**).

**Table 1-3: Summary of Capital Costs**

Description	Cost – CAD\$
Mine capital costs	450,000
Plant Equipment+Installation	7 860,000
Infrastructure capital costs	2 018,500
Closure costs	1 150,000
Contingency (30%)	3 443,500
Owner costs (5%)	574,000
EPCM costs (5%)	574,000
<b>Total initial capex (rounded)</b>	<b>16 070,000</b>

A required working capital estimated at \$1,761,200 is required and should be added to the required capital costs.

## 1.9 Operating Costs

Mine operating costs by activity area are shown in **Table 1-4**.

**Table 1-4: Details of Operating Costs**

Items	Cost CAD\$	Cost CAD\$/t tailing mined
Mine operating costs	4,153,500	4.50
Processing costs	20,049,400	21.72
G&A	2,889,800	3.13
<b>Total</b>	<b>27,092,700</b>	<b>29.35</b>

## 1.10 Economic Model

The main assumptions for the economic analysis and the results are summarized in **Table 1-5**, **Table 1-6** and **Table 1-7**.

**Table 1-5: Main assumptions of Economic Analysis**

Items	Units	Values
Micas concentrate	US\$/MT	200
Gold selling price	US\$/oz	1 750
Silver selling price	US\$/oz	21
Mining (mineralized tailings) tonnage over LOM	metric tonne	923,000
Royalty on sales	%	1.00
Federal tax	%	15.00
Provincial tax	%	11.50
Mining tax	%	16.00

**Table 1-6: Base Case economics**

Items	Value CA\$
Total revenue of sales	62,207,000
Total operating costs	27,093,000
Before-tax discounted	(5.0%) NPV 14,079,000
After-tax discounted	(5.0%) NPV 6,992,000

**Table 1-7: Detailed Cash flow**

<b>ESGold Montauban PEA 2023 - Tailings Au Ag + Micas EXW Montauban</b>							
Year		-1	1	2	3	4	Total
<b>PHYSICAL</b>							
Tonnage Beginning	(t)	923 000	923 000	653 000	383 000	113 000	
Tailings mined & processed	(t)		270 000	270 000	270 000	113 000	<b>923 000</b>
Tonnage End year	(t)	923 000	653 000	383 000	113 000	-	
Grade Au	Au (g/t)		0,38	0,57	0,29	0,34	<b>0,41</b>
Grade Ag	Ag( g/t)		38,84	36,09	27,89	26,68	<b>33,34</b>
Au Recovery	%		92,00	92,00	92,00	92,00	-
Ag Recovery	%		77,00	77,00	77,00	77,00	
Ounces Au Produced	oz		3 002	4 583,34	2 352,64	1 146,63	<b>11 084,73</b>
Ounces Ag Produced	oz		259 612	241 232	186 410	74 624	<b>761 878,39</b>
Available Micas Mined/processed	(t)		242 700	270 000	154 700	47 400	<b>714 800</b>
Micas Grade Recoverable	%		9%	6%	9%	9,0%	<b>6,20%</b>
Micas recovered	(t)		21 843	17 155	13 923	4 266	<b>57 187</b>
<b>Revenues</b>							
Gold selling price	(Can\$/Oz)		2 363 \$	2 363 \$	2 363 \$	2 363 \$	<b>2 363 \$</b>
Silver selling price	(Can\$/Oz)		28 \$	28 \$	28 \$	28 \$	<b>28 \$</b>
Micas selling price	(US\$/t)		200 \$	200 \$	200 \$	200 \$	<b>200 \$</b>
Exchange Rate	US\$:CA\$		1,35	1,35	1,35	1,35	<b>1,35</b>
Revenues of Metals	(CA\$)		\$ 14 452 493	\$ 17 667 085	\$ 10 842 848	\$ 4 824 499	\$ 47 786 925,29
Revenues of Micas less selling costs	(CA\$)		\$ 5 602 730	\$ 4 631 850	\$ 3 759 210	\$ 1 151 820	\$ 15 145 609,50
Payable	%		99,935%	99,935%	99,935%	99,935%	99,935%
Refinining Charges on Gold	Can/oz		5 \$	5 \$	5 \$	5 \$	
1% NSR Owner's Royalty AuAgMicas	(CA\$)		200 552 \$	222 989 \$	146 021 \$	59 763 \$	<b>629 325 \$</b>
<b>Revenue</b>	<b>(CA\$)</b>		<b>19 826 624 \$</b>	<b>22 038 535 \$</b>	<b>14 434 782 \$</b>	<b>5 906 939 \$</b>	<b>62 206 880 \$</b>
<b>OPEX</b>							
Mining Operating Costs	(CA\$)		1 215 000 \$	1 215 000 \$	1 215 000 \$	508 500 \$	<b>4 153 500 \$</b>
Processing costs	(CA\$)		5 864 940 \$	5 864 940 \$	5 864 940 \$	2 454 586 \$	<b>20 049 406 \$</b>
G&A Operating Costs	(CA\$)		845 350 \$	845 350 \$	845 350 \$	353 795 \$	<b>2 889 845 \$</b>
<b>Total Operating Cost</b>	<b>(CA\$)</b>		<b>7 925 290 \$</b>	<b>7 925 290 \$</b>	<b>7 925 290 \$</b>	<b>3 316 881 \$</b>	<b>27 092 751 \$</b>
<b>Total Operating Cost / Tonne Tailing</b>	<b>(CA\$/t)</b>		<b>29 \$</b>	<b>29 \$</b>	<b>29 \$</b>	<b>29 \$</b>	<b>29,4 \$</b>
<b>CAPEX &amp; SUSTAINING CAPEX</b>							
Mine Capital Costs Montauban	(CA\$)		450 000 \$	45 000 \$	45 000 \$	45 000 \$	<b>630 000 \$</b>
Plant Equipment +Installation	(CA\$)		7 859 797 \$	157 196 \$	157 196 \$	157 196 \$	<b>8 488 581 \$</b>
Infrastructure Capital Costs Montauban	(CA\$)		2 018 500 \$	40 370 \$	40 370 \$	40 370 \$	<b>2 179 980 \$</b>
Closure Costs	(CA\$)		1 150 000 \$				<b>1 150 000 \$</b>
Sub-Total Capital Costs	(CA\$)		11 478 297 \$	242 566 \$	242 566 \$	242 566 \$	<b>12 448 561 \$</b>
Contingency 30% on client capital cost	(CA\$)		3 443 489 \$				<b>3 443 489 \$</b>
Owner's cost 5% on client capital cost	(CA\$)		573 915 \$				<b>573 915 \$</b>
EPCM cost 5% on client capital cost	(CA\$)		573 915 \$				<b>573 915 \$</b>
<b>Grand Total Capital Costs</b>	<b>(CA\$)</b>		<b>16 069 616 \$</b>	<b>242 566 \$</b>	<b>242 566 \$</b>	<b>242 566 \$</b>	<b>17 039 880 \$</b>
<b>ECONOMICS</b>							
Depreciation Pool Beginning	(CA\$)		16 069 616 \$	16 312 182 \$	11 783 037 \$	7 153 597 \$	<b>53 671 588 \$</b>
Depreciation Period	(CA\$)		- \$	4 771 711 \$	4 872 006 \$	5 043 006 \$	<b>17 039 880 \$</b>
Depreciation Pool End	(CA\$)		16 069 616 \$	11 540 471 \$	6 911 031 \$	2 110 591 \$	<b>36 631 709 \$</b>
Working Capital 2/9	(CA\$)		1 761 176 \$	- \$	- \$	- \$	<b>(1 761 176) \$</b>
Taxable Income	(CA\$)		- \$	7 129 623 \$	9 241 239 \$	1 466 487 \$	<b>18 074 249 \$</b>
Federal Tax	(CA\$)		- \$	1 069 443 \$	1 386 186 \$	219 973 \$	<b>2 711 137 \$</b>
Provincial Tax	(CA\$)		- \$	819 907 \$	1 062 742 \$	168 646 \$	<b>2 078 539 \$</b>
Mining Tax	(CA\$)		- \$	1 140 740 \$	1 478 598 \$	234 638 \$	<b>2 913 045 \$</b>
Total Tax	(CA\$)		- \$	3 030 090 \$	3 927 526 \$	623 257 \$	<b>7 702 721 \$</b>
<b>Cash Flow Before Tax</b>	<b>(CA\$)</b>		<b>(17 830 791) \$</b>	<b>11 458 216 \$</b>	<b>13 647 690 \$</b>	<b>6 120 906 \$</b>	<b>4 048 904 \$</b>
Pre-production CAPEX	(CA\$)		16 069 616 \$				
IRR	(%)		42,6%				
NPV 5%	(CA\$)		<b>14 079 164 \$</b>				
<b>Cash Flow After Tax</b>	<b>(CA\$)</b>		<b>(17 830 791) \$</b>	<b>8 428 126 \$</b>	<b>9 720 163 \$</b>	<b>5 497 649 \$</b>	<b>3 927 056 \$</b>
Pre-production CAPEX	(CA\$)		16 069 616 \$				
IRR	(%)		23,4%				
NPV 5%	(CA\$)		<b>6 992 344 \$</b>				



## 1.11 Opportunities

The following opportunities have been identified as potential enhancements for the Montauban project. These opportunities could have material value-added impact on the project although additional work is required for them to be integrated.

- The current tailings resource estimate outlines only a proportion of the tailings that should be expected in the project area according to historical production records.
- The project land package hosts historical resources in hard rock that are non-compliant with NI 43-101 standards.
- The project also hosts greenfield exploration potential as modern exploration techniques have not been systematically applied over the property.
- Toll milling agreements with projects outside the Montauban area could allow mill utilisation and revenue following the depletion of the current project resource.
- The Montauban project has the effect of reclaiming an orphan site therefore removing the environmental liability attributed to the Quebec Government. There are precedents in the province of Quebec where the government offers financial support to projects reclaiming orphan sites.
- Due to the economic challenges in the region of Montauban it is possible that government grants be obtained to fund a portion of employee salary and training costs.
- The mica value received in the current plan assumes that the recovered mica is in the lower marketable quality range. Mica value can be substantially enhanced through enrichment.
- The company has entered into a joint-venture agreement to create construction building materials with the use of the processed tailings and organic polymer binder.
- The Montauban project could be reshaped into a carbon offset project for which carbon credits could be sold.

## 1.12 Recommendations

**Table 1-8** shows a summary of the recommended work and an approximate budget required to advance the Project.

A drilling program is highly recommended to test the conductive zones with a minimum depth of 150 m. As of the issue date of the PEA Report, several anomalies remain untested.

The detailed conductors identified could be the target of a new drilling program. The second phase is conditional on the success of the first phase (drilling) and will be adapted to the observations established at that time.



Expenditures for the recommended work on the tailings are estimated at \$105,500. Expenditures for the recommended hard-rock work are estimated at \$2,290,000. The grand total is \$2,395,500.

The two drilling programs are independent and can be carried out concurrently.

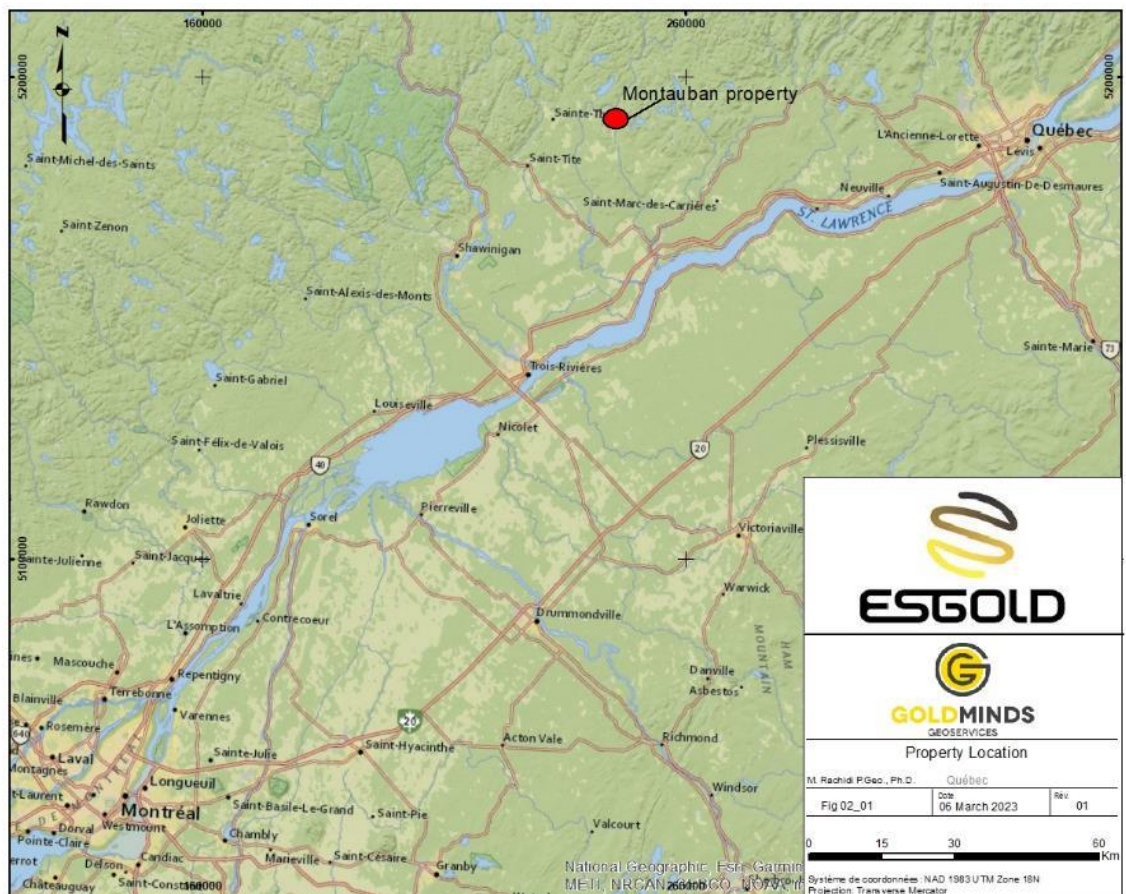
**Table 1-8: Estimated Costs for the Recommended Drilling Program**

<b>TAILINGS WORK</b>	<b>WORK PROGRAM</b>	<b>DESCRIPTION</b>	<b>BUDGET COST</b>
	Sonic drilling on tailings to convert all or a part of the inferred resources to indicated or measured. At the same time taking density measurements.	200 metres (between 40 to 50 sonic drillholes) all-inclusive, \$300/m	\$67,500
	Drillhole collars survey		\$3,000
	Surface topographic survey for all the tailings		\$35,000
	Subtotal		\$105,500
	<b>HARD-ROCK WORK</b>		
<b>HARD-ROCK WORK</b>	<b>WORK PROGRAM</b>	<b>DESCRIPTION</b>	<b>BUDGET COST</b>
	Drilling program to test the historical resources	5 000 metres (between 25 to 30 drillholes) all-inclusive, \$225/m	\$1,125,000
	Drilling program on known geophysical targets (holes; all-inclusive, \$225/m). Total of 5000 m.	“ “	\$1,125,000
	Survey drill holes		\$5,000
	Surface topographic survey		\$35,000
	Subtotal		\$2,290,000
	<b>TOTAL</b>		<b>\$2,395,500</b>

## 2. INTRODUCTION

This report on the Montauban Gold Project (the "Project") was authored by Claude Duplessis (GMG), Daniel Dufort (GMG), Merouane Rachidi (GMG), Edmond St-Jean (Laboratoire LTM Inc.), John Langton (JPL GeoServices Inc.), Claude Bissonnete (Alphard), Francis Gagnon (Alphard) and Stephen Coates (Evomine), (the "Authors") at the request of Jean-Yves Therien (CEO & Director) and Paul Mastantuono (COO & Director) of ESGold Corp ("ESGold").

The mineral claims comprising the Property (the "Property") are in southern Quebec, 120 km west of Québec City and 80 km northeast of Trois-Rivières and straddle the border of the Mauricie and Capitale-Nationale Administrative Regions of Quebec (**Figure 2.1**).



**Figure 2.1: Simplified regional map showing location of the Property**

In September of 2022, ESGold retained several geological consulting firms to coordinate on producing a National Instrument 43-101 technical report on a mineral resource estimate and Preliminary Economic Assessment (the "PEA Report") on the Project.

The Authors' preparations of the PEA Report were carried out in compliance with the disclosure and reporting requirements for mineral projects set forth in National Instrument 43-101 - *Standards of Disclosure for Mineral Projects* ("NI 43-101"). The individual authors meet the definition of a "qualified person" (QP) for the purposes of NI 43-101.

The purpose of the PEA Report is to provide ESGold's Board of Directors with an independent review of the Project, and to provide recommendations for further exploration.

## 2.1 Effective and Issue Dates

The PEA Report is issued in support of the press release dated March 2<sup>nd</sup>, 2023, entitled "ESGOLD's Preliminary Economic Assessment Report Confirms the Viability of the Montauban Project". The effective date of the PEA Report, is March 2<sup>nd</sup>, 2023, and the issue date is April 11, 2023.

## 2.2 Report Responsibility and Qualified Persons

The following individuals, by virtue of their education, experience and professional association, are considered QPs and are members in good standing of appropriate professional institutions.

- Claude Duplessis                      GMG
- Daniel Dufort                            GMG
- Merouane Rachidi                      GMG
- John Langton                            JPL GeoServices Inc.
- Edmond St-Jean                        Laboratoire LTM Inc.
- Claude Bissonnette                    Groupe Alphard Engineering Inc.
- Francis Gagnon                        Groupe Alphard Engineering Inc.
- Stephen Coates                        Evomine

The preceding QPs have contributed to the writing of the PEA Report and have provided their certificates of qualification in the PEA Report. The information contained in their certificates outlines the Items in the PEA Report for which each QP is responsible. **Table 2-1**, outlines the responsibilities for the various Items of the PEA Report and the name of the corresponding Qualified Person.

**Table 2-1: PEA Report Section List of Responsibility**

Item Number	Item Title	QP Responsibility
1	Summary	All
2	Introduction	All
3	Reliance on Other Experts	JPL GeoServices Inc.
4	Property Description and Location	JPL GeoServices Inc. & GMG
5	Accessibility, Climate, Local Resources, Infrastructure and Physiography	JPL GeoServices Inc. & GMG
6	History	JPL GeoServices Inc.
7	Geological Setting and Mineralization	JPL GeoServices Inc.
8	Deposit Type	JPL GeoServices Inc.
9	Exploration	JPL GeoServices Inc. & GMG
10	Drilling	JPL GeoServices Inc.
11	Sample Preparation, Assaying and Security	JPL GeoServices Inc. & GMG
12	Data Verification	GMG
13	Mineral Processing and Metallurgical Testing	Laboratoire LTM Inc.
14	Mineral Resource Estimate	GMG
15	Mineral Reserve Estimate	n/a
16	Mining Methods	GMG
17	Recovery Methods	Laboratoire LTM Inc.
18	Project Infrastructure	Laboratoire LTM Inc. & Alphard
19	Market Studies and Contracts	GMG
20	Environmental Studies, Permitting and Social or Community Impact	Evomine
21	Capital and Operating Costs	Laboratoire LTM Inc., GMG & Alphard
22	Economic Analysis	GMG
23	Adjacent Properties	GMG
24	Other Relevant Data and Information	All
25	Interpretation and Conclusions	All
26	Recommendations	All
27	References	All

## 2.3 Qualified Persons and Inspection of the Property

**Table 2-2**, presents the site visits by representatives from the companies involved in the Project.

**Table 2-2: Site Visits to the Property**

Date	Name	Event
Nov 13, 2021	John Langton, P.Geo.	Site inspection and infrastructure
Jul 11, 2022	Claude Duplessis, P.Eng., GMG	Site inspection, mining, and infrastructure
Sep 14, 2022	Claude Duplessis, P.Eng., GMG	Site inspection and independent samples
Nov 14, 2022	Claude Duplessis, P.Eng., GMG	Site inspection
Sep 14, 2022	Merouane Rachidi, P.Geo., GMG	Sites inspection, and independent samples
Dec 6-8, 2022	Merouane Rachidi, P.Geo., GMG	Sites inspection (Notre-Dame-de-Montauban tailings), and independent samples

During his site-visit, Mr. Langton explored the general landscape of the five tailing sites on the Property, inspected the location of several historic drilling and trenching sites, and examined the infrastructure at the Anacon Lead 1 tailings site.

Mr. Duplessis and Mr. Rachidi carried out independent sampling with the cooperation of JY & Serge from ESGold. Twenty (20) duplicate (witness) samples were collected from material retrieved during a Sonic Drilling campaign conducted by Longford Exploration Services Ltd. ("Longford") in 2022. An additional twenty (20) in-situ samples were collected from the various tailings sites. Fifty-six (56) check-samples were selected on a random basis from legacy sample reject material for critical density measurements.

## 2.4 Source of Information

For the preparation of the PEA Report, the authors have relied on reports and documentation listed in Item 3 and Item 27. Sections from reports authored by other consultants may have been directly quoted or summarized in the PEA Report and are so indicated, where appropriate.

The bulk of the historical geological information sourced for the PEA Report was distilled from the on-line SIGEOM database (<http://sigeom.mines.gouv.qc>) of the Quebec Ministère de l'Énergie et des Ressources naturelles ("MERN"). The Authors

also made use of publicly available Assessment Reports, on-line resources, publications of the Geological Survey of Canada and scientific papers from various earth science Journals. A list of the principal material reviewed and used in the preparation of this document is included in the References (Item 27) of this document.

The Authors believe that the information used to prepare the PEA Report, and to formulate its conclusions and recommendations, are valid and appropriate considering the status of the Property and the purpose for which the PEA Report was prepared.

## 2.5 Units and Currency

The abbreviations, acronyms and units used in the PEA Report are provided in **Table 2-3** and

**Table 2-4.** In the PEA Report, all currency amounts are in Canadian Dollars ("CAD" or "\$") unless otherwise stated, with commodity prices typically expressed in U.S. dollars ("USD"). Units of measurement are generally stated in the Système international d'unités ("SI") metric units, the standard Canadian and international practices, including metric tons ("tonnes", "t") for weight, kilometres ("km") or metres ("m") for distance and hectares (ha) for area.

Mineral grades and concentrations from assay results are given in percent (%), parts per million (ppm), and grams per tonne (g/t). Where applicable, imperial units have been converted to SI units for consistency (

**Table 2-5).** Grid coordinates on maps and figures are based on the UTM NAD 83 Zone 18 projection.

### Table 2-3 – List of Acronyms

Acronyms	Term
43-101	National Instrument 43-101 (Regulation 43-101 in Québec)
CAPEX	Capital expenditure
CIM	Canadian Institute of Mining, Metallurgy and Petroleum
CoG	cut-off grade
CRM	Certified reference material
CSA	Canadian Securities Administrators
CV	Coefficient of variation
CWi	Crusher work index
DEM	Digital elevation model
DDH	Diamond drill hole
EIA	Environmental impact assessment
EIS	Environmental impact study

Acronyms	Term
EPCM	Engineering, procurement, construction, management
EQA	Environment Quality Act
ESA	Environmental site assessment
ESIA	Environmental and social impact assessment
F <sub>100</sub>	100% passing - Feed
F <sub>80</sub>	80% passing - Feed
FIFO	Fly in fly out
FOB	Freight on board
FS	Feasibility study
FWR	Fresh water reservoir
G&A	General and administration
GESTIM	Gestion des titres miniers (the MERN's online claim management system)
ID2	Inverse distance squared
IDW	Inverse distance weighting
IEC	International Electrotechnical Commission
IRR	Internal rate of return
ISA	Inter-ramp slope angle
ISO	International Organization for Standardization
ISRM	International Society for Rock Mechanics
IT	Information technology
JV	Joint venture
JVA	Joint venture agreement
LLC	Limited liability company
LOM	Life of mine
LOMP	Life of mine plan
LUP	Land Use Permit
MERN	Ministère de l'Énergie et des Ressources Naturelles du Québec (Québec's Ministry of Energy and Natural Resources)
MELCCFP	Ministère de l'Environnement, de la Lutte contre les changements climatiques, de la Faune et des Parcs (Québec's Ministry of Environment)
MIK	Multiple indicator kriging
MRC	Municipalité régionale de comté (Regional county municipality in English)
MRE	Mineral resource estimate
MRN	Former name of MERN
n/a	Not applicable



Acronyms	Term
N/A	Not available
NAD	North American Datum
NAD 27	North American Datum of 1927
NAD 83	North American Datum of 1983
nd	Not determined
NI 43-101	National Instrument 43-101 (Regulation 43-101 in Québec)
NN	Nearest neighbour
NPI	Net profits interest
NPV	Net present value
NRC	Natural Resources Canada
NSR	Net smelter return
NTS	National Topographic System
OPEX	Operational expenditure
PFS	Prefeasibility study
PM	Particulate matter
QA	Quality assurance
QA/QC	Quality assurance/quality control
QC	Quality control
QP	Qualified person (as defined in National Instrument 43-101)
R&D	Research and development
RMR	Rock mass rating
ROM	Run of mine
RQD	Rock quality designation
RQI	Rock quality index
RWi	Rod work index
SABC	Comminution circuit consisting of a SAG mill, ball mill and pebble crusher
SAG	Semi-autogenous-grinding
SD	Standard deviation
SF	Safety factor
SG	Specific gravity
SIGÉOM	Système d'information géominière (the MERN's online spatial reference geominig information system)
SMC	SAG mill comminution
SMU	Selective mining unit
SPLP	Synthetic Precipitation Leaching Procedure
TCLP	Toxicity characteristic leaching procedure



Acronyms	Term
TDS	Total dissolved solids
TSP	Total suspended particulate matter
UTM	Universal Transverse Mercator coordinate system

**Table 2-4 – List of Measurement Units**

Symbol	Unit
%	Percent
% solids	Percent solids by weight
\$. C\$	Canadian dollar
\$/t	Dollars per metric ton
°	Angular degree
°C	Degree Celsius
µm	Micron (micrometre)
µS/cm	Micro-siemens per centimetre
A	Ampere
Btu	British thermal unit
cfm	Cubic feet per minute
cfs	Cubic feet per second
cm	Centimetre
cm <sup>2</sup>	Square centimetre
cm <sup>2</sup> /d	Square centimetre per day
cm <sup>3</sup>	Cubic centimetre
cP	Centipoise (viscosity)
d	Day (24 hours)
dm	Decametre
ft	Foot (12 inches)
g	Gram
G	Billion
Ga	Billion years
gal/min	Gallon per minute
g-Cal	Gram-calories
g/cm <sup>3</sup>	Gram per cubic centimetre
g/L	Gram per litre
g/t	Gram per metric ton (tonne)
GW	Gigawatt

Symbol	Unit
h	Hour (60 minutes)
ha	Hectare
hp	Horsepower
Hz	Hertz
in	Inch
k	Thousand (000)
ka	Thousand years
kbar	Kilobar
kg	Kilogram
kg/h	Kilogram per hour
kg/t	Kilogram per metric ton
kJ	Kilojoule
km	Kilometre
km <sup>2</sup>	Square kilometre
km/h	Kilometres per hour
koz	Thousand ounces
kPa	Kilopascal
kW	Kilowatt
kWh	Kilowatt-hour
kWh/t	Kilowatt-hour per metric ton
kVA	Kilo-volt-ampere
L	Litre
lb	Pound
lb/gal	Pounds per gallon
lb/st	Pounds per short ton
L/h	Litre per hour
L/min	Litre per minute
lbs NiEq	Nickel equivalent pounds
M	Million
m	Metre
m <sup>2</sup>	Square metre
m <sup>3</sup>	Cubic metre
m/d	Metre per day
m <sup>3</sup> /h	Cubic metres per hour
m <sup>3</sup> /min	Cubic metres per minute
m/s	Metre per second

Symbol	Unit
m <sup>3</sup> /s	Cubic metres per second
Ma	Million years (annum)
masl	Metres above mean sea level
Mbgs	Metres below ground surface
Mbps	Megabits per second
mm	Millimetre
Moz	Million (troy) ounces
mph	Mile per hour
Mt	Million metric tons
MW	Megawatt
oz	Troy ounce
oz/t	Ounce (troy) per short ton (2,000 lbs)
ppb	Parts per billion
ppm	Parts per million
st/d	Short tons per day
st/h	Short tons per hour
t	Metric tonne (1,000 kg)
ton	Short ton (2,000 lbs)
tpy	Metric tonnes per year
tpd	Metric tonnes per day
tph	Metric tonnes per hour
US\$	American dollar
vol%	Percent by volume
wt%	Weight percent

**Table 2-5 – Conversion Factors for Measurements**

Imperial Unit	Multiplied by	Metric Unit
1 inch	25.4	mm
1 foot	0.3048	m
1 acre	0.405	ha
1 ounce (troy)	31.1035	g
1 pound (avdp)	0.4535	kg
1 ton (short)	0.9072	t

1 ounce (troy) / ton (short)	34.2857	g/t
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### **3. RELIANCE ON OTHER EXPERTS**

The QPs have relied upon other expert reports that provided information regarding mineral rights, property agreements, royalties, taxation, and marketing and commodity price information contained within the PEA Report.

The QPs have fully relied upon SIGEOM, the province of Québec's online database system, for information regarding mineral claim titles, and disclaim responsibility for, information supplied by ESGold about option agreements, royalty agreements, environmental liabilities and permits. This disclaimer applies to Item 4 of the PEA Report.

The QPs have not independently reviewed or verified the ownership of the mineral rights of the Property, nor or any underlying agreement(s) that may exist concerning the licenses or other agreement(s) between third parties, as they are not qualified to express any legal opinion with respect to property titles, current ownership or possible litigation.

Environmental permitting considerations were provided by ESGold.

The Authors believe that the information used to prepare the PEA Report, and to formulate its conclusions and recommendations, is valid and appropriate considering the status of the Project and the purpose for which the PEA Report has been prepared.

## 4. PROPERTY DESCRIPTION AND LOCATION

### 4.1 Introduction

The Property is in the province of Québec, 80 km northeast of Trois-Rivières, and 120 km west of Québec City (**Figure 4.1**).

### 4.2 Location

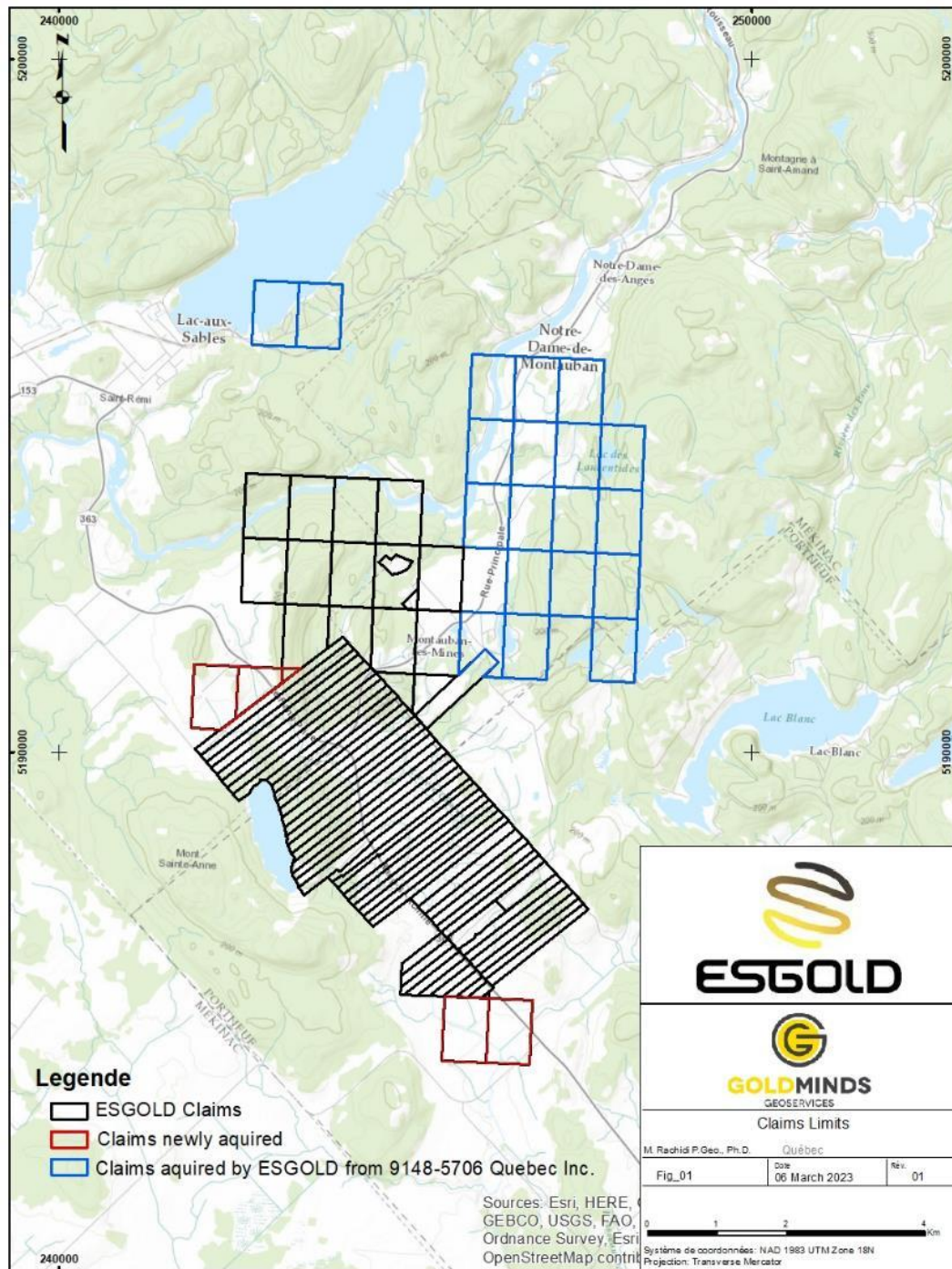
The approximate centre of the Property has Universal Transverse Mercator (UTM) coordinates 701950 East, 5188260 North, in Zone 18 of the 1983 North American Datum (NAD83) geoid; equivalent to 46° 49' 02" North Latitude, 72° 21' 10" West Longitude.



**Figure 4.1: Regional base map showing general location of the Property**

### 4.3 Mineral Title Status

The Property comprises ninety-six (96) claims that cover an aggregate area of 3,526.97 hectares (**Figure 4.2**). All of the current claims are held 100% by ESGold.



**Figure 4.2: Claim map of the Property**

ESGold originally acquired a group of twenty-four (24) claims totalling approximately 1,166.77 hectares from 9148-5706 Quebec Inc. in exchange for 200,000 shares. **Table 4-1** lists the details of the registered active claims (all of which are in good standing), based on information from MERN's GESTIM website, updated as of March 07, 2023.



**Table 4-1: List and Summary Status of Claims Comprising the Property**

Type	#Title	Status	Registration Date	Expiration Date	Renewal	Area (Ha)	Over (\$)	Work Required (\$)
CDC	2190140	Actif	2009-09-28	2023-09-27	6	29.39	0	2500
CDC	2191456	Actif	2009-10-14	2023-10-13	6	26.61	0	2500
CDC	2191457	Actif	2009-10-14	2023-10-13	6	24.86	0	1000
CDC	2191512	Actif	2009-10-14	2023-10-13	6	31.45	0	2500
CDC	2195875	Actif	2009-11-30	2023-11-29	6	27.39	0	2500
CDC	2331339	Actif	2012-02-09	2024-02-08	5	19.54	0	750
CDC	2331340	Actif	2012-02-09	2024-02-08	5	21.35	0	750
CDC	2331341	Actif	2012-02-09	2024-02-08	5	20.93	0	750
CDC	2331342	Actif	2012-02-09	2024-02-08	5	21.9	0	750
CDC	2336204	Actif	2012-03-16	2024-03-15	5	21.87	0	750
CDC	2388118	Actif	2013-08-05	2023-09-27	10	58.91	0	2500
CDC	2388119	Actif	2013-08-05	2023-09-27	10	53.24	0	2500
CDC	2388120	Actif	2013-08-05	2023-09-27	10	58.9	0	2500
CDC	2388121	Actif	2013-08-05	2023-09-27	10	16.03	0	1000
CDC	2388122	Actif	2013-08-05	2023-09-27	10	3.72	0	1000
CDC	2388123	Actif	2013-08-05	2023-09-27	10	58.67	0	2500
CDC	2388125	Actif	2013-08-05	2023-09-27	10	38.81	0	2500
CDC	2388126	Actif	2013-08-05	2023-09-27	10	58.9	0	2500
CDC	2388127	Actif	2013-08-05	2024-09-27	10	58.89	0	2500
CDC	2388128	Actif	2013-08-05	2024-09-27	10	58.9	0	2500
CDC	2388130	Actif	2013-08-05	2023-09-27	10	58.9	0	2500
CDC	2388131	Actif	2013-08-05	2023-09-27	10	58.9	0	2500
CDC	2395241	Actif	2013-12-03	2023-12-02	4	32.86	4423.9	1800
CDC	2395242	Actif	2013-12-03	2023-12-02	4	32.44	0	1800
CDC	2395243	Actif	2013-12-03	2023-12-02	4	31.08	0	1800
CDC	2395244	Actif	2013-12-03	2023-12-02	4	29.2	0	1800
CDC	2395245	Actif	2013-12-03	2023-12-02	4	29.06	0	1800
CDC	2395246	Actif	2013-12-03	2023-12-02	4	26.89	0	1800
CDC	2395247	Actif	2013-12-03	2023-12-02	4	32.25	0	1800
CDC	2395248	Actif	2013-12-03	2023-12-02	4	32.53	0	1800
CDC	2397363	Actif	2014-01-14	2024-01-13	4	21.58	250	750
CDC	2397489	Actif	2014-01-14	2024-01-13	4	32.58	0	1800
CDC	2398022	Actif	2014-01-21	2024-01-20	4	10.96	0	750
CDC	2398023	Actif	2014-01-21	2024-01-20	4	11.14	0	750
CDC	2398024	Actif	2014-01-21	2024-01-20	4	11.79	0	750
CDC	2398025	Actif	2014-01-21	2024-01-20	4	11.87	0	750
CDC	2398026	Actif	2014-01-21	2024-01-20	4	9.22	0	750



Type	#Title	Status	Registration Date	Expiration Date	Renewal	Area (Ha)	Over (\$)	Work Required (\$)
CDC	2398027	Actif	2014-01-21	2024-01-20	4	8.47	0	750
CDC	2398028	Actif	2014-01-21	2024-01-20	4	6.63	0	750
CDC	2398029	Actif	2014-01-21	2024-01-20	4	3.83	0	750
CDC	2398030	Actif	2014-01-21	2024-01-20	4	4.64	0	750
CDC	2408129	Actif	2014-07-25	2023-07-24	3	26.74	0	1800
CDC	2408130	Actif	2014-07-25	2023-07-24	3	27.22	0	1800
CDC	2408131	Actif	2014-07-25	2023-07-24	3	25.37	0	1800
CDC	2408132	Actif	2014-07-25	2023-07-24	3	26.01	0	1800
CDC	2408133	Actif	2014-07-25	2023-07-24	3	27	0	1800
CDC	2408134	Actif	2014-07-25	2023-07-24	3	25.41	0	1800
CDC	2408135	Actif	2014-07-25	2023-07-24	3	21.83	0	750
CDC	2408136	Actif	2014-07-25	2023-07-24	3	31.11	0	1800
CDC	2408137	Actif	2014-07-25	2023-07-24	3	35.82	0	1800
CDC	2408138	Actif	2014-07-25	2023-07-24	3	34.68	0	1800
CDC	2408139	Actif	2014-07-25	2023-07-24	3	33.16	0	1800
CDC	2408140	Actif	2014-07-25	2023-07-24	3	33.27	0	1800
CDC	2408141	Actif	2014-07-25	2023-07-24	3	20.92	0	750
CDC	2408142	Actif	2014-07-25	2023-07-24	3	21.11	0	750
CDC	2408143	Actif	2014-07-25	2023-07-24	3	21.49	0	750
CDC	2408144	Actif	2014-07-25	2023-07-24	3	19.47	0	750
CDC	2408145	Actif	2014-07-25	2023-07-24	3	22.56	0	750
CDC	2408146	Actif	2014-07-25	2023-07-24	3	20.95	0	750
CDC	2408147	Actif	2014-07-25	2023-07-24	3	26.24	0	1800
CDC	2408148	Actif	2014-07-25	2023-07-24	3	28.7	0	1800
CDC	2408612	Actif	2014-07-29	2023-07-28	3	30.63	0	1800
CDC	2424350	Actif	2015-03-12	2024-03-11	3	56.48	653.16	1800
CDC	2426429	Actif	2015-02-25	2023-07-03	6	47.04	0	2500
CDC	2426430	Actif	2015-02-25	2023-07-03	6	58.91	0	2500
CDC	2426431	Actif	2015-02-25	2023-06-06	6	58.9	0	2500
CDC	2456371	Actif	2016-08-08	2023-08-07	2	36.81	0	1200
CDC	2456372	Actif	2016-08-08	2023-08-07	2	32.77	0	1200
CDC	2456373	Actif	2016-08-08	2023-08-07	2	28.99	0	1200
CDC	2456374	Actif	2016-08-08	2023-08-07	2	33.41	0	1200
CDC	2456375	Actif	2016-08-08	2023-08-07	2	31.21	0	1200
CDC	2743547	Actif	2023-02-24	2026-02-23	0	58.97	0	1200
CDC	2743548	Actif	2023-02-24	2026-02-23	0	58.97	0	1200
CDC	2743549	Actif	2023-02-24	2026-02-23	0	57.07	0	1200
CDC	2743550	Actif	2023-02-24	2026-02-23	0	30.94	0	1200
CDC	2743551	Actif	2023-02-24	2026-02-23	0	2.96	0	500

Type	#Title	Status	Registration Date	Expiration Date	Renewal	Area (Ha)	Over (\$)	Work Required (\$)
CDC	2660176	Actif	2022-08-12	2025-08-11	0	58.9	0	1200
CDC	2660177	Actif	2022-08-12	2025-08-11	0	58.89	0	1200
CDC	2660178	Actif	2022-08-12	2025-08-11	0	58.89	0	1200
CDC	2660179	Actif	2022-08-12	2025-08-11	0	58.88	0	1200
CDC	2660180	Actif	2022-08-12	2025-08-11	0	58.88	0	1200
CDC	2660181	Actif	2022-08-12	2025-08-11	0	58.88	0	1200
CDC	2660182	Actif	2022-08-12	2025-08-11	0	58.87	0	1200
CDC	2660183	Actif	2022-08-12	2025-08-11	0	58.87	0	1200
CDC	2660454	Actif	2022-08-17	2025-08-16	0	47.75	0	1200
CDC	2660455	Actif	2022-08-17	2025-08-16	0	58.92	0	1200
CDC	2660456	Actif	2022-08-17	2025-08-16	0	58.92	0	1200
CDC	2660457	Actif	2022-08-17	2025-08-16	0	58.91	0	1200
CDC	2660458	Actif	2022-08-17	2025-08-16	0	58.91	0	1200
CDC	2660459	Actif	2022-08-17	2025-08-16	0	58.91	0	1200
CDC	2660460	Actif	2022-08-17	2025-08-16	0	58.91	0	1200
CDC	2660461	Actif	2022-08-17	2025-08-16	0	58.9	0	1200
CDC	2660462	Actif	2022-08-17	2025-08-16	0	58.9	0	1200
CDC	2660463	Actif	2022-08-17	2025-08-16	0	58.9	0	1200
CDC	2660464	Actif	2022-08-17	2025-08-16	0	58.89	0	1200
CDC	2660465	Actif	2022-08-17	2025-08-16	0	58.89	0	1200

#### 4.4 Issuer's Interest

On December 12, 2019, Secova (now ESGold) signed a purchase agreement with DNA Canada Inc. ("DNA") to acquire a 100% undivided interest (the "Purchase") in 152 mining claims (including 76 of the 96 claims that comprise part of the area known herein as the Property), pursuant to which it would acquire from DNA the following assets:

- i. 152 mining claims (the "Project Area");
- ii. the Project Area, together with all improvements, rights, and privileges incidental or belonging to the Project Area, including the Immovable Assets and the Project Area Data, free and clear of all encumbrances.

In consideration for an undivided one hundred percent (100%) interest in and to the Project Area, the Immovable Assets and the Property Data, Secova agreed to:

- a) deliver 15,000,000 Secova Shares to DNA on the date that is four months and one day following the Closing Date (the "First Tranche Shares");
- b) deliver 15,000,000 Secova Shares to DNA on the date that is eight months following the Closing Date; (the "Second Tranche Shares");

- c) deliver 20,000,000 Secova Shares to DNA on the date that is 12 months following the Closing Date (the "Third Tranche Shares"); and
- d) assume the Assumed Liabilities up to \$100,000 and the Notre-Dame de Montauban Municipality Liabilities.

An equivalent of \$969,000 of the purchase price was allocated to the Immovable Assets in the Project Area. The remainder of the purchase price was allocated to goodwill.

#### 4.5 Mineral Royalties

There remains a 0.5% net smelter return royalty ("NSR") with a Mr. Fayz Yacoub attached to five (5) claims on the Property, namely claims 2456371 to 2456375 inclusive.

From the date of the start of operations and until the end of the term or any renewal period, as the case may be, ESGold undertakes to pay the Municipality an annual amount equal to a 1% NSR resulting from its activities, all as additional rent (the "Additional Rent"). The parties agree that the Additional Rent will be a minimum of six thousand dollars (\$6,000) per month if the quantity treated is less than one hundred and eighty thousand (180,000) tonnes per year and of eight thousand dollars (\$8,000) per month if the quantity treated is greater than one hundred and eighty thousand (180,000) tonnes per year.

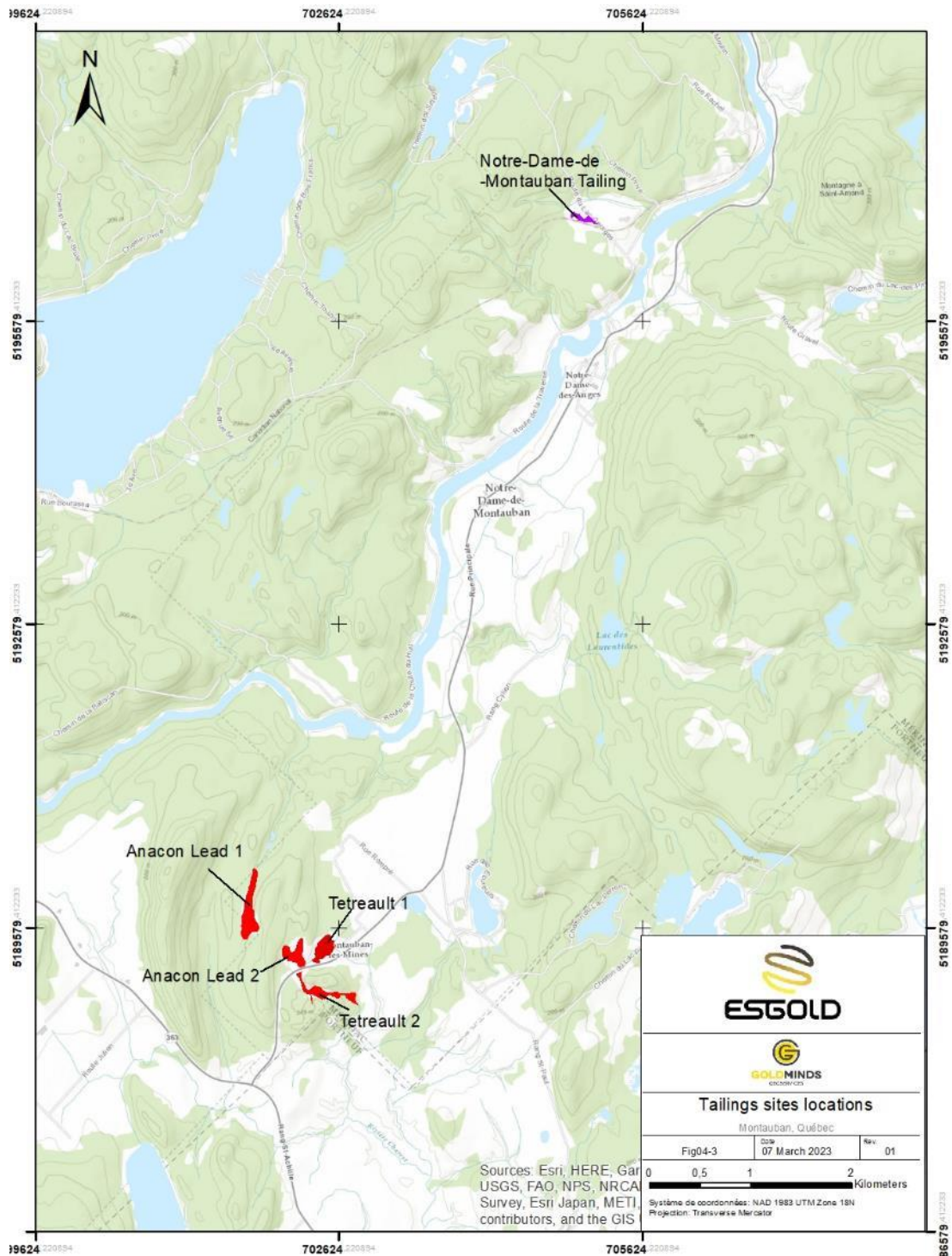
#### 4.6 Permits and environmental liabilities

There are four tailings sites in the Montauban-les-Mines area and one tailing site in Notre-Dame-de-Montauban (**Figure 4-3**).

On September 14, 2012, DNA received a Certificate of Authorization (CA) from the provincial Ministère du Développement durable, de l'Environnement, de la Faune et des Parcs with respect to operating a gravity separation circuit to process the mining residues (i.e., tailings) corresponding to the Anacon Lead 1 tailings site, located in the municipality de Notre-Dame-de-Montauban on lots P-142, -144, -145, -153, -202, -209 and -210.

On March 13, 2014, DNA received a CA from the Province of Québec permitting the operation of a cyanidation circuit to process the mining residues ("tailings") of the Anacon Lead 1 tailings site.

The two CA's issued to DNA allowing it to proceed with the construction and installation of equipment facilities to recover precious metals (i.e., gold and silver), and possibly mica, from the mining residues at the Anacon Lead 1 tailings site have not yet been officially transferred to ESGold.



**Figure 4.3: Tailings sites on the Property**

During the process of acquiring the Property assets from DNA, Secova provided notice to MERN that it would be assuming responsibility for the tailings material and the potential environmental liabilities going forward. Secova has applied to

obtain the necessary permits to carry out field work that will have an impact on the environment, notably the mobilization (during processing) of mining residues (tailings), which are considered toxic waste by the government authorities.

On February 28, 2014, DNA received approval from the provincial government for its "Restoration Plan", which was to be implemented once DNA had processed the site's mining residues. Secova has engaged Alphard of Montreal, QC to update DNA's 2014 restoration plan for submission to the provincial government.

Secova has negotiated with the Municipality to pay a monthly rent to the Municipality (the "Lease"). From the date of signature of this Lease, the monthly base rent (the "Rent") will be five hundred dollars (\$500), plus applicable taxes (i.e., GST and QST); however, from the date on which Secova will begin its tailings recovery operations on the territory of the Municipality (the "Operation Start Date"), the Rent will be increased to two thousand five hundred dollars (\$2,500), plus applicable taxes. The Rent will be indexed annually, on the anniversary date of the signing of the Lease, whichever is greater of 2% or the Consumer Price Index for the Province of Quebec (CPI). Notwithstanding the foregoing, the Rent will be reduced if Secova employs (full-time) residents of the Municipality having their permanent residence as owner in the territory of the Municipality or tenant for more than eighteen (18) months, as follows:

- 0 jobs - \$2,500;
- 10 jobs - \$2,000;
- 20 jobs - \$1,500;
- 30 jobs and more - \$1,000.

For clarification purposes, the amount of the Rent will be adjusted at the end of each month for the following month if it is demonstrated by ESGold that ten (10) local full-time jobs have been created.

As at the effective date of the PEA Report, there are no other known environmental liabilities to which the Property is subject, and no other known significant factors or risks exist that may affect access, title, or the right or ability to perform mineral exploration work.

#### **4.7 Significant Factors and Risks**

The Project is part of an industry that contains various risks and uncertainties. The Project is subject to all risks associated with establishing or expanding new mining operations and business enterprises, including the timing and cost, which can be considerable, of the construction of mining and processing facilities and related infrastructure; the availability and cost of skilled labour and mining equipment; the potential increases in construction and operating costs due to changes in the cost of fuel, power, materials and supplies.



## 5. ACCESSIBILITY, CLIMATE, PHYSIOGRAPHY, LOCAL RESOURCES & INFRASTRUCTURE

### 5.1 Accessibility

The Notre-Dame-de-Montauban Municipality is accessible via Highway 363 from Highway 40, which links Québec City and Trois-Rivières. Rail access is also available less than 10 kilometres to the northeast, in Notre-Dame-des-Angles (Figure 5.1). The Property can be easily reached by four-wheel drive vehicles via numerous unpaved forestry and farm roads that branch off the paved highways. Areas not serviced by roads can be accessed by foot or all-terrain vehicles during the summer, and by snowmobile in the winter.

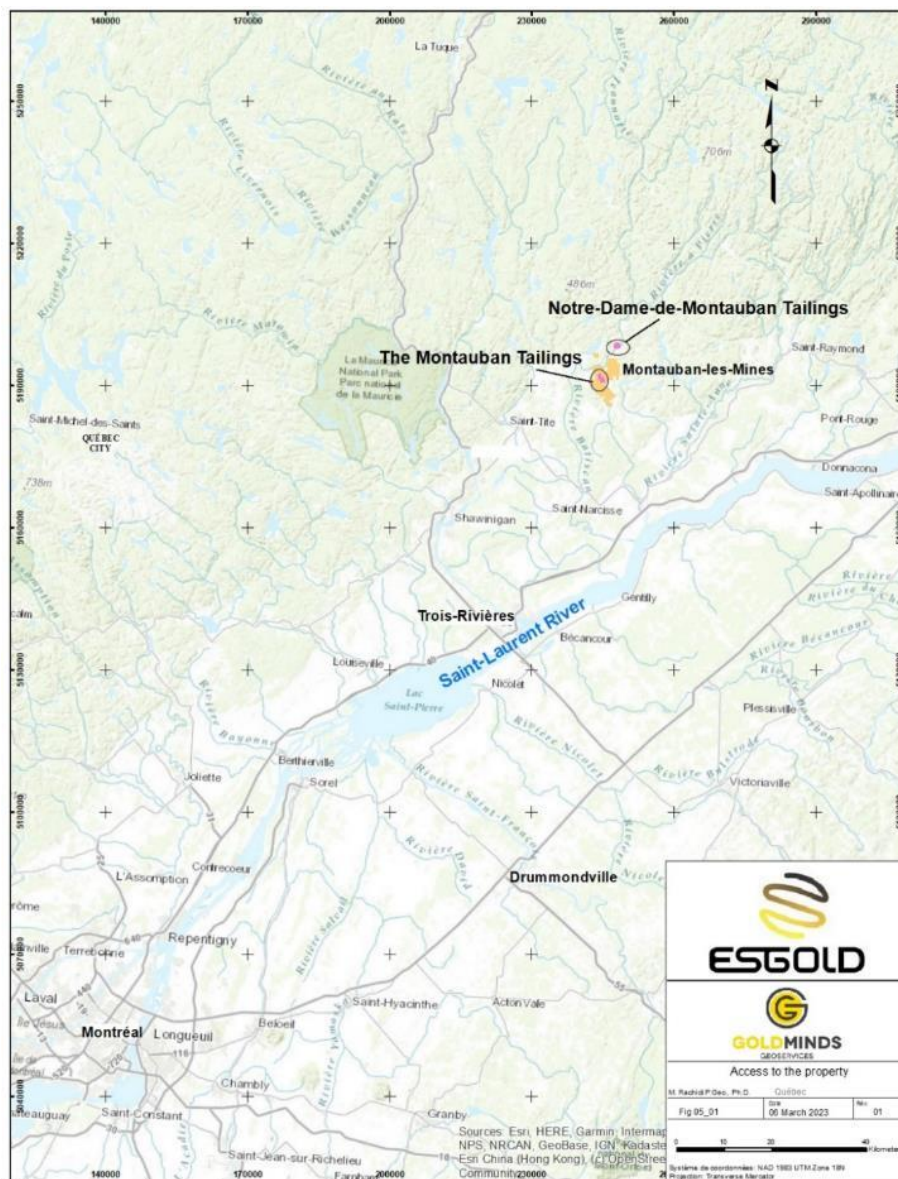
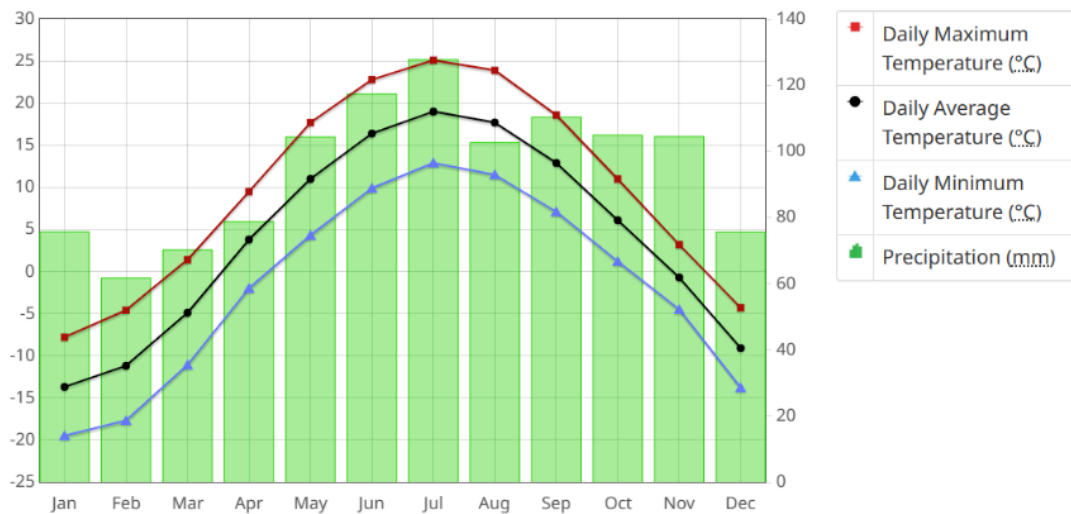


Figure 5.1: Base map showing local area access to the Property

## 5.2 Climate

From 1981 to 2010, Environment Canada reports daily average temperature of 19.0°C in July and -13.7°C for January. Snow cover generally lasts from November to April, with February as the month with the most snow accumulation (Figure 5.2). The average yearly precipitation is 1,133.2 mm, including rainfall (902.9 mm) and snowfall (230.3 mm). These data were collected at the Lac aux Sables station about 10 kilometres to the northwest of Property.

Mining and drilling operations may be carried out all year long, but surface exploration work (e.g., mapping, channel sampling) is most convenient from mid-April to mid-November.



