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NI 43-101 Technical Report and Feasibility Study for the Kiena Mine Complex, Val-d'Or, Québec, Canada

Prepared for

Wesdome Gold Mines Ltd
220 Bay St, Suite 1200, Toronto, (Ontario) M5J 2W4

Project Location
Latitude 48° 08' North; Longitude 77° 54' West
Province of Quebec, Canada

Prepared by:

Eric Lecomte, P.Eng.
David Sims, P.Geo.
Eric Tremblay, P.Eng.
Simon Veilleux
Denys Vermette, P.Geo, M.Sc., M.Sc. A
Norda Stelo
Quebec City (Quebec)

Serge Gonthier, P.Geo.
Breanne Beh, P.Geo.
Wesdome Gold Mine Ltd.
Toronto (Ontario)

Charles Veilleux, P.Eng.
Jean-François St-Laurent, P.Eng., M.Sc.
SRK Consulting Canada Inc.
Vancouver (Bristish Columbia)

Pierre Roy, P.Eng. M.Sc.
Soutex Inc.
Quebec City (Quebec)

Ganan Nadarajah, P.Eng.
WSP Canada Inc.
Mississauga (Ontario)

Francis Couture, P.Eng
1823 Water Inc.
Val-d'Or (Quebec)

Ali Jalbout, P.Eng., Ph.D.
Asa Géotech
Kirkland (Quebec)

Jean-Louis Roberge, P.Eng.
SLR Consulting (Canada) Ltd.
Sudbury (Ontario)

Effective Date: June 24, 2026
Signature Date: August 6, 2026

SIGNATURE PAGE – NORDA STELO

NI 43-101 Technical Report and Feasibility Study for the Kiena Mine Complex

Prepared for

Wesdome Gold Mines Ltd
220 Bay St, Suite 1200, Toronto, (Ontario) M5J 2W4

Project Location
Latitude 48° 08' North; Longitude 77° 54' West
Province of Quebec, Canada

Effective Date: June 24, 2026

(Original signed and sealed)

Eric Lecomte, P.Eng.
Norda Stelo
Val d'Or (Quebec)

Signed at Val d'Or on August 6, 2026

(Original signed and sealed)

David Sims, P.Geo
Norda Stelo
Longueuil (Quebec)

Signed at Longueuil on August 6, 2026

(Original signed and sealed)

Eric Tremblay, P.Eng.
Norda Stelo
Quebec (Quebec)

Signed at Quebec on August 6, 2026

SIGNATURE PAGE – NORDA STELO

NI 43-101 Technical Report and Feasibility Study for the Kiena Mine Complex

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Latitude 48° 08' North; Longitude 77° 54' West
Province of Quebec, Canada

Effective Date: June 24, 2026

(Original signed and sealed)

Signed at Quebec on August 6, 2026

Simon Veilleux, P.Eng.
Norda Stelo
Quebec (Quebec)

(Original signed and sealed)

Signed at Val d'Or on August 6, 2026

Denys Vermette, P.Geo, M.Sc., M.Sc.A
Norda Stelo
Val d'Or (Quebec)

SIGNATURE PAGE – WESDOME GOLD MINES LTD

NI 43-101 Technical Report and Feasibility Study for the Kiena Mine Complex

Prepared for

Wesdome Gold Mines Ltd
220 Bay St, Suite 1200, Toronto, (Ontario) M5J 2W4

Project Location
Latitude 48° 08' North; Longitude 77° 54' West
Province of Quebec, Canada

Effective Date: June 24, 2026

(Original signed and sealed)

Signed at Toronto on August 6, 2026

Serge Gonthier, P.Geo.
Wesdome Gold Mine Ltd.
Toronto (Ontario)

(Original signed and sealed)

Signed at Toronto on August 6, 2026

Breanne Beh, P.Geo.
Wesdome Gold Mine Ltd.
Toronto (Ontario)

SIGNATURE PAGE – SRK CONSULTING CANADA INC.

NI 43-101 Technical Report and Feasibility Study for the Kiena Mine Complex

Prepared for

Wesdome Gold Mines Ltd
220 Bay St, Suite 1200, Toronto, (Ontario) M5J 2W4

Project Location
Latitude 48° 08' North; Longitude 77° 54' West
Province of Quebec, Canada

Effective Date: June 24, 2026

(Original signed and sealed)

Signed at Vancouver on August 6, 2026

Charles Veilleux, P.Eng.
SRK Consulting Canada Inc.
Vancouver (Bristish Columbia)

(Original signed and sealed)

Signed at Vancouver on August 6, 2026

Jean-François St-Laurent, P.Eng., M.Sc.
SRK Consulting Canada Inc.
Vancouver (Bristish Columbia)

SIGNATURE PAGE – SOUTEX INC.

NI 43-101 Technical Report and Feasibility Study for the Kiena Mine Complex

Prepared for

Wesdome Gold Mines Ltd
220 Bay St, Suite 1200, Toronto, (Ontario) M5J 2W4

Project Location
Latitude 48° 08' North; Longitude 77° 54' West
Province of Quebec, Canada

Effective Date: June 24, 2026

(Original signed and sealed)

Pierre Roy, P.Eng., M.Sc.
Soutex Inc.
Quebec City (Quebec)

Signed at Quebec on August 6, 2026

SIGNATURE PAGE – WSP CANADA INC.

NI 43-101 Technical Report and Feasibility Study for the Kiena Mine Complex

Prepared for

Wesdome Gold Mines Ltd
220 Bay St, Suite 1200, Toronto, (Ontario) M5J 2W4

Project Location
Latitude 48° 08' North; Longitude 77° 54' West
Province of Quebec, Canada

Effective Date: June 24, 2026

(Original signed and sealed)

Ganan Nadarajah, P.Eng.
WSP Canada Inc.
Mississauga (Ontario)

Signed at Mississauga on August 6, 2026

SIGNATURE PAGE – 1823 WATER INC.

NI 43-101 Technical Report and Feasibility Study for the Kiena Mine Complex

Prepared for

Wesdome Gold Mines Ltd
220 Bay St, Suite 1200, Toronto, (Ontario) M5J 2W4

Project Location
Latitude 48° 08' North; Longitude 77° 54' West
Province of Quebec, Canada

Effective Date: June 24, 2026

(Original signed and sealed)

Francis Couture, P.Eng
1823 Water Inc.
Val-d'Or (Quebec)

Signed at Val-d'Or on August 6, 2026

SIGNATURE PAGE – ASA GÉOTECH

NI 43-101 Technical Report and Feasibility Study for the Kiena Mine Complex

Prepared for

Wesdome Gold Mines Ltd
220 Bay St, Suite 1200, Toronto, (Ontario) M5J 2W4

Project Location
Latitude 48° 08' North; Longitude 77° 54' West
Province of Quebec, Canada

Effective Date: June 24, 2026

(Original signed and sealed)

Ali Jalbout, P.Eng., Ph.D.
Asa Géotech
Kirkland (Quebec)

Signed at Kirkland on August 6, 2026

SIGNATURE PAGE – SLR CONSULTING (CANADA) LTD.

NI 43-101 Technical Report and Feasibility Study for the Kiena Mine Complex

Prepared for

Wesdome Gold Mines Ltd
220 Bay St, Suite 1200, Toronto, (Ontario) M5J 2W4

Project Location
Latitude 48° 08' North; Longitude 77° 54' West
Province of Quebec, Canada

Effective Date: June 24, 2026

(Original signed and sealed)

Jean-Louis Roberge, P.Eng.
SLR Consulting (Canada) Ltd.
Sudbury (Ontario)

Signed at Sudbury on August 6, 2026

CERTIFICATE OF AUTHOR – ÉRIC LECOMTE

I, Eric Lecomte, P.Eng. (OIQ No. 122047, PEO No. 100574333 and EGBC No. 56488), do hereby certify that:

1. I am a Senior Engineer with the firm Norda Stelo Inc., located at 560, 3rd Avenue, Val-d'Or, Québec, J9P 1S4.
2. This certificate applies to the technical report entitled "Feasibility Study for the Kiena Mine Complex, Val-d'Or, Quebec, Canada" (the "Technical Report") with an effective date of June 24,2026 and a signature date of August 06, 2026, prepared for Wesdome Gold Mines Ltd.
3. I am a graduate from Laval University, Québec, Canada with a Bachelor's degree in Mining Engineering in 1998.
4. I am a Professional Engineer registered with the Ordre des Ingénieurs du Québec (OIQ No: 122047), the Association of Professional Engineers and Geoscientists of British Columbia (EGBC No. 56488) and the Association of Professional Engineers of Ontario (PEO No. 100574333).
5. I have twenty-six (26) years of experience in mining engineering. Throughout my career, I have held various technical and operational positions related to underground and open-pit mining operations. Since 2021, I have worked as a Mining Engineering consultant for InnovExplo Inc. and subsequently for Norda Stelo Inc., contributing to various mining technical studies.
6. I have read the definition of a "qualified person" set out in Regulation 43-101/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 fulfill the requirements to be a qualified person for the purposes of NI 43-101.
7. I am author and responsible for items 14.9, 15, all item 16 excluding sections 16.2, 16.3, and 16.7.1, 16.7.2, and 16.7.8, sections 18.2, 18.12, 18.13 and 18.15, 19, sections Section 21.1, 21.2.1 to 21.2.5, 21.2.8, 21.2.9, 21.2.11, 21.2.12, 21.2.13 and 21.3 (except sections 21.3.10 and 21.3.6.7), 22, and 24. I am co-author and share responsibility for items 1 to 3, and 25 to 27 of the Technical Report.
8. I have visited the Kiena Mine Complex on April 24, 2025.
9. I have not had prior involvement with the property that is the subject of this Technical Report.
10. I am independent of the issuer in accordance with the application of Section 1.5 of NI 43-101.
11. I have read NI 43-101 and Form 43-101F1, and the sections of the Technical Report for which I am responsible have been prepared in accordance with that instrument and form.
12. 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 Technical Report, the omission to disclose which makes the Technical Report misleading.

Signed this 6th day of August 2026.

(Original signed and sealed)

Eric Lecomte, P.Eng
Norda Stelo Inc.
eric.lecomte@norda.com

CERTIFICATE OF AUTHOR – DAVID SIMS

I, David Sims, P. Geo., do hereby certify that:

1. I am a Hydro-geotechnical professional with Norda Stelo Inc., with a corporate business address of 630, boul. René-Lévesque Ouest Bureau 1500, Montréal, Québec, H3B 1S6, Canada.
2. This certificate applies to the technical report entitled “Feasibility Study for the Kiena Mine Complex, Val-d’Or, Quebec, Canada” (the “Technical Report”) with an effective date of June 24, 2026 and a signature date of August 06, 2026, prepared for Wesdome Gold Mines Ltd.
3. I am a graduate of the University’s of Victoria with a Bachelor of Science in 1999 with an Earth Science major and an Environmental Studies minor, including focus on mine restauration studies certificate program courses. I initiated a masters in Bioresource Engineering and the Integrated Water Resource Management program at the McGill University.
4. I am a member in good standing with Ordre des Géologues du Québec (OGQ No. 1431), Professional Geoscientists Ontario (PGO No. 4087) and Engineers and Geoscientists British Columbia (No. 52960).
5. My relevant experience includes 25 years of experience focused in mining, geotechnical, and water management including surface water and groundwater.
6. 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.
7. I am author of Section 16.3 of Chapter 16. I am also co-author and share responsibility for relevant portions of items 1 to 3 and 25 to 27 of the Technical Report.
8. I have not visited the Kiena Mine Complex.
9. I have not had prior involvement with the property that is the subject of this Technical Report.
10. I am independent of the issuer in accordance with the application of Section 1.5 of NI 43-101.
11. I have read NI 43-101 and Form 43-101F1, and the sections of the Technical Report for which I am responsible have been prepared in accordance with that instrument and form.
12. 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 Technical Report, the omission to disclose which makes the Technical Report misleading.

Signed this 6th day of August 2026.

(Original signed and sealed)

David Sims, P.Geo
Norda Stelo Inc.
david.sims@norda.com

CERTIFICATE OF AUTHOR – ÉRIC TREMBLAY

I, Éric Tremblay, P.Eng., do hereby certify that:

1. I am a Professional Engineer and Director of Norda Stelo Electrical Department, located at 1015, av. Wilfrid-Pelletier, Québec, QC, G1W 0C4, Canada.
2. This certificate applies to the technical report entitled “Feasibility Study for the Kiena Mine Complex, Val-d’Or, Quebec, Canada” (the “Technical Report”) with an effective date of June 24, 2026 and a signature date of August 06, 2026, prepared for Wesdome Gold Mines Ltd.
3. I graduated with a Bachelor’s degree in Electricity (B.Sc.) from Université de Sherbrooke in 1997.
4. I am a member of the Ordre des Ingénieurs du Québec (OIQ No. 119410).
5. I have over 28 years of experience in the electrical field, covering a wide range of disciplines from power distribution to control and communication systems. My experience is primarily focused on heavy industry manufacturing, metallurgy, and mining. My mining expertise was acquired through projects and operations with the ERAMET Group in New Caledonia.
6. I have read the definition of a “qualified person” set out in Regulation 43-101/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 fulfill the requirements to be a qualified person for the purposes of NI 43-101.
7. I am author of Sections 18.3 and 18.6 of Chapter 18. I am also co-author and share responsibility for items 1 to 3, 21 and 25 to 27 of the Technical Report.
8. I did not visit the Kiena Mining Complex as part of this Feasibility Study.
9. I have not had prior involvement with the property that is the subject of this Technical Report.
10. I am independent of the issuer in accordance with the application of Section 1.5 of NI 43-101.
11. I have read NI 43-101 and Form 43-101F1, and the sections of the Technical Report for which I am responsible have been prepared in accordance with that instrument and form.
12. 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 Technical Report, the omission to disclose which makes the Technical Report misleading.

Signed this 6th day of August 2026.

(Original signed and sealed)

Éric Tremblay, P.Eng.
Norda Stelo
Eric.Tremblay@norda.com

CERTIFICATE OF AUTHOR – SIMON VEILLEUX

I, Simon Veilleux, P Eng., do hereby certify that:

1. I am a Professional Engineer and employee of Norda Stelo inc., located at 1015, avenue Wilfrid Pelletier, Québec, Québec, Canada, G1W 0C4.
2. This certificate applies to the technical report entitled “Feasibility Study for the Kiena Mine Complex, Val-d’Or, Quebec, Canada” (the “Technical Report”) with an effective date of June 24,2026 and a signature date of August 06, 2026, prepared for Wesdome Gold Mines Ltd.
3. I graduated with a Bachelor’s degree in Civil Engineering (B.Sc.) from Université de Sherbrooke (Sherbrooke, Québec) in 1993.
4. I am a member of the Ordre des Ingénieurs du Québec (OIQ No. 112627).
5. My relevant experience includes a total of 32 years since my graduation from university. My building structure and foundation expertise has been acquired as a Project Engineer for different kinds of projects all along my career at Norda Stelo. My mining expertise was developed through my involvement in various projects at IOC Labrador, IOC Sept-Îles, Canadian Royalties, and SLN (New Caledonia)
6. I have read the definition of a “qualified person” set out in Regulation 43-101/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 fulfill the requirements to be a qualified person for the purposes of NI 43-101.
7. I am author and responsible for items 1 to 3, 18.1, 18.4, 18.5, 18.7, 18.8, 18.9, 18.11, 21.2.11 of the Technical Report. I am co-author and shared responsibility of the relevant portions of Chap 1 to 3, and 25 to 27 of the Technical Report.
8. I did not visit the Kiena Mine Complex as part of this Feasibility Study. My involvement was limited exclusively to the existing facilities.
9. I have not had prior involvement with the property that is the subject of this Technical Report.
10. I am independent of the issuer in accordance with the application of Section 1.5 of NI 43-101.
11. I have read NI 43-101 and Form 43-101F1, and the sections of the Technical Report for which I am responsible have been prepared in accordance with that instrument and form.
12. 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 Technical Report, the omission to disclose which makes the Technical Report misleading.

Signed this 6th day of August 2026.

(Original signed and sealed)

Simon Veilleux, P.Eng.
Norda Stelo inc.
simon.veilleux@norda.com

CERTIFICATE OF AUTHOR – DENYS VERMETTE

I, Denys Vermette, P.Geo. M.Sc., M.Sc.A., do hereby certify that:

1. I am a I am a professional geoscientist and Project Manager in Environment for Norda Stelo Inc., located at 1015, Wilfrid-Pelletier avenue, Quebec City, Quebec, Canada, G1W 0C4.
2. This certificate applies to the technical report entitled “Feasibility Study for the Kiena Mine Complex, Val-d’Or, Quebec, Canada” (the “Technical Report”) with an effective date of June 24, 2026 and a signature date of August 06, 2026, prepared for Wesdome Gold Mines Ltd.
3. I graduated with a Bachelor’s of Science degree in Geology from Université Laval (Quebec City, Canada) in 1986. In addition, I obtained a Master’s degree in Geology from Université Laval (Quebec City, Canada) in 1989. I initiated, but not completed, a Ph.D degree in geochemistry at Université Paul Sabatier, Toulouse, France between 1990 and 1994. I obtained a Master’s degree in Mineral Engineering (mining environment) from Université de Montréal, École Polytechnique de Montréal (Montréal, Canada) in 2018.
4. I am a member of the Ordre des Géologues du Québec (OGQ No. 564).
5. I have practiced my profession in mineral exploration and mining environment for a total of 40 years since graduating from university in 1986. My relevant experience includes 32 years in mining exploration and 8 years in mining environment. I acquired my expertise SOQUEM, Agnico-Eagle Mines, Noranda, Noranda-Falconbridge, Alexis Minerals Corporation, QMX Gold, Alexandria Minerals Corporation, IOS Geosciences and Wesdome Gold Mines. I am a “Qualified Person” for the purpose of Canadian National Instrument 43-101 (“NI 43-101” or the “Instrument”).
6. I have read the definition of a “qualified person” set out in Regulation 43-101/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 fulfill the requirements to be a qualified person for the purposes of NI 43-101.
7. I am author and responsible for item 20. I am also co-author and share responsibility for Section 4.4 of Chapter 4, items 1,2,3 and 25 to 27 of the Technical Report.
8. I did not visit the Kiena Mine Complex as part of this Study. However, I was Exploration Manager for Wesdome Gold Mines in 2022 and 2024, and I visited the Kiena Mine on several occasions.
9. I have not had prior involvement with the property that is the subject of this Technical Report.
10. I am independent of the issuer in accordance with the application of Section 1.5 of NI 43-101.
11. I have read NI 43-101 and Form 43-101F1, and the sections of the Technical Report for which I am responsible have been prepared in accordance with that instrument and form.
12. 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 Technical Report, the omission to disclose which makes the Technical Report misleading.

Signed this 6th day of August 2026.

(Original signed and sealed)

Denys Vermette,P.Geo., M. Sc., M. Sc. A
Norda Stelo.
Denys.vermette@norda.com

CERTIFICATE OF AUTHOR – SERGE GONTHIER

I, Serge Gonthier, P.Geo., do hereby certify that:

1. I am the Principal Geologist, Resources and Geology for Wesdome Gold Mines Ltd., located at 1200-220 Bay street, Toronto, Ontario, Canada, M5J 2W4.
2. This certificate applies to the technical report entitled “Feasibility Study for the Kiena Mine Complex, Val-d’Or, Quebec, Canada” (the “Technical Report”) with an effective date of June 24, 2026 and a signature date of August 06, 2026, prepared for Wesdome Gold Mines Ltd.
3. I graduated with a bachelor’s degree in Geology (B.Sc.) from Université du Québec à Montréal (Montréal, Québec) in 1996.
4. I am a member of the Ordre des Géologues du Québec (OGQ No. 578) and of the Association of Professional Geoscientists of Ontario (PGO No. 1849).
5. My relevant experience includes a total of 25 years (working as a Geologist) since my graduation from university. My mining expertise has been acquired at the Doyon, Sigma-Lamaque, and Hoyle-Pond mines, whereas my exploration experience has been acquired with Geologica inc., Goldcorp, Agnico-Eagle. My experience in Resources estimations and modelling has been as a consultant for Geopointcom, as a Senior Resources Geologist at Canadian Royalties, and since May 2023 for Wesdome Gold Mine Ltd., where I work now as Principal Resources Geologist, Resources and Geology.
6. I have read the definition of a “qualified person” set out in Regulation 43-101/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 fulfill the requirements to be a qualified person for the purposes of NI 43-101.
7. I am author and responsible for items 5, 11 and 23. I am co-author and share responsibility for relevant portions of items 1, 2, 3, 4, 6, 7, 8, 9, 10, 12, 14, 25 to 27 of the Technical Report.
8. I have visited and worked at the Kiena Mine Complex on many occasions: from May 2023 to December 2025, I have spent a total of one hundred and eight (108) days at site.
9. I am an employee of Wesdome Gold Mine Ltd; accordingly, I am not independent of the issuer within the meaning of Section 1.5 of NI 43-101.
10. I have read NI 43-101 and Form 43-101F1, and the sections of the Technical Report for which I am responsible have been prepared in accordance with that instrument and form.
11. 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 Technical Report, the omission to disclose which makes the Technical Report misleading.

Signed this 6th day of August 2026.

(Original signed and sealed)

Serge Gonthier, P.Geo.
Wesdome Gold Mine Ltd.
Serge.Gonthier@wesdome.com

CERTIFICATE OF AUTHOR – BREANNE BEH

I, Breanne Beh, P.Geo., do hereby certify that:

1. I am the Director of Geology, Near Mine and Surface Exploration, for Wesdome Gold Mines Ltd., located at 1200-220 Bay street, Toronto, Ontario, Canada, M5J 2W4.
2. This certificate applies to the technical report entitled “Feasibility Study for the Kiena Mine Complex, Val-d’Or, Quebec, Canada” (the “Technical Report”) with an effective date of June 24, 2026 and a signature date of August 06, 2026, prepared for Wesdome Gold Mines Ltd.
3. I graduated with a Bachelor’s degree in Geology (B.Sc.) from the University of Calgary (Calgary, Alberta) in 2010 and a Master’s degree in Geology (M.Sc) from Lakehead University (Thunder Bay, Ontario) in 2013.
4. I am a member of the Ordre des Géologues du Québec (OGQ No. 2165) and of the Association of Professional Geoscientists of Ontario (PGO No. 2648).
5. My relevant experience includes a total of 15 years (working as a Geologist) since my graduation from university. My exploration experience has been acquired with Probe Mines Ltd., Goldcorp Inc., Probe Metals Inc., Probe Gold Inc. and Angus Gold Ltd. I have worked for Wesdome Gold Mines Ltd. since August 2025.
6. I have read the definition of a “qualified person” set out in Regulation 43-101/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 fulfill the requirements to be a qualified person for the purposes of NI 43-101.
7. I am co-author and share responsibility for relevant portions of items 1, 4, 6, 7, 8, 9, 10 and 12 of the Technical Report.
8. I have visited the Kiena Mine Complex in November 2025.
9. I am an employee of Wesdome Gold Mine Ltd; accordingly, I am not independent of the issuer within the meaning of Section 1.5 of NI 43-101.
10. I have read NI 43-101 and Form 43-101F1, and the sections of the Technical Report for which I am responsible have been prepared in accordance with that instrument and form.
11. 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 Technical Report, the omission to disclose which makes the Technical Report misleading.

Signed this 6th day of August 2026.

(Original signed and sealed)

Breanne Beh, P.Geo.
Wesdome Gold Mine Ltd.
Breanne.Beh@wesdome.com

CERTIFICATE OF AUTHOR – CHARLES VEILLEUX

I, Charles Veilleux, P.Eng., do hereby certify that:

1. I am a Senior Consultant with SRK Consulting Canada Inc., located at 2600-320 Granville Street Vancouver, BC V6C 1S9 Canada.
2. This certificate applies to the technical report entitled “Feasibility Study for the Kiena Mine Complex, Val-d’Or, Quebec, Canada” (the “Technical Report”) with an effective date of June 24, 2026 and a signature date of August 06, 2026, prepared for Wesdome Gold Mines Ltd.
3. I graduated from University Laval (Québec, QC, Canada) in 2012 with a Bachelor’s in Water Engineering.
4. I am a member in good standing of the Ordre des Ingénieurs du Québec (OIQ No. 5038360), and registered with the Association of Professional Engineers, Geologists of British Columbia (No. 63975).
5. I have practiced my profession for 14 years. I have been directly involved in hydrology and hydrotechnical design. I have been directly involved in mine water management in projects in North America. I have been a senior consultant for SRK Consulting Canada Inc. since May 2022.
6. I have read the definition of a “qualified person” set out in Regulation 43-101/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 fulfill the requirements to be a qualified person for the purposes of NI 43-101.
7. I am co-author and share responsibility for Section 18.14 of Chapter 18. I am also co-author and share responsibility for relevant portions of items 1, 2, 3, 21, 25 to 27 of the Technical Report.
8. I have not visited the Kiena Mine Complex.
9. I have prior involvement with the property that is the subject of this Technical Report. I completed the tailing storage facility (TSF) dam safety review (DSR) in 2024.
10. I am independent of the issuer in accordance with the application of Section 1.5 of NI 43-101.
11. I have read NI 43-101 and Form 43-101F1, and the sections of the Technical Report for which I am responsible have been prepared in accordance with that instrument and form.
12. 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 Technical Report, the omission to disclose which makes the Technical Report misleading.

Signed this 6th day of August 2026.

(Original signed and sealed)

Charles Veilleux, P.Eng.
SRK Consulting Canada Inc.
cveilleux@srk.com

CERTIFICATE OF AUTHOR – JEAN-FRANÇOIS ST-LAURENT

I, Jean-François St-Laurent, P.Eng., M.Sc., do hereby certify that:

1. I am a professional engineer in Québec, located at certify that I am employed as an Associate with SRK Consulting Canada Inc., with an office address of 2600-320 Granville Street Vancouver, BC V6C 1S9 Canada.
2. This certificate applies to the technical report entitled “Feasibility Study for the Kiena Mine Complex, Val-d’Or, Quebec, Canada” (the “Technical Report”) with an effective date of June 24, 2026 and a signature date of August 06, 2026, prepared for Wesdome Gold Mines Ltd.
3. I am a graduate of University Laval (Québec, QC, Canada) as Geological Engineer in 2005. I completed a master’s degree in civil engineering in 2007 at University Laval.
4. I am a member in good standing of Ordre des Ingénieurs du Québec (OIQ No 140657), and Professional Engineers Ontario (PEO No. 100541518).
5. My relevant experience as a geological engineer with 19 years of experience in soils geotechnics, mine waste management and site reclamation. Currently Engineer of Record of two closed sites and one active mine in Québec. My experience includes modelling embankment behaviour under various loading conditions, performing risk assessments, statutory inspections and safety reviews of tailings storage facilities. I’ve been involved in the preparation of detailed engineering designs with drawings and technical specifications for numerous embankment and tailings storage facilities. In March 2025, I have been a member of an independent technical review board supporting a mining company operating a filtered tailings facility. In November 2025, I completed a Feasibility Study (FS) and Preliminary Economic Assessment (PEA) designs for two co-disposal storage facility.
6. I have read the definition of a “qualified person” set out in Regulation 43-101/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 fulfill the requirements to be a qualified person for the purposes of NI 43-101.
7. I am co-author and share responsibility for Section 18.14 of Chapter 18. I am also co-author and share responsibility for items 1,2,3, 21 and 25 to 27 of the Technical Report.
8. have visited the Kiena Mine Complex on May 22, 2024.
9. I have prior involvement with the property that is the subject of this Technical Report. I completed the tailing storage facility (TSF) dam safety review (DSR) in 2024.
10. I am independent of the issuer in accordance with the application of Section 1.5 of NI 43-101.
11. I have read NI 43-101 and Form 43-101F1, and the sections of the Technical Report for which I am responsible have been prepared in accordance with that instrument and form.
12. 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 Technical Report, the omission to disclose which makes the Technical Report misleading.

Signed this 6th day of August 2026.

(Original signed and sealed)

Jean-François St-Laurent, P.Eng., M.Sc
Associate SRK Consulting (Canada) inc.
jst-laurent@stjgeotech.ca

CERTIFICATE OF AUTHOR – PIERRE ROY

I, Pierre Roy, P.Eng, M.Sc. do hereby certify that:

1. I am currently a Senior Metallurgist and Specialist–Mineral Processing at Soutex Inc. located at 1990 rue Cyrille-Duquet, Local 204, Quebec, Province of Quebec, Canada G1N 4K8.
2. This certificate applies to the technical report entitled “Feasibility Study for the Kiena Mine Complex, Val-d’Or, Quebec, Canada” (the “Technical Report”) with an effective date of June 24, 2026 and a signature date of August 06, 2026, prepared for Wesdome Gold Mines Ltd.
3. I graduated from the Universite Laval (Quebec, Quebec, Canada) with a B.Sc. in Mining Engineering in 1986, and a M.Sc. in Mining in 1989.
4. I am a registered member in good standing with Ordre des Ingénieurs du Québec (OIQ No. 45201).
5. I have practiced my profession continuously in the mining industry since my graduation from university. I have been involved in mining operations, engineering and financial evaluations for 38 years. During this time, I have been involved in mineral processing and environmental coordination at Kiena mine for six (6) years and Troilus mine for nine (9) years. I have also worked as consultant for the mineral processing industry for two (2) years at CRM in Québec and with Soutex inc. in Québec for twenty-one (21) years. As consultant I have been involved in many projects with Iron, base metals and gold mining sectors.
6. I have read the definition of a “qualified person” set out in Regulation 43-101/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 fulfill the requirements to be a qualified person for the purposes of NI 43-101.
7. I am co-author and share responsibility for relevant portions of items 1 to 3, 18, 21 and 25 to 27. I am the author of items 13 and 17 of the Technical Report.
8. I have visited the Kiena Mine Complex process plant in November 2021.
9. I have not had prior involvement with the property that is the subject of this Technical Report.
10. I am independent of the issuer in accordance with the application of Section 1.5 of NI 43-101.
11. I have read NI 43-101 and Form 43-101F1, and the sections of the Technical Report for which I am responsible have been prepared in accordance with that instrument and form.
12. 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 Technical Report, the omission to disclose which makes the Technical Report misleading.