**Figure 5.2: Temperature and precipitation graph for 1981 to 2010: Canadian climate normals for Lac aux Sables station**  
[\(\[http://climate.weather.gc.ca/climate\\\_normals/index\\\_e.html\]\(http://climate.weather.gc.ca/climate\_normals/index\_e.html\)\)](http://climate.weather.gc.ca/climate_normals/index_e.html)

## 5.3 Physiography

The area's physiography is characterized by clayey and sandy plateaus forming the foothills of the Laurentian Mountains. The region is rural and agricultural, with most farms producing potatoes and corn. The Property is limited in the north by the Batiscan River, which drains most of the Property towards the south to the Saint Lawrence River. The topography is typified by small hills reaching up to 80-100 metres of relief above the valleys, which lie at an average elevation of 160 metres above sea level. Forest cover comprises a mix of mainly conifer, birch, cedar and maple trees.

## 5.4 Local Resources & Infrastructure

Manpower, water and electric power are easily available from the immediate area of Notre-Dame-de-Montauban. Quarry-specific equipment and personnel specialized in quarrying are available within a 30 kilometre radius from the municipality.

The on-site infrastructure includes a 16,000 ft<sup>2</sup> steel-structure building and its foundation, as well as water and electrical power installations. Access-infrastructure to the site where the milling facilities are projected to be located have been upgraded to handle heavy equipment. The primary objective of the proposed mill will be to recover precious metals from the tailings sites on the Property.



## 6. HISTORY

NOTE: The GESTIM and SIGEOM systems are the principal repository for historical information on the Province's mineral resources and are accessible online at <https://gestim.mines.gouv.qc.ca/> and <http://sigeom.mines.gouv.qc.ca/>. The GESTIM and SIGEOM web-sites allow on-line examination and queries of the Province of Quebec's database of Provincial Assessment Reports or "Gestimes Minières" (GM's). A listing of GM's pertinent to the Property is included in the References (**Item 27.0**).

All underground mining and production work described in the following sections of **Item 6** relate to work that was conducted within the boundaries of the current Property.

It should be noted that unless otherwise stated, all quoted diamond-drill intervals herein represent down-hole lengths and not true widths.

### 6.1 Summary of Historic (pre-NI 43-101 implementation) Work

The mining history of the area starts in 1910 with the discovery of the Montauban Pb-Zn deposit by Elzéar Gauthier. The numerous base-metal zones of the Montauban Mine (**Figure 6.1**) were worked over the years by a series of successive owners: Mr. E. Gauthier (1910-1911), Mr. P. Tétreault (1911-1914), the Zinc Company Ltd. (1915-1921), the Tétreault Estate (1923-1924), British Metal Corporation (1924-1929), the Pierre Tétreault Succession (1929-1937), Siscoe Metals Ltd. (1942-1944), Anacon Lead Mines Ltd. (1948-1956) and Ghislau Mining Corporation Ltd. (1957-1966).

In 1966, most of the installations were decommissioned, and the mining rights on the Anacon Property expired in 1972. Total production from the Tétreault-Anacon Property amounted to 2,655,588 short tons of ore with average recoveries of 4.53% Zn, 1.54% Pb, 0.02 oz/t Au and 2.50 oz/t Ag (McAdam and Flanigan, 1976). A total of 100,309 short tons of ore from the Montauban Zone, located north of the Tétreault-Anacon Property, were milled from June 1953 to January 1954 at grades of 2.88% Zn, 1.03% Pb, 1.00 oz/t Ag and 0.01 oz/t Au (Baldwin, 1961).

The five tailings sites in the Montauban-les-Mines area, created during the various mining operations described above, are: Anacon Lead 1; Anacon Lead 2; Tétreault 1; Tétreault 2; and Montauban United.

From 1983 to 1990, Muscocho Explorations Ltd. ("Muscocho") mined several gold bearing zones of the deposit producing 813,632 tonnes grading 3.54 g/t Au and 12.36 g/t Ag (McPhee, 1982; GM42953).

Regional geological mapping in the Montauban area was carried out by Bancroft (1915), Smith (1950; 1956, RG-065), Pyke (1966, RP-545; 1967), Rondot (1978a, DPV-594; 1978b) and Morin (1987, MM-86-02), and Provincial government stream-sediment (heavy and fine fractions) and till geochemistry surveys were carried out in the Montauban-les-Mines sector in 1989 (Choinière, 1992; MB-92-18).

The ore deposits and host rocks have been studied by the following authors: Alcock (1930); Osborne (1939); O'Neil and Osborne (1939; RP-136); Wilson (1939); Smith (1950; 1956, RG-065); Sangster (1972); Stamatelopoulou-Seymour (1975); Stamatelopoulou-Seymour and MacLean (1977); Ledoux and Assad; (1979); Fletcher (1979); Prabhu (1981); MacLean et al., (1982); Prabhu and Webber (1984); Stamatelopoulou-Seymour and MacLean (1984); Bernier (1985); Gauthier et al.; (1985); Bernier et al.; (1987); Côté (1989); Jourdain; (1987); Jourdain et al. (1987); Bernier (1992); Bernier and Maclean (1993); Jourdain (1993); Nadeau and van Breemen; (1994); Nadeau et al. (1999); and Tomkins (2007).

**1988:** Minerals Barexor Inc. performed a diamond-drilling programme just south of where Exploration Norwood Inc. were drilling at the time. Minerals Barexor Inc. completed 5 drill-holes (BV-88-05 and BV-88-07 to BV-88-10). It was reported that each drill-hole intersected quartz-tourmaline veins with low gold values (highest value: 0.01 oz/t Au locally).

**1989:** Exploration Norwood Inc. reported on geophysical and diamond-drilling work. Geophysical work included an IP survey (27.2 km) and EM survey (17.0 km). The IP survey produced 14 anomalous zones believed to represent semi-massive to disseminated sulphides, or zones rich in magnetite. Five drill-holes (470-01-87, 470-02-87, 470-03-87, 470-04-88 and 470-05-88) were drilled to test the best geophysical anomalies. Gold-assay values were low with the best results being 400 ppb Au over 1.5 metres in a sheared and breccia zone (124.1 - 125.6 m down-hole in drill-hole 470-03-87), and 0.14 g/t Au over 4.5 metre (52.5 - 56.7 m down-hole) in a semi-massive pyrite zone, in hole 470-04-88 (Perron and Morin, 1988; GM47590).

A 1989 basal till survey was carried out to assess the area's mineral potential by tracing the detrital dispersal of bedrock mineralization to the bedrock source (Pelletier and Beaumier, 1990; MB-90-20). The fine fraction was assessed for 41 elements. In 1993, a study of the gahnite dispersal within of the heavy fraction of basal till from the same survey was reported by Lalonde et al. (1994; MB-94-42). The heavy fractions were assessed for 31 elements and the results were published by Lalonde (1996; MB-96-31).

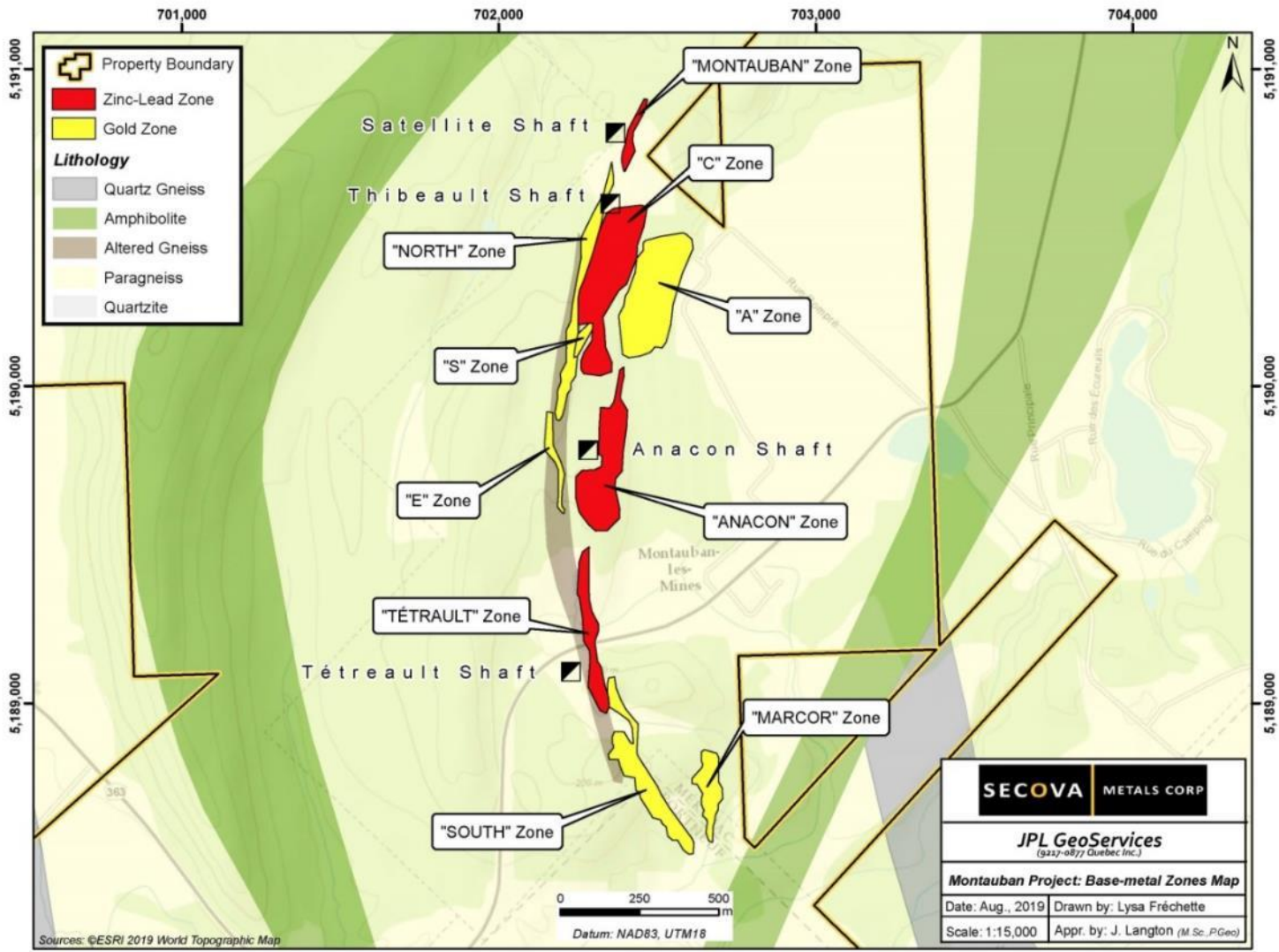


Figure 6.1: Simplified geology map showing of Montauban base-metal zones

## **6.2 The Montauban property**

Most of the exploration and mining activities on the Property were conducted in the area formerly covered by the Tétreault–Anacon property (1910-1973) and the former Muscocho Exploration property (1974-1996). Summaries of exploration activities in the surrounding areas are also included in the following:

### **6.2.1 Tétreault–Anacon property (1910-1973)**

In 1910, Elzear Gauthier discovered the first lead-zinc mineralization near the Montauban-les-Mines. Mining rights were acquired in 1911 by Pierre Tétreault, who began development work and built a mill with a capacity of 150 short tons per day. This marked the start of mining of the Montauban ore-body (i.e., the Tétreault Mine). Small quantities of ore were mined from transverse veins following the first year of discovery.

Mining by various companies continued intermittently in the region from 1912 to 1935. The Zinc Company Ltd., a subsidiary of the Weedon Mining Company, took over the property and operated the mine from 1914 to 1921. The Zinc Company built a 200-ton flotation mill and a roasting plant for the zinc concentrate in 1916 that was in operation until 1921, when the lease on the property expired. From 1911 to 1924, the Tétreault Mine produced 318,413 short tons of ore (Malouf, 1948; GM00557-A). The average value of assayed ore was not noted in the available documents.

The Tétreault Estate reopened the mine in 1923, and operated it until 1924 when it was leased to British Metal Corporation, who improved the plant and operated it continuously until 1929. During this time, British Metal Corporation performed underground development work and surface and underground drilling on the Tétreault Mine (Denis, 1930; GM18431). From 1925 to 1929, the mine produced about 527,921 short tons of ore assaying roughly 9% Zn, 3% Pb, 0.09 oz/t Au and 8.3 oz/t Ag (Malouf, 1948; GM00557-A).

Titles reverted to the Pierre Tétreault succession in 1929, and production resumed during from December 1934 to May 1937. During this period, 259,087 short tons were mined at an average of 4.5% Zn, 1.4% Pb, 0.02 oz/t Au and 3.0 oz/t Ag (Malouf, 1948; GM00557-A).

As a wartime measure, Siscoe Metals Mines Ltd. reopened the mine from 1942 to 1944 under contract to Wartime Metals Corporation. Siscoe Metals Mines then mined the lead-zinc ore-body to help supply strategic metals during World War II. Siscoe Metals Mine milled 213,641 short tons averaging 4.0% Zn, 1.0% Pb, 0.02 oz/t Au and 2.0 oz/t Ag (Malouf, 1948; GM00557-A)

In 1948, Anacon Lead Mines Ltd. took over the property and resumed operations. They built a 1,000-short ton mill, which operated until the closing of the mine in 1955. Diamond-drilling, which commenced in 1949 and was discontinued in February 1953, comprised 93,457 feet (28,485.7 m) of surface diamond-drilling and 40,450 feet (12,329.2 m) of underground drilling (Cornwall, 1953; GM0203). Most of this drilling was carried out in the A, C and North Gold zones. Some drilling

was also carried out in the southern part of the South Gold and D zones. No exploration work was done after February 1953 (Arcand, 1961; GM11070).

The mine was operated by two shafts. The No.3 shaft (Tétreault shaft) was inclined at 53° and sunk to a vertical depth of 426 feet (129.85 m). The No. 4 shaft (Anacon shaft) was a vertical opening that extended to a depth of 771 feet (235.0 m). This shaft provided access to the A Zone - discovered and subsequently mined out by Anacon Lead Mines. Eight levels aggregating 4,400 feet (1,341.1 m) were developed.

When underground operations by Anacon Lead Mines ceased in 1955, all equipment below ground, as well as the surface plant, were left in place; however, both hoists and air compressors were removed and sold with the milling equipment. From 1949 to July 1955, Anacon Lead Mines produced 1,336,526 short tons at an average grade of 3.09% Zn, 1.24% Pb, 1.98 oz/t Ag and 0.013 oz/t Au (Arcand, 1961, GM11070; Lee, 1965).

In 1957, Ghislau Mining Corporation Ltd. purchased from Anacon Lead Mines the mining rights, surface rights, mill, and other mine buildings. In 1961, Lavolette Mining Corporation Ltd. installed a 1,000 short ton per day concentrator to treat tailings from former operations. The mill ran for 8 months and operations ended early in 1962 when extreme grade variations in the feed made metal recovery uneconomic (Lee, 1965). In 1962, 14 vertical holes, totalling 2,662 feet (811.4 m), were drilled on the D Zone and the north part of the South Gold Zone (Lee, 1965). In 1964, 20 holes totalling 4,664 feet (1,421.6 m), were drilled to the south of the South Gold Zone (Lee, 1965). One deep hole 2,504 feet long (763.2 m) was drilled to cut a carbonatized horizon in the paragneiss that was exposed at surface; the hole cut the target horizon at a vertical depth of 1,500 feet (457.2 m), but it was not mineralized. In 1965, 27 short holes were drilled on the North Gold Zone at intervals of 50 feet (15.2 m) (Lee, 1965).

A bulk sampling programme was also collected from the North Gold Zone. During the same year, Ghislau Mining Corporation bought Lavolette's share of the equipment for \$30,000. Ore reserves tabulated by Lee (1965) are summarized in **Table 6-1**.



**Table 6-1: Historical Ore Reserves\* on the Tétreault-Anacon property (Lee, 1965)**

Location	Tonnage	Zn%	Pb%	Ag oz/ton	Au oz/ton
<u>Basemetal</u>					
C Zone	60,929	3.94	1.17	1.15	0.017
D Zone	62,608	3.32	1.15	1.39	0.01
E Zone	15,300	2.69	0.96	0.96	0.007
Total	138,837	3.52	1.10	1.24	0.013
South Gold Zone	77,230			1.99	0.189
North Gold Zone	140,039			0.605	0.193
Total	217,269 tons Precious Metal			1.10	0.192

\*These gold, silver and base-metal resources, are historical in nature and should not be relied upon. A qualified person has not done sufficient work to classify the historical estimate as current mineral resources or mineral reserves. ESGold is not treating the historical estimate as current mineral resources or mineral reserves.

After 1965, the mining concession covering the former Anacon property became idle and was eventually revoked in 1971.

Total production from the Tétreault-Anacon property amounted to 2,655,588 short tons of ore with average recoveries of 4.53% Zn, 1.54% Pb, 0.02 oz/t Au and 2.50 oz/t Ag (McAdam and Flanigan, 1976).

### 6.2.2 United Montauban Mine property (1914-1974)

The Montauban United Mine property adjoined the Tétreault-Anacon property at its northern boundary. It was formed by the amalgamation of two properties (Figure 6.2) as follows:

**United Lead and Zinc Mines property:** Between 1914 and 1916, some surface trenching was done by the Montauban Mining Syndicate and two shallow shafts were sunk to depths of 34 feet (10.4 m) and 51 feet (15.5 m) respectively (Cornwall, 1954; GM03509). A 60-foot sloped winze was also sunk, to a total vertical depth of 110 feet (33.5 m). Two levels comprising some short drifts and cross-cuts were also developed (MRN, 1916). In 1928, St-Lawrence Lead and Zinc Mines was succeeded by St-Lawrence Metals Ltd., which carried out a programme of diamond-drilling and underground exploration (the Thibault mine) (Carpenter, 1930; GM18425).

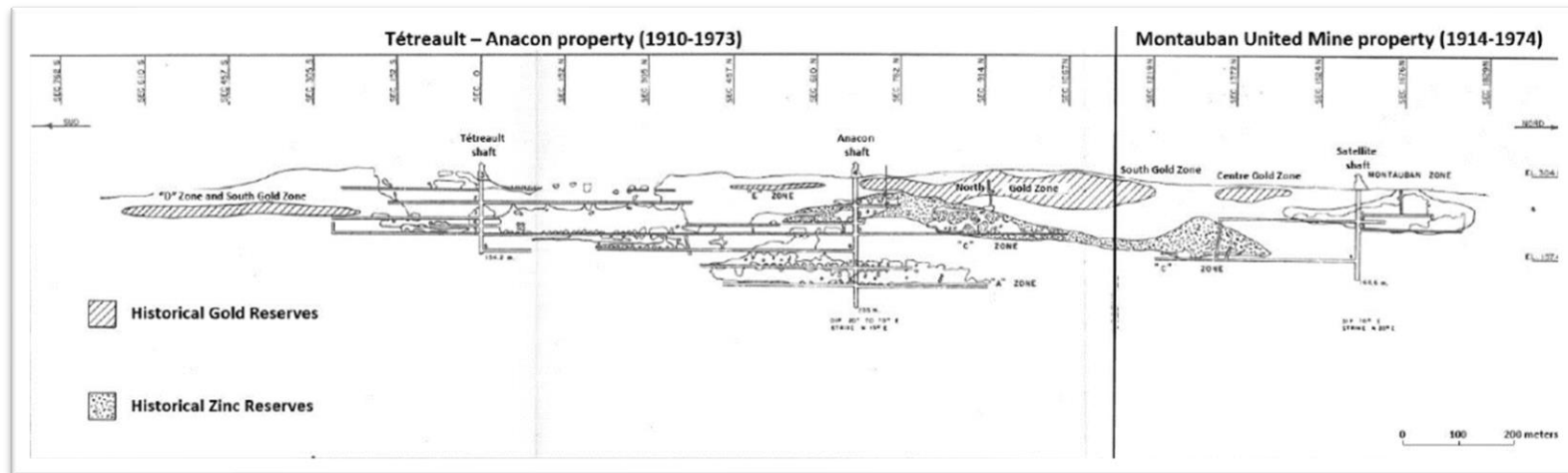


Figure 6.2: United Property - circa 1974

The Thibault shaft was sunk to 100 feet (30.5 m). A winze was sunk from the 100-ft level to a depth of 175 feet (53.3 m). Cross-cutting and drifting were carried out on the 50-ft and 100-ft levels. St-Lawrence Lead and Zinc Mines suspended operations in September 1930 and was succeeded in 1932 by Vimy Gold and Metals Ltd., who in turn were replaced by United Metals in 1937 (Cornwall, 1954; GM0203). United Lead and Zinc Mines Ltd. acquired its holdings at the time from United Metals. The mine at this stage had filled with water and no further exploration was attempted until 1950-51. Between 1950 and 1952, a total of 43,185.2 feet (13,162.8 m) of surface diamond-drilling and 283.4 feet (86.4 m) of underground drilling were bored by United Lead and Zinc Mines.

**Montauban Mines property:** The property held by Montauban Mines Ltd. was previously owned by the Shawinigan Mining and Smelting Company, which sunk a shaft and did some exploratory trenching (Cornwall, 1954; GM03509). Their early investigations did not locate any valuable mineralization, but in 1948, diamond-drilling revealed the presence of additional lead and zinc mineralization. A total of 3,529.6 feet (1,075.8 m) of surface drilling was bored. In 1950, Montauban Mines was incorporated and took over the property. Between 1950 and 1952, a total 38,301.6 feet (11,674.3 m) of surface diamond-drilling and 232.0 feet (70.7 m) of underground drilling were completed by Montauban Mines.

A shaft was started in 1951 and ended in June 1952. The shaft reached a depth of 550.0 feet (167.6 m) and stations were cut at four levels. The main zone (Montauban Zone) was developed from cross-cuts and drifts on the upper three levels. The fourth level was developed by means of a drift driven south to meet the continuation of the Anacon C Zone.

**United Montauban property:** In June 1953, United Montauban Mines was formed from an amalgamation of two companies previously known as United Lead and Zinc Mines and Montauban Mines. The diamond-drilling carried out by Montauban Mines and United Lead and Zinc Mines between 1950 and 1952 established the continuation of the Anacon C Zone, the Anacon Gold Zone, and the presence of mineable ore in a separate ore zone known as the "Montauban Ore Zone" (Cornwall, 1954; GM03509). Production started in mid-1953. With an estimated 3 years of ore apparently remaining, but with operating losses of \$166,000 in 1953, the mine was shut down on January 31, 1954 in order to conserve mine reserves for a period of better metal prices. A total of 100,309 short tons of ore were milled during the period of June 1953 to January 1954 at a grade of 2.88% Zn, 1.03% Pb, 1.00 oz/t Ag and 0.01 oz/t Au from the Montauban Zone (Baldwin, 1961). At the end of 1953, United Montauban Mines Ltd. became Satellite Metal Mines Ltd. in 1958. No work was performed by Satellite Metal Mines. The mine was maintained on a caretaker basis during the time Satellite Metal Mines held the property.

### 6.2.3 Muscocho Exploration Property 1974-1996

The Tétreault-Anacon Property comprising claims held by Mr. Poulin was acquired by Muscocho in December 1974 (McAdam and Flanagan, 1976).



Muscocho optioned the former holdings of United Montauban Mines from its successor company, Satellite Metal Mines Ltd., thereby acquiring control of the total known strike of the Montauban mineralized zone.

In 1975, Muscocho resurveyed and compiled the results of previous diamond-drilling on the property. During the year, ground magnetic and electromagnetic (Radem) surveys were performed over the entire Montauban mineralized zone. Twenty-one (21) short holes, totalling 1,301.8 metres, were drilled on the North Gold Zone over 1,400 feet (426.7 m) of mineralized strike.

In 1976, metallurgical tests were carried out on drill-core from the 1975 diamond-drilling programme. Two composite samples collated from hole MM-1 were sent to a laboratory of the Ministry of Energy and Resources of Québec. Cyanidation test work was performed on the two composite samples and the overall recovery was evaluated at 98% (Vachon, 1976). In 1977, a geophysical survey was carried out to investigate the northern extension of the Montauban mineralized zone (Lamarche, 1978; DPV-578). In June 1978, SOQUEM Inc. ("SOQUEM") entered into a joint venture agreement with Muscocho to acquire a 50% interest in the property by spending \$200,000. SOQUEM was also required to make cash payments totalling \$80,000 to Muscocho over a period of two years. At this time, Boudreault and Léonard (1979; GM34881) reported gold and silver indicated reserves\* totalling 370,000 metric tons at grades of 8.81 g/t Au and 34.28 g/t Ag. These gold and silver "reserves" corresponded to the South, E and North zones from the former Tétreault-Anacon property, and the South and Centre zones of the former United Montauban property. In addition, indicated reserves\* of base-metals were reported as 635,000 metric tons at 3.46% Zn, 1.07% Pb, 38.74 g/t Ag, and 0.55 g/t Au.

*\*These "reserves" are historical in nature. A qualified person has not done sufficient work to classify the historical estimate as current mineral resources or mineral reserves. ESGold is not treating the historical estimates as current mineral resources or mineral reserves.*

Exploration work performed by SOQUEM in 1978 (Boudreault and Léonard, 1979; GM34881) comprised a review of all core from the 1975 diamond-drilling programme by Muscocho. Some check assays were performed at an independent laboratory to provide quality control on the prior gold, silver and base-metal assays. Between October 1978 and March 1979, a total of 37 BQ-diameter short holes totalling 2,030.9 metres were drilled, mainly on the North Gold Zone. Following this drilling campaign, SOQUEM reported indicated geological reserves\* (uncut) of 500,417 metric tons averaging 8.33 g/t Au and 21.7 g/t Ag.

*\*These "reserves" are historical in nature. A qualified person has not done sufficient work to classify the historical estimate as current mineral resources or mineral reserves. ESGold is not treating the historical estimate as current mineral resources or mineral reserves.*

In 1980, a detailed geological survey was performed on the North Gold Zone (Biron and Bureau, 1981; GM37536). The geological survey area covered the zone over a strike length of 915 metres, with an additional 150 metres on either side (perpendicular to survey length). A total of 12 trenches were also excavated in this area. The North Gold Zone was recognized in several trenches. In fall 1980, an infill drilling campaign was carried out on the North Gold Zone and represented by 24 short surface holes, totalling 1,135.6 metres. During the year, the portal of a new ramp was excavated. Underground development commenced and an access decline ramp (4.25 m X 2.90 m; average gradient of 10%) was developed from surface over a total of 422 metres. The ramp reached a vertical depth of 60 metres. Three levels were opened (level 280, 260 and 250). A total of 80 metres of crosscuts, 90 metres of raises, and 285 metres of drifts were excavated. Two underground infill drilling programmes were completed by SOQUEM. In 1980, ten (10) holes were drilled for a total of 356.9 metres, and in winter 1981, twenty-one (21) holes were added, for another 728.7 metres.

Proven and probable ore reserves\* published by SOQUEM in May 1981 for the North Gold Zone were 219,300 tonnes grading 7.75 g/t Au, 12.8 g/t Ag, 0.61% Cu, 0.24% Pb and 0.62% Zn. By mutual agreement between Muscocho and SOQUEM, SOQUEM relinquished the management of the joint venture on August 12, 1981 in favour of Muscocho (McPhee, 1982; GM42953). During the rest of the year, Muscocho drilled 146 surface diamond-drill holes totalling 5,253 metres and carried out 246 metres of drifting on the three existing levels (McPhee, 1982; GM42953). The SOQUEM and Muscocho underground programmes resulted in stock piles of 13,353 metric tons of ore grading 3.98 g/t Au.

*\*These "reserve" estimates are historical in nature. A qualified person has not done sufficient work to classify the historical estimate as current mineral resources or mineral reserves. ESGold is not treating the historical estimate as current mineral resources or mineral reserves.*

In 1982, Muscocho carried out 9 metres of drifting and mined 3,902 metric tons of ore at a grade of more than 4.0 g/t Au, and 4,833 metric tons of ore at a lower grade (1.5 g/t to 4.0 g/t Au). The Anacon Shaft was repaired, a fire assay laboratory was built, and the foundation for the future mill was prepared. In April 1982, Control Data Canada Ltd. established ore reserves\* for the North Gold Zone as 308,000 metric tons at 6.9 g/t Au with a cut-off grade of 4 g/t Au (McPhee, 1982; GM42953).

*\*These "reserve" estimates are historical in nature. A qualified person has not done sufficient work to classify the historical estimate as current mineral resources or mineral reserves. ESGold is not treating the historical estimate as current mineral resources or mineral reserves.*

In 1983, Muscocho purchased a 150 tonne per day (tpd) cyanidation mill for \$1.78 million from Canada Mining Corporation, who had designed, built and installed it on the Camlaren gold property 84 kilometres north of Yellowknife, NWT

(Huggard, 1984). Under the supervision of Canada Mining Corporation, the mill was dismantled in January 1983, moved to Muscocho's property and was operating within five months. Muscocho commenced production, and on June 16, 1983 the first gold bar was poured (McPhee, 1982; GM42953). The gold bar weighted 606 ounces and contained 45.2% of gold and 47.7% of silver. Between June and December 1983, a total of 57,024 metric tons were processed from the 1981-1983 developmental ore and from the test material from the bulk sampling programme on the North Gold Zone. Surface drilling was also carried out during the year. A total of 70 holes were drilled in order to define the shape of the North Gold Zone and test its extension to the north and south and at depth (Vallières, 1984; DV84-06).

In 1984, diamond-drilling performed by Muscocho on the South Gold Zone, located about 2 kilometres from the North Gold Zone, defined proven reserves\* of 208,835 metric tons averaging 4.0 g/t Au and 68.46 g/t Ag to a depth of 90 metres (Vallières, 1985; DV85-02).

*\*These "resources" are historical in nature. A qualified person has not done sufficient work to classify the historical estimate as current mineral resources or mineral reserves. ESGold is not treating the historical estimate as current mineral resources or mineral reserves.*

Other exploration work was done on the newly discovered Simard Zone. This new zone was found near the North Gold Zone. In November 1984, a new ramp was begun in order to reach the South Gold Zone. Between January 1 and December 31, 1984, a total of 123,294 metric tons were processed from the North Gold Zone.

In 1985, Muscocho bought the remaining part (16%) of SOQUEM's interest in the Muscocho property. SOQUEM received 300,000 shares of Muscocho at a share price of \$3.80 for a total of \$1.14M. A total of 26,900 metres of diamond-drilling were carried out on the North Gold Zone, the South Gold Zone and the Marcor Zone. In 1985, the access ramps of the Simard Zone (later renamed the S Zone) and the South Gold Zone were finished. The diamond-drilling programme increased the proven reserve on the South Gold Zone to 279,200 metric tons averaging 4.69 g/t Au at a vertical depth of less than 90 metres (Lachance, 1986; DV86-04). Proven reserves\* on the Marcor Zone were established at 125,000 metric tons averaging 4.0 g/t Au. A total of 135,029 tonnes were processed in 1985 from the North Gold Zone.

*\*These "resources" are historical in nature. A qualified person has not done sufficient work to classify the historical estimate as current mineral resources or mineral reserves. ESGold is not treating the historical estimate as current mineral resources or mineral reserves.*

In 1986, 170 holes were drilled for a total of 23,619 metres on the South Gold Zone, the Marcor Zone and the A Zone (Lachance, 1987; DV87-01). The A Zone was a newly discovered zone. At the end of the year, the proven reserve was established at 320,600 metric tons.

Proven reserves\* on the South Gold Zone, the Marcor Zone and the Simard Zone were evaluated at 216,000, 54,600 and 50,000 metric tons, respectively. Muscocho put the South Gold Zone into production on July 15, 1986 (Lachance, 1987; DV87-01). During the year, the ramp was extended toward the Marcor Zone, located northeast of the South Gold Zone. Between January 1 and December 31, 1986, a total of 123,500 metric tons were processed from the North Gold Zone (103,103 t) and the South Gold Zone (20,397 t). The North Gold Zone was mined out on October 1986.

*\*These “resources” are historical in nature. A qualified person has not done sufficient work to classify the historical estimate as current mineral resources or mineral reserves. ESGold is not treating the historical estimate as current mineral resources or mineral reserves.*

In 1987, 75 holes were drilled totalling 13,296 metres and distributed as follows: South Marcor Zone (12 holes = 2,071 m); S Zone (formerly the Simard Zone; 6 holes = 563 m); A Zone (28 holes = 6,021 m); C Zone (7 holes = 1,073 m); Hanging wall Zone (17 holes, 3,032 m); and Carbonate Zone (5 holes = 546 m) (Lachance, 1988; DV88-01). At the end of the year, the proven reserves\* were established at 208,300 metric tons. Proven reserves on the South Gold Zone, the South Marcor Zone and the S Zone were evaluated at 125,300, 28,200 and 54,800 metric tons, respectively. During the year, the ramp was extended (240 m) on the South Marcor Zone accompanied by drifting (220 m) and raising (615 m). On the S Zone, the ramp was extended (240 m) accompanied by drifting (100 m), crosscutting (100 m), and raising (110 m). Between January 1 and December 31, 1987, a total of 133,306 metric tons were processed from the South Gold Zone (90,709 t), the South Marcor Zone (26,400 t), the S Zone (3,858 t) and other development ores.

*\*These “resources” are historical in nature. A qualified person has not done sufficient work to classify the historical estimate as current mineral resources or mineral reserves. ESGold is not treating the historical estimate as current mineral resources or mineral reserves.*

In 1988, 121 holes totalling 9,679 metres were drilled on the Muscocho property (Lachance, 1989; DV89-01). At the end of the year, the geological reserve was established at 356,000 metric tons averaging 4.07 g/t Au and 128.0 g/t Ag. The E Zone was discovered by diamond-drilling. The geological reserves\* of this new zone were estimated at 24,167 metric tons averaging 4.72 g/t Au and 24.9 g/t Ag. The northern extension of the North Gold Zone contained 26,100 metric tons averaging 5.38 g/t Au and 10.4 g/t Ag. During the year, the ramp, collared on the North Gold Zone, was extended toward the A Zone. Between January 1 and December 31, 1988, a total of 119,173 metric tons were processed from the South Gold Zone (35,734 t), Marcor Zone (36,313 t), S Zone (45,501 t), and North Gold Zone (1,625 t).

*\*These “resources” are historical in nature. A qualified person has not done sufficient work to classify the historical estimate as current mineral resources or mineral reserves. ESGold is not treating the historical estimate as current mineral resources or mineral reserves.*

In 1989, 31 holes were drilled for a total of 4,134 metres on the C Zone (Lachance, 1990; DV90-01). The diamond-drilling programme increased the geological reserves\* of the C Zone to 454,446 metric tons averaging 4.27% Zn, 1.48% Pb, 0.22 g/t Au and 23.01 g/t Ag. At the end of the year, the geological reserves\* of the gold zones was established at 77,301 metric tons. During the year, the ramp providing access to the A Zone was extended, accompanied by drifting and raising in the A Zone. Between January 1 and December 31, 1989, a total of 120,051 metric tons were processed from the South Gold Zone (47,499 t), the Marcor Zone (980 t), the S Zone (12,664 t), the North Gold Zone (13,558 t), the A Zone (42,184 t), and other development ores. In December 1989, Muscocho announced that the mine would close in early 1990.

*\*These "resources" are historical in nature. A qualified person has not done sufficient work to classify the historical estimate as current mineral resources or mineral reserves. ESGold is not treating the historical estimate as current mineral resources or mineral reserves.*

Muscocho closed the gold mine in February 1990. Between January and February, a total of 2,255 metric tons were processed, mainly from the A Zone. From 1983 to 1990, Muscocho produced a total of 92,553 ounces of gold and 323,376 ounces of silver, and 813,632 metric tons of ore (Marcoux, 1992; DV92-01).

In 1996, Muscocho, McNellen Resources Inc. and Flanagan McAdam Resources Inc. combined to form Golden Goose Resources Inc. ("Golden Goose"), which emerged with a 100% interest in their Montauban Property. At this time, Golden Goose's property corresponded to mining concession CM410 and mining lease BM748, as well as two (2) adjacent claims (range 1, lot 37 and range 1 lot 38, Montauban Township).

Golden Goose did not perform work on the property and it was subsequently sold to Excel Gold Mining Inc. ("Excel Gold") in 2009.

#### **6.2.4 South-Malartic Exploration Property**

In 1999, South-Malartic Exploration Inc. signed an agreement to acquire a property belonging to geologists Jean Bernard, Marc Bannas and Christian Desrosiers. The property covered the southern and western extensions of the former gold mine of Muscocho (Gaudreau and Perreault, 2000; DV-2000-02).

The 1999 exploration work on their property consisted of a soil survey (B horizon), a ground geophysical survey (Mag and VLF), geological mapping, trenching and diamond-drilling to verify the eastern limit of the South Zone and to confirm the extension and grade of the zone near the surface (Pinet, 2000, GM58883; Derosier, 2000, GM58886; Bernard, 2001a; GM58884).



Eighteen (18) holes were drilled for a total of 820.6 metres. Between March and June 2000, trenching and sampling were carried out on the North Zone (formerly the E Zone of Muscocho; Bernard, 2001b; GM58701).

### 6.2.5 Mirabel Resources Property

On December 20, 2000, Mirabel Resources Inc. acquired the Montauban property from South-Malartic Exploration by issuing 1,800,000 common shares for an amount of \$540,000. As a result of this transaction, South-Malartic Exploration transferred to its shareholders 1,200,000 common shares of Mirabel Resources as a dividend in kind.

In 2001, Mirabel Resources carried out a diamond-drilling programme (North Zone) and trenching (South Zone) (Perreault, 2002; DV-2002-02). Seventeen (17) short holes were drilled on the North Zone (formerly the E Zone of Muscocho) totalling 529 metres.

On July 16, 2003 Mirabel Resources reported by press release the results of the resource evaluation completed by Marchand (2003). The study was conducted between May and June 2003 and aimed at evaluating the in-situ resource left in the surface pillars from the previous mining operations carried out at the Montauban mine.

The study reported an indicated resource\* for the North Zone 1 area (formerly the E zone) of 274,500 metric tons at a grade of 2.8 g/t Au and 15 g/t Ag, for a total of 24,917 ounces of gold and 133,912 ounces of silver. On the South Zone, a measured resource\* of 123,533 metric tons at 3.5 g/t Au and 56 g/t Ag was calculated, for a total of 13,915 ounces of gold and 222,974 ounces of silver.

*\*These "resources" are historical in nature. A qualified person has not done sufficient work to classify the historical estimate as current mineral resources or mineral reserves. ESGold is not treating the historical estimate as current mineral resources or mineral reserves.*

In 2007, Rocmec Mining Inc. (formerly Mirabel Resources) carried out a preliminary economic study on their property\* (Gagnon, 2007; GM63161); however, Rocmec Mining Inc. did not complete the necessary work to have this study comply with current NI 43-101 standards. Their study used the resource evaluation completed by Marchand (2003). The purpose of the study was only to evaluate the economic potential of the property. Mr. Gagnon (2007; GM63161) did not visit the property and no validation of the historical data was performed in the study. Mr. Gagnon concluded that the project could have economic viability, but recommended more technical work be carried out (Gagnon, 2007; GM63161); however, the work necessary to have the historical estimate verified by a Qualified Person was not completed.

### 6.2.6 Excel Gold Mining Property

In July 2009, Excel Gold announced that it had completed the acquisition of mining concession CM410, mining lease BM748 and two adjacent claims, from

Golden Goose. During that same year, Excel Gold provided consultants MRB & Associates with all documentation and copies of Muscocho's underground operations and detailed plans of the mine. MRB & Associates compiled all the mining information data, which were then used to generate sections, plan views and transverse projections of the entire property and to prepare an exploration programme. A total of fifty-two (52) short holes were drilled in the crown pillar of the Montauban Mine for a total of 1,505 metres (Bérubé, 2010).

In 2010, Excel Gold drilled twenty-two (22) holes for a total of 4,249 metres to test the A, C, South Gold and Montauban zones. No mineral resource estimate was performed by Excel Gold.

### 6.2.7 Evaluation of Tailings Sites (Pre-2010)

From 1958 to 1965, Ghislau Mining sampled the tailings sites that were created from the 1914-1944 mining operations, intending to recycle the tailings for their zinc, silver and gold content. The death of Ghislau Mining's president in 1961 prevented them from going ahead with the project. A bulk sample taken by Ghislau Mining in 1960 consisted of 24,000 pounds of tailings that were processed at a pilot plant in Québec city (Depatie, 1982; GM38388):

In 1974, Société Minière Marcor conducted another summary assessment on the potential for recovering precious- and base-metals from the Montauban-les-Mines mine tailings. Their report, based on trench sampling across several sections of different tailings, showed that processing of the tailings could be profitable (Gélinas, 1974; GM30513).

East and immediately adjacent to the Muscocho property, Boville Resources Ltd. held ground, which covered the mine tailings that had been generated by the Tétreault Mine (1914-1944). In August and September 1981, Boville Resources conducted a systematic percussion-drilling programme to evaluate the quantity of these mine tailings. The total estimated tonnage\* of the sampled tailings was about 400,000 humid short tons at 0.9% Zn, 0.18% Pb, 0.041 oz/t Au, and 2.42 oz/t Ag (Depatie, 1982; GM38388).

*\*These "resources" are historical in nature. A qualified person has not done sufficient work to classify the historical estimate as current mineral resources or mineral reserves. ESGold is not treating the historical estimate as current mineral resources or mineral reserves.*

In 1988, Aurtec Mining Development ("Aurtec") carried out leaching tests on the Tétreault Mine tailings. A total of 6,000 metric tons were tested and Aurtec considered the tests satisfactory (Lachance, 1990; DV90-01). In 1989, a leaching complex comprising several piles of the old tailings was set up, and tests were carried out from July 1989 until freeze-up in November. During the year, a total of 25,100 metric tons were processed. A total of 794 ounces of gold and 5,451 ounces of silver were produced. The recovery of gold and silver were established at 66% and 21%, respectively. At the end of the year, Aurtec reported tailings reserves\* of 200,000 metric tons at an average grade of 1.43 g/t Au and 60 g/t

Ag. In August 1990, production was interrupted due to metallurgical problems and low gold price.

*\*These “reserves” are historical in nature. A qualified person has not done sufficient work to classify the historical estimate as current mineral resources or mineral reserves. ESGold is not treating the historical estimate as current mineral resources or mineral reserves.*

In 2003, Mirabel Resources performed limited gravimetric tests on four (4) samples equally split between core samples from former diamond-drill holes and tailings samples of the “old tailings” taken close to the access road to Montauban-les-Mines (Bernard, 2003; GM60048). The results showed that the gravimetric method yielded good recoveries for the tailings samples, but nothing significant for the rock samples. Their report also stated that, according to provincial government authorities (MERN), more than 2 million tonnes of tailings remained in numerous sites surrounding the village of Montauban.

### **6.3 Other Exploration Areas on the Montauban Property**

Exploration work in other areas of the Montauban property started with the discovery of the Montauban deposit in 1910. In several of these areas, exploration activities were conducted in multiple phases and by different companies. This explains that some areas are known under several names. This section cites the nomenclature of Morin (1987; MM-86-02) who visited the majority of the showings on the Montauban Property.

#### **6.3.1 Grawmont Showing Area**

Grawmont Mines Ltd. carried out an electrical resistivity survey in September 1950 in the area of Mont Tétréault to the west and northwest of the Montauban Mine (McCannell, 1950a; 1950b). From October 1950 to April 1951, the company drilled twelve (12) diamond-drill holes, with an aggregate length of 7,998 feet (2,437.8 m), to test the anomalies revealed by the resistivity survey (MacKeracher, 1951a, 1951b; GM01081-A, GM01081-B). The Grawmont showing was discovered by the first hole of the drilling programme. Hole #1 intersected 2.7 metres of heavily sheared and altered material containing 20% to 30% sulphides, along the lower contact between hornblende gneiss and light brown mica paragneiss. Sulphide mineralization consisting of pyrite, pyrrhotite and chalcopyrite was encountered in the hole as it passed through the anomaly. Numerous narrow bands and stringers of similar mineralization were present for 18 metres in the hornblende gneiss above the contact. Assays for the first section yielded only low values in copper and traces of lead, zinc, gold, and silver.

Alteration of the paragneiss appeared similar to that found in the Zn-Pb ore bodies of the Montauban Mine (MacKeracher, 1951a, 1951b; GM01081-A, GM01081-B). A mineralized zone in hole #3 was wider but more lightly mineralized than hole #1. Alteration of the paragneiss was more extensive and tremolite was observed (MacKeracher, 1951a, 1951b; GM01081-A, GM01081-B). Other sulphide



mineralization and typical alteration assemblages were reported in other holes from the diamond-drilling programme.

In 1951, O'Brien and Fowler Ltd. carried out a diamond-drilling programme to the southwest of the Grawmont showing (Smith, 1952; GM01813). Two holes (51-1 and 51-2) were drilled for a total of 2,378 feet (724.8 m). The results of eight (8) assays indicated traces of Zn, Pb, Ag, and Au in the hole 51-2.

In 1962, R. Reeves drilled six (6) short holes near of the same contact as the Grawmont showing (i.e., contact between amphibolite and paragneiss). These holes were located 2.4 kilometres north of the Grawmont showing. Sillimanite was reported in paragneiss in all holes. No assays were reported (Arcand, 1962; GM12003).

In 1980, SOQUEM carried out a regional survey southwest of the Grawmont showing (Halde, 1980; GM36593). Some VLF-Mag test lines were also performed (Glass, 1980; GM36265). No significant results were reported.

From October 1983 to November 1985, Cous Creek Copper Mines Ltd. and Shiningtree Gold Resources Inc. performed an exploration programme on their property located southwest of the Grawmont showing and the South Gold Zone (Robert, 1984; Marchand, 1986a; GM42778). In February 1984, a systematic high-resolution Mag-VLF heli-borne survey was carried out over the region surrounding the Montauban deposit (Sander and Archer, 1984a; GM41778; GM42386). The other work consisted of systematic soil (humus) geochemical sampling, ground VLF and Mag-gradiometer surveys, geological surveys, and two (2) diamond-drill holes totalling 305 metres. This programme failed to find economic mineralization.

### 6.3.2 St-Thomas Showing Area

The St-Thomas showing was discovered in 1930, presumably during molybdenite exploration (Osborne, 1943; GM00428). The rock in this area comprises deformed garnetiferous biotite gneiss with shallow-dipping schistosity. Lenses of quartz and pegmatite have intruded locally along the foliation. The assayed samples were collected from the pit walls, where lenticular masses of glassy quartz and pegmatite were found. Stringers penetrate the biotite gneiss, and 1.1 m to 1.4 m of quartz and pegmatite were present over a distance of 1.5 metres. Quartz, potassic feldspar and muscovite were the principal gangue minerals. Molybdenite as coarse flakes was observed in the wall-rock and the vein. Fine-grained pyrite was present in veinlets but not abundant overall. The best result obtained by Osborne (1943; GM00428) was 5.76 g/t Au over 0.6 m in a section containing a quartz vein (pyrite), pegmatite and gneiss. Molybdenite content was estimated at 0.07% MoS<sub>2</sub>.

In 1945, Bourret (1949; GM10528) visited the showing and sampled the mineralized zones. A channel sample returned a value of 6.62 g/t Au and 3.70 g/t Ag over 0.9 m. A grab sample contained large molybdenite flakes and visible gold from the contact between a quartz vein and pegmatite yielded 32.64 g/t Au and 7.82 g/t Ag.

In 1951, four (4) trenches were dug by Anacon Extension Ltd. at intervals of 3 to 10 metres along the zone, and some blasting was also carried out (Mattison and Dayman, 1951; GM01780). All the trenches exposed one or more quartz lenses. Channel-chip samples were collected from the exposures. Gold assays for these samples yielded trace amounts to 0.3 g/t Au. A grab sample from the discovery pit yielded 61.0 g/t Au and 13.7 g/t Ag.

Between April 14, 1951 and June 4, 1951, Grondines Mines Ltd. drilled four (4) holes totalling 3,843.2 feet (1,171.4 m), about 3.5 kilometres northwest of the St-Thomas showing (Isaacs, 1951; GM01205). The best results were 2.74 g/t Au and 5.49 g/t Ag over 1.4 m in hole G-1 within a garnetiferous biotite gneiss.

In 1959, Ghislau Mining Corporation Ltd. drilled two holes totalling 1,160.0 feet (353.6 m) near previous holes drilled by Grondines Mines Ltd. No significant results were reported (Arcand, 1959; GM09351).

In February 1984, Shiningtree Gold Resources Inc. completed a high-resolution Mag-VLF heli-borne survey over the area of the Montauban deposit (Sander and Archer, 1984a; GM41778; GM42386). Following this survey, Cous Creek Copper Mines Ltd. carried out exploration work to the northwest of the St-Thomas showing (Marchand, 1986b; GM43938). This work consisted of soil (humus) geochemical sampling, ground VLF and Mag-gradiometer surveys, and a geological survey. The programme revealed interesting geophysical targets. In winter 1987, ground VLF and Mag-gradiometer survey coverage was extended toward and over the St-Thomas showing (Marchand, 1987; GM45360). These geophysical surveys outlined potential exploration targets.

Following the results obtained from a till survey (fine fraction), carried out in 1988 by the Ministère de l'Énergie et des Ressources du Québec (Pelletier and Beaumier, 1990; MB-90-20), Explorations Cache Inc. ("Cache") acquired a mining property that was essentially the same as the one held by Cous Creek Copper Mines Ltd. This property covered many prospective geochemical till anomalies.

During summer 1991, ground VLF and Mag-gradiometer surveys were performed over entire the property (Tshimbalanga and Gaucher, 1991; GM51010), and helped to refine the geological interpretation.

During the autumn of 1991, Cache and SOQUEM carried out geological mapping and a till survey (Gaumont, 1992; GM51263). The till survey (heavy fraction) was carried out by means of reverse-circulation drilling (9 holes). The assayed heavy fraction from 20 samples yielded averages of 1,365 ppm Zn (range 252-5,220 ppm), 198 ppm Pb (range from 19-957 ppm), 268 ppm Cu (range from 28-1012 ppm), 2,100 ppm As (range from 2.5-31,700 ppm), and 62 ppb Au (range from <15-520 ppb). Sphalerite, chalcopyrite, pyrrhotite, pyrite, and indicator minerals anthophyllite, garnet and diopside, were observed in the heavy-metal concentrate from the till samples. Cache identified a geochemically anomalous sector, in particular for zinc and gold. In the autumn of 1992, a reverse-circulation drilling programme tested the till anomaly. Five (5) holes were drilled, for a total of 915 metres, to investigate the bedrock source of the till anomaly (Lachance, 1992; GM51701). The drilling programme did not

successfully explain the source of the till anomaly. According to Lachance (1992; GM51701), the bedrock source likely lies further “up-ice” from the sector investigated by the drilling.

### 6.3.3 Rang St-Achille Showing Area

In 1952, O'Brien and Fowler drilled a hole in the southern part of Lac Sainte-Anne. Traces of gold, silver and zinc were reported, associated with calc-alkaline rocks (GM01367). This showing, formerly known as Rang St-Achille, is no longer listed in the SIGEOM database.

## 6.4 Anacon Lead 1 Tailings Site

In 2010, DNA completed a drilling programme consisting of 49 percussion-drill holes totalling 302.3 metres, in order to sample and assess the resource potential of the Anacon Lead 1 tailings site. The drilling programme formed the basis of the January 2011 resource estimate (Gagnon, 2011), and drilling samples supplied the material for several metallurgical tests (St-Jean, 2010, 2011, 2014; GM65979, GM68907) (see Item 13.0).

According to the January 2011 resource estimate, the tailings site contained total measured resources\* of 428,252 tonnes grading 0.31 g/t Au, 32 g/t Ag, 0.037% Cu, 0.618% Zn and 0.169% Pb. The mica content was estimated to be at least 10% of total volume, thus representing additional measured resources of 42,825 tonnes of mica. Note that any mica in the < 100 mesh fraction of any processed tailings material is not recoverable, so realistically only 5% i.e., the coarse fraction, is recoverable. Metal contents were estimated to be: 4,200 ounces of gold; 440,645 ounces of silver; 352,236 pounds of copper; 5,820,985 pounds of zinc; 1,590,914 pounds of lead; and 42,825 tonnes of mica.

*\*These “resources” are historical in nature. A qualified person has not done sufficient work to classify the historical estimate as current mineral resources or mineral reserves. ESGold is not treating the historical estimate as current mineral resources or mineral reserves.*

In 2012, the access road to the site was upgraded, a 16,000 ft<sup>2</sup> (1,500 m<sup>2</sup>) building was erected, and a 1.5-kilometre 600V power line was built from the village of Montauban-les-Mines village to the site.

In October of 2014, an NI 43-101 Technical Report (Turcotte et al., 2014) reported that the Anacon Lead 1 tailings site contained an Inferred Resource\* of 462,000 tonnes grading 0.31 g/t Au and 32.68 g/t Ag (for 4,570 total oz. gold and 485,630 total oz. silver).

*\*These “resources” are historical in nature. A qualified person has not done sufficient work to classify the historical estimate as current mineral resources or mineral reserves. ESGold is not treating the historical estimate as current mineral resources or mineral reserves.*

## 6.5 Recent Work

**DNA:** In 2014, a compilation of diamond-drilling data from the Montauban deposit area defined the Montauban Horizon and identified four exploration targets along this favourable horizon.

From December 6, 2014 to January 13, 2015, DNA completed a 755.7 linear kilometre helicopter-borne electromagnetic (VTEM) geophysical survey (Fiset et al., 2015) that covered almost the entire Northern Block of the current Property. Flight lines were spaced at 100 metres.

In 2015, following the DNA airborne geophysical survey, Boivin (2015) carried out further detailed the processing of the magnetic and electromagnetic data consisting of an unconstrained inversion to generate a 3D model of magnetic susceptibility. The profiles of the electromagnetic data were analyzed along the flight lines in order to locate specific electromagnetic anomalies. Anomalies caused by cultural phenomena (road, power line, etc.) were first identified and removed. In a second step, each anomaly interpreted as being caused by a source in the rock mass was described and characterized by the number of anomalous channels and the time constant of the anomaly (**Figure 6.3**).

### 6.5.1 1844 Resources Inc.\*:

*\*Renamed from "Gespeg Resources Ltd." on December 29th 2020, and known prior to June 21st, 2019 as "Gespeg Copper Resources Inc."*

In June of 2018, 1844 Resources Inc. ("1844 Inc.") began to explore the DNA property as per the terms of its option agreement with DNA to acquire a 50% undivided interest in the property. Their exploration programme on the Property comprised a trenching/pitting programme on the tailings sites in June of 2018.

A total of thirty-one pits, typically 1.0-1.5 m deep, were mechanically excavated using a back-hoe. Once excavated, a section of plastic tubing with an inside diameter of 4.9 cm was driven horizontally into the exposed section of the tailings material, approximately 0.5 m from surface to obtain a sample, which was assayed for Au and Ag content. Visually, the collected samples had consistent physical characteristics (e.g., particle size, moisture-content, consistency) and their quality was deemed appropriate for the purpose of specific gravity testing. The pit locations are shown in **Figure 6.4** and the collected samples are summarized in **Table 6-2**. The length and mass of the retrieved sample was measured to calculate an average specific gravity (SG) of the tailings sites material (**Table 6-3**).

A plot of SG (g/cm<sup>3</sup>) vs gold grade (g/t) (**Figure 6.5**) shows that the collected samples plot within a very narrow range (i.e., between 1.5 and 2.0), indicating that the collected samples are representative of the tailings overall, and that the tailings material is homogeneous.

A percussion-drilling campaign was carried out on the Anacon Lead 2, Tétrault 1 and Tétrault 2 tailings sites in June of 2018, concurrently with the pitting/excavation programme. A Geoprobe 7822-DT percussion-type drill-rig

was utilized to complete 106 vertical holes, totalling 261 metres (**Table 6-4** and **Figure 6.6**).

The drill-rig recuperates cored material within a 1.5-metre-long plastic tube, with an inner diameter of 4.9 centimetres. The topographic surface of the tailings at the tailings sites, as well as the hole collar location, were surveyed using a Trimble Geo 7X Handheld GPS.

Data obtained from 1844 Inc.'s 2018 percussion-drilling programme show that the Anacon Lead 2 tailings comprise an upper layer of medium-grained brown sand (GMB) that is up to 3.0 metres thick, and a lower layer of medium-grained grey sand (GMG), up to 3.9 metres thick. These tailings were deposited on a base composed of humus and plants. The Anacon Lead 2 tailings have a maximum measured thickness of 6.9 metres.

The Tétrault 1 tailings comprise a layer of medium-grained brown sand (GMB) up to 1.2 metres thick. These tailings were deposited on a base composed of natural sandstone.