Signed this 6th day of August 2026.

(Original signed and sealed)

Pierre Roy, P.Eng. M.Sc.
Soutex Inc.
proy@soutex.ca

CERTIFICATE OF AUTHOR – GANAN NADARAJAH

I, Ganan Nadarajah, P.Eng., do hereby certify that:

1. I am a Professional Engineer employed as Senior Technical Director at WSP Canada Inc. located at 6925 Century Avenue, Suite 600 Mississauga, ON, L5N 7K2.
2. This certificate applies to the technical report entitled “Feasibility Study for the Kiena Mine Complex, Val-d’Or, Quebec, Canada” (the “Technical Report”) with an effective date of June 24,2026 and a signature date of August 06, 2026, prepared for Wesdome Gold Mines Ltd.
3. I am a graduate of University of Peradeniya, Peradeniya, Sri Lanka in 1998 with a Bachelor’s degree in Civil Engineering and of University of British, Vancouver, BC, Canada in 2002 with a Master of Applied Science degree in Geotechnical Engineering.
4. I am a member in good standing of the Professional Engineers Ontario (PEO No. 100183764) and Association of Professional Engineers and Geoscientists of British Columbia (License No. 33280).
5. I have more than 20 years of experience in geotechnical engineering with focus on mine waste management, including tailings, water and waste rock.
6. I have read the definition of a “qualified person” set out in Regulation 43-101/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 fulfill the requirements to be a qualified person for the purposes of NI 43-101.
7. I am author and responsible for Section 18.19 of Chapter 18. I am also co-author and share responsibility for relevant portions of items 1 to 3, 21 and 25 to 27 of the Technical Report.
8. I have visited the Kiena Mine Complex on several occasions starting in 2020. My last visit was on October 20, 2024.
9. I have been involved with performing technical and design works related to the tailings storage facility at the Kiena Mine Complex site since 2020 as senior mine waste engineer.
10. I am independent of the issuer in accordance with the application of Section 1.5 of NI 43-101.
11. I have read NI 43-101 and Form 43-101F1, and the sections of the Technical Report for which I am responsible have been prepared in accordance with that instrument and form.
12. 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 Technical Report, the omission to disclose which makes the Technical Report misleading.

Signed this 6th day of August 2026.

(Original signed and sealed)

Ganan Nadarajah, P.Eng.
WSP Canada Inc.
Ganan.nadarajah@wsp.com

CERTIFICATE OF AUTHOR – FRANCIS COUTURE

I, Francis Couture, P. Eng., do hereby certify that:

1. I am a Senior Chemical engineer specialize in Mining Water Treatment with 1823 Water Inc., located at 888 3e Avenue Ste 302, Val-d'Or, QC J9P 1T1, Canada.
2. This certificate applies to the technical report entitled “Feasibility Study for the Kiena Mine Complex, Val-d’Or, Quebec, Canada” (the “Technical Report”) with an effective date of June 24, 2026 and a signature date of August 06, 2026, prepared for Wesdome Gold Mines Ltd.
3. I graduated from the Université de Sherbrooke, Sherbrooke, Québec, Canada, in 2011 with a Bachelor of Applied Science (B.A.Sc.) in Chemical Engineering.
4. I am a Professional Engineer registered with the Ordre des Ingénieurs du Québec (OIQ No. 5037752), Professional Engineer registered with the Professional Engineers of Ontario, (PEO No. 100616293), Professional Engineer registered with the Northwest Territories and Nunavut Association of Professional Engineers and Geoscientists (NAPEG No. L5741).
5. I have worked in the mining industry for fifteen years. During this time, I worked as a hydrometallurgist at the Québec Lithium Mine for three (3) years. I have also worked as a water treatment consultant to the mining industry for twelve years, including ten (10) years with ASDR Canada Inc. in Malartic and two (2) years with 1823 Water Inc. in Val-d'Or. As a consultant, I have been involved in numerous water treatment projects for gold and base metal mining operations.
6. I have read the definition of a “qualified person” set out in Regulation 43-101/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 fulfill the requirements to be a qualified person for the purposes of NI 43-101.
7. I am author and responsible for the preparation of Sections 18.10 of Chapter 18. I am also co-author for the relevant portions of Chapters 1, 2, 3, 21, 25 to 27 of the Technical Report.
8. I personally visited the Property that is the subject to the Technical Report on August 18, 2025.
9. I have had prior involvement with the property that is the subject of the Technical Report by being involved in several different technical support mandates in the last 2 years related with water treatment.
10. I am independent of the issuer in accordance with the application of Section 1.5 of NI 43-101.
11. I have read NI 43-101 and Form 43-101F1, and the sections of the Technical Report for which I am responsible have been prepared in accordance with that instrument and form.
12. 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 Technical Report, the omission to disclose which makes the Technical Report misleading.

Signed this 6th day of August 2026.

(Original signed and sealed)

Francis Couture, P. Eng.
1823 Water Inc.
francis.couture@1823.ca

CERTIFICATE OF AUTHOR – ALI JALBOUT

I, Ali Jalbout, P.Eng., Ph.D. do hereby certify that:

1. I am employed as a Principal Geotechnical Specialist by ASA Geotech., located at 35, Rue Hans Selye, Kirkland, Québec, Canada, H9J 3W4.
2. This certificate applies to the technical report entitled “Feasibility Study for the Kiena Mine Complex, Val-d’Or, Quebec, Canada” (the “Technical Report”) with an effective date of June 24,2026 and a signature date of August 06, 2026, prepared for Wesdome Gold Mines Ltd.
3. I graduated with a Bachelor’s degree in Civil Engineering from Damascus University in 1997, and from the University of Science and Technologies in Lille USTL- France with a Master and Doctorate degrees in Geotechnical Engineering in 2005.
4. I am a member of the Ordre des Ingénieurs du Québec (OIQ No. 6010434), member of Professional Engineers Ontario (PEO No. 100121550) and a member of Professional Engineers and Geoscientists of Newfoundland and Labrador (PEGNL No 12207).
5. I have practiced my profession for 24 years. I have been directly involved in Geotechnical Engineering and Mining since graduating from university. During my career, I have held multiple positions, starting as Engineer Site Supervisor, Ground Control Engineer, Rock Mechanics Engineer, Senior Rock Mechanics Engineer, Senior Ground Control Engineer, Geotechnical Technical Expert, and Geotechnical Manager. My expertise was acquired while working with Inco (then Vale), Goldcorp, Xstrata (then Glencore), Freeport McMorran, Newmont, IAMGOLD and ASA Geotech. I have been the Geotechnical Principal Specialist for ASA Geotech Inc. since November 2021.
6. I have read the definition of a “qualified person” set out in Regulation 43-101/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 fulfill the requirements to be a qualified person for the purposes of NI 43-101.
7. I am author and responsible for Sections 16.2 of Chapter 16. I am co-author and shared responsibility of the relevant portions of Chap 25 to 27 of the Technical Report.
8. I have visited the Kiena Mine Complex few times since November 2024 for the purpose of that technical report and other Geotechnical mandates. The last visit was on April 14, 2026.
9. I have not had prior involvement with the property that is the subject of this Technical Report.
10. I am independent of the issuer in accordance with the application of Section 1.5 of NI 43-101.
11. I have read NI 43-101 and Form 43-101F1, and the sections of the Technical Report for which I am responsible have been prepared in accordance with that instrument and form.
12. 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 Technical Report, the omission to disclose which makes the Technical Report misleading.

Signed this 6th day of August in 2026.

(Original signed and sealed)

Ali Jalbout, P.Eng., Ph.D.
ASA Geotech.
ali.jalbout@asageotech.com

CERTIFICATE OF AUTHOR – JEAN-LOUIS ROBERGE

I, Jean-Louis Roberge, P.Eng, do hereby certify that:

1. I am a professional engineer and Senior Process Engineer employed by SLR Consulting (Canada) Ltd., located at 531 Notre Dame Avenue, Sudbury, ON, Canada, P3C 5L1.
2. This certificate applies to the technical report entitled “Feasibility Study for the Kiena Mine Complex, Val-d’Or, Quebec, Canada” (the “Technical Report”) with an effective date of June 24, 2026 and a signature date of August 06, 2026, prepared for Wesdome Gold Mines Ltd.
3. I graduated with a Bachelor's degree in Chemical Engineering from Laurentian University (Sudbury, Ontario) in 2015.
4. I am a member in good standing of the Ordre des Ingénieurs du Québec (OIQ No. 6045586), Professional Engineers Ontario, (PEO No. 100223974), Professional Engineers and Geoscientists Newfoundland and Labrador (PEGNL No. 11794) and of the Canadian Institute of Mines (CIM).
5. My relevant experience includes a total of 10 years since my graduation from university. My mining expertise has been acquired working as a consultant in mine backfill and tailings management on a variety of project globally. In addition, I was involved in the design and implementation of the Kiena Paste Backfill Plant.
6. I have read the definition of a “qualified person” set out in Regulation 43-101/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 fulfill the requirements to be a qualified person for the purposes of NI 43-101.
7. I am author and responsible for Section 16.7.8 of Chapter 16; Section 18.16 of Chapter 18. I am also co-author and share responsibility for relevant portions of items 1 to 3 and 25 to 27 of the Technical Report.
8. I was regularly on site in Q4 2022 to Q1 2023 during the construction and commissioning of the paste plant.
9. I have not had prior involvement with the property that is the subject of this Technical Report.
10. I am independent of the issuer in accordance with the application of Section 1.5 of NI 43-101.
11. I have read NI 43-101 and Form 43-101F1, and the sections of the Technical Report for which I am responsible have been prepared in accordance with that instrument and form.
12. 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 Technical Report, the omission to disclose which makes the Technical Report misleading.

Signed this 6th day of August 2026.

(Original signed and sealed)

Jean-Louis Roberge, P.Eng.
SLR Consulting (Canada) Ltd.
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1. SUMMARY

1.1 Introduction

This Technical Report has been prepared for Wesdome Gold Mines Ltd. ("Wesdome"), the Issuer, in accordance with the disclosure requirements of National Instrument 43-101–Standards of Disclosure for Mineral Projects ("NI 43-101") and Form 43-101F1. The Report documents the results of the Feasibility Study ("FS") completed for the Kiena Mine Complex ("Kiena Mine"), located approximately 10 km west of Val-d'Or, Québec, Canada.

Wesdome retained Norda Stelo Inc. and other consulting firms (ASA Geotech Inc., SRK Consulting Canada Inc., SLR Consulting (Canada) Ltd., WSP Canada Inc., Soutex Inc., 1823 Water Inc) to complete a Feasibility Study for Kiena Mine. The primary objective of the Study was to establish a high-confidence, reserve-based mine plan supporting the continued operation of the Kiena Mine through an updated Mineral Reserve estimate. The Study incorporates revised mine design, detailed production scheduling, updated capital and operating cost estimates, environmental and permitting considerations, and an economic evaluation of the Project. The resulting mine plan provides a reliable and executable technical foundation for the continued operation of the mine.

Since the restart of mining operations, significant operational knowledge has been gained, particularly within the Kiena Deep mining area. This experience, combined with detailed engineering investigations completed specifically for the Feasibility Study, has resulted in important refinements to the mine design, production strategy, infrastructure requirements, and Life-of-Mine ("LOM") schedule. A comprehensive geotechnical assessment formed a key component of the Study and was integrated throughout the mine planning process, resulting in revised design parameters, optimized mining layouts, updated extraction sequences, and a higher-confidence engineering basis relative to previous technical studies.

The updated mine plan incorporates production from the Kiena Deep, Presqu'île, and Dubuisson mining areas, providing increased operational flexibility by diversifying production sources and maximizing the utilization of the existing underground infrastructure. The Feasibility Study establishes a high-confidence reserve-based mine plan that supports continued operations through 2033 while providing a robust engineering foundation upon which future optimization initiatives may be evaluated.

The Feasibility Study demonstrates the technical and economic viability of the Project and provides the basis for the updated Mineral Reserve estimate and the continued development of the Kiena Mine through 2033.

1.2 Contributors and Qualified Persons

This Technical Report was prepared through the collaboration of a multidisciplinary team of Qualified Persons ("QPs") and technical specialists with expertise in geology, mineral resources, mining engineering, geotechnical engineering, mineral processing, mine backfill, tailings management, environmental permitting, infrastructure, and economic evaluation.

Each Qualified Person is responsible for the scientific and technical information contained within their respective areas of expertise and has reviewed and approved the applicable sections of this Technical Report in accordance with the requirements of NI 43-101.

The preparation of the Feasibility Study also benefited from the participation of numerous technical and operational personnel from Wesdome Gold Mines Ltd., who provided operational data, engineering information, production records, cost information, and technical guidance throughout the Study. Their contributions were integrated into the engineering analyses completed by the respective Qualified Persons.

The Qualified Persons responsible for the preparation of this Technical Report, together with their respective discipline, are summarized in Table 1.1. Table 2.1 presents the responsibilities of each QP.

Table 1.1 Qualified Persons and Disciplines

Qualified Person	Company	Discipline
Éric Lecomte, P.Eng.	Norda Stelo Inc.	Mining Engineering
Simon Veilleux, P.Eng.	Norda Stelo Inc.	Structural Engineering
Éric Tremblay, P.Eng.	Norda Stelo Inc.	Electrical Engineering
Ali Jalbout, P.Eng.	ASA Geotech Inc.	Geomechanical Engineering
Denys Vermette, P. Geo.	Norda Stelo Inc.	Environment
Jean-Louis Roberge. P.Eng.	SLR Consulting (Canada) Ltd.	Process Engineering – Mine Backfill
David Sims, P.Geo.	Norda Stelo Inc.	Hydrogeology / geotechnical
Francis Couture, P.Eng.	1823 Water	Water treatment
J-F St-Laurent, P.Eng.	SRK Consulting Canada Inc.	Geotechnical / Waste Rock Dump
Charles Veilleux, P.Eng.	SRK Consulting Canada Inc.	Surface Water Management/Waste RockDump
Serge Gonthier, P.Geo.	Wesdome Gold Mine Ltd.	Geology
Breanne Beh, P.Geo.	Wesdome Gold Mine Ltd.	Geology
Pierre Roy, P.Eng.	Soutex Inc.	Metallurgy-Processing
Ganan Nadarajah, P.Eng.	WSP Canada Inc.	Tailings Storage Facility (Geotechnical and water Management)

1.3 Project Nomenclature

For the purposes of this Technical Report, the term “Kiena Deep” refers collectively to the underground mining zones comprising the A, A2, Basalt, Footwall, H, and Sneak zone families, unless otherwise specified. These mining zones represent the principal underground production area included in the LOM plan.

This nomenclature has been adopted throughout this Technical Report to provide consistency with the current geological interpretation, mine planning terminology, and Mineral Reserve estimate. References to “Kiena Deep” therefore apply collectively to these mining zones, while individual zone families are identified only where discussion of specific geological, geotechnical, mine planning, or production considerations is required.

1.4 Property Overview

The Project is in the Province of Quebec in the Abitibi-Témiscamingue administrative region within the limits of the municipality of Val-d'Or and 100 km east of Rouyn-Noranda. It lies to the northwest of the urban centre of Val-d'Or and covers 7,237.7 ha.

The coordinates for the approximate centre of the Project are latitude 48°08' N and longitude 77°54' W (284105E and 5335715N: NAD 83 / UTM Zone 18).

As of June 30, 2026, the Kiena Mine Complex property consists of a contiguous group of 189 contiguous electronic map designated mining claims and two (2) mining concessions. Of the 189 mining claims, Wesdome has 175 claims registered 100% in their name. Six (6) claims are held by Mines Dynacor (50%) and Wesdome (50%), which represents the Maufort property. Eight (8) claims are held by Wesdome (75%) and 9264-7890 Québec Inc. (25%), which represents the Siscoe Extension property.

Some of the mining titles comprising the Project are subject to certain agreements and royalties.

The Project includes the milling and tailings facilities of the Kiena mine, nine (9) shafts including the Parker Shaft, and related underground workings from past producers and exploration projects, and various surface facilities, other than the exploration offices and underground development.

1.5 Geology and Mineralization

The Kiena Mine Complex is located in northwestern Quebec, straddling the southern part of the Abitibi Greenstone Belt (AGB) and the northern part of the Pontiac Subprovince:

- The AGB comprises E-trending successions of folded and faulted volcanic and sedimentary rocks and intervening domes of intrusive rocks. An important geologic feature of the AGB is the occurrence of major, E-trending ductile-brittle fault zones. These zones cut across the entire belt from the Kapuskasing structural zone in the west to the Grenville front in the east, dividing the supracrustal rocks and intervening domes into distinct lozenge-shaped domains. The two most important fault zones in the southern AGB are Destor-Porcupine Fault Zone (DPFZ) in the north and Larder Lake-Cadillac Fault Zone (LLCFZ) in the south.
- The Pontiac Subprovince (PS) consists principally of a turbiditic succession composed of graywacke and mudstone with minor intercalated conglomerate and basalt.

The southern Abitibi Greenstone Belt in the area of the Kiena Mine Complex consists of 2714–2700 Ma volcano-plutonic assemblages, including the Malartic and Louvicourt groups, intruded by calc-alkaline plutonic rocks. The Malartic Group comprises mainly komatiitic and tholeiitic basalt flows and sills, with minor sedimentary rocks, which are interpreted as an oceanic floor in an extensional environment related to mantle plumes, whereas the Louvicourt Group is mainly composed of mafic to felsic volcanic rocks that formed in a subduction-related arc setting. From south to north, the Kiena Mine Complex area is underlain by the lithologies of the Pontiac Group (PO), the Piché Group (PG), the Cadillac Group (CG), and formations belonging to the Louvicourt Group and the Malartic Group.

The area of the Kiena Mine Complex contains a series of large-scale shear zones and related subsidiary faults trending ESE-WNW to SE-NW, subparallel to stratigraphy and dipping steeply to the north. They are, from south to north: the Larder Lake-Cadillac Fault Zone (LLCFZ), the Parfouru Fault (PF), the Marbenite Fault (MF), the Norbenite Fault (NF), the Callahan Fault (CF), the K Shear Zone (KSZ) and the Rivière Héva Fault (RHF). The area of the Kiena Mine Complex is cut by all of them. The shear zones contain dykes or stocks of monzonitic or tonalitic composition that vary widely in age (pre-, syn- or post-tectonic) and are spatially associated with gold mines (Norlartic, Marban, Kiena, Sullivan, Goldex, Siscoe, Joubi, Sigma and Lamaque). The observed diversity in the styles and ages of gold mineralization related to these large-scale shear zones demonstrates that several distinct episodes of mineralization occurred.

Gold mineralization on the Kiena Mine Complex shares many geological attributes with other vein- type gold deposits of the Val-d'Or district and with orogenic gold deposits (also known as lode gold, greenstone-hosted quartz-carbonate vein, or mesothermal deposits) in terms of host rock composition, mineralogy and hydrothermal alteration.

Gold mineralization on the property occurs in all rock types except the Proterozoic dykes but is more common in intrusive bodies and basalt as these acted as competent rock units that promoted fracturing during deformation. Gold mineralization is concentrated where there is a marked competency contrast between these competent units and the adjacent deformed komatiite and/or chlorite-talc schists. There are at least two main gold mineralizing events in the region: young deposits in which the gold mineralization did not experience much deformation after its emplacement; and early mineralization in which mineralized bodies are commonly affected by D1 asymmetric folds, are highly strained and are locally dismembered. In a few deposits, both generations are present. Gold-bearing veins in the region exhibit a great variety of orientations, mineralogy and crosscutting relationships.

A total of 94 mineralized lenses were interpreted for the purpose of the 2025 MRE.

Besides the envelopes reported in this Study, there is a broader number of other lenses that were not included; these amount to 60 lenses in the surrounding area of the Project.

1.6 Mineral Resources

The mineral resource drill database for the Project, as of December 30, 2025, comprised 788 surface-collared and 7,709 underground-collared diamond drillholes, totaling 1,344,536.8 m of drilling. The average diamond drillhole length was 151.6 m. Within this database, a subset of 2,357 drillholes intersected 4,370 mineralized lens intercepts, representing a cumulative mineralized interval of 26,195 m. The broader Kiena Property drillhole database consists of 2,583 surface-collared and 8,172 underground-collared diamond drillholes, with a cumulative drilled length of 1,948,153.1 m. However, only the Project resource database with MRE 2025 status was used for Mineral Resource estimation.

Christopher Grondin, Resources Engineer and the QP, Serge Gonthier, Principal Geologist, Resources and Geology, reviewed the drilling, sample preparation, analytical and security procedures, as well as insertion rates and the performance of blanks, standards, duplicates and check assays for the 2021-2025 drilling programs, and concluded that the observed failure rates are within expected ranges and that no significant assay biases are present. The QP is of the opinion that the protocols in place are adequate and followed. The database for the Project is of good overall quality and adequate to industry standards. The QP is of the opinion that the database is appropriate for the purpose of the 2025 MRE and that the sample density allows for a reliable estimate to be made of the size, tonnage and grade of the mineralization in accordance with the level of confidence established by the mineral resource categories in the Canadian Institute of Mining, Metallurgy, and Petroleum Definition Standards for Mineral Resources and Mineral Reserves – 2014 (CIM Standards).

The Measured + Indicated and Inferred 2025 Mineral Resource estimate (inclusive of mineral reserves) for the Kiena Mine Complex is presented in Table 1.2.

Table 1.2 Measured, Indicated, (M+I) and Inferred Kiena Mine Complex 2025 Mineral Resource Estimate per zone (inclusive of Mineral Reserves)

2025 Resources												
Zone	Measured			Indicated			Measured + Indicated			Inferred		
	Tonnes (000)	Grade (g/t Au)	Ounces (000)	Tonnes (000)	Grade (g/t Au)	Ounces (000)	Tonnes (000)	Grade (g/t Au)	Ounces (000)	Tonnes (000)	Grade (g/t Au)	Ounces (000)
Kiena Deep	254	18.8	153	1,324	14.4	615	1,578	15.1	768	175	13.0	73
S50	10	4.5	1	78	4.6	12	88	4.6	13	94	4.9	15
VC Zone	-	-	-	125	5.1	21	125	5.1	21	178	5.9	34
ZB	-	-	-	127	4.7	19	127	4.7	19	136	5.3	23
South Zone	-	-	-	48	4.6	7	48	4.6	7	147	4.4	21
K109	-	-	-	-	-	-	-	-	-	122	4.8	19
Presqu'île	44	13.4	19	256	10.0	82	300	10.5	101	55	9.8	17
Dubuisson	-	-	-	451	6.7	97	451	6.7	97	519	5.0	84
Martin	61	3.8	7	78	4.3	11	139	4.1	18	103	3.9	13
North West	-	-	-	-	-	-	-	-	-	368	5.8	69
Wesdome	-	-	-	-	-	-	-	-	-	2,020	4.5	295
Wish	-	-	-	29	4.4	4	29	4.4	4	11	3.3	1
Shawkey_22	-	-	-	-	-	-	-	-	-	159	6.1	31
Z 134	-	-	-	2	4.4	0.3	2	4.4	0	55	6.9	12
Total Measured	**370**	**15.2**	**181**	-	-	-	-	-	-	-	-	-
Total Indicated				**2,519**	**10.7**	**868**	-	-	-	-	-	-
Total M+I							**2,888**	**11.3**	**1,049**	-	-	-
Total Inferred										**4,151**	**5.3**	**707**

1. The qualified persons for the 2025 MRE, as defined by National Instrument (“NI”) 43-101 guidelines,is Serge Gonthier, P. Geo. from Wesdome. The effective date of this MRE is December 30, 2025.
2. These mineral resources are not mineral reserves as they do not have demonstrated economic viability.
3. These mineral resources are inclusive of mineral reserves.
4. The mineral resource estimate follows CIM Definitions (2014) for mineral resources.
5. Results are presented in situ and undiluted and considered to have reasonable prospects for economic extraction,below a 60 m crown pillar.
6. The resources include 94 mineralized lenses with a minimum true thickness of 2.0 to 3 m (2.4 m for Wesdome Zones)using the grade of the adjacent material when assayed or a value of zero when not assayed. High-grade capping varies from 6 to 265 g/t Au (when required) and was applied to composited assay grades for interpolation using an Ordinary Kriging, ID^2 or ID^3 when required, based on 1.0 m composite and block size of 3 m x 3 m x 3 m, with bulk density values of 2.8 (g/cm^3). A three-step capping strategy was applied, where capping value decreased as interpolation search distance increased, in order to restrict high-gradeimpact at greater distance. Indicated resources are manually defined and encloses areas where drill spacing is generally less than 30 m, blocks are informed by a minimum of three drillholes, and reasonable geological and grade continuity is shown.
7. The estimate is reported for potential underground scenario at zone specific Cut-off Grades. The Cut-off Grades were calculated using a gold price of US$2,100 per ounce, a USD:CAD exchange rate of 1.35 (resulting in C$2,835 per ounce gold price); refer to Table 14.13 and Table 14.13+1 for unit costs used in estimate.
8. The number of metric tonnes and ounces were rounded to the nearest hundred and the metal contents are presented in troy ounces (tonne x grade/31.10348). Rounding may result in apparent summation differences between tonnes, grades and contained metals content.
9. The QPs are not aware of any known environmental, permitting, legal, title-related, taxation, socio-political or marketing issues, or any other relevant issues not reported in this Report that could materially affect the mineralresource estimate.

1.7 Mineral Reserves

The 2026 Mineral Reserve estimate for the Kiena Mine has been prepared in accordance with the CIM Standards and CIM Estimation of Mineral Resources and Mineral Reserves Best Practice Guidelines – 2019 (CIM MRMR Guidelines) and is reported in accordance with the requirements of NI 43-101. The Mineral Reserve estimate incorporates only Measured and Indicated Mineral Resources that have been demonstrated to be economically mineable through detailed mine design, production scheduling, and economic evaluation completed as part of the Feasibility Study. The resulting Proven and Probable Mineral Reserve estimate is summarized in Table 1.2.

The Mineral Reserve estimate was developed using detailed stope optimization and mine design based on the planned underground mining methods, appropriate mining recovery and dilution assumptions, geotechnical design criteria, and operating cost estimates representative of the planned operation. Cut-off Grades were established using long-term economic assumptions consistent with those applied throughout the Feasibility Study.

The resulting Proven and Probable Mineral Reserves support an underground operation extending from 2026 through 2033 and form the basis of the LOM production schedule, capital cost estimate, operating cost estimate, and economic analysis presented in this Technical Report.

Table 1.3 Kiena Project Statement of Mineral Reserves

Effective Date as December 31, 2025

Category	Tonnes (t)	Grade (g/t Au)	Contained Gold (oz)
Proven	*463,000*	*9.6*	*143,000*
Presqu'île	75,000	7.5	18,000
Kiena Deep	388,000	10.00	125,000
Stockpile and Inventory	0	-	-
Probable	*2,090,000*	*8.5*	*568,000*
Presqu'île	262,000	6.41	54,000
Kiena Deep	1,543,000	9.17	455,000
Dubuisson	285,000	6.44	59,000
Proven and Probable	2,553,000	8.7	711,000

Notes:

1. The Qualified Person responsible for the Mineral Reserve estimate is Éric Lecomte, P.Eng., Norda Stelo Inc. The Mineral Reserve estimate has an effective date of December 31, 2025 and has been prepared in accordance with the CIM Definition Standards for Mineral Resources and Mineral Reserves (2014) adopted by the CIM Council and incorporated by reference into National Instrument 43-101.
2. Mineral Reserves are estimated from Measured and Indicated Mineral Resources that have demonstrated economic viability through detailed mine planning and economic evaluation. Inferred Mineral Resources are treated as waste and are not included in the Mineral Reserve estimate.
3. The Mineral Reserve estimate is based on a gold price of US$1,800/oz, an exchange rate of US$1.00 = C$1.35, and refining costs of US$5.65/oz. The estimate incorporates the modifying factors appropriate for a Feasibility Study, including mine design, mine planning, production scheduling, mining recovery, planned dilution, backfill dilution, metallurgical recovery, geotechnical constraints, environmental considerations, and economic assumptions.
4. Mineral Reserves were estimated assuming longitudinal longhole stoping with paste backfill in the Kiena Deep, Presqu'île, and Dubuisson mining areas. Planned external dilution was estimated using lithology-specific ELOS values developed by the Qualified Person responsible for the rock mechanics aspects of the Feasibility Study. Mining recovery factors ranging from 87% to 92% were applied to production stopes depending on the mining area, lithology, and mining conditions. A mining recovery factor of 80% was applied to sill stopes.