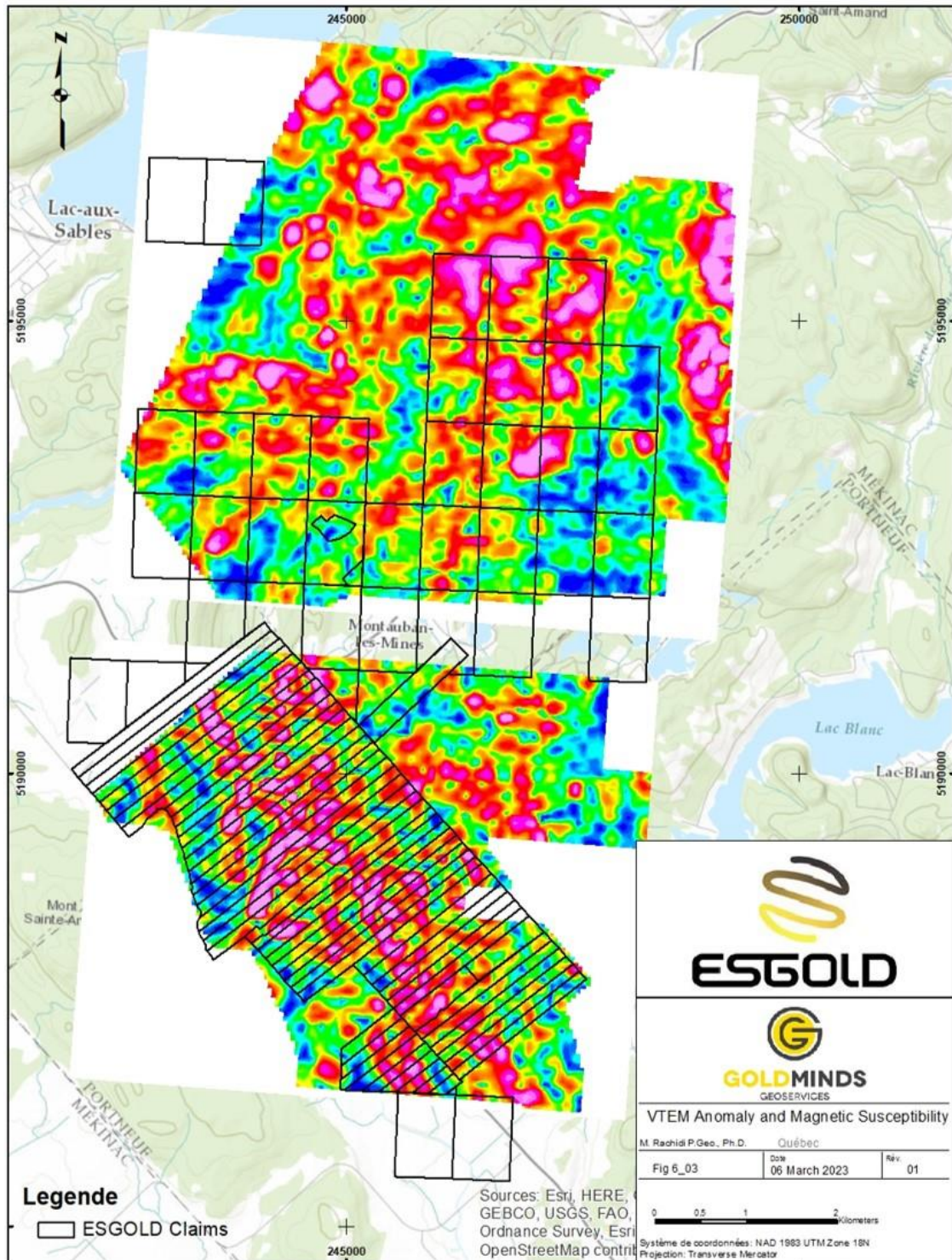


Figure 6.3: VTEM anomaly and magnetic susceptibility map (Boivin, 2015)





Figure 6.4: Locations of 2018 trench/pit excavations by 1844 Inc



**Table 6-2: Summary of Trench/Pit Samples Collected by 1844 Inc. in 2018**

Pit/Trench	Sample #	Layer	UTM X (NAD83_Z18)	UTM Y (NAD83_Z18)	Au (ppm)	Ag (ppm)
TRENCH 3 T1	K434531	GMB	702484.71	5189464.55	0.62	136.00
MB-18-01	K434506	GMB	702747.24	5188895.31	0.80	41.70
MB-18-61	K434510	GMB	702113.07	5189320.91	0.19	22.00
MB-18-01	K434507	GMG	702747.24	5188895.31	0.64	44.60
TRENCH 3 T1	K434532	GMB	702484.71	5189469.55	0.40	133.00
MB-18-27	K434520	GMG	702429.22	5188911.28	0.57	34.80
TRENCH 1 T1	K434526	GMB	702440.65	5189421.79	0.76	109.00
MB-18-61	K434511	GMG	702113.07	5189320.91	0.11	21.10
MB-18-33	K434515	GMB	702417.26	5188964.72	0.92	66.00
MB-18-24	K434523	GMB	702431.97	5188890.93	0.69	69.60
MB-18-24	K434522	GMB	702431.97	5188890.93	1.20	80.20
MB-18-09	K434533	GMB	702600.49	5188929.82	0.93	59.30
MB-18-09	K434534	GMB	702600.49	5188934.82	1.78	88.70
MB-18-62	K434509	GMG	702098.18	5189302.26	0.18	23.90
TRENCH 1 T1	K434528	GMG	702440.65	5189421.79	0.24	93.30
MB-18-09	K434535	GMG	702600.49	5188929.82	0.83	48.60
MB-18-27	K434521	GMG	702429.22	5188915.28	0.82	46.30
MB-18-62	K434508	GMB	702098.18	5189302.26	0.18	20.90
MB-18-33	K434514	GMB	702417.26	5188960.72	0.94	55.60
MB-18-33	K434517	GMG	702417.26	5188964.72	0.87	39.00
MB-18-27	K434518	GMB	702429.22	5188911.28	0.80	49.60
MB-18-09	K434536	GMG	702600.49	5188934.82	0.58	50.40
TRENCH 1 T1	K434527	GMB	702440.65	5189425.79	0.98	160.00
MB-18-68	K434512	GMB	702107.88	5189348.75	0.17	36.50
MB-18-40	K434525	GMB	702381.30	5188931.15	0.08	29.50
TRENCH 2 T1	K434529	GMB	702480.10	5189429.24	0.60	93.70
MB-18-33	K434516	GMG	702417.26	5188960.72	1.24	53.90
MB-18-68	K434513	GMG	702107.88	5189348.75	0.11	19.60
MB-18-40	K434524	GMB	702381.30	5188931.15	0.11	35.10
MB-18-27	K434519	GMB	702429.22	5188915.28	0.49	36.40
TRENCH 2 T1	K434530	GMB	702480.10	5189434.24	0.83	193.00
					Avg 0.63	Avg 64.24

**Table 6-3: Calculated Specific Gravity from 1844 Inc. Trench/Pit Samples Collected in 2018**

Sample #	Length (cm)	Mass (kg)	Volume (cm <sup>3</sup> )	S.G.
K434531	31	0.74	584.58	1.27
K434506	29	0.80	546.86	1.46
K434510	25	0.70	471.44	1.48
K434507	35	1.00	660.01	1.52
K434532	29	0.83	546.86	1.52
K434520	29	0.87	546.86	1.59
K434526	40	1.23	754.30	1.63
K434511	39	1.20	735.44	1.63
K434515	38	1.17	716.58	1.63
K434523	40	1.24	754.30	1.64
K434522	37	1.16	697.72	1.66
K434533	39	1.23	735.44	1.67
K434534	43	1.36	810.87	1.68
K434509	25	0.80	471.44	1.70
K434528	18	0.58	339.43	1.71
K434535	34	1.10	641.15	1.72
K434521	28	0.91	528.01	1.72
K434508	37	1.23	697.72	1.76
K434514	43	1.43	810.87	1.76
K434517	35	1.18	660.01	1.79
K434518	32	1.08	603.44	1.79
K434536	20	0.68	377.15	1.80
K434527	41	1.43	773.15	1.85
K434512	16	0.56	301.72	1.86
K434525	41	1.45	773.15	1.88
K434529	39	1.38	735.44	1.88
K434516	27	0.96	509.15	1.89
K434513	32	1.15	603.44	1.91
K434524	38	1.39	716.58	1.94
K434519	30	1.10	565.72	1.94
K434530	28	1.33	528.01	2.52
	<b>Avg 33</b>	<b>Avg 1.07</b>		<b>Avg 1.74</b>

**Table 6-4: Summary of 2018 Percussion-Drill Holes by 1844 Inc. Canada Inc.**

Tailings site	# of Holes	Length (m)
Anacon Lead 2	21	52
Tétrault 1	31	63
Tétrault 2	54	146
<b>Totals:</b>	<b>106</b>	<b>261</b>

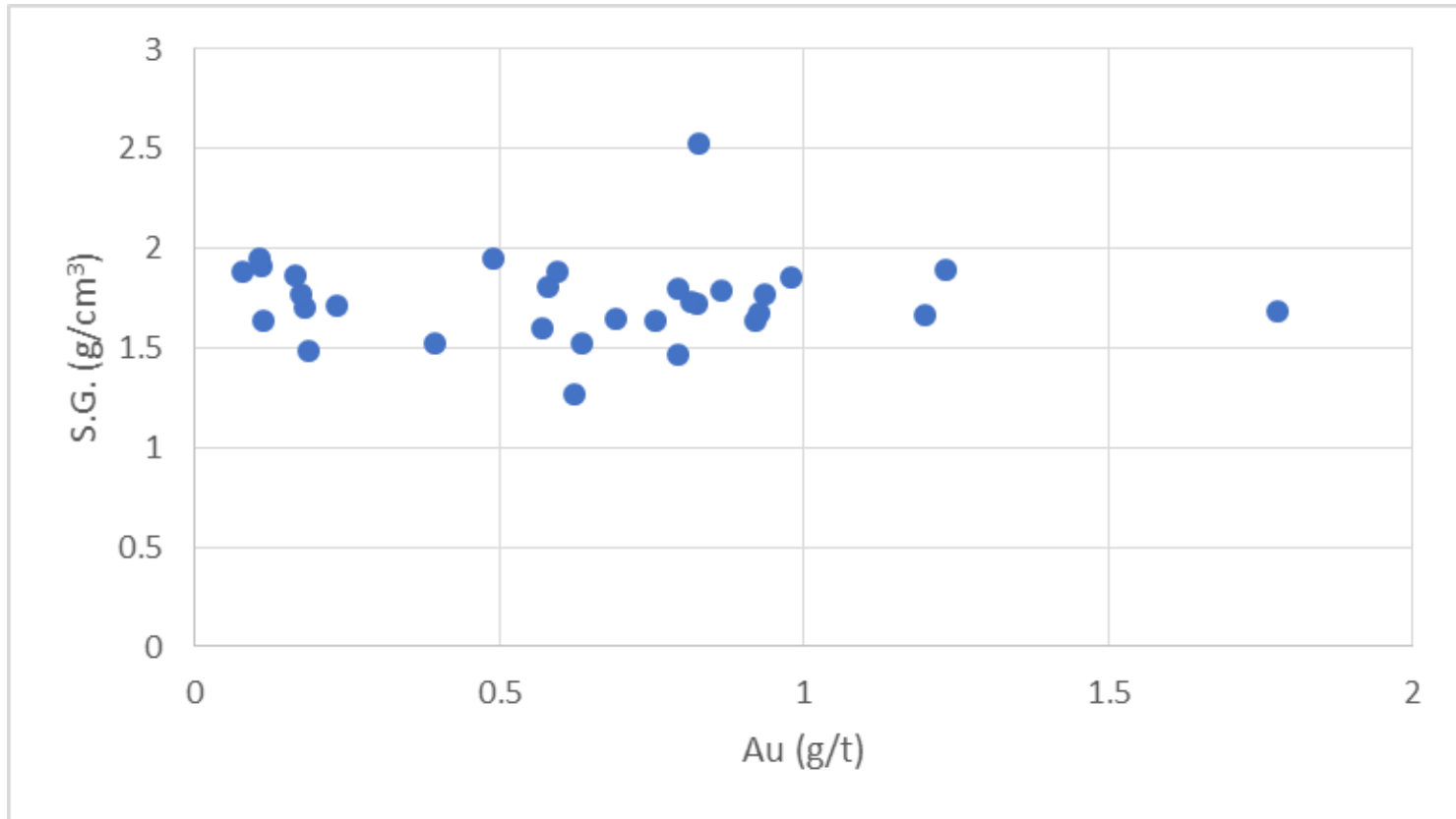


Figure 6.5: Scatter plot of tailings samples collected from pit excavations

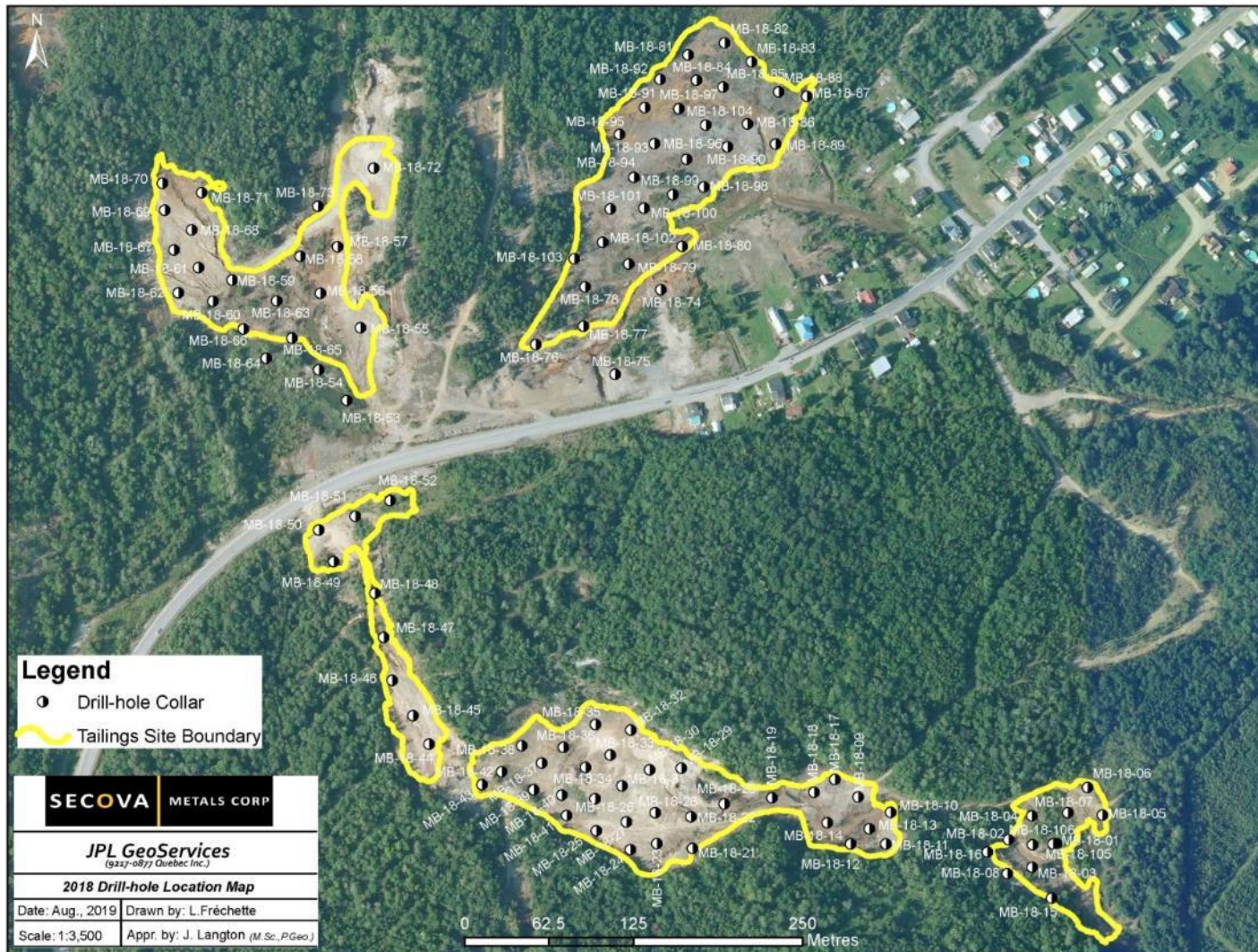


Figure 6.6: Location of 1844 Inc.'s 2018 percussion-drill holes



The Tétrault 2 tailings site is subdivided into the North, East, and Central sectors:

- the North Sector (holes MB-18-44 to MB-18-52) is composed of a medium-grained brown sand layer that is up to 5.4 metres thick layer. All of the 2018 percussion-drill holes ended in this lithology;
- the East Sector tailings were deposited on a grey clay base and comprises an upper layer of medium-grained brown sand up to 3.9 metres thick, underlain by a layer of medium-grained grey sand that is up to 1.5 metres thick. The maximum measured thickness of the East Sector tailings (holes MB-18-1 to MB-18-8, MB-18-15, MB-18-16, and MB-18-106) was 3.9 metres;
- the Central Sector is subdivided into two parts
  - the eastern part (holes MB-18-9 to MB-18-14 and MB-18-17 to MB-18-35) of the Central Sector is composed of an upper layer of medium-grained brown sand up to 3.8 metres thick, overlying a layer of medium-grained grey sand up to 4.0 metres thick. These tailings were deposited on a base composed of humus and plants. The maximum measured thickness of the southern tailing was 5.7 metres;
  - the western part (holes MB-18-36 to MB-18-43) of the Central Sector tailings comprises a layer of medium-grained brown sand that is up to 2.1 metres thick. All percussion-drill holes in this part of the tailings ended in this lithology.

1844 Inc.'s 2018 percussion-drilling programme indicates that the stratigraphy of the Tétrault 1, Tétrault 2 and Anacon Lead 2 tailing sites are similar consisting of a top layer of medium grained brown sand probably representing the results of oxidation in sharp contact with a layer of medium grained grey sand.

The maximum depth and the average of the gold, silver and zinc grade of tailings intersections per tailing site are summarized in **Table 6-5**.

**Table 6-5: Characteristics of Tailings Piles as Determined from 2018 Drilling Programme**

Tailing site	Maximum Tailings Depth (m)	Average Au (g/t)	Average Ag (g/t)	Average Zn (g/t)
Anacon Lead 2	6.9	0.35	32.66	1.22
Tétrault 1	2.6	0.76	95.95	4.71
Tétrault 2	5.7	0.98	57.33	0.80
<b>Grand Total</b>	<b>6.9</b>	<b>0.79</b>	<b>62.80</b>	<b>1.95</b>

The spacing and orientation of the holes are appropriate and suitable for the deposit geometry and mineralization style. Sampling of the percussion-drill core from the area was configured such that it would be representative of the tailings as a whole. Thickness (depth) of tailings and average gold-, silver- and zinc-grades of 1844 Inc.'s drill-hole intersections are summarized in **Table 6-6**. Note that values for holes MB-18-05, -76 and -88 are absent.

**Table 6-6: Tailings' Thickness and Average Gold-, Silver- and Zinc-grades. 1844 Inc. 2018 Drill-hole Intersections**

Tailings Site	Hole	UTM-X (NAD83-Z18)	UTM-Y (NAD83-Z18)	Elevation (m)	Hole Length (m)	Tailings Depth (m)	Au (g/t)	Ag (g/t)	Zn (g/t)
Tétrault 2	MB-18-01	702747.235	5188895.312	133.22	3.00	1.69	0.86	55.89	0.34
Tétrault 2	MB-18-02	702711.649	5188898.214	133.063	2.70	2.70	1.43	64.71	0.52
Tétrault 2	MB-18-03	702728.988	5188877.933	132.554	2.70	2.70	1.10	69.74	0.41
Tétrault 2	MB-18-04	702728.819	5188915.705	136.438	3.00	1.00	1.01	52.50	0.86
Tétrault 2	MB-18-06	702769.832	5188936.747	136.644	1.50	0.55	0.67	77.10	0.58
Tétrault 2	MB-18-07	702755.302	5188918.234	135.104	1.50	1.11	0.70	67.86	0.84
Tétrault 2	MB-18-08	702710.515	5188873.22	136.356	4.50	3.86	0.75	49.98	0.55
Tétrault 2	MB-18-09	702600.485	5188929.819	149.523	3.00	2.81	0.87	54.70	0.42
Tétrault 2	MB-18-10	702624.442	5188918.463	150.336	3.00	1.98	0.59	33.60	0.37
Tétrault 2	MB-18-11	702620.893	5188895.096	150.829	1.50	1.50	0.50	44.38	0.47
Tétrault 2	MB-18-12	702594.725	5188895.031	149.333	0.45	0.31	0.71	39.15	0.50
Tétrault 2	MB-18-13	702608.607	5188906.172	148.793	1.50	0.78	0.84	45.42	0.50
Tétrault 2	MB-18-14	702577.575	5188910.743	149.06	1.50	1.50	0.96	36.26	0.43
Tétrault 2	MB-18-15	702743.151	5188855.129	135.059	3.00	1.12	1.78	67.30	0.95
Tétrault 2	MB-18-16	702695.78	5188889.217	138.717	3.00	2.05	0.85	58.85	0.50
Tétrault 2	MB-18-17	702583.12	5188942.791	151.162	3.00	2.45	0.83	54.98	0.52
Tétrault 2	MB-18-18	702567.785	5188933.239	151.558	4.50	4.50	1.12	47.07	0.63
Tétrault 2	MB-18-19	702536.846	5188929.049	153.931	4.50	4.50	1.21	46.44	0.46
Tétrault 2	MB-18-20	702501.314	5188924.53	155.213	3.00	3.00	0.99	57.22	0.48
Tétrault 2	MB-18-21	702478.059	5188891.654	158.528	2.50	2.50	1.64	53.95	0.27
Tétrault 2	MB-18-22	702476.872	5188915.181	157.92	1.95	1.95	0.58	31.60	0.34
Tétrault 2	MB-18-23	702451.577	5188895.354	160.585	4.50	4.33	0.42	51.12	0.69
Tétrault 2	MB-18-24	702431.966	5188890.93	161.388	2.40	2.40	0.91	82.15	0.88
Tétrault 2	MB-18-25	702406.953	5188904.762	161.589	1.20	1.20	0.53	40.20	0.33
Tétrault 2	MB-18-26	702405.919	5188928.489	162.122	5.10	5.10	0.33	23.94	0.70
Tétrault 2	MB-18-27	702429.222	5188911.28	161.473	6.00	5.65	0.87	45.29	0.70
Tétrault 2	MB-18-28	702450.604	5188918.214	160.115	2.80	2.69	0.62	38.77	0.42
Tétrault 2	MB-18-29	702469.668	5188951.062	160.022	0.75	0.75	0.65	45.00	0.65
Tétrault 2	MB-18-30	702446.325	5188949.897	159.173	6.60	5.70	0.61	37.60	0.80
Tétrault 2	MB-18-31	702425.892	5188937.887	160.589	6.00	4.05	1.08	50.25	0.48
Tétrault 2	MB-18-32	702432.487	5188979.025	159.724	1.50	1.50	0.90	47.10	0.46

Tailings Site	Hole	UTM-X (NAD83-Z18)	UTM-Y (NAD83-Z18)	Elevation (m)	Hole Length (m)	Tailings Depth (m)	Au (g/t)	Ag (g/t)	Zn (g/t)
Tétrault 2	MB-18-33	702417.258	5188960.719	159.889	6.00	5.10	1.23	68.30	1.24
Tétrault 2	MB-18-34	702398.807	5188951.639	161.016	2.40	1.50	2.15	88.30	0.62
Tétrault 2	MB-18-35	702406.192	5188983.209	159.877	4.00	4.00	0.71	62.45	0.58
Tétrault 2	MB-18-36	702382.545	5188966.431	161.713	0.60	0.60	3.53	81.30	0.57
Tétrault 2	MB-18-37	702366.653	5188954.774	163.06	0.60	0.60	2.06	99.40	0.55
Tétrault 2	MB-18-38	702351.858	5188967.474	165.466	0.30	0.30	1.98	78.10	0.52
Tétrault 2	MB-18-39	702360.538	5188935.004	163.127	1.20	1.20	1.37	88.70	0.68
Tétrault 2	MB-18-40	702381.299	5188931.153	162.451	2.10	2.10	0.78	54.94	0.71
Tétrault 2	MB-18-41	702384.903	5188916.117	162.671	1.80	1.80	1.47	67.05	0.64
Tétrault 2	MB-18-42	702336.956	5188948.383	167.49	0.90	0.90	1.87	81.60	0.50
Tétrault 2	MB-18-43	702322.407	5188938.766	168.07	1.20	1.20	1.41	74.90	0.50
Tétrault 2	MB-18-44	702283.26	5188968.869	170.234	3.00	3.00	0.27	14.25	0.18
Tétrault 2	MB-18-45	702271.5	5188989.719	170.303	4.50	4.50	0.60	26.20	0.22
Tétrault 2	MB-18-46	702256.19	5189015.935	169.562	5.40	5.40	0.60	56.74	0.51
Tétrault 2	MB-18-47	702249.889	5189047.566	163.48	2.10	2.10	0.53	71.21	0.46
Tétrault 2	MB-18-48	702243.217	5189080.306	159.36	0.30	0.30	0.33	44.90	0.38
Tétrault 2	MB-18-49	702212.941	5189103.633	153.275	0.90	0.90	0.32	75.10	2.10
Tétrault 2	MB-18-50	702201.798	5189127.137	151.295	2.10	2.10	0.73	11.67	0.13
Tétrault 2	MB-18-51	702228.926	5189137.074	153.333	2.10	2.10	0.36	46.90	1.20
Tétrault 2	MB-18-52	702254.508	5189148.777	153.418	2.10	2.10	0.25	32.83	1.43
Anacon Lead 2	MB-18-53	702222.521	5189222.733	144.915	3.00	1.96	0.65	142.72	7.18
Anacon Lead 2	MB-18-54	702201.712	5189245.221	144.093	1.05	1.05	0.30	27.75	1.11
Anacon Lead 2	MB-18-55	702232.573	5189276.351	148.422	1.20	0.75	0.19	21.40	0.86
Anacon Lead 2	MB-18-56	702203.179	5189301.926	148.773	1.20	1.20	0.45	49.70	2.13
Anacon Lead 2	MB-18-57	702215.838	5189336.376	150.703	1.50	0.82	0.19	21.26	1.50
Anacon Lead 2	MB-18-58	702188.258	5189329.159	150.733	3.00	2.69	0.48	31.18	0.83
Anacon Lead 2	MB-18-59	702137.778	5189311.519	151.417	1.35	1.35	0.16	25.40	0.62
Anacon Lead 2	MB-18-60	702123.658	5189295.813	150.626	2.40	1.50	0.16	21.00	0.64
Anacon Lead 2	MB-18-61	702113.072	5189320.906	154.474	2.40	2.40	0.24	22.37	0.45
Anacon Lead 2	MB-18-62	702098.177	5189302.261	154.206	4.20	3.04	0.16	23.74	0.45
Anacon Lead 2	MB-18-63	702170.84	5189296.306	149.508	1.50	0.54	0.94	55.80	0.98



Tailings Site	Hole	UTM-X (NAD83-Z18)	UTM-Y (NAD83-Z18)	Elevation (m)	Hole Length (m)	Tailings Depth (m)	Au (g/t)	Ag (g/t)	Zn (g/t)
Anacon Lead 2	MB-18-64	702163.109	5189253.988	145.593	1.50	0.35	0.38	38.10	1.07
Anacon Lead 2	MB-18-65	702182.139	5189268.793	145.018	0.60	0.60	0.17	27.60	1.41
Anacon Lead 2	MB-18-66	702146.211	5189275.456	147.569	6.00	6.00	0.42	34.75	1.10
Anacon Lead 2	MB-18-67	702094.978	5189333.891	155.797	3.60	3.60	0.16	47.37	1.69
Anacon Lead 2	MB-18-68	702107.876	5189348.747	154.738	3.00	3.00	0.18	28.67	1.17
Anacon Lead 2	MB-18-69	702088.164	5189363.253	155.815	3.00	2.10	0.55	28.33	1.95
Anacon Lead 2	MB-18-70	702086.38	5189382.956	156.724	1.20	1.03	0.91	29.44	4.19
Anacon Lead 2	MB-18-71	702115.322	5189376.278	154.526	1.80	1.56	0.20	22.50	0.60
Anacon Lead 2	MB-18-72	702242.566	5189394.325	152.011	6.90	6.90	0.57	49.39	0.79
Anacon Lead 2	MB-18-73	702201.385	5189366.101	151.353	1.50	1.23	0.28	31.95	1.30
Anacon Lead 2	MB-18-74	702454.753	5189304.568	115.527	4.50	0.89	0.26	48.20	0.82
Tétrault 1	MB-18-75	702420.858	5189242.058	119.966	4.50	0.82	0.92	108.00	2.26
Tétrault 1	MB-18-77	702397.288	5189277.687	116.616	1.50	1.05	1.29	72.30	0.32
Tétrault 1	MB-18-78	702398.733	5189306.603	116.744	2.10	0.14	0.71	74.60	2.46
Tétrault 1	MB-18-79	702430.887	5189323.36	113.534	4.50	0.20	0.91	50.10	0.53
Tétrault 1	MB-18-80	702470.339	5189336.617	112.613	1.50	1.50	1.58	94.27	3.29
Tétrault 1	MB-18-81	702474.775	5189477.798	113.345	1.50	0.41	0.86	189.00	11.15
Tétrault 1	MB-18-82	702501.871	5189486.792	112.75	1.50	0.73	0.01	0.25	0.33
Tétrault 1	MB-18-83	702521.676	5189472.735	112.438	1.50	0.56	0.00	0.25	0.17
Tétrault 1	MB-18-84	702480.976	5189459.358	113.436	1.50	0.60	0.61	162.00	15.25
Tétrault 1	MB-18-85	702500.459	5189454.121	113.092	3.00	0.51	0.63	146.00	7.90
Tétrault 1	MB-18-86	702518.502	5189426.79	112.933	1.50	0.98	0.78	82.80	4.67
Tétrault 1	MB-18-87	702562.533	5189447.41	112.613	3.00	1.08	0.06	9.10	0.29
Tétrault 1	MB-18-89	702539.463	5189411.989	112.44	3.00	0.61	0.88	54.20	2.04
Tétrault 1	MB-18-90	702503.673	5189410.037	112.707	3.00	0.22	0.45	194.00	8.63
Tétrault 1	MB-18-91	702442.754	5189438.986	114.956	3.00	1.00	0.60	126.00	11.70
Tétrault 1	MB-18-92	702454.031	5189459.895	114.891	1.50	0.41	0.56	117.50	3.32
Tétrault 1	MB-18-93	702449.901	5189412.4	116.271	1.50	0.27	0.73	147.00	4.79

Tailings Site	Hole	UTM-X (NAD83-Z18)	UTM-Y (NAD83-Z18)	Elevation (m)	Hole Length (m)	Tailings Depth (m)	Au (g/t)	Ag (g/t)	Zn (g/t)
Tétrault 1	MB-18-94	702434.632	5189387.456	115.214	1.50	0.21	0.60	81.80	8.49
Tétrault 1	MB-18-95	702424.013	5189419.348	115.622	1.50	1.21	0.66	128.00	8.34
Tétrault 1	MB-18-96	702473.623	5189400.776	113.957	1.50	0.39	0.52	122.00	7.29
Tétrault 1	MB-18-97	702467.864	5189438.279	114.015	1.50	0.30	0.54	168.00	4.66
Tétrault 1	MB-18-98	702486.38	5189380.437	113.815	1.50	0.53	0.75	71.70	4.40
Tétrault 1	MB-18-99	702463.445	5189374.782	114.458	1.50	0.45	1.95	75.00	4.27
Tétrault 2	MB-18-100	702442.023	5189364.793	114.39	1.50	0.24	0.79	87.80	4.46
Tétrault 1	MB-18-101	702417.33	5189364.024	115.354	1.50	0.14	0.99	88.10	3.75
Tétrault 1	MB-18-102	702411.78	5189339.538	115.429	1.50	0.55	1.44	87.20	2.97
Tétrault 1	MB-18-103	702390.498	5189327.403	118.599	1.30	0.15	0.68	80.80	3.92
Tétrault 1	MB-18-104	702487.657	5189426.134	113.343	1.50	0.27	0.57	100.00	4.17
Tétrault 2	MB-18-105	702744.528	5188895.101	133.352	4.50	2.64	0.89	56.60	0.44
Tétrault 2	MB-18-106	702729.454	5188894.408	132.817	4.50	2.96	2.12	70.29	0.55

On December 12th, 2018, DNA announced the execution of an option agreement with Osisko Metals Inc. for base-metal exploration on the Property. All claims and work related to the tailings sites on the Property were excluded from this option. Under this agreement, Osisko Metals continued to explore the Property, which it had been doing since the summer of 2018 in the form of sampling, mapping, geochemical analysis, diamond-drilling and airborne geophysical surveys.

On April 25th, 2019 Osisko Metals Inc. delivered a notice of termination of the option agreement, effective as at May 25th, 2019, citing unsatisfactory results of their base-metal exploration programmes. This termination was announced by DNA on May 1st, 2019. No results of Osisko's Metals Inc. exploration programme results were publicly available as at the effective date of the PEA Report.

On January 17th of 2019, 1844 Inc. announced that it had signed a Letter of Agreement to acquire 100% of the Montauban property and the all buildings, immovables and other assets and permits located on, or with respect to the Property from DNA. With this acquisition, 1844 Inc. intended to develop and to evaluate the tailings sites on the Property and contracted MRB & Associates to update the 2014 MRE and deliver an NI 43-101 Technical Report on the Project. On March 4th, 2019, DNA ratified the Letter of Agreement with 1844 Inc.

### 6.5.2 MRB & Associates

MRB & Associates completed a NI 43-101 Technical Report and Mineral Resource Estimate (the "2019 MRE"), which verified that the Anacon Lead 1 tailings site contained an Inferred Resource\* of 462,000 tonnes grading 0.31 g/t Au and 32.68 g/t Ag (for 4,570 total oz. gold and 485,630 total oz. silver), corroborating the 2014 MRE of Turcotte et al. (2014) (Jourdain et al., 2019).

*\*Although no work has taken place on the Property since the 2019 MRE, these resources are considered historical in nature. ESGold is not treating the 2019 MRE as current mineral resources or mineral reserves.*

The 2019 MRE for the Anacon Lead 1 tailings site was made using 3D block modelling. The inverse distance squared (ID2) interpolation method was applied to a single 3D solid with a strike-length of 685 metres, a width up to approximately 195 metres, and a vertical depth of 45 metres below surface, representing the tailings site material.

The 2019 MRE utilized a validated percussion-drill hole database for the Anacon Lead 1 tailings site and a digital spreadsheet file containing coordinate data from a high-precision survey of the perimeter of the tailings site commissioned by 1844 Inc. during their tenure of ownership of the Property. Following verification, the database used for the resource estimation contained data from 49 percussion-drill holes covering the strike-length of the project at a drill-collar spacing averaging approximately 25-35m, but up to 70 m. The drill-hole database contained 104 analyses from 25 holes from the first phase of drilling, and 95 analyses from 24 holes of the second phase of drilling. Technical data from the

second phase drilling included a visual estimate of the sampling recovery, which allowed for calculations of sample density.

In order to conduct accurate resource modelling of the Anacon Lead 1 tailings site, a 3D solid was constructed from two surfaces. The first surface joins the drill-hole collar locations and the survey points of the tailings site perimeter, whereas the second surface joins the down-holes limits of the drill-holes and the survey points of the tailings site perimeter. The 2019 MRE was calculated for the 3D solid representing the volume between these two surfaces.

A statistical analysis of the raw analytical data obtained from a total of 199 percussion-drill hole samples, all of which fall within the mineralized solid, was carried out. Based on the results of these investigations, capping grades of 2.0 g/t for gold and 125.0 g/t for silver were determined.

Within the drill-hole database, two (2) samples were capped for gold and two (2) samples were capped for silver, at the determined capping limits; one of the samples was capped for both gold and silver. The capping of high assays affected 1.51% of the samples. This results in 2.26% of the gold content and 1.92% of the silver content being cut for the entire deposit.

Variography was conducted on drill-hole assays, but the variograms were found inconclusive. The search ellipsoids dimensions were set at 1.5 times the average drill spacing of 30 metres in plan view (45 m), and 10 m in the vertical direction. The search radii for both gold and silver were 45m x 45m x 10m for the first pass, and 90m x 90m x 20m for the second pass.

A fixed density of 1.71 g/cm<sup>3</sup> was applied to all material for the 2023 MRE.

The block model developed for the 2019 MRE was validated for gold and silver by visually comparing the estimated block grades with the capped-composite grades in cross-section and plan views. In general, a good correlation was observed between block grades and neighbouring composites. A comparison of the average composite grade with the average of the interpolated blocks, at a 0.0 g/t Au cut-off, within the solid (**Table 6-7**), shows that the average block grade is comparable (slightly lower) to the average composite grade.

**Table 6-7: Interpolation Statistics from 2019 MRE (Jourdain et al., 2019)**

Element	Number of Composites	Composite Average	Number of Blocks	Block Average
Au (g/t)	199	0.35	30,492	0.31
Ag (g/t)		34.32		32.80

The gold equivalent grade (AuEq) for the 2019 MRE was calculated using the following assumptions:

$$Au \text{ price} = \$US 1,300/oz; Ag \text{ price} = \$US 15/oz; Ag \text{ Recovery} = 78\%.$$

The resulting equation is:

$$[AuEq(g/t) = Au (g/t) + 78\% \times Ag (g/t) \times 15/1300].$$

The notion of cut-off was applied to the whole tailings site. The following parameters were used to calculate the AuEq cut-off grade that determined the reasonable prospects of economic extraction of the whole material as at the effective date of the historic 2019 MRE:

Au Price	US\$1,300/oz
Au Recovery (avg)	89% (see Item 13.0)
Exchange Rate	C\$1.31 = US\$1.00
Operating cost*	C\$24/t

*\*Operation costs were estimated by Edmond St-Jean (P.Eng.) (Jourdain et al., 2019).*

The AuEq cut-off grade was calculated as follows:

$$(24\$C)/(\$US1,300 \times 1.31\$C/\$US \times 89\% / 31.1035) = 0.5 \text{ g/t AuEq.}$$

Based on the density of the processed data, the search ellipse criteria, the specific interpolation parameters and the confidence in the information provided, the entire historic mineral resource\* outlined by the 2019 MRE was classified in the Indicated category.

*\*These “resources” are historical in nature. A qualified person has not done sufficient work to classify the historical estimate as current mineral resources or mineral reserves. ESGold is not treating the historical estimate as current mineral resources or mineral reserves.*

In February 2022 JPL GeoServices completed an updated NI 43-101 Technical Report on the Montauban Tailings Project. No additional exploration work was reported to have been carried out on the Project since the 2019 MRE.

### **6.5.3 Secova/ESGold**

Exploration work carried out by ESGold is summarized in Item 9 and Item 10 of the PEA Report.

## **7. GEOLOGICAL SETTING AND MINERALIZATION**

### **7.1 Regional Geology**

The Property is located in the Grenville Province, which borders the southeast part of the Canadian Shield and extends southwest-northeast for more than 2,000 km over widths varying from 300 km to 600 km. The Grenville Province exposes the interior of an ancient mountain belt and comprises a mosaic of geological terranes that record the Paleoproterozoic through Neoproterozoic crustal growth and continental margin collision events that took place during the assembly of the Rodinia supercontinent.

Grenvillian rocks are subdivided into a set of allochthonous terranes, assembled in a southeasterly dipping thrust stack emplaced over the southern margin of the Archean Superior Province. Rock units within the thrust stack range from Archean to late Mesoproterozoic, with older units occupying the lower levels of the thrust stack, and the younger units comprising the upper levels (relatively) to the southeast (Figure 7.1).

The first-order lithotectonic terranes of the Grenville Province comprise:

1. the Parautochthonous Belt, composed of Archean, Paleoproterozoic, and Mesoproterozoic rocks representing the southern margin of Laurentia during the Mesoproterozoic. These rocks essentially comprise equivalents of the adjacent Superior Province shield rock that were reworked, to a major extent, during the Grenvillian Orogeny, i.e., during the interval 1080 to 980 Ma (timing scheme of Gower and Krogh, 2002);
2. the Allochthonous Polycyclic Belt (APB), composed of tectonically transported Paleoproterozoic and Mesoproterozoic rocks, that are separated from the Parautochthonous Belt by the Allochthon Boundary Thrust (ABT). Rocks of the APB bear no affinity to shield rocks, and have undergone pre-Grenvillian orogenesis, and;
3. the Allochthonous Monocyclic Belt (AMB), consisting of supracrustal rocks, largely Mesoproterozoic, and having been affected by only the Grenville orogeny. The AMB is defined as consisting of the Central Metasedimentary Belt, the Morin Terrane, the Adirondack Highlands, and the Wakeham Group on the basis that they were thought to have formed coevally during the 1.35 to 0.95 Ga "Grenvillian orogenic cycle". Currently, a 1.45 to 1.3 Ga volcano-plutonic continental arc and island arc have been documented and dated within structural windows of the marble-rich and quartzite-rich domains of the Central Metasedimentary Belt in Québec, and within the La Bostonnais Plutonic Complex and Montauban Group of the Portneuf-Mauricie Domain (Figure 7.2) (Nadeau and van Breemen, 1994; Nadeau et al., 1999; Nantel and Pintson, 2002, RG-2001-16; Blein et al., 2003; Wodicka et al., 2004).

All of these three major belts contain smaller tectonic units (terranes) that are also bounded by zones of high-strain, representing either north-directed thrusts

or extensional shear zones, that subdivide the belts into separate lithotectonic zones (Rivers et al., 1989; McLelland et al., 2010).

Other than the youngest intrusive granites, all rocks within the Grenville Province were highly deformed and metamorphosed between approximately 1.2 and 1.0 Ga (the Grenville Orogeny).

Common rock types include quartzo-feldspathic gneiss (commonly garnet-bearing), marble and associated calc-silicate rocks, quartzite, pelite, meta-volcanic rocks, breccias, meta-diorite, anorthosite, gabbro, amphibolite, granulite, eclogite, tonalite, granite, syenite, migmatite, and anorthosite massifs.

Widespread arc-related volcanic activity is well documented in the low-grade metamorphic terranes of the Grenville Province (Composite Arc Belt and Montauban Group; Nadeau et al., 1999; Carr et al., 2000). Metallogenic settings specific to the Grenville Province host past-producing mines such as the Balmat-Edwards Zn deposit, the New Calumet and Montauban Zn- Pb-Ag-Au ( $\pm$ Cu) mines, the Long Lake zinc mine, the Renzy Lake and Lac Edouard Ni-Cu deposits, the Hilton and Marmoraton Fe mines, the Faraday, Bicroft and other U mines near Bancroft, as well as many, small Fe, Au, Mo, Zn, and U deposits, some of them also formerly mined (de Lorraine and Dill, 1982; Eckstrand et al., 1996; Lentz, 1996; Clark, 2000).

## 7.2 Local Geology

The Portneuf-Mauricie Domain of the Allocthonous Polycyclic Belt (APB) underlies the area of the Property and comprises mainly grey gneiss and migmatite complexes with minor units of metamorphosed supracrustal rocks, amphibolite, paragneiss, calc-silicate gneiss, and quartzite (Figure 7.3).

### Portneuf-Mauricie Domain

The following description of the Portneuf-Mauricie Domain is summarized from Sappin et al. (2009) and references therein.

The Portneuf-Mauricie Domain (Rivers et al., 1989; Nadeau et al., 1992, DV92-03) comprises mainly rocks of the Montauban Group, which are intruded by plutons of the La Bostonnais Complex (Nadeau and Corrigan, 1991; Nadeau et al., 1992, DV92-03; Gautier, 1993; Nadeau and van Breemen, 1994; Corrigan, 1995).



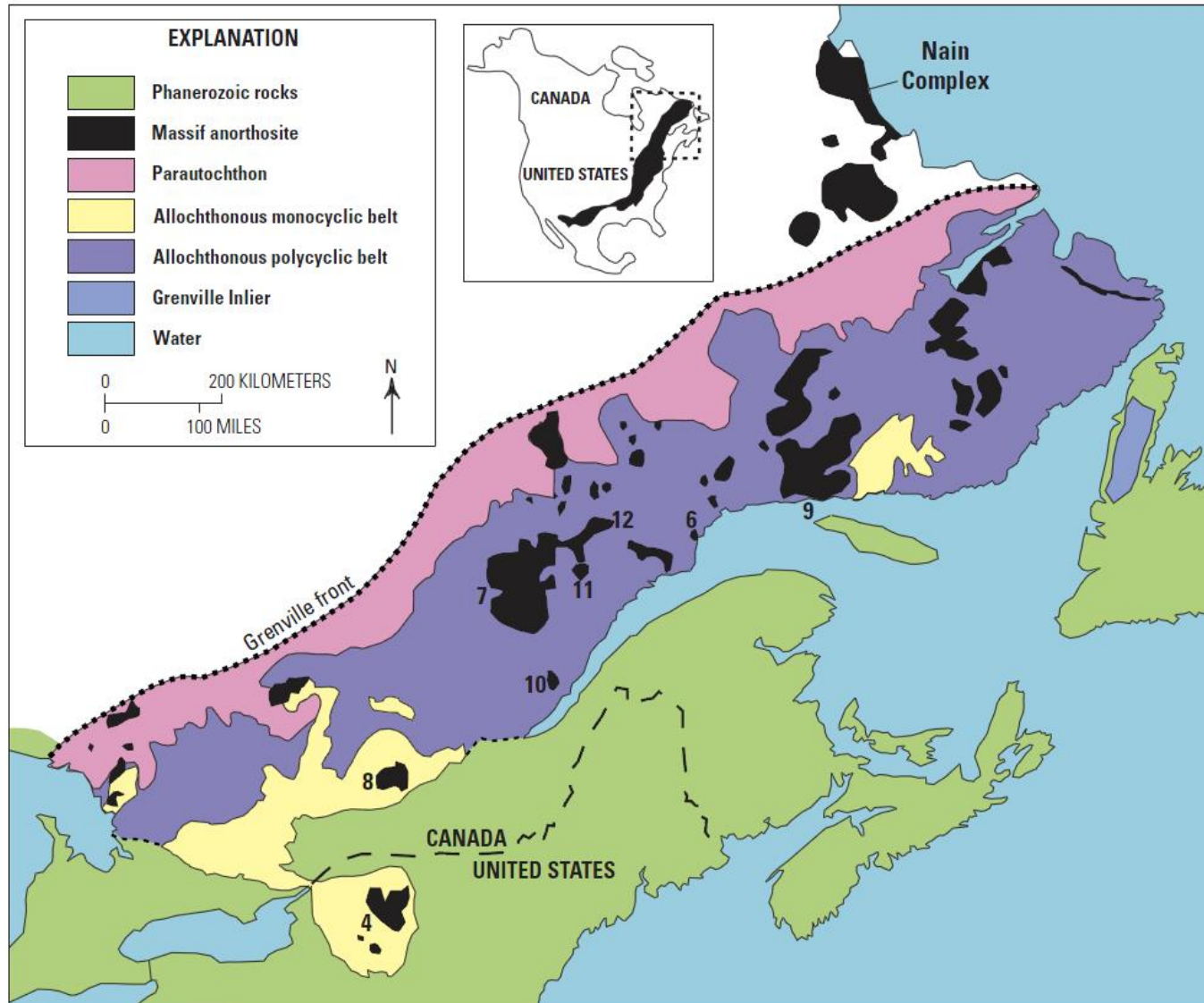


Figure 7.1: Tectonic subdivisions of the Grenville (from Woodruff et al., 2013)

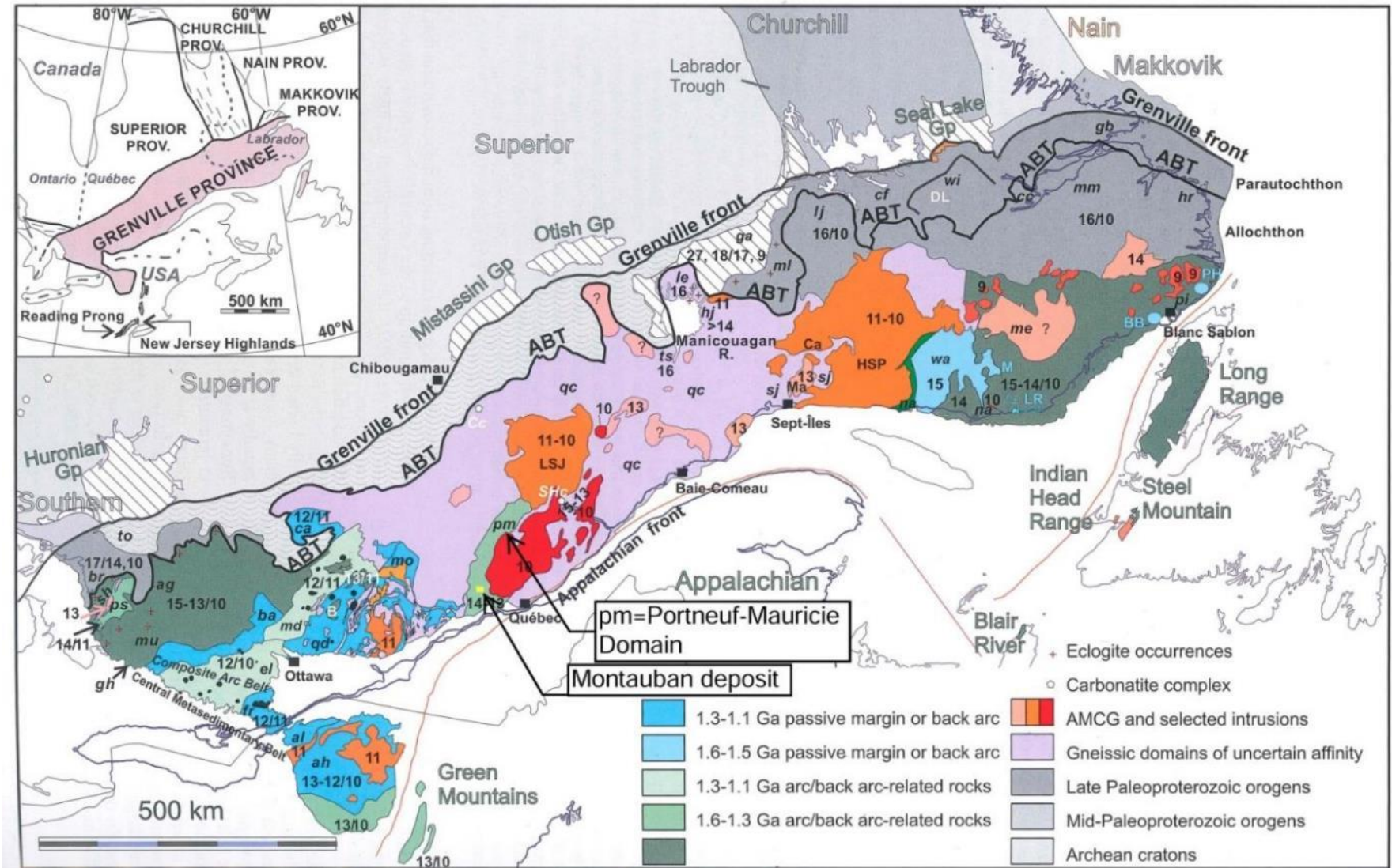


Figure 7.2: Geological subdivisions of the Grenville Province (from Corriveau et al., 2007) showing locations of Portneuf-Mauricie Domain and Property (ABT = Allochthon Boundary Thrust)

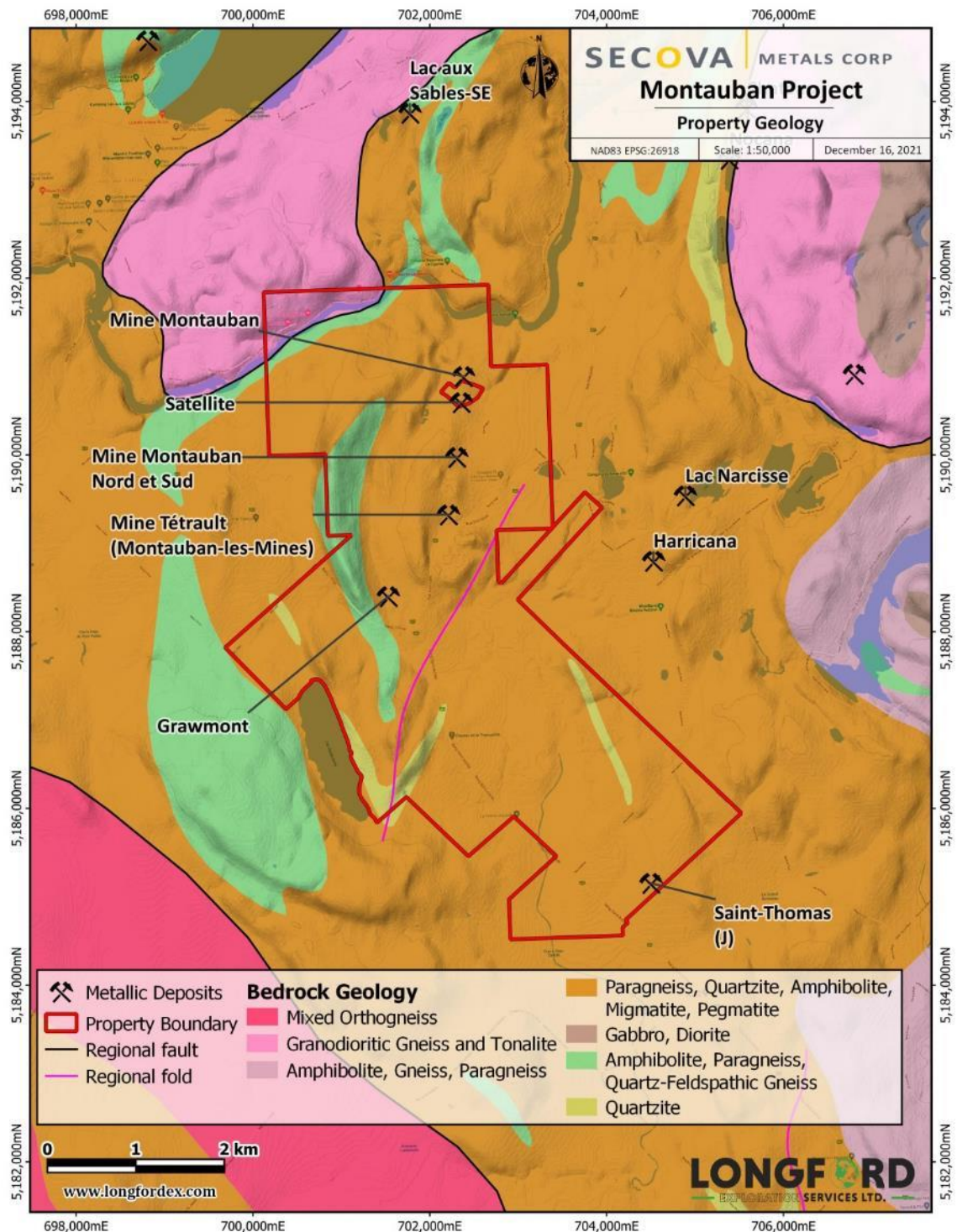
The 1.45 Ga Montauban Group (Nadeau and van Breemen, 1994) is composed of metamorphosed sedimentary rocks, including quartzo-feldspathic gneiss, minor quartzite, and rare marble and calc-silicate rocks. This assemblage is associated with metavolcanic rocks, comprising tholeiitic pillowed metabasalt (MacLean et al., 1982; Nadeau et al., 1992, DV92-03) and lapilli metatuffs. These rocks were metamorphosed to amphibolite facies, at peak conditions of 4.5–6.5 kbar and 550–620°C (Bernier and MacLean, 1993). The Montauban Group metavolcanic rocks preserve a complex eruptive history. Proximal deposits (lapilli tuffs and vesicular basaltic pillow lavas), distal deposits (intermediate to felsic volcanic ashes), and polymictic epiclastic sedimentary rocks are closely associated (Nadeau et al., 1999). The volcanic rocks were deposited in a shallow-submarine environment during the late stage of an andesitic to felsic volcanic cycle (Nadeau et al., 1999). Such an environment is compatible with a mature island-arc or back-arc basin tectonic setting (Nadeau et al., 1999). This interpretation is supported by the trace element signatures of gneisses and metamorphosed Montauban volcanic rocks, namely chondrite-normalized rare earth element (REE) patterns and mid-ocean ridge basalt (MORB)-normalized multi-element patterns; TiO<sub>2</sub>–Zr, Ti–Zr–Y and Nb–Y discriminant diagrams; and Zr/Y ratios (MacLean et al., 1982; Bernier and MacLean, 1993; Gautier, 1993).

The 1.40–1.37 Ga La Bostonnais Complex (Nadeau and van Breemen, 1994; Corrigan, 1995) comprises mainly metamorphosed calc-alkaline igneous rocks with massive, gneissic, and migmatitic characteristics (Nadeau et al., 1992, DV92-03; Gautier, 1993). The plutons vary in composition from granitic to ultramafic, but they are dominated by quartz diorite and tonalite. In weakly deformed zones, the primary igneous textures and minerals are well preserved (Corrigan and van Breemen, 1997), whereas in more strongly deformed zones, the rocks are characterized by amphibolite-facies metamorphic assemblages (Corrigan and van Breemen, 1997). Plutons of the La Bostonnais Complex crosscut the folded paragneisses and amphibolites of the Montauban Group, indicating that the latter were deformed and metamorphosed pre- or syn-emplacement of the La Bostonnais intrusive rocks (Corrigan and van Breemen, 1997).

The trace element geochemical signature of the La Bostonnais Complex plutons is typical of a subduction zone setting (Gautier, 1993; Corrigan, 1995; Corrigan and van Breemen, 1997). An association with an island arc or a continental arc is not clearly established. Gautier (1993) argued for an island arc environment on the basis of the Zr/La and La/Ce ratios and the discriminant diagram of Harris et al. (1986). In contrast, Corrigan (1995) applied the Zr/Y versus Zr and Th/Yb versus Ta/Yb discriminant diagrams of Pearce (1983), and concluded that the plutons of the La Bostonnais Complex were emplaced into an Andean-type continental arc.

The predominance of metasedimentary and metavolcanic rocks of intermediate to felsic composition and the lack of a strongly bimodal volcanic composition, however, are more typical of an island-arc than a back-arc setting (Corrigan and van Breemen, 1997).





**Figure 7.3: Local geology of Property**

According to the geochemical work of Gautier (1993), these rocks are enriched in light rare-earth elements (LREE) compared to heavy rare-earth elements (HREE), and they contain high concentrations of K<sub>2</sub>O, Rb, Cs, Ba, and Th. In the region of interest for this study, intermediate and felsic rocks are much more

abundant than mafic rocks (Gautier, 1993). These geochemical and petrological characteristics suggest that the rocks of the La Bostonnais Complex formed in a continental-arc or mature island-arc setting.

The lithotectonic evolution of the Portneuf–Mauricie Domain began with the initiation of intra-oceanic subduction at the beginning of the Mesoproterozoic (1.45 Ga). An island arc was created and the Montauban Group rocks were deposited. Between 1.45 and 1.40 Ga, the arc matured (Gautier, 1993). As a result of subduction at the craton margin, the arc was accreted to Laurentia at about 1.39 Ga (Corrigan et al., 1994). The collision between the island arc and the Laurentian continent resulted in deformation of the arc (Corrigan and van Breemen, 1997). In this Andean-type setting, the subduction zone dipped towards the northwest, under Laurentia (Hanmer et al., 2000; Corrigan et al., 2000). Hanmer et al. (2000) suggested that this subduction zone existed before 1.40 Ga based on the presence of extensive 1.5–1.42 Ga magmatism in the Central Gneiss Belt in Ontario (Dickin and McNutt, 1990; Easton, 1992; Rivers, 1997; Nadeau and van Breemen, 1998), which is located well inboard from the Mauricie area, and on the polarity of the subduction zone inferred for the Pinwarian arc in Labrador (Wasteneys et al., 1997; Corrigan et al., 2000). Corrigan and van Breemen (1997) suggested that the suture zone between the Laurentian margin and the accreted Montauban arc in the Mauricie region was masked by later plutonism associated with the active continental margin. Before the arc–continent collision, around 1.40 Ga, magmatic activity below the arc intensified, which led to the emplacement of the first La Bostonnais Complex plutons into Montauban Group rocks. Plutonism continued after the arc–continent collision until 1.37 Ga. Thus, the earliest La Bostonnais plutons were emplaced in a mature island-arc setting, whereas later ones originated in an active, Andean-type continental margin environment.

### 7.3 Regional Geology

The following description of the Property geology is mostly modified and summarized from Nadeau et al. (1999) and references therein.

The geology of the Montauban area and its regional tectonic framework have been studied anew by Morin (1987), and Hocq and Dufour (1999). The Montauban Group (Rondot, 1978a; DPV-594) is made up of a medium-grade sequence of well-layered, intermediate to felsic gneiss with intercalated subordinate amphibolite, locally pillowed metabasalt, and minor quartzite, which distinguish the region from adjacent high-grade Grenvillian terranes.

The rocks of the Montauban area have been regionally metamorphosed to almandine-amphibolite facies, with estimated peak metamorphic conditions in the range of 4.5–6.5 kbar and 550–620°C (Bernier and MacLean, 1993). Pronounced mineral foliation is generally parallel to compositional layering. The planar fabric undulates smoothly along strike, and dips gently to moderately eastward. Mineral lineations are variably developed, generally subtle in quartzofeldspathic gneiss and more pronounced in amphibolite. Locally occurring

attenuated pillows and lapilli fragments, with aspect ratios on the order of 1:3:>10, indicate significant ductile deformation.

The large-scale deformation pattern of the Montauban region is not fully understood. Fold interference and possibly ductile faulting preclude tracing of structural markers in discontinuous outcrops. Minor folds are sporadically exposed between the abandoned mine workings and Mont Tétréault. They are consistently Z-verging with easterly shallowly to moderately dipping axial planes, and sub-horizontal to shallowly plunging axes parallel to the local mineral and stretching lineations. This is consistent with the sequence being part of the inverted limb of a larger north-plunging and west-verging synform (Morin, 1987; Jourdain et al., 1987).