5. Mineral Reserves are reported within mineable stope shapes generated using zone-specific Break -Even Cut-off Grades and subsequently optimized using Marginal Cut-off Grades (MCOG) for material located within previously established mineable envelopes where no additional mine development was required. The applied cut-off grades were:
   - Presqu'île: 4.25 g/t Au (BCOG) and 3.95 g/t Au (MCOG);
   - Kiena Deep: 4.85 g/t Au (BCOG) and 4.55 g/t Au (MCOG);
   - Dubuisson: 4.55 g/t Au (BCOG) and 4.15 g/t Au (MCOG).
6. The mining costs used to establish the cut-off grades were estimated at C$240.98/t mined for Kiena Deep, C$188.72/t mined for Presqu'île, and C$210.50/t mined for Dubuisson. Processing and General & Administrative costs were estimated at C$50.20/t milled and C$80.00/t milled, respectively. Metallurgical recoveries used for cut-off grade determination were estimated at 98.5% for Kiena Deep and 97.0% for the Presqu'île and Dubuisson mining areas.
7. Tonnage, grade, and contained gold have been rounded to reflect the precision of the estimate; therefore, totals may not sum due to rounding. Contained gold ounces are calculated from diluted tonnes and diluted grades before application of metallurgical recovery.

1.8 Mining

The FS mine plan has been developed by integrating operational experience gained since the restart of the Kiena Mine with the findings of a comprehensive geotechnical assessment completed specifically for this Study. Ground behaviour observed during the initial years of mining at Kiena Deep significantly improved the understanding of rock mass response under increasing mining depth and stress conditions. The recommendations arising from this work have been incorporated throughout the mine design and constitute one of the principal technical foundations of the FS.

The geotechnical assessment influenced the design of the mine layouts, production sequencing, underground infrastructure, and the LOM schedule. Key design changes include reducing stope dimensions to improve excavation stability, revising the extraction sequence to better manage stress redistribution, and modifying the access strategy for the Kiena Deep mining fronts by establishing access from the extremities of the mineralized zones rather than through the central portions. These measures are intended to reduce stress concentrations, improve ground conditions, enhance operational flexibility, and support the safe and efficient extraction of the Mineral Reserves.

The FS considers underground mining using mechanized longitudinal longhole stoping as the primary mining method for all mining areas included in the LOM plan. The selected mining method is consistent with current Kiena operating practices and has been adapted to the geometry and geotechnical characteristics of each mining zone.

1.8.1 Mining Method and Mine Design

The mine plan includes three principal mining areas: Kiena Deep, Presqu'île, and Dubuisson. These mining areas will be developed and extracted sequentially to maintain continuous mill feed throughout the LOM.

The Mineral Reserves will be mined using mechanized pillarless longhole stoping with cemented backfill. The mining method includes longitudinal longhole stoping as the primary extraction method for most of the deposit, while transverse longhole stoping is used locally in wider ore zones where the geometry is suitable.

Kiena Deep represents the primary production source throughout the LOM and is accessed through the existing shaft and underground ramp network. Mining in the Presqu'île Zone supplements production during the early years of the schedule, while the Dubuisson Zone progressively replaces depleted production from Presqu'île during the latter part of the LOM.

The mine design incorporates new underground development, ventilation infrastructure, electrical distribution, pumping systems, and access development required to support the planned mining sequence while maximizing the utilization of the existing Kiena underground infrastructure.

The mine layout and excavation geometries were developed in accordance with the recommendations of the geotechnical assessment completed for the FS. Mine access locations, level spacing, stope geometries, pillar design, and infrastructure placement were selected to improve long-term ground stability while maintaining operational efficiency.

1.8.2 Mine Production

The LOM schedule has been developed to provide a stable and continuous ore supply to the Kiena processing facility while balancing development requirements, stope availability, backfill curing constraints, and underground infrastructure capacity.

Production is scheduled from 2026 through 2033 with ore sourced from Kiena Deep, Presqu'île, and Dubuisson according to the planned mining sequence. The mine plan maintains mill feed rates consistent with the available processing capacity while optimizing equipment utilization and mining productivity.

Average annual production, gold production and waste tonnes are summarized in Table 1.4.

Table 1.4 Annual Mine Production Schedule

Item	Unit	Total	2026	2027	2028	2029	2030	2031	2032	2033
Total ore mined	kt	2,553.6	306.8	352.4	359.1	308.5	295.4	339.3	311.6	280.5
Average production rate	t/d	873	841	966	984	845	809	930	854	769
Average mined grade	g/t Au	8.7	8.6	8.9	8.4	10.2	9.3	8.1	8.3	7.5
Contained gold mined	koz Au	710.9	85.1	101.0	97.2	101.0	88.0	87.8	82.8	67.9
Waste mined	kt	2,602.7	457.6	424.9	398.6	269.4	292.8	346.5	334.1	78.8

1.8.3 Mine Development

Mine development includes the lateral development, ramp advancement, level accesses, ventilation raises, ore passes, and associated underground infrastructure required to support the planned production schedule.

Development activities are concentrated during the early years of the operation to establish future mining fronts within Kiena Deep and to provide access to the Dubuisson Zone. Development requirements progressively decrease as mining areas become established and production advances through the scheduled reserves.

The development schedule has been prepared using productivity assumptions representative of current Kiena operating performance and reflects the planned equipment fleet and workforce available during the operation.

1.8.4 Mining Infrastructure

The Feasibility Study maximizes the use of the existing Kiena underground and surface mining infrastructure while incorporating targeted upgrades and new installations required to support the planned LOM operation.

Existing infrastructure includes the production shaft and hoisting system, underground loading pockets, crushing facilities, ventilation network, pumping stations, electrical distribution system, maintenance facilities, communication network, and paste distribution infrastructure. Planned capital works primarily consist of new development access, ventilation raises and fans, electrical upgrades, underground services, and infrastructure required to access the Dubuisson Zone.

The proposed infrastructure is considered adequate to support the planned mining rate throughout the operation.

1.8.5 Mobile Equipment

The underground mobile fleet has been selected to support the planned mining and development rates while maximizing equipment standardization with the existing Kiena operation.

The fleet includes underground development jumbos, load-haul-dump units, haul trucks, bolters, utility vehicles, and support equipment required for mine services. Battery-electric haul trucks are planned for the Dubuisson mining area to reduce ventilation demand and improve operating efficiency.

Fleet sizing has been established using detailed productivity modelling and is sufficient to achieve the scheduled production and development targets.

1.8.6 Life of Mine Schedule

The LOM schedule forms the basis of the Mineral Reserve estimate and the economic evaluation presented in this Technical Report.

The production schedule spans the period from 2026 through 2033 and has been developed using detailed production sequencing, development scheduling, backfill curing constraints, equipment availability, ventilation capacity, and underground operating requirements. Mining progresses from Kiena Deep and Presqu'île during the initial years before transitioning to the Dubuisson Zone as production from Presqu'île is completed.

The resulting schedule provides a balanced production profile that maintains continuous mill feed while optimizing development requirements and maximizing the utilization of the existing mining infrastructure.

1.9 Mineral Processing

Ore will be processed in the existing mill, which was originally built in 1984, refurbished in 2020, and has been in operation since 2021. During this period, mill throughput has remained below the design capacity while achieving the planned metallurgical performance. The throughput assumed for the Feasibility Study also remains below the mill design capacity.

The Mineral Reserve will be sourced primarily from three (3) zones, and metallurgical testwork has been completed for each zone. The grindability testwork indicates that ore from each zone can be processed at the expected throughput while maintaining a final product size distribution suitable for optimal gold recovery. The testwork also confirmed that the existing gold recovery process is appropriate for all zones.

The metallurgical process is expected to achieve the following gold recoveries for each ore zone:

- Kiena Deep, 98.5% gold recovery
- Presqu'île, 98.5% gold recovery
- Dubuisson, 97.0% gold recovery

These recoveries are based on metallurgical testwork and a predicted product size distribution with a P80 of 60 µm.

The mill flowsheet consists of cyanide leaching followed by activated carbon recovery to produce gold bullion for shipment to a refiner. Underground ore is crushed to 150 mm before being fed to a grinding circuit consisting of a SAG mill (Semi-Autogenous Grinding) followed by a ball mill operating in closed circuit with hydrocyclones. Cyanide solution is added in the grinding circuit to initiate gold dissolution. The grinding product is thickened and sent to the leach circuit, where gold dissolution is completed. The slurry is then transferred to a series of carbon-in-pulp tanks, where activated carbon recovers gold from solution. The loaded carbon is harvested and sent to the stripping circuit, where gold is transferred to a pregnant solution and then to electrowinning. Electrowinning produces a gold-bearing sludge that is smelted to produce gold bullion. Tailings from the CIP circuit are treated in a cyanide destruction process before being sent to the mine backfill plant or the tailings pond.

1.10 Paste Backfill

Paste backfill was selected as the preferred fill method for all mining zones based on a few factors but primarily the increased productivity, lower operating costs, utilization of existing infrastructure and maximizing the amount of tailings placed underground. Due to the Dubuisson and Presqu'île Zones being relatively distant from the existing paste plant, various options were considered including: cemented rock fill, addition of underground booster pump stations or trucking of paste to surface boreholes. The preferred option following a trade-off study was to dilute the paste to reduce the viscosity and increase binder content for those zones as the most economical solution based on the size of the zones. The impacts of more dilute paste were tested in the laboratory to confirm the results of this trade-off study and estimate new paste recipes for these zones.

The surface paste backfill plant will require minor upgrades to the paste pumps due to the required pumping pressures for the Dubuisson and Presqu'île Zones while Kiena Deep will continue to utilize the gravity distribution circuit as per the current practices.

The existing 6 inch distribution system will continue to be extended for Kiena Deep utilizing gravity for paste distribution. For Dubuisson and Presqu'île, new lines will be installed on Level 33 to the access drifts to the respective zones which will tie into the existing system at the backfill station on this level. Additionally, automated diversion valves for selecting to which ore zone the paste will be routed as well automated dumping will be added to the existing backfill station.

1.11 Infrastructure

1.11.1 Surface Infrastructure

The Kiena Mine Complex is an established underground gold mining operation located approximately 10 km west of the City of Val-d'Or, Québec. The operation has been developed over several decades and includes the surface and underground infrastructure necessary to support underground mining, mineral processing, paste backfill production, water management, maintenance activities, and administrative functions.

The existing surface infrastructure has been progressively expanded and upgraded throughout the operating history of the mine to support ongoing operations. Since completion of the previous PFS, the most significant surface infrastructure additions include the construction and commissioning of a new paste backfill plant, replacing the former hydraulic backfill facility on Parker Island, and the development of the Presqu'île portal providing direct underground access to the Presqu'île mining area and Kiena mine.

The existing site infrastructure includes administrative and dry facilities, mine maintenance shops, warehouses, mine service buildings, fuel storage and distribution systems, electrical distribution facilities, process plant infrastructure, water treatment facilities, waste rock and mineralized material stockpiles, tailings management facilities, explosives storage, and the associated utilities required to support continuous mining operations.

With the exception of the infrastructure additions described above and some ongoing site improvements, the majority of the surface facilities remain unchanged from those described in the previous PFS and continue to provide adequate capacity to support the LOM plan developed for this FS.

1.11.2 Waste Rock Stockpile

The expansion of the existing waste rock stockpile Waste Stockpile Extension and the construction of an adjacent topsoil stockpile, both designed in compliance with Quebec and Canadian mining and environmental regulations, including Directive 019. The WSE is located east of the current facility, with its footprint constrained by high-water lines, natural barriers (lake and wetlands), property limits, and foundation bearing capacity. To inform the design criteria to be used, the consequence classification of WSE was performed and was identified as “Important” or having a “Moderate” risk level. The WSE maximum design height is limited to 16.5 m to comply with the Directive 019 factors of safety criteria under static and pseudo-static loading conditions. Geotechnical analyses distinguish a soft varved clay foundation zone requiring staged construction sequence and a stiffer stratified silty zone that can be raised to full height with minimal delay. At design crest elevations, the existing footprint and extension provide a combined storage

capacity of approximately 523,300 m³, sufficient for waste rock storage until about 2030, after which additional storage capacity will be required at a new location to be defined for the remainder of mine life to 2032.

Contact water management for the WSE and TS is designed around Directive 019 hydrological criteria, including a lined collection pond sized for the combination of a 1-in-100-year, 24-hour storm and 100-year snowmelt, perimeter geomembrane-lined collector ditches, culverts, an emergency spillway sized for the Probable Maximum Flood, and a pumping station that transfers collected water to the existing polishing pond. All runoff and seepage from the waste rock stockpile areas are captured and directed to the polishing pond or to the tailings facility should the water requires treatment before discharge. The collection pond is classified as “Low Consequence” and designed to maintain required safety factors and prevent overtopping.

1.12 Environmental, Permitting and ESG

1.12.1 Physical Settings

The Kiena Mine is an active underground gold mine located about 10 km west of Val-D’Or, Québec. The Kiena Mine is flanked by Lake De Montigny to the north and east. The main glacial deposits encountered are clay, but reworked till on the surface and glaciofluvial sediments are also recognized in some places. A silt unit is observed at the mine. This silt unit is permeable and is hydraulically connected with Lake De Montigny, thus constituting a privileged groundwater flow drain. The Kiena Mine area is characterized by flat topography with a few isolated hills and an elevation difference of less than 50 m relative to Lake De Montigny.

The Lake De Montigny is part of the Harricana River watershed which covers an area of 16,340 km². The Harricana River takes it source in Blouin lake located further east and drains towards James Bay. Mining companies are required to monitor the quality of the water body receiving the final effluent, which is defined by an area of exposure. The evaluation is made by comparing the aqueous metal concentrations in the area of exposure against those in the reference area located approximately 7 km north. Water surface sampling surveys were conducted between 2023 and 2025 at the Kiena Mine. For most of the metals analyzed, the results indicate concentrations below the CPVA for the exposure and the reference areas with few exceptions. Iron (Fe) concentrations in most samples analyzed are above the CPVA both in the exposure and reference areas. A few samples showed occasional concentrations of aluminum above the CPVA in exposure area.

Kiena Mine collects water samples from the final effluent at the frequency recommended by Directive 019 to monitor water quality. This monitoring makes it possible to control the quality of the water that flows into the dilution plume located near the south shore of Lake De Montigny. The annual concentrations measured in the final effluent are often lower than those measured in the exposure area for several metals. However, they are higher for nitrites and nitrates, sulphates, chlorine, Mn, Cu, Co, Hg, Mo and Se. Currently, the concentrations in metals and chemical components measured in the final effluent meet the criteria recommended by the DIR-019.

Groundwater surveys in the TSF area had relatively high metal concentrations in several metals, cyanide, nitrites and nitrates in groundwater which exceed the drinking water and resurgence criterion while the pH ranged from slightly acidic to alkaline. The monitoring of the evolution of the concentrations for some metal and non-metal parameters confirmed upward trends in their respective concentrations. It can therefore be concluded that the TSF site is affecting the quality of groundwater in its surrounding area. Another survey in the waste rock stockpile area indicate that concentrations of Mn, Se, Na, sulfides, and nitrite-nitrate exceed drinking water criteria, while concentrations of Hg and sulfides exceed criteria for resurgence waters. Parker Island, along with the TSF and waste rock pile areas, are characterized by a slight rise in water table elevation by a few meters above the water level of Lake De Montigny. As in the Kiena Mine area, groundwater flow following the topography, this difference in elevation causes these waters laden with metals and chemical compounds to discharge diffusively into Lake De Montigny. Concentrations of certain metals and chemical compounds in groundwater near the tailings management area and waste rock storage areas must continue to be monitored regularly to ensure that applicable surface water quality criteria and sediment criteria are not exceeded for Lake De Montigny.

From 2022 to 2024, the air emission of suspended particles as well as those of carbon monoxides, nitrogen oxides, sulphur oxides and volatile organic compounds have decreased significantly. In 2024, all air quality results remained within NPRI reporting thresholds, with no major incidents, non-compliances or complaints related to air quality management at the Kiena Mine site.

Noise blankets were installed on the surface drilling equipment to minimize noise during drilling operations. In 2024, the Kiena Mine implemented a proactive noise monitoring and management program that requires acoustic recording and modeling for each project. As additional underground ventilation infrastructure is required, new fans will be installed underground with a focus on low-noise equipment to minimize impacts.

1.12.2 Biological Settings

The Kiena Mine Complex site is in the Balsam Fir-paper Birch bioclimatic domain in the closed boreal forest subzone. The mine site is in the Harricana River watershed, and the infrastructures take place on the shores of Lake De Montigny and Parker Island.

The ecological characterization studies carried out since 2020 have focused on the vicinity of the Kiena Mine Complex, on the southwest shore of the lake, as well as on the Presqu'île area. Seven (7) fauna special-status wildlife species (either protected under the Act Respecting Threatened or Vulnerable Species and/or the Species at Risk Act) have been confirmed to be present on the Kiena Mine Complex or close to it, including the Bald Eagle, the Eastern Red Bat, the Hoary Bat, the Little Brown Myotis, the Northern Myotis, the Silver-haired Bat and the Least Weasel. These inventories also reported the presence of four (4) invasive alien plant species, but none of those are on the “Liste des espèces floristiques exotiques envahissantes prioritaires” of the MELCCFP.

Wildlife habitats protected under the Act respecting the conservation and development of wildlife and the Regulation respecting wildlife habitats are located in the vicinity of the Wesdome property, which is a heronry about 2 km north on an island in Lake De Montigny, as well as a water fowl gathering area and a muskrat habitat about 1 km to the south on the Piché River. Also, a Walleye spawning ground would be present in the northern sector of Lake De Montigny, near the Milky River. Otherwise, the mining facilities are located approximately 3 km north of the Réserve de biodiversité de la Moraine-d'Harricana.

Some of the present fish species are of significant value for sport fishing, including Walleye, Northern Pike, Lake Whitefish and Yellow Perch. The Lake Whitefish is of significant value to local Indigenous communities. The Environmental Effects Monitoring studies demonstrate, among other things, that nitrogen was identified as the cause of the confirmed effects on benthos and fish, with copper secondarily.

For future work and development, consultations must be planned with the relevant ministries beforehand to incorporate specific environmental requirements, as well as avoidance, prevention, and/or mitigation measures, into the projects. Such consultations will be important given the presence of wetlands, wildlife species with special status, protected wildlife habitats, and the Harricana Moraine Biodiversity Reserve on or near Wesdome Mine.

1.12.3 Waste Rock, Ore, Tailings and Water Characterization

Waste rock and tailings samples collected since 1993 from several zones associated with Kiena Mine deposit are classified as non-acid generating, but could be potentially leachable for some metals. Based on these results, it is possible to anticipate the quality of the drainage water related to the mining of these materials from the Kiena Deep Zone. However, given its estimated tonnage, limited geoenvironmental analyses and tests have been conducted to date on the Kiena Deep Zone mine materials (waste rock, mineralized rock and future tailings). A geo-environmental characterization program including leaching tests as well as static and kinetic tests have been recommended for the Kiena Deep Zone.

A geo-environmental characterization program carried out during the initial phases of the exploration program in the Presqu'Île and Dubuisson enabled a preliminary assessment of environmental risks for both zones. Ore and waste rock from Presqu'Île are considered NPAG and at low risk regarding metals leaching. Kinetic testing by the ASTM humidity cell protocol is currently ongoing with samples of waste rock and mineralized rock to verify the weathering behaviour and leaching characteristics of these materials. Geochemical characterization of the Dubuisson area was initiated in 2025 and is ongoing. This environmental analytical program has been integrated into exploration activities.

The waters of the south basin of the tailings management facility have been collected and sampled since 2021. These waters are recycled and reused for mining operations. The results indicate that the pH of waters varies from neutral to low alkaline and that the concentrations of Cu, Ni, Fe and total cyanides are higher than those of other metals and chemical components.

Given that tailings and waste rock are not expected to have acid-generating potential but could potentially release certain metals through leaching, these materials could be used for construction activities on the mine site such as embankment building, erosion protection, the installation of drainage systems, and other supporting infrastructure.

1.12.4 Environmental Legal Framework

For the restart in 2021 of the mining activities at the Kiena Mine Complex and since then, several authorizations and permits have been delivered to Wesdome particularly by the MELCCFP and the MRNF, among other things for the tailings storage's facility, the tailings backfill plant, the Presqu'île site, the crusher at the ore process plant, the waste rock pile, the closure plan and for diamond drilling exploration.

1.12.5 Social Summary

Wesdome Gold Mines set up a monitoring committee at the same time as the resumption of operations at the Kiena Mine. The role of this committee is to act as an intermediary between the various stakeholders (citizens, First Nations, businesses, the city of Val-d'Or, etc.) and the company. Among other things, the committee informs the community about the mine's activities. It also collects and forwards to the company any questions or concerns expressed by the various stakeholders.

A total of nineteen meetings between stakeholders and the monitoring committee took place between January 2021 and December 2025 with discussions covering hazardous materials management, water quality monitoring, tailings management and underground operations. The impact of noise on the quality of life of residents near the activity sites was a constant concern for the committee. Among the other topics discussed are the economic impacts of the mine in terms of purchasing goods and services and creating jobs locally, as well as the company's relationships with the community and Indigenous people.

Meetings organized by the monitoring committee have resulted in collaborative relationships between company representatives and community members of the community, interest groups, and other stakeholders. However, after five (5) years of activities, some improvements are possible, particularly regarding information management and the committee's and its members' representativeness.

Measures proposed aim to expand the monitoring committee to include new members. Also, the work of the monitoring committee should be supported by developing a theme-based analysis grid that its members could refer to track the environmental and social impacts of the mine's activities. An environmental assessment expert could join the monitoring committee meetings to help create this theme-based analysis grid and keep track of it. The proposed approach involves identifying the activities of a project that could be a source of impact, measuring the changes those activities bring about in the components of the environment and society, and analyzing them in relation to specific issues framed in terms of stakes to determine their impacts.

1.13 Capital Cost and Operating Cost Estimate

The capital and operating cost estimates have been prepared at a FS level and are considered appropriate to support the Mineral Reserve estimate and the reserve-based LOM plan. The estimates were developed using a bottom-up methodology based on detailed engineering, current operating experience at the Kiena Mine, vendor quotations where available, contractor pricing, historical operating data, and discipline-specific cost estimates prepared by the Qualified Persons responsible for each area of the Study.

The estimated LOM operating cost averages approximately 389.6$/t of ore processed, with definition drilling, development, production mining, mining services representing the largest cost component followed by maintenance, G&A and processing. Unlike previous studies, the operating cost estimates were developed using a comprehensive bottom-up cost build across mining, processing, and site general and administrative functions. Historical benchmark assumptions were replaced with estimates representative of current operating practices, updated engineering designs, planned production rates, equipment utilization, labour requirements, and site-specific operating conditions. This approach provides a more representative and higher-confidence operating cost basis for the reserve-based LOM plan.

The LOM capital estimate includes approximately 106.4M$ of growth capital and 247M$ sustaining capital for a total capital requirement of approximately 353.4M$. Capital expenditures are concentrated during the early years of the mine plan to support the development of the Presqu'île and Dubuisson mining areas, underground development, electrical and mine service infrastructure, and mobile equipment acquisitions required to establish and sustain planned production. Sustaining capital has been scheduled throughout the mine life to maintain production capacity and replace mobile equipment while supporting the ongoing development required by the reserve-based mining sequence.

The Qualified Persons consider that the capital and operating cost estimates appropriately reflect the scope, complexity, and maturity of the proposed mining operation. The estimates are consistent with the level of engineering completed for a FS and provide an appropriate basis for the modifying factors applied in the Mineral Reserve estimate and the execution of the reserve-based LOM plan.

1.14 Economic Disclosure

As the Kiena Mine is an operating mine, Wesdome Gold Mines Ltd. has elected not to publicly disclose the economic analysis supporting the Mineral Reserve estimate presented in this Technical Report. Accordingly, this Technical Report has been prepared in accordance with the disclosure requirements applicable to producing issuers under National Instrument 43-101. Consistent with those requirements, an economic analysis is not included in this report.

1.15 Conclusions

This Technical Report summarizes the results of the FS completed for the Kiena Mine Complex on behalf of Wesdome Gold Mines Ltd. The Study integrates updated geological models, Mineral Resource estimates, Mineral Reserve estimates, mine design, production scheduling, geotechnical assessments, metallurgical performance, infrastructure requirements, environmental considerations, and capital and operating cost estimates prepared by the Qualified Persons responsible for their respective disciplines.

The Feasibility Study represents a significant advancement over the previous 2021 Pre-Feasibility Study. The updated Study incorporates current operating experience gained since the restart of the Kiena Mine together with refined geological interpretations, updated geotechnical design criteria, revised mining methods, detailed infrastructure engineering, and bottom-up capital and operating cost estimates developed specifically for the current operation.

The QPs conclude that the modifying factors applied throughout the Study are appropriate for a Feasibility Study level evaluation and adequately support the declaration of Mineral Reserve.

The updated mine plan establishes an eight-year reserve-based mine life extending to 2033 and provides a technically achievable production plan based on the Kiena Deep, Presqu'île and Dubuisson mining zones. The inclusion of the Presqu'île and Dubuisson zones increases operational flexibility by diversifying production sources while utilizing the existing Kiena processing plant and underground infrastructure.

Overall, the QPs consider that the technical work completed provides an appropriate basis for continued operation of the Kiena Mine in accordance with the reserve-based LOM plan presented in this Technical Report.

1.16 Recommendations

The Kiena FS confirms the technical viability of the Mineral Reserve estimate and demonstrates that the proposed LOM plan provides a practical and executable framework for the continued operation and development of the Kiena Mine through 2033. The Study integrates updated geological models, mine design, geotechnical assessments, hydrogeological evaluations, processing assumptions, infrastructure requirements, capital and operating cost estimates, and production scheduling to establish a reserve-based operating plan consistent with the level of confidence expected for a Feasibility Study.

As Kiena is an existing operating mine, the recommendations presented in this chapter are not intended to define additional phases of project evaluation prior to implementation. Instead, they are directed toward supporting the successful execution of the reserve-based LOM plan, reducing technical and operational uncertainties, and identifying opportunities for continuous improvement throughout the remaining mine life.

The Qualified Persons recommend that Wesdome continue implementing the reserve-based LOM plan while advancing the detailed engineering, permitting, procurement, and operational activities required to support the development of the Presqu'île and Dubuisson mining areas. Continued geological exploration and infill drilling should remain a priority to convert Mineral Resources into Mineral Reserves, while regular reconciliation and updates to the LOM plan should be completed to reflect evolving geological knowledge and operational performance. Opportunities to optimize mining sequences across the Kiena Deep, Presqu'île, and Dubuisson areas should also continue to be evaluated to enhance operational flexibility and maximize long-term project value.

The Qualified Persons further recommend maintaining a strong focus on operational improvement initiatives, including productivity enhancements through automation, larger mining equipment, and battery-electric technologies, as well as continue monitoring of geotechnical risks such as ground squeezing and seismicity. Ongoing optimization of critical infrastructure, including ventilation, cooling, paste backfill, water management, and mine services, should support future production requirements and improve operational reliability. Environmental stewardship should continue through proactive waste rock and tailings management, hydrogeological and water balance assessments, geoenvironmental monitoring of mined materials, and environmental monitoring programs to protect Lake De Montigny and ensure regulatory compliance throughout the life of the operation.

2. INTRODUCTION

This National Instrument 43-101 Technical Report (the "Technical Report" or the "Report") was prepared and compiled by Norda Stelo Inc. ("Norda Stelo"), an independent engineering consulting firm, at the request of Wesdome Gold Mines Ltd. ("Wesdome" or the "Issuer").

The purpose of this Technical Report is to present the results of the 2026 Feasibility Study ("FS") for the Kiena Mine Complex located in Val-d'Or, Québec, Canada. The FS evaluates the technical and economic viability of the continued underground mining operations within the Kiena Deep mining areas, together with the planned development of the Presqu'île and Dubuisson mining areas and supports the estimation of updated Mineral Reserves for the Project.

This Technical Report has been prepared in accordance with the disclosure requirements of National Instrument 43-101 – Standards of Disclosure for Mineral Projects ("NI 43-101") and Form 43-101F1 and follows the applicable definitions and guidelines of the Canadian Institute of Mining, Metallurgy and Petroleum ("CIM").

The Report integrates the contributions of several Qualified Persons ("QPs") and specialized consultants responsible for their respective technical disciplines and has been prepared to support Wesdome's public disclosure requirements under applicable Canadian securities legislation.

2.1 Purpose of the Technical Report and FS

This Technical Report presents the results of the 2026 Feasibility Study completed for the Kiena Mine Complex. Wesdome retained Norda Stelo Inc. to lead and coordinate the FS with the support of several specialized consulting firms, including Soutex, SLR Consulting, 1823 Water, WSP, SRK Consulting, and other technical contributors.