Five informal units are recognized between Montauban village and Mont Tétréault. In stratigraphic order, these are: 1) the grey composite gneiss; 2) the mine sequence; 3) the lapilli tuff unit; 4) the thinly bedded felsic tuff unit; and 5) the metabasalt unit.

### 7.3.1 Grey Composite Gneiss

The grey composite gneiss was recognized in various parts of the Montauban area by Smith (1956; RG-065). It consists of indistinctly layered, migmatitic, biotite-hornblende quartzo-feldspathic gneiss. Although generally considered to be conformably overlain by the mine sequence, the contact is locally marked by a ductile fault, a section of which is exposed in the abandoned open-pit mine.

### 7.3.2 Mine Sequence

The petrogenesis of the informally defined "mine sequence" has been described in detail by Jourdain (1987), Jourdain et al., (1987) and Bernier and MacLean (1993). The mine sequence comprises the polymetallic and Au-rich volcanogenic massive-sulphide (VMS)-type orebodies and their associated, metamorphosed and hydrothermally altered wall rocks. The VMS orebodies invariably present as proximal facies, where hydrothermal alteration systems are extensively developed.

The mine sequence includes the various rock types genetically associated with the orebodies and forming their wall rocks. The mine sequence is structurally conformable with the regional structural fabric and is at most a few tens of metres thick, extending more than 2.5 kilometres along strike, with the ore occurring as discontinuous tabular bodies several hundreds of metres long. Two types of ore bodies are present: Pb-Zn massive-sulphides in calc-silicate rocks, and Au-Ag-rich disseminated sulphides in garnet-gahnite-biotite quartzitic gneiss. The latter are mantled by distinctive cordierite-anthophyllite and cordierite-biotite gneiss and schist. The orebodies and immediate wall rocks are incompletely enveloped in quartzitic biotite-muscovite gneiss with distinctive lenticular sillimanite mats up to 1 cm thick. This rock unit, locally called "nodular-sillimanite gneiss", is considered to reach a maximum thickness close to 10 metres adjacent the cordierite-anthophyllite quartzitic gneiss.

### **7.3.3 Felsic Lapilli Tuff**

The felsic lapilli tuff unit is dominated by unaltered rhyolitic lapilli tuff, and derivative hydrothermally altered pyrite-bearing muscovite-sillimanite quartzitic gneiss, with minor, thinly bedded pyroclastic tuff, and possibly a few massive rhyolitic flows. The abundance of metamorphosed hydrothermally altered rocks and the thickness of the lapilli tuff imply a proximal depositional setting.

Metamorphosed lapilli tuff consisting of approximately 40% white, ellipsoidal, monomictic, very fine-grained felsic fragments in a grey, foliated matrix, is located between the Montauban Mine and Mont Tétréault. The fragments and the matrix are recrystallized, and have a sugary texture. The fragments are matrix supported, generally less than 1 cm thick, and range in length from 1 cm to approximately 15 cm. Most are 3-5 cm long. The present shape of the fragments is likely to reflect both the initial flattened form of the lapilli, and subsequent regional deformation. The matrix is slightly coarser grained and more mafic than the clasts, with approximately 5% biotite. Mesoscopic bedding is not apparent in this unit, which is discontinuously exposed across strike over a width of 10 metres.

In addition to being the first unambiguously felsic volcanic rock to be recognized in the area, the lapilli tuff between the Montauban Mine and Mont Tétréault is of special interest because it contains zircons with a distinctive internal igneous morphology that have yielded a U-Pb age of circa 1.45 Ga (Nadeau and van Breemen, 1994). This age is taken to mark the age of volcanism and deposition of the Montauban Group.

### **7.3.4 Thinly Bedded Intermediate and Felsic Tuff**

Rocks between the Mont Tétréault metabasalt and the lapilli tuff are composed of thinly bedded quartzo-feldspathic gneiss. The thinly bedded felsic tuff unit is composed of intermediate to felsic, centimetre-thick, bedded fallout tuffs, in places with pronounced compositional zoning, and rare intercalated decimetre-thick lapilli tuff beds, indicative of a distal depositional setting.

Thinly bedded quartzo-feldspathic gneiss, although somewhat strained, does not show mesoscopic ductile strain gradients, isoclinal folds, or evidence of structural repetition. Minor decimetre-scale folds with consistent Z-verging (i.e., dextral) asymmetry occur sporadically throughout the section; crosscutting granitic sheets show little evidence of folding. Given the mid-amphibolite facies metamorphism and the absence of mylonitic structures, the very fine- to fine-grained granoblastic textures of these rocks are here interpreted to reflect a fine-grained protolith.

### **7.3.5 Metabasalt (pillow-Lava)**

At the type locality, pillowed basalt flows with well defined, 1-2 cm thick, fine-grained selvages are recognized. They are a few decimetres in diameter, and display ellipsoidal shape in oblique section along the elongation axis. Contacts between pillows are smoothly undulating, sharp, and thin, with weathered,



recessed, irregular interspaces filled with calcite and calc-silicate minerals. Selvages exhibit granoblastic texture with a grain size markedly finer than that of the pillow cores. Locally, calcite-filled vesicles up to 5 mm in diameter are preserved, testifying to a shallow subaqueous extrusion. The facing direction, deduced from overall morphology, indicates that the section at Mont Tétréault is overturned.

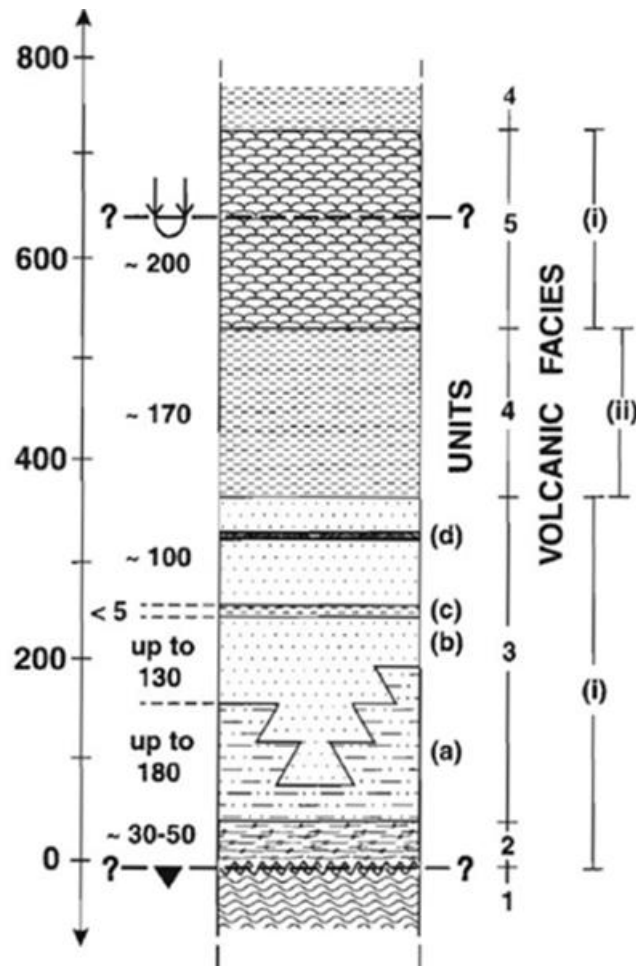
#### **7.4 Stratigraphic Polarity and Volcanic Stratigraphy**

Structural observations of Nadeau et al. (1999) are consistent with the conclusions of previous workers (e.g., Smith, 1956, RG-065; Pyke, 1966, RP-545; Morin, 1987; Jourdain et al., 1987) that the rock succession between the mine sequence and the metabasalt at Mont Tétréault occupies the inverted eastern limb of a shallow, north-plunging synform overturned to the west. The absence of evidence of structural repetition intimates that the rocks belong to a continuous stratigraphic succession. Recognizing the local and regional complexity of the fold pattern, this kilometre-scale fold has been variously interpreted as: 1) a first-phase fold (Smith, 1956, RG-065; Pyke, 1966, RP-545; Rondot, 1978a, DPV-594); 2) a second-phase Ramsay type-3 interference fold (Morin, 1987); and as a second phase structure of unspecified geometry (Jourdain et al., 1987; Bernier and MacLean, 1993). Accordingly, some workers did not specify the stratigraphic polarity of the section (Prabhu and Webber, 1984; Bernier and MacLean, 1993), whereas others inferred that the Mont Tétréault metabasalt was deposited either stratigraphically below (Rondot, 1978a, DPV-594; MacLean et al., 1982; Morin, 1987), or above (Stamatelopoulou-Seymour and MacLean, 1977; Jourdain, 1987) the mine sequence.

With the exception of Pyke (1966, RP-545), none of the cited workers have described or located the mesoscopic facing indicators on which they based their interpretation.

Along with those of Pyke (1966, RP-545), the observations of pillows at Mont Tétréault by Nadeau et al. (1999) suggest that the succession is stratigraphically overturned. This is consistent with the polarity deduced from the compositional zoning and relict graded bedding identified in a number of tuff beds. If these observations are correct, they would indicate that the metabasalt was deposited stratigraphically above the mine sequence.

The determination of the stratigraphic polarity of the succession, allows for a tentative interpretation in terms of the eruption history and of volcanic facies, emphasizing the position of the rock unit relative to the eruptive centre (Figure 7.4).



**Figure 7.4: Volcanic stratigraphy in the structural footwall of the Montauban ore deposits (Nadeau et al., 1999). Rock units: 1, grey composite gneiss; 2, mine sequence; 3, lapilli tuff including thickly bedded hydrothermally altered (a) and unaltered (b), lapilli tuff subordinate thinly bedded felsic tuff (c), and possibly rare massive metre-thick pyroclastic flow (d); 4, thinly bedded felsic tuff; and 5, metabasalt pillow lava. Volcanic facies: (i) proximal, and (ii) distal. Structural thicknesses in metres.**

## 7.5 Mineralization

The mineralization underlying the Property is not the focus of the PEA Report.

There is no primary precious-metal mineralization on the Property; however, there are five (5) tailings sites on the Property that were generated during the processing of ore from the historic underground Montauban Mine, which hosted a gold-rich VMS deposit. Secova proposes to mine the Anacon Lead 1 tailings site, which has average gold (Au) and silver (Ag) grades of 0.28 g/t (Au) and 27.10 g/t (Ag), and is delineated over an area of 695 m x 195 m, with a depth of 45 m.

### 7.5.1 Montauban Underground VMS Deposit

Mining of the Montauban deposit has been sporadic. From 1911 to 1955, a total of 2,655,588 short tons of massive-sulphide ore grading 4.53% Zn, 1.54% Pb, 0.69 g/t Au, and 85.7 g/t Ag was mined from the Tétreault-Anacon Mine, and 102,000 short tons grading 2.88% Zn, 1.03% Pb and 34.3 g/t Ag of massive-sulphide ore was extracted from the Montauban Mine from 1953 to 1954 (Montauban Zone) (McAdam and Flanigan, 1976). Other Zn-Pb zones were the C and D zones.

Marginal to the massive-sulphide ore are two zones (north and south), with small volumes of Au–Ag mineralization within gahnite-bearing gneiss, although the highest gold grades are found within the massive-sulphides (Bernier et al., 1987). Some gold and silver have been produced from the marginal mineralization. From 1983 to 1987, a total of 330,830 metric tons of ore, grading 4.27 g/t Au and 12.45 g/t Ag, was extracted from the North Gold Mine, and another 225,433 metric tons, grading 3.70 g/t Au and 72.37 g/t Ag, was extracted from the South Gold Mine between 1987 and 1990 (McAdam and Flanigan, 1976). Other gold zones were the A, E, S and Marcor zones.

The elongated tabular orebodies have a sub-horizontal plunge and are composed of massive-sulphide bodies in calc-silicate rocks, and gold-rich disseminated sulphides in cordierite-anthophyllite and related gneisses (Bernier and MacLean, 1993). Prominent mineral and metal zoning occurs within and between the orebodies. Sphalerite, galena, pyrrhotite and pyrite are the main constituents of the massive base-metal ores, whereas chalcopyrite and pyrrhotite form “veinlets” confined to quartzitic gneiss and cordierite-anthophyllite rocks in the Au-Ag mineralization. Cordierite-anthophyllite, cordierite-biotite and nodular sillimanite gneisses lie to either side of the gold ore in the quartzitic gneiss. Pyrrhotite-chalcopyrite veinlets are locally concentrated in the cordierite-anthophyllite and cordierite-biotite rocks. The quartzitic gneiss contains variable amounts of disseminated pyrrhotite, chalcopyrite, sphalerite, galena, and minor gold and electrum. The principal gangue and ore minerals in the massive-sulphide and gold zones are listed in **Table 7-1**.

**Table 7-1: Gangue and Ore Minerals in the Massive-sulphide and Gold Zones**

<b>Massive-sulphide Zone (Calc-silicate rocks)</b>	<b>North Gold Zone (Altered rocks)</b>
<b>Gangue Minerals<sup>1</sup></b>	
Diopside, tremolite, phlogopite, anorthosite, calcite, dolomite, scapolite, titanite, apatite, dravite, zircon	Cordierite, anthophyllite, zircon-staurolite, gahnite, phengite, phlogopite, quartz, plagioclase, garnet, kyanite, sillimanite, rutile dravite, zircon, apatite, corundum <sup>2</sup>
<b>Ore Minerals</b>	
Sphalerite, galena, pyrite, chalcopyrite, pyrrhotite, tetrahedrite, electrum, silver, gold, molybdenite <sup>3</sup> , arsenopyrite <sup>3</sup>	Pyrrhotite, chalcopyrite, sphalerite, galena, pyrite, electrum, gold, arsenopyrite <sup>3</sup>
<b>Secondary Retrograde Minerals<sup>4</sup></b>	
Chlorite, talc, brucite, laumontite, prehnite, gypsum, jarosite, brochanite, hisingerite, hematite	
<sup>1</sup> Minerals formed during prograde metamorphism	
<sup>2</sup> In silica under-saturated rocks	
<sup>3</sup> Rarely observed	
<sup>4</sup> Minerals formed in veinlets during retrograde metamorphism	

## 8. DEPOSIT TYPES

The Montauban Zn–Pb–Au–Ag deposit was metamorphosed at mid-amphibolite facies conditions (Stamatelopoulou-Seymour and MacLean 1984; Bernier et al., 1987) during the Grenvillian Orogeny (ca. 980–1080 Ma; Gower and Krogh 2002). Another deposit with striking similarities to Montauban is also found within the Grenville Province. Calumet is located 90 kilometres northwest of Ottawa, Ontario in Canada and is also thought to be a volcanic massive-sulphide (VMS) deposit that was metamorphosed at 650–700°C and 4–6 kbar (Williams, 1990). It has been suggested that gold at Calumet was introduced after peak metamorphism (Williams, 1990), whereas gold mineralization at Montauban is thought to have been part of the initial exhalite ore, deposited concurrently with the Zn–Pb–Ag sulphides (Bernier et al., 1987). The origin of the gold for these deposits remains a subject of discussion. The deposit at Montauban is thus potentially a useful location to investigate metal remobilization in Au-bearing massive Zn–Pb sulphides.

### 8.1 Gold-Rich Volcanogenic Massive-sulphide Deposits (Au-Rich VMS)

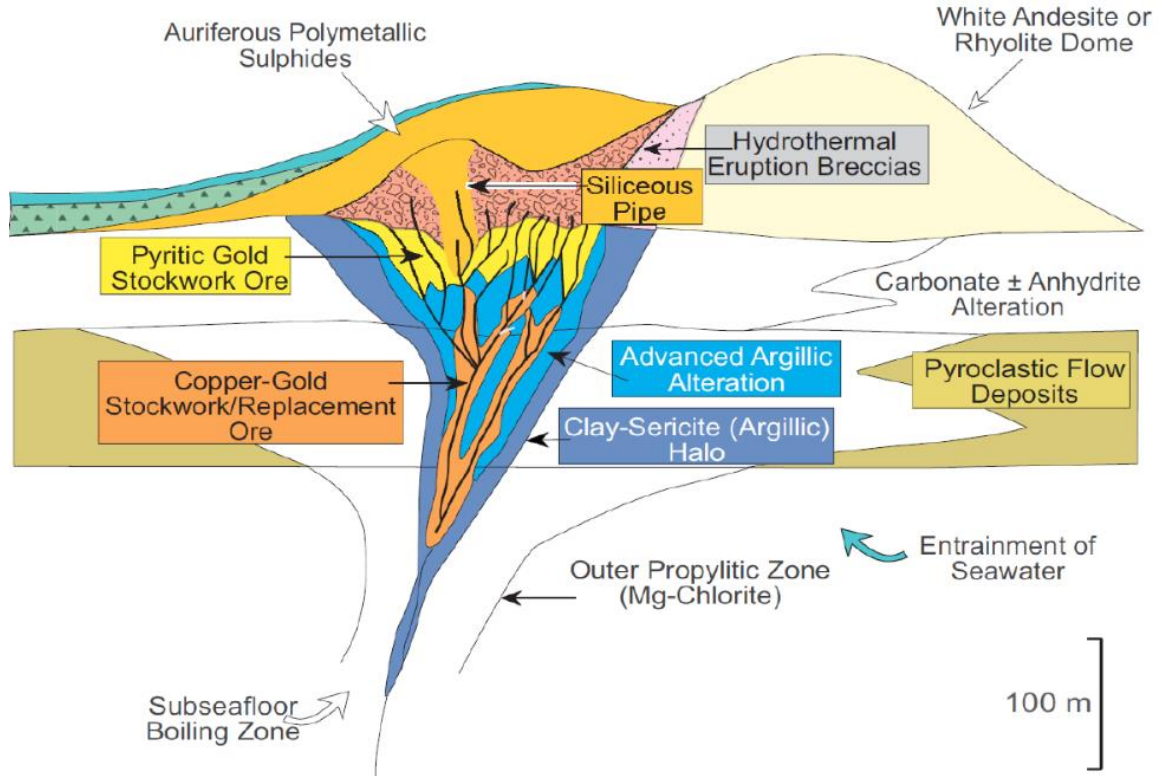
The Montauban Zn–Pb–Au–Ag deposit is a gold-rich VMS deposit, a subtype of both VMS and lode gold deposits (Poulsen and Hannington, 1996; Hannington et al., 1999; Huston, 2000; Poulsen et al., 2000). Like most VMS deposits, they consist of semi-massive to massive, stratabound to locally discordant sulphide lenses underlain by discordant stockwork feeder zones (Figure 8.1). The main difference between Au-rich VMS and other VMS deposits is their average g/t gold content, which exceeds the associated combined Cu, Pb and Zn grades (in wt%) (Poulsen et al., 2000). Gold is thus the main commodity; however, the polymetallic nature of this deposit subtype makes it more resistant to fluctuating metal prices, resulting in a very attractive exploration target.

Three types of Au-rich VMS deposits have been proposed based on common metal associations (Huston and Large, 1989; Hannington et al., 1999): 1) an Au–Zn–Pb–Ag association, in which gold is concentrated towards the top or along the margins of the massive-sulphide lens; 2) an Au–Cu association, where gold is concentrated at the base of the massive-sulphide lens or within the underlying stringer zone; and 3) a pyritic Au group, where gold is concentrated within massive-pyrite zones with low base-metal content.

Gold-rich VMS deposits occur in a variety of submarine volcanic terranes, from mafic bimodal through felsic bimodal to bimodal siliciclastic, in greenstone belts of all ages, typically metamorphosed to greenschist or lower amphibolite facies and intruded by subvolcanic intrusions and dyke-sill complexes. The tectonic setting is commonly inferred to be island arcs, rifted arcs, back-arc basins, or back-arc rifts (Hannington et al., 1999; Huston, 2000).

According to these authors, an association with rifted continental crust and continental margin arc environments may be particularly important for some districts (e.g., Boliden, Eskay Creek). Their host strata are commonly underlain by coeval subvolcanic intrusions and sills or dykes. Consequently, large volumes of

effusive rhyolite and associated felsic pyroclastic rocks (lithic tuffs, crystal tuffs, etc.) and the occurrence of subvolcanic intrusions or dyke swarms of tonalitic to granitic composition (Hannington et al., 1999) are important features of Au-rich VMS deposits.



**Figure 8.1: Schematic illustration of geological setting and hydrothermal alteration associated with Au-rich high-sulphidation VMS hydrothermal systems (from Dubé et al., 2007; modified from Hannington et al., 1999)**

Apophyses developed on oxidized granitoids may be particularly important (Huston, 2000). Areas of transitional subaerial to shallow submarine volcanism are potentially very prospective (Hannington et al., 1999). Shallow-water volcanic complexes can be traced most readily through detailed mapping of volcanic and sedimentary facies (Hannington et al., 1999), and textures indicative of boiling, a process potentially responsible for the elevated gold content, may also be a useful exploration guide (Huston, 2000).

The sulphide mineralogy of the gold-bearing ores is commonly more complex than in traditional Au-poor VMS deposits (Hannington et al., 1999). Sulphide minerals are mainly pyrite, chalcopyrite, sphalerite, pyrrhotite, and galena with a complex assemblage of minor phases including locally significant amounts of bornite, tennantite, sulphosalts, arsenopyrite, mawsonite, and tellurides. As indicated by Hannington et al. (1999), gold occurs mainly as native metal and Au-tellurides in Cu-Au VMS deposits, whereas auriferous, polymetallic (Au-Zn-Pb-Ag) VMS typically contain electrum, which is often Ag- or Hg-rich (Huston et al., 1992). In some deposits, gold is mainly hosted in commonly refractory arsenic-rich



pyrite and arsenopyrite, and is present as submicroscopic inclusions or structurally bound to the crystal lattice (Huston et al., 1992; Larocque et al., 1993, and Dubé et al., 2007). The chemical signature of the ore is dominated by Au, Ag and Cu or Zn with locally high concentrations of As, Sb, Bi, Pb, Se, Te and Hg.

The North and South ore zones at Montauban are associated with disseminated pyrite, sphalerite and chalcopyrite, with cordierite-anthophyllite and quartz-biotite garnet assemblages within quartz-biotite and quartz-sillimanite gneisses (Morin, 1987). In addition, the occurrence of Au- and Ag-rich ore in association with hydrothermally altered, shallow marine felsic volcanic rocks suggests that the Montauban Au-rich deposits may belong to the recently recognized high-sulphidation VMS type (Sillitoe et al., 1996; Hannington et al., 1998; Dubé et al., 2007). Exploration for this type of deposit in the region should therefore concentrated on the recognition of hydrothermally altered rocks, whether or not they are associated with mafic rocks or a significant Pb-Zn ore zone.

The sulphide contents of many of these deposits are sufficient to produce geophysical responses and, owing to the disseminated to massive nature of the sulphides, induced polarization (IP) methods should be the most effective geophysical tools. Nevertheless, prospective gold-rich VMS deposits would likely be highlighted by airborne VTEM survey anomalies, which could then be followed up by detailed ground geophysical methods, such as IP.

## **8.2 Paleotectonic Setting and Ore Remobilization at the Montauban Deposit**

### **8.2.1 Paleotectonic Setting**

The Montauban Group has been attributed to island- or back-arc (e.g., Bernier and MacLean, 1993), and continental rift (e.g., Morin, 1987) paleotectonic settings. By extension, the associated mineral deposits have been interpreted as VMS-type (e.g., Bernier and MacLean, 1993) and SEDEX-type (e.g., Morin, 1987). These conflicting interpretations arose from the opposing views that the wall rock protoliths are dominantly volcanic or sedimentary, respectively.

Observations by Nadeau et al., (1999) support the view of Bernier and MacLean (1993) and demonstrate that the best-preserved part of the Montauban Group is derived chiefly from metamorphosed intermediate to felsic volcanic rocks with minor vesicular basalt. Accordingly, Nadeau et al. (1999) suggests that these rocks were deposited in a relatively shallow marine environment in the late stage of an andesitic to felsic volcanic cycle. This setting is common in mature island-arcs or back-arcs, where VMS deposits are commonly formed.

### **8.2.2 Ore Remobilization**

Gold mineralization at Montauban is thought to have been part of the initial exhalite ore, deposited concurrently with the Zn-Pb-Ag sulphides (Bernier et al., 1987). This deposit is thus potentially a useful location to investigate metal remobilization in Au-bearing massive Zn-Pb sulphides. Because most massive Pb-

Zn deposits form in basinal environments, nearly all deposits that are mined have been metamorphosed and deformed to some degree.

Understanding the factors affecting ore remobilization is clearly important to mining and to exploration proximal to known deposits, because it promotes, in many deposits, localization of larger and sometimes richer volumes of ore material. In some deposits, ore remobilization has transformed an uneconomic deposit into an economic one. Clearly, understanding the processes that cause remobilization allows prediction of metal distribution. Tomkins (2007) investigated aspects of ore remobilization at the Montauban deposit.

There are three possible mechanisms by which ore material can be remobilized after it has formed: mechanical remobilization; hydrothermal dissolution and re-precipitation; and transfer of a sulphide melt (Marshall et al., 2000). According to Tomkins (2007), at Montauban, mechanical remobilization was the most important of the three transfer mechanisms for controlling the distribution of the main commodity, namely the massive Zn–Pb mineralization. This finding is in agreement with research on similarly metamorphosed massive-sulphide deposits reported by many other authors (e.g., Vokes 1971; Friesen et al., 1982; Barnes 1987; Newberry et al., 1993; Marshall et al., 2000). In many of these deposits, as at Montauban, ore body thickening associated with mechanical remobilization has resulted in economic upgrading of the ore. Metamorphic fluids were not effective in significantly remobilizing Zn and Pb. This was in part due to the relatively small volume of fluid generated through metamorphic devolatilization of chlorite, relative to the large volume of Pb and Zn sulphides. In addition, the metamorphic fluids, which in general tend to be low salinity, were sulphur-rich, and these metals dissolve as chloride complexes rather than sulphide complexes (e.g., Hemley et al., 1992). Sulphide melting was not extensive enough to significantly remobilize Zn and Pb, although a very small proportion of Pb was remobilized by this mechanism.

In contrast, the Au and Ag mineralization at Montauban was most strongly affected by a combination of prograde hydrothermal remobilization and partial melting of the ore assemblage, both of which drove migration of these elements into, and probably within, the wall rocks (Tomkins, 2007). These elements are soluble in hydrothermal fluids as sulphide complexes (e.g., Gammons and Barnes 1989; Loucks and Mavrogenes 1999) and are strongly partitioned into sulphide melts (e.g., Tomkins et al., 2004; Sparks and Mavrogenes 2005). Although there is likely to have been some disseminated precious metal mineralization in the wall rocks before metamorphism, these two remobilization mechanisms upgraded the ore in the region of Montauban.

Internally driven prograde metamorphic hydrothermal remobilization only becomes important as the metamorphic grade moves into the amphibolite facies, and probably ceases once metamorphic fluid has been driven out of the system. Muscovite dehydration can proceed without silicate melting at low pressures in the upper amphibolite facies and represents the last stage when internally driven hydrothermal remobilization is possible on the prograde metamorphic path. Externally derived hydrothermal fluid is also unlikely to be

abundant in the upper amphibolite facies as it promotes melting in metasedimentary rocks, which causes H<sub>2</sub>O loss to the melt.

Metamorphic sulphide melting in massive Zn–Pb deposits starts in mid-amphibolite facies and becomes increasingly important as temperature increases. During the initial stages of melting, the proportion of melt is likely to be very low, but at granulite facies, a large enough volume of melt may form for laterally extensive sulphide magma dykes to develop (Tomkins et al., 2007).

## 9. EXPLORATION

In preparing the PEA Report, a review of all available data from historic exploration work completed on the Property was completed. A summary of the historic work is included as Item 6.

In December 2022, ESGold retained Laurentia Exploration to conduct a sampling campaign on the tailings at Notre-Dame-de-Montauban, located approximately 10 km north of Montauban-les-Mines (**Figure 9.1**). A total of thirty-five (35) test pits and trenches totaling 77.44 m, were excavated (**Figure 9-2; Figure 9-3** and **Figure 9-4**). A total of 112 samples, including Blanks and Certified Reference Material (CRM) "standards", were collected and sent to SGS Canada Ltd. ("SGS") laboratory in Quebec City for Au, Ag, Cu, Pb, Zn and multi-element analysis.

Significantly, the Company has enhanced the exploration opportunity at the Notre-Dame-de-Montauban tailings site by using an excavator to successfully sample different area of the tailings to a maximum vertical depth of five (5) metres. This program provided a very good and precise characterization of the tailings site material, and the data were used to calculate a mineral resource estimate.

Material from the test pits was exhumed using a 15-ton excavator. Sample material was collected by scaping along the walls of the pits from bottom to top.



**Figure 9.1: Google Earth map showing the location of the Notre-Dame-de-Montauban tailings site.**

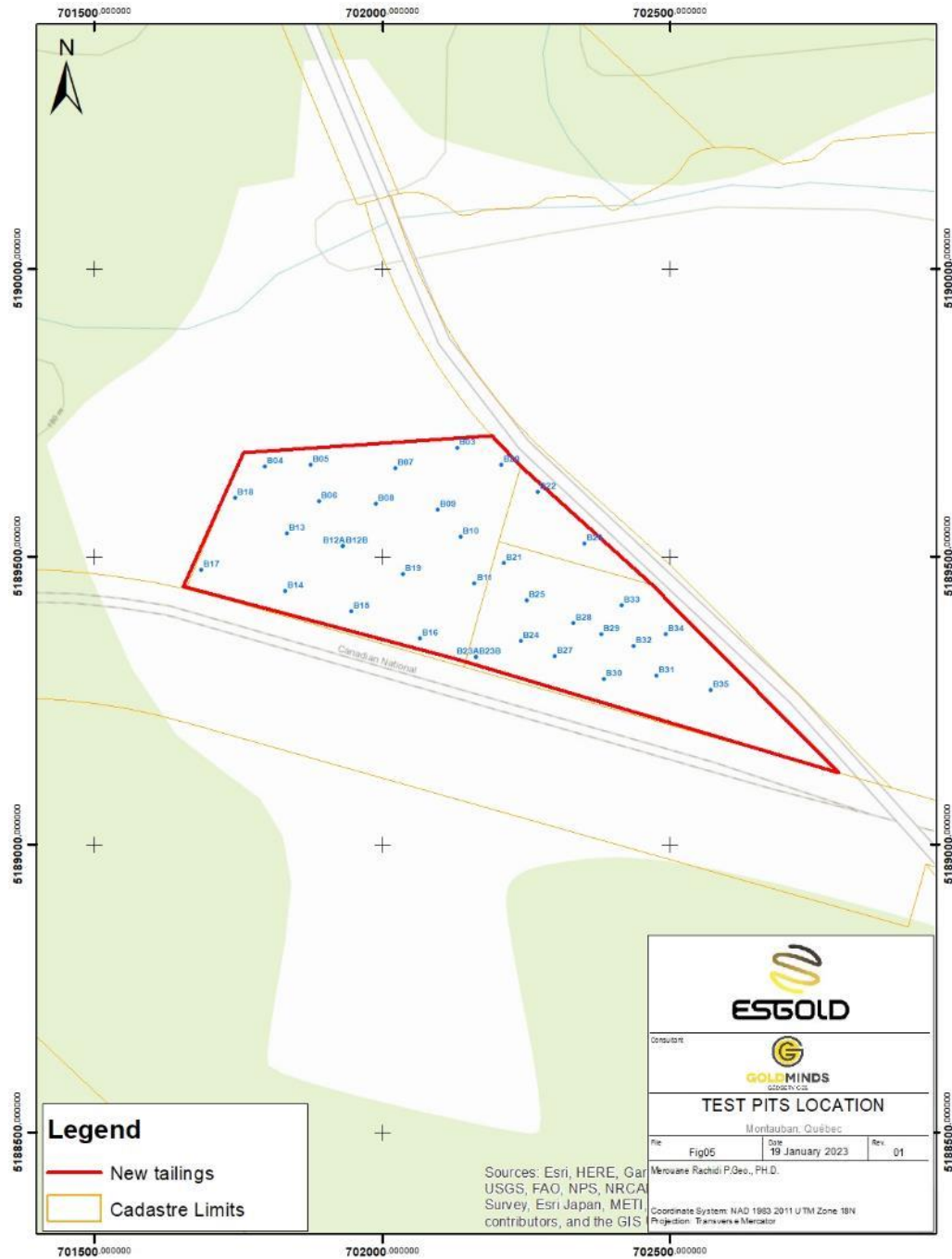


Figure 9.2: Test pit and trench locations; Notre-Dame-de-Montauban tailings site





**Figure 9.3: Typical test pit excavations**



**Figure 9.4: Example of a tailing sample being prepared for shipping to SGS laboratory**



Sampling intervals were selected based on the interpretation of the tailings lithologies.

The purpose of the tailings sampling was to delineate zones of Au and Ag.

The procedure for collecting samples sample was as follows:

- Excavate the test pits and trenches;
- Describe visually the lithology of each test pits;
- Sampling each facies separately;
- Each sample bagged in a plastic bag with a tag number;
- Take a GPS reading of the location of each test pit and trench;
- Blanks and standards tags were inserted into each batch of twenty samples.

A summary of analytical results is presented in **Table 9-1**, **Figure 9-5**, **Figure 9-6** and **Figure 9-7**. The best value for gold was from test pit B33 and graded 5.45 g/t Au over 0.9 m. The best silver value was obtained from test pit B35 and graded 709 g/t Ag over 0.65m.

**Table 9-1: Grade Highlights in g/t**

Trench Name	From	To	Sample Number	Length	Au g/t	Ag g/t	Zn g/t	Cu g/t	Pb g/t
B06	0	0.35	26100	0.35	2.95	170	5 000	410	19 300
B08	0	0.2	26093	0.2	0.6	61	1 010	205	6 640
B12A	0	1	26076	1	1.06	82	1 690	299	8 160
B12B	0	0.35	26080	0.35	0.58	54	977	223	5 230
B15	0	0.25	26066	0.25	1.41	220	4 100	404	26 000
B16	0	0.3	26062	0.3	2.25	169	6 040	1 120	14 100
B17	0	0.3	26058	0.3	0.95	63	8 630	420	5 720
B17	0.3	1.1	26059	0.8	0.53	111	116 000	1 240	9 900
B18	0	0.6	26056	0.6	1.96	215	2 840	474	24 300
B19	0	0.4	26053	0.4	0.64	43,8	820	193	5 630
B23A	0	1	26043	1	1.37	80	19 600	1 360	7 220
B23A	1.6	2.3	26045	0.7	0.76	4,8	211	59	257
B23B	0	1.1	26046	1.1	2.12	148	7 240	841	12 500
B24	0	0.5	26037	0.5	0.74	60	3 500	371	6 040
B24	0.5	1.5	26038	1	1.6	65	59 500	1 770	6 190
B24	1.5	2.5	26039	1	0.86	82	60 900	1 760	8 000
B25	0	0.6	26035	0.6	0.6	73	1 390	276	6 280
B28	0	0.8	26025	0.8	1.74	270	3 440	1 140	18 400
B29	0	1	26020	1	2.29	298	2 880	320	16 500
B31	0	1	26015	1	1.6	176	1 310	434	10 100
B33	0	0.9	26006	0.9	5.45	260	12 400	9 680	9 660
B33	0.9	1.55	26007	0.65	1.41	235	22 100	9 100	8 990
B33	1.55	2.36	26008	0.81	1.43	237	16 900	7 810	7 120
B33	2.36	3.4	26009	1.04	1.31	164	27 300	5 300	5 990
B33	3.4	4	26010	0.6	1.01	127	16 900	4 360	4 410
B34	0	0.96	26004	0.96	1.62	219	982	139	10 300
B35	0	0.65	26001	0.65	3.59	709	2 190	527	22 200

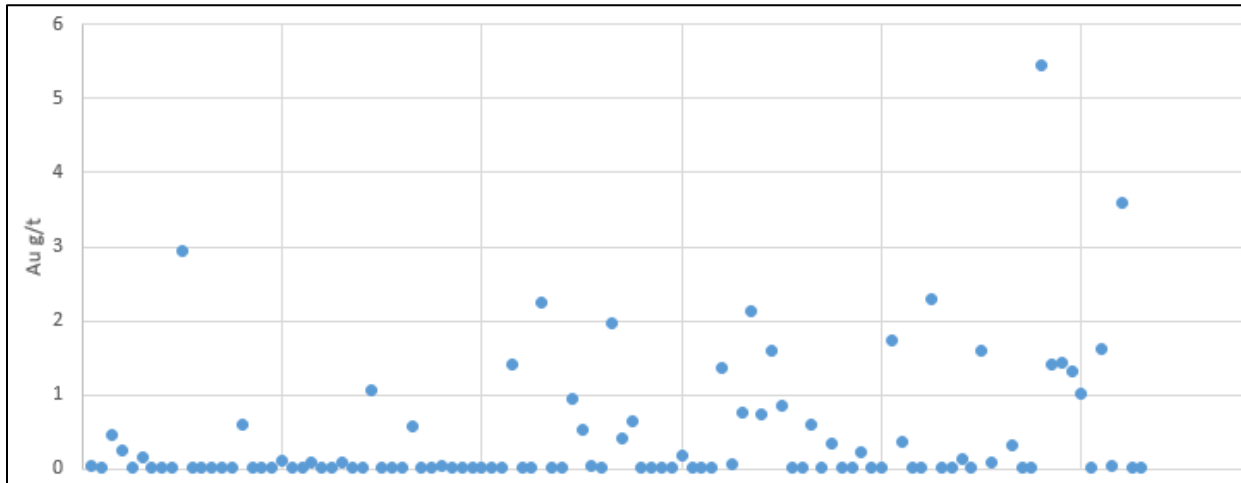


Figure 9.5: Gold assays (in g/t) distribution of the tailing samples

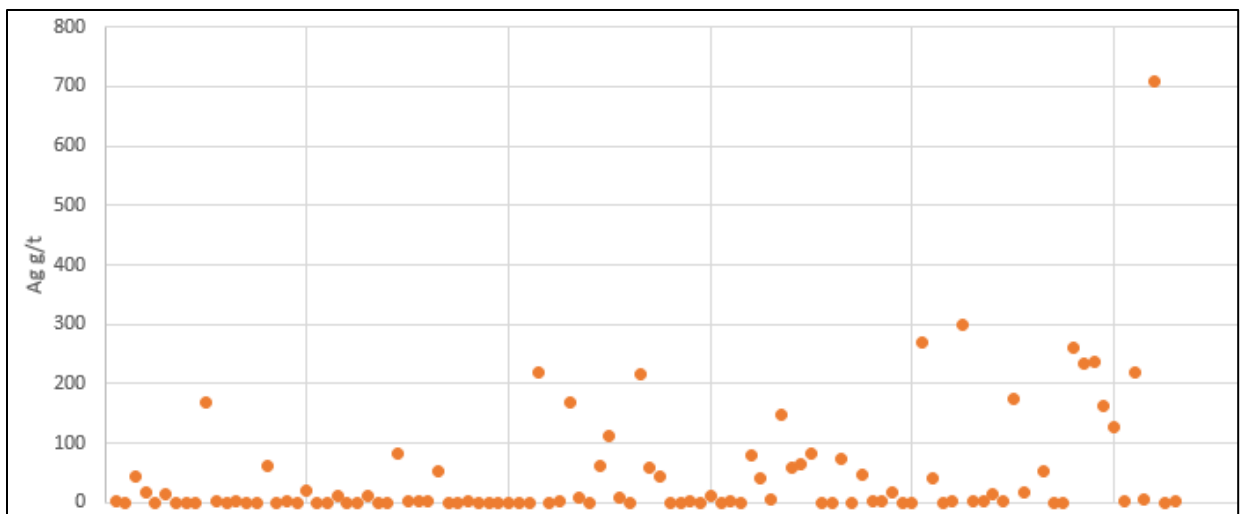
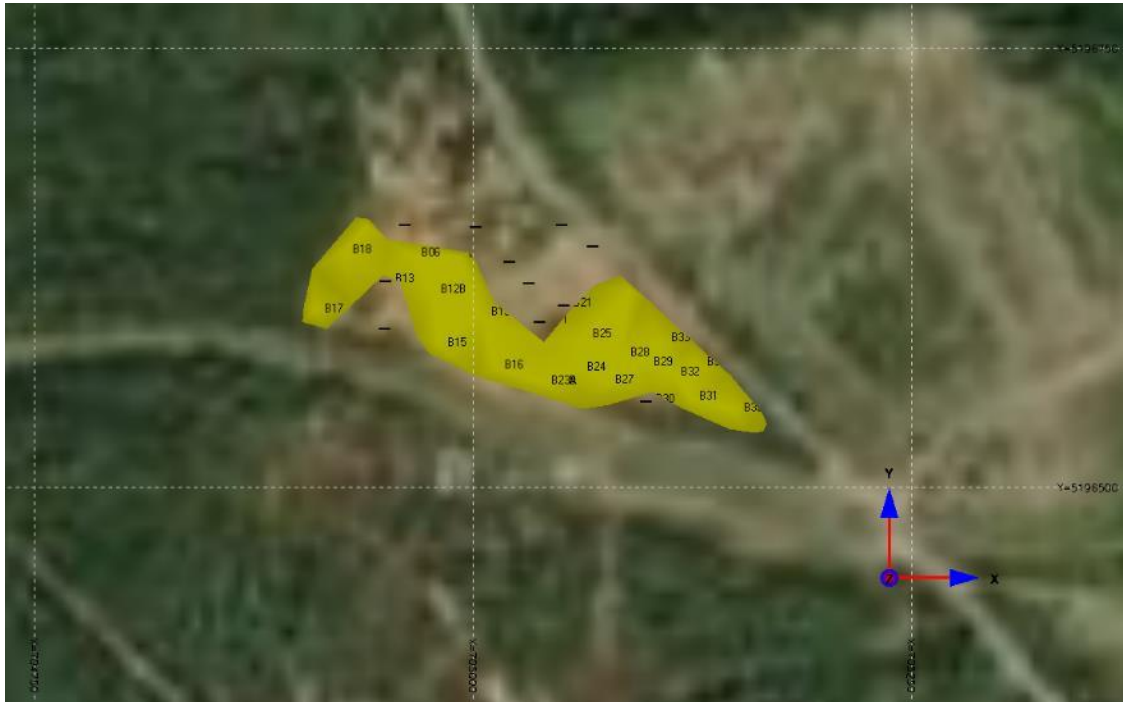


Figure 9.6: Silver assays (in g/t) distribution



**Figure 9.7: Distribution of Au and Ag grade values**

## 10. DRILLING

### 10.1 Drilling Introduction

In February and March of 2022, ESGold conducted a percussion-drilling campaign on the Anacon Lead 1, Anacon Lead 2, Tétrault 1 and Tétrault 2 tailings sites. Drilling was carried out by Earth Drilling Co. Ltd. of Calgary, Alberta, between February 21 and March 25, 2022.

An LS250 Minisonic percussion-type drill-rig was utilized to complete 197 vertical holes with an aggregate core retrieval of 1,090.3 metres and tailings retrieval of 909.85 metres (**Table 10-1**). The drill-rig uses 5-ft rods and collects cored material into a long plastic sausage-like bag.

**Table 10-1: Summary of 2022 Percussion-Drilling Program on the Property**

Site	# Holes (2022)	Metres Drilled	Tailings Intersected (m)
Anacon Lead 1	89	695.00	643.75
Anacon Lead 2	30	103.30	83.40
Tétrault 1	31	136.60	45.60
Tétrault 2	47	155.40	137.10
<b>Totals</b>	<b>197</b>	<b>1090.30</b>	<b>909.85</b>

### 10.2 Drilling Methodology

Collar locations were established at intersections of roughly 25 m spaced grid lines using a handheld GPS. Precise collar locations were later surveyed with a real-time-kinematic (RTK) type GPS instrument. An RTK-type GPS receiver senses the normal signals from the Global Navigation Satellite Systems along with a correction stream to achieve 1 cm positional accuracy. The elevation of the collars were not accurate and were adjusted using Government LiDAR surface data.

Drill-hole site coordinates and attitudes are tabulated in **Table 10-2**.

Spatial locations are shown in **Figure 10.1**, **Figure 10.2**, **Figure 10.3**, and **Figure 10.4**.

**Table 10-2: Summary of 2022 Drilling - Montauban Gold Project (RTK coordinates are UTM NAD83 Zone 18)**

Tailings Site	Hole ID	RTK Easting (m)	RTK Northing (m)	RTK Elevation (m)	Dip (°)	Hole Length (m)	Tailings Intersected (m)
Anacon Lead 1	MT22-001	701769.108	5190073.485	151.36	90	13.50	11.25
Anacon Lead 1	MT22-002	701779.507	5190066.603	153.54	90	12.00	10.50
Anacon Lead 1	MT22-003	701798.995	5190075.159	153.95	90	12.00	12.00
Anacon Lead 1	MT22-004	701798.285	5190052.024	154.07	90	6.75	6.75
Anacon Lead 1	MT22-005	701771.551	5190052.088	153.75	90	12.00	9.75

Tailings Site	Hole ID	RTK Easting (m)	RTK Northing (m)	RTK Elevation (m)	Dip (°)	Hole Length (m)	Tailings Intersected (m)
Anacon Lead 1	MT22-006	701781.760	5190025.957	159.76	90	12.90	9.00
Anacon Lead 1	MT22-007	701760.197	5190028.490	153.65	90	13.50	9.40
Anacon Lead 1	MT22-008	701772.849	5190002.754	154.80	90	12.75	9.00
Anacon Lead 1	MT22-009	701790.993	5190001.439	154.43	90	6.75	6.00
Anacon Lead 1	MT22-010	701747.726	5190002.527	154.87	90	10.50	8.70
Anacon Lead 1	MT22-011	701747.551	5189976.185	156.00	90	20.00	9.50
Anacon Lead 1	MT22-012	701774.646	5189980.948	154.03	90	9.00	9.00
Anacon Lead 1	MT22-013	701773.627	5189950.448	152.93	90	10.00	10.00
Anacon Lead 1	MT22-014	701747.453	5189954.076	152.51	90	10.50	9.90
Anacon Lead 1	MT22-015	701724.000	5189932.000	160.60	90	9.00	8.20
Anacon Lead 1	MT22-016	701722.660	5189900.599	160.60	90	9.00	9.00
Anacon Lead 1	MT22-017	701722.486	5189874.219	160.36	90	13.50	13.50
Anacon Lead 1	MT22-018	701725.830	5189858.082	160.67	90	15.00	10.50
Anacon Lead 1	MT22-019	701758.927	5189933.742	154.50	90	10.50	10.50
Anacon Lead 1	MT22-020	701752.020	5189905.150	159.08	90	6.10	6.10
Anacon Lead 1	MT22-021	701750.563	5189879.892	167.16	90	6.00	6.00
Anacon Lead 1	MT22-022	701710.202	5189805.269	159.65	90	9.00	9.00
Anacon Lead 1	MT22-023	701700.880	5189779.246	160.07	90	6.70	6.70
Anacon Lead 1	MT22-024	701697.800	5189756.332	163.62	90	6.70	6.70
Anacon Lead 1	MT22-025	701695.823	5189731.613	164.84	90	9.00	9.00
Anacon Lead 1	MT22-026	701693.589	5189706.963	163.99	90	10.50	10.50
Anacon Lead 1	MT22-027	701697.105	5189678.167	165.69	90	13.50	13.50
Anacon Lead 1	MT22-028	701700.459	5189655.622	167.63	90	15.00	15.00
Anacon Lead 1	MT22-029	701720.253	5189630.946	167.98	90	9.00	9.00
Anacon Lead 1	MT22-030	701721.911	5189652.264	169.63	90	6.20	6.20
Anacon Lead 1	MT22-031	701719.808	5189675.884	166.38	90	6.00	6.00
Anacon Lead 1	MT22-032	701723.020	5189703.773	163.23	90	6.00	6.00
Anacon Lead 1	MT22-033	701725.278	5189730.138	162.42	90	7.50	7.50
Anacon Lead 1	MT22-034	701749.000	5189629.000	170.93	90	6.00	7.50
Anacon Lead 1	MT22-035	701746.408	5189651.578	170.93	90	6.00	6.00
Anacon Lead 1	MT22-036	701750.000	5189683.000	170.93	90	6.00	6.00
Anacon Lead 1	MT22-037	701746.651	5189679.137	169.69	90	6.00	5.30
Anacon Lead 1	MT22-038	701749.151	5189705.995	168.85	90	3.00	3.00
Anacon Lead 1	MT22-039	701748.489	5189753.812	166.97	90	3.00	3.00
Anacon Lead 1	MT22-040	701749.000	5189791.000	168.85	90	3.00	3.00
Anacon Lead 1	MT22-041	701758.345	5189805.415	165.22	90	1.50	1.50
Anacon Lead 1	MT22-042	701742.212	5189830.879	160.61	90	7.50	7.50
Anacon Lead 1	MT22-043	701734.122	5189808.805	160.69	90	7.50	7.50



Tailings Site	Hole ID	RTK Easting (m)	RTK Northing (m)	RTK Elevation (m)	Dip (°)	Hole Length (m)	Tailings Intersected (m)
Anacon Lead 1	MT22-044	701720.671	5189778.710	162.54	90	9.00	6.00
Anacon Lead 1	MT22-045	701723.930	5189750.605	163.48	90	9.00	9.00
Anacon Lead 1	MT22-046	701768.177	5189628.622	179.18	90	7.50	7.50
Anacon Lead 1	MT22-047	701772.442	5189652.621	175.16	90	6.00	6.00
Anacon Lead 1	MT22-048	701772.562	5189678.830	171.01	90	3.00	3.00
Anacon Lead 1	MT22-049	701766.917	5189702.019	166.44	90	4.50	4.00
Anacon Lead 1	MT22-050	701770.585	5189734.362	165.65	90	3.00	3.00
Anacon Lead 1	MT22-051	701771.496	5189750.428	167.88	90	3.00	2.30
Anacon Lead 1	MT22-052	701794.984	5189631.875	171.50	90	4.50	3.70
Anacon Lead 1	MT22-053	701822.350	5189584.952	175.07	90	4.50	4.20
Anacon Lead 1	MT22-054	701799.628	5189603.530	173.13	90	4.50	3.00
Anacon Lead 1	MT22-055	701773.760	5189604.777	172.87	90	7.50	7.30
Anacon Lead 1	MT22-056	701747.521	5189606.177	169.78	90	9.00	8.30
Anacon Lead 1	MT22-057	701670.635	5189603.188	164.09	90	4.50	4.50
Anacon Lead 1	MT22-058	701698.605	5189604.254	166.99	90	12.00	11.80
Anacon Lead 1	MT22-059	701719.659	5189605.211	166.77	90	7.50	7.50
Anacon Lead 1	MT22-060	701697.333	5189629.533	166.17	90	13.70	13.30
Anacon Lead 1	MT22-061	701677.872	5189655.891	164.89	90	7.50	7.50
Anacon Lead 1	MT22-062	701673.442	5189629.180	165.86	90	4.50	4.50
Anacon Lead 1	MT22-063	701676.300	5189579.356	163.17	90	9.00	9.00
Anacon Lead 1	MT22-064	701696.256	5189577.713	165.16	90	12.00	12.00
Anacon Lead 1	MT22-065	701722.194	5189577.123	167.22	90	6.00	5.90
Anacon Lead 1	MT22-066	701747.429	5189577.770	169.42	90	6.00	6.00
Anacon Lead 1	MT22-067	701768.738	5189582.629	171.64	90	6.00	6.00
Anacon Lead 1	MT22-068	701790.490	5189581.507	175.94	90	3.00	3.00
Anacon Lead 1	MT22-069	701794.065	5189554.365	175.08	90	4.50	4.50
Anacon Lead 1	MT22-070	701773.495	5189556.710	174.08	90	4.50	4.50
Anacon Lead 1	MT22-071	701749.043	5189557.801	170.39	90	6.00	6.00
Anacon Lead 1	MT22-072	701721.794	5189555.848	167.10	90	6.00	6.00
Anacon Lead 1	MT22-073	701697.695	5189552.017	167.73	90	9.00	9.00
Anacon Lead 1	MT22-074	701673.842	5189551.170	166.02	90	9.00	8.80
Anacon Lead 1	MT22-075	701672.669	5189528.428	166.05	90	7.50	7.50
Anacon Lead 1	MT22-076	701697.254	5189528.108	167.27	90	9.00	9.00
Anacon Lead 1	MT22-077	701719.297	5189528.237	168.12	90	4.50	4.00
Anacon Lead 1	MT22-078	701672.778	5189503.691	166.11	90	7.50	7.00
Anacon Lead 1	MT22-079	701697.706	5189506.822	167.71	90	9.00	9.00
Anacon Lead 1	MT22-080	701717.225	5189505.734	169.73	90	3.00	2.80
Anacon Lead 1	MT22-081	701691.840	5189478.890	168.25	90	9.00	9.00

Tailings Site	Hole ID	RTK Easting (m)	RTK Northing (m)	RTK Elevation (m)	Dip (°)	Hole Length (m)	Tailings Intersected (m)
Anacon Lead 1	MT22-082	701670.678	5189680.641	165.11	90	4.50	3.30
Anacon Lead 1	MT22-083	701672.347	5189704.207	164.05	90	3.00	3.00
Anacon Lead 1	MT22-084	701699.731	5189832.989	163.22	90	6.00	5.60
Anacon Lead 1	MT22-085	701706.528	5189851.835	159.38	90	7.50	6.00
Anacon Lead 1	MT22-086	701773.784	5190101.684	154.39	90	7.50	7.00
Anacon Lead 1	MT22-087	701790.635	5190149.117	151.63	90	9.00	9.00
Anacon Lead 1	MT22-088	701802.316	5190124.810	150.04	90	9.00	9.00
Anacon Lead 1	MT22-089	701800.737	5190102.977	152.64	90	7.50	5.50
Tétreault 2	MT22-090	702583.773	5188929.045	147.70	90	7.50	7.50
Tétreault 2	MT22-091	702588.041	5188909.932	146.25	90	3.00	3.00
Tétreault 2	MT22-092	702613.699	5188916.542	147.65	90	4.50	3.80
Tétreault 2	MT22-093	702550.183	5188927.379	152.45	90	3.00	2.20
Tétreault 2	MT22-094	702517.737	5188922.846	155.59	90	0.30	0.20
Tétreault 2	MT22-095	702458.530	5188929.066	159.45	90	3.00	3.00
Tétreault 2	MT22-096	702460.629	5188949.038	159.53	90	4.50	4.50
Tétreault 2	MT22-097	702442.157	5188969.860	159.95	90	3.00	3.00
Tétreault 2	MT22-098	702422.186	5188969.796	160.01	90	4.50	3.00
Tétreault 2	MT22-099	702404.402	5188971.123	160.41	90	4.50	3.00
Tétreault 2	MT22-100	702404.272	5188946.747	161.86	90	3.00	3.00
Tétreault 2	MT22-101	702423.383	5188945.629	160.40	90	4.50	3.00
Tétreault 2	MT22-102	702440.564	5188950.075	160.74	90	4.50	3.00
Tétreault 2	MT22-103	702440.510	5188928.327	161.46	90	5.00	4.50
Tétreault 2	MT22-104	702420.993	5188930.644	162.50	90	4.50	4.00
Tétreault 2	MT22-105	702452.370	5188904.476	160.57	90	4.50	4.30
Tétreault 2	MT22-106	702430.459	5188902.666	161.56	90	4.50	4.50
Tétreault 2	MT22-107	702408.657	5188913.355	161.66	90	4.50	4.50
Tétreault 2	MT22-108	702381.337	5188923.700	162.05	90	3.00	2.00
Tétreault 2	MT22-109	702362.546	5188947.344	163.25	90	2.00	1.50
Tétreault 2	MT22-110	702366.196	5188962.475	162.77	90	3.00	3.00
Tétreault 2	MT22-111	702366.172	5188978.022	164.42	90	1.50	1.50
Tétreault 2	MT22-112	702340.318	5188927.365	166.72	90	1.50	1.50
Tétreault 2	MT22-113	702345.293	5188878.622	161.41	90	3.50	3.00
Tétreault 2	MT22-114	702349.625	5188860.961	161.56	90	4.50	4.50
Tétreault 2	MT22-115	702380.000	5188951.000	170.43	90	1.50	1.50
Tétreault 2	MT22-116	702307.415	5188931.633	170.43	90	1.50	1.50
Tétreault 2	MT22-117	702284.129	5188944.764	171.45	90	1.50	1.50
Tétreault 2	MT22-118	702272.099	5188970.773	170.69	90	1.50	1.50
Tétreault 2	MT22-119	702258.457	5188998.519	170.23	90	3.00	3.00

Tailings Site	Hole ID	RTK Easting (m)	RTK Northing (m)	RTK Elevation (m)	Dip (°)	Hole Length (m)	Tailings Intersected (m)
Tétreault 2	MT22-120	702282.090	5188982.942	170.60	90	1.50	1.50
Tétreault 2	MT22-121	702276.184	5188998.623	171.30	90	3.00	3.00
Tétreault 2	MT22-122	702266.069	5189018.309	171.21	90	3.00	3.00
Tétreault 2	MT22-123	702251.884	5189038.946	166.80	90	6.00	6.00
Tétreault 2	MT22-124	702233.682	5189107.288	153.77	90	1.50	0.30
Tétreault 2	MT22-125	702221.817	5189123.870	151.04	90	3.00	3.00
Tétreault 2	MT22-126	702239.617	5189135.499	151.14	90	6.00	6.00
Tétreault 2	MT22-127	702206.307	5189120.475	154.40	90	3.00	3.00
Tétreault 2	MT22-128	702215.000	5189107.000	154.40	90	3.00	3.00
Tétreault 2	MT22-129	702725.031	5188923.054	135.95	90	3.00	3.00
Tétreault 2	MT22-130	702739.752	5188905.889	134.40	90	3.00	1.50
Tétreault 2	MT22-131	702747.142	5188894.841	133.29	90	1.50	1.50
Tétreault 2	MT22-132	702752.670	5188885.334	133.08	90	3.00	3.00
Tétreault 2	MT22-133	702758.146	5188870.298	132.08	90	2.20	1.30
Tétreault 2	MT22-134	702758.779	5188930.021	137.09	90	2.20	1.50
Tétreault 2	MT22-135	702705.429	5188875.837	135.90	90	5.20	5.00
Tétreault 2	MT22-136	702716.885	5188866.799	134.74	90	4.50	1.50
Anacon Lead 2	MT22-137	702242.186	5189233.116	146.82	90	4.50	3.70
Anacon Lead 2	MT22-138	702234.444	5189251.648	147.44	90	4.50	2.60
Anacon Lead 2	MT22-139	702237.097	5189290.111	150.77	90	4.50	2.20
Anacon Lead 2	MT22-140	702221.229	5189289.096	150.66	90	1.50	0.70
Anacon Lead 2	MT22-141	702216.844	5189316.825	151.29	90	1.50	0.70
Anacon Lead 2	MT22-142	702217.920	5189362.295	152.56	90	2.20	1.50
Anacon Lead 2	MT22-143	702227.680	5189403.073	152.39	90	1.50	0.90
Anacon Lead 2	MT22-144	702244.607	5189388.809	151.95	90	12.00	12.00
Anacon Lead 2	MT22-145	702247.020	5189368.577	151.71	90	9.00	9.00
Anacon Lead 2	MT22-146	702247.115	5189410.789	153.67	90	12.00	12.00
Anacon Lead 2	MT22-147	702247.591	5189432.370	156.09	90	1.50	1.50
Anacon Lead 2	MT22-148	702246.204	5189450.664	157.37	90	7.50	7.50
Anacon Lead 2	MT22-149	702198.528	5189348.824	152.28	90	9.00	1.50
Anacon Lead 2	MT22-150	702168.805	5189322.155	152.59	90	1.50	0.70
Anacon Lead 2	MT22-151	702140.504	5189314.459	152.56	90	1.50	1.50
Anacon Lead 2	MT22-152	702104.120	5189320.674	155.60	90	3.00	3.00
Anacon Lead 2	MT22-153	702080.769	5189329.565	158.15	90	0.20	0.00
Anacon Lead 2	MT22-154	702096.527	5189350.531	158.03	90	4.50	4.00
Anacon Lead 2	MT22-155	702109.901	5189358.212	157.18	90	1.50	1.50
Anacon Lead 2	MT22-156	702121.284	5189338.673	156.01	90	3.00	3.00
Anacon Lead 2	MT22-157	702084.019	5189371.169	158.66	90	1.50	1.50

Tailings Site	Hole ID	RTK Easting (m)	RTK Northing (m)	RTK Elevation (m)	Dip (°)	Hole Length (m)	Tailings Intersected (m)
Anacon Lead 2	MT22-158	702097.826	5189374.096	157.87	90	3.00	3.00
Anacon Lead 2	MT22-159	702084.832	5189353.450	157.74	90	1.50	1.50
Anacon Lead 2	MT22-160	702217.269	5189255.152	141.67	90	1.50	1.50
Anacon Lead 2	MT22-161	702200.383	5189272.191	142.05	90	1.50	0.00
Anacon Lead 2	MT22-162	702134.473	5189278.256	144.43	90	1.50	1.50
Anacon Lead 2	MT22-163	702137.130	5189296.923	145.93	90	1.50	1.50
Anacon Lead 2	MT22-164	701695.907	5189951.858	173.48	90	1.50	0.00
Anacon Lead 2	MT22-165	702128.537	5189308.188	147.58	90	1.80	1.80
Anacon Lead 2	MT22-166	702115.091	5189296.900	147.77	90	1.60	1.60
Tétreault 1	MT22-167	702467.985	5189309.601	133.17	90	9.00	1.50
Tétreault 1	MT22-168	702454.965	5189329.726	129.89	90	12.00	1.50
Tétreault 1	MT22-169	702472.603	5189349.370	129.50	90	1.50	1.50
Tétreault 1	MT22-170	702496.946	5189359.963	128.29	90	4.50	1.50
Tétreault 1	MT22-171	702513.741	5189373.963	128.42	90	1.60	1.60
Tétreault 1	MT22-172	702531.423	5189381.781	128.07	90	4.50	0.80
Tétreault 1	MT22-173	702560.104	5189379.077	128.00	90	4.50	1.20
Tétreault 1	MT22-174	702559.746	5189399.581	130.49	90	6.00	3.00
Tétreault 1	MT22-175	702450.463	5189354.170	132.09	90	3.00	1.50
Tétreault 1	MT22-176	702451.291	5189373.366	132.66	90	4.50	1.50
Tétreault 1	MT22-177	702477.191	5189381.763	131.92	90	4.50	1.50
Tétreault 1	MT22-178	702501.262	5189394.041	131.54	90	6.00	3.00
Tétreault 1	MT22-179	702511.719	5189422.091	131.10	90	6.00	1.50
Tétreault 1	MT22-180	702541.595	5189426.790	132.27	90	4.50	1.50
Tétreault 1	MT22-181	702546.045	5189441.961	131.87	90	1.50	1.00
Tétreault 1	MT22-182	702523.210	5189441.791	131.90	90	4.50	0.00
Tétreault 1	MT22-183	702509.858	5189461.196	132.31	90	4.50	1.50
Tétreault 1	MT22-184	702491.755	5189474.287	131.26	90	4.50	1.50
Tétreault 1	MT22-185	702485.099	5189440.733	130.98	90	4.50	1.50
Tétreault 1	MT22-186	702481.436	5189421.410	131.96	90	4.50	1.50
Tétreault 1	MT22-187	702461.531	5189422.122	132.73	90	4.50	1.50
Tétreault 1	MT22-188	702438.021	5189422.801	133.79	90	4.50	1.50
Tétreault 1	MT22-189	702430.000	5189401.318	133.95	90	4.50	1.50
Tétreault 1	MT22-190	702425.636	5189378.887	133.64	90	4.50	1.50
Tétreault 1	MT22-191	702429.020	5189353.804	132.94	90	4.50	1.50
Tétreault 1	MT22-192	702399.950	5189374.672	134.74	90	3.00	1.50
Tétreault 1	MT22-193	702408.404	5189354.769	133.55	90	4.50	1.50
Tétreault 1	MT22-194	702410.771	5189331.806	132.87	90	3.00	1.50
Tétreault 1	MT22-195	702401.929	5189310.031	133.34	90	3.00	1.50

<b>Tailings Site</b>	<b>Hole ID</b>	<b>RTK Easting (m)</b>	<b>RTK Northing (m)</b>	<b>RTK Elevation (m)</b>	<b>Dip (°)</b>	<b>Hole Length (m)</b>	<b>Tailings Intersected (m)</b>
Tétreault 1	MT22-196	702422.125	5189304.008	130.97	90	3.00	1.50
Tétreault 1	MT22-197	702467.830	5189451.949	132.34	90	1.50	0.50



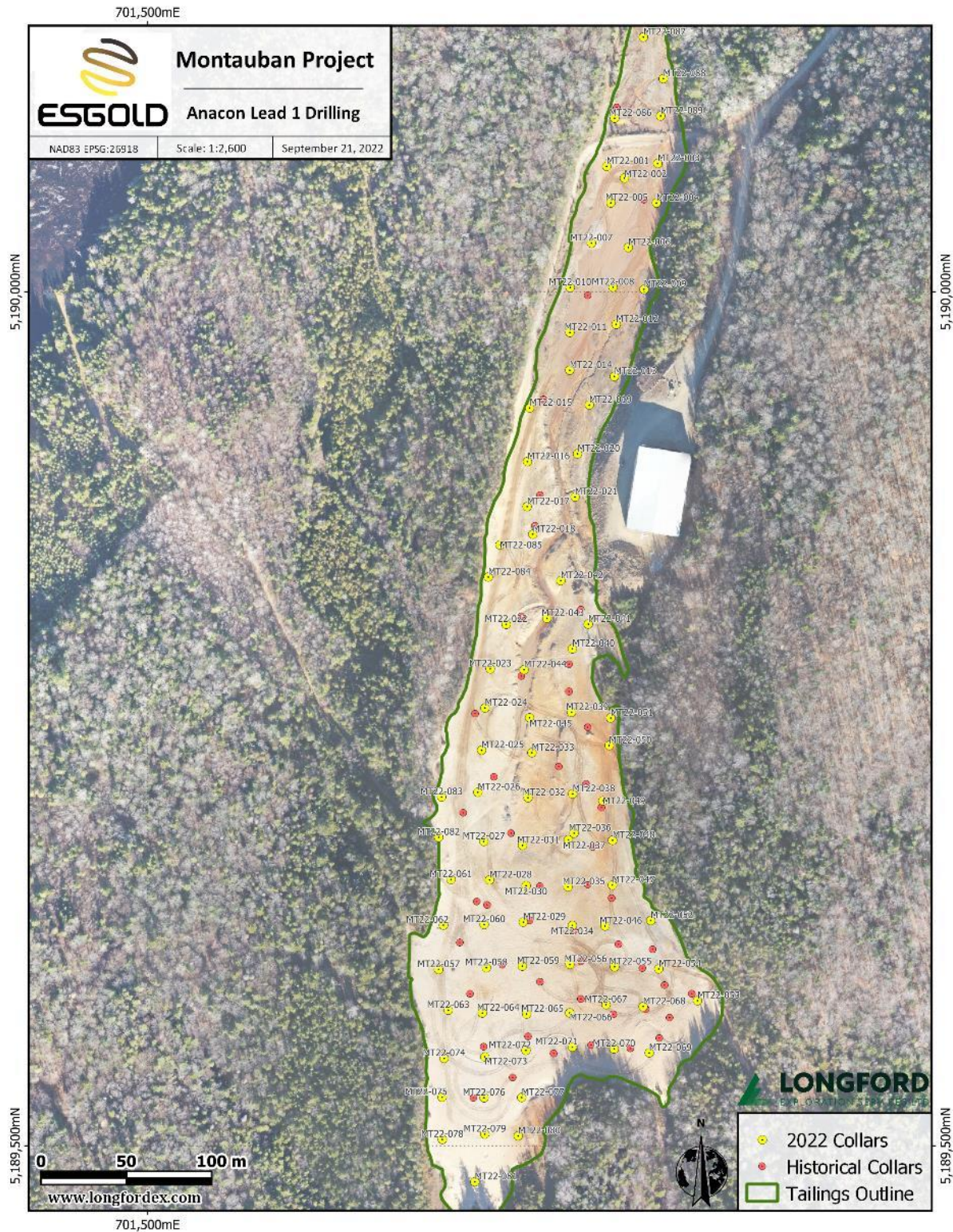


Figure 10.1: Longford drill sites - Anacon Lead 1 tailings site



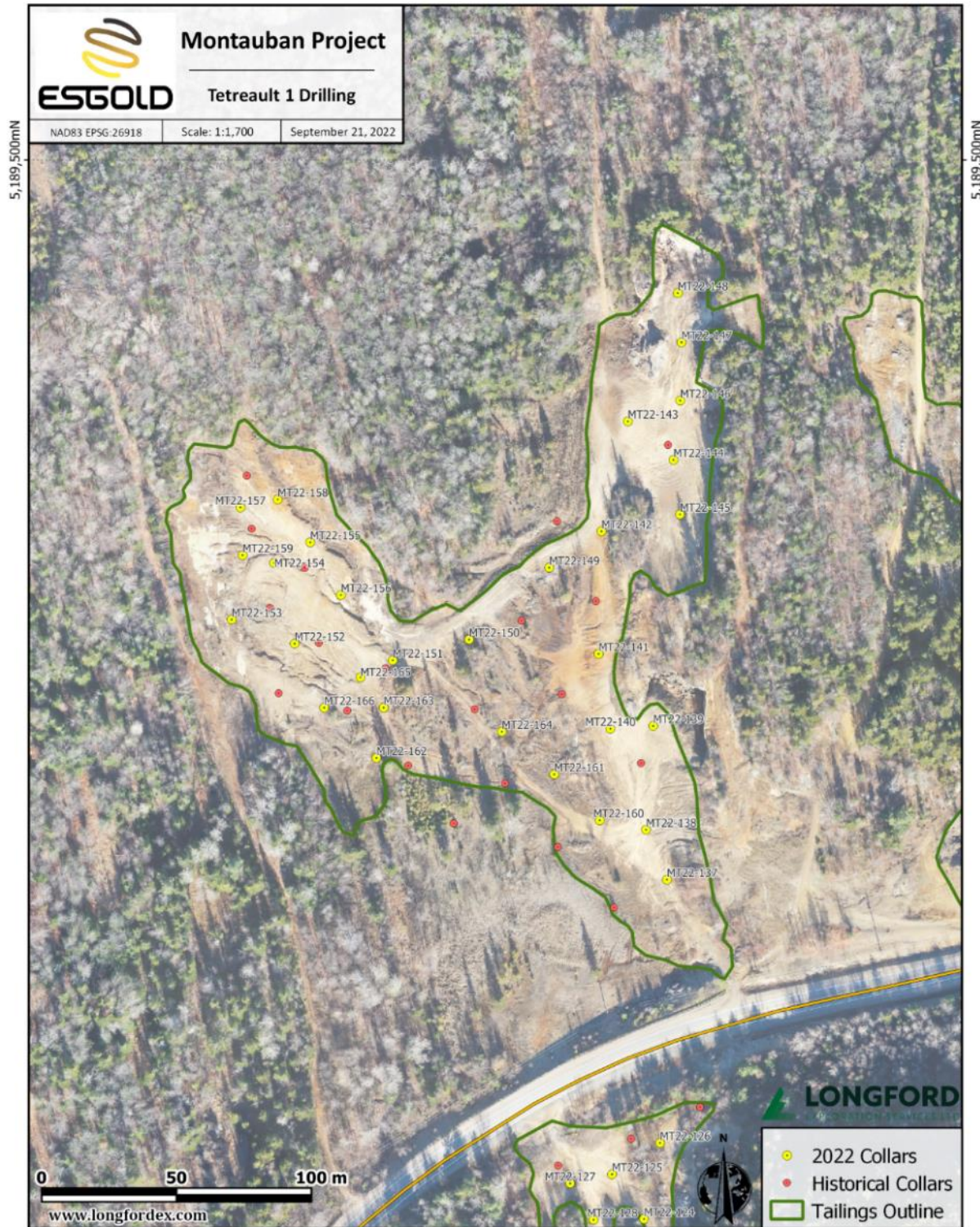


Figure 10.2: Longford drill sites - Anacon Lead 2 tailings site



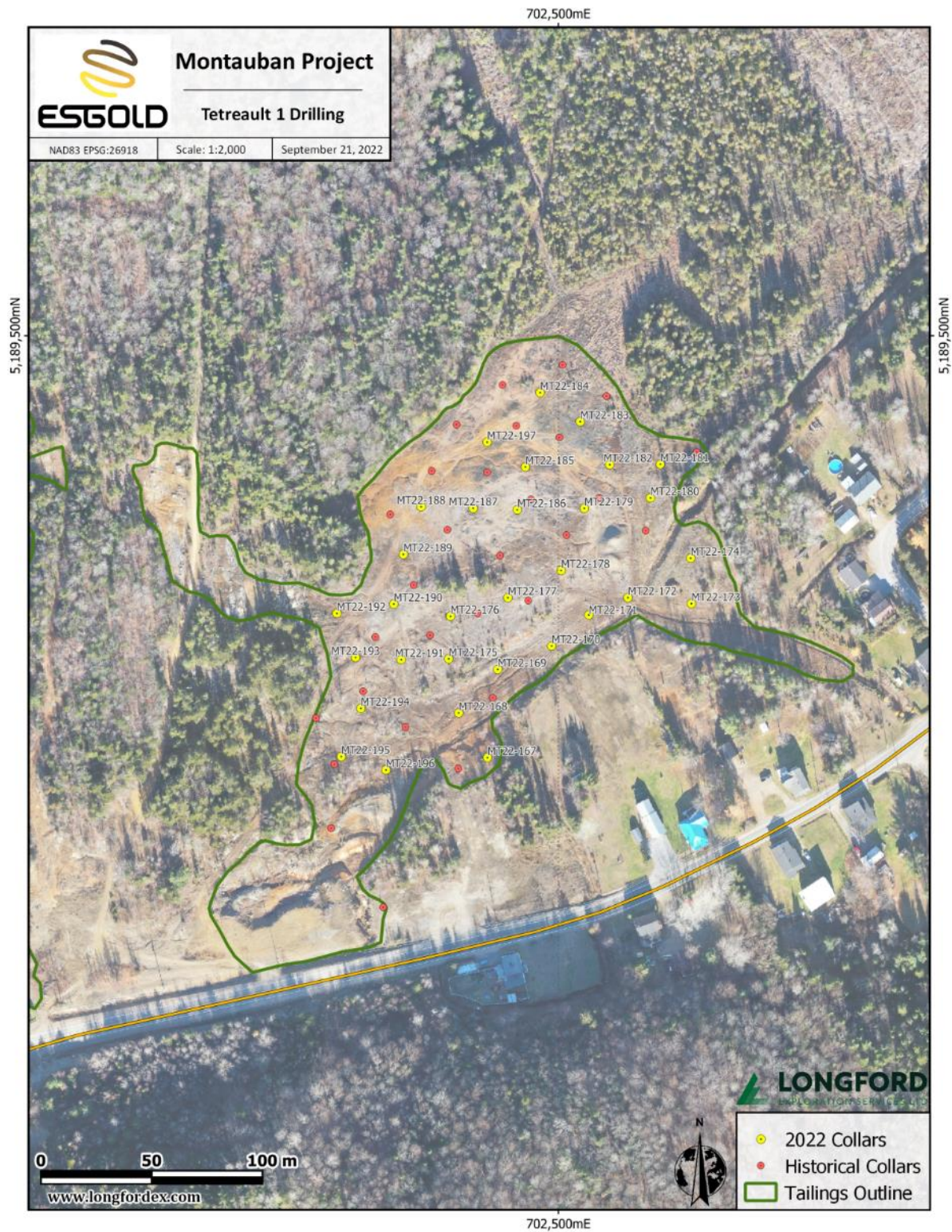


Figure 10.3: Longford drill sites - Tétréault 1 tailings site



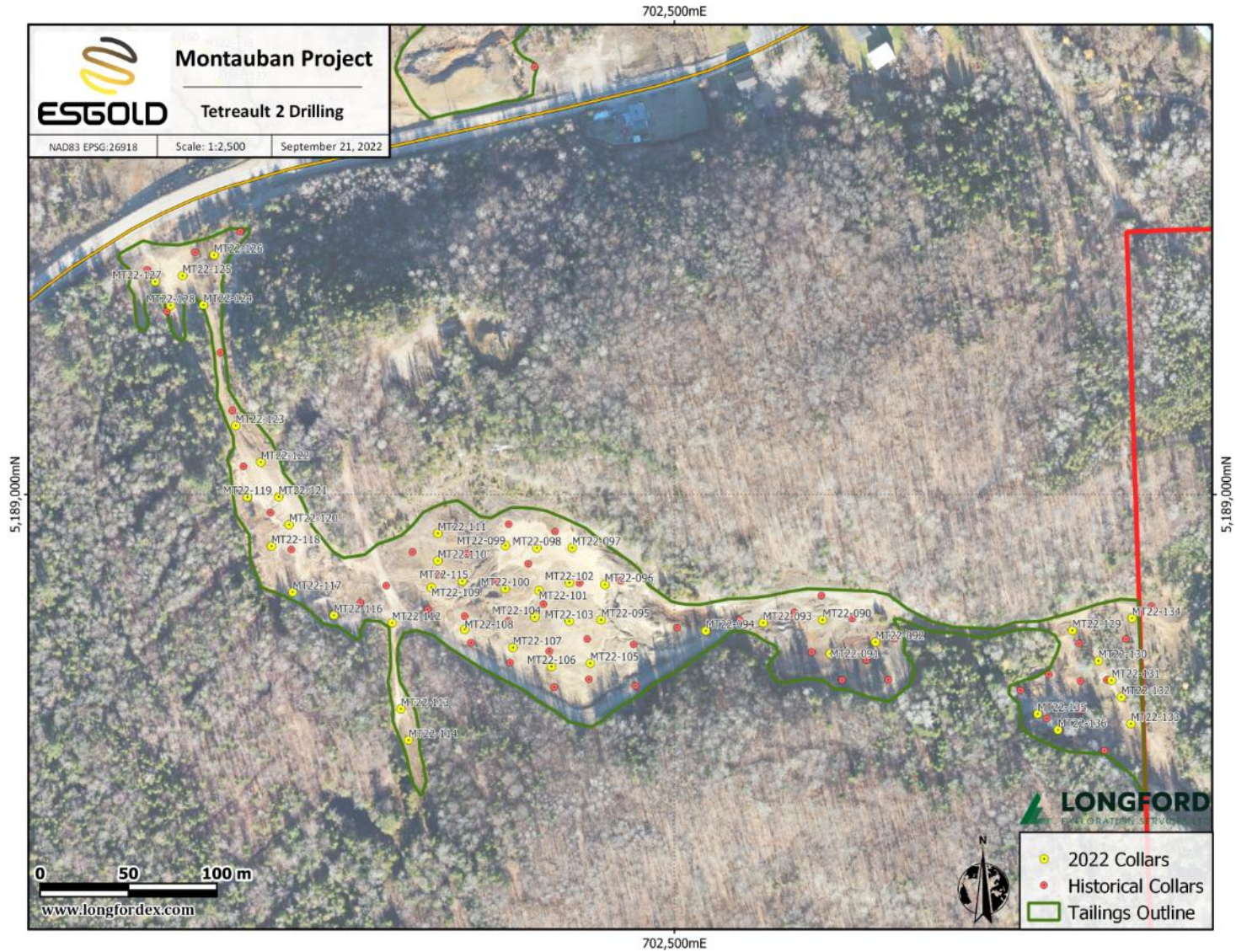


Figure 10.4: Longford drill sites - Tétrault 2 tailings site

### 10.3 Drilling Results

The average of the gold (Au), silver (Ag), lead (Pb) and zinc (Zn) grade of tailings intersections per tailing site are summarized in **Table 10-3**. **Table 10-4** shows the mineralized intervals with elevated gold grades.

**Table 10-3: Average Au, Ag, Pb, Zn Grades From 2022 Drilling**

Site	# Holes	Tailings (m)	Avg Au (g/t)	Avg Ag (g/t)	Avg Pb (%)	Avg Zn (%)
Anacon Lead 1	89	695.05	0.28	26.23	0.156	0.555
Anacon Lead 2	30	103.30	0.30	24.45	0.198	1.211
Tétreault 1	31	136.60	0.42	22.78	0.223	1.267
Tétreault 2	47	155.40	0.72	33.16	0.131	0.511
<b>Totals</b>	<b>197</b>	<b>1009.35</b>				

**Table 10-4: Mineralized Intervals with High-grade Au**

Hole Name	From	To	Number	length (m)	Au (g/t)	Ag (g/t)	Zn ppm	Cu ppm	Pb ppm
MT22-035	3	4.5	4629755	1.5	1.17	64.2	7690	449	3640
MT22-047	4.5	6	4629808	1.5	2.22	83.2	9420	530	6090
MT22-048	0	1.5	4629809	1.5	2.96	63.6	2720	363	7690
MT22-050	0	1.5	4629816	1.5	1.28	41.2	3440	470	2150
MT22-067	3	4.5	4629915	1.5	3.37	76.9	6210	497	2740
MT22-067	4.5	6	4629916	1.5	1.12	50.3	5490	374	2180
MT22-069	3	4.5	4629922	1.5	1.14	71.6	7170	448	3770
MT22-090	0	1.5	4629038	1.5	1.44	49.5	6550	258	1375
MT22-093	0	1.5	4629051	1.5	1.395	59.1	5470	306	1565
MT22-093	1.5	2.2	4629052	0.7	2.02	72.8	5990	262	1790
MT22-097	0	1.5	4629061	1.5	1.055	44.4	5170	284	1325
MT22-098	0	1.5	4629064	1.5	1.69	83.2	12200	425	1505
MT22-098	1.5	3	4629065	1.5	2.21	49.8	23500	549	1030
MT22-099	1.5	3	4629068	1.5	2.01	43.8	20900	531	975
MT22-100	1.5	3	4629072	1.5	1.605	30.6	2500	215	880
MT22-101	0	1.5	4629073	1.5	1.415	56.5	6910	336	1745
MT22-101	1.5	3	4629074	1.5	1.625	39.5	4140	168.5	1150
MT22-102	0	1.5	4629077	1.5	1.885	44.4	4870	235	1295
MT22-103	1.5	3	4629083	1.5	1.035	44.2	3790	185.5	1525
MT22-105	1.5	3	4629092	1.5	1.055	43.1	5490	286	1840
MT22-107	1.5	3	4629099	1.5	3.04	63.5	6540	262	1435
MT22-108	1.5	2	4629103	0.5	1.58	61.9	5680	203	1095

Hole Name	From	To	Number	length (m)	Au (g/t)	Ag (g/t)	Zn ppm	Cu ppm	Pb ppm
MT22-108	2	3	4629104	1	1.055	36	4050	129.5	870
MT22-110	0	1.5	4629107	1.5	1.615	45.6	4400	206	940
MT22-112	0	1.5	4629111	1.5	1.985	37.3	2070	197.5	1140
MT22-113	0	1.5	4629112	1.5	1.415	73.8	4480	260	1555
MT22-114	0	1.5	4629115	1.5	1.505	71.9	3480	285	1725
MT22-115	0	1.5	4629118	1.5	1.16	31.5	3280	135	733
MT22-132	1.5	3	4629153	1.5	1.005	59.2	5470	221	1325
MT22-133	0	1.3	4629154	1.5	1.84	58.8	3820	286	1535
MT22-133	1.3	1.5	4629155	0.2	1.315	29.3	3080	177.5	879
MT22-139	3	4	4629181	1	1.775	81.6	47200	821	10450
MT22-140	0	0.7	4629183	0.7	1.15	59.7	46600	1425	6350
MT22-146	4.5	6	4629211	1.5	1.315	100	4780	302	1370
MT22-167	0	1.5	4629256	1.5	3.66	74.7	1425	191	5390
MT22-171	0	0.7	4629261	0.7	1.145	45.2	17000	696	4890
MT22-172	0	0.8	4629263	0.8	1.04	49.4	19100	633	5190
MT22-196	0	1.5	4629291	1.5	3.67	66.5	18800	645	7120
MT22-197	0	0.5	4629292	0.5	1.285	70.9	98300	1370	7660

#### 10.4 Drilling Interpretation

Data obtained from the 2022 drilling program corroborates the observations and results of the 2018 drilling and shows that the Anacon Lead 2 tailings comprise an upper layer of medium-grained brown sand approximately 3.0 metres thick, and a lower layer of medium-grained grey sand, up to 9.0 metres thick. These tailings were deposited on a base composed of humus and plants.

The Anacon Lead 2 tailings have a maximum measured thickness of 12.0 metres (holes MT22-144 and MT22-146).

The Tétrault 1 tailings comprise an upper layer of medium-grained brown sand and a maximum measured thickness of 12.0 metres (hole MT22-168). These tailings were deposited on a base composed of natural sandstone.

The Tétrault 2 tailings site is subdivided into the North, East, and Central sectors:

- The North Sector (holes MT22-117 to MT22-128) is composed of a medium-grained sand layers up to 6.0 metres thick (holes MT22-123 and MT22-126). All of the 2022 drill-holes ended in tailings material;
- Tailings in the East Sector (holes MT22-129 to MT22-136) comprise an upper layer of medium-grained brown sand underlain by a layer of medium-grained grey sand. The maximum measured thickness of the East Sector tailings was 5.0 metres (hole MT22-135);



- the Central Sector is subdivided into two parts.
  - the eastern part of the Central Sector (holes MT22-90 to MT22-107) is composed of an upper layer of medium-grained brown sand, overlying a layer of medium-grained grey sand. These tailings were deposited on a base composed of humus and plants ("soil"). The maximum measured thickness of the east-central sector tailings was 7.5 metres (hole MT22-90).
  - the western part of the Central Sector (holes MT22-108 to MT22-116) comprises a layer of mainly medium-grained brown sand that is up to 4.5 metres thick (hole MT22-114). All but 3 holes drilled in this area ended in tailings material.

The 2022 drilling program indicates that the stratigraphy of the Anacon Lead 1, Anacon Lead 2, Tétreault 1, and Tétreault 2 tailing sites are similar, generally consisting of a top layer of medium-grained brown sand, probably representing the results of oxidation, in sharp contact with a lower layer of less oxidized medium-grained grey sand.

## 10.5 Conclusions

It is the Authors' opinion that the drilling was conducted in a professional manner using industry best practices. There are no drilling, sampling or recovery factors that would materially impact the accuracy and reliability of the sample results.

## **11. SAMPLE PREPARATION, ANALYSES AND SECURITY**

### **11.1 Sampling Approach and Methodology**

Samples obtained during the 2022 drilling program were sent to ALS Laboratories Ltd in Montreal, Quebec ("ALS") for analysis.

Drilling collar coordinates are reported as x,y,z values in UTM NAD 83 Z18. Drill samples were initially collected as 1.0 m to 1.5 m intervals, and later as 1.5 m.

Sample booklets were filled using the measured FROM-TO sample definition. Paper sample tags with three identification parts were used; Part 1 stayed in the booklet, Part 2 was placed in the sample bag for the lab, and Part 3 was attached in the other half sample stored at the Montauban site.

The cored material was brought from the field to a logging facility where the 5 ft long plastic sausages were split open for description. Each half sample was labelled with drillhole number, sample number and the down-hole FROM-TO metreage with a permanent black marker. The degree of oxidation was noted as well as the depth at which the tailings transition to either a humus or clay substrate. Samples were generally taken in 1.5m intervals. Half of each sampled interval was dispatched to ALS, whereas the other half was securely stored on site for future reference. A series of standards, blanks and duplicates were added to the sequence at every tenth sample.

The stored reference samples were noted to be in good condition when visited by Claude Duplessis and Merouane Rachidi of GMG on September 14, 2022.

### **11.2 Sample Preparation**

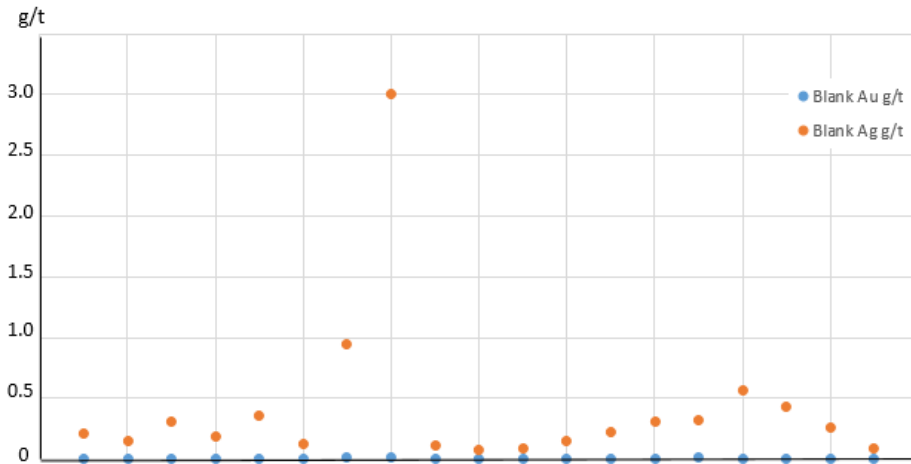
All samples from the 2022 tailings drill campaign were sent to ALS, which is ISO 9001:2015 accredited. All samples were weighed, dried and split with a riffle splitter and then crushed to 85% passing a 200-mesh screen. A 30 g subsample was analyzed for gold with a fire assay and atomic absorption finish and a 0.75 g subsample was analyzed for 48 elements by four acid digestion with an ICP-MS finish. Overlimits were analyzed with a four-acid digestion and ICP-AES finish.

#### **11.2.1 Relation of issuer to Sample Analysis**

Longford designed the drilling program and supervised field data collection, sample preparation, and shipping of samples to ALS. Both Longford and ALS are independent of ESGold.

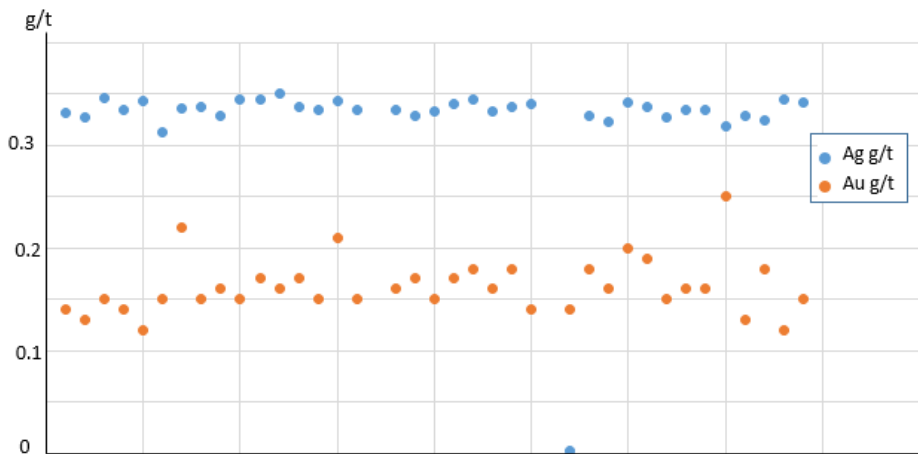
### 11.3 Quality Control and Quality Assurance (“QA/QC”)

QA/QC samples were inserted along with the collected drill-core interval samples. Generally, for each batch of twenty (20) samples, a blank and CRM standard were inserted into the sample stream (**Figure 11-1**).



**Figure 11.1: Distribution of blanks assays, Au g/t and Ag g/t**

A total of 19 blank samples were inserted and consisted of coarse white quartz sand from large bags purchased at a hardware store (Figure 11.1 and Figure 11.2).

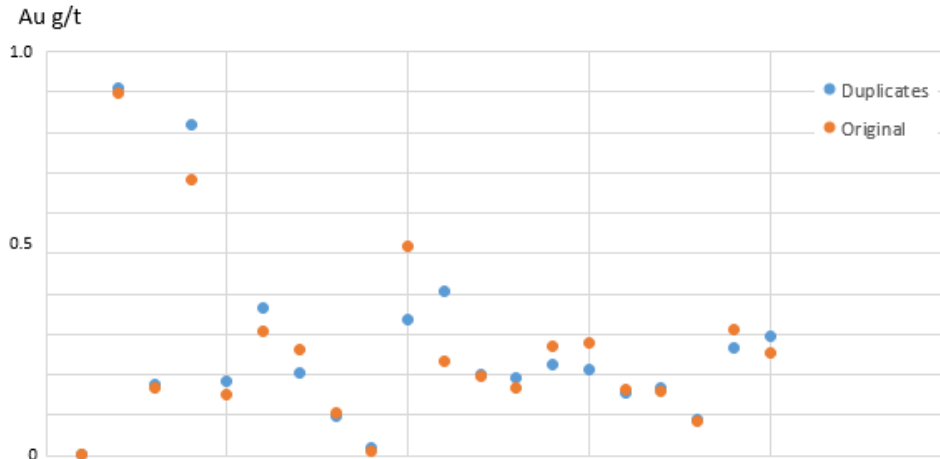


**Figure 11.2: Distribution of standards, Au (g/t) and Ag (g/t)**

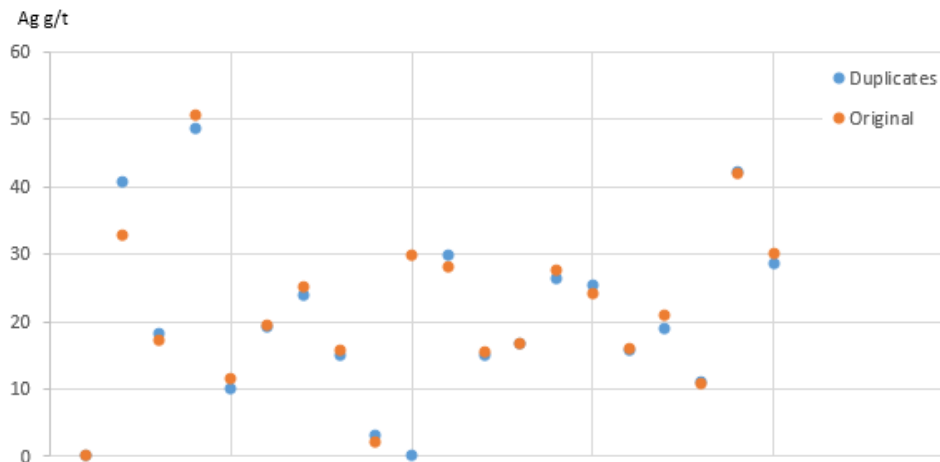
The integration of blank and standard samples verified the accuracy and precision of the ALS results.

Duplicate samples consisted of the second half of a particular drill sample interval using the next sample number (for example, sample number 110 is the duplicate

of drill sample number 109). A total of 20 duplicate samples were inserted along the drill sample definition during the 2022 drilling campaign (**Figure 11.3** and **Figure 11.4**).



**Figure 11.3: Duplicates samples versus original samples, Au g/t**



**Figure 11.4: Duplicates samples versus original samples, Ag g/t**

**Figure 11.3** and **Figure 11.4** show that sample and duplicate values are quite similar, and no abnormal values were detected. The slope of the regression lines and the correlation coefficient is very close to unity which indicates a good reproducibility.

GMG did not visit the ALS laboratory in Vancouver BC but it has a reliable industry reputation and work was completed in a professional manner. The results from the combination of blanks, standards, field duplicates and the ALS's internal QA/QC met the quality criteria, indicating ESGold can rely on these values for the 2022 sample program.

#### **11.4 Summary**

Sample preparation, analytical and security procedures, employed by ESGold are considered by the Author to have been appropriate and adequate for the scope of the Report. There is no evidence of bias in ALS's QA/QC results that would be considered to have a material effect on the analytical results. The resultant assay data obtained from the 2022 sampling program is considered reliable for the purpose of the PEA Report.



## 12. DATA VERIFICATION

The drillhole database (the "DHDB") used in the PEA Report was compiled from data obtained from Longford and from MRB & Associates, who produced the previous technical report on the Montauban tailings project in April 11, 2019 (the "2019 MRE"). The DHDB is composed of 352 holes totalling 1,654.04 m, and 35 test pits/trenches totalling 75.14 m.

Not all the drill collars in the DHDB have been surveyed, and the locations of some drill holes were located approximately using a hand-held GPS. The drill hole elevations in the DHDB were modified by GMG using a digital elevation model (DEM) uploaded from the web site of the Ministère des Forêts, de la Faune et des Parcs du Québec.

On September 14, 2022, Merouane Rachidi and Claude Duplessis of GMG, visited the Property and the facility used during the drilling programs to store the core samples (**Figure 12.1**). Jean-Yves Therien, the CEO of ESGold, was present to guide and answer questions about the Project.



**Figure 12.1: The Anacon Lead 1 tailings site**

### 12.1 Data base

The files containing the drillhole data were received in Microsoft Excel format. The Authors reviewed all database and technical reports. In addition, the GMG team conducted its own site visit and sampling activities to better evaluate some drilling data.

M. Rachidi and C. Duplessis collected check-samples for independent analytical validation of drill core samples obtained during the 2022 drilling program and surface sampling.

The GMG team conducted verification on the DHDB. Verifications were carried out on drill hole locations and elevation information. All the collars elevation were modified to fit with the DEM.

The Authors are of the opinion that the data used for the current Mineral Resource Estimate (the “2023 MRE”) are of suitable quality and can be used for the 2023 MRE.

## 12.2 Site Inspection and Data Verification

A field visit to the Property was carried out by M. Rachidi and C. Duplessis in September 14, 2022 where they collected samples from the retained sample material of the 2022 drilling program (**Figure 12.2**). A total of twenty (20) drill - interval samples (**Figure 12.2**) and fourteen (14) surface samples (**Figure 12.3** and **Figure 12-5**) were sent to SGS in Québec City for analysis.

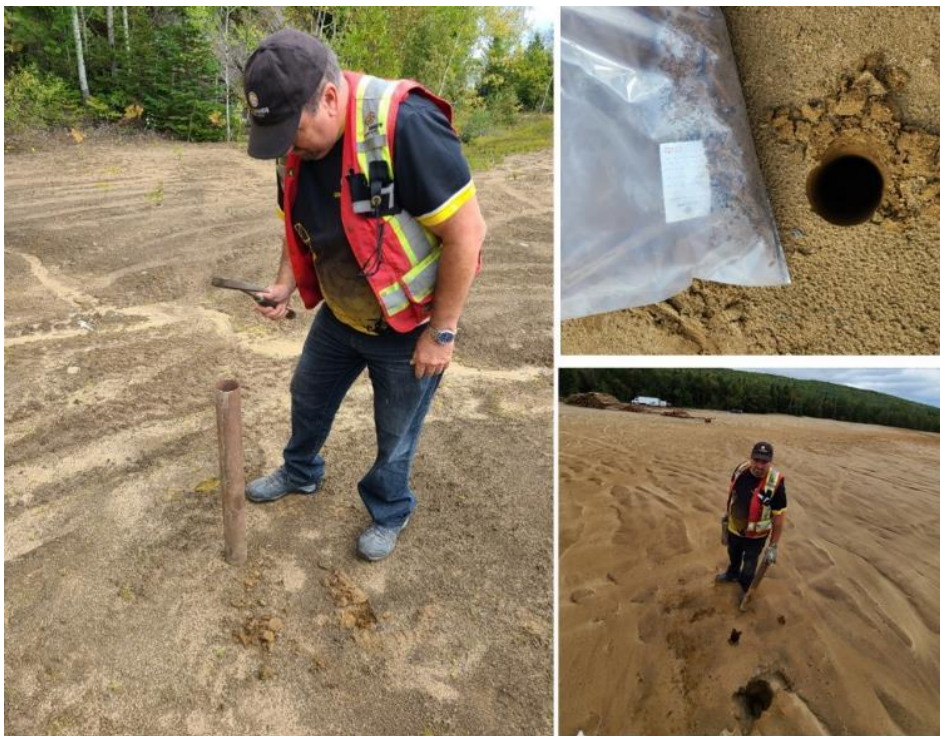


**Figure 12.2: Photo of the retained half-samples from the 2022 drilling program at the sample-storage facility during the site visit.**

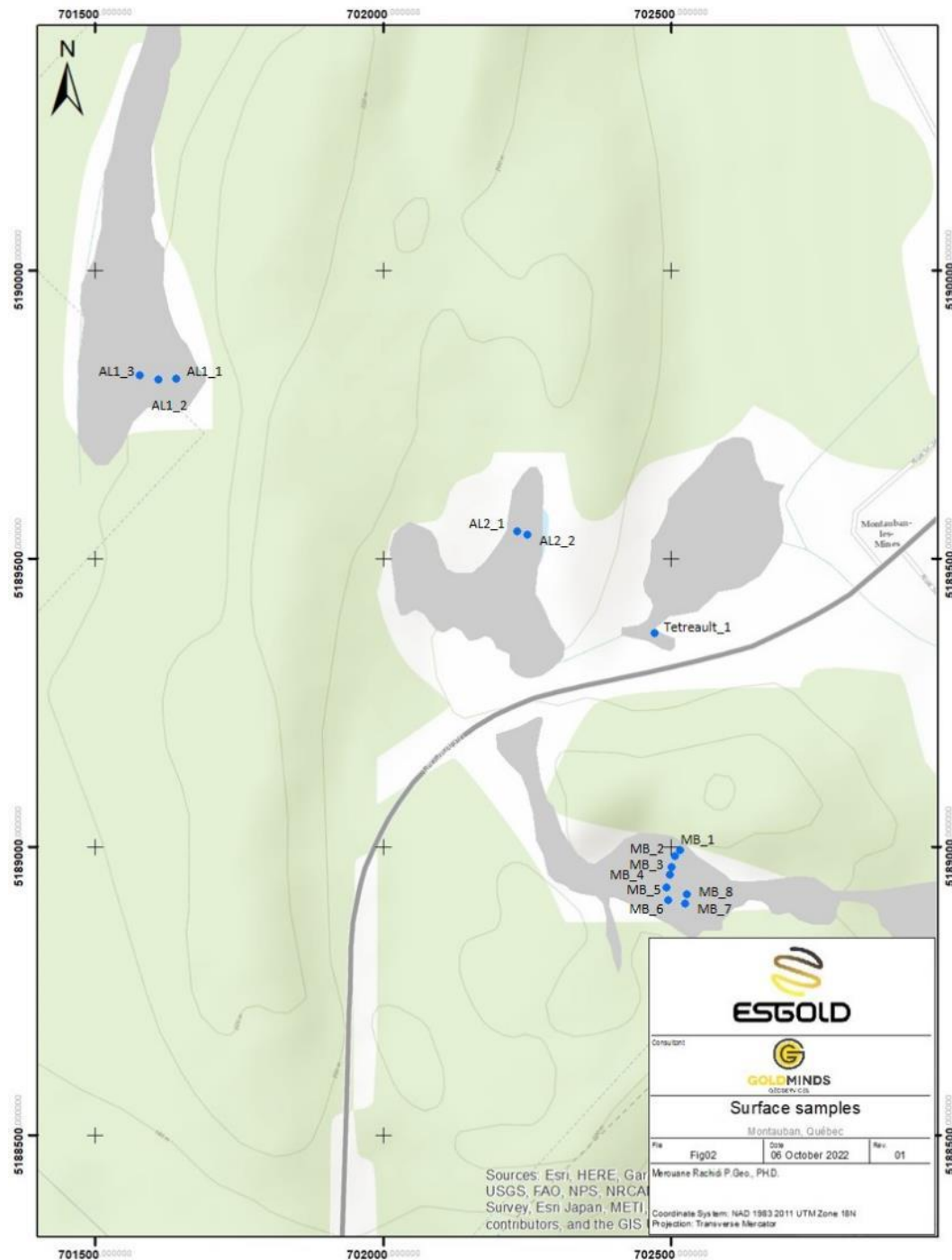




**Figure 12.3: Locations of the drill-holes that were resampled**



**Figure 12.4: Surface sample collection from the Montauban tailings sites**



**Figure 12.5: The location of the independent surface samples collected during the site visit.**

Results of the original and resampled analytical results are tabulated for comparison in **Table 12-1**.

**Table 12-1: The Original Analytical Results Versus the Independent Resampled Core Samples**

Interval with original assays							Intervals resampled during the site visit		
Hole Name	From	To	Sample Number	Length	Au g/t	Ag g/t	Duplicate (GMG)	Au g/t	Ag g/t
MT22-022	0	1.5	4629663	1.5	0.385	28.3	25 773	0.73	29.4
MT22-168	0	1.5	4629257	1.5	0.902	34.5	25 774	1.29	47.4
MT22-001	6	7.5	4629505	1.5	0.49	17.85	25 775	0.2	29.7
MT22-037	0	1.5	4629762	1.5	0.911	34.2	25 776	0.43	31.3
MT22-167	0	1.5	4629256	1.5	3.66	74.7	25 777	4.87	95.2
MT22-171	0	0.7	4629261	0.7	1.145	45.2	25 778	1.24	46.9
MT22-067	3	4.5	4629915	1.5	3.37	76.9	25 779	0.92	71.2
MT22-100	1.5	3	4629072	1.5	1.605	30.6	25 780	1.96	31.7
MT22-069	3	4.5	4629922	1.5	1.14	71.6	25 781	0.87	89.9
MT22-101	0	1.5	4629073	1.5	1.415	56.5	25 782	1.47	56.9
MT22-024	3	4.5	4629677	1.5	0.389	36.5	25 783	0.66	37.3
MT22-146	1.5	3	4629208	1.5	0.944	14.2	25 784	0.25	15.8
MT22-101	1.5	3	4629074	1.5	1.625	39.5	25 785	1.57	36.5
MT22-146	4.5	6	4629211	1.5	1.315	100	25 786	1.21	111
MT22-030	6	6.2	4629731	0.2	0.661	22.4	25 787	0.61	23.4
MT22-146	3	4.5	4629209	1.5	0.994	100	25 788	1.18	133
MT22-098	0	1.5	4629064	1.5	1.69	83.2	25 789	1.39	51.6
MT22-098	1.5	3	4629065	1.5	2.21	49.8	25 790	2.33	51
MT22-067	4.5	6	4629916	1.5	1.12	50.3	25 791	0.58	48.7
MT22-046	3	4.5	4629802	1.5	0.899	93.8	25 792	3.4	98.3

The verification samples were collected independently of ESGold, kept secure and dropped by M. Duplessis at SGS in Québec city.

Once dried, the samples were passed through a 20-mesh sieve to break up any agglomerates, homogenized and a 150 g sub-sample taken for head assay for Au and Ag, and ICP-Scan for six samples (29751, 29753, 29757, 29760, 25765 and 25769). Each 150 g sub-sample will be pulverized to 85% less than 75 µm and submitted for Au and Ag assays. Au assay by Fire Assay with Atomic Absorptions Spectrometry (AAS) finish, reporting limits 0.02-200000 ppm for Au and Ag assay by 4-acid digest AAS, reporting limits of 1-1000 ppm.

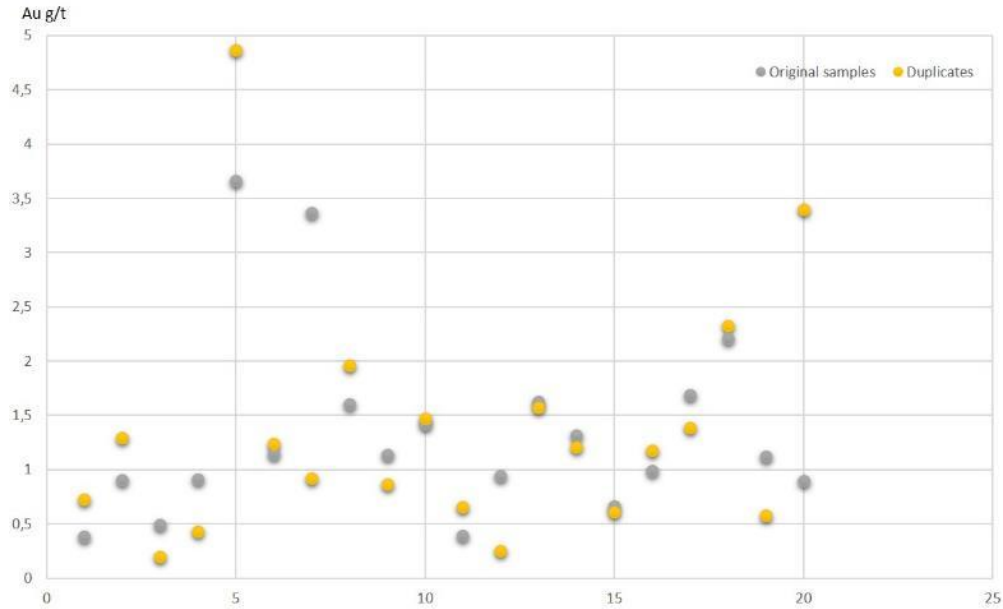
Five of the samples were submitted for strong acid digest ICP-AES by 4-acid digest 30-element scan includes: Ag, Al, As, Ba, Be, Bi, Ca, Cd, Co, Cr, Cu, Fe, K, Li, Mg, Mn, Mo, Na, Ni, P, Pb, Sb, Se, Sn, Sr, Ti, Tl, V, Y, and Zn with detection limits as presented in the table below (**Table 12-2**).

**Table 12-2: Detection limits ICP-AES SGS laboratory**

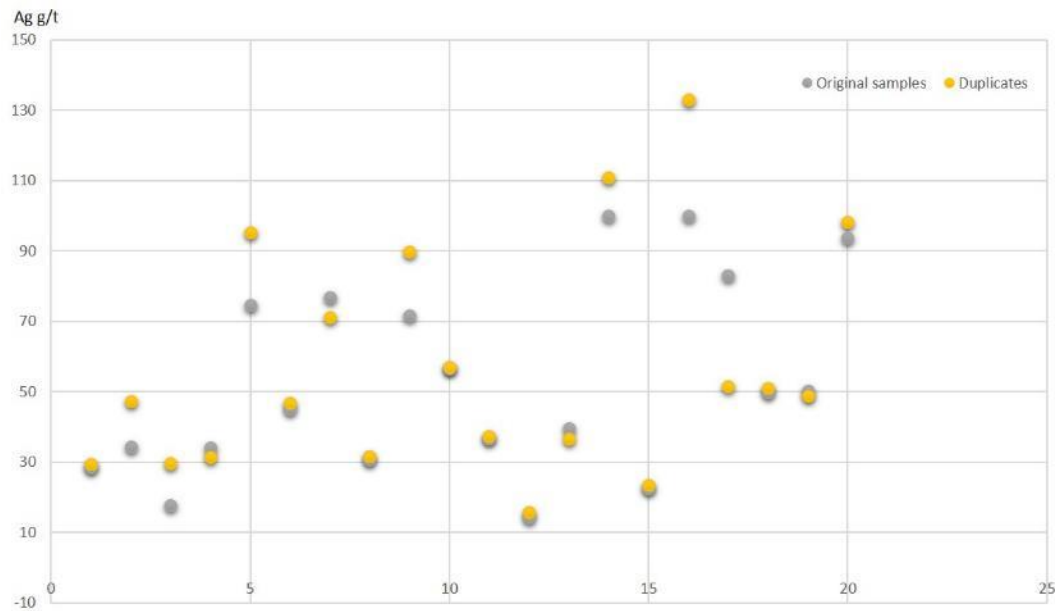
Elements and Lower Limits					
Ag	2 ppm	Cu	5 ppm	Pb	20 ppm
Al	100 ppm	Fe	100 ppm	Sb	10 ppm
As	30 ppm	K	20 ppm	Se	30 ppm
Ba	2 ppm	Li	10 ppm	Sn	20 ppm
Be	0.05 ppm	Mg	40 ppm	Sr	1 ppm
Bi	20 ppm	Mn	5 ppm	Ti	5 ppm
Ca	100 ppm	Mo	5 ppm	Tl	30 ppm
Cd	2 ppm	Na	100 ppm	V	2 ppm
Co	4 ppm	Ni	20 ppm	Y	0.5 ppm
Cr	10 ppm	P	30 ppm	Zn	10 ppm



Error! Reference source not found. and **Figure 12.6** shows the comparison between both assay results from ESGold vs GMG. The results confirm the presence of gold in the resampled intervals. The correlation between original and the resampled intervals are good and do not show bias.



**Figure 12.6: Distribution of the Au (g/t) original versus independent core samples**



**Figure 12.7: Distribution of the Ag (g/t) original versus independent core samples**

Surface samples taken from the Montauban tailings show some good values for Au (g/t) and Ag (g/t) (**Table 12-3**) with a highest value for gold from Tétréault 2

(sample 25751; 1.25 g/t Au) and for silver from Tétrault 1 (sample 25768; 83.7 g/t Ag) (Table 12-4).

**Table 12-3: Surface samples results (Au g/t and Ag g/t)**

Name	Easting	Northing	Samples	Length (cm)	Zones	Au g/t	Ag g/t
MB 1	702 434	5 188 981	25751	36	Tétrault 2	1.25	43
MB 2	702 427	5 188 974	25752	27	Tétrault 2	0.73	32.2
MB 3	702 423	5 188 960	25753	51	Tétrault 2	0.96	43.7
MB 4	702 421	5 188 951	25754	46	Tétrault 2	0.98	63.9
MB 5	702 416	5 188 934	25755	33	Tétrault 2	0.25	15.1
MB 6	702 419	5 188 918	25756	37	Tétrault 2	0.56	28.5
MB 7	702 440	5 188 913	25757	20	Tétrault 2	0.6	28.9
MB 8	702 443	5 188 925	25758	52	Tétrault 2	0.12	27
AL 1_1	701 790	5 189 584	25765	33	Anacon Led 1	0.65	45.7
AL 1_2	701 767	5 189 583	25766	32	Anacon Led 1	0.29	33
AL 1_3	701 744	5 189 588	25767	38	Anacon Led 1	0.33	31.6
Tétrault 1	702 401	5 189 259	25768	20	Tétrault 1	0.94	83.7
AL 2_1	702 226	5 189 389	25769	27	Anacon Led 2	0.57	16.1
AL 2_2	702 239	5 189 385	25770	23	Anacon Led 2	0.18	18.4

**Table 12-4: Surface samples ICP-AES results**

Name	Samples	Length (cm)	Zones	Al g/t	As g/t	Ba g/t	Bi g/t	Ca g/t	Cd g/t	Co g/t	Cr g/t	Cu g/t	Fe g/t	K g/t	Li g/t	Mg g/t	Mn g/t
MB 1	25751	36	Tétrault 2	15700	< 30	33	< 20	127000	20	10	30	245	53200	3070	< 30	97400	5570
MB 3	25753	51	Tétrault 2	26600	< 30	144	< 20	105000	24	11	46	287	55400	7000	< 30	93100	5560
MB 7	25757	20	Tétrault 2	32100	< 30	178	< 20	96600	17	11	45	293	54900	7690	< 30	86000	5010
AL 1_1	25765	33	Anacon Led 1	24700	232	76	< 20	94000	< 10	9	50	342	82400	7100	< 30	83700	7990
AL 2_1	25769	27	Anacon Led 2	34800	< 30	126	< 20	85300	27	8	46	254	41500	9160	< 30	93800	5020
Name	Samples	Length (cm)	Zones	Mo g/t	Na g/t	Ni g/t	P g/t	Pb g/t	Sb g/t	Se g/t	Sn g/t	Sr g/t	Ti g/t	Tl g/t	V g/t	Y g/t	Zn g/t
MB 1	25751	36	Tétrault 2	< 5	2120	< 20	229	1310	13	< 30	< 20	76	579	< 30	37	11.7	5360
MB 3	25753	51	Tétrault 2	< 5	4050	< 20	272	1590	15	< 30	< 20	103	906	< 30	42	15	5750
MB 7	25757	20	Tétrault 2	< 5	5550	< 20	372	949	12	< 30	< 20	124	1390	< 30	52	20.3	4990
AL 1_1	25765	33	Anacon Led 1	6	2650	< 20	321	1490	31	< 30	< 20	74	829	< 30	44	19.2	2270
AL 2_1	25769	27	Anacon Led 2	< 5	3930	< 20	256	1080	10	< 30	< 20	96	942	< 30	38	20.5	7360

Five surface samples, were the subject of ICP-AES analysis showing some high content of Ca, Al, Mg and Fe.

### 12.3 Conclusion

It is the Authors' opinion that the independent check-assays confirm the presence of gold and silver in the tailings on the Property and that the results are acceptable for use in the 2023 MRE.

### 13. MINERAL PROCESSING AND METALLURGICAL TESTING

The following summarizes the results of metallurgical tests conducted by Laboratoire LTM Inc. on material sampled during the first phase of DNA's 2010 percussion-drilling programme on the Anacon Lead 1 tailings site (St-Jean, 2010; St-Jean, 2011; St-Jean, 2014; GM65979; GM68907).

Four drill-core samples were combined into one sample weighing 16.5 kg. This sample was homogenized and split into seven (7) 1.0 kg samples and three (3) 3.0 kg samples. The remaining material was sent for assaying to determine the head grades. As the style of mineralization of tailings site material was considered to be homogeneous, the composite sample assembled from material recovered from four (4) drill-holes was considered to be representative of the tailings resource in its entirety.

**Table 13-1** presents the results of a cyanidation test conducted on the seven (7) 1.0 kg samples that were ground to different granulometries. The cyanidation time for each test was 48 hours with 3.0 grams of sodium cyanide added at the beginning of the test and none added afterward.

**Table 13-1: Results of Cyanidation Test (from St-Jean, 2011)**

<b>Granulometry passing 200 mesh (%)</b>	<b>Gold tail grade (g/t)</b>	<b>Gold recovery (%)</b>	<b>Silver recovery (%)</b>	<b>Cyanide consumption (g)</b>
> 100	0.03	91.1%	76.0%	2.56
95	0.03	89.0%	79.3%	2.56
90	0.02	93.3%	79.3%	2.56
85	0.04	86.7%	78.2%	2.34
80	0.02	92.4%	78.6%	1.9
75	0.03	86.9%	77.1%	1.68
70	0.04	85.7%	79.7%	1.9
<b>Average</b>	<b>0.03</b>	<b>89.3%</b>	<b>78.3%</b>	<b>2.2</b>

The average head grades were 0.28 g/t for gold and 27.1 g/t for silver and the gold grade in the cyanidation tail were very stable. Using an operating grind of 90% passing 200 mesh (the granulometry giving the best results) and the tailing grade after cyanidation of 0.03 g/t (the average of the tests), gold recovery was calculated to be 91.6% and the average operating recovery for silver was determined as 78.3%.

A gravimetric concentration test was conducted on the three 3.0 kg samples using different gravimetric concentrators (Humphrey, Knelson and table spiral). These tests show poor results for gold and silver, but spiral tests show good results for recovering mica. Cyanidation of gravimetric concentrates gave similar results to cyanidation of the total feed. The results show that cyanidation is preferred method for recovery of gold and silver and that cyanidation dissolved almost all gold in the tailings at the Anacon Lead 1 site sample.