The FS was undertaken to evaluate the technical and economic viability of the continued operation and long-term development of the Kiena Mine Complex. The Study incorporates updated mine planning, infrastructure requirements, operating and capital cost estimates, and economic analyses for the Kiena Deep mining areas, together with the planned development of the Presqu'île and Dubuisson mining areas.

The Study is based on the 2025 Mineral Resource Estimate presented in Chapter 14 and supports the estimation of updated Mineral Reserves presented in Chapter 15. The results of the FS provide the basis for Wesdome's long-term mine plan and support the Company's public disclosure requirements under NI 43-101.

2.2 Issuer

Wesdome Gold Mines Ltd. is a Canadian-focused gold producer with two (2) high-grade underground assets, Eagle River in Northern Ontario and Kiena in Val-d'Or, Québec. The Company's primary goal is to responsibly leverage its operating platform and high-quality brownfield and greenfield exploration pipeline to build a value-driven mid-tier gold producer. Wesdome is listed on the Toronto Stock Exchange under the symbol “WDO” and the United States OTCQX market under symbol “WDOFF” with its head office situated at 220 Bay Street, Suite 1200, Toronto, Ontario, Canada, M5H 2W4.

The Kiena Mine Complex is an operating underground gold mine located approximately 10 km west of Val-d'Or, Québec. The operation includes a 2,000 tpd processing plant, a 930 m production shaft, and the associated surface and underground infrastructure required to support ongoing mining activities.

Commercial production at Kiena commenced in 1981, and the operation has produced 2.0 million ounces (achieved in 2025) of gold to date. Following the successful restart of mining operations in 2022, current production is sourced primarily from the Kiena Deep mining areas. The 2026 FS presented in this Technical Report evaluates the continued development of the Kiena Deep mining areas, including the Kiena Deep, Presqu'île, and Dubuisson mining areas, which together form the basis of the updated LOM plan and Mineral Reserve estimate.

2.3 Responsibility and Qualified Persons

This Technical Report was prepared and compiled by Norda Stelo Inc. on behalf of Wesdome Gold Mines Ltd. in accordance with the requirements of National Instrument 43-101 – Standards of Disclosure for Mineral Projects.

The following professionals, by virtue of their education, relevant experience, and membership in recognized professional associations, are Qualified Persons as defined under NI 43-101 and have contributed to the preparation of this Technical Report:

- Eric Lecomte, P.Eng. – Norda Stelo Inc.
- Eric Tremblay, P.Eng. – Norda Stelo Inc.
- David Sims, P.Geo. – Norda Stelo Inc.
- Denys Vermette, P.Geo. – Norda Stelo Inc.
- Simon Veilleux, P.Eng. – Norda Stelo Inc.
- Pierre Roy, P.Eng. – Soutex Inc.
- Jean-Louis Roberge, P.Eng. – SLR Consulting (Canada) Ltd.
- Jean-François St-Laurent, P.Eng. – SRK Consulting Canada Inc.
- Charles Veilleux, P.Eng. – SRK Consulting Canada Inc.
- Francis Couture, P.Eng. – 1823 Water Inc.
- Ali Jalbout, P.Eng. – ASA Geotech Consultation Inc.
- Ganan Nadarajah, P.Eng. – WSP Canada Inc.
- Serge Gonthier, P.Geo. – Wesdome Gold Mines Ltd.
- Breanne Beh, P.Geo. – Wesdome Gold Mines Ltd.

Each QP is responsible for the technical content within their respective area of expertise and has reviewed and approved the sections of this Technical Report for which they are responsible. In addition, all QPs contributed, as applicable, to the preparation and review of Chapters 1 (Summary), 2 (Introduction), 3 (Reliance on Other Experts), 25 (Interpretation and Conclusions), 26 (Recommendations), and 27 (References).

The responsibilities of each QP are summarized in Table 2.1. Additional details are provided in the individual QP Certificate of Author included with this Technical Report.

Table 2.1 Qualified Persons and item responsibility

Chapter	Description	Qualified Person	Company	Comments and exceptions
1.	Executive Summary	E. Lecomte	Norda Stelo	All QPs contributed based on their respective scope of work and the Chapters/Sections under their responsibility.
2.	Introduction	E. Lecomte	Norda Stelo	All QPs contributed based on their respective scope of work and the Chapters/Sections under their responsibility.
3.	Reliance on Other Experts	E. Lecomte	Norda Stelo	All QPs contributed based on their respective scope of work and the Chapters/Sections under their responsibility.
4.	Project Property Description and Location	S.Gonthier B.Beh	Wesdome Gold Mines Limited	Shared responsibility for all Chapter 4
		D. Vermette	Norda Stelo	Shared responsibility for Section 4.4
5.	Accessibility, Climate, Local Resource, Infrastructure and Physiography	S.Gonthier	Wesdome Gold Mines Limited	All Chapter 5
6.	History	S.Gonthier B.Beh	Wesdome Gold Mines Limited	Shared responsibility for All Chapter 6
7.	Geological Setting and Mineralization	S.Gonthier B.Beh	Wesdome Gold Mines Limited	Shared responsibility for All Chapter 7
8.	Deposit Types	S.Gonthier B.Beh	Wesdome Gold Mines Limited	Shared responsibility for All Chapter 8
9.	Exploration	S.Gonthier B.Beh	Wesdome Gold Mines Limited	Shared responsibility for All Chapter 9
10.	Drilling	S.Gonthier B.Beh	Wesdome Gold Mines Limited	Shared responsibility for All Chapter 10
11.	Sample Preparation, Analyses and Security	S.Gonthier	Wesdome Gold Mines Limited	All Chapter 11
12.	Data Verification	S.Gonthier B.Beh	Wesdome Gold Mines Limited	Shared responsibility for all Chapter 12
13.	Mineral Processing and Metallurgical Testing	P. Roy	Soutex	All Chapter 13
14.	Mineral Resource Estimates	S.Gonthier	Wesdome Gold Mines Limited	All Chapter 14 except Section 14.9
		E. Lecomte	Norda Stelo	Section 14.9
15.	Mineral Reserve Estimates	E. Lecomte	Norda Stelo	All Chapter 15

Chapter	Description	Qualified Person	Company	Comments and exceptions
16.	Mining Methods	E. Lecomte	Norda Stelo	All Chapter 16 excluding Section 16.2, 16.3, 16.7.1, 16.7.2 and 16.7.8
		A. Jalbout	ASA Geotech	Section 16.2
		D. Sims	Norda Stelo	Section 16.3
		E. Tremblay	Norda Stelo	Section 16.8.1 and 16.8.2
		J.L. Roberge	SLR Consulting	Section 16.7.8
17.	Recovery Methods	P. Roy	Soutex	All Chapter 17
18.	Project Infrastructure	E. Lecomte	Norda Stelo	Section 18.2, 18.12, 18.13 and 18.15
		S. Veilleux	Norda Stelo	Section 18.1, 18.4, 18.5, 18.7, 18.8, 18.9, 18.11
		E. Tremblay	Norda Stelo	Section 18.3 and 18.6
		F. Couture	1823 Water	Section 18.10
		P. Roy	Soutex	Section 18.17 and 18.18
		J-L Roberge	SLR Consulting	Section 18.16
		G. Nadarajah	WSP Canada Inc.	Section 18.19
		J F. St-Laurent C. Veilleux	SRK Consulting	Shared responsibility for section 18.14
19.	Market Studies and Contracts	E. Lecomte	Norda Stelo	All Chapter 19
20.	Environmental Studies, Permitting, and Social or Community Impact	D. Vermette	Norda Stelo	All Chapter 20
21.	Capital and Operating Costs	E. Lecomte	Norda Stelo	Section 21.1, 21.2.1 to 21.2.5, 21.2.8, 21.2.9, 21.2.11, 21.2.12, 21.2.13 and 21.3 (except sections 21.3.10 and 21.3.6.7)
		E. Tremblay	Norda Stelo	Section 21.2.6
		JF. St-Laurent C. Veilleux	SRK Consulting	Shared responsibility for section 21.2.7
		F. Couture	1823 Water	Section 21.2.7
		G.Nadarajah	WSP Canada	Section 21.2.7
		S.Veilleux	Norda Stelo	Section 21.2.11
		P. Roy	Soutex	Section 21.2.10
		JL. Roberge	SLR Consulting	Section 21.3.6.7
22.	Economic Analysis	E. Lecomte	Norda Stelo	All Chapter 22
23.	Adjacent Properties	S. Gonthier	Wesdome Gold Mine Limited	All Chapter 23
24.	Other Relevant Data and Information	E. Lecomte	Norda Stelo	All Chapter 24

Chapter	Description	Qualified Person	Company	Comments and exceptions
25.	Interpretation and Conclusions	E. Lecomte	Norda Stelo	All QPs contributed based on their respective scope of work and the Chapters /Sections under their responsibility.
26.	Recommendations	E. Lecomte	Norda Stelo	All QPs contributed based on their respective scope of work and the Chapters/Sections under their responsibility.
27.	References	E. Lecomte	Norda Stelo	All QPs contributed based on their respective scope of work and the Chapters/Sections under their responsibility.

The QPs have no current or prior material interest in the Issuer or any of its related entities that could reasonably be expected to interfere with their professional judgment. Their relationship with the Issuer is solely that of independent professional consultants retained to prepare this Technical Report. The Report was prepared in consideration of professional fees based on agreed commercial rates, and such compensation is not contingent upon the results or conclusions of the Technical Report.

2.4 Effective Dates

The overall effective date of this Technical Report is June 24, 2026.

The Technical Report incorporates technical information prepared by the respective Qualified Persons using data and engineering evaluations that were current as of the following effective dates:

- Effective date of the Technical Report: June 24, 2026.
- Effective date of the 2025 Mineral Resource Estimate: December 31, 2025.
- Effective date of the Mineral Reserve Estimate: June 24, 2026.
- Effective date of the FS economic evaluation: June 24, 2026.

Unless otherwise stated, all technical information, engineering designs, capital and operating cost estimates, and economic analyses presented in this Technical Report are current as of the overall effective date of the Report.

2.5 Site Visits

In accordance with the requirements of NI 43-101, the QPs responsible for the preparation of this Technical Report completed site visits to the Kiena Mine Complex, as appropriate for their respective areas of responsibility. The site visits provided the QPs with an opportunity to review the existing mining operations and infrastructure, discuss technical aspects of the Project with Wesdome personnel, and verify information relevant to their respective disciplines.

The site visits completed by the QPs are summarized below:

- Éric Lecomte, P.Eng. (Norda Stelo Inc.) visited the Kiena Mine Complex on April 24, 2025. The visit included an underground inspection of the active mining areas, a review of the existing underground infrastructure and mining methods, and discussions with Wesdome technical personnel regarding the LOM plan, mine services, and planned development of the Kiena Deep mining areas. The visit also included a surface tour of the processing and mine infrastructure.
- Pierre Roy, P.Eng. (Soutex Inc.) visited the Kiena Mine Complex from November 16 to 19, 2021. The purpose of the visit was to support the bulk sample processing program and review the existing process plant. The visit included discussions with Wesdome personnel regarding the processing facilities and metallurgical performance.
- Denys Vermette, P.Geo. (Norda Stelo Inc.) did not visit the Kiena Mine Complex for this Study. However he was the Exploration Manager for Wesdome Gold Mine Ltd in 2022 and 2024. He visited the Kiena Mine Complex on several occasions.
- David Sims, P.Geo. (Norda Stelo Inc.) did not visit the Kiena Mine Complex for this Study.
- Éric Tremblay, P.Eng. (Norda Stelo Inc.) did not visit the Kiena Mine Complex for this Study.
- Simon Veilleux, P.Eng. (Norda Stelo Inc.) did not visit the Kiena Mine Complex for this Study.
- Jean-Louis Roberge, P.Eng. (SLR Consulting (Canada) Ltd.) was previously regularly on site during the construction and commissioning of the paste plant in 2022-2023 but never visited the underground. He did not conduct a site visit specifically for this Study.
- Jean-François St-Laurent, P.Eng. (SRK Consulting Canada Inc.) visited the Kiena Mine Complex on May 24, 2024.
- Charles Veilleux, P.Eng. (SRK Consulting Canada Inc.) did not visit the Kiena Mine Complex.
- Francis Couture, P.Eng. (1823 Water Inc.) visited the Kiena Mine Complex on August 18, 2025. The visit visit focused on a review of the existing temporary water treatment plant. The visit also included a tour of the surface and the processing plant.
- Ali Jalbout, P.Eng. (ASA Geotech Consultation Inc.) visited the Kiena Mine Complex few times since the start the start of the Study, the last visit was on April 14, 2026. The visits included underground observations of the mining areas, review of ground conditions, geotechnical mapping, and discussions with Wesdome personnel regarding ground support practices, stope performance, mine sequence, mine layout, and geotechnical design considerations.
- Serge Gonthier, P.Geo. (Wesdome Gold Mine Ltd.) have visited and worked at the Kiena Mine Complex on many occasions from May 2023 to December 2025.
- Breanne Beh, P.Geo. (Wesdome Gold Mine Ltd.) have visited the Kiena Mine Complex on November 2025.

- Ganan Nadarajah, P.Eng. (WSP Canada Inc.) visited the Kiena Mine Complex on several occasions. The last visit was on October 20, 2024. The visit focussed on Tailings Storage Facility and associated water management structures, and construction area of the underground ramp.

2.6 Sources of Information

2.6.1 General

This Technical Report is based on information provided by Wesdome Gold Mines Ltd., together with technical studies, engineering designs, operating data, and supporting documentation prepared by the Issuer and its consultants.

In preparing this Technical Report, the Qualified Persons reviewed and relied upon, as applicable:

- Technical discussions with Wesdome personnel
- Geological, geotechnical, hydrogeological, and environmental studies
- Mineral resource and mine planning databases
- Operating data from the Kiena Mine Complex
- Engineering designs and technical memoranda prepared in support of the FS
- Capital and operating cost estimates
- Previous technical reports, annual information forms, management discussion and analysis reports, and press releases filed by the Issuer on SEDAR+
- Publicly available information, including mining tenure records available through GESTIM and geological information available through SIGÉOM; and
- The references listed in Chapter 27 of this Technical Report

The Qualified Persons have no reason to believe that any of the information used in preparing this Technical Report is invalid or contains material misrepresentations. The information has been reviewed and considered appropriate for the purpose of completing the FS.

2.6.2 Norda Stelo Inc.

The following individuals provided specialist technical input to Éric Lecomte, P.Eng., Qualified Person:

Gabriel Gauthier, P.Eng., prepared the underground mine designs and Deswik mine planning shapes used in the development of the LOM plan.

Constant Noutchogwe, P.Eng., contributed to the design and evaluation of the underground dewatering system and mine ventilation network supporting the LOM plan.

Sébastien Tanguay, P.Eng., Pierre-Olivier Avoine, P.Eng., and Yness El Rakka, P.Eng. contributed to the development of the Deswik mine production schedule, including the preparation of the underground mining sequence used to support the LOM plan.

Simon Veilleux, P.Eng. contributed to validating the capacity of certain existing surface infrastructures to continue supporting the planned operation throughout the LOM.

Charles-Antoine Perreault-Liard, P.Eng. contributed to the development of capital cost estimates for selected underground infrastructure components included in the FS.

2.6.3 Soutex Inc.

No other specialist provided technical input to Pierre Roy, P.Eng., Qualified Person.

2.6.4 Norda Stelo Inc. – Environmental

The following individuals provided specialist technical input to Denys Vermette, P.Geo., Qualified Person:

Environmental, permitting and regulatory inputs were provided by Stéphanie Lafrenière, Biologist (external consultant to Norda Stelo). Social inputs were provided by Gilles Côté.

2.6.5 SLR Consulting (Canada) Ltd.

The following individuals provided specialist technical input to Jean-Louis Roberge, P.Eng., Qualified Person:

Mine design inputs were provided by Eric Lecomte, P.Eng. Cost assumptions and existing infrastructures data were provided by Francis Couture, P.Eng. Required infrastructure inputs were provided by Ali Jalbout, P.Eng.

2.6.6 SRK Consulting Canada Inc.

The following individuals provided specialist technical input to Jean-François St-Laurent, P.Eng. and Charles Veilleux, P.Eng., Qualified Persons:

Barbara Amar CEP, contributed to the stability analyses for the Extension of the waste rock dump.

2.6.7 1823 Water Inc.

No other specialist provided technical input to Francis Couture, P.Eng., Qualified Person.

2.6.8 ASA Geotech Consultation Inc.

The following individuals provided specialist technical input to Ali Jalbout, P.Eng., Qualified Person:

Thierry Lavoie P.Eng from GeoMec Modeling Inc., provided the Flac3D stress modeling results of the LOM plan.

2.6.9 WSP Canada Inc.

The following individuals provided specialist technical input to Ganan Nadarajah, P.Eng., Qualified Person:

Patrick Whissell, P.Eng., Nam Pham, P.Eng., Geraldine Cosset, P.Eng., Mark Sullivan, P.Eng. and Zinan Urmi contributed with the design, analyses and report preparation of the TSF and associated water management structures.

The individuals identified above are not QPs as defined by NI 43-101. Their contributions were completed under the direction and supervision of the respective QPs, who remain responsible for their technical content, conclusions, and opinions presented in this Technical Report.

2.7 Currency, Units of Measure, Abbreviations, and Conventions

Unless otherwise stated, this Technical Report uses the International System of Units (SI) throughout. All distances, areas, volumes, weights, and grades are reported using metric units.

All monetary amounts presented in this Technical Report are expressed in Canadian dollars (CAD or C$) unless otherwise indicated. Metal prices and certain market references may be expressed in United States dollars (USD or US$) where appropriate.

Gold grades are reported in grams per tonne (g/t), while other units of measure are presented using standard mining industry conventions. Imperial units are used only where necessary to reference existing infrastructure or historical information and, where applicable, have been converted to SI units for consistency.

The abbreviations, units of measure, and conversion factors used throughout this Technical Report are summarized respectively in Table 2.2, Table 2.3 and Table 2.4.

Table 2.2 List of Abbreviations

Acronyms	Term
3SD	Three times standard deviations
AA or AAS	Atomic absorption spectroscopy
ABA	Acid Base Accountant
AGB	Archean Abitibi Greenstone Belt
Ai	Abrasion index
ASTM	American Society for Testing and Materials
Axb	SMC testing
BC	Collection Basin
BCOG	Break-Even Cut-off Grade
BIF	Banded iron formation
BLK	Block
BM	Mining lease
BMA	Bulk Mineralogical Analysis
BWi	Bond work index

Acronyms	Term
C	Carbon
CAD: USD	Canadian-American dollar exchange rate
CAPEX	Capital expenditure
CDA	Canadian Dam Association
CDC	Map-designated Claims
CDPNQ	Centre de données sur le patrimoine naturel du Québec
CEAA	Canadian Environmental Assessment Act
CEHQ	Centre d'expertise hydrique du Québec
CEP	Candidate to the Engineering Profession
CF	Callahan Fault
CG	Cadillac Group
CGT	Courvan Gold Trend
CIM	Canadian Institute of Mining, Metallurgy and Petroleum
CIM Definition Standards	CIM Definition Standards for Mineral Resources and Mineral Reserves
CIP	Carbon-In-Pulp
CL	Staked Claim
CM	Mining concession
CN	Canadien National
CNP	Carbonate Neutralisation Potential
CNWAD	Weak Acid Dissociable Cyanide
CoG	Cut-off Grade
COV	Coefficient of variation
CP	Collection Pond
CPTu	Cone Penetration Tests
CPVA	Criteria for the Prevention of Aquatic Life
CRF	Cemented Rockfill
CRM	Certified reference material
CSZ	Callahan Shear Zone
CTEU-9	Essais de Lixiviation à l'Eau
CTRI	Canmet Minning Technology Research Institute
CVAAS	Cold Vapour Atomic Absorption Spectrometry
CWi	Crusher work index
DDH	Diamond drill hole(s)
DEV	Deviation
DF	Dubuisson Formation
DIR-019	Directive 019
DO	Dissolved Oxygen
DPFZ	Destor-Porcupine Fault Zone

Acronyms	Term
DSI	Dam Safety Inspection
DSM	Deep Soil Mixing
DSO	Deswik stope optimizer
DUB	Dubuisson
DWi	Drop-Weight Index
EC	Electric Conductivity
ECCC	Environment and Climate Change Canada
EDF	Emergency Design Flood
EEM	Environmental Effects Monitoring
EIO	Elements of Interest
ELOS	Equivalent Linear Overbreak Slough
EM	Electromagnetic
EQA	Environmental Quality Act
ESG	Environmental, Social, and Governance
FA	Fire assay
FEL	Frequent Effect Level
FIFO	Fly-in/Fly-out
FOS	Factor of Safety
FS	Feasibility study
FTE	Full-Time Equivalent
G&A	General and administration
GAT	Gravity amenability tests
GESTIM	Gestion des titres miniers (the MERN's online claim management system)
GHG	Greenhouse Gas
GIG	Garden Island Group
GISTM	Global Industry Standard on Tailings Management
GITZ	Garden Island Tectonic Zone
GMR	Gross Metal Royalty
GPS	Global Positioning System
GRAV	Gravimetric
GRG	Gravity recoverable gold
GTL	Gravity Tails Leaching
HF	Héva Formation
HG	High-grade
HSE	Health, Safety, and Environment
HW	Highway
IAA	Impact Assessment Act
IAPS	Invasive alien plant species
ICP-MS	Inductively coupled plasma mass spectrometry

Acronyms	Term
ICP-OES	Inductively coupled plasma optical emission spectroscopy
ID	Inverse Distance
ID2	Inverse distance squared
ID3	Inverse Distance Cubed
IDF	Inflow Design Flood
IEC	International Electrotechnical Commission
Int.	Intermediate
IP	Induced Polarization
IRR	Internal rate of return
ISO	International Organization for Standardization
JF	Jacola Formation
JV	Joint Venture
KD	Kiena Deep
KNA	Kriging Neighborhood Analysis
KSF	K Shear Zone
LAN	Landrienne Formation
LG	Low-grade
LHD	Load haul dump
LLCFZ	Larder Lake–Cadillac Fault Zones
LLDPE	Linear Low Density Polyethylene
LOD	Limit of Detection
LOM	Life-of-Mine
LVF	La Motte-Vassan Formation
M+I	Measured and Indicated
MABA	Modified Acid Base Accountant
MAG	Magnetics (or magnetometer)
MBA	Master of Business Administration
MCOG	Marginal Cut-off Grade
MD&A	Management discussion and analysis
MDDELCC	Ministère du Développement durable, de l'Environnement et de la Lutte contre les changements climatiques (Quebec's current Ministry of Sustainable Development, Environment and the Fight Against Climate Change)
MDDEP	Ministère du Développement durable, de l'Environnement et des Parcs
MDMER	Metal and Diamond Mining Effluent Regulations
MELCCFP	Ministère de l'Environnement, de la Lutte contre les changements climatiques, de la Faune et des Parcs du Québec (Quebec's current Ministry of Environment, the Fight Against Climate Change, Wildlife and Parks)
MERN	Ministère de l'Énergie et des Ressources Naturelles du Québec (Québec's Ministry of Energy and Natural Resources)
mesh	US mesh
MF	Marbenite fault

Acronyms	Term
MFFP	Ministère des Forêts, de la Faune et des Parcs (Quebec's current Ministry of Forests, Wildlife and Parks)
MG	Malartic Group
Mia	Coarse ore impact breakage index
Mic	Crushing impact breakage index
Mih	High-energy impact breakage index
MOWL	Maximum operating water level
MRC	Regional County Municipality
MRE	Mineral resource estimate
MRMR	Mineral Resource and Mineral Reserve Guidelines
MRN	Former name of MERN
MRNF	Ministère des Ressources naturelles et des Forêts
MS	Mass Spectroscopy
N/A	Not Applicable
NAD	North American Datum
NAD 83	North American Datum of 1983
NAPEG	Northwest Territories and Nunavut Association of Professional Engineers and Geoscientists
NB	New Beliveau
NF	Norbenite Fault
NI 43-101	National Instrument 43-101 (Regulation 43-101 in Quebec)
NN	Nearest neighbour
NP	Neutralization Potential
NPAG	Non-Potentially Acid Generating
NPI	Net profits interest
NPO	Net Operating Profit
NPR	Net Proceeds Royalty
NPRI	National Pollutant Release Inventory
NPV	Net present value
NSR	Net smelter return
NTS	National Topographic System
NZ	North Zone
OEL	Occasional effect level
OGQ	Ordre des Géologues du Québec
OIQ	Ordre des Ingénieurs du Québec
OK	Ordinary kriging
OP	Open pit
OPEX	Operating Expenditures
OTCQX	OTCQX Best Market

Acronyms	Term
P.Eng.	Professional engineer
P.Geo.	Professional geoscientist
P80	80% passing – Product
PAG	Potentially Acid-Generating
PDFZ	Porcupine-Destor Fault Zone
PEA	Preliminary economic assessment
PEL	Probable Effect Leval
PEO	Professional Engineers Ontario
PF	Parfouru fault
PFS	Prefeasibility study
PG	Piché Group
PGA	Peak Acceleration
PGO	Professional Geoscientists Ontario
pH	Potential of Hydrogen
PI	Presqu'île
PMF	Probable Maximum Flood
PMW	Probable Maximum Flood
PO	Pontiac Group
PS	Pontiac Subprovince
Q	Rock Mass Quality Index
Q2	Second Quarter
QAQC	Quality assurance/quality control
QP	Qualified person (as defined in National Instrument 43-101)
R2	Coefficient of Determination
RA	Réunion Activité
RC	Reverse circulation (drilling)
RCM	Regional County Municipality
Regulation 43-101	National Instrument 43-101 (name in Québec)
REL	Rare effect level
RES	Resurgence criteria
RHF	Rivière Héva fault
RMR	Rock Mass Rating
RO	Reverse Osmosis
ROM	Run of mine
RPEEE	Reasonable prospects of eventual economic extraction
RQD	Rock Quality Designation
RTP	Reduction-to-the-Pole
RWi	Rod work index
S	Sulphur

Acronyms	Term
Sa	Spectral period
SAA	Shape Accel Array
SAG	Semi-Autogenous Grinding
SARA	Species at Risk Act
SCADA	Supervisory Control and Data Acquisition
SCSE	Sag mill specific energy
SD	Standard deviation
SEDAR+	System for electronic document analysis and retrieval plus
SMC	Sag Mill Comminution Test
SFE	Shake Flask Extraction
SFs	Safety Factors
SG	Specific gravity
SIGÉOM	Système d'information géominière (the MERN's online spatial reference geomining information system)
SMBS	Sodium Metabisulfite
SPLP	Synthetic Precipitation Leaching Procedure
STGGQM	Technical Guide for Groundwater Quality Monitoring
SUSEX	Sustaining Expenditures
SZ	South Zone
TARP	Trigger Action Response Plans
TCLP	Toxicity Characteristic Leaching Procedure
TDEM	Time Domain Electromagnetic
TDIP	Time domain induced polarization
TEL	Threshold effect level
TMF	Tailings Management Facility
TMI	Total Magnetic Intensity
TOC	Total Organic Carbon
TQC	Traceability, Quality, Control
TS	Topsoil Stockpile
Ts	Spectral period
TS	Topsoil
TSF	Tailings Storage Facility
TSMD	Toward Sustainable Mining Development
TSS	Total Solid Suspended
TSX	Toronto Stock Exchange
TTG	Tonalite–Trondhjemite–Granodiorite
UCS	Uniaxial Compressive Strength
UF	Ultrafiltration
UG	Underground

Acronyms	Term
UM	Ultramafic
URSTM	Unité de recherche et de service en technologie minérale
USD/CAD	Exchange rate: cost of 1 American dollar in Canadian dollars
UTM	Universal Transverse Mercator coordinate system
VDF	Val-d'Or Formation
VFD	Variable Frequency Drives
VLF	Very low frequency
VLG	Very low grade
VMS	Volcanogenic massive sulphide
VOC	Volatile Organic Compounds
VOD	Ventilation on Demand
VST	Vane Shear Tests
VTEM	Versatile Time Domain Electromagnetic
VWP	Vibrating Wire Piezometers
WBS	Work Breakdown Structure
WD	Waste Dump
WOL	Whole Ore Leaching
WRA	Whole Rock Analysis
WRP	Waste rock pad
WS	Waste Stockpile
WSE	Waste Stockpile Extension
WTP	Water Treatment Plant
XRD	X-Ray Diffraction
XRT	X-ray transmission

Table 2.3 List of units

Symbol	Unit
$, C, C$, CA, CAD	Canadian dollar
$/m^3	Canadian dollar per cubic meters-
$/t	Canadian dollar per ton (metric)
%	Percent
°	Angular degree
°C	Degree Celsius
A×b	Ore breakage parameter (indicator of ore competency)
CA	Certificates of Authorization
CFM	cubic feet meter
cm	Centimetre
cm^3	Cubic centimetre

Symbol	Unit
ft	Foot (12 inches)
g	Gram
g/t	Gram per metric ton (tonne)
Ga	Billion years
ha	Hectare
hp	Horsepower
kCFM	Kilo cubic feet meter 1 kCFM=1000 CFM
kg/t	Kilogram per ton
km	Kilometre
km^2	Square kilometre
kPa	KiloPascal
kV	Kilovolts
kWh	Kilowatt
kWh/t	Kilowatt-hours per tonne
l	Litre
LHD	loadhauldump
M	Million
m	Metre
m/t	Meters per ton
m^2	Square metre
m^3	Cubic metre
m^3/d	Cubic meter per day
m^3/h	Cubic meter per hour
m^3/s	Cubic meter per second
Ma	Million years
masl	Metres above mean sea level
mg	Milligram
mg/l	Milligram per litres
mm	Millimetre
mm/h	Millimetres per hour
MPa	MegaPascal
Mt	Million Metric tonne
oz	Troy ounce
P_{80} or K_{80}	80% passing size
ppb	Parts per billion
ppm	Parts per million
psi	Pounds per square inch
R^2	Coefficient of determination

Symbol	Unit
t	Metric tonne (1,000 kg)
t or tm	Tonne metric
ta or t/a	Tonnes per annum (tonnes per year)
Tpd, t/d	Metric tonnes per day
tph	Tonne per hour
TSS	Total Solid Suspended
US$	USD United States dollars (symbol US$)
USD:CAD	American Canadian exchange rate
V	Volts
V30	slot raise
µm	Micron (micrometre)

Table 2.4 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

3. RELIANCE ON OTHER EXPERTS

The Qualified Persons have relied on reports, informations sources and opinions provided by outside experts and Wesdome Gold Mines Ltd. (the "Issuer"), related to Kiena Mine Complex mineral rights, surface rights, property agreements, royalties and tax matters.