St-Jean carried out additional mineralogical tests tailing material sampled during the second phase of percussion-drilling by DNA on the Anacon Lead1 tailing site (St-Jean 2011; St-Jean 2014; GM 65979; GM68907). The objectives of these tests were to maximize mica recovery and determine whether the cyanidation process would generate acid product. All the samples from the percussion-drill core were combined, homogenized and split into 3.0 kg samples. Eight (8) gravity concentration tests were conducted using different gravity concentrators (Humphrey and Knelson spirals).

The most efficient test includes the following steps: sieving the feed to 100 mesh; the coarse fraction goes to the Humphrey spiral, which separates the sample into light, intermediate and heavy fractions. The intermediate fraction is passed three (3) times through Humphrey's spiral and the light fraction is passed one last time through Humphrey's spiral.

This method produced a mica concentrate representing 4.2% of the initial sample weight. **Table 13-2** presents the composition of the ten (10) mica concentrates obtained during the different mica concentration tests.

**Table 13-2: Composition of Mica Concentrates**

	TR-1	TR-2	TR-3	TR-4	TR-7	TR-8	TR-9	TR-10	Average	Industrial standard
<b>Proportion of feed (%)</b>	2.3	4.1	2.8	2.1	4.4	4	8.4	8.1	4.53	
<b>Fe<sub>2</sub>O<sub>3</sub> (%)</b>	4.2	7.88	4.64	4.23	4.47	4.14	4.36	4.67	4.82	4.5 to 7.5
<b>SiO<sub>2</sub> (%)</b>	43.39	41.82	43.56	43.51	46.29	44.62	43.9	42.9	43.75	40.6 to 48.5
<b>Al<sub>2</sub>O<sub>3</sub> (%)</b>	15.57	13.54	15.43	16.47	13.16	13.73	14.69	14.39	14.62	10.8 to 19.8
<b>MgO (%)</b>	21.16	17.96	21.0	21.1	21.4	21.2	20.46	21.00	20.66	20.5 to 23.5
<b>CaO (%)</b>	12.6	9.3	1.68	1.39	2.06	3.09	2.87	3.17	4.52	0.4 to 0.6
<b>K<sub>2</sub>O (%)</b>	0.88	0.34	6.29	7.00	5.14	5.54	5.73	5.93	4.61	8.2 to 9.8

The envisaged processing operation would be seasonal and operate at a rate of 1000 tonnes per day. The process would begin by concentrating the mica using Humphrey spiral, the rest of the material would be sent to the cyanidation circuit to recover the gold and silver and finally neutralizing the acid generation potential of the material.

To the extent known, there are no processing factors, nor deleterious elements present, that could significantly affect the potential economic extraction of tailing material, based on the results of the metallurgical test-work.



## **14. MINERAL RESOURCE ESTIMATES**

### **14.1 Introduction**

The results of the Mineral Resource Estimates for the Project based on the historical data from the 2010 drill program and the more recent drilling program (SONIC drilling program 2018/2022) provided by ESGold (the “2023 MRE”) are reported herein.

The geological interpretation and mineral intervals on sections and plans of the mineralized bodies of the Montauban tailings were done by Merouane Rachidi, P.Geo., Ph.D. and Claude Duplessis, P.Eng. of GMG.

The 2023 MRE represents an update to the last estimate dated November 14<sup>th</sup>, 2021, for the Property, and includes the tailings at Notre-Dame-de-Montauban that was the subject of the exploration work in November 2022 (**Figure 14.1**).

The 2023 MRE have been estimated in conformity with CIM Estimation of Mineral Resource and Mineral Reserves Best Practices Guidelines and are reported in accordance NI 43-101.

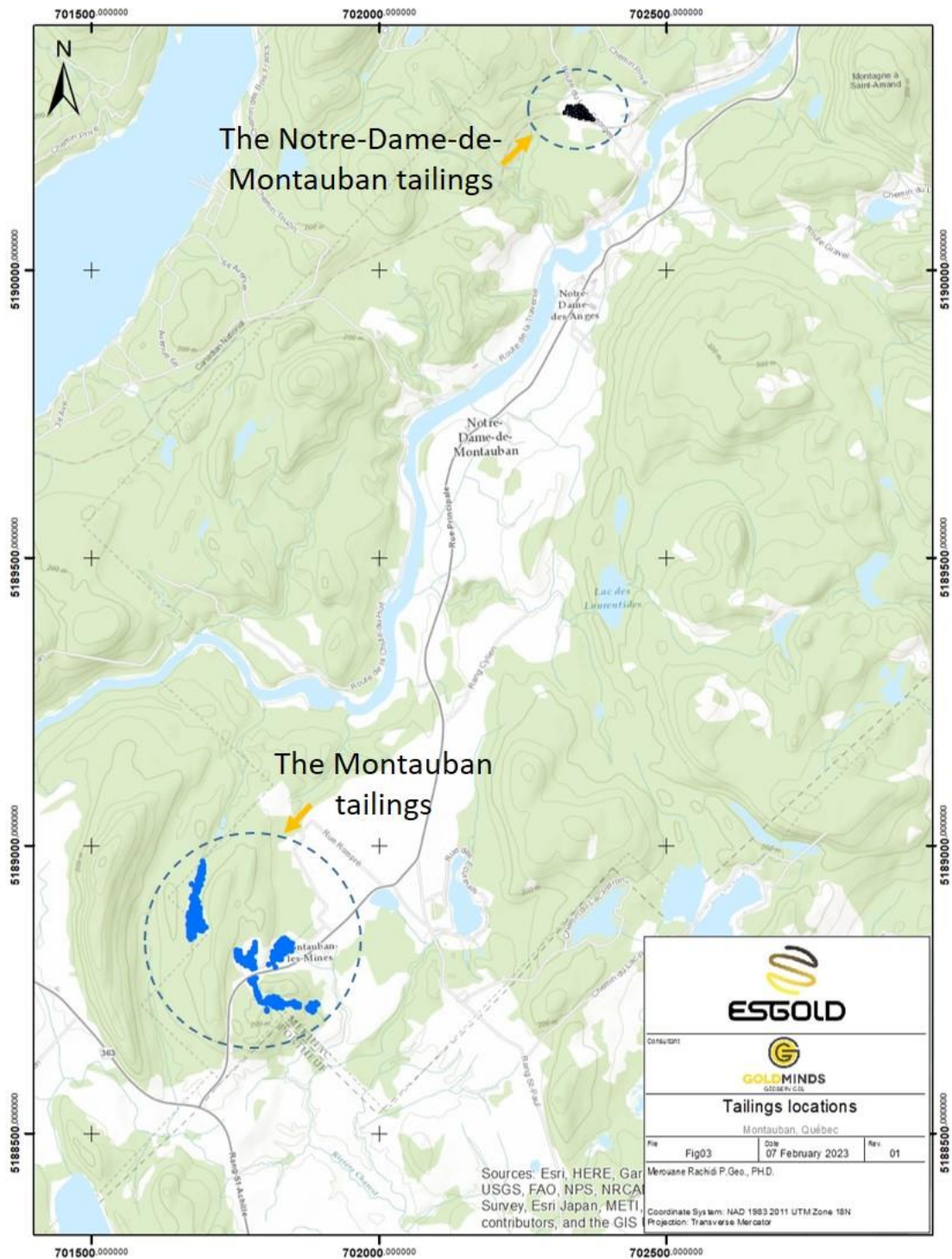
Mineral resources are not mineral reserves and have not demonstrated economic viability. There is no certainty that all or any part of the mineral resource will be converted into mineral reserves.

### **14.2 Resource Database**

The DHDB was provided by ESGold in Excel spreadsheets.

The DHDB contains 352 valid percussion drill hole collars, with a total meterage of 1,654.04 m and 1,170 assay intervals totaling 1,498.05 m.

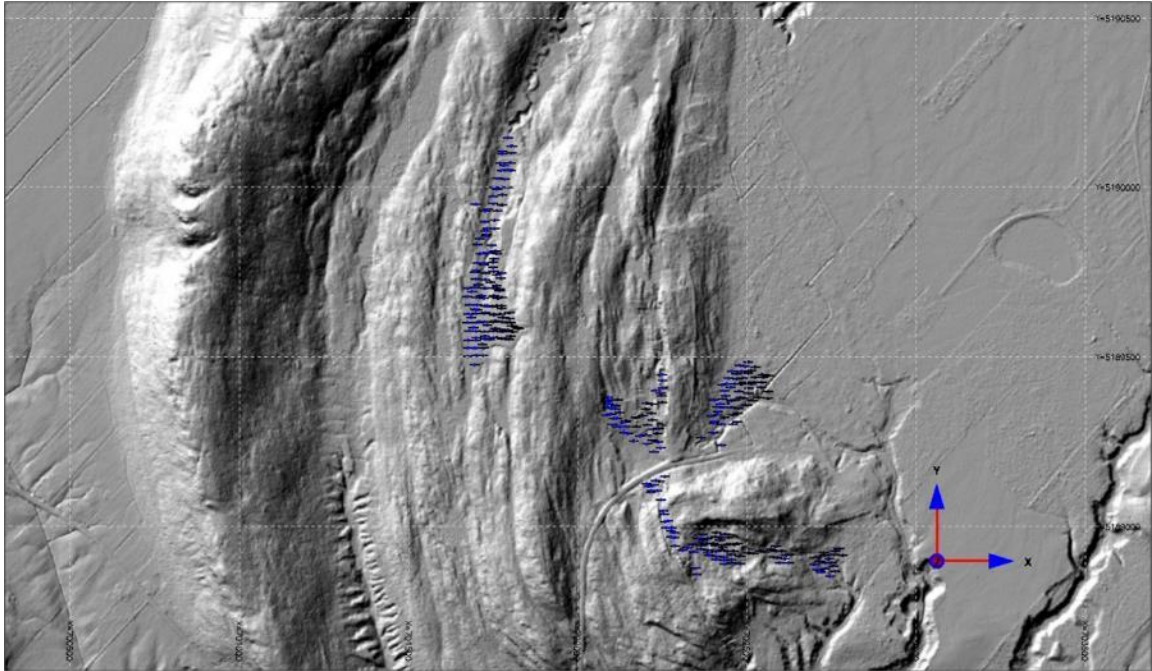
The Authors verified and validated the DHDB used for the 2023 MRE. After the verification/correction of the compiled drill hole data, GMG considered the database suitable for mineral resource estimation.



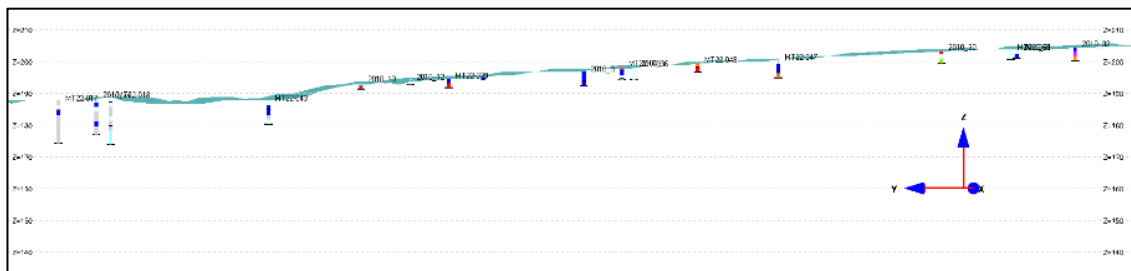
**Figure 14.1: The Montauban tailings property and the tailings at Notre-Dame-de-Montauban**

### 14.3 Topography Surface

The topographic surface was taken from the LiDAR surface file downloaded from the government web site sheet number 31116 (Notre-Dame-de-Montauban), (**Figure 14.2** and **Figure 14.3**).



**Figure 14.2: The topographic surface and drillhole collars of the Property**



**Figure 14.3: Section view (looking NNE) showing topographic surface and collar locations**

## **14.4 Resource Estimation Procedures (Methodology)**

### **14.4.1 The Montauban tailings**

The 2023 MRE was prepared using Genesis software. The Genesis software was used for the database validation, the creation of the mineralized intervals, creation of the wireframes and compositing of the 2023 MRE.

The 2023 MRE was completed using the inverse distance to the square methodology and the search ellipsoids (with variable orientations) used followed the wireframes trends.

### **14.4.2 The Notre-Dame-de-Montauban tailings**

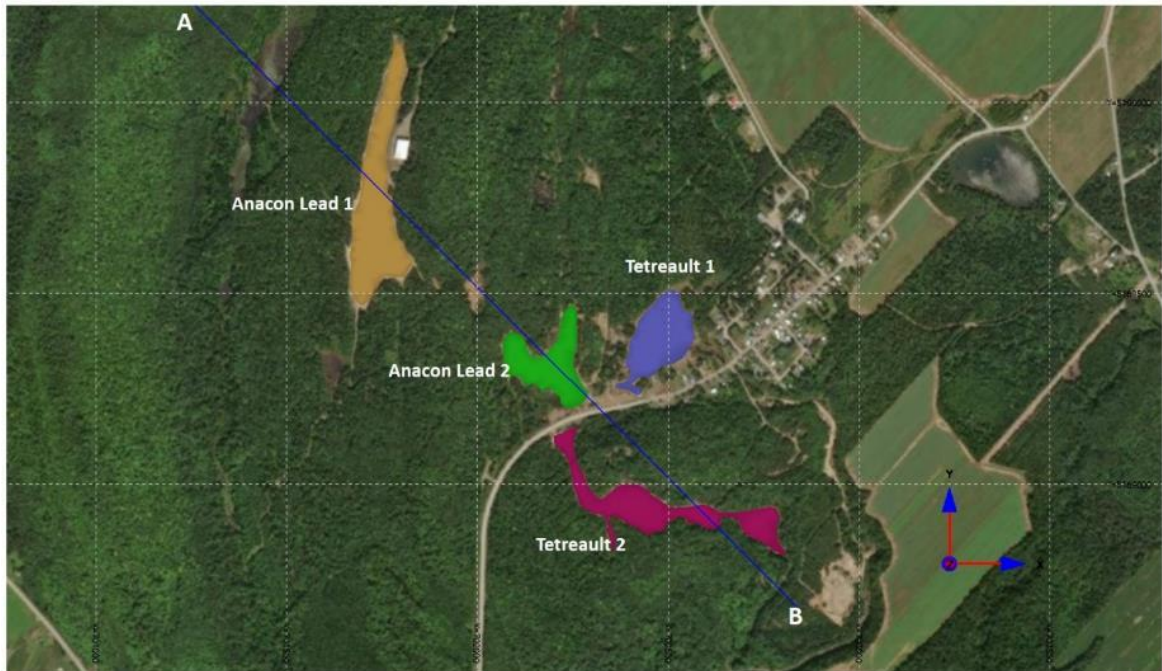
The tailings at Notre-Dame-de-Montauban were estimated using the polygon method for estimation. The database used for this mineral estimate corresponds to test pit and trench results obtained from the 2022 program realised by Laurentia and verified/validated by GMG.

## **14.5 Wireframes and mineralized zones**

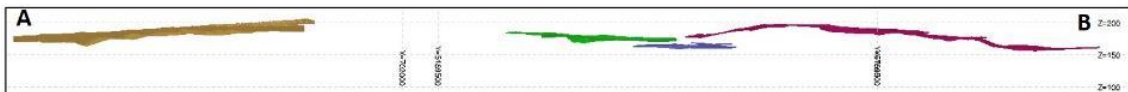
### **14.5.1 The Montauban tailings**

The 3D wireframe was generated using the mineralised intervals created by holes. The wireframe solids of the tailings sites were created by digitizing the mineralised intercepts on sections. Intercepts below the minimum grade were also considered and values of zero were applied to drillhole intersections not assayed within a mineralized zone. A total of four distinct wireframes (**Figure 14.4** and **Figure 14.5**) were created along approximately 1,500 m of strike.





**Figure 14.4: Plan view showing wireframe solids of the tailings site and the location of the A – B profile**



**Figure 14.5: Section looking NE showing the mineralised wireframes**

#### 14.5.2 The Notre-Dame-de-Montauban tailings

For the Notre-Dame-de-Montauban tailings, one 3D wireframe was generated using the mineralised intervals (**Figure 14-6**). The wireframe solids of the tailings site were created by digitizing the mineralised intercepts on sections.



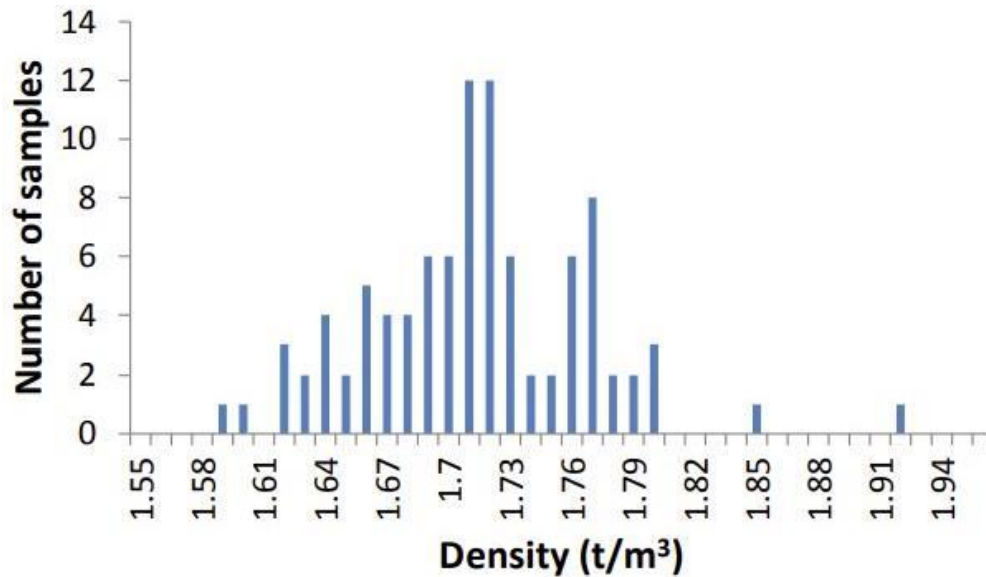


**Figure 14.6: Plan view showing wireframe solid of the Notre-Dame-de-Montauban tailings site.**

## 14.6 Density

### 14.6.1 The Montauban tailings

During the 2010 drilling programs the estimation of the density was performed on 24 holes, all of which were drilled in the Anacon Lead 1 tailings site (total of 95 samples). Recovery of Anacon Lead 1 tailings in the sampling process averaged about 76 % from the last percussion drilling campaign (Gagnon, 2011). For the upper part of the tailings the averaged recovery was approximately 81 % (68 samples) and dropped to below 64 % (27 samples) for the deeper part. The overall density is estimated to be 1.71 g/cm<sup>3</sup> (**Figure 14.7**).



**Figure 14.7: Histogram of the density data from the 2010 drilling samples**

A density analysis was carried out on 34 samples using the dry weight and the tailings sampler diameter without taking into consideration the recovery of sampling. The measurements were made on two types of samples (**Table 14-1**). The first set corresponds to samples taken from the 2022 drilling program (20 half samples). The second set corresponds to surface samples collected during the site visit (14 samples) by M. Rachidi P.Geo., and C. Duplessis, Eng., in September 14, 2022. The averaged density for these samples is 1.46 g/cm<sup>3</sup>.

Taking into consideration all density measurements (2010 drill holes samples and the 2022 samples) the average density is 1.59 g/cm<sup>3</sup>. To be more conservative, a fixed density of 1.52 g/cm<sup>3</sup> was used to calculate the mineral resource tonnages from the volumetric estimates of the block models. This value was assigned to all wireframes and reflect the average density of the tailings material.

It is recommended to perform density measurements on fresh material over the course of any future drilling programs. Complete intervals of samples with corresponding assay tags should be measured for a few select holes in order to allow additional reliable analysis and validation of the density.

#### **14.6.2 The Notre-Dame-de-Montauban tailings**

During the site visit M. Rachidi and C. Duplessis performed a density analysis on five surface samples using the dry weight and the tailings sampler diameter without taking into consideration the recovery of sampling.

The averaged density for these surface samples is 1.5 g/cm<sup>3</sup> (**Table 14-2**). This value was assigned to the block models and reflect the average density of the tailings material.

It is recommended to carry density measurement during the future drill program.

**Table 14-1: Samples Obtained During the September 2022 Site Visit and used for Density Measurements**

Hole Name	From	To	Length	Sample number	Sample type	Calculated Density g/cm <sup>3</sup>
NV 3	0	0.25	0.25	25761	Surface	1.26
AL 1_1	0	0.33	0.33	25765	Surface	1.28
AL 1_3	0	0.38	0.38	25767	Surface	1.29
AL 1_2	0	0.32	0.32	25766	Surface	1.30
MB 8	0	0.52	0.52	25758	Surface	1.32
MB 1	0	0.36	0.36	25751	Surface	1.33
MB 3	0	0.51	0.51	25753	Surface	1.33
MB 4	0	0.46	0.46	25754	Surface	1.38
AL 2_1	0	0.27	0.27	25769	Surface	1.44
AL 2_2	0	0.23	0.23	25770	Surface	1.47
MB 2	0	0.27	0.27	25752	Surface	1.49
MB 6	0	0.37	0.37	25756	Surface	1.51
MB 7	0	0.2	0.2	25757	Surface	1.54
MB 5	0	0.33	0.33	25755	Surface	1.64
<b>Average</b>						<b>1.40</b>
MT22-024	1.5	3	1.5	4629676	Drilling sample	1.47
MT22-023	1.5	3	1.5	4629671	Drilling sample	1.54
<b>Average</b>						<b>1.50</b>
MT22-013	3	4.5	1.5	4629599	Drilling sample	1.38
MT22-024	3	4.5	1.5	4629677	Drilling sample	1.39
MT22-018	3	4.5	1.5	4629639	Drilling sample	1.40
MT22-009	3	4.5	1.5	4629571	Drilling sample	1.45
MT22-042	3	4.5	1.5	4629777	Drilling sample	1.56
<b>Average</b>						<b>1.43</b>
MT22-081	4.5	6	1.5	4629986	Drilling sample	1.33
MT22-009	4.5	6	1.5	4629572	Drilling sample	1.34
MT22-058	4.5	6	1.5	4629855	Drilling sample	1.48
MT22-033	4.5	6	1.5	4629744	Drilling sample	1.65
<b>Average</b>						<b>1.45</b>
MT22-081	6	7.3	1.3	4629987	Drilling sample	1.21
MT22-058	6	7.5	1.5	4629856	Drilling sample	1.29
MT22-004	6	6.75	0.75	4629533	Drilling sample	1.38
MT22-010	6	7.5	1.5	4629578	Drilling sample	1.47
MT22-001	6	7.5	1.5	4629505	Drilling sample	1.60
MT22-027	6	7.5	1.5	4629699	Drilling sample	1.84
MT22-026	6	7.5	1.5	4629692	Drilling sample	1.94
MT22-016	7.5	9	1.5	4629626	Drilling sample	1.41
<b>Average</b>						<b>1.52</b>

**Table 14-2: Samples Collected from the Notre-Dame-de-Montauban Tailings for Density Measurements**

Sample	Volume Cm <sup>3</sup>	Weight (kg)	Calculated Density g/cm <sup>3</sup>
17 x 15 x 10	2 550	3.16	1.24
15 x 5 x 12	900	2.37	2.63
NV 1	1 632	1.95	1.20
NV 2	1 883	2.20	1.17
NV 3	1 046	1.32	1.26
<b>Average</b>			<b>1.50</b>

## 14.7 Compositing and High-Grade Capping

### 14.7.1 The Montauban tailings

#### 14.7.1.1 Compositing

The block model grade interpolation was conducted on composited assay data in order to minimize any bias introduced by varying sample length (**Figure 14.8**). The proposed block size was taken into consideration for the selected composite length.

<b>Settings</b>	
Mode	Regular
Min Sample Length	0.3
Length of intervals	1.5
Min intervals length	0.2
Round	Round Closest
<b>Dilution</b>	
Using Dilution	Yes

**Figure 14.8: Composite settings**

A composite length of 1.5 m was used, created from the assay table, starting from the collar to the end of each drill hole. The last composite kept at the end of the mineralized intercept has a minimum length of 0.2 m.

All intervals within the mineralized zones that were not assayed were given a value of zero during the compositing routine.

#### 14.7.1.2 Capping

The blocks were interpolated from equal length composites calculated from the drill hole intercepts within the wireframes only. Prior to compositing, high-grade capping value for gold was applied on assay data to limit the influence of high-grade values during the estimation.

The capping grade value was defined using two criteria:

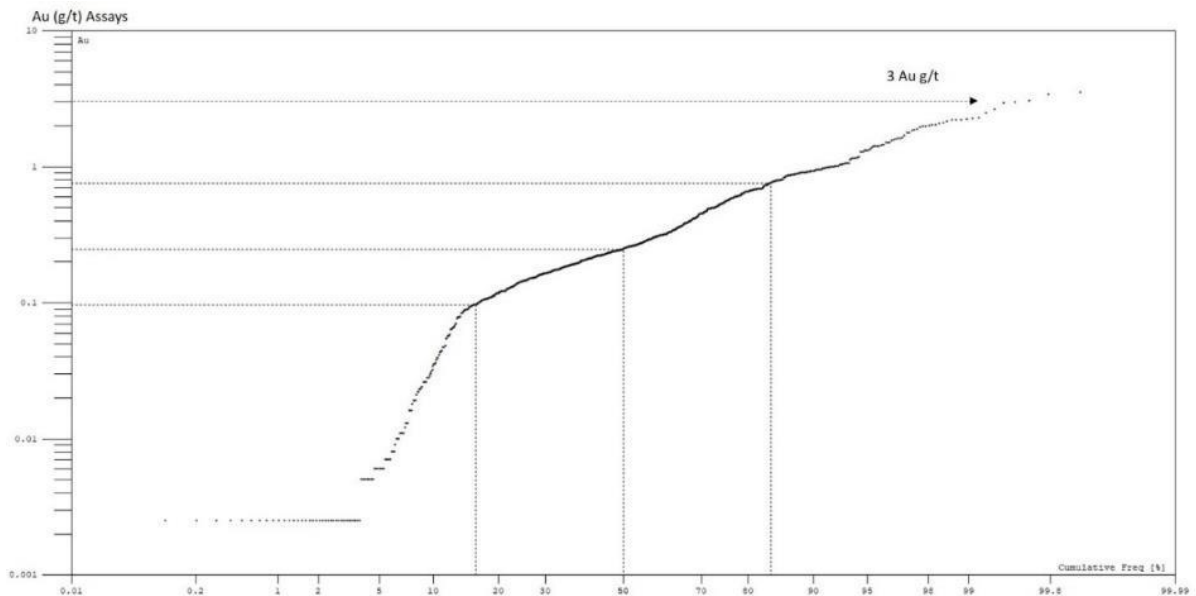
- The log normal distribution of grades (g/t Au) showing intermittent grade bins and distant values from the main population;
- The coefficient of variation must be approximately 2.0.

The cumulative frequency shown in **Figure 14.9** supports the capping value. This capping value is subjective and was chosen to stay conservative (**Table 14-3**).

**Table 14-3** and **Table 14-4** presents the selection of the capping limit and a summary of the assay statistical analysis.

**Table 14-3: Descriptive Analysis on Au Assays (Uncapped and Capped at 3 Au g/t)**

	Uncapped assays Au g/t	Capped at 3 Au g/t
<b>Mean</b>	0.42	0.41
<b>Standard Error</b>	0.02	0.02
<b>Median</b>	0.25	0.25
<b>Mode</b>	0.00	0.00
<b>Coefficient of Variation</b>	1.16	1.13
<b>Standard Deviation</b>	0.48	0.47
<b>Sample Variance</b>	0.23	0.22
<b>Kurtosis</b>	11.41	8.59
<b>Skewness</b>	2.87	2.59
<b>Range</b>	3.67	3.00
<b>Minimum</b>	0.00	0.00
<b>Maximum</b>	3.67	3.00
<b>Sum</b>	403.55	401.28
<b>Count</b>	971	971
<b>Capped value</b>	0.00	5.00



**Figure 14.9: The log normal distribution of assays data within the wireframes**



**Table 14-4: Descriptive Analysis on Ag Assays (Uncapped and Capped at 125 Ag g/t)**

	Uncapped assays Ag g/t	Capped at 125 Ag g/t
<b>Mean</b>	31.19	30.81
<b>Standard Error</b>	0.82	0.77
<b>Median</b>	25.70	25.70
<b>Mode</b>	0.25	0.25
<b>Coefficient of Variation</b>	0.82	0.77
<b>Standard Deviation</b>	25.70	23.88
<b>Sample Variance</b>	660.68	570.25
<b>Kurtosis</b>	7.36	2.60
<b>Skewness</b>	2.05	1.40
<b>Range</b>	193.93	124.93
<b>Minimum</b>	0.07	0.07
<b>Maximum</b>	194.00	125.00
<b>Sum</b>	30 288.18	29 919.68
<b>Count</b>	971	971
<b>Capped value</b>	0	11

#### 14.7.1.3 Statistical analysis

The assay values within the wireframes were exported for statistical analysis. The Author compiled and reviewed the basic statistics of the gold and silver assays within the mineralized envelopes (**Figure 14-10** and **Figure 14-11**).

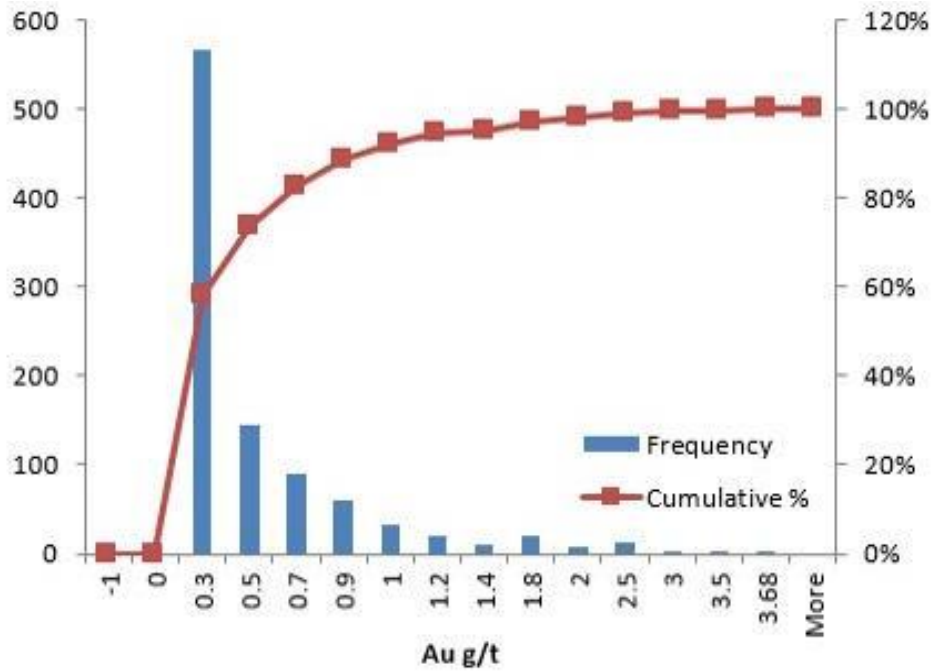


Figure 14.10: Histogram showing Au assays g/t

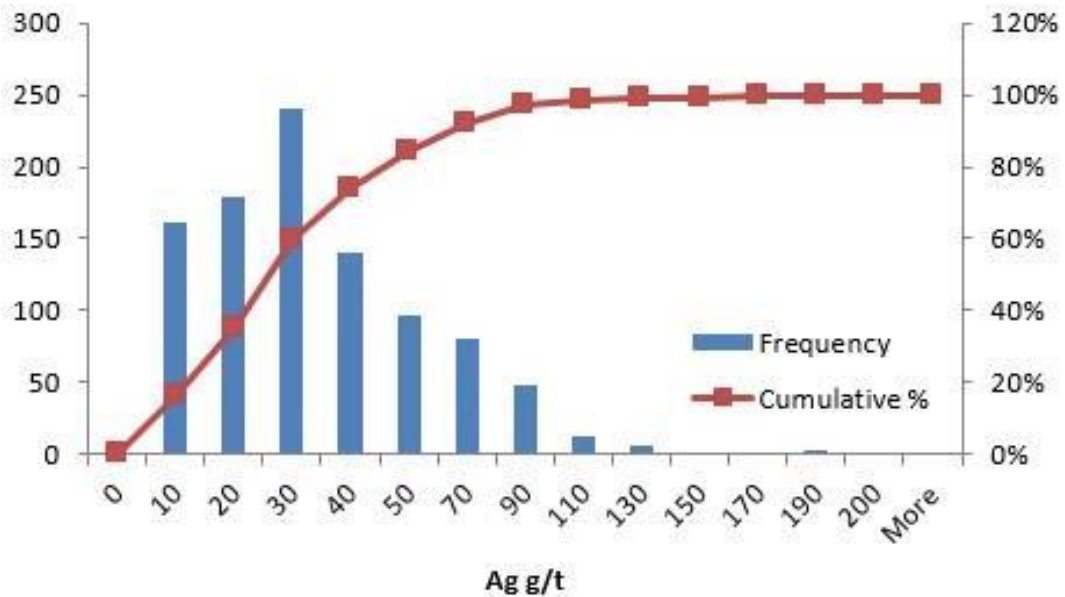


Figure 14.11: Histogram showing Ag assays g/t

#### 14.7.1.4

#### 14.7.1.5 Search Ellipsoid

Search ellipsoids (**Figure 14-12** and **Figure 14-13**) were created to select the composites and used for the estimation of the block grades. **Table 14-5** presents the search ellipsoids with their axis lengths, orientations and sizes. The median is the intermediate axis, the major is the long axis and the minor is the short axis.

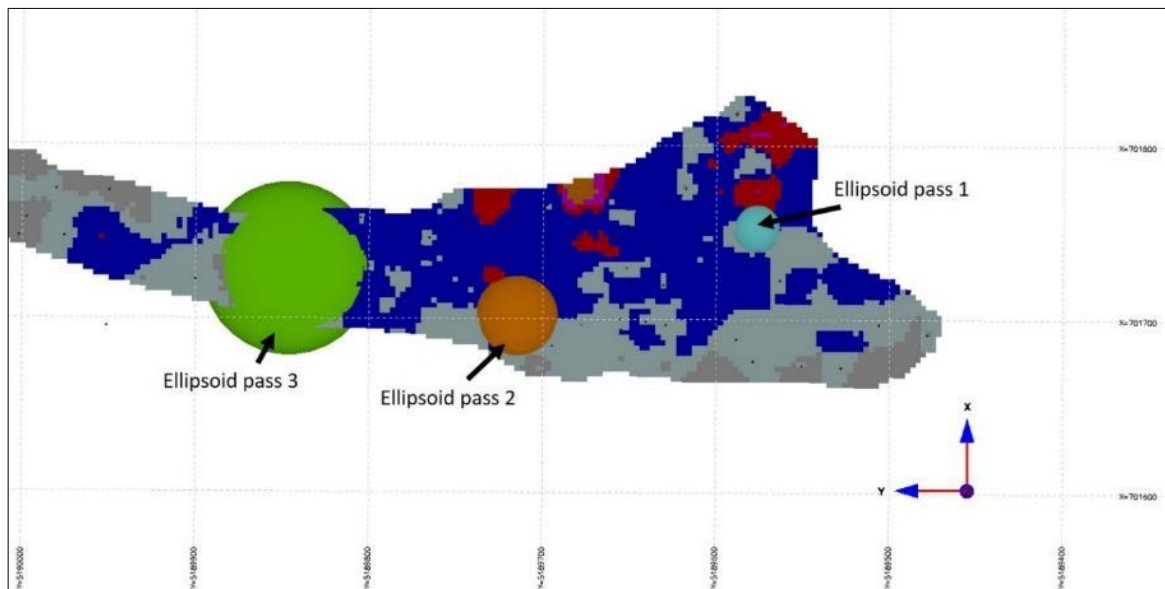


Figure 14.12: Plan view showing search ellipsoids orientation

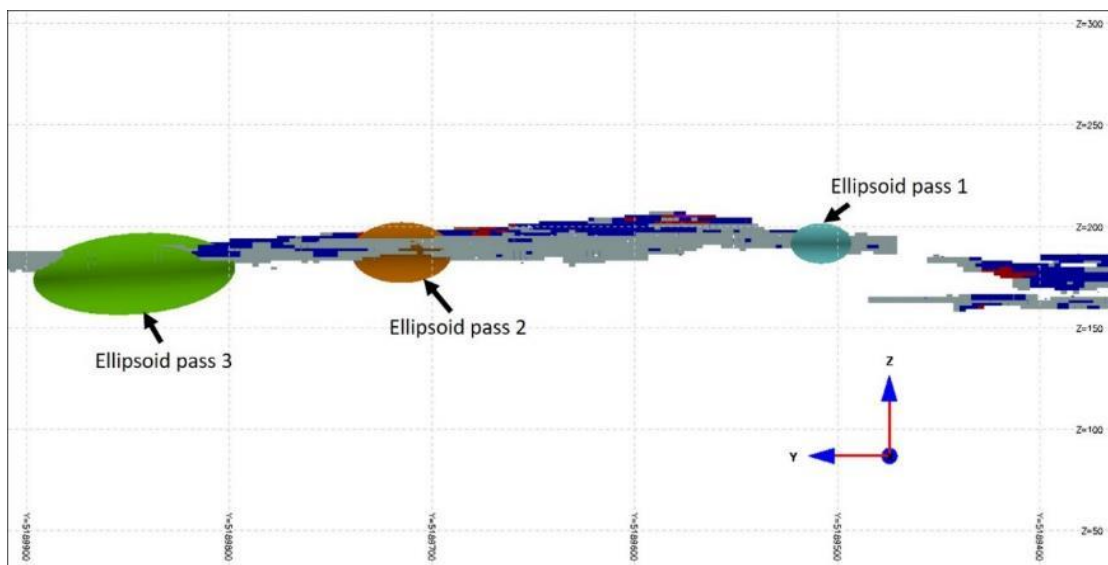


Figure 14.13: Section view looking East showing search ellipsoids orientation

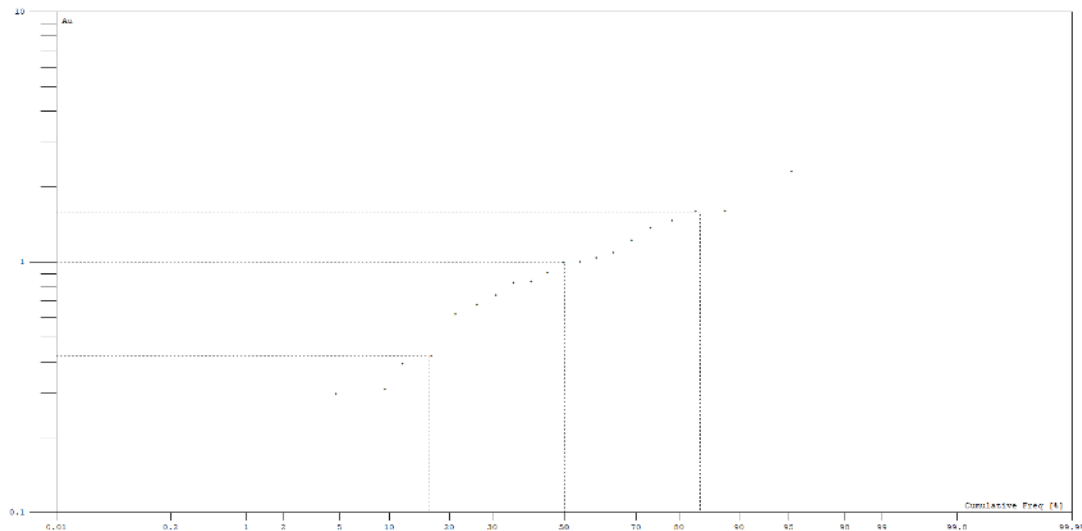
**Table 14-5: Search Ellipsoid of Different Passes used for Estimation**

Ellipsoids	Major (m)	Median (m)	Minor (m)
Pass 1	15	15	10
Pass 2	25	25	15
Pass 3	50	50	20

## 14.7.2 The Notre-Dame-de-Montauban tailings

### 14.7.2.1 Compositing

The block model grade interpolation was conducted on composited assay data. For the Notre-Dame-de-Montauban tailings we used central composites. Each mineralized interval will result in a composite in the centre of each interval (**Figure 14.14**). Any composite outside the wireframe will be ignored for the estimation.



**Figure 14.14: The log normal distribution of the composites for the Notre-Dame-de-Montauban tailings**

### 14.7.2.2 Capping

The blocks were interpolated from composites calculated from the drill hole mineralized intervals within the wireframe. No grade capping was applied.

## 14.8 Block Model

### 14.8.1 The Block Model Parameters

#### The Montauban tailings

The bloc grid parameters (**Figure 14.15**) were defined to enclose all the mineralized envelopes. The origin of the block model is the lower left corner. The block sizes were defined to respect the mineralized zones and to optimize the amount of block centroids within the wireframes. Block size of 3mE x 3mN x 1.5mZ was used.

	X	Y	Z
Block Model Origin	701063	5188542	120
Block Size	3	3	1.5
Block Discretization	1	1	1
<b>Model Extents</b>			
	X	Y	Z
Starting Coordinates	701063	5188542	120
Starting Block Indices	1	1	1
Ending Coordinates	703583	5190273	220.5
Ending Block Indices	841	578	68

**Figure 14.15: Block grid parameters for Montauban tailings sites**

#### The Notre-Dame-de-Montauban tailings

The origin of the block model is the lower left corner. The block sizes were defined to respect the tailings property. Block size of 0.5mE x 0.5mN x 0.5mZ was used (**Figure 14.16**).



	X	Y	Z
Block Model Origin	704000	5196000	150
Block Size	0.5	0.5	0.5
Block Discretization	1	1	1

Model Extents	X	Y	Z
Starting Coordinates	704000	5196000	150
Starting Block Indices	1	1	1
Ending Coordinates	706000	5197000	175
Ending Block Indices	4001	2001	51

**Figure 14.16: Block grid parameters for the Notre-Dame-de-Montauban tailings site**

## 14.8.2 Estimation Parameters

### The Montauban tailings

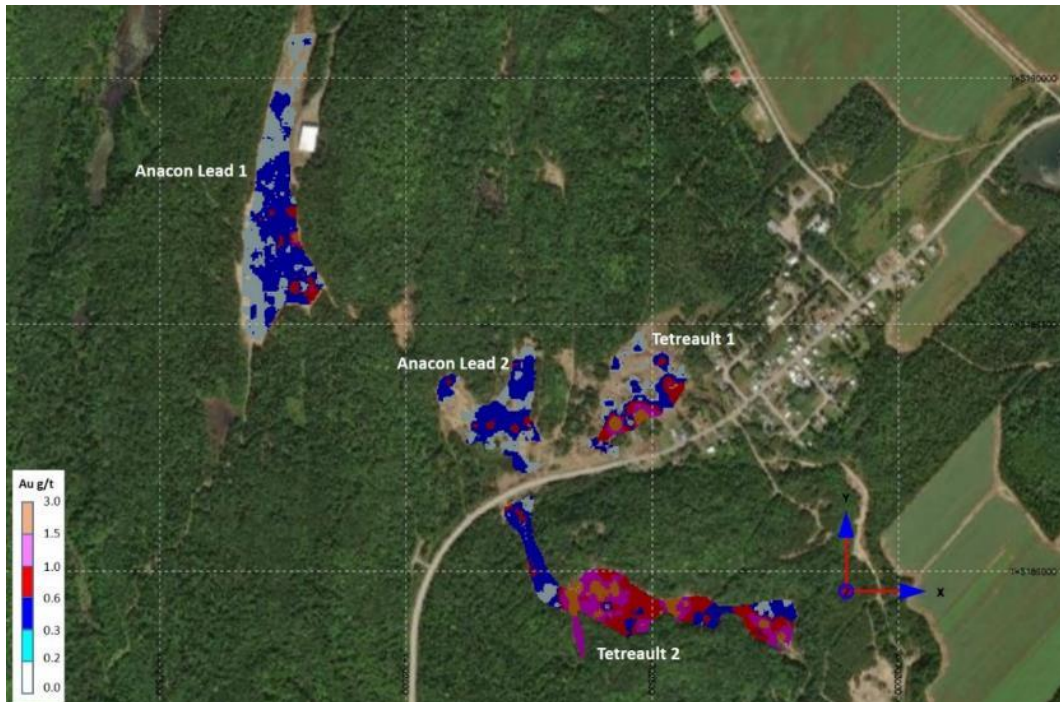
The 2023 MRE was completed using the inverse distance to the square methodology with three passes. Search ellipsoids were used to select the composites (point data) and followed the interpreted mineralized zones.

**Table 14-6**, shows the minimum composites, maximum composites and composites per drill hole used. For the first and the second pass, the number of composites was limited to five (05) with a minimum of three (03) with a maximum of two (02) composite from the same hole. For the third pass, the number of composites was limited to five (05) with a minimum of two (02) with a maximum of one (01) composite from the same hole.

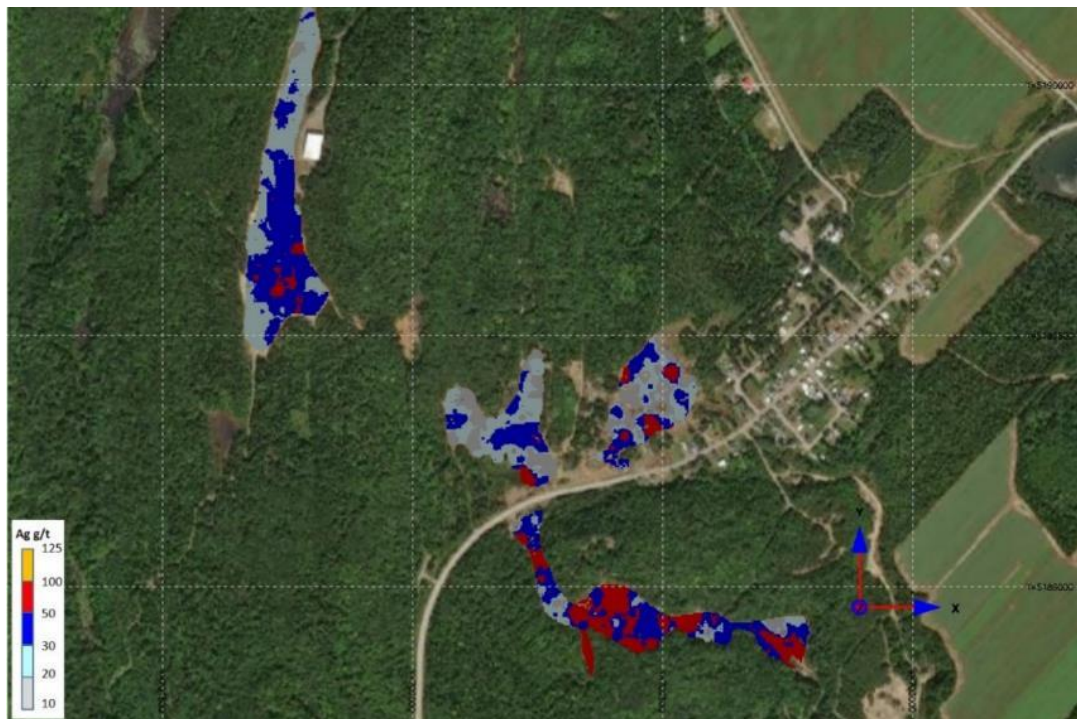
**Table 14-6: Three Pass Estimation Composite Parameters**

	Min composites	Max composites	Max composites per drillhole
First and second Pass	3	5	2
Third Pass	2	5	1

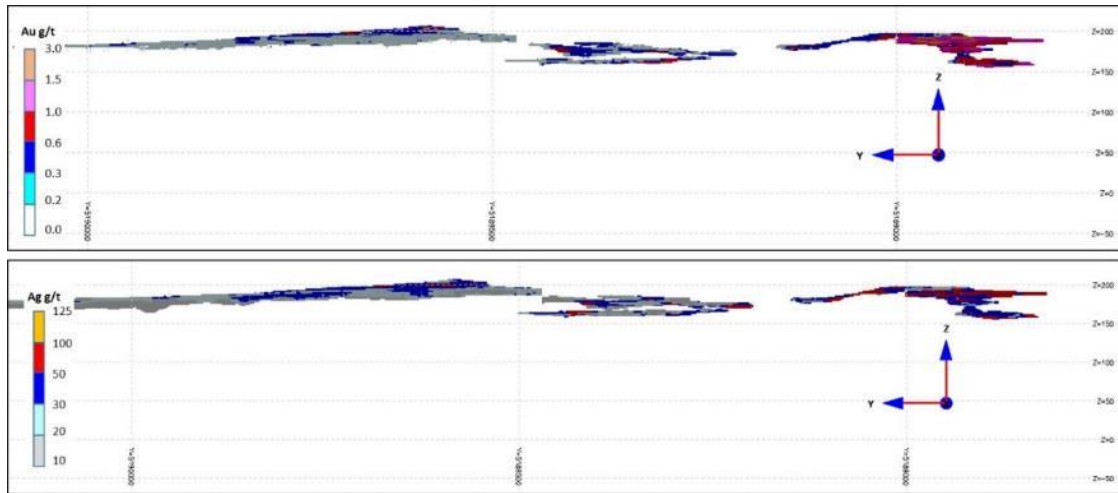
The block models correspond to the blocks within the wireframes. No cut-off grade was used and the total tonnage within the wireframes (Anacon Lead 1, Anacon Lead 2, Tétreault 1 and Tétreault 2) is considered in the 2023 MRE (refer to **Figure 14-17**, **Figure 14-18** and **Figure 14-19**).



**Figure 14.17: Plan view showing the Block Model, colour-coded by Au grade (g/t)**



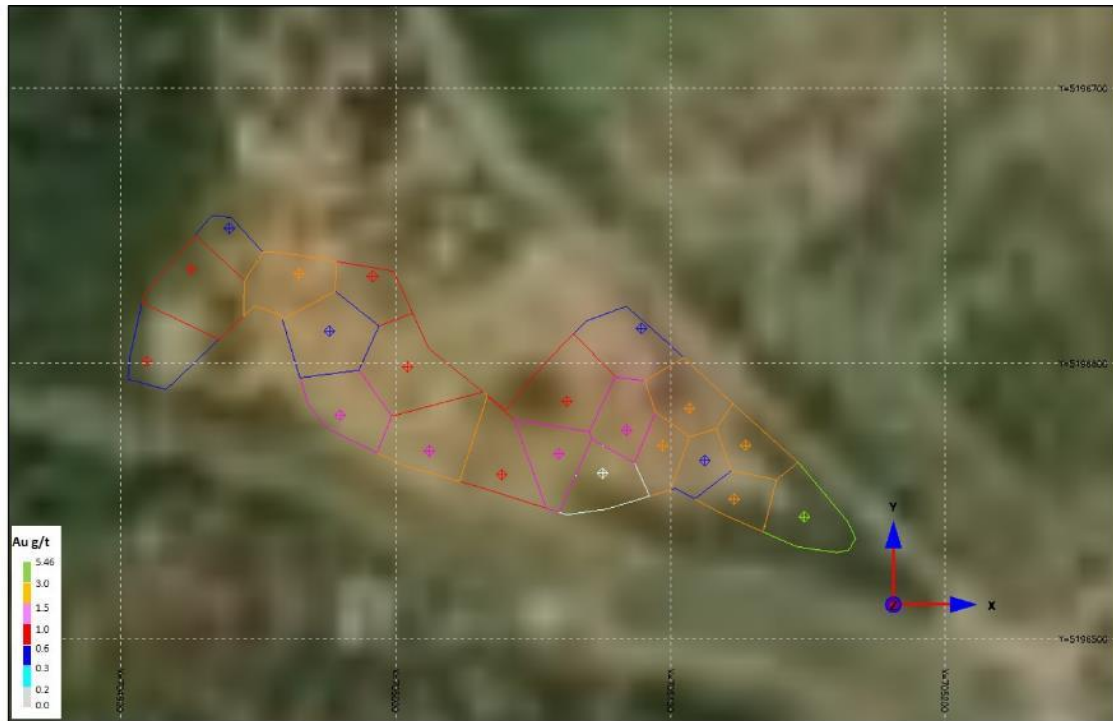
**Figure 14.18: Plan view showing the Block Model, colour-coded by Ag grade (g/t)**



**Figure 14.19: Section view looking East showing the block models**

### The Notre-Dame-de-Montauban tailings

The mineral resource estimate of the Notre-Dame-de-Montauban tailings was completed using the polygon method (**Figure 14.20**). The polygons were constructed around each test pits (each test pit was considered as a borehole) by the partitioning of a plane into regions based on distance to points (composites) in a specific subset of the plane.



**Figure 14.20: Polygons constructed around each test pit.**

### 14.8.3 Model Validation

Validation procedures included:

- Visual comparisons of block gold values versus composite values;
- Validation of the total volume of the wireframe models compared to the total block model volume;
- Block model grades were visually examined and compared with composite grades in cross sections and on elevation plans.

Grade continuity was found to be reasonable and confirmed that the block grades were reasonably consistent with local drill hole assays and composite grades, and that there was no significant bias.

## 14.9 Mineral Resource Classification

### 14.9.1 Resource categories

The resource classification definitions used for the PEA Report are those published by the Canadian Institute of Mining, Metallurgy and Petroleum in their document "CIM Definition Standards for Mineral Resources and Reserves".

Mineral resources are sub-divided, in order of increasing geological confidence from Inferred, to Indicated and Measured categories.

Mineral resources are not mineral reserves and have not demonstrated economic viability. There is no certainty that all or any part of the mineral resource will be converted into mineral reserves. GMG is not aware of any environmental, permitting, legal, title, taxation, socio-economic, marketing, political, or other relevant factors that could materially affect the Mineral Resource estimate.

#### Measured Mineral Resource

Measured mineral resources comprise those parts of a Mineral Resource for which quantity, grade or quality, densities, shape, physical characteristics are so well established that they can be estimated with confidence sufficient to allow the appropriate application of technical and economic parameters to support production planning and evaluation of the economic viability of the deposit. The estimate of Measured mineral resources is based on detailed and reliable exploration, sampling and testing information gathered through appropriate techniques from locations such as outcrops, trenches, pits, workings and drill holes that are spaced closely enough to confirm both geological and grade continuity.

#### Indicated Mineral Resource

Indicated mineral resources comprise those parts of a Mineral Resource for which quantity, grade or quality, densities, shape and physical characteristics can be estimated at 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. The estimate is based on



detailed and reliable exploration and testing information gathered through appropriate techniques from locations such as outcrops, trenches, pits, workings and drill holes that are spaced closely enough for geological and grade continuity to be reasonably assumed.

#### Inferred Mineral Resource

Inferred mineral resources comprise those parts of a Mineral Resource for which quantity and grade or quality can be estimated on the basis of geological evidence and limited sampling and reasonably assumed, but not verified, for geological and grade continuity. The estimate is based on limited information and sampling gathered through appropriate techniques from locations such as outcrops, trenches, pits, workings and drill holes. Resources from this category should not be used to support mine planning and evaluation of the economic viability of the deposit.

The mineral resources of the Property are classified as Indicated and Inferred mineral resources.

The Indicated resources were classified using search ellipsoid extents of a maximum of 40 m long and 10 m wide using a maximum of five composites and a minimum of two composites per block with a maximum of one composite from the same hole.

The inferred resources were classified using search ellipsoid extents of a maximum of 100 m long and 20 m wide using a maximum of five composites and a minimum of two composites per block with a maximum of one composite from the same hole.

#### **14.9.2 Cut-off and commodities prices**

The mineral resources are reported without a cut-off grade as all the materials within the wireframes have to be mined/extracted. The gold and silver prices used for the 2023 MRE are respectively 1,750 US\$ and 21 US\$ with an exchange rate for Canadian dollars of 1:1.35.

#### **14.9.3 Resource Statement**

The 2023 MRE was independently prepared by GMG in accordance with NI 43-101 and having an effective date of March 2<sup>nd</sup>, 2023.

Estimated mineral resources for the Montauban and the Notre-Dame-de-Montauban tailings are as follows: Indicated resources are 7,800 Au ounces and 610,350 Ag ounces (603,700 tonnes grading 0.4 g/t Au and 31.4 g/t Ag); Inferred resources are 4,200 ounces gold and 379,100 ounces silver (319,300 tonnes grading 0.41 g/t Au and 36.9 g/t Ag), (**Table 14-7, Table 14-8** and Error! Reference source not found.).

Mineral resources are not mineral reserves and have not demonstrated economic viability. There is no certainty that all or any part of the mineral resource will be converted into mineral reserves.



**Table 14-7: The Mineral Resource Estimate for the Montauban and the Notre-Dame-de-Montauban tailings sites**

	<b>Au (g/t)</b>	<b>Ag (g/t)</b>	<b>AuEq (g/t)</b>	<b>Tonnes</b>	<b>Au Oz</b>	<b>Ag Oz</b>	<b>AuOz eq</b>
<b>Total Indicated tailings</b>	<b>0.40</b>	<b>31.45</b>	<b>0.77</b>	<b>603 700</b>	<b>7 800</b>	<b>610 350</b>	<b>15 000</b>
<b>Total Inferred tailings</b>	<b>0.41</b>	<b>36.93</b>	<b>0.87</b>	<b>319 300</b>	<b>4 200</b>	<b>379 100</b>	<b>8 900</b>

**Table 14-8: Mineral Resources Estimate for the Montauban tailings sites**

<b>Anacon Lead 1</b>	<b>Au g/t</b>	<b>Ag g/t</b>	<b>AuEq g/t</b>	<b>Tonnes</b>	<b>Au Oz</b>	<b>Ag Oz</b>	<b>AuOz eq</b>
indicated	0.30	29	0.64	486 900	4 700	449 350	10 000
inferred	0.20	23	0.47	85 000	500	61 900	1 300
<b>Tetreault_2</b>	<b>Au g/t</b>	<b>Ag g/t</b>	<b>AuEq g/t</b>	<b>Tonnes</b>	<b>Au Oz</b>	<b>Ag Oz</b>	<b>AuOz eq</b>
indicated	0.83	43	1.34	116 800	3 100	161 000	5 000
inferred	0.85	46	1.40	26 100	700	38 800	1 200
<b>Tetreault_1</b>	<b>Au g/t</b>	<b>Ag g/t</b>	<b>AuEq g/t</b>	<b>Tonnes</b>	<b>Au Oz</b>	<b>Ag Oz</b>	<b>AuOz eq</b>
inferred	0.39	26	0.70	65 600	800	54 400	1 500
<b>Anacon_Lead_2</b>	<b>Au g/t</b>	<b>Ag g/t</b>	<b>AuEq g/t</b>	<b>Tonnes</b>	<b>Au Oz</b>	<b>Ag Oz</b>	<b>AuOz eq</b>
inferred	0.31	28	0.64	115 300	1 150	103 800	2 400
<b>Total indicated</b>	<b>0.40</b>	<b>31</b>	<b>0.78</b>	<b>603 700</b>	<b>7 800</b>	<b>610 350</b>	<b>15 000</b>
<b>Total inferred</b>	<b>0.34</b>	<b>28</b>	<b>0.67</b>	<b>292 000</b>	<b>3 150</b>	<b>258 900</b>	<b>6 400</b>

**Notes:**

- 1 Mineral resources which are not mineral reserves do not have demonstrated economic viability. The estimate of mineral resources may be materially affected by environmental, permitting, legal, title, market or other relevant issues. The quantity and grade of reported inferred Resources are uncertain in nature and there has not been sufficient work to define these inferred resources as indicated or measured resources.
- 2 The database used for this mineral estimate includes drill results obtained from 2010, 2018 and 2022 drill programs.
- 3 The mineral resource presented here were estimated with a block size of 3mE x 3mN x 1.5mZ. The blocks were interpolated from equal length composites (1.5 metre) calculated from the mineralized intervals.
- 4 Prior to compositing, high-grade gold assays were capped to 3 g/t Au and 125 g/t Ag.
- 5 The mineral estimation was completed using the inverse distance to the square methodology utilizing three passes. For pass 1 and pass 2 minimum of 2 composites and maximum of 05 composites with a maximum of 1 composite from the same drillhole (a minimum of two drillholes are needed to estimate blocks). For pass 3 minimum of 2 composites and maximum of 5 composites were used.
- 6 The Indicated resources classified using a minimum of two drillholes within 20 m of each

other or less were used. The inferred resources were classified by a minimum of two drillholes within 50m of each other or less.