As the date of this Feasibility Study Report, Wesdome Gold Mines Ltd. indicates that there are no known or potential litigations that could affect the Project.

3.1 Property Agreements, Mineral Tenure, Surface Rights and Royalties

The QPs have not independently reviewed the ownership of the Project area and any underlying property agreements, mineral tenure, surface rights, or royalties. The QPs have fully relied upon, and disclaim responsibility for, information derived from Wesdome Gold Mines Ltd. and legal experts retained by the Issuer for this information through the following documents: various e-mail exchanges with Wesdome Gold Mines Ltd. representatives, excel spreadsheets and documents filed on SEDAR by Wesdome Gold Mines Ltd.

This information is used in Chapter 4 of the report. The information is also used in support of the Cut-off Grade assumptions (royalties) for the Mineral Resource estimate (Chapter 14) and Mineral Reserve estimate (Chapter 15).

3.2 Taxation

The QPs have fully relied upon, and disclaim responsibility for, information supplied by experts retained by Wesdome Gold Mines Ltd. for information related to taxation as applied to the financial model, received from the Issuer.

4. PROPERTY DESCRIPTION AND LOCATION

4.1 Location

The Kiena Mine Complex is located in the Province of Quebec in the Abitibi-Témiscamingue administrative region within the limits of the municipality of Val-d'Or and 100 km east of Rouyn-Noranda (Figure 4.1). It lies to the northwest of the urban centre of Val-d'Or and covers 7,232.7 ha.

The coordinates for the approximate centre of the Project are latitude 48°08' N and longitude 77°54' W (284105E and 5335715N: NAD 83 / UTM Zone 18). The Project lies in the townships of Dubuisson and Vassan on NTS map sheet 32C/04.

Figure 4.1 Location of the Kiena Mine Complex Project in Quebec

4.2 Mineral Tenure

4.2.1 Mining Title Status

The issuer supplied mineral title status. Norda Stelo verified the status of all mining titles using GESTIM, the Government of Quebec's online claim management system (gestim.mines.gouv.qc.ca).

The Kiena Mine Complex property consists of a contiguous group of 189 contiguous electronic map designated mining claims, one mining concession, and two mining leases covering a total area of 7,237.7 ha (Figure 4.2).

From the 189 mining claims, Wesdome has 175 claims registered in their name at 100% ownership. Six claims are held by Mines Dynacor (50%) and Wesdome (50%), which represents the Maufort property. Eight claims are held by Wesdome (75%) and 9264-7890 Québec Inc. (25%), which represents the Siscoe Extension property. All claims are in good standing as of July 12, 2026.

Appendix I presents a list of mining titles with details of ownership, and expiration dates.

4.2.2 Mineral Claims Conversion

As of November 29, 2024, under the reform introduced by Bill 63, the term "claim" has been replaced with "exclusive exploration right" in the Mining Act. This includes both staked claims ("CL") and map-designated claims ("CDC"). This change aims to modernize the legislation in line with current environmental and social concerns, land protection considerations, and the rights of Indigenous communities.

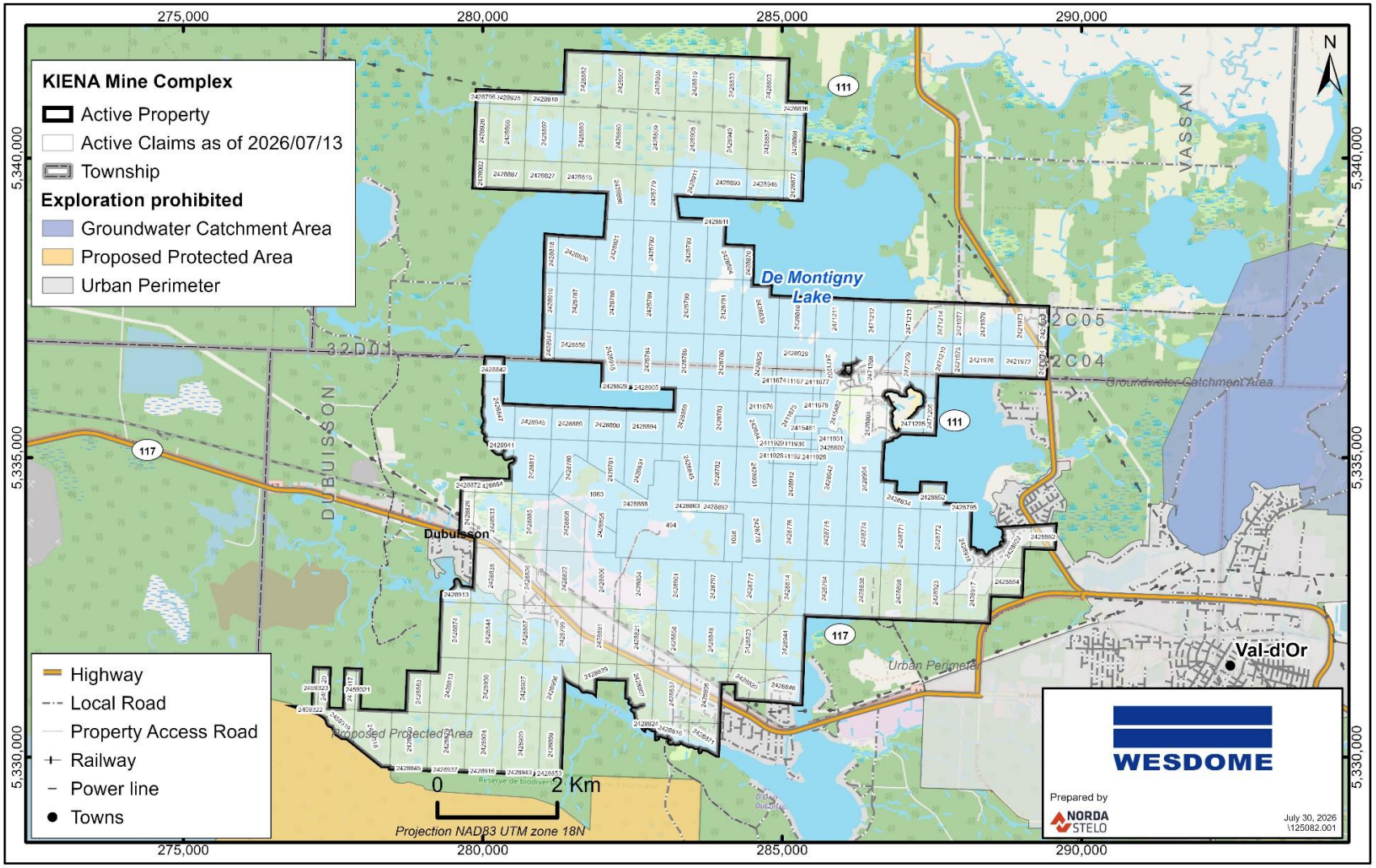


Figure 4.2 Kiena Mine Complex titles as of July 12, 2026

4.3 Ownership, Royalties and Agreements

Some of the mining titles comprising the Project are subject to certain agreements and royalties. Figure 4.3 shows the historical properties that were amalgamated to form the current Project, some of which have active royalties. Table 4.1 provides the details of these royalties.

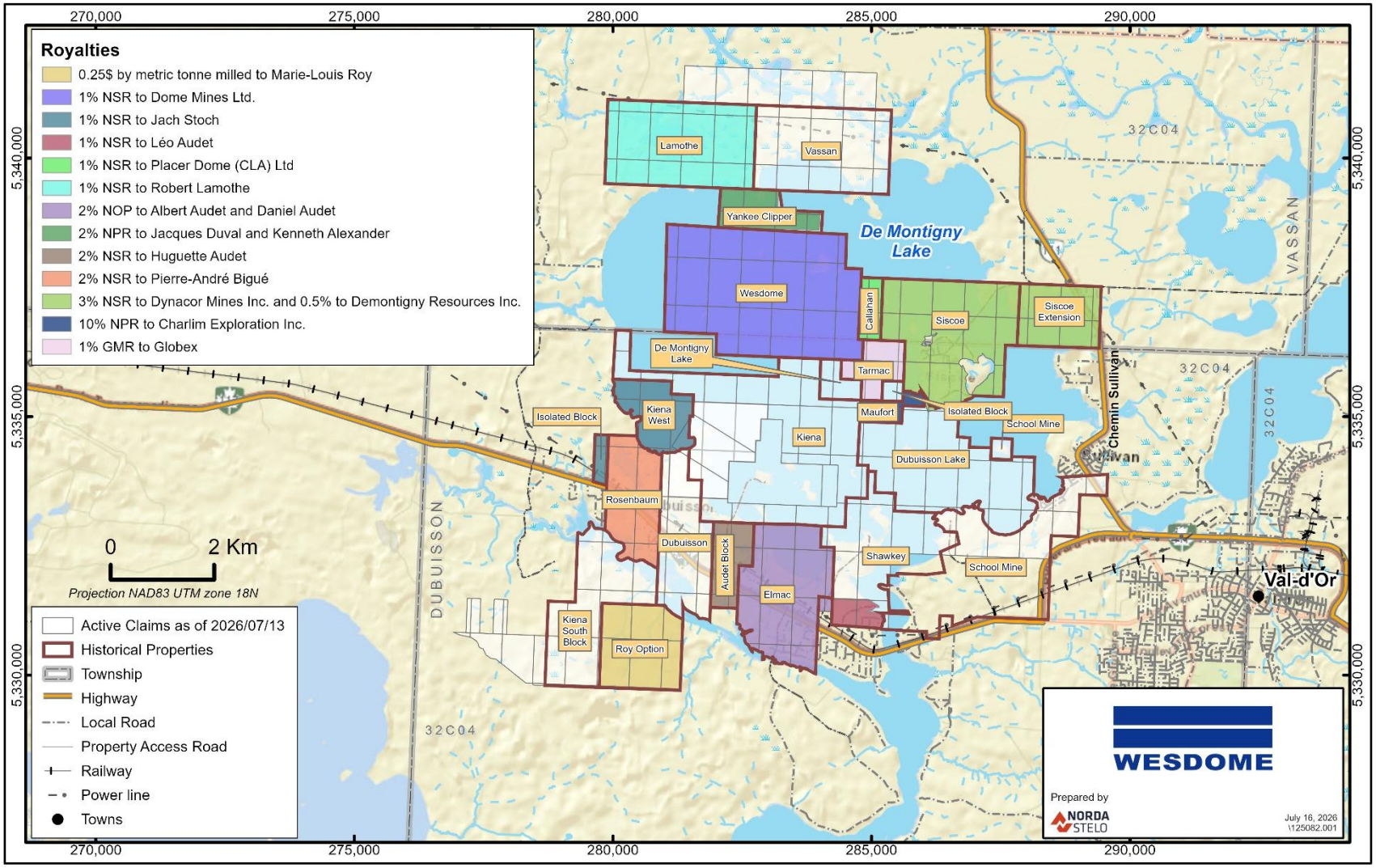


Figure 4.3 Kiena Mine Complex mining royalties and historical property name

Table 4.1 List of historical properties with their applicable royalties

Name	Royalties	Date of agreement	Details
Audet Block	2% NSR to Huguette Audet	N/A	
Callahan	1% NSR to Placer Dome (CLA) Ltd.	N/A	
Dubuisson	No royalty		
Elmac	2% NOP to Albert Audet and Daniel Audet		
Kiena	No Royalty		
Kiena South Block	No Royalty		
Kiena West	1% NSR to Jack Stoch	N/A	
Lac De Montigny	No Royalty		
Lac Dubuisson	No Royalty		
Lamothe	1% NSR to Robert Lamothe	January 15, 1998	
Maufort	10% NPR to Charlim Exploration Inc.	N/A	
Rosenbaum	2% NSR to Pierre-André Bigué	N/A	1% can be bought back for $1,000,000
Roy Option	CAD0.25 per tonne of ore milled to Marie-Louis Roy (6 of 8 claims)	N/A	
School Mine	No Royalty		
Shawkey	No Royalty		
Shawkey South	1% NSR to Léo Audet	N/A	
Siscoe and Siscoe Extension	3% NSR to Dynacor Mines Inc.	November 9, 1999	1% can be bought back for $500,000
	0.5% NSR to Demontigny Resources Inc.	N/A	0.5% can be bought for $500,000
Tarmac	1% GMR to Globex Mining Enterprises Inc.	July 12, 2021	
Vassan	No Royalty		
Wesdome	1% NSR to Dome Mines Ltd.	November 21, 1997	
Yankee Clipper	2% NPR to Jacques Duval and Kenneth Alexander Wheeler	February 25, 1981	

4.4 Environmental Liabilities

Several studies were conducted before and during operations on portions of the Project related to former operations and other projects within its boundaries. The Project includes the milling and tailings facilities of the Kiena Mine, nine (9) shafts including Parker Shaft, related underground workings from past producers and exploration projects (Figure 4.4), and various surface facilities. The remaining infrastructure components at the former Kiena Mine site now constitute the principal infrastructure of the Project; these components are listed below:

- The former collar of the Parker Shaft is located close to the actual mill but is not accessible
- A functional hoisting shaft of 930 m depth

- A dewatered underground ramp system from 170 m (Level 17) to 1,110 m (Level 111)
- A 2,000 t/d processing plant
- A tailing management facility
- Core shacks
- Offices
- A guard house and security gate (Kiena and Presqu'île)
- Office and garage at Presqu'île
- Workshops and warehouses
- A Hazmat storage facility
- Paste backfill plant

The principal infrastructure of the Project to the exception of the portal, connecting ramp and the paste backfill plant, has been in operation since the mine restart production in 2022.

Effluent is being controlled and analytical results are submitted to federal and provincial authorities who have determined that the effluent, based on the available data, complies with regulation requirements.

Several geochemical studies have been conducted since 1990 for the characterization of tailings and waste rock on the Kiena Mine Complex. Based on the information in hand, the waste rock from the Kiena zone is expected to be NPAG overall, having an excess of available neutralization potential. Possible localized spots of PAG rock may occur but are expected to be neutralized by the bulk of the rock surrounding it.

Static tests (modified Sobek protocol) and kinetic tests were also conducted on tailings samples. Grab samples were taken from the tailing storage facility at different depths and three (3) samples were produced by metallurgical testing. All results demonstrated that the tailings are NPAG, with a neutralization potential (NP) high enough to control acidity produced by the sulphides oxidation.

Based on the review prepared by Labtem (2023), waste rock and tailings samples are classified as potentially leachable, but the risk of actual exceedances to groundwater criteria in-situ is qualified as low because of the marginal exceedances observed in testing. Overall, metal release rates for all waste rock and tailings cells were low with rates based on concentrations that were mostly at or below the analytical detection limit. Monitoring of contact water quality and groundwater quality is being conducted to document water quality in the area surrounding the mine infrastructures. The environmental geochemistry analysis program is anticipated to be pursued for the Kiena Deep zone.

Presqu'île area geochemical characterization of waste rock and mineralized rock began in 2023. Labtem (2024 and 2025) concluded that mineralized rock and waste rock are NPAG. Additionally, the materials are considered at low-risk because the metals with concentrations exceeding the Provincial soil criteria are not leachable (SPLP and CTEU-9) according to surface water resurgence criteria (RES) (leaching test concentrations of parameters are below groundwater quality criteria for that parameter).

Geochemical characterization of the Dubuisson area was initiated in 2025 and is ongoing.

The environmental permits are in place to support current operations.

A monitoring committee made up of local and regional representatives, as well as representatives from Wesdome Gold Mines, was set up in 2020 at the mine's initiative. The committee's main job is to act as a link between the community and the company. Among other things, the committee keeps the community informed about construction, mining, and site restoration, expected impacts, mitigation measures, and the environmental monitoring program. It also collects and relays questions and concerns from the community, interest groups, and other stakeholders to the company.

Based on the compilation of 19 meeting of the committee from 2021 to 2025, Wesdome had addressed various items discussed by the committee in line with the social acceptability to operate Kiena Mine.

The fourth revision of the closure plan for the Kiena Mine Complex was submitted to the MERN by Wesdome Gold Mines Ltd in April 2021. As of MNRF's approval of the fourth revision of the restoration plan on November 8, 2024, the financial guarantee amounted to $14,356,564. The financial assurance amount now stands at $12,516,673, according to the latest update reported in an internal document for the Wesdome Kiena Mine in March 2026. Based on that same internal document, closure costs at the end of the LOM in 2034 are estimated at $15,213,744.

The authors are unaware of any environmental liabilities associated with the Property mining titles. However, the authors have not conducted a thorough inspection of these claims. The ongoing production activities planned will have a minimum impact on the environment.

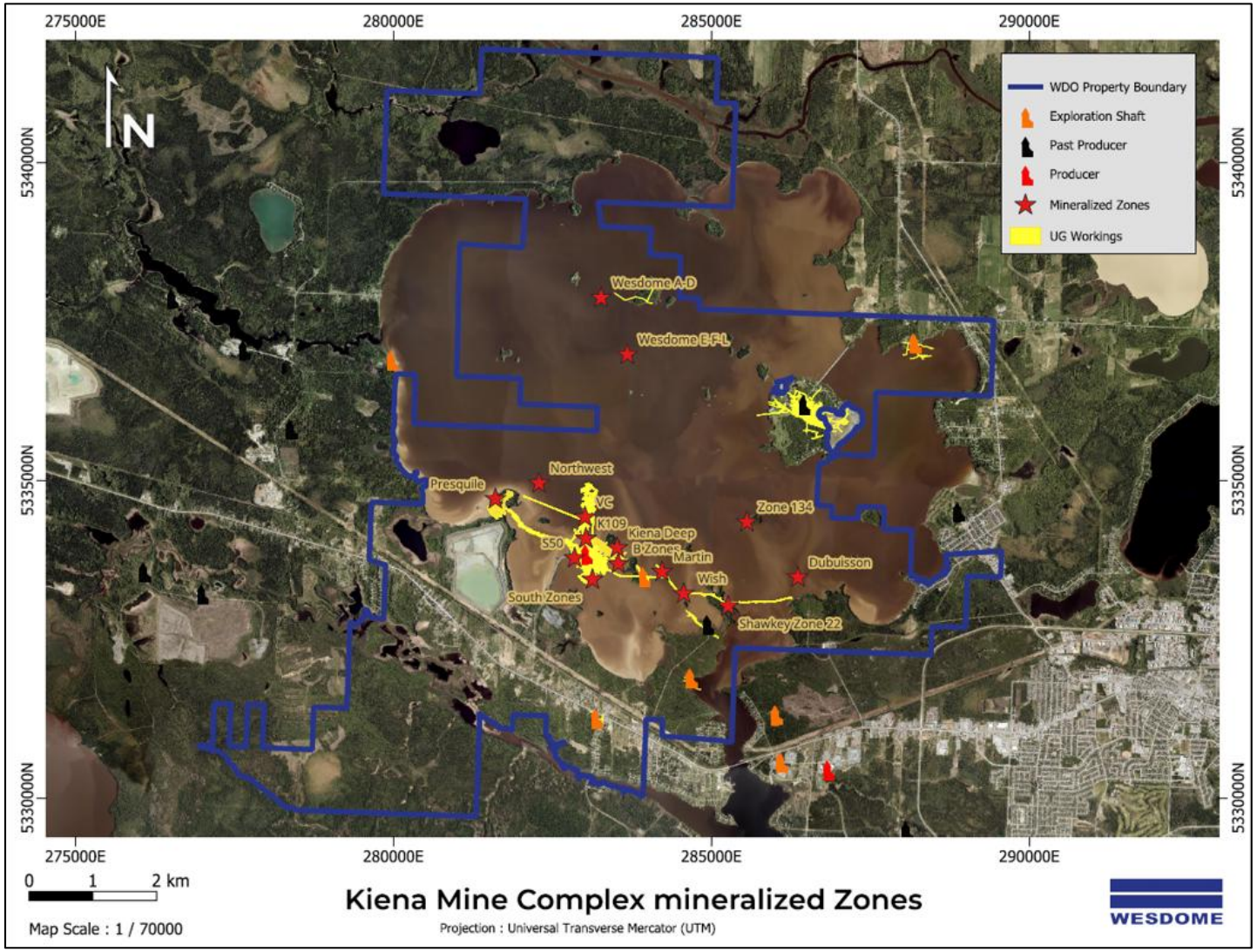


Figure 4.4 Surface projection of the Kiena Mine Complex underground work, production and exploration shafts and exploration targets as of end of 2025

4.5 Permits

Wesdome has various Certificates of Authorization for their property. Table 4.2 shows the list of certificates they currently hold with the conditions to respect. All Certificates of Authorization were provided by Blandine Arseneault, Environment Superintendent Environment and Sustainable Development Coordinator from Wesdome at the Kiena Mine Complex. The Certificates of Authorization are valid and active.

Table 4.2 Wesdome certificates of authorization details

Certificate of authorization number	Title	Type	Date	Conditions
7610-08-01-70065-23	Reopening of "Les mines d'or Kiena Ltée"	Authorization certificate	1981-07-29	Extraction of 1,000 tpd of ore; Truck transportation to the Lamaque Mill; Hydraulic backfill with the Lamaque Mill waste; Enlargement of the island with the waste rock; Disposal of the waste rock in a sequence; Dust control of the access roads and unpaved traffic areas; Final effluent monitoring according to the Directive 019 with additional cadmium at 0.05 mg/l and mercury at mg/l; All mitigation measures of the: Environmental Impact Assessments (Nov. 21, 1980): Letter of January 14, 1981; Letter of May 27, 1981.
		Cession of the authorization certificate from "Les mines d'or Kiena Ltée" to "Mc Watters"	1997-09-12	Same conditions as the authorization certificate of July 29, 1981.
		Modification	2001-02-23	Extraction changes of 1,000 tpd to 2,040 tpd of ore.
		Cession of the authorization certificate from "Mc Watters" to "Wesdome inc."	2004-05-25	Extraction of 2,040 tpd of ore.
	Expansion of the waste rock pile	Modification	2004-12-20	From 160,000 t to 418,000 t; On lots 24B and 25B, road A, Dubuisson township; Extraction of 10,000 t per month of waste rock; Kiena Mine waste rock and development of the ramp towards Shawkey and Wesdome; Waste rock will be hauled by truck towards the waste pile; Actual waste pile of 160,000 t, 11,800 m^2 with a height of 8 m; Temporary extension of the waste pile to 258,000 t for 31,357 m^2 at 4.5 m high; Some waste rock will be used for raising the tailings pond, building berms and roads; Slope of 2H/1V.

Certificate of authorization number	Title	Type	Date	Conditions
7610-08-01-70065-24	Operation of the ore plant at the Kiena mine	Authorization certificate	1984-08-02	Located on lots 19B to 25B, road B, Dubuisson township; Treatment plant of 1,250 tpd; Direct cyanidation and activated carbon recovery; Hydrocarbon sensor installation where they are likely to be present; Installation of leak proof structures to store a volume equivalent to the largest tank of the same group for all tanks of toxic and dangerous products; Installation of a dry or wet scrubber to capture the emissions of gas or dust generated by the treatment operations; Installation of equipment to eliminate or reduce dust emissions from storage, disposal, transhipment and transportation areas in accordance with the Regulation on the Quality of the Atmosphere; Construction of a tailings transportation line from the plant to the park; Development of a tailings pond; Construction of a polishing pond; Digging of diversion channels for drainage water at the periphery of the tailings pond; Installation of a continuous recording system for pH and flow; Cyanide treatment at the mill effluent; Effluent monitoring according to the standards established in the authorization certificate.
	Modification of the authorization certificate of Aug. 2, 1984, for the tailings pond construction	Modification	1987-07-27	Lots 19B to 25B, road A, Dubuisson township; Use of the waste rocks from "Malartic Goldfields" to rise the pond; Installation of a geotextile into the structure of the pond embankment.
	Modification at the final effluent standards	Modification	1989-04-04	Modification of the effluent discharge standards for the tailings pond pursuant to guidelines from Directive 019.
	Operation of the ore plant at the Kiena mine	Modification	1996-11-27	Addition of two polishing ponds of 32,500 m^2 at the south end of the current pond.

Certificate of authorization number	Title	Type	Date	Conditions
		Cession of the authorization certificate from "Les mines d'or Kiena Ltée" to "Mc Watters"	1997-09-12	All the conditions of the authorization certificate remain unchanged.
		Modification	2001-03-19	Change of 1,250 tpd to the treatment of 2,040 tpd.
		Cession of the authorization certificate from "Mc Watters" to "Wesdome inc."	2004-05-25	All the conditions of the authorization certificate remain unchanged.
7610-08-01-70065-28	Tailings pond expansion	Authorization certificate	1992-05-19	Natural degradation of the cyanide with the SO2-Air process; Technical description of the cyanide content of the hydraulic backfill; Installation of five piezometers at the tailings pond (P-6 to P-10) and a control piezometer for background (P-11); Commitment to comply with Directive 019; Regular inspections of embankments and pipes; Pumping of 125,000 m^3 per year of fresh water from Demontigny Lake; The overburden will be kept.
		Cession of the authorization certificate from "Les mines d'or Kiena Ltée." to "Mc Watters."	1997-09-12	All the conditions of the authorization certificate remain unchanged.
		Cession of the authorization certificate from "Mc Watters" to "Wesdome inc."	2004-05-25	All the conditions of the authorization certificate remain unchanged.
		Modification	2005-10-28	Upgrading of the northern cell of the tailings pond from elevation 3,048 m to 3,050 m; Lots 18B to 22B, road A, Dubuisson township.
7610-08-01-70065-29	Clay quarry exploitation	Authorization certificate	1994-08-26	Exploitation area of 40,000 m^2, with an average thickness of 1.5 m and maximum of 2 m; Lots 21B, 22B and 23B, rang A, Dubuisson township.
		Cession of the authorization certificate from "Les mines d'or Kiena ltée" to "Mc Watters"	1997-09-12	All the conditions of the authorization certificate remain unchanged.
		Cession of the authorization certificate from "Mc Watters" to "Wesdome inc."	2004-06-04	All the conditions of the authorization certificate remain unchanged.

Certificate of authorization number	Title	Type	Date	Conditions
7610-08-01-70065-33	Clay borrow pit exploitation	Authorization certificate	1999-05-21	Topsoil will be stored on the edge of the exploitation for use during restoration (8,550 m^3); Exploitation above the water table.
		Cession of the authorization certificate from "Mc Watters" to "Wesdome inc."	2004-06-04	Exploitation of 12,000 m^3 of clay on an area of 29,000 m^2, an average thickness of 1 m and maximum of 2 m on lots 18B half East and half West, road A, Dubuisson township.
7610-08-01-70065-00	Septic system	Authorization certificate	1981-02-10	For the services building with a maximum capacity of 135 persons; Installation of the septic system with a capacity of 5,744 US gallons; Installation of a pumping station with two pumps; Installation of a leaching field with an area of 3,200 ft^2.

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

5.1 Accessibility

The Project is easily accessible via paved highways from local communities such as Val−d'Or. The Project is located 10 km west of the Val-d'Or Township (Figure 5.1) via the provincial Highway 117 and the Chemin Kienawisik gravel road. The Property can be accessed and operated on a year-round basis. The nearest airport with daily flights connecting Montreal is in Val-d'Or.

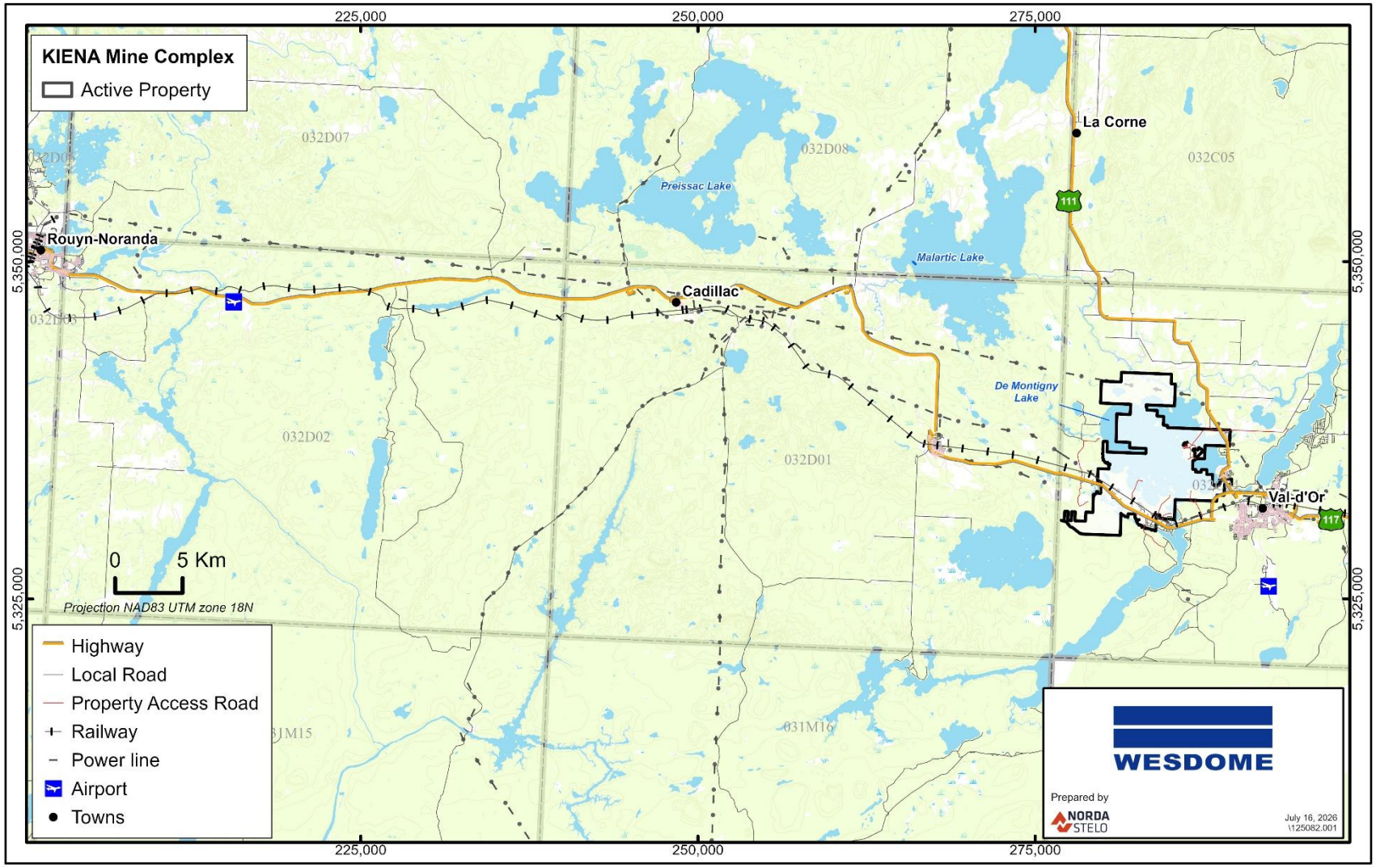


Figure 5.1 Location of the Kiena Mine Complex Property

(© Jean-Philippe Richard, 2016)

Figure 5.2 Gravel road leading to the property with an overview of the infrastructure

5.2 Climate

Climatological data are available from 1954 to the present and are from the Val-d'Or weather stations (48° 3'N; 77° 47'W), located approximately 12 km from the Kiena mine site (ECCC 2026, in BGC Engineering 2026). Average data over this period show average daily temperatures ranging from -16.4°C in January to 17.5°C in July, for an annual average of 1.7°C. The average annual precipitation over the same period was 912 mm, including 630 mm of rain and 282 mm of snowfall. The heaviest monthly average rainfall was in September (100.5 mm). The heaviest monthly average snowfall was in December (61.5 mm). The maximum annual snow cover reaches, on average, 83 cm at the beginning of March.

The prevailing winds are particularly from the north and south. However, winds from the northwest, west and southwest are also very common. In the spring, the prevailing winds blow from the north and northwest, towards Provincial Highway 117. In summer, the prevailing winds generally blow from the southwest, towards Lac De Montigny. A peculiarity should be noted that in June, the southwest and north winds have almost similar frequencies. Therefore, depending on the mine site, these winds blow either towards Lac De Montigny or towards Provincial Road 117. In autumn, winds are usually from the south, while in winter they are from the northwest and south.

5.3 Local Resources and Infrastructure

5.3.1 Airports, Rail Terminals and Bus Services

The town of Val-d'Or, with a population of approximately 33,000 residents, is located 10 km east of the Project along the provincial Highway 117. Val-d'Or has been a mining service centre since its foundation in the 1920's. Val-d'Or is one of the largest communities in the region and has all major services including an airport with scheduled service from Montreal. CN railway line crosses the southern part of the Property, connecting east through to Montreal and west to the North American rail network. Val−d'Or is a six-hour drive from Montreal and there are daily bus services between Montreal and the other cities in the Abitibi-Témiscamingue region.

5.3.2 Local Work Force

According to the 2021 census prepared by Statistics Canada, the population of the MRC of La Vallée-de-l'Or was 43,226 people, with 66% of the residents aged 15-64 and an average of 41 years old. Male population accounts for 51% of the population. 8.5% of the population is Aboriginal. In 2016, 64.4% of the population participated in the labour force, with 14.2% of the labour force employed in mining, quarrying, and oil and gas extraction. This portion of the workforce is experienced in mining operations, as they are currently employed at exploration and gold mines located elsewhere in the region. Local resources also include commercial laboratories, drilling companies, exploration service companies, engineering consultants, construction and mining contractors, and equipment suppliers.

5.3.3 Additional Support Services

Additional services within the town of Val-d'Or include the Val-d'Or Hospital, grocery stores, fuel stations, financial institutions, and hotels. Val-d'Or has a Canada Post office and additional shipping/freight services by several providers. Landline telephone, mobile service, high-speed internet, and satellite internet are available in town and the nearby vicinity.

5.4 Physiography

The Project is located in the Abitibi Greenstone Belt of the Superior Province. The topography of the area is characterized by low ridges and hills flanked by generally flat areas of glacial outwash, swamps, and numerous lakes and bogs. The average elevation varies from 300 m a.s.l. to 320 m a.s.l. with some areas in the southern part of the project rising to 360 m a.s.l. Overburden varies between 0 m and 15 m and consists of stratified clays as well as glacial and glaciofluvial Pleistocene deposits (MDDELCC). Most of the project is covered by Lac De Montigny, which includes several islands.

The Project is located in the southern part of the boreal bioclimatic domain. The dominant vegetation is fir and white spruce forest, with occurrences of white birch, black spruce, jack pine, larch and aspen (MFFP website).

Two sources of water were used at the Project: surface water from Lac De Montigny and an underground source from 17 Level in the Kiena mine at a vertical depth of 170 m. Surface water is used in case of emergencies (e.g., fire). Two large pumps are located in a building behind the plant. Underground water flows naturally on 17 Level. A pumping system was installed to bring water to the surface at the pumping facilities near the No.1 shaft. This water is used as clean water for showers and toilets. A small storage tank (holding water from 17 Level) is also located on 38 Level for industrial underground use.

Electricity is available from Hydro-Québec through an above-ground power line. This source of power is used for surface building and infrastructures (mill plant, paste plant, hoist, compressors, ventilation) and underground infrastructures (pumps, crusher, ventilation, underground mobile equipment) to heat the surface buildings and run the mill. An emergency diesel powered generator is also available in case of a power outage. A 10,000 L capacity diesel tank is located near the generator, linked to a tank with a capacity of 1,135 L. Four diesel tanks are located underground at mine Levels 27, 33, 48, and 64. These tanks have a capacity of 4,500 L.

A Natural Gas line is also used to feed the mill, shaft, warehouse, backfill plant, and heating of the fresh mine air ventilation for underground use.

5.5 Mine Infrastructure

The Project is an amalgamation of 20 former properties. Figure 4.4 shows all underground development for the Project. Table 5.1 presents a summary of the remaining infrastructure in each part (former site) of the Kiena Mine Complex.

Table 5.1 Kiena Mine Complex infrastructure

Historical mine	Underground infrastructure	Surface infrastructure
Kiena Mine	Access to underground work is through the No.1 shaft to a depth of 930 m. It provides access from 12 Level (120 m below surface) to 93 Level (930 m below surface). Levels 17 to 111 are accessible by aramp that extends from 170 m to 1,100 m below surface. A total of 49 levels were excavated. A northwest exploration drift of 947 m is present on 12 Level. A second exploration drift of about 3,500 m extends to the east on 33 Level. A new ramp from Presqu'île was completed in 2026.	The shaft and head frame; A dry facility; A laboratory; A core shack; A hoisting room; Main electric substation (4 transformers); A secondary electrical substation (25 kV); Fuel reservoirs.
Wisik	Exploration shaft provides access to two levels of drifting at 200 ft (61 m), 300 ft (91m).	Concrete slab and old foundation walls.
Shawkey Mine Shaft No. 1 Area	A shaft is connected to 7 levels of underground drifts and raises at levels 125 ft (38 m), 225 ft (69 m), 325 ft (99 m), 450 ft (137 m), 575 ft (175 m), 625 ft (191 m), and 725 ft (221 m) below surface. The drifts amount to approximately 1,125 ft (343 m). Plan views for the first five levels are available.	Concrete slab and old foundation walls.

Historical mine	Underground infrastructure	Surface infrastructure
Shawkey Mine Shaft No.2 Area	A 743 ft (227 m) shaft provides access to four levels of drifting at 250 ft (76 m), 400 ft (122 m), 550 ft (168 m), and 700 ft (213 m) below the surface. Drifting and cross-cutting amounted to approximately 927 ft (283 m). Total underground lateral development in the form of drives, crosscuts, and drifts amounted to 2,337 ft (712.3 m). One drive on the 4th level was extended 926 ft southeast.	Concrete slab and old foundation walls; Two core racks near the intersection of Highway 117 and the road to the site.
Elmac Shaft Area	A 100 ft (30 m) shaft provides access to one level of drifting. Drifting and crosscutting amounted to approximately 460 ft (140 m).	Concrete slab and old foundation walls.
Island No. 3	No underground infrastructure. There is a 23 m shaft collar.	Island No. 3 is accessible by boat. The shaft was collared in 1999 at a depth of 23 m, the 10-ft hoist and surface buildings were installed in 2000-2001 to access the Wesdome Deposit, and the permitting process was initiated. The acquisition of the Kiena mine in 2003 provided an alternate access and work was suspended.
Dorval-Siscoe Shaft Area	A historical three-compartment shaft of 343 ft (105 m) provides access to level 300 ft (91 m) where there are 850 m of drifts and crosscuts.	The Dorval-Siscoe Shaft is located on Island No. 6, which is east of Island No. 3. The Dorval-Siscoe Shaft was built to access part of the Wesdome Deposit. All that remains of the surface infrastructure are old foundation walls, concrete slabs, and pieces of broken equipment.
Siscoe Mine Area	A shaft of 2,475 ft (754 m) provides access to 19 levels below surface from 150 ft (46 m) to 2,475 ft (754 m). The development work amounts to more than 15,000 m of drifts and crosscuts.	Mine site rehabilitation is complete. Flooded sink holes caused by the collapse of near-surface underground excavations were observed. These areas are protected by fences.
Siscoe Extension Area	A three-compartment shaft of 725 ft (221 m) provides access to two levels below surface at 350 ft (107 m) and 725 ft (221 m). The development work amounts to about 2,000 m of drifts and crosscuts.	The area is restricted and blocked by a fence and a security camera system.

5.6 Crown Pillar – Kiena Mine

A historical crown pillar of approximately 100 m thickness was retained beneath Parker Island, the S50 Zone, and the overlying lake in the Kiena Mine. In 2010, Itasca (Andrieux, 2010) completed a preliminary empirical assessment of the crown pillar in the North Zone, considering both lower-quality schist and higher-quality competent rock conditions. The assessment identified the importance of maintaining an appropriate monitoring and risk management framework for the historical workings in this area.

The Itasca review recommended three practical control measures: installation of instrumentation to monitor ground response; construction of hydrostatic barricades; and backfilling of open stopes to limit the available void space within the historical workings.

These measures were intended to provide a robust monitoring and mitigation protocol for the historical North Zone area.

These recommendations have been implemented. The 12 Level in the North Zone has been equipped with extensometers, with inspection and measurement programs maintained during operations and continued following the suspension of mining in June 2013. The monitoring program has since been supplemented by drone surveys of the 12 Level voids, routine visual inspections, and acoustic monitoring, providing multiple lines of observation for the historical workings.

Hydrostatic barricades have also been completed on the levels providing access to the North Zone. These barricades separate the historical evaluation area from the current Kiena Deep mine workings and are designed to manage potential water or backfill loading, providing a physical control between the historical workings and the active mining areas.

Backfilling is also being advanced as part of the current mine plan. Backfill reticulation services the North Zone area where historical voids are present, and Wesdome is progressively filling these voids. This work further reduces open void volume and supports the long-term management of the historical workings in a controlled and positive manner.

A crown pillar of approximately 100 m thick was left in place in the Kiena Mine. The crown pillar is located under Parker Island (S50 Zone) and the lake.

In 2010, Itasca (Andrieux, 2010) performed a preliminary empirical analysis of crown pillar stability in the North Zone. The analysis evaluated two scenarios: the first assumes that the pillar is made of poor-quality rock (schist), and the second assumes good quality (hard) rock. In the first scenario, the pillar showed significant potential for instability. The second case showed a situation of near-instability.

Three recommendations were made to monitor pillar stability. Any of these three would be an adequate protocol.

1. Instrumentation:
    - Manual probe to access any rock disentanglement (weekly readings); or
    - Multi-point borehole extensometers installed toward the surface from 12 Level (weekly readings or datalogger).
2. Hydrostatic barricades
3. Backfilling of open stopes:
    - Backfill the majority of the void: in the advent of a pillar collapse, the loose material from the pillar would not have a chance to expand and fill the rest of the opening.

The 12 Level was equipped with two extensometers at the North Zone area. During mining operations a monthly inspection and measurement recording was undertaken. The 17 Level at the North S50 area was visually inspected every 6 months in the fall and after the spring thaw.

Since the suspension of mining operations in June 2013, the inspections and measurements on 12 Level have been maintained on a quarterly basis. According to Wesdome, to date, drone surveys conducted on the 12 Level voids show little to no change in size. Daily visual inspections are also being done. In 2021 acoustic monitors were installed to expand the monitoring measures being taken.

The North Zone was monitored using two extensometers installed on the 12 Level. During active mining operations, inspections were conducted monthly and displacement measurements were recorded. In addition, the North S50 area on the 17 Level was visually inspected twice annually, in the fall and following the spring thaw.

Following the suspension of mining operations in June 2013, inspections and extensometer monitoring on the 12 Level continued on a quarterly basis. After the mine restart, weekly visual inspections were maintained until the construction of the final hydrostatic barricade on the 12 Level, after which access to the area was permanently restricted. Continuous acoustic monitoring systems (microphones) have also been installed to provide ongoing surveillance.

Hydrostatic barricades have been constructed on the six levels providing access to the North Zone. These barricades are designed to withstand the pressures associated with a column of water or backfill material. The six barricades have been completed, with only the final concrete grouting activities for the 12 Level barricade remaining. This work is scheduled for completion during the summer of 2026, after which the barricade installation project will be considered complete.

(modified from Turcotte et al., 2015)

Figure 5.3 Aerial photograph showing principal surface infrastructure at the Kiena Mine Complex

6. HISTORY

This item was mostly taken and modified from the previous technical report on the Property from Athurion et al. (2021). It is divided into two sections: Wesdome historical involvement in the Project and the historical work conducted on the different mineralized zones of the Property.

The region's first discovery of gold mineralization was near the shore of Lake DeMontigny in 1911 by the prospector Fred Lapalme. Another discovery of gold bearing quartz veins was made between 1911 and 1914 on Parker Island by the the prospector Barney Parker. Exploration work followed from 1922 to 1927, and the Wisik vein was discovered on the island to the east of Parker Island. The increase in exploration activities and mining development in the area resulted in the generation of mining operations such as Siscoe, Sullivan, and Shawkey between 1929 and 1945.

6.1 Wesdome Principal History in the Project

This section provides a chronological overview of the history of Wesdome's involvement in the Quebec Wesdome Project. Most of the information was taken and modified from previous technical reports on the property: Beauregard et Gaudreault (1999, 2005), Turcotte and Pelletier (2009), Turcotte et al. (2015), Beausoleil et al. (2019), Richard and Torrealba (2019), Athurion et al. (2020), Corkal et al. (2020), and Athurion et al. (2021).

The origin of the Company's business can be traced back to Western Quebec Mines Inc., which was incorporated in 1945. Western Quebec Mines began developing the Dorval-Siscoe property and carried out various exploration works on the property until 1975.

In 1976, Wesdome Resources Limited ("Wesdome Resources") was created as a joint venture for the purpose of exploring and developing the Wesdome property (formerly the Dorval-Siscoe property). The word "Wesdome" is a combination of the names of Western Quebec Mines and Dome Exploration Ltd. Wesdome Resources was held 30% by Western Quebec Mines and 70% by Dome Exploration.

On November 13, 1984, Western Quebec Mines agreed to purchase a 40% interest in the Joubi property from Valmag Inc.

In 1988-1989, the School Mine property, the Shawkey South property, and a 35% interest in the Shawkey property were acquired by Western Quebec Mines from Valmag Inc.

In1990, production started at the Joubi mine.

On October 27, 1992, Western Quebec Mines acquired the Yankee Clipper property from Goldhunter Explorations Inc.

In 1993, Western Quebec Mines completed its acquisition of the 100% interest in the Joubi property.

In 1994 Western Quebec Mines drilled 6 DDH for a total of 2,958 m in the southwestern part of the School Mine Property. Erratic gold values reached 77 g/t Au.

In 1996 Western Quebec Mines acquired the Dubuisson West property from Republic Goldfields Inc. This property was merged with the Joubi property.

On November 21, 1997, Western Quebec Mines acquired the 525,000 common shares of Wesdome Resources that were held by Dome Exploration. The result was that Wesdome Resources became wholly owned by Western Quebec Mines.

In November 1997 Western Quebec Mines acquired the 65% interest of the Shawkey property from Placer Dome. This property hosts the past-producing Shawkey mine. The Shawkey and Shawkey South properties were then merged. During the period between 1936 and 1964 the Shawkey mine produced a total of 25,637 ounces of gold from 127,737 metric tons (t) of mineralized material grading an average 6.24 g/t Au.

On December 1, 1997, Western Quebec Mines acquired the Callahan property from Placer Dome.

In 1998, Western Quebec Mines staked 3 claims (the Lamothe-Extension property) adjacent to the Lamothe property. On January 15, 1998, the Lamothe property was acquired by Western Quebec Mines from Robert Lamothe and Alphonse Beaudoin. On November 3, 1998, Western Quebec transferred to Wesdome Resources all of its interests in the Lamothe, Lamothe-Extension (now Vassan), Yankee Clipper, and Callahan properties.

In October 1999 Dynacor Mines Inc. and Western Quebec Mines signed an agreement whereby ownership of the contiguous Siscoe and Siscoe-Extension (Dynacor Mines) and Wesdome, Lamothe, Lamothe-Extension, Yankee Clipper, and Callahan (Wesdome Resources) properties were to be pooled into a new company to develop them jointly. The new company, Wesdome Gold Mines Inc., was created by Dynacor Mines and the latter transferred its 100% interest in the Siscoe property and its 75% interest in the Siscoe-Extension property. Following this, Wesdome Gold Mines Inc. then acquired 100% of the share of Wesdome Resources from Western Quebec. From 1929 to1949 the Siscoe mine produced a total of 802,303 ounces of gold and 306,070 ounces of silver from 2,975,785 t of mineralized material grading an average 9.22 g/t Au and 3.20 g/t Ag.

The Joubi mine was closed in 1999 after a 10-year production history. The historical production amounted to 62,283 ounces from 327,561 t of mined mineralized material.

In December 2003 Western Quebec Mines purchased the Kiena Complex and subsequently placed the property into Wesdome Gold Mines Inc. thereby completing and consolidating Wesdome's land package around Lac De Montigny. As a part of this transaction Wesdome Gold Mines acquired a 100% interest in the Kiena, Kiena West, Lac Dubuisson, Rosenbaum, Dubuisson, Audet Block, Elmac, South Block Kiena, Option Roy and Lac De Montigny properties, and a 50% interest in the Maufort property.

Before this transaction, the Kiena mine produced a total of 1.56 million ounces of gold from 10.7 Mt of mineralized material grading an average 4.54 g/t Au.

In 2006 Western Quebec Mines drilled 13 DDH (3,700 m) on the School Mine Property to test new targets in the unexplored northern part of the property.

On February 1, 2006 River Gold Mines Ltd. and Wesdome Gold Mines Inc. completed a merger to form the current company called Wesdome Gold Mines Ltd. (Wesdome).

On April 4, 2006 Wesdome staked seven claims and added them to the Vassan property. The Kiena mine was in the pre-production development stage until August 1, 2006 when commercial production commenced.

On July 10, 2007 a merger was completed with parent company Western Quebec Mines on the basis of 1.45 shares of Wesdome for each share of Western Quebec Mines. Wesdome was the surviving operating entity.

Table 6.1 summarizes the historical work carried out on the Quebec Wesdome Project.

Table 6.1 Historical work on the Quebec Wesdome Project

Year	Company	Work description	Highlights / Significant results
1945-1975	Western Quebec Mines Inc.	Incorporated and began developing the Dorval-Siscoe property.	Exploration on Dorval-Siscoe until 1975.
1976	Wesdome Resources Ltd.	Creation of a JV to explore and develop the property, renamed the Wesdome Property.	Wesdome Resources was formed from Western Quebec Mines and Dome Exploration.
1984	Western Quebec Mines Inc.	Acquired 40% interest in the Joubi property.	Partnership with Valmag Inc.
1988-1989		Acquired several properties from Valmag Inc. (School Mine property, the Shawkey South property, and a 35% interest in the Shawkey property).	Expanded exploration portfolio.
1990		Started production at Joubi mine.	Initiation of gold production.
1992		Acquired Yankee Clipper property from Goldhunter Explorations Inc.	Expanded asset base.
1993		Completed acquisition of Joubi property.	Achieved 100% ownership.
1994		6 DDH (2,958 m) in the southwestern part of the School Mine Property.	Erratic values reached 77 g/t Au.
1996		Acquired Dubuisson West property from Republic Goldfields Inc. and merged with Joubi.	Expanded mining assets.
1997		Acquired full ownership of Wesdome and Callahan property and 65% of the Shawkey property.	Full control over Wesdome.
1998		Staked 3 claims and acquired Lamothe, Lamothe-Extension (now Vassan), Yankee Clipper, and Callahan properties; transferred to Wesdome Resources.	Asset transfer for focused development.
1999	Wesdome Gold Mines Inc.	Consolidation of properties and created new company.	Dynacor Mines Inc. and Western Quebec Mines consolidated several properties into a new company, Wesdome Gold Mines Inc. Joubi mine closed after 10 years.
2003	Western Quebec Mines Inc. / Wesdome Gold Mines Inc.	Purchased and consolidated Kiena Complex.	Gained multiple properties Kiena, Kiena West, Lac Dubuisson, Rosenbaum, Dubuisson, Audet Block, Elmac, South Block Kiena, Option Roy and Lac De Montigny properties, and a 50% interest in the Maufort property. Kiena mine historic production of 1.56M oz.
2006	Wesdome Gold Mines Inc. / Wesdome Gold Mines Ltd.	Merged with River Gold Mines Ltd. to form Wesdome Gold Mines Ltd. Staked claims. Began production at Kiena.	Staked 7 claims and added them to the Vassan property. Staked seven claims and added them to the Vassan property. Commercial production at Kiena began in August.
2007		Merged with Western Quebec Mines.	Wesdome became sole operating entity.

6.2 Detailed Historical Work by Area

Table 6.2 to Table 6.15 summarize the historical work performed on the different mineralized zones of the Property.

6.2.1 Kiena Mine Area

The following description of historical work in the Kiena Mine Area is mostly modified and summarized from Mailhiot (1920), Cooke et al. (1931), Hawley (1931), Bell (1935; 1936; 1937), Auger (1947), Dresser and Denis (1949), Claveau et al. (1951), Salt (1960), Robinson (1961a; 1961b; 1962), Cormier (1986a; 1986b), Sauvé et al. (1993), Morasse (1998), Beauregard and Gaudreault (2005), Turcotte et al. (2015), Beausoleil et al. (2019), Athurion et al. (2021), and the annual reports of Wesdome Gold Mines Inc. and Wesdome Gold Mines Ltd. (2003–2013).

Table 6.2 summarizes the historical work carried out in the Kiena Mine area. Table 6.3 and Table 6.4 summarize the Kiena mine production from 1981 to 2002 and from 2006 to 2013.

Table 6.2 Historical work in the Kiena Mine area

Year	Company	Work description	Highlights / Significant results
1911-1914	Barney Parker	Discovery of native gold quartz veins.	Gold discovered in a shear zone at the northwestern end of the island where Kiena's mill was built.
1922-1927	Martin Gold Mines & Parker Island Gold Mines	5 quartz veins tested by trenching and diamond drilling.	Follow-up work on original gold discovery. Discovery of "Wisik vein" on eastern shore of Moccasin Island.
1936-1940	Ventures Ltd (JV between Kiena Gold Mines Ltd. and Wisik Gold Mines Ltd.)	Major surface exploration program.	Shaft-sinking 455 ft (138 m). Development of exploration drifts (levels at 130, 230, 330, and 430 ft).
1937-1938		Extensive stratigraphic winter drilling program from lake surface ice. A crosscut excavated toward the S-21 Zone.	Discovery of the S-21 Zone (later called the North Zone) at 2,300 ft (701 m) from the island. Crosscut intersected 4 mineralized veins.
1940		Mining operations ceased due to limited ore reserves and wartime difficulties.	Exploration activities suspended for 20 years.
1948		2 DDH (400.2 m).	
1961-1965		Magnetometer survey geological mapping. 13 DDH proposed but cut down to 3 DDH.	S50 Zone DDH targeted the "nose of a fold" and a "magnetic low that could represent a siliceous intrusive and intersected 0.22 oz/t Au (7.54 g/t Au) over 50 ft (15.2 m) of core, at approximately 800 ft (243.8 m) below the lake's surface.
1962-1965	Falconbridge Ltd.	Falconbridge acquired Ventures in 1962. Surface diamond drilling 79,000 ft (24,079.2 m).	Based on drilling new S-50 Zone reserves estimate. FS showed that mining operations would be marginal at best.

Year	Company	Work description	Highlights / Significant results
		No. 1 shaft collared at 800 ft (243.8 m) east of Parker shaft and sunk to 1,324 ft (403.55 m). UG exploration and diamond drilling. FS on S-50 orebody.	Adverse ground conditions from the geological structures of the deposit were found in a test stope. Due to these conditions it was concluded that no large openings could be left unfilled and low-cost mining could not be expected. Property placed under care and maintenance program leaving the S50 orebody dormant for the next 14 years.
1979-1984		Property re-evaluated and recommendation made to bring it back into production. Trackless and cut-and-fill methods employed.	Mining officially started October 1981. Custom milling at Teck's nearby Lamaque Mill used for first three years. Kiena Mill operational in 1984.
1986-1994	Campbell Red Lake Mines Ltd./ Placer Dome Inc.	Ownership transition and mine operation.	Campbell Red Lake Mines became Kiena's major shareholder on January 25, 1986. Falconbridge sold 56.7% of its interest in Kiena Gold Mines. Placer Dome Inc. became owner and operator of the Kiena mine. On January 1, 1994 Placer Dome Inc. became Placer Dome Canada Ltd.
1997-2003	McWatters Mining Inc.	Ownership, operation, and closure of mine. Exploration program UG drilling (5,012 m) in 2002 investigating five gold targets. Follow-up surface drill program (8,200 m) to extend the hanging wall mineralization and improve the resources (January 2003 to March 2003).	Mine sold to McWatters Mining on September 12, 1997. McWatters operated the Kiena mine until its closure in September 2002 (Table 6.3).
2003	Wesdome Gold Mines Inc.	Acquisition of property.	Wesdome Gold Mines Inc. acquired the Kiena Mine (along with the Elmac Property) in December 2003.
2004		UG development and exploration via Kiena shaft.	4.5 km drift to Wesdome property (520 m level) and a 2.0 km drift to Shawkey No. 22 Zone (330 m level). Established access to VC Zone. Commenced fan drilling from 520 m level.
2005		Continued UG development at Kiena Mine. Major exploration on VC Zone; work on North, No. 388, and Martin Zones; East Drift development. Publication of MRE technical report.	Resource estimate for VC1-VC3 zones.
2006-2013	Wesdome Gold Mines Ltd.	Kiena mine in pre-production until 2006.	Placed under care and maintenance post-2013.