- 7 Tonnage estimates are based on a fix density of 1.52 tonnes per cubic metre.
- 8 The commodity prices showed in the table below. The formula used for AuEq calculation:  $AuEq = ((Au \times 75.96) + (Ag \times 0.91)) / (2362.5 / 31.103)$ . The Mineral resources are in situ and the recovery values are not used.
- 9 Tonnages and AuEq oz in the table above are rounded to nearest hundred. Numbers may not total due to rounding

**Table 14-9: The Mineral Resource Estimate for the Notre-Dame-de-Montauban tailings site**

Notre-Dame-de-Montauban Tailings	Au (g/t)	Ag (g/t)	AuEq (g/t)	Tonnes	Au Oz	Ag Oz	AuOz eq
Inferred tailings	1.21	137	2.84	27 300	1 050	120 200	2 500

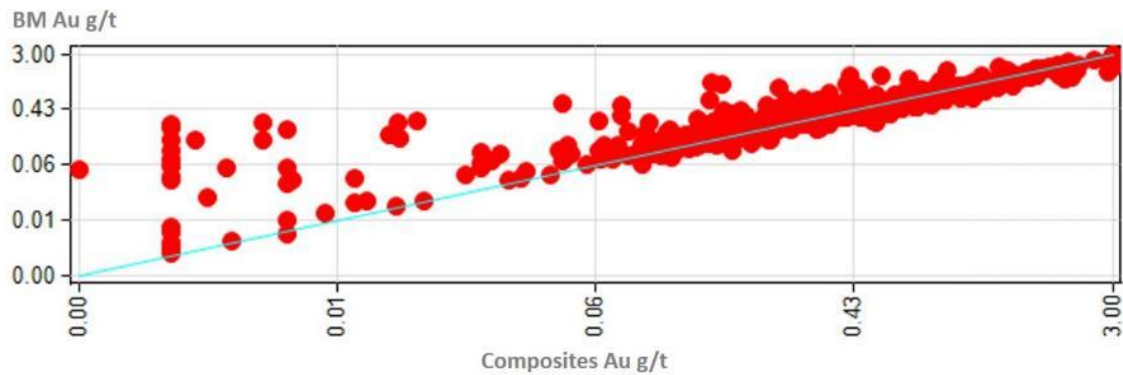
Mineral resources are not mineral reserves and have not demonstrated economic viability. There is no certainty that all or any part of the mineral resource will be converted into mineral reserves. It is uncertain if further exploration will allow improving of the classification of the Inferred mineral resources.

**Table 14-10** shows statistical analysis of blocks and a very good correlation between blocks grades and assays Au g/t.

**Table 14-10: Statistical Analysis Block Model versus Assays**

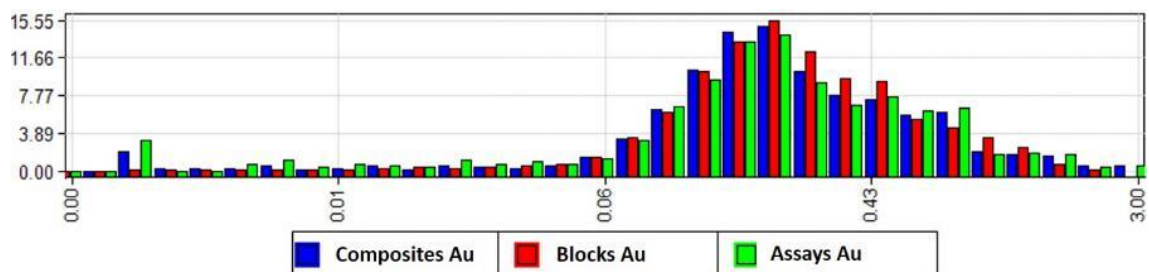
Au g/t	Block Models	Assays
<b>Min Value</b>	0.0025	0.0025
<b>Max Value</b>	2.99	3.00
<b>Average</b>	0.40	0.40
<b>Variance</b>	0.13	0.20
<b>Standard Deviation</b>	0.36	0.45
<b>% Variation</b>	0.89	1.12
<b>Median</b>	0.28	0.25
<b>First Quartile</b>	0.18	0.15
<b>Third Quartile</b>	0.49	0.49

The block model was validated visually by the inspection of successive section lines in order to confirm that the block models correctly reflect the distribution of high-grade and low-grade values. **Figure 14.21** shows the correlation between block gold grades and the composites data. The results fall within acceptable limits for linear grade estimation.



**Figure 14.21: Block model versus Au composite grades (g/t)**

An additional validation check was completed by comparing the blocks grade, the composites and assays data. **Figure 14.22**, show a good correlation between blocks grades, assays and composites used for the estimation.



**Figure 14.22: Block model validation showing Au composites and assays (g/t)**

#### 14.9.4 Comparison with 2019 resource

The 2019 MRE of the Anacon Lead 1 tailings site was done by MRB & Associates with an effective date of February 28, 2019 (**Table 14-11**).

**Table 14-11: Indicated Mineral Resource Estimate of the Anacon Lead 1 Tailings Site (Jourdain et al., 2019)**

Tonnage (t)	Gold Equivalent Grade (g/t)	Gold Grade (g/t)	Gold Content (Oz)	Silver Grade (g/t)	Silver Content (Oz)
462,000	0.60	0.31	4,570	32.68	485,630

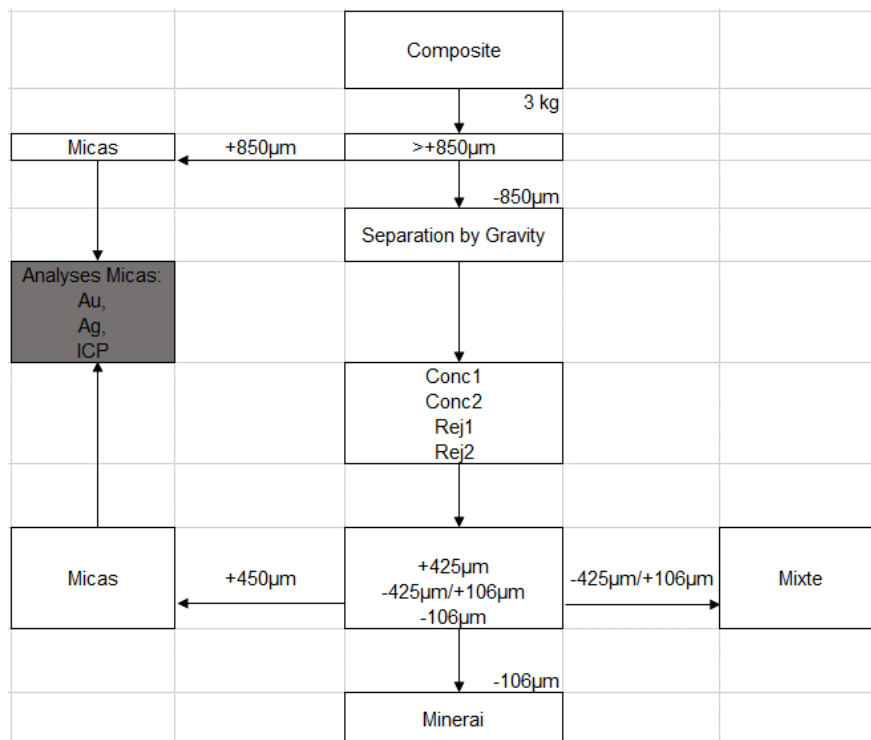
Compared to the 2019 MRE, the tonnages of the 2023 MRE increased for indicated resources by around 141,000 tonnes; the grade for Au increased from 0.31 g/t Au to 0.40 g/t; and grades for Ag decreased from 32.68 g/t Ag to 31.45 g/t Ag (see **Table 14-7**).

In addition to the Indicated resources the 2023 MRE includes inferred resources of 319,300 tonnes at 0.41 g/t Au and 36.9 g/t Ag for the combined Montauban and Notre-Dame-de-Montauban tailings.

In addition to the mineral resources of gold and silver, we add an estimate of the mica concentrates on the Anacon Lead1 and Tétreault 2 tailings sites. To estimate the mica concentrates in the Montauban tailings, drill holes samples were collected from Anacon Lead 1 (six drillholes) and from Tétreault 2 (two drillholes). A total of 30 tailings samples from the eight drill holes were sent to SGS for mica-separation tests. Samples from each hole were mixed and considered as one composite. A total of eight composites were tested. **Table 14-12**, show the micas concentration for each composite and **Figure 14.23**, shows the method used at SGS.

**Table 14-12: Mica Concentrations in Each Composite**

	Tetreault _ 2		Anacon Lead _ 1					
Débrit (+850µm)	8%	2%	2%	3%	1%	9%	1%	4%
<b>Conc</b>	<b>4%</b>	<b>4%</b>	<b>4%</b>	<b>9%</b>	<b>8%</b>	<b>11%</b>	<b>7%</b>	<b>11%</b>
Rejet	31%	36%	36%	19%	26%	17%	26%	20%
Mixte	56%	58%	58%	70%	65%	62%	66%	65%
Somme	100%	100%	100%	100%	100%	100%	100%	100%



**Figure 14.23: The micas test separation method used by SGS**

**Table 14-13** shows the micas concentrates from the Anacon Lead 1 (“AL1”) and Tétreault 2 composite samples. The total inferred mica concentrate from the two tailings is 57,200 t.

**Table 14-13: The micas concentrations in the Anacon Lead 1 and Tétreault 2**

<b>Inferred</b>	<b>Micas (%)</b>	<b>Tonnes</b>	<b>Micas (t)</b>
Inferred Micas AL1	9	571 900	51 500
Inferred Micas Tetreault_2	4	142 900	5700
<b>Total Micas Inferred</b>	<b>8.0</b>	<b>714 800</b>	<b>57 200</b>



## **15. MINERAL RESERVE ESTIMATES**

There are no current mineral reserves on the property.

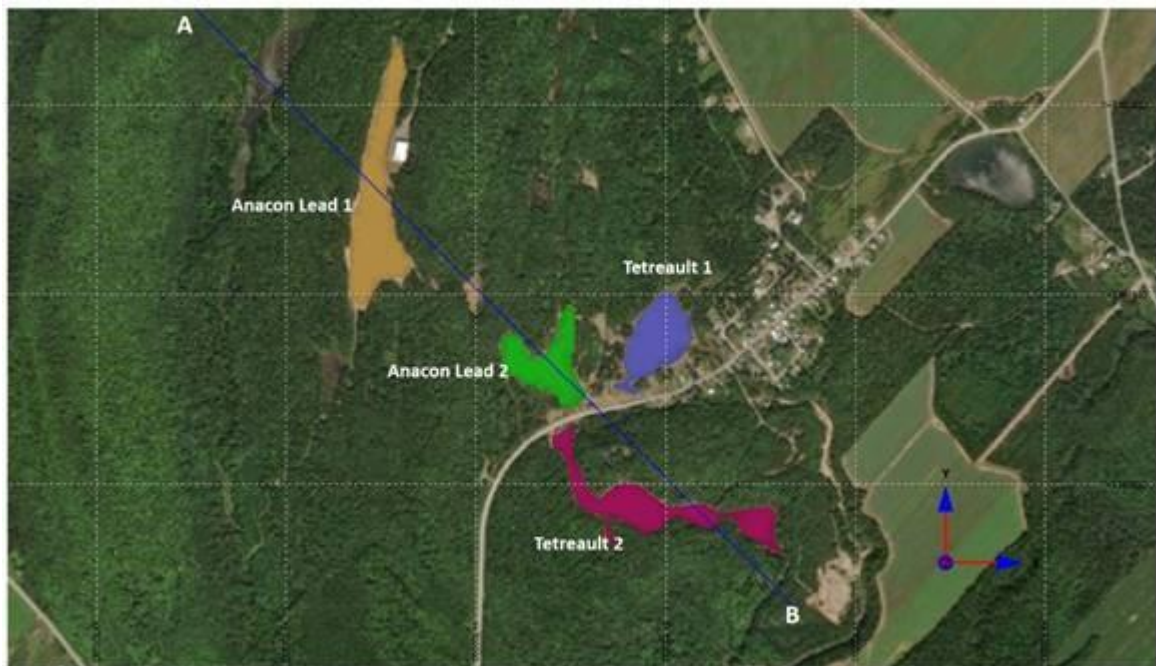
## 16. MINING METHODS

### 16.1 Open Pit Quarry

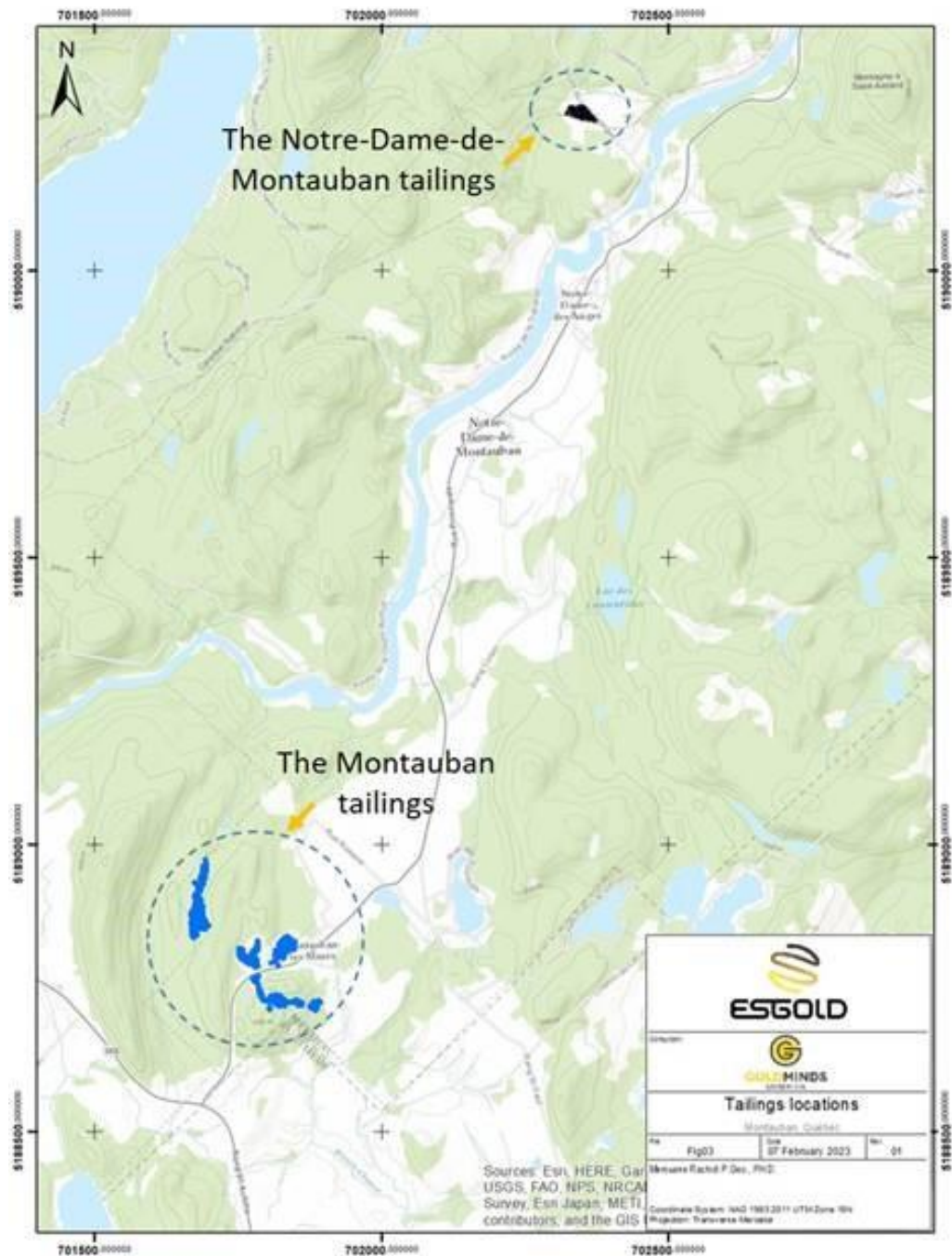
#### 16.1.1 Open pit quarry method

The operational design is to bring the tailings pile material to the pump box near the processing plant.

The objective is to feed 270,000 t of tailings to the processing plant (**Figure 16.1**) for the first three (3) years and 113,000 t during the fourth year of operation, for a four-year total of 923,000 metric tonnes. The contractor at the mining operation will work on a 9-month per annum basis avoiding operations during the coldest months. Tailings material source locations are shown on **Figure 16.1** and **Figure 16.2**.



**Figure 16.1: Google Earth image of the Montauban processing location (white rectangle on east side of Anacon Lead 1 tailings) and the surrounding tailings sites where material will be extracted and sent to processing plant.**



**Figure 16.2: Tailings mill feed locations**

The material will be picked up by a shovel (Cat 336 type) or a loader (Cat 966 type).

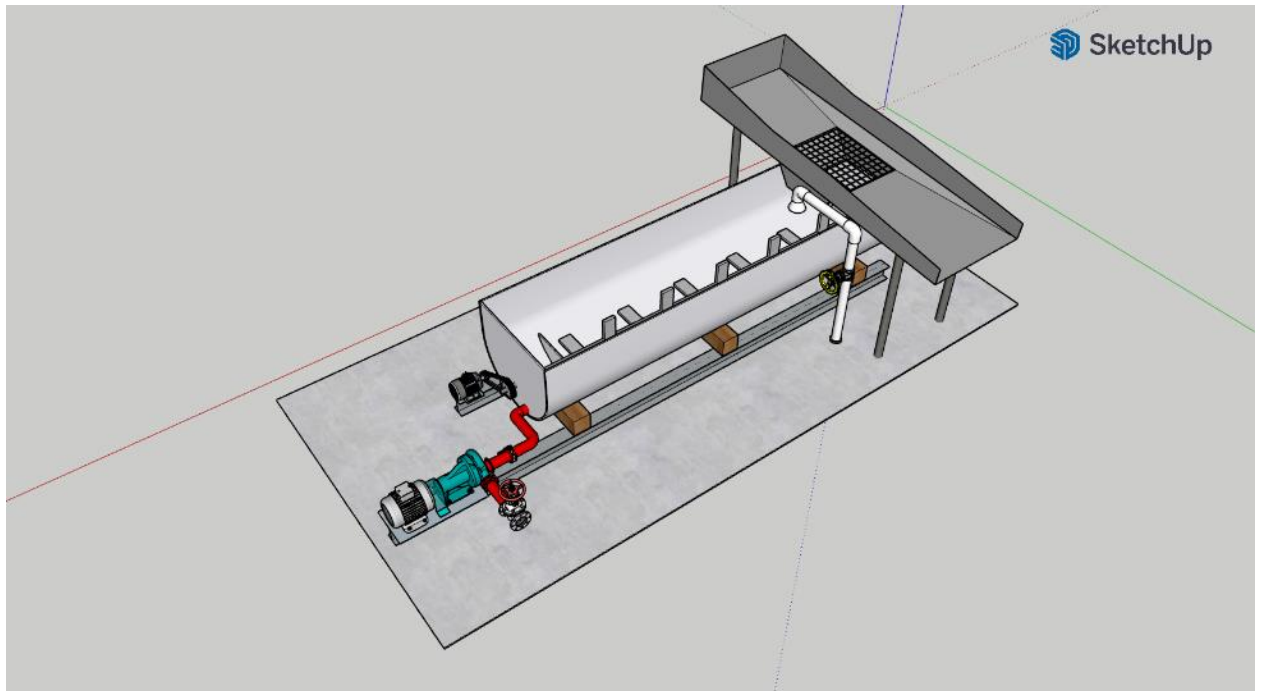
The hauling work can be done by a single articulated truck (Cat 730 type) with a capacity of 14 cubic metres. A second truck will be available on-site as backup.

The truck will unload near the pump box (plumper) and a loader will pick up the material to feed the plumper via a hopper, the objective being to have the tailings in slurry for pumping and mill feed. At short distance, the excavator will discharge directly on the hopper at the plumper. The work will be contracted out on a 24-7 basis.

As the Anacon Lead 1 pile is close to the processing plant, at the beginning of production a wheel loader will be used to load the truck and the same loader could load the plumper by driving down to the plant. As production advances, the wheel loader will not be able to do both tasks and a shovel should be brought to the pile to do carry out one of the tasks.

There will be a buffer of 500 t (12 hours of feed) stockpiled after the plumper to feed the plant in case of emergency or quarry shutdown.

Limited power is needed on the pile for the pump box and the one lighting system that will be installed on the pile near where the tailings material is mixed into slurry in the plumper (**Figure 16.3**).



**Figure 16.3: Plumper and hopper schematic design**

Supporting infrastructure on site will include a small administrative building, warehouse, fuel tank, spare generator and various sea-cans for material storage. Employees will stay at Montauban-les-Mines, so an on-site camp will not be required.

The proposed semi-mobile plumper system was recommended based on the experiences of Edmond St-Jean gained during his tenure as engineer at another

tailings reprocessing project. The design for the Project is to place the semi-mobile plumper system on skids directly on the tailings surface, with flexible piping hose for water and electrical power for the plumper. A second bigger hose with a pump will bring the material to a storage bin at the processing plant. Should the system fail, a provisional approach will be to excavate and haul the tailings directly to the mill.

### **16.1.2 Geotechnical study**

A geotechnical study should be done before construction of the tailing pond

### **16.1.3 Hydrogeological parameters and study**

A hydrogeological study was done to characterize effluents.

### **16.1.4 Phase design**

The project design is to feed 270,000 t of tailings to the processing plant for the first three (3) years and 113,000 t during the fourth year of operation, for a four-year total of 923,000 metric tonnes. The contractor at the mining operation will work on a 9-month per annum basis avoiding operations during the coldest months.

Mica shipping from the plant is projected to be done on a 5- or 7-day per week basis, depending on the shipping schedule of the client.

## **16.2 Quarry Operation Planning**

### **16.2.1 Contracts operators**

For the PEA, the idea of utilizing contractor operators is used as a basis. ESGold could also hire their own operators for the work. A formal request for proposal (RFP) will be submitted at the next study stage with the exact tonnage to firm up the estimated costs from a chosen contractor. GMG has used some ESGold operator's costs to establish the PEA mining costs.

### **16.2.2 Quarry operations planning parameters**

The plumper and the loader supplying feed to the plumper will work 24hrs/7 days per week. Four (4) operators will be needed to work on the plumper and four (4) operators will be needed on the loader to supply the plumper. Their schedule of work will be on an eight-hour per shift basis, five days per week for three weeks and six days on the fourth week, for a monthly average of 42 hours per week. A working rotation will be established to fulfill the three shifts needed to work around the clock.



Another schedule could be applied using 12-hour shifts depending on the plant working schedule but the same four operators will be needed. One week, 12 hours dayshift, the second week, 12 hours night shift.

For the shovel and the truck, assumptions are they can do the work in a 12-hour dayshift, seven days a week. The operation will need two shovel operators and two truck operators working four days the first week and three days the second week, for a two-week average of 42 hours per week.

During the initial stage of the project, as the plumper will be in close proximity to the tailings pile, assumptions are made that a shovel (and two operators) will dump material directly to the plumper, thus eliminating the need for a truck (and operators), and also the loader (and operators). As well, it is proposed to use another contractor to haul tailings from Notre-Dame de Montauban along a legacy rail bed to the processing site during the first year.

Presently, there are no backup employees for vacation or sick leave replacement.

The projected quarry plan has room for variations and flexibility.

The tonnage balance sequencing between the tailings has been done.

The resource tonnage for gold and silver, and for mica, are outlined in Section 14 of the PEA Report.

**Table 16-1** presents the four-year sequence for precious metals. The first year of operation calls for the extraction of Anacon Lead 1 ("AL1") and Notre-Dame de Montauban ("NDM") tailings, comprising 242 Kt of AL1 and 27.3 Kt of MDM. On year 2: extraction of 127 Kt of AL1 and 142.9 Kt of Tétreault 2 ("T2") material. On year 3: extraction of 154 Kt of AL1 and 115.3 Kt of Anacon Lead 2 ("AL2") material. For the fourth year: the remaining 47 Kt of AL1 and 65 Kt of Tétreault 1 ("T1") material.

Within the 923,000 tonnes of available material for precious metals are 571.9 Kt of recoverable mica (**Table 16-1**).

The tonnage of Micas associated with Anacon L1 and Tétreault 2 are balanced with the expected average grades presented in **Table 16-1**.

It is recommended to prepare a more detailed sequence of extraction with optimization at the Preliminary Feasibility Study (PFS) phase.

**Table 16-1: Average Grades of the Extraction Sequence**

Mining					
270Kt/yr	Year 1	Year 2	Year 3	Year 4	Total
	Anacon L1 + New Tailing	Anacon L1 + T2	Anacon L1+AL2	AL1+T1	
	270000	270000	270000	113,000	923000
	Grade	Grade	Grade	Grade	Grade
Au g/t	0.38	0.57	0.29	0.34	0.41
Ag g/t	38.84	36.09	27.89	26.68	33.34

<b>Micas</b>	242,700	127,100	154,700	47,400	571,900
	9%	9%	9%	9%	
		142,900		0	
		4%		0%	
Tonnes	21843	17155	13923	4266	57187

## 17. RECOVERY METHODS

### 17.1 Crushing Circuit

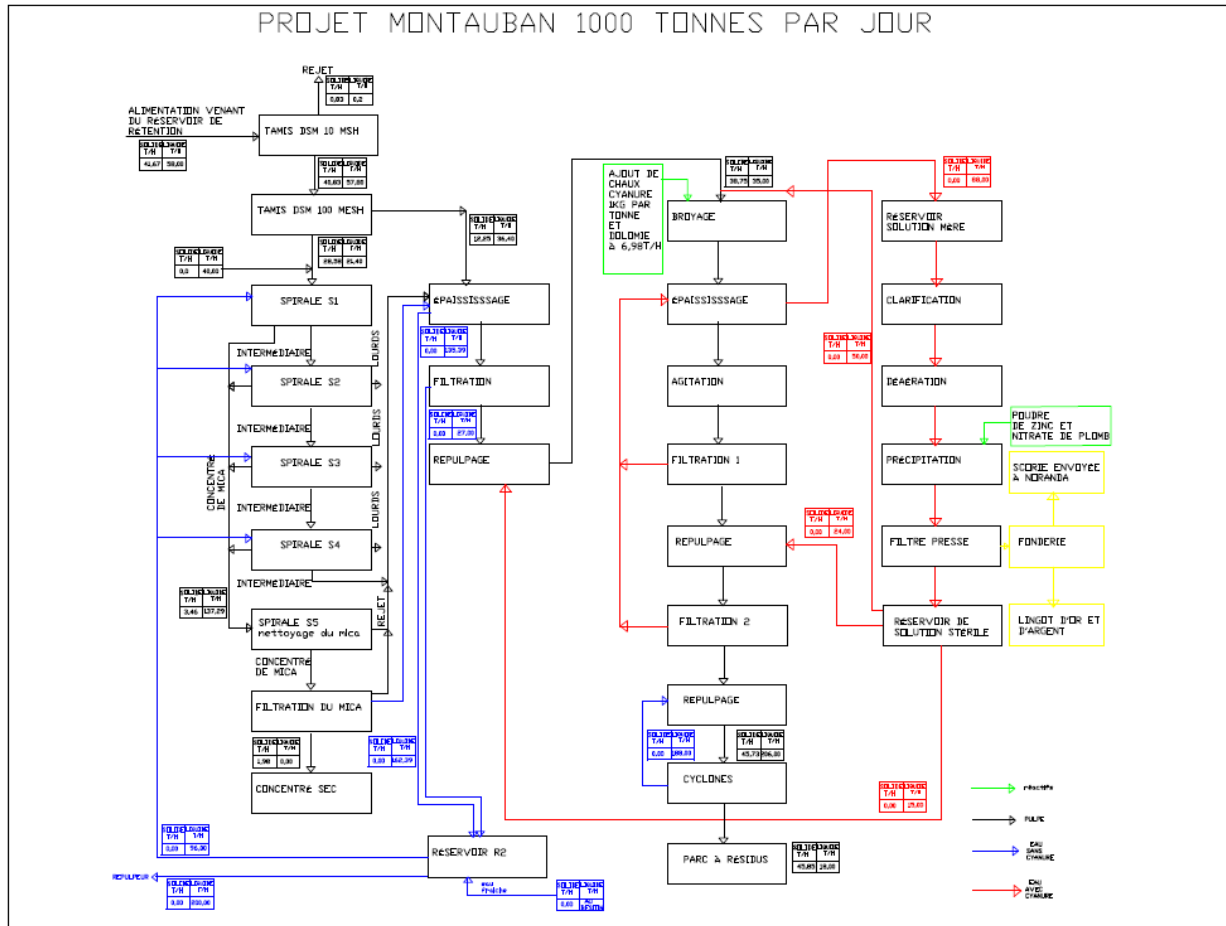
Because the feed is a material that has been previously crushed and grinded, the Montauban processes don't begin with a crushing circuit. The first step of the Montauban process is a re-pulper where the tailings material is mixed with water to obtain a pulp at average 45% solid. The function of this tank is to obtain a stable feed. This pulp is stocked in a mixing tank with a twelve (12) hour buffer retention.

### 17.2 Mica Recovery

The pulps come to the mixing tank (**Figure 17.1**) by pulping at an average flow rate of 42 tons per hour of solid at 45% solid passing through a -10 mesh DSM screen to remove any waste coming with the tailing. The waste material drops into a trash box that will be returned to the new tailings pond. The pulp passing through the screen is pumped to a 100 mesh DSM screen. The +100-mesh fraction falls down into a pump box where water is added to obtain a 30% solid pulp. This pulp is sent to a Humphrey spirals circuit. The -100-mesh fraction falls down into a pump box that sends it to a 30 feet diameter thickener.

The Humphrey spirals circuit constitutes 4 stages of mica recovery and one stage of mica re-concentration. The reject of the spiral circuit is sent to the same thickener, then the pulp passes through the 100 mesh DSM screen. The mica concentrate is filtered by a 48-inch circular sweco screen and dried on a conveyer with a steel belt. The liquid recovery by the sweco is pumped to a water retention tank outside.

The thickener is operating without flocculent. The lime is added to help the sedimentation and raise the pH. The overflow is sent to the water retention tank outside. The underflow is pumped to a disk filter. The solid filtered falling down in a re-pulper where a solution of cyanide at 1 kg per ton at pH 11 is added. This pulp is pumped to the grinding circuit.



Error! Reference source not found.: Project processing flowsheet

### 17.3 Grinding Circuit

The grinding circuit is constituted by two 8 X 8 ball mills, a battery of 6 cyclones of 10-inch diameter, and one Falcon C2000 gravimetric concentrator. The cyanidations begin in the grinding circuit. The gravimetric concentrator is installed to the overflow of cyclones and returns the gold and silver in the ball mill to raise the dissolution. The underflows of cyclones return in ball mills to obtain a 95 % pass 200 mesh grind. The exit of the grinding circuit is sent by gravity to a 30-foot thickener.

### 17.4 Thickening and Leaching

The overflow of the thickener is pumped to pregnant solution tank. The underflow is pumped to a series of four (4) cyanidation tanks connected one by one. The retention time is average of 40 hours. The flow exits by gravity from the series of cyanidation tanks and arrives in a series of two drum filters. The liquid is pumped to pregnant solution tank. The solid fall down to a re-pulper where is added barren solution to make a pulp. This pulp is pumped to the second series of two drum filter. The liquid is pumped to pregnant solution tank. The solid fall down to a re-

pulper where is added tap water and water come from cyclone overflow close of new tailing pond to make a pulp. This pulp is pumped to a cyclone installed outside, close of the new tailing pond. The underflow goes by gravity at the new tailing pond. The overflow goes by gravity to the re-pulper of second series of drum filter.

### **17.5 Precipitation Circuit**

The liquid contained in the pregnant solution tank is pumped to a clarifier to obtain a liquid totally clear of all particles. This liquid passes through a de aeration tank by vacuum and is pumped to a press filter after adding zinc powder in the pipe before entrance in press filter. The liquid exit to the press filter is send to the barren solution tank. When the press filter is full the liquid is switched to another press filter and blow the air in the press filter full to dry the precipitate.

### **17.6 Smelting**

The dried precipitate is put in small drum and transported to the refinery. The filtering cloth is burn in the furnace. The precipitate is mixed with a flux compound by borax, sodium carbonate, sodium nitrate and sodium silicate. The ingots compounded principally of silver, gold and a very small amount of diverse metal like zinc and copper are pouring in a mold.



## **18. PROJECT INFRASTRUCTURE**

### **18.1 General Site Description**

The Project's processing plant is less than 1 km northwest of the village of Montauban-les-Mines at the AL1 tailings site.

**Figure 18-1** shows the location of the proposed plant and **Figure 18-2** shows the location of the treatment plant at the site.

**Figure 18-3** shows a model of the industrial platform, particularly the general arrangement inside the treatment building and some equipment installed outside the building.

### **18.2 Power Line, Substations and Electrical Distribution**

A new powerline will supply the plant with electricity. Plant requirements are estimated at approximately 2,000 A/600 V. The powerline will run along the access road to the plant. This access road is located northwest of the Montauban-les-Mines sector at the intersection of Rompré St (see **Figure 18.1**). This new powerline will be connected to the existing network at Rompré St. to supply a 2,500 kVA, 25 kV/600V outdoor transformer; however, the power will be limited to 2,000 kVA in accordance with Hydro-Québec requirements.

#### **18.2.1 Future Provision for Full Electrification of Operations**

An electrical room will be set up inside the processing building where a 2,000 A/600 V main circuit breaker will be installed to supply the 600 V Motor Control Center (MCC).

### **18.3 Site Services**

#### **18.3.1 Potable and Sanitary Water**

The municipal aqueduct will not be used for the plant's potable water supply, as the site is relatively far from the existing municipal water network. Besides, the projected number of workers on site does not justify such an investment. Workers will have access to bottled water.

#### **18.3.2 Fuel Storage**

There is no requirement for storage of fuel on site.

Refill services will be outsourced to a local oil and gas contractor. This contractor will be responsible for establishing the refueling frequency and the minimum volume of petroleum products to be maintained on site.

The minimal storage tanks' layout will fall under the selected contractor's responsibility.

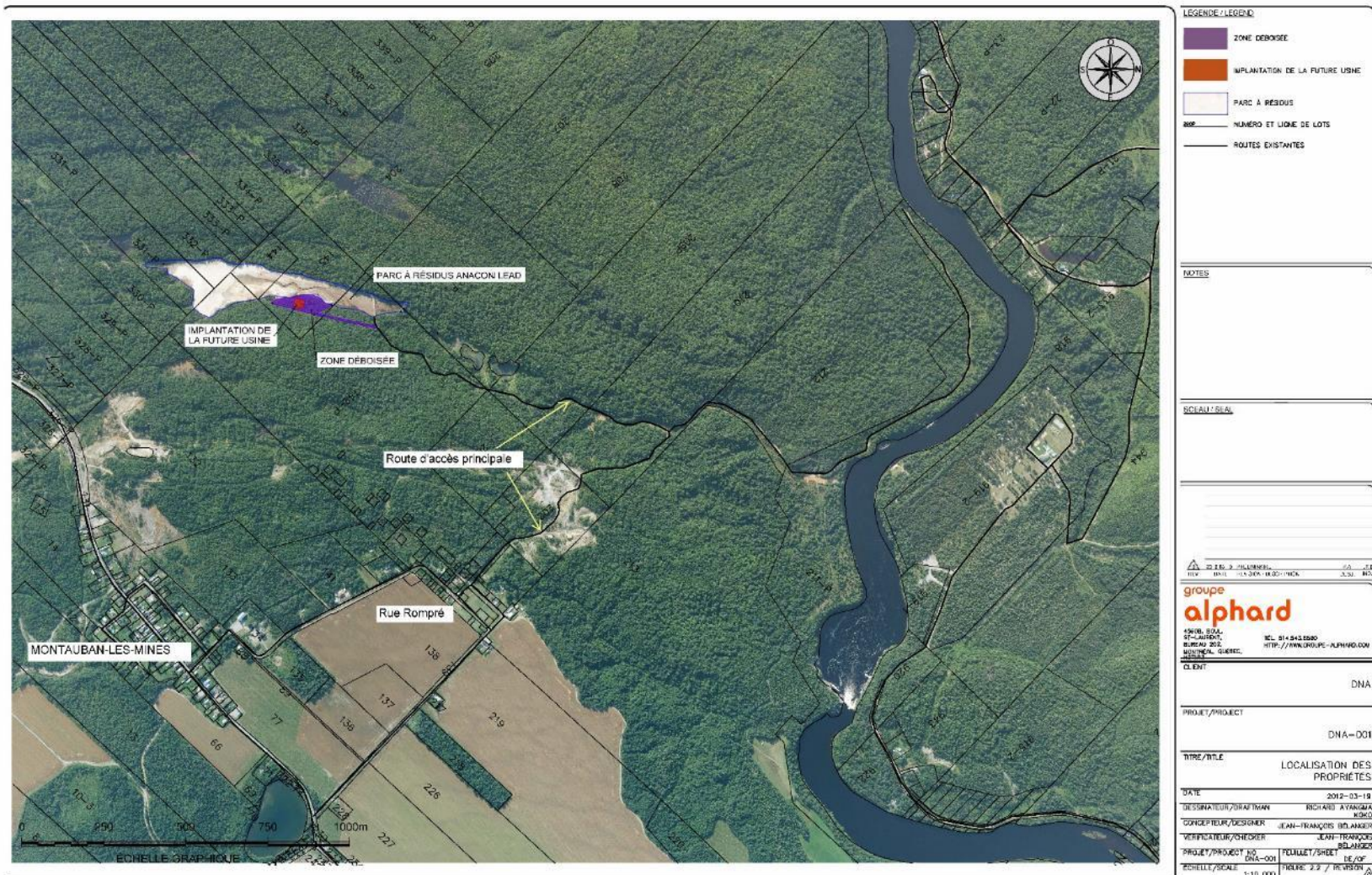


Figure 18-1: Location of the processing site





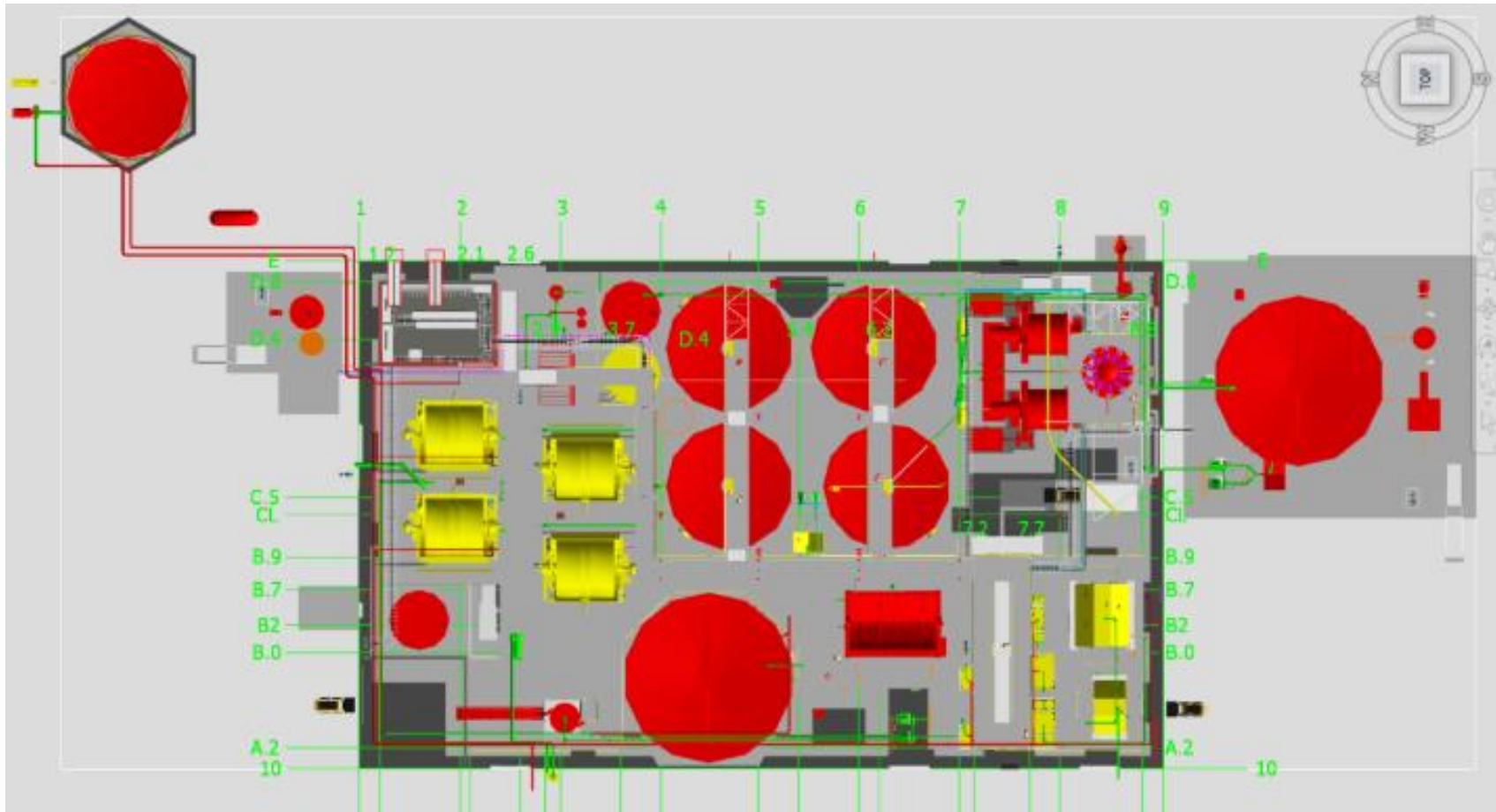


Figure 18-3: Image extracted from the 3D model representing the industrial platform

### **18.3.3 Telecommunication and Industrial Information Technology (IT)**

No IT infrastructure will be deployed on site. Internet access will be provided by satellite network.

A mobile radio system will be used for communications between workers and staff.



## 19. MARKET STUDIES AND CONTRACTS

The gold silver ingot bars or bullion produced by the operations can be sold to refiners or directly to the Royal Canadian Mint.

### 19.1 Gold Pricing

According to the World Gold Council, gold is a precious metal bought by people across the world for reasons often influenced by socio-cultural factors, market conditions, and macro-economic drivers in their country (**Figure 19.1** and **Figure 19.2**).

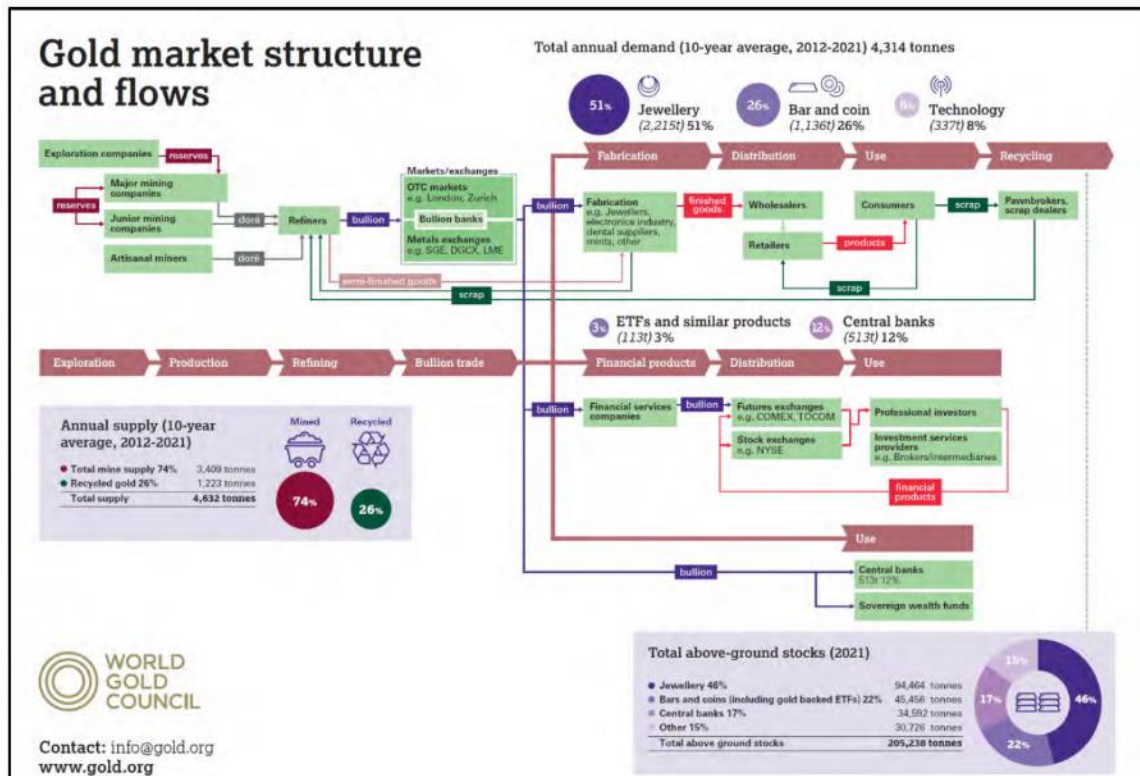
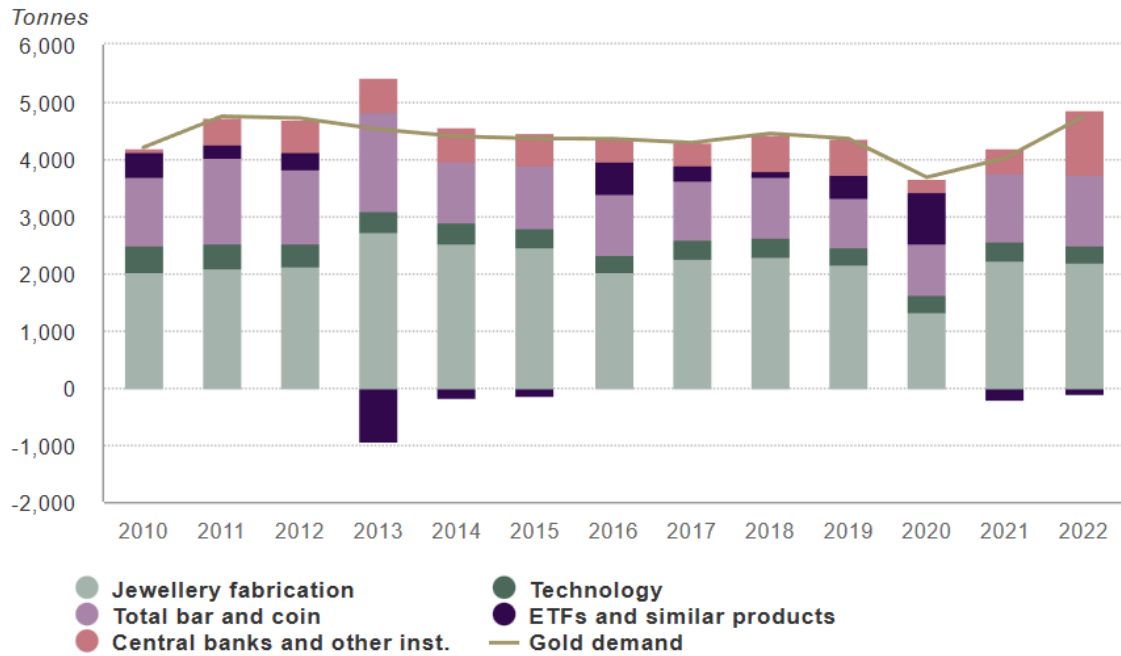
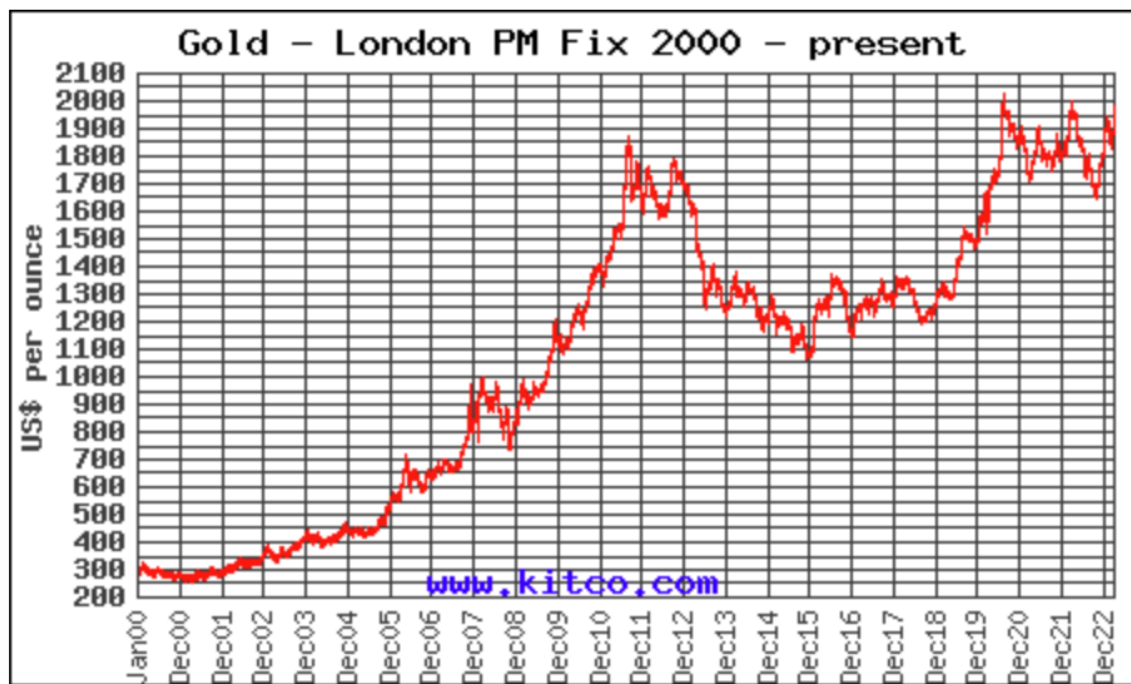


Figure 19.1: Gold market structure and flows as per World Gold Council



**Figure 19.2: Bar chart of world use and consumption of gold from 2010-2021 (World Gold Council-Metal Focus)**

Daily market pricing is available from over-the-counter (OTC) markets and Metals Exchanges, e.g., Kitco (**Figure 19.3**).



**Figure 19.3: Gold price from 2020 to present (Kitco-London PM Fix London: [www.kitco.com](http://www.kitco.com))**

**Figure 19.3** shows that gold price per ounce expressed in USD has significantly increase from 2018 to 2020, where it reached above USD \$2000/oz for a short period of time. From that date it has varied from USD \$1,600/oz to \$1,900/oz. The four-year trailing average is USD \$1,837.41/oz. Average for years 2020-2022 complete is USD \$1,813.35/oz

- 2020 average USD \$1,856.66/oz
- 2021 average USD \$1,786.65/oz
- 2022 average USD \$1,796.75/oz
- 2023 average (incomplete year) USD \$1,909.69/oz

In agreement with client discussions, GMG elected to use a gold price of USD \$1,750/oz in relation to the latest trailing average.

## 19.2 Silver Pricing

Silver is also considered a precious metal bought by people across the world for different reasons, often influenced by socio-cultural factors, market conditions, and macro-economic drivers in their country. The daily pricing via available from OTC Markets and at Metals Exchanges (**Figure 19.4**).

Silver is used for jewelry and silver tableware, where appearance is important. Silver is used to make mirrors, as it is the best reflector of visible light known, although it does tarnish with time. It is also used in dental alloys, solder and brazing alloys, electrical contacts and batteries.

**Figure 19.4** shows that silver prices spiked in 2010 and thereafter stabilized in the USD \$17-\$18/oz bracket from 2014 to 2019. It rose over USD \$25/oz in 2019 and has remained above USD \$18.33/oz since that time.

The four-year trailing average price is USD \$23.09/oz. Average for years 2020-2022 complete is USD \$23.50/oz

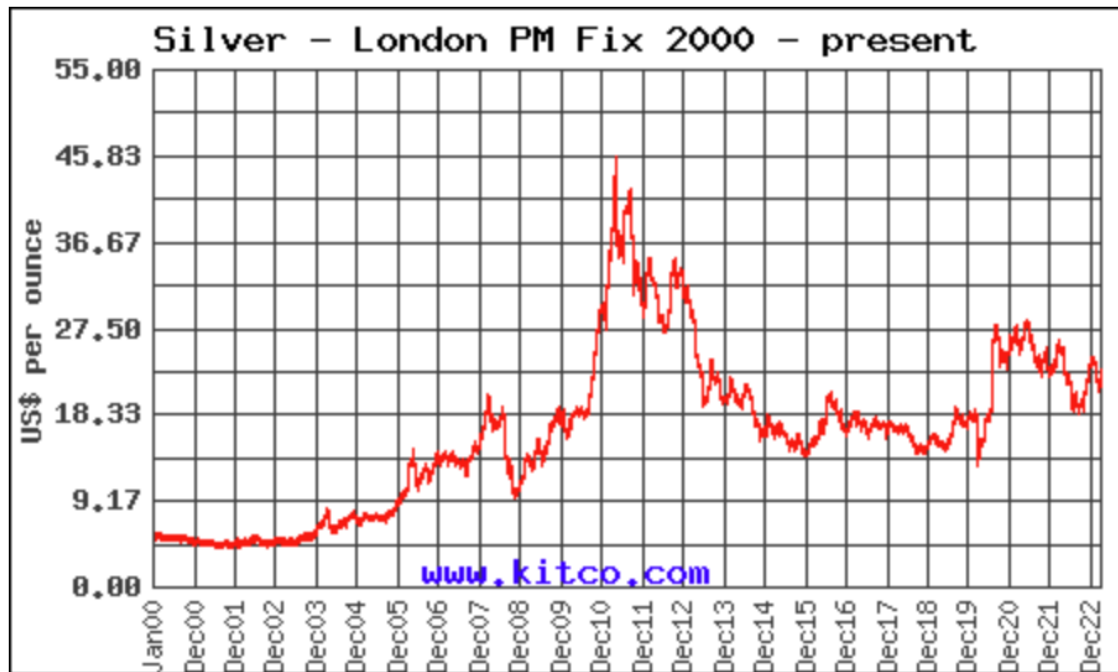
- 2020 average USD \$24.89/oz
- 2021 average USD \$22.47/oz
- 2022 average USD \$23.18/oz
- 2023 average (incomplete year) USD \$21.83/oz

In agreement with client discussions, GMG elected to use a conservative silver price of USD \$21.00/oz in relation to the latest trailing average and lower price at the beginning of 2023.

## 19.3 Mica Pricing

Mica is an industrial mineral commodity and is not publicly traded like gold and silver.

Micas are used in products such as drywall, paints, fillers, certain automobile parts, roofing and shingles, and electronics. The mineral is used in cosmetics and food to add "shimmer" or "frost." It is now used in the production of batteries.



**Figure 19.4: Silver price per ounce from 2000 to present (London PM Fix - Kitco)**

Moreover, sheet mica is used in electronics, microscopy, diaphragms for oxygen-breathing equipment, navigation compasses, thermal regulators, optical fibres, pyrometers (a type of thermometer used to measure the temperature of distant objects), stove or kerosene heater windows and mica thermic heaters. The mineral is used in different application and its grade, flake size and purity affect its value. It is mica which gives the metallic shining effect in automotive paints.

USGS (2023) states: In 2022, the price for one metric ton of dry ground mica in the United States was USD \$300. The most important sources of sheet mica are pegmatite deposits. Sheet mica prices vary with grade and can range from less than \$1 per kilogram for low-quality mica to more than \$2,000 per kilogram for the highest quality. The Montauban geology and deposit contain >10% mica in the gneiss units.

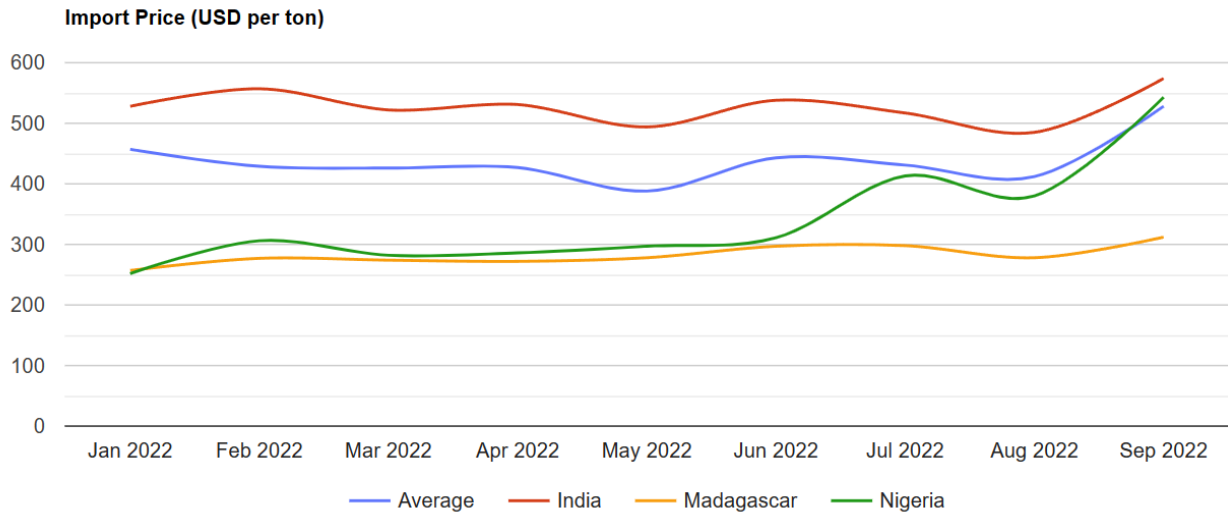
The mica market is growing and is expected to continue growing (**Figure 19.5**). Market growth is projected to reach USD \$669.3 M in 2024 (**Figure 19.6**).

In September 2022, the mica price stood at USD \$528/ton (CIF China) (IndexBox – Market analysis).

After review of different prices, GMG in agreement with the client elected to use a low-end price of USD \$200/t for its mica concentrate. This price being below all importing price reported by Index Box.

In 2018, DNA sent a catalogue of the Montauban muscovite final concentrate product to parties of interest. ESGold does not at this time have client for the mica product has contact with previously interested parties. ESGold intends to contact

potential buyers. The confidence is high as the product has already been qualified and there is interest to purchase the concentrate (Hawley, 2011).