Year	Company	Work description	Highlights / Significant results
		Commercial production from Aug 1, 2006 to June 30, 2013.	Produced 198,708 oz of gold from 1.8265 Mt at 3.38 g/t Au (Table 6.4) plus an additional 1,959.5 oz from plant cleanup in 2016–2017.

Table 6.3 Kiena mine production from 1981 to 2002 (Turcotte et al., 2015)

Year	Metric tonnes (t) milled	Recovered grade Au g/t	Gold production (oz)
1981	101,231	4.61	15,018
1982	287,916	6.81	63,038
1983	307,661	6.19	61,193
1984	378,014	5.48	66,658
1985	381,376	5.71	70,035
1986	453,793	4.98	72,694
1987	478,752	4.36	67,113
1988	477,947	3.79	58,219
1989	470,705	4.38	66,235
1990	473,602	4.33	65,953
1991	486,217	4.55	71,112
1992	501,827	5.03	81,195
1993	496,401	4.95	79,034
1994	504,873	5.12	83,044
1995	534,330	5.03	86,375
1996	608,701	4.32	84,609
1997	631,606	4.59	93,169
1998	594,000	4.39	83,807
1999	647,933	4.16	86,602
2000	719,363	3.74	86,610
2001	745,391	3.41	81,631
2002	415,400	2.82	37,626
Total	**10,697,039**	**4.54**	**1,560,970**

Table 6.4 Kiena mine production from 2006 to 2025 (modified from Turcotte et al., 2015)

Year	Metric tonnes (t) milled	Recovered grade Au g/t	Gold production (oz)
2006	94,200	3.07	9,300
2007	284,757	3.87	35,404
2008	241,641	5.19	40,344
2009	302,034	3.65	35,398
2010	285,527	3.50	32,162
2011	255,311	2.38	19,516
2012	265,872	2.20	18,814
2013	97,158	2.49	7,770
2021	68,470	10.4	22,440
2022	115,171	7.9	28,848
2023	191,148	5.9	35,537
2024	216,755	11.2	77,472
2025	219,167	10.5	72,808
Total	**2,637,211**	**5.14**	**435,813**

6.2.2 Wisik Shaft Area

The following description of historical work in the Wisik Shaft Area is mostly modified and summarized from Bell (1935; 1936; 1937), Taschereau (1936), Denis (1937), Auger 1947), Dresser and Denis (1949), Turcotte et al. (2015), Beausoleil et al. (2019), Athurion et al. (2021), and the diamond drill logs of Wisik Gold Mines Ltd.

Table 6.5 summarizes the historical work carried out in the Wisik Shaft area.

Table 6.5 Historical work in the Wisik Shaft area

Year	Company	Work description	Highlights / Significant results
1934-1935	H. Klee (Wisik Gold Mines), Teck Hughes	Property optioned by Teck Hughes. Diamond drilling in the veins, between Moccasin Island and Shawkey Peninsula.	Option lapsed.
1936	Wisik Gold Mines	Overburden removal and shaft sinking on Moccasin Island.	Three-compartment shaft sunk 300 ft (91.4 m). Drifts excavated along principal vein or shear on 200 and 300 ft levels, totalling 2,100 ft (640.1 m).
1937		Metallurgical test work performed on two samples of gold ore: 1 from the Wisik North drift (237 lbs, 107.5 kg) and 1 from Wisik South (200 lbs or 90.7 kg). Operations suspended and mine flooded in September 1937.	The North drift sample assayed 0.125 oz/t Au (4.29 g/t Au) and 0.19 oz/t Ag (6.51 g/t Ag). The South drift sample returned 0.675 oz/t Au (23.14 g/t Au) and 0.09 oz/t Ag (3.09 g/t Ag).

Year	Company	Work description	Highlights / Significant results
1958	Ventures Ltd (JV between Kiena Gold Mines and Wisk Gold Mines)	1 DDH (W-1:350 ft (106.7 m) on Moccasin Island, NW of the Wisik shaft.	Initial testing of area near Wisik shaft.
1959		1 DDH: W-2: 750 ft (228.6 m).	To test eastern extension of the No. 1 Zone.

6.2.3 Shawkey Mine Area

The following description of historical work in the Shawkey Mine Area is modified and summarized from Mailhiot (1920), Cooke et al. (1931), Hawley (1931), Bell (1935; 1936; 1937), Dresser and Denis (1949), Ingham (1950), Claveau et al. (1951), Ingham (1953), Bourret et al. (1956), Sauvé (1985), Chevalier (1989b), Sauvé et al. (1993), Beauregard and Gaudreault (2005), Turcotte et al. (2015), Beausoleil et al. (2019), Athurion et al. (2021), and the annual information forms of Western Quebec Mines Inc., Wesdome Gold Mines Inc. and Wesdome Gold Mines Ltd. (1997–2013).

Table 6.6 summarizes the historical work carried out in the Shawkey Mine area. Table 6.7 summarizes the Shawkey mine production from 1936 to 1964.

Table 6.6 Historical work in Shawkey Mine area

Year	Company	Work description	Highlights / Significant results
1911	Fred La Palme	Discovery of gold-bearing vein (No. 1 Vein) on south shore of Lac De Montigny.	Initial discovery of gold-bearing quartz vein.
1917-1919	Martin Gold mining Company Ltd	Incorporated to develop the new gold showing. UG work. Erection of small mill. Two-compartment vertical shaft 125 ft (38.1 m) on shore of Lac De Montigny plus small amount of drifting and cross-cutting.	600 lbs of rock milled in 1918. Work suspended in 1919.
1921-1923	John Dalton	Option secured by J.J. Godfrey. Shaft deepened to 325 ft (99.1 m) and roughly 700 ft (213.4 m) of drifts and cross-cuts excavated. Diamond drilling 4,500 ft (1,371.6 m).	Underground expansion. Option lapsed in 1923.
1934-1938	Shawkey Gold Mines Ltd.	Mine purchased and operated by Shawkey Gold Mines Ltd. Shaft deepened to 725 ft (221 m); new levels at 450, 575, 625 ft. Mill erected (1936). Surface drilling 3,915 ft (1,193.3 m). UG drilling 45,885 ft (13,985.7 m). Drifting and crosscutting 1,125 ft (342.9 m).	Raise completed to surface, north of shaft. Shrinkage stopes prepared above first and second levels. Several gold-bearing veins discovered. All production was from discovery vein. Vein developed to maximum length of 1,000 ft (304.8 m). Production of 25,414 oz Au from 137,978 short tons at 0.184 oz/t (6.31 g/t). Operations suspended after depletion of discovery vein.
1945-1951	Shawkey Mines Ltd.	Surface drilling 37,000 ft (11,277.6 m). UG drilling 20,000 ft. (6,096 m) UG development (drives, crosscuts, and drifts) 2,337 ft (712.3 m). No. 2 shaft sunk to 743 ft in 1950-1951. 927 ft (282.5 m) drifting and crosscutting on 700 ft level and 605 ft (184.4 m) and on the 550 ft level. UG drilling 2,265 ft (690.4 m). Over 7,000 ft3 (198.2 m^3) of rock slashed.	Of the 37,000 ft: 28,500 ft (8,686.8 m) on No. 10 Vein, 9,000 ft (2,743.2 m) in cross-sectional exploration on the east side of the Thompson River and south of the No. 10 Zone. UG drilling was from old UG workings, used in lateral and depth tests from the 4th and 6th levels. Drive on the 4th level extended 926 ft southeast to reach the diorite body containing gold-bearing quartz veins. Discovery of new gold zones (No. 9, No. 11, and No. 12). 1,735 short ton (1,574 t) of ore grading 0.09 oz/t (3.09 g/t Au) was mined from various drifts and slashes. Operations suspended in 1951.

Year	Company	Work description	Highlights / Significant results
1962-1964	Con-Shawkey Gold Mines Ltd.	No. 2 shaft (No. 10 Zone) Reopened. Bulk sampling: 51.3 short tons (46.5 t) sent to MRN pilot plant, average grade of 0.23 oz/t (7.89 g/t Au) for 53 samples. Bulk sampling: 1,039 short tons (942.6 t) sent to Malartic Goldfields Mill, average grade of 0.053 oz/t Au (1.82 g/t Au). Surface diamond drilling: 14,000 ft (4,267.2 m). UG drilling: 1,600 ft (487.7 m). UG development: 1,400 ft (426.7 m). Mag and EM surveys.	By the end of 1964, over a 31-year period From 1936 the Shawkey mine produced a total of 25,637 oz of gold from 127,737 metric tons of ore grading an average 6.24 g/t Au.
1964-1966	Noranda Inc.	Diamond drilling 3,710 ft (1,130.8 m). Mag and EM surveys.	Focused on the No. 10 Zone.
1972-1976	Umex Ltd	Umex acquired an interest. 6 DDH: 2,240 ft (682.8 m). Mag and EM surveys.	Continued geophysical and drill assessment.
1979-1989	Valmag Inc./ Les mines Sigma (Québec) Ltée/ Placer Dome Inc.	Les Mines Sigma acquired interest in the Shawkey Property from Valmag. 45 km of Mag surveys. Diamond drilling 11,500 m on the 22 Zone. 24 km of Mag surveying over Lac De Montigny. 23 DDH (6,000 m) 9 DDH (2,224 m).	Multiple new zones explored.
		1988-1989: Shawkey and Shawkey South acquired by Western Quebec Mines Inc. from Valmag Inc. 1988: Placer Dome Inc. acquired Les Mines Sigma. 7 DDH (1,897.5 m).	Drilling on the West and 22 zones. Shawkey Property consists of 4 mining concessions in Dubuisson Township.
1990-1997	Placer Dome & Western Quebec Mines (JV)	Mineral inventory completed (Lebel & Lafleur, 1991). 6 mineralized lenses (A–F) estimated using polygonal method and SG of 2.7 g/cm³.	Shawkey Property JV ended in 1997.
1997	Western Quebec Mines	Acquired 70% of Wesdome Resources and 65% of Shawkey property.	Full ownership obtained over time.
2002-2003	Western Quebec Mines	11 DDH (1,248 m) on No. 22 Zone in 2002. 10 DDH (1,657 m) in 2003.	Cumulative production from 1936-1964 was 25,637 oz Au from 127,737 t at 6.24 g/t Au (Table 6.7).

Table 6.7 Shawkey mine production from 1936 to 1964 (Turcotte et al., 2015)

Year	Metric tonnes (t) milled	Recovered grade Au g/t	Gold production (oz)
1936-1938	125,174	6.31	25,414
1945-1951	1,574	3.08	156
1962-1964	989	2.11	67
Total	**127,737**	**6.24**	**25,637**

6.2.4 Elmac Shaft Area

The following description of historical work in the Elmac Shaft Area is mostly modified and summarized from Mailhiot (1920), Cooke et al. (1931), Hawley (1931), Bell (1935; 1936), Koulomzine and Brossard (1946), Dresser and Denis (1949), Chevalier (1989a), Beauregard and Gaudreault (2005), Turcotte et al. (2015), Beausoleil et al. (2019), Athurion et al. (2021), and the annual information forms of Western Quebec Mines Inc., Wesdome Gold Mines Inc., and Wesdome Gold Mines Ltd. (1997–2013).

Table 6.8 summarizes the historical work carried out in the Elmac Shaft Area.

Table 6.8 Historical work in Elmac Shaft area

Year	Company	Work description	Highlights / Significant results
1919-1935	Union Mining Corporation/ Unison Gold Mines/ Lorette Mines Ltd/ Minrand Co-operative Company/ Minrand Gold Ltd/ Crossroads Gold Mines Ltd	Property originally known as Fosie-Kengrow. Deposit discovered in 1919. 1922: DDH program. 1925: Shaft sunk to 100 ft (30.5 m). UG work: intermittent development and drilling.	Discovery of vein exposed over 200 ft (61 m) with offshoots and stringers. Mine workings flooded in 1935.
1940–1946	Elmac Malartic Mines Ltd.	Work around the shaft and UG development. Resampling known zones. Drilling northern part of the property (Claims Potter-Kee). Magnetic survey.	Discovery of new mineralized zone (Carbonated Zone).
1963-1965		18 DDH (2,682.2 m) across property (Potter-Kee, shaft, Carbonated Zone). 1965: drilling program (1,531 m) on Lac De Montigny.	Carbonated Zone: 23.78 g/t Au over 2.74 m. New zone in porphyries: 4.14 g/t Au over 6.24 m.
1978-1983	Les Mines Sigma (Québec) Ltée	Mines Sigma (Québec) Ltée optioned the property. 7 DDH (1,905 m) on Carbonated Zone. 22.3 km Mag and 3.6 km IP surveys. 53,823 ft of drilling completed 1978-1983.	Advanced exploration.

Year	Company	Work description	Highlights / Significant results
1989		8 DDH (2,117.75 m) in northern part of property.	Continued testing in underexplored zones.
1997-2002	McWatters Mining Inc.	Acquired Elmac property from Placer Dome Canada Ltd.	Operator until 2003.
2003	Western Quebec Mines	Acquired the Kiena Complex including Elmac in December 2003.	Consolidation of Elmac with surrounding assets.

6.2.5 Joubi Mine Area

The following description of historical work in the Joubi Mine Area is mostly modified and summarized from Mailhiot (1920), Bell (1935), Ingham (1944b), Hinse (1975), Lavery (1983), Laforest (1987) Castonguay (1995), Turcotte et al. (2015), Beausoleil et al. (2019), Athurion et al. (2021), and the annual information forms of Western Quebec Mines Inc. (1996–2006).

Table 6.9 summarizes the historical work carried out in the Joubi Mine area. Table 6.10 summarizes the Joubi mine production from 1990 to 1999.

Table 6.9 Historical work in the Joubi Mine area

Year	Company	Work description	Highlights / Significant results
1919	Clowse (individual prospector)	Prospecting. 27-ft-deep exploration shaft sunk.	Discovery of narrow gold-bearing vein traced over 100 ft.
1934	Amity Gold Mines Ltd.	Surface trenching. Sampling. 4 DDH.	Exploration around Clowse vein.
1941-1942	Seventh Malartic Mines Ltd.	4/28 DDH (13,550 ft) on Joubi property.	Range Line Zone discovered.
1943-1944	Perron Gold Mines	Optioned property by Perron Gold Mines. 18 DDH.	Diamond drilling resumed in the spring of 1944.
1960	Iso-Newlund Mines	Mag survey. 5 DDH.	Survey covered part of the property.
1964	Amerel Mining	1 DDH. Mag survey.	Drilling followed by geophysical survey.
1973	Joubi Mining Corporation	Joubi Mining Corporation acquired the property. 24 DDH on Range Line Zone.	Range Line Zone further defined.
1979	Massey-Gauthier Ltd.	6 DDH on Range Line Zone.	Continued evaluation of mineralized trend.
1981-1983	Joubi JV: U.F. Venture, Messeguay Mines, V. Audet	JV created between U.F. Venture and Messeguay Mines. 46 DDH (6,838 m) in 1981. JV restructured: U.F. Venture, Messeguay Mines, V. Audet in 1982. Resource estimate completed. 12 DDH (2,402.7 m) on Range Line Zone between 1982-83. Detailed Mag/VLF surveys.	Range Line Zone delineated.
1984-1986	Western Quebec Mines	Geophysical surveys. 11 DDH (3,178 m).	Exploration program.
1987-1989	Western Quebec Mines / Messeguay / Oasis JV	Western Quebec Mines granted Messeguay Mines and Oasis Resources Inc. working rights and an option to acquire interest in the Joubi property. Evaluation review by Minexpert. Three-compartment Shaft sunk to 253 m with 4 stations 2,780 m of crosscuts. 1,094 m raises. Drilling: 47,812 m. Mining operations began. Definition drilling of the zones:3,645 m.	Evaluation review recommended an UG exploration program to define the essential parameters required for a better understanding of the nature of the gold mineralization.

Year	Company	Work description	Highlights / Significant results
1990-1991	Western Quebec Mines	Drilling: 15,084 m in 1990. Drilling: 12,614 m in 1991. Shaft deepened by 71 m.	F Zone discovered on Dubuisson West boundary. Shaft extended to access A Zone.
1992		Optioned Dubuisson East and purchased Dubuisson West from Republic Goldfields. 1 km of drifts developed at the 2nd level to access the Dubuisson East Zone. Drilling: 268 m (Dubuisson W). Drilling: 3,610 m (Dubuisson E). Drilling: 2,409 m (Joubi).	Shift in focus to adjacent properties. Reserves depleted on Joubi.
1993-1994		Developed and mined Dubuisson East Zones Extended 5th level drift. Definition drilling: 3,633 m on the Dubuisson East property (1993) and 3,171 m of the A Zone below the 5th level (659 m) on Joubi (1994).	Mining of the Dubuisson East zones slowed down by wall instabilities which resulted in an excessive dilution problem. Minor ore extracted from Joubi.
1995		2-year UG exploration and development program on Joubi: 200 m of shaft sinking to 524 m deep. Upgrading of production infrastructure. Development of a loading system and establishment of levels 360 and 440. Due to the shaft sinking program, >6 months production halt.	Production came from the Dubuisson East property where the bulk of the reserves were located.
1996		New drifts at 440 m. 110 holes (15,000 m) along Joubi shear zone.	DE-F Zone identified. DE-B/C zones traced at 440 m level. System open at depth and east.
1997-1998		90 DDH (8,600 m) in 1997. 81 DDH (14,200 m) and 480 m of drifting in 1998.	The program tested the depth and strike potential of the Joubi shear zone to identify significant new reserve blocks. Results were insufficiently encouraging to justify further development.
1999		Mine closed after 10 years. Total 62,283 oz Au from 327,561 t mined ore. Ore custom-milled in Val-d'Or. Shaft sealed and headframe removed.	The three-compartment shaft reached a depth of 524 m with levels developed at 70 m, 120 m, 220 m, 280 m, 360 m, and 440 m. Ore chutes were installed at levels 120 m, 220 m, 280 m, 440 m, and 524 m. End of Joubi mining. (Table 6.10)
2016	Agnico Eagle Mines Ltd.	Purchased claims from Wesdome.	Acquired portion of the Joubi property; granted 3% NSR.

Table 6.10 Joubi mine production from 1990 to 1999 (Turcotte et al., 2015)

Year	Metric tonnes (t) milled	Recovered grade (Au g/t)	Gold production (oz)
1990	30,146	10.94	10,601
1991	36,998	6.99	8,319
1992	36,572	7.64	8,983
1993	28,419	4.49	4,104
1994	57,115	4.55	8,351
1995	20,166	5.37	3,484
1996	35,270	4.73	5,364
1997	39,191	4.72	5,947
1998	27,470	4.17	3,679
1999	16,214	6.62	3,451
Total	**327,561**	**5.91**	**62,283**

6.2.6 Dorval-Siscoe/Wesdome Deposit Area

The following description of historical work in the Dorval-Siscoe Area is mostly modified and summarized from Beckman et al. (1933), Bell (1937), Ross et al. (1938), Ross and Asbury (1939), Koulomzine (1941; 1942; 1943), Ingham (1944a; 1947), D'Aragon (1947), Auger (1947), Dresser and Denis (1949), Young (1955), Salamis (1970), Prud'homme (1970), Audet (1975a; 1975b), Matheson (1976), Audet (1979), Gardiner (1987; 1988), Sauvé et al. (1993), Beauregard and Gaudreault (1999; 2005), Turcotte and Pelletier (2009), Turcotte et al. (2015), Beausoleil et al. (2019), Athurion et al. (2021), and the annual information forms of Western Quebec Mines Inc., Wesdome Gold Mines Inc., and Wesdome Gold Mines Ltd. (1996- 2013).

Table 6.11 summarizes the historical work carried out in the Dorval-Siscoe area.

Table 6.11 Historical work in the Dorval-Siscoe area

Year	Company	Work description	Highlights / Significant results
1933-1937	Dorval-Siscoe Gold Mines / Snowshoe Mines Ltd.	37 DDH (7,050 m) by Dorval-Siscoe Gold Mines. 5 DDH (844 m) by Snowshoe Mines Ltd.	Discovery of Dorval-Siscoe Main Break. The material in the zone consisted of schistose and talcose granodiorite with laminated quartz-carbonate stringers up to 10 in (25 cm) wide, and a feldspar porphyry dyke about 10 ft (3 m) in section width injected and replaced by vein quartz. The mineralization consists of pyrite, chalcopyrite, galena, and tourmaline.
		Three-compartment shaft sunk to 343 ft (104.5 m) on Island No. 6 in 1937 and 1938. 850 m drifts and crosscuts on the 300 ft level. 14 UG DDH (686 m).	A strong vein was exposed for a length of 780 ft (237.7 m) in a drift on the 300 ft level. Emphasis was placed on extending the K Zone in the Siscoe gold mine onto the Dorval-Siscoe property. At the time the K Zone was considered spatially related to most of the mineralization on the Dorval-Siscoe property. The primary focus of the work was to outline a broad zone of weak to moderate mineralization.
1941-1943	Camp Bird Gold Mines Ltd.	Optioned on the project by Camp Bird Gold Mines Ltd. Dip needle survey (590 ha). 24 surface DDH (5,400 m). 16 UG DDH (1,467 m) from the earlier Dorval-Siscoe workings.	Magnetic anomalies outlined.
1945-1948	Snowshoe Gold Mines Ltd. / Western Quebec Mines	Dip needle survey (191 ha) by Snowshoe Gold Mines Ltd. 14 surface DDH (2,671 m)	Drilled on the periphery of a large circular magnetic depression (granodiorite plug) located in the centre of the property.
		1946-1947: Western Quebec Mines (incorporated in 1945) developed the property held by Camp Bird Gold Mines Ltd. 12 surface DDH (3,394 m).	Drilled on magnetic anomalies which provided encouraging results.
1955		EM survey by Snowshoe Gold Mines Ltd. over the western part of the Snowshoe intrusion.	
1963-1965	Western Quebec Mines	4 DDH (holes #87 to #90) (1,559 m) on the "A" zone. Magnetic survey over the western and southwestern part of the project.	Exploration focused on gold-bearing massive sulphides
1965-1970	Kerr Addison Mines / Western Quebec Mines	EM survey (12.9 km). Magnetic survey (209 km). 4 surface DDH (65-1 to 65-4) (1,613 m).	Exploration focused on gold-bearing massive sulphides.

Year	Company	Work description	Highlights / Significant results
1970	Western Quebec Mines	Magnetic survey (132.9 km). Max-Min (EM) – IP survey (182 km). 9 surface DDH (W70-1 to W70-9) (1,373 m).	The goal of these surveys was to delineate massive sulphides associated with peridotites.
1975-1976	Wesdome Resources Ltd / Sigma Mines Ltd.	Wesdome was created as a joint venture (Western Quebec Mines and Dome Exploration Ltd.). 78-km VLF survey. 38 DDH (82-1 to 82- 38) (10,584 m).	Goal was to evaluate potential of the Project.
1979		4 DDH (82-39 to 82-42) (1,273 m).	Goal was to complete transverse section north of A and B zones.
1980-1981		67 DDH (19,740 m).	Goals were to delineate mineralization and evaluate gold reserves in A and B zones and associated “flat” quartz veins.
1983		26 DDH (82-105 to 82-130) (6,348 m).	Field program carried out to identify mineralization in albitized monzodiorite on the western periphery of the property, adjacent to project held by Falconbridge Nickel Ltd. (Duhaime, 1983).
1984		Total field and gradient Mag survey (116.5 km). 51 surface DDH (18,656 m).	Drilling was on the intrusive dyke complex (Falconbridge Zone) (10,935 m) and on the A and E zone extensions (7,721 m). The F Zone returned encouraging results.
1987		Geophysical survey (seismic refraction). 30 surface DDH (holes 82-177 to 206) (12,180 m).	Continued drilling of “E2” and “F” zones; exploration of “South Shear Zone”.
1988		Seismic, magnetic, IP, and bathymetric surveys by Sigma Mines Ltd. 26 surface DDH (9,842 m).	Continued drilling of “E” and E3” zones.
1998-1999	Wesdome Gold Mines Ltd	5.5 km access road build on the northern peninsula. Rock mechanic tests, seismic surveys for overburden and rock quality on the former site of the decline portal. 100 DDH (37,278 m). A 600-m pilot hole was drilled on the island for rock mechanic purposes prior to shaft sinking, with positive results. Preparation work, which consisted of levelling the site (Island No. 3), was conducted during winter of 1998-99. In 1999 permitting and engineering work continued, and limited mining equipment was purchased.	Results revealed a deep trough (more than 60 m) over an E-W striking, multi-metre wide, sheared and altered ultramafic unit, indicating that a ramp project would not be feasible. Three areas were tested: K Zone (to the north), E3 and E zones, and A and B zones.
2000-2001		Construction of the necessary surface infrastructure to commence shaft sinking and underground development. Shaft collared at 23 m, hoist and surface buildings installed, wharf-barge access system fully functional. 2 DDH (611 m).	Drilling to test the western limits of the A Zone.

6.2.7 Siscoe Mine Area

The following description of historical work in the Siscoe Mine Area is mostly modified and summarized from Mailhiot (1920), Cooke et al. (1931), Hawley (1931), Bell (1937), Auger (1940), Auger (1947), James (1949), Dresser and Denis (1949), Gill (1981), Timmins and Wing, (1981), Trudel (1985), Allard (1988), Sauvé et al. (1993), Turcotte et al. (2015), Beausoleil et al. (2019), and Athurion et al. (2021).

Table 6.12 summarizes the historical work carried out in the Siscoe Mine area. Table 6.13 summarizes the Siscoe mine yearly production from 1929 to 1949.

Table 6.12 Historical work in the Siscoe Mine area

Year	Company	Work description	Highlights / Significant results
1912-1919	Siscoe Mining Syndicate	Siscoe Island staked in 1912. Between 1913 and 1919 exploration work focused on four principal veins: A, B, C, and D. Shafts sunk: A (45 ft) over a length of 90 ft (27.4 m), B reached 32 ft (9.8 m) deep, C sunk to 100 ft (30.5 m), inclining 35° to follow the dip of the vein, D 88 ft (26.8 m) deep.	Prospecting revealed presence gold in the northernmost part of the property in 1911 and 1912 and the first main gold discovery was made in 1913. Several quartz veins contained nests or pockets rich in native gold, in which wonderful specimens were sometimes found.
1923-1927	British Mineral Corp / Siscoe Gold Mines Ltd.	Property bought by British Mineral Corporation and, in 1923 Siscoe Gold Mines created. June 1926: UG workings: shaft sunk to 105 ft (32 m) on the D Vein, and 1,500 ft (457.2 m) of drifting and crosscutting. 1927: active development on the C shaft and C Vein operations recommenced. The C shaft was continued to 500 ft (152.4 m) and much lateral work was completed on the 170', 300', 400', and 500' levels.	Most of the 1926 work was an exploratory nature directed to finding single veins large enough to mine. The long crosscut that runs southwest from the shaft to the granodiorite-basalt boundary cut a vein, known as the K Vein, which seemed to follow that boundary.
1929-1930	Siscoe Gold Mines Ltd.	Milling infrastructure installed. Mine entered production (1929). Extensive drilling in 1929. 1930: Central three-compartment shaft completed to 472 ft (143.9 m). Cross-cuts at 300 and 450 ft levels at distances of 50 (15.2 m) and 100 ft (30.5 m) beyond the New Vein. The workings on the 300 ft level were driven east to connect with the 5th level of the inclined C shaft by an 85-ft raise from the latter. At the 450 ft level, a cross-cut was driven east to intersect the C Vein on this level.	Discovery of a vein nearly parallel to the cross-cut driven south of the D-shaft (New Vein). Major infrastructure milestone. Confirmation of multiple productive veins.

Year	Company	Work description	Highlights / Significant results
1930-1946		By the end of 1936, the mine developed on levels to a vertical depth of 1,350 ft (411.5 m). For the first 600 ft (182.9 m), levels are at intervals of 150 ft (45.7 m); below this they were spaced at 125-ft intervals. The Central shaft serviced the entire mine. Shaft deepened to 1,900 ft (579.1 m) to permit the opening of the newly opened 11th and 12th levels.	By the end of 1939, the Central shaft reached the 19th level at a depth of 2,475 ft (754.4). At this time, the mine had been continuously in production since 1929.
1946-1951		Intense exploration.	No new ore zones found. Mine closed (1949). Mill and equipment sold (1951). Between 1929 and 1949, the Siscoe mine had produced a total of 882,303 ounces of gold and 306,070 ounces of silver from 2,975,785 t of ore grading an average of 9.22 g/t Au and 3.20 g/t Ag.
1981	Canzona Mineral Inc.	VLF EM survey over Siscoe Island. 19 DDH on Siscoe Island Phase 2 (4 DDH) drilled northward into a VLF EM conductor associated with the K Zone.	Discovery of mineralized zones; confirmation of conductive features associated with K Zone.
1984-1990	Maufort Resources Inc.	JV with Teck Corporation (1984-1987) and Cambior Inc. (1987-1989). Pumped mine dry. 20,693 m DDH.	Renewed underground work and significant drilling.
1993-1997	Dynacor Mines Inc. (formerly Maufort)	Mapping, stripping, and sampling. 9 DDH (3,170 m) in 1997.	Detailed surface evaluation and DDH campaign.
1999	Dynacor Mines Wesdome Gold Mines Ltd.	All Siscoe property interests transferred to Wesdome on Nov 9, 1999.	Consolidation of ownership under Wesdome. During the period between 1929 and 1949, the Siscoe mine had produced a total of 882,303 ounces of gold and 306,070 ounces of silver from 2,975,785 t of ore grading an average of 9.22 g/t Au and 3.20 g/t Ag (Table 6.13).