**Figure 19.5: Import price (in USD) per ton for various counties (from IndexBox: www.indexbox.io)**

**Market value of mica worldwide from 2015 to 2024 (in million U.S. dollars)\***



**Figure 19.6: Market value of mica from 2015 to expected 2024 (Statista 2023: www.statista.com)**



## **20. ENVIRONMENTAL STUDIES, PERMITTING, AND SOCIAL OR COMMUNITY IMPACT**

### **20.1 Introduction**

The existing environmental and social conditions within the Project area are reported herein. Current and future project permitting requirements are also discussed.

### **20.2 Permitting and Authorizations**

#### **20.2.1 Provincial Regulations**

The Project is set to have a production capacity of 1,000 tpd, which is under the threshold of 2,000 tpd that triggers an Environmental and Social Impact Assessment and review procedure under the Environment Quality Act. Therefore, only a CA under the Environment Quality Act must be obtained from the Ministère de l'environnement et de la lutte contre les changements climatiques, de la Faune et des Parcs (MELCCFP).

The previous project owner had performed substantial permitting work and had successfully obtained the CAs for the installation and operation of a mine tailings treatment plant, the operation of a mine tailings treatment plant, and the installation of a wastewater treatment plant. The current permitting status allows for the reprocessing of tailings from the Anacon Lead 1 tailings site. A CA for the reprocessing of tailings from the other tailings sites is required.

#### **20.2.2 Federal Regulations**

The Project is under the threshold of 5,000 tpd that triggers the federal permitting process for a project that involves the construction, operation, decommissioning, and abandonment of a new gold mine, other than a placer mine.

The Metal and Diamond Mining Effluent Regulations under the Fisheries Act provides the framework for mining activities, particularly mining effluents, with regard to the protection of fish and fish habitats.

#### **20.2.3 Municipal Requirements**

A leasing agreement that outlines the framework for municipal land use was signed between the Project owner(s) and the municipality of Notre-Dame-de-Montauban. Included in the agreement is a commitment on local hiring and purchasing, as well as an agreement to pay a 1% NSR royalty to the municipality on production from the Project.

The municipality unanimously adopted a resolution on the 9th of March 2023 supporting the current plan to decontaminate mine tailings present on the territory of the Notre-Dame-de-Montauban municipality, as outlined in the PEA Report.

#### 20.2.4 Citations of Municipal Agreements

**March 9, 2023:** Appui à ES Gold pour la décontamination des résidus miniers sur le territoire de Notre-Dame-de-Montauban, Résolution Numéro 2023-03-46.

**August 27, 2021:** Bail Municipale, Notre-Dame-de-Montauban & Secova Metals Corp.

**March 13, 2014:** Autorisation, Installation d'un système de traitement des eaux usées, 7610-04-01-03026-02, 401 116 286.

**September 14, 2012:** Autorisation, Implantation et exploitation d'une usine de traitement de résidus miniers, 7610-04-01-03026-01, 400 965 180.

**September 14, 2012:** Autorisation, Exploitation d'une usine de traitement de résidus miniers, 7610-04-01-03026-02, 401 116 285.

**March, 2022:** Mise à jour du plan de restauration, SEM-003-RAP-001.

**October, 2013:** Plan de restauration, DNA-001.

#### 20.3 Closure Plan

The original closure plan for the Project was developed by Alphard and submitted to the MELCCFP in 2013. According to provincial regulation, closure plans must be revised on a five-year basis. An updated closure plan was submitted to the Ministry in 2022, as the project development was put on hold after the original closure plan was issued by the previous owner, due to market conditions.

The closure plan involves the reprofiling of tailings to allow water runoff to peripheral ditches and covering the tailings with 15 cm of topsoil to allow for hydraulic seeding. All supporting Project infrastructure, including the process plant and the wastewater treatment plant, will be dismantled. All mobile and fixed equipment will be sold for salvage value. Recyclable material will be segregated and sold when possible. Any contaminated soil will be managed according to regulation. The closure of the site is expected to take about one year. Post closure monitoring will be performed six times per year for a period of five years for groundwater and effluent, and bi-annually for revegetation as specified in the applicable regulation.

The approximate closure cost is estimated at \$1,139,000 (**Table 20-1**). As per applicable regulation, the closure cost provision will have to be submitted to the government as a bond in two tranches prior to project exploitation.

**Table 20-1: Closure Cost Breakdown**

Description	Quantity	Cost
Process plant dismantlement	1	\$306,100.00
Dyke removal	1	\$45,000.00
Basin removal	1	\$17,500.00
Tailings reprofiling	58,000 m <sup>2</sup>	\$68,266.00
Peripheral dyke construction	1,400 m <sup>3</sup>	\$82,390.00
Topsoil covering	9,200 m <sup>3</sup>	\$108,284.00
Hydraulic seeding	58,000 m <sup>2</sup>	\$85,332.50
Septic tank dismantlement	1	\$5,885.00
Pumping station dismantlement	1	\$5,885.00
Environmental characterization	1	\$35,000.00
Groundwater monitoring	30	\$105,000.00
Effluent monitoring	30	\$36,000.00
Indirect costs	10%	\$90,064.25
Contingency costs	15%	\$148,606.01
Total	-	\$1,139,312.76

## 20.4 Water Management

The processing plant is expected to require an average of 2,400 cubic metres (m<sup>3</sup>) of water per day. It is expected that 80% of water consumption will be sourced from recycled process water, with the remaining to be sourced from water runoff from the tailings pond. A water storage basin with a capacity of 5,000 m<sup>3</sup> will be constructed downstream of the tailings pond. A network of ditches will be constructed to divert water runoff to the storage basin. It is expected that 21,000 m<sup>3</sup> of water be returned to the environment after treatment, if necessary.

## 20.5 Tailings

The current tailings management facility is considered an orphan site and the provincial government carries the environmental liability associated with it. The tailings are characterized as being potentially acid generating that carry a risk of leaching heavy metals including cadmium, copper, manganese, zinc, and lead. Sampling around the current tailings has demonstrated that the tailings have not had a meaningful impact on water quality but there is a high-risk potential for contamination.

The proposed tailings management plan considers the construction of an impermeable dyke to the north of the current tailing's storage facility. Tailings will be sent for processing and returned to the tailings management facility upstream of the impermeable dyke. The current process includes the addition of 14-18% of

dolomite in the tailings during the reprocessing, effectively neutralising the acid generation potential and reducing the risk of heavy metals leaching.

## **20.6 Site Monitoring**

During the operations, monthly reporting summarizing operational and site monitoring activities will be submitted to the MELCCFP. These reports will include the following elements:

- A description of current activities (milled tonnage, generated tailings, number of production days, etc.);
- Problems that have a potential of influencing the environment and mitigation measures applied;
- The surface area of tailing deposition;
- A water balance.

## **20.7 Social or Community Impact**

The population in the area has been declining since the end of mining activities in the 1960s. The current economical activity in the area revolves around agriculture and forestry and both sectors have been in decline. There are seasonal touristic attractions in the area that are mainly active during the summer months. These attractions are located at a sufficient distance from the Project for it to not have any significant interaction. The Project is expected to create about 30 direct employment opportunities, providing a revitalisation potential for the region. Access rights from certain surface landowners is required for the Project, the majority of which have been secured through contractual agreements. The Project will not have an impact or influence on First Nations communities.

## **21. CAPITAL AND OPERATING COSTS**

### **21.1 Introduction**

The Montauban project is a brownfield mining and tailings reprocessing facility with average yearly mill feed throughput capacity of 270,000 t and a target production averaging 3,000 oz of gold and 230,000 oz of silver with 17,640 t of mica concentrate per year for the first three (3) years.

The process flowsheet was developed using tests elaborated at LTM Laboratory of Val d'Or and the mill designed through a collaboration of LTM and Alphard engineers. At this stage, only tailings are to be processed at the mill; however, the company intends to add hard-rock mining in the near future to the Project. The Project is an environmental cleanup of legacy tailings with reprocessing of the tailings to remove precious metals and mica, and stabilize the secondary tails with limestone. Given this consideration, the flowsheet includes a first step to remove mica prior to the complete grinding and traditional Merrill Crow system. Selection of certain used equipment will reduce the capital expenditures ("CapEx") of the project and the Company intends to use the local and regional workforce to reduce its operating expenditures ("OpEx").

- CapEx estimates for the mine were prepared by GMG;
- CapEx estimates for the mill were prepared by Edmond St-Jean;
- CapEx estimates were prepared by Alphard for the new tailings processing facilities, infrastructures, power & water treatment plant;
- The major processing-equipment pricing is supported by budgetary quotes and emails from consumable providers;
- All costs provided are free of contingency and escalation;
- Costs are adjusted to reflect market pricing for bulk materials and local labour costs.

The estimate was built with a base date of February 2023 and the default currency is the Canadian dollar ("CAD" or \$). All bulk material pricing is based on CAD. Budgetary pricing received for equipment in US dollars ("USD") has been converted to CAD using a USD:CAD exchange rate of 1:1.35.

### **21.2 Capital cost estimate**

The capital cost estimate (CapEx) consists of direct and indirect capital costs, owners' costs, as well as contingency.

The accuracy achieved was evaluated considering the level of definition reached in major engineering deliverables, execution strategy and pricing for each plant.

Major Assumptions:



All backfill materials, especially for the new dyke of the new tailings pond, will be available from gravel pits or other sources located close to the site.

Major Exclusions:

The following items have not been included in the CapEx:

- provisions for inflation, escalation, and currency fluctuations;
- provisions for risk and mitigation plans;
- interest incurred during construction;
- project financing costs.

### 21.3 Capital Costs Summary

A list of the initial capital and sustaining capital costs for the Project are presented in **Table 21-1**.

**Table 21-1: Capital Cost Estimate**

Description	Cost – CAD*
Mine capital costs	450,000
Plant Equipment+Installation	7,860,000
Infrastructure capital costs	2,018,500
Closure costs	1,150,000
Contingency (30%)	3,443,500
Owner costs (5%)	574,000
EPCM costs (5%)	574,000
<b>Total initial CapEx</b>	<b>16,070,000</b>

\*Amounts rounded

A required working capital estimated at \$1,761,200 is required and should be added to the required CapEx.

### 21.4 Direct Capital Costs

Capital budget and production cost estimates have been based on USD converted to CAD at the exchange rate of 1.00USD/1.35CAD.

The capital cost estimates project has an accuracy of +/-30 % for a Preliminary Economic Assessment level.

Total direct capital cost is estimated at \$16,069,616 for this PEA.

### **21.4.1 Mining**

For our case, since the 'quarry' excavation side will be contracted out, we evaluate a total of \$450,000 for total capital costs, which will include the costs of plumper and hopper, fences, and safety of the area.

### **21.5 Indirect capital costs**

The indirect costs comprise the costs of temporary construction facilities and services, construction equipment, freight, insurance and engineering/procurement/construction management services.

Indirect costs include the costs associated with the following:

- Project management and procurement of all project equipment, materials and services that will be carried out from site as needed; and
- Detailed engineering, the design of which will be carried out by ESGold and the chosen contractor.

### **21.6 Contingency allowance**

The contingency allowance is an amount added to an estimate to allow for items, conditions, or events for which the state, occurrence, and/or effect is uncertain and that experience shows will likely result in additional costs. This amount covers unforeseen events, unknown or minor change in the preliminary design.

Based on the stage of development of the Project and the assessment of major risks, a global contingency allowance of 30% has been added to the CapEx evaluation at the PEA level.

The contingency allowance excludes:

- Major scope changes such as changes in final product specification, capacities, building sizes and location of the project;
- Delays in delivery of equipment for the mill;
- Extraordinary events such as major strikes and natural disasters;
- Management reserves; and
- Escalation and currency effects.

### **21.7 Sustaining-, Owners'- and EPCM-capital costs**

The sustaining capital costs are the capital expenditures during the life of the quarry that are to maintain or upgrade the existing asset and to continue the operation at the same level of production. In that case it is a % of the initial capital cost for each item. For our project we used 10% of the total quarry capital cost, which equals to \$45,000 for year 1,2 and 3.

For the Owners' capital costs, we used 5% of the total initial capital cost, for a total of \$573,915

For the EPCM capital costs, we use also 5% of the total initial capital cost, for a total of \$573,915. It is a low % because most of the EPCM work will be performed by the chosen quarry contractor.

### 21.7.1 The Mill

For the mill, the capital equipment cost plus installation cost from received quotations total \$7,859,000 plus \$628,784 for the sustaining capital costs over 4 years, as anticipated by Edmond St-Jean.

### 21.7.2 Infrastructure

For the new tailings construction and infrastructure costs a sum of \$2.018 Million is anticipated by Alphard, with annual sustaining capital of \$40,370 for a total of \$161,480.

### 21.7.3 Closure costs

Based on site layout and permitting for the AL1 tailings site alone, a provision of \$1.15M was estimated closure and rehabilitation.

The closure and rehabilitation costs include revegetation of the AL1 area but do not include the dismantling and removal of all facilities and services. Possible revenue from the salvage of equipment and materials was not considered in the closure costs nor the cash flow. The company is aiming at doing progressive reclamation, when possible, over time.

## 21.8 Operating cost estimate

Information on the estimated operating costs of the Project and covers mining, processing, tailings and water management, site services and general administration is presented. The operating costs ("OpEx") over the Project life are estimated at \$27.09M for an average of \$29.4/t of tailings. A summary of these costs is presented in **Table 21-2**.

**Table 21-2: Operating Cost Summary\***

Items	Cost (CAD)	Cost (CAD/t tailings mined)
Mine operating costs	4,153,500	4.50
Processing costs	20,049,400	21.72
G&A	2,889,800	3.13
<b>Total</b>	<b>27,092,700</b>	<b>29.40</b>

\*Numbers may not add due to rounding

### 21.8.1 Scope and methodology

The operating costs for the project were estimated by year.

### 21.8.2 Quarry costs

The quarry operating cost was estimated by year and, assuming it will be contracted out, including the production equipment (**Table 21-3**). The estimated costs are based on operating the quarry equipment, the manpower associated with operating the equipment, the cost of fuel, a generator (if necessary) and maintenance.

**Table 21-3: Operating Mining Costs per Year**

	OPEX QUARRY COST			
	YEAR 1	YEAR 2	YEAR 3	YEAR 4
TONNAGE	270,000	270,000	270,000	113,000
COST/M.T.	\$4.50	\$4.50	\$4.50	\$4.50
TOTAL	\$1,215,000	\$1,215,000	\$1,215,000	\$508,500

The \$4.50 cost per tonne includes; \$0.25 for water management, \$1.00 for environment, \$0.25 for dam reinforcement and \$3.00 for manpower, fuel, equipment and maintenance.

### 21.8.3 Owners' G&A costs

The owners' general and administration project costs include the operation of all the services, manpower, and infrastructures required to support the operations.

#### **Royalties:**

Royalties will be paid by the owners or the operators of the Project to compensate for the resources that are extracted at Montauban and also to contribute to the town operation. Royalties are anticipated to be \$629,325 over the 4 years of operation. The mining taxes calculation is separate. In this Project, royalties have been evaluated yearly as follows: 1% of the resource material revenue, which is based on revenue of precious metals and micas.

#### **Sales, Administration & General Management:**

Sales, General and Administrative expense (SG&A) is reported on the income statement as the sum of all direct and indirect selling expenses and all general and administrative expenses (G&A) of a company. A cost of \$3.13 per metric tonne of material was assumed on a yearly basis (**Table 21-4**).

**Table 21-4: Operating Cost for G&A per Annum**

	OPEX G&A			
	YEAR 1	YEAR 2	YEAR 3	YEAR 4
TONNAGE	270,000	270,000	270,000	113,000
COST/M.T.	\$3.13	\$3.13	\$3.13	\$3.13
TOTAL	\$845,400	\$845,400	\$845,400	\$354,800

#### 21.8.4 Operating cost of the mill

For a typical year at 270,000 tpy of feed, the process operating costs were estimated at \$5.86M/y or \$21.72/tonne of mill feed. The OpEx is divided into 3 main cost areas including labour, consumables and power. The total processing cost per tonne of feed is estimated at \$21.72/t.

Where the costs are estimated:

- \$4.87/t for the operators
- \$14.38/t for consumables
- \$2.48/t for electricity

The costs to pump out the reject of the mill to the new tailings pond are included in mill operating costs. The cost per year is presented in **Table 21-5**.

**Table 21-5: Annual Operating Cost of the Mill Over Four Years**

	OPEX Mill			
	YEAR 1	YEAR 2	YEAR 3	YEAR 4
TONNAGE	270,000	270,000	270,000	113,000
COST/M.T.	\$21.72	\$21.72	\$21.72	\$21.72
TOTAL	\$5.86M	\$5.86M	\$5.86M	\$2.45M



## 22. ECONOMIC ANALYSIS

The economic evaluation of the Project was performed using a discounted cash flow model on both a pre- and post-tax basis. The CapEx and OpEx cost estimates presented in Item 21 were based on the mining and processing plans designed to process 1000t/day over 270 days (nine months) of mineralized tailings over the life of mine (LOM). The internal rate of return (IRR) on total investment was calculated based on 100% equity financing.

The net present value (NPV) was calculated from the net cash-flow generated by the Project. The Project base case NPV was calculated based on a discounting rate of 5%. The 5% rate was selected to reflect the relatively low risk associated with limited Capex requirements, and the fact that the Project is permitted, which reduces the risk. The payback period based on the undiscounted annual cash flow of the Project is also indicated as a financial measure. A sensitivity analysis was performed for the pre- and post-tax results to assess the impact of variation of the Project initial capital costs, operating costs, and sensitivity to the selling price of concentrate.

The financial analysis was done using the following assumptions and procedures:

- A base case mill processing 1000 t/day of mineralized tailings for 270 days per year;
- Capital and operating costs are in constant Q1-2023 dollars with no escalation or inflation applied;
- Working capital required to meet expenses after production start and before revenue becomes available, is identified;
- One royalty agreement with the town of Montauban has been identified and included in this analysis;
- An exchange rate of CAD 1.35 = USD 1.00 has been considered;
- Calculation of production, sales and key financial metrics on a yearly basis;
- Payback periods, unless otherwise stated, are the years required to reach a break-even cashflow from the start of production (not accounting for pre-production).

The financial analysis was performed by GMG on a pre-tax basis. ESGold provided applicable annual taxation guidance which GMG incorporated into its cash flow model to also provide results on a post-tax basis. Current Canadian tax regulations were applied to assess the corporate tax liabilities, whereas the Québec mining tax regulations adopted in 2013 were applied to assess the mining tax liabilities. All values are expressed in Canadian Dollars unless otherwise stated. The following cash-flow presents the cash flow projection for the Project based on the following:

- the aforementioned annual revenues;
- operating costs;
- capital cost disbursements;
- other costs including rehabilitation and closure costs.

## 22.1 Cautionary statement

The results of the economic analyses discussed in this section represent forward-looking information as defined under Canadian securities law. The results depend on inputs that are subject to a number of known and unknown risks, uncertainties and other factors that may cause actual results to differ materially from those presented in the PEA Report. Information that is forward-looking includes:

- mineral resource estimates;
- assumed commodity prices and exchange rates;
- mine production plans;
- projected recovery rates;
- sustaining and operating cost estimates;
- assumptions as to environmental, permitting and social risks.
- changes to costs of production from what is assumed;
- unexpected variations in quantity of mineralised material, grade, and recovery rates;
- geotechnical and hydrogeological considerations during mining being different from what was assumed and was experienced in the past;
- failure of plant, equipment, and processes to operate as anticipated;
- accidents, labour disputes and other risks of the mining industry.

## 22.2 Financial Model Parameters

All dollar amounts in this analysis are expressed in Canadian dollars (CAN), unless otherwise specified. The economic analysis includes four years of the entire project life. Corporate sunk costs to that point in time, including costs for exploration, technical studies and permitting, are included in the initial capital. The basis of the project economic analysis is summarized in Item 22.3. Details of the capital and operating cost estimates are described in Item 21. The production schedules used for the economic analysis are described in Item 16. Metallurgical recoveries are described in Item 13.

Highlights of the PEA Study:

- A project life of 4 years with the current resources starting in 2024 and ending in 2027;
- Project IRR 42.6% pre-tax and 23.4% post-tax;
- Production starts at 273,000 metric tonnes of product for year 1, 2 and 3 and decreasing to 113,000 metric tonnes of product for year 4.
- Total operating costs of \$29 per metric tonne of tailings (averaged over the expected life of the Project);
- CapEx (direct and indirect costs) and sustaining capital requirements of \$17.04M, where initial capex (direct) requirement is \$16.07 M.

## 22.3 Economic Analysis

The production schedule upon which the economic analysis is provided and discussed in Item 16.

The economic analysis for the overall project is summarized in **Table 22-1**. The overall IRR is 42.6% (post-tax), and the payback (after-tax) is \$6,992,000 (NPV 5%).

**Table 22-1: Project Base-Case Economic Parameters and Assumptions**

Items	Units	Values
MICA	US\$/mt	200
Silver	US\$/oz troy	21
Gold	US\$/oz troy	1750
Mining ore tonnage over LoM(actual)	metric tonne	923,000
Royalty on sales (Owners)	%	1.0
Federal tax	%	15
Provincial tax	%	11.5
Mining tax	%	16

+ The exchange rate used is USD1.00:CAD1.35.

+ The cash flow does not take into account inflation.

+ The study does not include an escalation of commodity price during the life of the project.

The project cash flow summary of the base case\* is shown in **Table 22-2**.

\*Base-case here supposes the product is sold Ex Works ("EXW"), i.e., when it leaves the Montauban mill

**Table 22-2: Project Cash Flow Summary**

Items	Value CAN\$
Total revenue of sales	\$61,207,000
Total operating costs	\$27,093,000
Pre-tax discounted (5.0%) NPV	\$14,079,000
After-tax discounted (5.0%) NPV	\$6,992,000
Pre-tax discounted (8.0%) NPV	\$12,314,000
After-tax discounted (8.0%) NPV	\$5,557,000

**Table 22-3** is a detailed cash flow of the Project. The labelling of EXW Montauban relies on the fact Micas selling price are EXW Montauban mill.

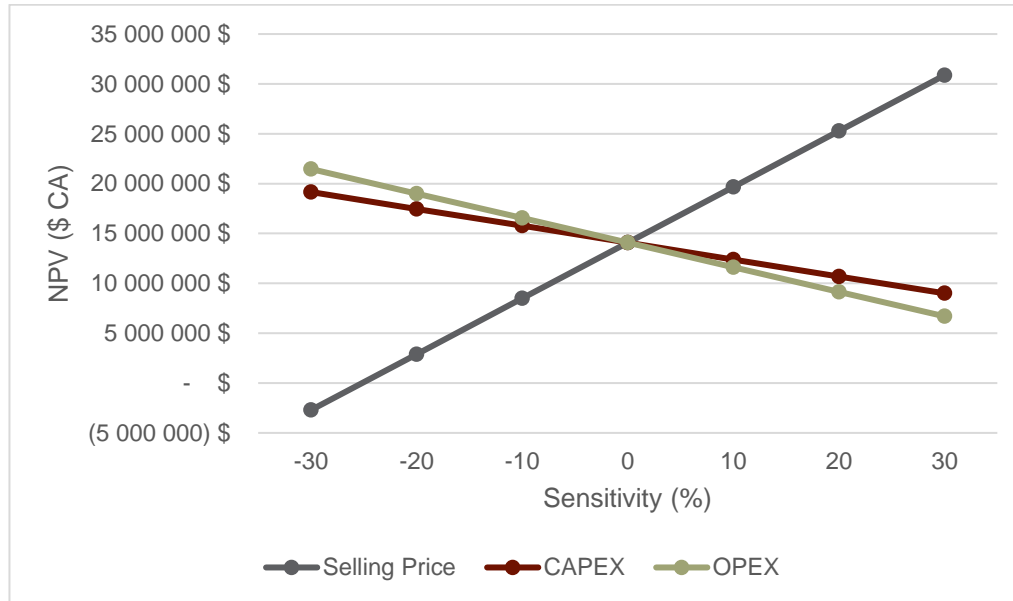
**Table 22-3: Detailed Cash Flow of the Project**

<b>ESGold Montauban PEA 2023 - Tailings Au Ag + Micas EXW Montauban</b>							
<b>Year</b>		<b>-1</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>Total</b>
<b>PHYSICAL</b>							
Tonnage Beginning	(t)	923 000	923 000	653 000	383 000	113 000	
Tailings mined & processed	(t)		270 000	270 000	270 000	113 000	923 000
Tonnage End year	(t)	923 000	653 000	383 000	113 000	-	
Grade Au	Au (g/t)		0,38	0,57	0,29	0,34	0,41
Grade Ag	Ag(g/t)		38,84	36,09	27,89	26,68	33,34
Au Recovery	%		92,00	92,00	92,00	92,00	-
Ag Recovery	%		77,00	77,00	77,00	77,00	
Ounces Au Produced	oz		3 002	4 583,34	2 352,64	1 146,63	11 084,73
Ounces Ag Produced	oz		259 612	241 232	186 410	74 624	761 878,39
Available Micas Mined/processed	(t)		242 700	270 000	154 700	47 400	714 800
Micas Grade Recoverable	%		9%	6%	9%	9,0%	6,20%
Micas recovered	(t)		21 843	17 155	13 923	4 266	57 187
<b>Revenues</b>							
Gold selling price	(Can\$/Oz)		2 363 \$	2 363 \$	2 363 \$	2 363 \$	2 363 \$
Silver selling price	(Can\$/Oz)		28 \$	28 \$	28 \$	28 \$	28 \$
Micas selling price	(US\$/t)		200 \$	200 \$	200 \$	200 \$	200 \$
Exchange Rate	US\$:CA\$		1,35	1,35	1,35	1,35	1,35
Revenues of Metals	(CA\$)		\$ 14 452 493	\$ 17 667 085	\$ 10 842 848	\$ 4 824 499	\$ 47 786 925,29
Revenues of Micas less selling costs	(CA\$)		\$ 5 602 730	\$ 4 631 850	\$ 3 759 210	\$ 1 151 820	\$ 15 145 609,50
Payable	%		99,935%	99,935%	99,935%	99,935%	99,935%
Refining Charges on Gold	Can/oz		5 \$	5 \$	5 \$	5 \$	
1% NSR Owner's Royalty AuAgMicas	(CA\$)		200 552 \$	222 989 \$	146 021 \$	59 763 \$	629 325 \$
<b>Revenue</b>	<b>(CA\$)</b>		<b>19 826 624 \$</b>	<b>22 038 535 \$</b>	<b>14 434 782 \$</b>	<b>5 906 939 \$</b>	<b>62 206 880 \$</b>
<b>OPEX</b>							
Mining Operating Costs	(CA\$)		1 215 000 \$	1 215 000 \$	1 215 000 \$	508 500 \$	4 153 500 \$
Processing costs	(CA\$)		5 864 940 \$	5 864 940 \$	5 864 940 \$	2 454 586 \$	20 049 406 \$
G&A Operating Costs	(CA\$)		845 350 \$	845 350 \$	845 350 \$	353 795 \$	2 889 845 \$
<b>Total Operating Cost</b>	<b>(CA\$)</b>		<b>7 925 290 \$</b>	<b>7 925 290 \$</b>	<b>7 925 290 \$</b>	<b>3 316 881 \$</b>	<b>27 092 751 \$</b>
<b>Total Operating Cost / Tonne Tailing</b>	<b>(CA\$/t)</b>		<b>29 \$</b>	<b>29 \$</b>	<b>29 \$</b>	<b>29 \$</b>	<b>29,4 \$</b>
<b>CAPEX &amp; SUSTAINING CAPEX</b>							
Mine Capital Costs Montauban	(CA\$)	450 000 \$	45 000 \$	45 000 \$	45 000 \$	45 000 \$	630 000 \$
Plant Equipment +Installation	(CA\$)	7 859 797 \$	157 196 \$	157 196 \$	157 196 \$	157 196 \$	8 488 581 \$
Infrastructure Capital Costs Montauban	(CA\$)	2 018 500 \$	40 370 \$	40 370 \$	40 370 \$	40 370 \$	2 179 980 \$
Closure Costs	(CA\$)	1 150 000 \$					1 150 000 \$
Sub-Total Capital Costs	(CA\$)	11 478 297 \$	242 566 \$	242 566 \$	242 566 \$	242 566 \$	12 448 561 \$
Contingency 30% on client capital cost	(CA\$)	3 443 489 \$					3 443 489 \$
Owner's cost 5% on client capital cost	(CA\$)	573 915 \$					573 915 \$
EPCM cost 5% on client capital cost	(CA\$)	573 915 \$					573 915 \$
<b>Grand Total Capital Costs</b>	<b>(CA\$)</b>	<b>16 069 616 \$</b>	<b>242 566 \$</b>	<b>242 566 \$</b>	<b>242 566 \$</b>	<b>242 566 \$</b>	<b>17 039 880 \$</b>
<b>ECONOMICS</b>							
Depreciation Pool Beginning	(CA\$)	16 069 616 \$	16 312 182 \$	11 783 037 \$	7 153 597 \$	2 353 157 \$	53 671 588 \$
Depreciation Period	(CA\$)	- \$	4 771 711 \$	4 872 006 \$	5 043 006 \$	2 353 157 \$	17 039 880 \$
Depreciation Pool End	(CA\$)	16 069 616 \$	11 540 471 \$	6 911 031 \$	2 110 591 \$	- \$	36 631 709 \$
Working Capital 2/9	(CA\$)	1 761 176 \$	- \$	- \$	- \$	(1 761 176) \$	- \$
Taxable Income	(CA\$)	- \$	7 129 623 \$	9 241 239 \$	1 466 487 \$	236 901 \$	18 074 249 \$
Federal Tax	(CA\$)	- \$	1 069 443 \$	1 386 186 \$	219 973 \$	35 535 \$	2 711 137 \$
Provincial Tax	(CA\$)	- \$	819 907 \$	1 062 742 \$	168 646 \$	27 244 \$	2 078 539 \$
Mining Tax	(CA\$)	- \$	1 140 740 \$	1 478 598 \$	234 638 \$	59 069 \$	2 913 045 \$
Total Tax	(CA\$)	- \$	3 030 090 \$	3 927 526 \$	623 257 \$	121 848 \$	7 702 721 \$
<b>Cash Flow Before Tax</b>	<b>(CA\$)</b>	<b>(17 830 791) \$</b>	<b>11 458 216 \$</b>	<b>13 647 690 \$</b>	<b>6 120 906 \$</b>	<b>4 048 904 \$</b>	<b>17 444 924 \$</b>
Pre-production CAPEX	(CA\$)	16 069 616 \$					
IRR	(%)	42,6%					
NPV 5%	(CA\$)	14 079 164 \$					
<b>Cash Flow After Tax</b>	<b>(CA\$)</b>	<b>(17 830 791) \$</b>	<b>8 428 126 \$</b>	<b>9 720 163 \$</b>	<b>5 497 649 \$</b>	<b>3 927 056 \$</b>	<b>9 742 203 \$</b>
Pre-production CAPEX	(CA\$)	16 069 616 \$					
IRR	(%)	23,4%					
NPV 5%	(CA\$)	6 992 344 \$					

Note NI-43-101: there is no Ore in this project for the moment as it requires either a prefeasibility or feasibility to define Ore and this PEA uses mineral resources partially classified as Inferred which is not used in the preparation of mineral reserves.

## 22.4 Sensitivity Analysis for ESGold Montauban project

A sensitivity analysis was performed examining capital costs, operating costs and commodity price. The Project is most sensitive to fluctuations in commodity price and exchange rate, and less sensitive to variations in capital and operating costs. **Figure 22.1** and **Figure 22.2** present the sensitivity from -30% to + 30% variation from the base case selected parameters.



**Figure 22.1: Sensitivity of NPV5 for the Base Case, Before Taxes**



**Figure 22.2: Sensitivity of IRR for the Base Case, Before Taxes**



## **22.5 Caution Regarding the Economic Analysis**

The economic analysis is preliminary in nature and includes the use of inferred mineral resources that are considered too speculative geologically to have the economic considerations applied to them that would enable them to be categorized as mineral reserves. Thus, there is no certainty that the results stated in the PEA Report will be realized. Actual results may vary, perhaps materially. Mineral resources that are not mineral reserves do not have demonstrated economic viability. Additional exploration work is required to increase the quality of the mineral resources.

### **23. ADJACENT PROPERTIES**

Claims held by Osisko Metals Incorporated claim and Christophe Gosselin lie directly to the west of the Property, whereas Rio Tinto Exploration Canada to the north and Potts Trent hold claims to the north and east of the Property respectively (**Figure 23.1**). Various independently owned claims are also nearby. None of the various claim holders in the immediate vicinity of the Property have reported significant exploration work recently.

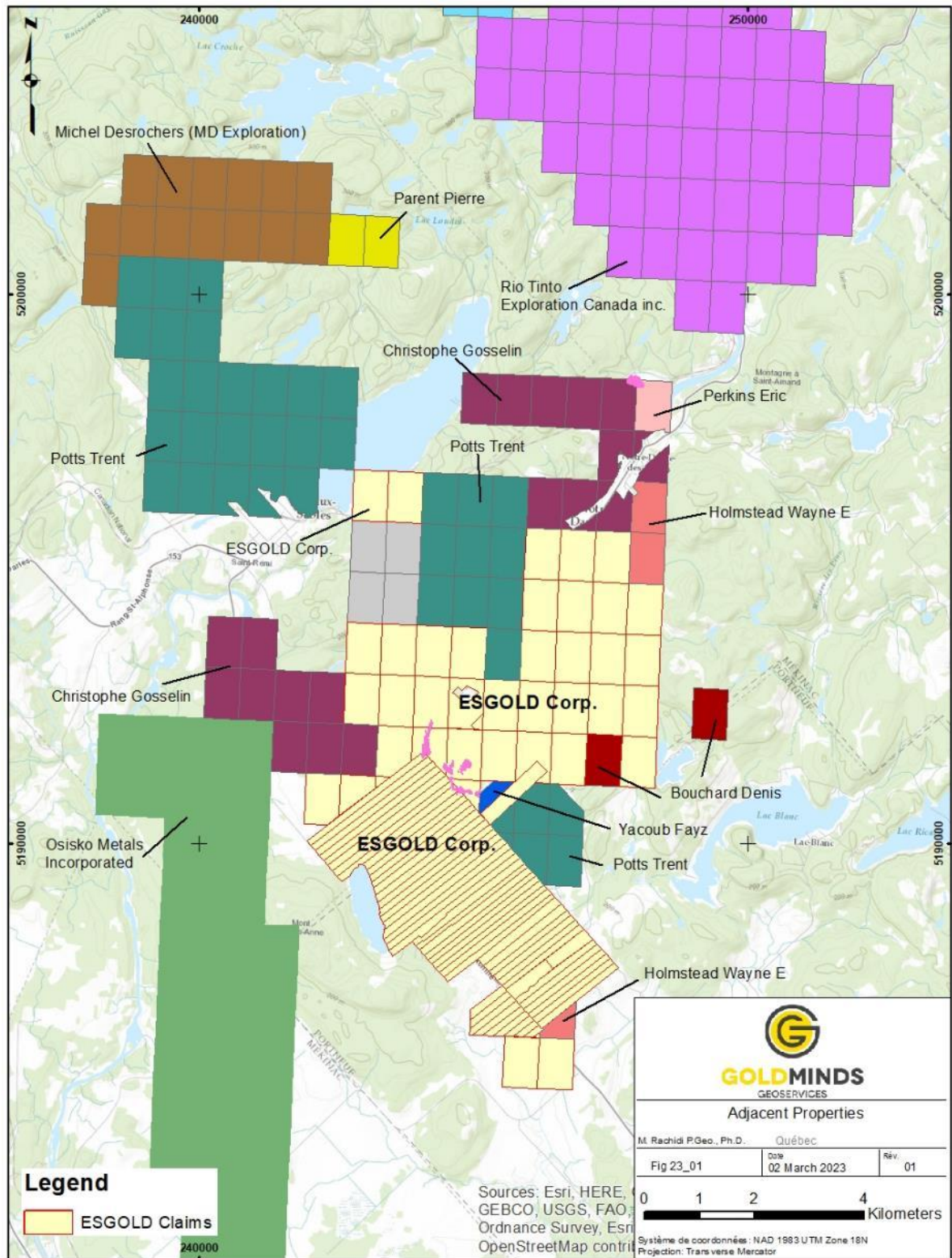


Figure 23.1: Claim map of the property and immediate area

## 24. OTHER RELEVANT DATA AND INFORMATION

### 24.1 Project Schedule

The Project schedule presented in **Table 24-1** takes into consideration the fact that the Project is already permitted and has a valid Certificate of Authorization to process the Anacon 1 tailings. In addition, a building to house the mill is already in place with a live Hydro-Québec power line and transformer adjacent to the building.

The effective schedule is conditional to financing, and whether a PFS is requested by the financiers. The Project may start as described or be delayed, to fulfill requests from financiers.

**Table 24-1: Montauban Conceptual Project Schedule**

Task	Time frame
Financing	2-3 months
Refining of detailed engineering	2-3 months
Suppliers-contractors firm quotes	1-2 months
Start of construction and acquisition	10-12 months
Geotechnical study for tailing dyke	2 months
Drilling for bulk sample hard rock and permit	4 months
Construction of new tailings pond	2-3 months
Amendment to CA to process Hard Rock	3-6 months
Convert 2003 hard-rock resource to NI 43-101	6 months
Sample other tailings	1-2 months

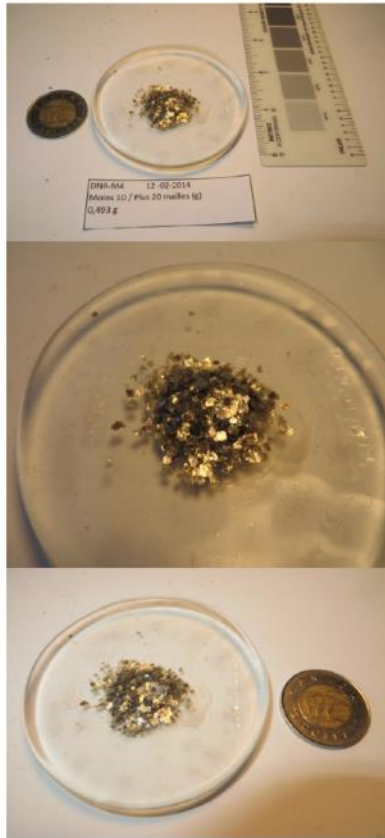
Many aspects of a PFS have much higher levels of precision than PEA reports. As outlined in the PEA Report, ESGold intends to take advantage of all identified and recently sampled tailings in the Project area to present a more accurate picture of the available amount of tailings to process.

Unfortunately, the existing hard rock mineralization cannot be taken into account in the economics of the Project, as the Mineral resources described in 2003 in the NI 43-101 of J. Marchand are not current.

### 24.2 Mica

During its ownership of the property, DNA produced a 60-page catalogue of possible product of varying quality for different mica markets (**Figure 24-1**). The PEA Report presumes a bulk selling of the concentrate.

In order to accept the inclusion of mica in the Mineral Resources and PEA value, GMG requested SGS to carry out independent test work to assess the grade and weight recovery of the coarse mica fraction of the Montauban tailings. Results were positive and are presented in Section 14.



DNA-M4 Fév 2014	TR-4 2,72 %
Granulométrie	-10+20 Mailles 1700 microns
Mica Concentré	54,32 g 2,72 % 2,65 g 6 %
Formule chimique Phlogopite	$\text{KMg}_3[\text{AlSi}_3](\text{OH})_2$
pH	7,6
Dureté (Mohs) Densité	2,5-3 2,8
Humidité (% H <sub>2</sub> O)	1 %
Perte au Feu Point Fusion	5,02 % °C
Propriétés Particulières	Isolant thermique Isolant électrique
Couleur Éclat & Opacité	Gris, ambre, brun miel Vitreux et translucide

**Figure 24.1: Example page of the product catalogue (prepared under DNA at the time in French)**



## 25. INTERPRETATION AND CONCLUSIONS

### 25.1 Overview

The results of the PEA Report demonstrate that the Project is economically viable and can be advanced to the next stage of project development.

### 25.2 Data Verification and Mineral Resources

The DHDB used for the 2023 MRE was amalgamated from data collected and supplied by Longford and MRB & Associates. The database delivered by Longford comprised 352 holes totalling 1,654.04 m from their 2022 drilling program. The 2022 exploration data on the Notre-Dame-de-Montauban tailings was compiled by Laurentia geologist (35 test pits totalling 75.14 m) and verified by GMG.

The 2023 MRE of the Property was calculated using Genesis software for modelling and Mineral Resources Estimate. Five block models were produced. The average Au and Ag grade was calculated for each block using interpolation according to the inverse of the distance from the nearest composites. For the Notre-Dame-de-Montauban tailings, the polygon method was used. Interpolation parameters were based on drill spacing, envelope extension and orientation.

**Table 25-1** presents the current Mineral Resources were estimated without a cut-off grade ("COG").

**Table 25-1: The Mineral Resource Estimate for the Montauban and the Notre-Dame-de-Montauban tailings**

	<b>Au (g/t)</b>	<b>Ag (g/t)</b>	<b>Au Eq (g/t)</b>	<b>Tonnes</b>	<b>Au Oz</b>	<b>Ag Oz</b>	<b>Au Oz eq</b>
<b>Total Indicated tailings</b>	<b>0.40</b>	<b>31.45</b>	<b>0.77</b>	<b>603 700</b>	<b>7 800</b>	<b>610 350</b>	<b>15 000</b>
<b>Total Inferred tailings</b>	<b>0.41</b>	<b>36.93</b>	<b>0.87</b>	<b>319 300</b>	<b>4 200</b>	<b>379 100</b>	<b>8 900</b>

Estimated mineral resources for the Montauban and the Notre-Dame-de-Montauban tailings indicated resources are 7,800 Au ounces and 610,350 Ag ounces (603,700 tonnes grading 0.4 g/t Au and 31.4 g/t Ag), inferred resources are 4,200 ounces gold and 379,100 ounces silver (319,300 tonnes grading 0.41 g/t Au and 36.9 g/t Ag).

**Table 25-2** presents the mineral resource estimate for the Montauban tailings site

**Table 25-2: Mineral resources estimation for the Montauban tailings site**

<b>Anacon Lead 1</b>	<b>Au g/t</b>	<b>Ag g/t</b>	<b>AuEq g/t</b>	<b>Tonnes</b>	<b>Au Oz</b>	<b>Ag Oz</b>	<b>AuOz eq</b>
indicated	0.30	29	0.64	486 900	4 700	449 350	10 000
inferred	0.20	23	0.47	85 000	500	61 900	1 300
<b>Tetreault_2</b>	<b>Au g/t</b>	<b>Ag g/t</b>	<b>AuEq g/t</b>	<b>Tonnes</b>	<b>Au Oz</b>	<b>Ag Oz</b>	<b>AuOz eq</b>
indicated	0.83	43	1.34	116 800	3 100	161 000	5 000
inferred	0.85	46	1.40	26 100	700	38 800	1 200
<b>Tetreault_1</b>	<b>Au g/t</b>	<b>Ag g/t</b>	<b>AuEq g/t</b>	<b>Tonnes</b>	<b>Au Oz</b>	<b>Ag Oz</b>	<b>AuOz eq</b>
inferred	0.39	26	0.70	65 600	800	54 400	1 500
<b>Anacon_Lead_2</b>	<b>Au g/t</b>	<b>Ag g/t</b>	<b>AuEq g/t</b>	<b>Tonnes</b>	<b>Au Oz</b>	<b>Ag Oz</b>	<b>AuOz eq</b>
inferred	0.31	28	0.64	115 300	1 150	103 800	2 400
<b>Total indicated</b>	<b>0.40</b>	<b>31</b>	<b>0.78</b>	<b>603 700</b>	<b>7 800</b>	<b>610 350</b>	<b>15 000</b>
<b>Total inferred</b>	<b>0.34</b>	<b>28</b>	<b>0.67</b>	<b>292 000</b>	<b>3 150</b>	<b>258 900</b>	<b>6 400</b>

**Notes:**

- 1 Mineral resources which are not mineral reserves do not have demonstrated economic viability. The estimate of mineral resources may be materially affected by environmental, permitting, legal, title, market or other relevant issues. The quantity and grade of reported inferred Resources are uncertain in nature and there has not been sufficient work to define these inferred resources as indicated or measured resources.
- 2 The database used for this mineral estimate includes drill results obtained from 2010, 2018 and 2022 drill programs.
- 3 The mineral resource presented here were estimated with a block size of 3mE x 3mN x 1.5mZ. The blocks were interpolated from equal length composites (1.5 metre) calculated from the mineralized intervals.
- 4 Prior to compositing, high-grade gold assays were capped to 3 g/t Au and 125 g/t Ag.
- 5 The mineral estimation was completed using the inverse distance to the square methodology utilizing three passes. For pass 1 and pass 2 minimum of 2 composites and maximum of 05 composites with a maximum of 1 composite from the same drillhole (a minimum of two drillholes are needed to estimate blocks). For pass 3 minimum of 2 composites and maximum of 5 composites were used.
- 6 The Indicated resources classified using a minimum of two drillholes within 20 m of each other or less were used. The inferred resources were classified by a minimum of two drillholes within 50m of each other or less.
- 7 Tonnage estimates are based on a fix density of 1.52 tonnes per cubic metre.
- 8 The commodity prices showed in the table below. The formula used for AuEq calculation:  $AuEq = ((Au \times 75.96) + (Ag \times 0.91)) / (2362.5 / 31.103)$ . The Mineral resources are in situ and the recovery values are not used.
- 9 Tonnages and AuEq oz in the table above are rounded to nearest hundred. Numbers may not total due to rounding

Mineral Reserves and Mineral Resources are as defined by CIM Definition Standards on Mineral Resources and Mineral Reserves. Mineral Resources, which are not Mineral Reserves, do not have demonstrated economic viability.

Mineral resources are not mineral reserves and have not demonstrated economic viability. There is no certainty that all or any part of the mineral resource will be converted into mineral reserves. It is uncertain if further exploration will allow improving of the classification of the Inferred mineral resources.

### 25.3 Mining Methods

The project design is to feed 270,000 t of tailings to the processing plant for the first three (3) years and 113,000 t during the fourth year of operation, for a four-year total of 923,000 metric tonnes. The contractor at the mining operation will work on a 9-month per annum basis avoiding operations during the coldest months.

There will be no drilling or blasting required, as the material is already of a screen size. The material will be excavated by a shovel or loader into a haul truck and unloaded near the pump box (plumper). A second loader will feed the material to the plumper. A second haul truck will be available on-site as a backup.

Where excavation is being carried out close to the plumper, the excavator will discharge directly to it.

Work will be contracted out on a 24 hour 7 days-a-week basis.

### 25.4 Infrastructure

Supporting infrastructure on site will include a small administrative building, warehouse, fuel tank, spare generator and various sea can for material storage. Employees will stay at the village and do not need on-site accommodation.

### 25.5 Indicative Economic Results

The results of the study confirm that the Project is economically viable with an after-tax IRR of 23.4% and an 5% discount rate NPV of \$6.99M. The complete results of the economic analysis, before and after tax are presented in **Table 25-3**.

**Table 25-3: Results of the economic analysis of the Montauban tailings Project**

Economic Indicator	Pre-Tax	After-Tax
NPV (5% discount rate)	\$14.08M	\$6.99M
IRR	42.6%	23.4%
Payback period	2.8 years	1.8 years

## 25.6 Risks and Opportunities

### 25.6.1 Risks

Project risks are highlighted in **Table 25-4**.

### 25.6.2 Opportunities

The following opportunities have been identified as potential enhancements for the Project. These opportunities could have material value-added impact on the Project, although additional work is required for them to be integrated.

- The 2023 MRE outlines only a proportion of the tailings that should be expected in the Project area, according to historical production records. Tailings that are not included in the 2023 MRE have recently been identified in the Project vicinity and some sampling has been performed. The search for additional tailings and the required work to include these in future resource estimates is ongoing.
- The geology underlying the Property hosts historical hard-rock resources that are non-compliant with NI 43-101 (Error! Reference source not found.). These resources could be recovered using remnant underground or surface mining methods. Additional exploration work must be completed to consider these resources in the mine plan. Two 5,000t bulk samples, which would be processed at the Montauban mill, are currently being planned.
- The Project also hosts greenfield exploration potential as modern exploration techniques have not been systematically applied over the Property.
- Toll milling agreements with projects outside the Montauban area could allow mill utilisation and revenue following the depletion of the 2023 MRE resource.
- The Project has the effect of reclaiming an orphan site, therefore removing the environmental liability attributed to the Quebec Government. There are precedents in the province of Quebec where the government offers financial support to projects reclaiming orphan sites. Discussions are ongoing with government officials to receive appropriate compensation for the rehabilitation of the Project tailings.
- Due to the economic challenges in the region of Montauban it is possible that government grants may be obtained to fund a portion of employee salary and training costs. Validation is currently being performed to determine the programs for which the Project qualifies.

**Table 25-4: Project risks (preliminary risk assessment)**

Area	Risk Description and Potential Impact	Mitigation Approach
<b>Geology and Mineral Resources</b>	<ol style="list-style-type: none"> <li>1. Insufficient density measurements from tailings material can influence Resource Estimates.</li> <li>2. The 3D modelling and the wireframes creation based on tailings morphology without taking into consideration the Cut-off grade may reduce the potential of the property.</li> <li>3. Inferred Mineral Resources are considered too speculative in nature to be categorized as Mineral Reserves. Mineral Resources that are not Mineral Reserves have not demonstrated economic viability.</li> </ol>	<ol style="list-style-type: none"> <li>1. Density determinations should be continued for tailings material.</li> <li>2. Continue updating the wireframe taking into consideration other zones with potential tailings.</li> <li>3. A drilling program that targets the inferred resources would be beneficial to increase confidence on the mineral resources with the goal to convert Inferred Mineral Resources to Indicated Mineral Resources.</li> </ol>
<b>Mine</b>	<ol style="list-style-type: none"> <li>1. Geotechnical and Hydrogeological knowledge.</li> <li>2. Availability of labour.</li> <li>3. Infrastructure location.</li> </ol>	<ol style="list-style-type: none"> <li>1. Engage with local contractors for operations labour (risk rating: LOW).</li> <li>2. Make some condemnation drilling to place the infrastructures.</li> </ol>
<b>Environmental, Permitting and Social License</b>	<ol style="list-style-type: none"> <li>1. Social licence and delay in obtaining permits.</li> <li>2. Permitting for the extraction of a portion of the resources (Anacon Lead2, Tetreault1 and Tetreault 2).</li> <li>3. Social acceptability.</li> </ol>	<ol style="list-style-type: none"> <li>1. Collaborations and communications with local and provincial authorities will be needed on a continual basis (risk rating: LOW).</li> <li>2. Initiate the permitting process for the extraction of resources not currently included in the permits.</li> <li>3. Maintain dialogue with the local community.</li> </ol>
<b>Sale</b>	<ol style="list-style-type: none"> <li>1. Mica sale price fluctuation: can potentially improve or decline the project economics.</li> <li>2. Gold sale price fluctuation: can potentially improve or decline the project economics.</li> <li>3. Trade barriers for mica: trade barriers could arise from other countries, i.e., dumping product price.</li> </ol>	<ol style="list-style-type: none"> <li>1. Sales price projection from an independent consultant (risk rating: MEDIUM).</li> <li>2. Sales price projection from an independent consultant (risk rating: LOW).</li> <li>3. Sales price projection from an independent consultant (risk rating: LOW).</li> <li>4. Contract could be harder to get but could open new markets (risk rating: MEDIUM).</li> </ol>



**Table 25-5: Historical Hard Rock Resources\***

Zone	Tonnage	Gold Grade	Silver Grade	Contained Gold	Contained Silver
North Zone	274,500 t	2.8 g/t	15 g/t	24,917 oz	133,912 oz
South Zone	123,533 t	3.5 g/t	56 g/t	13,915 oz	222,974 oz

*\*These resources are historical in nature and should not be relied upon. A qualified person has not done sufficient work to classify the historical estimate as current mineral resources or mineral reserves. ESGold is not treating the historical estimate as current mineral resources or mineral reserves.*

- The mica value received in the current plan assumes that the recovered mica is in the lower marketable quality range. Mica value can be substantially enhanced through enrichment. Furthermore, there is the possibility of creating additional value through the secondary transformation of mica at the Montauban site.

ESGold has entered into a joint-venture agreement to create construction building materials with the use of the processed tailings and organic polymer binder. The sale of these products should enhance Project revenues. The Project could be reshaped into a carbon offset project for which carbon credits could be sold.

## 26. RECOMMENDATIONS

### 26.1 Summary

The results of the PEA Report demonstrate that the Project is financially viable. The Authors of the PEA Report recommend that the Project be advanced to the next stage of development.

In addition to the tailings the Authors believe that the deposit has prospective geology for discovering additional mineralized zones based on historic geophysics data (see Item; **Figure 6.3**) and ESGold should continue to refine its understanding of the Property and define other potentially mineralized shear and fault/altered structures.

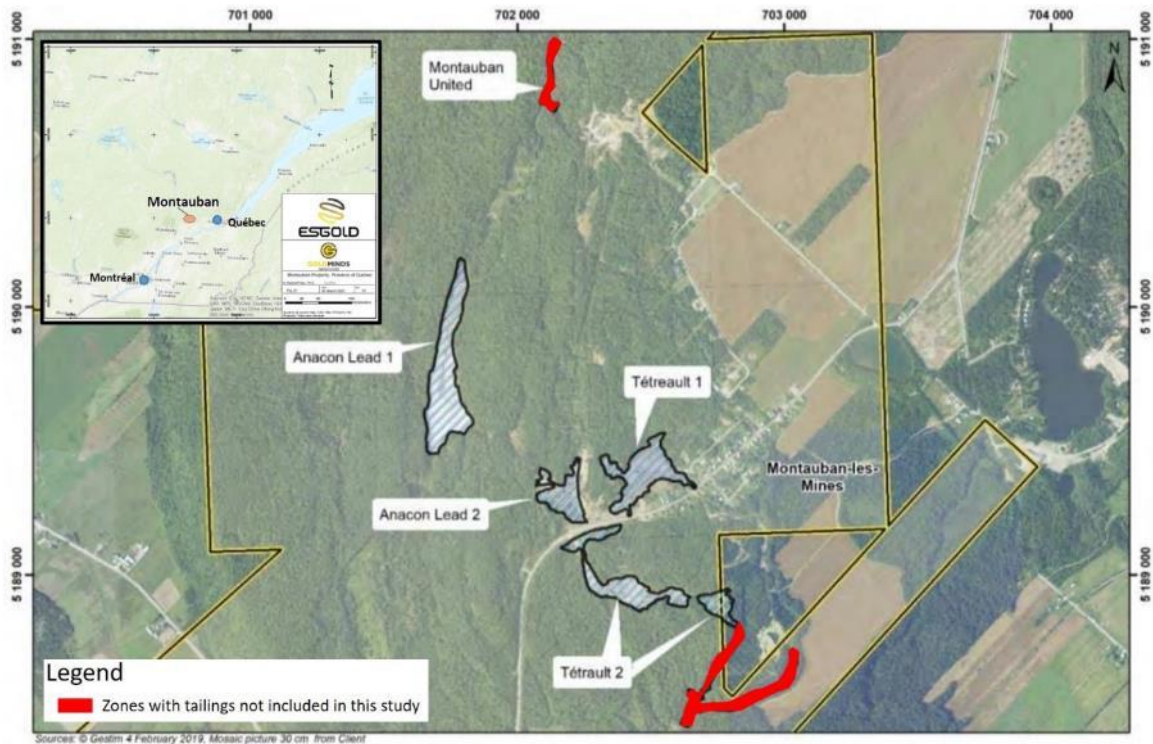
Additional exploration drilling is required on the Property. The Authors propose two campaigns for 2023 and 2024; one program on the tailings and one to test underground.

### 26.2 Geology & Mineral Resources

#### 26.2.1 Tailings

Five envelopes were produced for the two areas hosting tailings - four for the Montauban tailings and one for the Notre-Dame-de-Montauban tailings. No cut-off grade was considered during the creation of the wireframes as the entirety of the material in the tailings piles will ultimately be milled.

- Density determinations should be continued for tailings material;
- It is recommended to do additional drilling work to transform all or part of the Inferred mineral resources to either Indicated or Measured categories.
- To carry out all necessary work to maintain the claims in good standing during the development process;
- To carry out more exploration works on other potential tailings zones (**Figure 26.1**).
- Preparation of the permits for the exploitation of the tailings Anacon Lead 2, Tetreault 1 and Tetreault 2.



**Figure 26.1: Zones with tailings not included in this study**

### 26.2.2 Hard-rock (underground)

On July 16, 2003, Mirabel Resources reported by press release the results of the resource evaluation completed by Marchand (2003) corresponding to the in-situ resource remaining in the surface pillars from the previous underground mining operations carried out at the Montauban mine. This underground mineral resource is considered as historical.

- A drilling program is recommended to test and validate the historical resources;
- Additional drilling programs to test the subsurface mineralization at depth;
- Test new zones in accordance with the locations of the conductors using the available geophysics information (VTEM anomaly + Magnetic Susceptibility) to be subject of further exploration;
- Definition of the mineralized zones
- 3D scan of the underground openings
- The realization of the DTM surface to cover the whole Property

### 26.3 Environment and Permitting

It is recommended to initiate the permitting process for the extraction of resources not currently included in the Certificate of Authorization. It is also recommended to maintain dialogue with the local community.

## 26.4 Costs Estimate for Recommended Work

**Table 26-1** shows a summary of the next critical steps and an approximate budget required to advance the Project.

A drilling program is highly recommended to test the conductive zones with a minimum depth of 150 m. As at the issue date of the PEA Report, several anomalies remain untested.

The detailed conductors identified could be the target of a new drilling program. The second phase is conditional on the success of the first phase (drilling) and will be adapted to the observations established at that time.

**Table 26-1: Estimated Costs for the Recommended Drilling Program**

<b>TAILINGS WORK</b>	<b>WORK PROGRAM</b>	<b>DESCRIPTION</b>	<b>BUDGET COST</b>
	Sonic drilling on tailings to convert all or a part of the inferred resources to indicated or measured. At the same time taking density measurements.	200 metres (between 40 to 50 sonic drillholes) all-inclusive, \$300/m	\$67,500
	Drillhole collars survey		\$3,000
	Surface topographic survey for all the tailings		\$35,000
	Subtotal		\$105,500
<b>HARD-ROCK WORK</b>	<b>WORK PROGRAM</b>	<b>DESCRIPTION</b>	<b>BUDGET COST</b>
	Drilling program to test the historical resources	5 000 metres (between 25 to 30 drillholes) all-inclusive, \$225/m	\$1,125,000
	Drilling program on known geophysical targets (holes; all-inclusive, \$225/m). Total of 5000 m.	" "	\$1,125,000
	Survey drill holes		\$5,000
	Surface topographic survey		\$35,000
	Subtotal		\$2,290,000
	<b>TOTAL</b>		<b>\$2,395,500</b>

Expenditures for the recommended tailings drilling program 1 are estimated at \$105,500. Expenditures for the recommended underground "hard-rock" drilling campaign are estimated at \$2,290,000. The grand total is \$2,395,500. The two campaigns are independent and could be run concurrently.



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