Table 6.13 Siscoe mine yearly production from 1929 to 1949

Year	Metric tonnes (t) milled	Recovered grade Au g/t	Gold production (oz)	Recovered Ag g/t	Silver production (oz)
1929	27,067	17.07	14,853	1.38	1,200
1930	30,613	18.02	17,740	1.44	1,420
1931	50,508	22.10	35,883	0.99	1,614
1932	58,059	26.06	48,651	2.04	3,810
1933	87,407	19.48	54,729	3.14	8,826
1934	112,630	16.93	61,291	2.83	10,247
1935	135,236	14.82	64,446	3.70	16,089
1936	164,364	13.08	69,138	3.23	17,090
1937	181,895	12.89	75,383	3.61	21,095
1938	170,342	12.19	66,783	3.63	19,906
1939	171,965	9.76	53,982	3.76	20,765
1940	176,251	8.15	46,159	3.17	17,973
1941	208,710	6.63	44,461	3.79	25,457
1942	288,668	5.13	47,630	4.20	38,961
1943	290,407	4.35	40,656	3.51	32,808
1944	294,366	4.16	39,384	3.30	31,196
1945	241,466	4.33	33,610	2.30	17,864
1946	143,148	4.95	22,799	2.24	10,304
1947	64,649	10.37	21,556	2.33	4,847
1948	60,984	8.27	16,212	2.15	4,206
1949	17,049	12.69	6,957	0.72	392
Total	**2,975,785**	**9.22**	**882,303**	**3.20**	**306,070**

6.2.8 Siscoe Extension Area

The following description of historical work in the Siscoe Extension Area is mostly modified and summarized from Hawley (1931), Bell (1937), Denis (1937), Ross et al. (1938), Auger (1940), Auger (1947), Dresser and Denis (1949), Sullivan Consolidated Mines Ltd. (1957), Dussault (1988), Turcotte et al. (2015), Beausoleil et al. (2019), and Athurion et al. (2021).

Table 6.14 summarizes the historical work carried out in the Siscoe Extension area.

Table 6.14 Historical work in the Siscoe Extension area

Year	Company	Work description	Highlights / Significant results
1929-1937	Siscoe Extension Gold Mines Ltd.	1929-1930: 10,000 ft (3,048 m) drilling to pick up the eastern extension of the Siscoe granodiorite and possible veins. Three-compartment shaft sunk; 350 ft (1930) and 750 ft levels developed (1937). Surface and UG drilling from ice on Lac De Montigny in 1936. Drifting at 750 ft level (1937).	Drilling unsuccessful in locating K Zone extension under Lac De Montigny. Overburden penetrated to 202 ft (61.6 m) without confirmed bedrock.
1938		Operations suspended.	Mine flooded.
1946		Property optioned. Dewatering UG workings. UG Geological survey and re-sampling.	Option later lapsed. UG workings flooded again.
1957	Sullivan Consolidated Mines Ltd.	Property optioned. EM survey. Surface DDH.	Drilling from the ice south of the main UG workings.
1986	Maufort Resources Inc.	Acquired property from Extension Holdings Inc. 12 DDH 10,400 ft (3,169 m)	UG workings dewatered in 1987.
1987		56 DDH 81,361 ft (24,798.8 m). IP, Mag, and seismic surveys.	
1993	Dynacor Mines Inc. / Wesdome Gold Mines Ltd.	Maufort corporate name change to Dynacor Mines Inc.	Ownership consolidated under Wesdome.
1999		As part of Reorganization Agreement, Dynacor transferred 75% interest in Siscoe-Extension to Wesdome (Nov 9, 1999).	

6.2.9 Thomson-Tarmac Area

The following description of historical work in the Thomson-Tarmac Area is modified and summarized from Berthelot (2025).

Table 6.15 summarizes the historical work carried out in the Thomson-Tarmac area.

Table 6.15 Historical work in the Thomson-Tarmac area

Year	Company	Work description	Highlights / Significant results
1937	Siscoe Gold Mines Ltd. / Claims House	Drilling.	6 plans (4 surface with DDH locations and assays, 1 DDH location, 1 geology, and DDH locations) 2 DDH log
		Drilling and UG workings.	1 plan of diamond drilling and UG workings
1938	Paradis Mining Corp.	Regional survey.	Regional geological plan with location of mining property
1943	Camp Bird Mines Ltd.	Drilling. Geology.	Geological maps with DDH locations
1951	MRN	Technical evaluation.	Notes on mining and exploration in 1951 in the Val D'Or district
1952	Siscoe Gold Mines Ltd. / West Siscoe Mines Ltd.	45 DDH (T-1 to T-29, T-31 to T-39). UG works.	Callahan-Harvey group of claims (on De Montigny Lake, west of the southern part of Siscoe Island)
1963	Dumagami Mines Ltd. / Claims Dumas	8 DDH (M-8 to M-15).	Drill logs
1969	Claims Callahan/Claims Paquette/Croinor Pershing Mines Ltd.	24 DDH (C-1 to C-24).	
1980	Mines Sigma, Quebec, Ltee.	6 DDH (134-1 to 134-6).	Drill logs
1981	Amenagement Merite Canada Inc./Canzona Minerals Inc.	19 DDH (SL-1 to SL-19).	15 DDH drilled on EM conductors on the island and 4 DDH along the assumed "K" Zone EM conductor
1982	Claims Charlebois	Technical report.	vers two separate claim blocks in Dubuisson township (Block 1 and 3)
1984	Ressources Maufort Inc.	2 DDH (84-10 and 84-30).	Drill logs
1985		44 DDH (84 to -84-9, 84-11 to 84-29, 84-31, 85-1, 85-3 to 85-15).	Drill logs
1986	Ressources BP Canada Ltee. / Selco Inc.	Tarmac claims. VLF, magnetic (66.8 line-km), and I.P (19.8 line-km) surveys. 11 DDH (TM-1 to TM-7A, TM-9 to TM-11 - 1,435 m).	Drilling tested mag and I.P. geophysical anomalies and the traced out the Thompson Granodiorite.
1987		Tarmac claims. Seismic survey (2,386 m). 19 DDH (TM-8, TM-12 to TM-30 – 4,197 m).	Determined the thickness and nature of the OVB, silty clay.

Year	Company	Work description	Highlights / Significant results
1989	Ressources Maufort Inc.	6 DDH (407-01 to 407-06 -1,717 m).	Verify the presence of a known shear zone on the Wesdome property and the depth and eastern extension of the “Thompson Diorite” gold zone.
1994	Geoconseils Jack Stoch Ltd.	Tarmac Zone. 1 DDH (G-94-01 – 638 m). 16 DDH (G-01, G-01W1-01W2, G-02, G-02W1-G-02W2, G-94-07 to G-94-17 – 6,141 m).	Mincruisers tested the Thompson zone at depth as well as the volcanics located to the north. The gold intersections were grouped under the name “Tarmac Zone.”
1997-2000	Consolidated Beaufield Inc. / Corporation Minière du Nord Abitibi	Siscoe property. Airborne MAG-EM survey (156 line-km). 3 DDH (BS 99-01, 02 and 04 - 683.6 m).	Drilling was to test certain geophysical contexts obtained during the airborne geophysical survey.
2001	Golden Valley Mines Ltee.	Valuation report – Marymac and the Abitibi property.	10 gold properties in Abitbi were evaluated.

6.3 Previous Studies on the Kiena Mine Complex Property

The following table presents the previous studies completed on the property (Table 6.16).

The previous studies referenced in this table are for information purposes only. The 2025 MRE described in Item 14 of this report is the onlyure current mineral resource estimate for the Kiena Mine Complex Property.

Table 6.16 Summary of the Historical Resource Estimates for the Kiena Mine Complex Property

Year	Company	Work
2005	Wesdome Gold mines Inc.	MRE technical report of the Wesdome Group of Properties (Kiena Mine, Shawkey No. 22 Structure and Wesdome “A” Zone) Dubuisson Township, Quebec, Canada (Beauregard et Gaudreault, 2005)
2009	Wesdome Gold mines Inc.	MRE technical report for the Wesdome Project (Zone “A” to “F” area) Dubuisson and Vassan Townships, Quebec, Canada (Turcotte and Pelletier, 2009)
2015	Wesdome Gold mines Inc.	Technical report for the Quebec Wesdome Project, Dubuisson and Vassan Townships, Quebec, Canada (Turcotte et al., 2015)
2019	Wesdome Gold mines Inc.	MRE technical report for the for the Kiena Mine Complex (Kiena Area and for the Other Zones), Quebec, Canada (Beausoleil et al., 2019)
2019	Wesdome Gold mines Inc.	Updated MRE technical report for the Kiena Mine Complex Project (Kiena Area and for the Other Zones), Val-D’Or, Quebec, Canada (Richard and Torrealba, 2019)
2020	Wesdome Gold mines Inc.	Updated MRE technical report for the Kiena Mine Complex project (whole Kiena Mine Complex project), Val-D’Or, Quebec, Canada (Athurion et al., 2020)
2020	Wesdome Gold mines Inc.	Preliminary economic assessment (PEA) technical report for the Kiena Mine Complex project (Corkal et al., 2020)
2021	Wesdome Gold mines Inc.	Updated MRE technical report for the Kiena Mine Complex project, Val-D’Or, Quebec, Canada (Athurion et al., 2021)
2021	Wesdome Gold mines Inc.	Prefeasibility study (PFS) technical report for the Kiena Mine Complex project, Val-D’Or, Quebec, Canada (Athurion et al., 2021)

7. GEOLOGICAL SETTING AND MINERALIZATION

7.1 Regional Geology

7.1.1 Abitibi Greenstone Belt

The Kiena Mine Complex area is located in northwestern Quebec (Figure 7.1), straddling the southern part of the Abitibi Greenstone Belt (AGB) and the northern part of the Pontiac Subprovince.

The regional geological setting described below is mostly modified and summarized from reviews of the geology and ore deposits of the Abitibi Greenstone Belt including Ayer et al. (2002a), Robert et al. (2005), Thurston et al. (2008), Monecke et al. (2017), Poulsen (2017), De Souza et al. (2020), Dubé and Mercier-Langevin (2020), and references therein.

The Abitibi Greenstone Belt (AGB) forms part of the Archean Superior Province and consists of Neoarchean supracrustal rocks intruded by mafic to felsic intrusive bodies. The belt extends approximately 515 km east–west and 300 km north–south across Québec and Ontario (Figure 7.1) (Ayer et al., 2002a; Thurston et al., 2008; Monecke et al., 2017; Dubé and Mercier-Langevin, 2020). Supracrustal rocks were deposited over a period of ca. 125 million years, between ca. 2795 Ma and 2670 Ma, and the intrusions cover a slightly longer time span with the youngest batholiths dated at ca. 2640 Ma (Thurston et al., 2008; Monecke et al., 2017, and references therein) (Figure 7.1). The belt is bounded to the north by high-grade granitic and gneissic rocks of the Opatica Subprovince, to the southeast by metasedimentary rocks of the Pontiac Subprovince, to the west by the Kapuskasing Structural Zone, and to the east by the Grenville Province. In its southern portion, the belt is locally unconformably overlain by Paleoproterozoic sedimentary rocks of the Huronian Supergroup (Robert et al., 2005; Dubé and Mercier-Langevin, 2020).

The AGB is segmented by major east-trending ductile-brittle fault zones. The two most important fault zones in the southern Abitibi Greenstone Belt are the Destor–Porcupine Fault Zone (DPFZ) in the north and the Larder Lake–Cadillac Fault Zone (LLCFZ) in the south, which are subvertical (70°–90°), and dip either to the north or south. They have highly variable widths, ranging from tens to hundreds of meters and are generally marked by intense ductile-brittle deformation and penetrative fabric development (Robert, 1989; Robert et al., 2005; Bateman et al., 2008; Poulsen, 2017; De Souza et al., 2020; Dubé and Mercier-Langevin., 2020).

Volcanic successions within the AGB have been subdivided into formally defined assemblages based on lithological, geochemical, and geochronological characteristics (Daigneault et al., 1990, 2002; Thurston et al., 2008; Monecke et al., 2017). A modified chronostratigraphic framework (Ayer et al., 2002; Thurston et al., 2008; Monecke et al., 2017) groups coeval volcanic and sedimentary rocks and allows belt-scale correlation of stratigraphic units (Figure 7.1). Seven submarine volcanic assemblages are recognized that range in age from ca. 2795 Ma to 2695 Ma. These assemblages consist predominantly of tholeiitic basalt, with subordinate komatiite and locally coeval calc-alkaline intermediate to felsic volcanic rocks (Ayer et al., 2002a; Thurston et al., 2008; Monecke et al., 2017; Dubé and Mercier-Langevin., 2020). These assemblages are referred to, from oldest to youngest (Figure 7.1 to Figure 7.3):

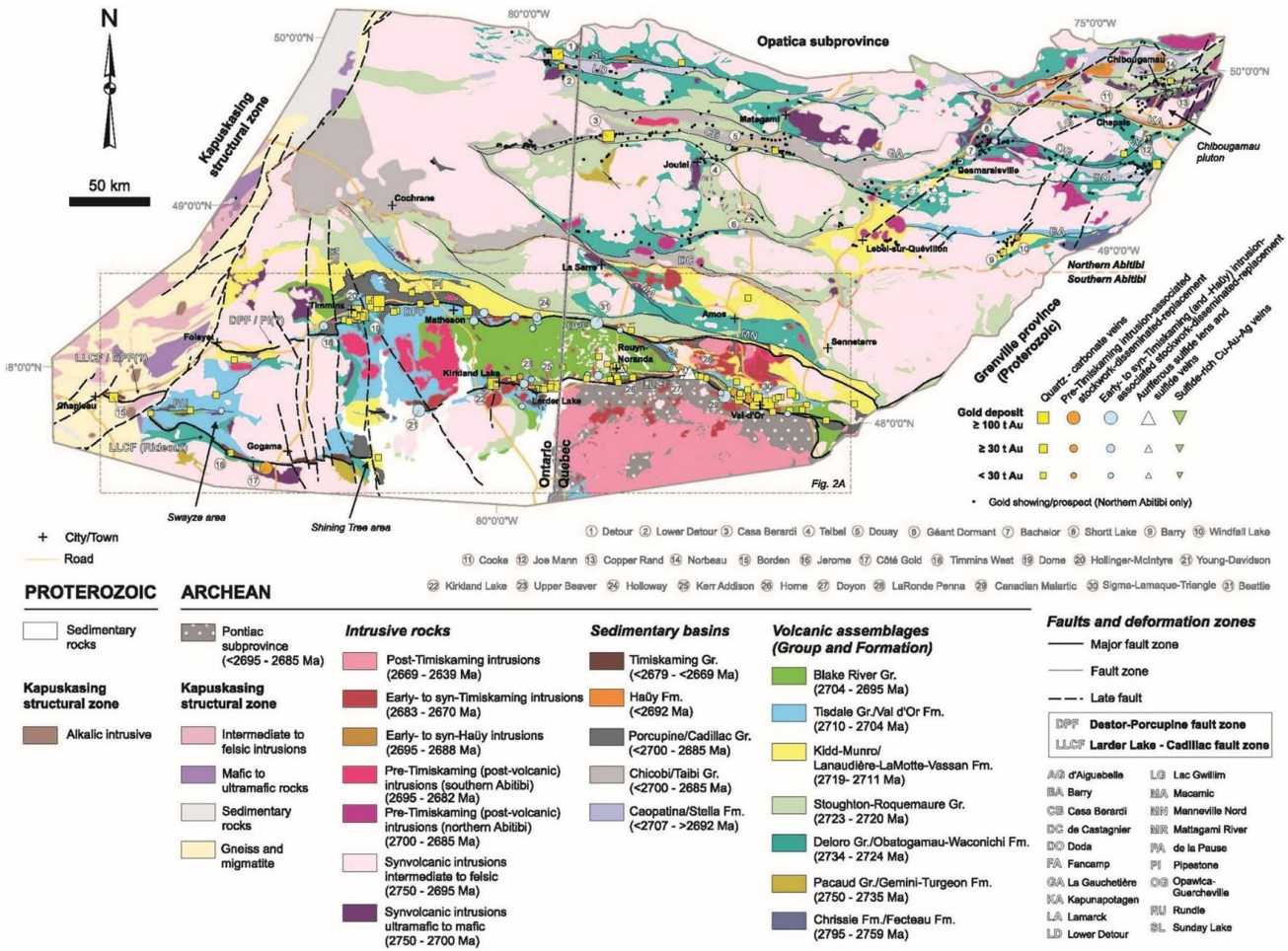
- Chrissie–Fecteau (2795–2759 Ma)
- Pacaud–Gemini-Turgeon (2750–2735 Ma)
- Deloro–Obatogamau–Waconichi (2734–2724 Ma)
- Stoughton–Roquemaure (2723–2720 Ma)
- Kidd–Munro–Lanaudière–La Motte–Vassan (2719–2711 Ma)
- Tisdale–Val-d'Or (2710–2704 Ma)
- Blake River (2704–2695 Ma) assemblages

In the AGB, volcanic assemblages are disconformably or conformably overlain by two successor sedimentary basin types: early, laterally extensive Porcupine-style basins composed of fine-grained deep-marine turbidites (graywacke, siltstone, and mudstone with minor conglomerate and iron formation), followed by Timiskaming-style basins consisting predominantly of coarse fluvial to alluvial polymictic conglomerate and sandstone with minor alkalic to shoshonitic volcanic rocks. These basins form approximately 4–10 km wide, east-trending synclinal belts and are commonly spatially associated with major fault systems, including the Porcupine-Destor Fault Zone and the Larder Lake–Cadillac Fault Zone (Figure 7.1 to Figure 7.3) (Thurston and Chivers, 1990; Mueller et al., 1991, Mueller and Donaldson, 1992, Daigneault et al., 2002; Ayer et al., 2002a; Goutier and Melançon, 2007; Dubé and Mercier-Langevin, 2020).

Intrusive rocks within the AGB range in age from ca. 2750 Ma to 2640 Ma and include synvolcanic tonalite–trondhjemite–granodiorite (TTG) suites, mafic to ultramafic intrusions, syn- to late-tectonic calc-alkaline to alkaline intrusions, and younger post-tectonic granitic batholiths (Feng and Kerrich, 1991; Powell et al., 1995; Monecke et al., 2017; Dubé and Mercier-Langevin, 2020). These intrusions are widespread and form an integral component of the crustal evolution of the belt (Figure 7.1 to Figure 7.3).

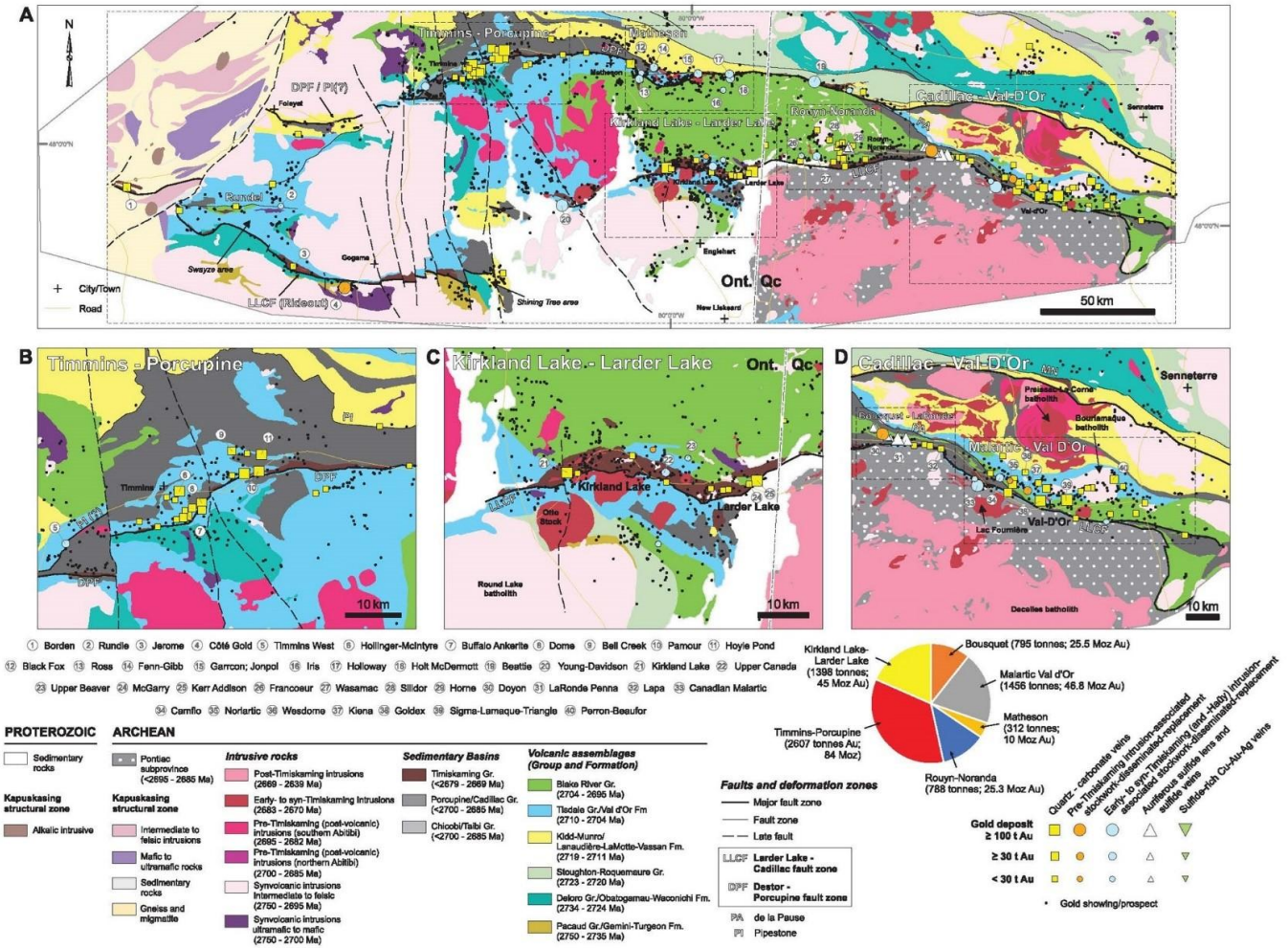
The current architecture of the AGB reflects multiple phases of deformation and metamorphism.

Early deformation events (D_1–D_2) predate deposition of the Timiskaming Group and are locally preserved, whereas the main regional deformation event (D_3) is characterized by east–west-trending folds, penetrative foliation, and the development of major crustal-scale fault zones during north–south shortening. Early deformation events (D_1–D_2) predate deposition of the Timiskaming Group and are locally preserved, whereas the main regional deformation event (D_3) is characterized by east–west-trending folds, penetrative foliation, and the development of major crustal-scale fault zones during north–south shortening (Figure 7.1 to Figure 7.3) (Dimroth et al., 1983; Hodgson and Hamilton, 1989; Robert, 1989; Wilkinson et al., 1999; Daigneault et al., 2002; Robert et al., 2005; Bleeker, 2015; Monecke et al., 2017; Poulsen, 2017; Bedeaux et al., 2018). Metamorphic grade in the AGB ranges from prehnite–pumpellyite to lower amphibolite facies, with greenschist facies predominating throughout most of the belt (Figure 7.3) (Powell et al., 1995).



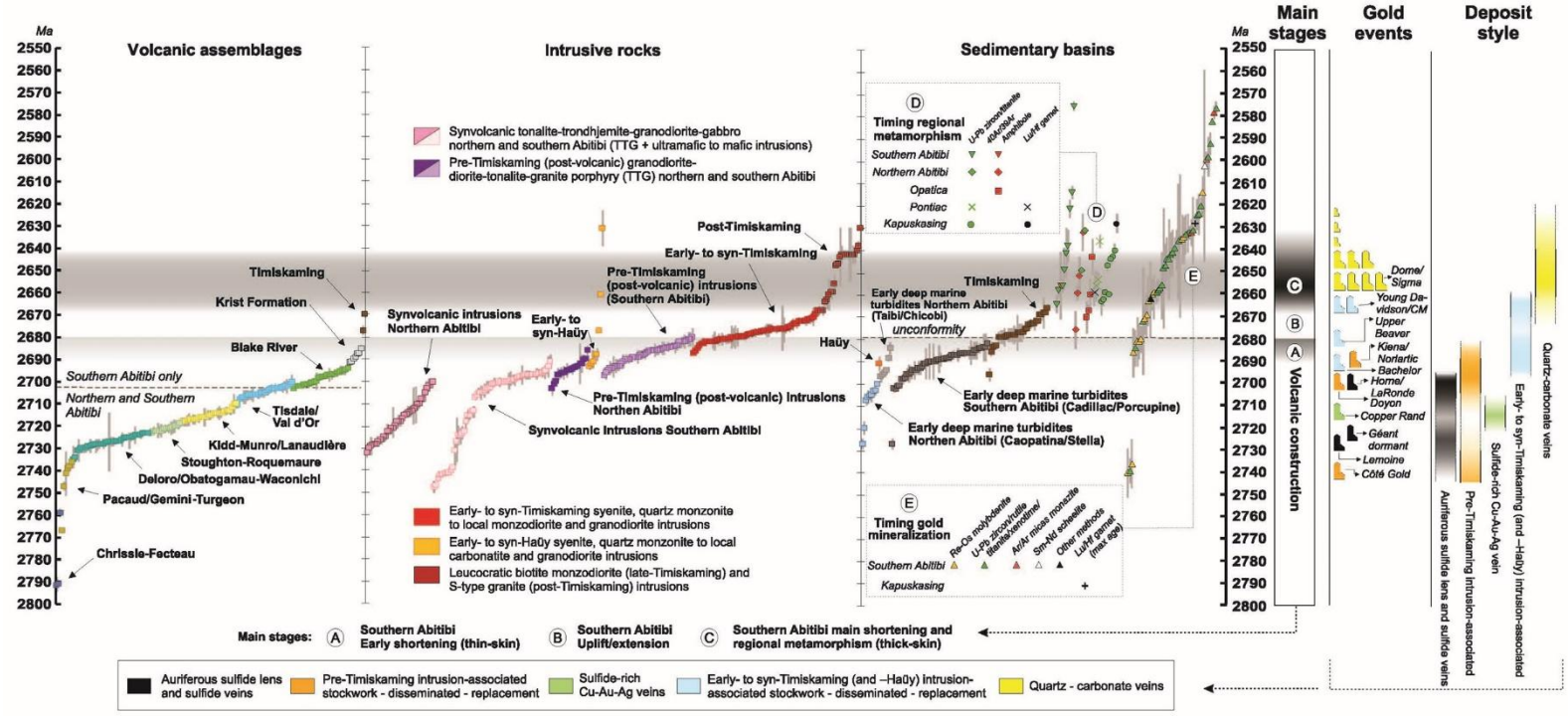
Source: Dubé and Mercier-Langevin, 2020); based on Ayer and Chartrand (2011), Stott et al. (2010), and SIGÉOM (2019), and modified from Thurston et al. (2008) and Monecke et al. (2017)

Figure 7.1 Geological map of the Abitibi greenstone belt with the gold deposits and principal showings



Source: from Dubé and Mercier-Langevin, 2020). Based on Ayer and Chartrand (2011), Stott et al. (2010), and SIGÉOM (2019), and modified from Thurston et al. (2008) and Monecke et al. (2017)

Figure 7.2 A. Geological map of the southern Abitibi gold belt. B. Close-up map of the Timmins-Porcupine district along the Destor-Porcupine fault (DPF) zone. C. Close-up map of the Kirkland Lake-Larder Lake district along the Larder Lake-Cadillac fault (LLCF) zone. D. Close-up map of the Cadillac-Val-d'Or districts along the Larder Lake-Cadillac fault



Source: from Dubé and Mercier-Langevin, 2020

Figure 7.3 Compilation of geochronological data in relationships with the main deformation events, metamorphism, and styles of gold mineralization. Square symbol for sedimentary rocks represents the maximum U-Pb age of sedimentation, as constrained by the youngest detrital zircon in each sample. Vertical lines represent the ± error. Abbreviation: CM = Canadian Malartic

7.1.2 Pontiac Subprovince

The following description of the Pontiac Subprovince was modified from Athurion et al. (2021), and references therein.

The Pontiac Subprovince (Figure 7.1 and Figure 7.2) is subdivided into three domains: (1) a northern domain consists of the Pontiac Group is composed of flysch-like sedimentary rocks and ultramafic to mafic volcanic flows; (2) a central complex of S-type granitoid, pegmatite, and migmatitic paragneiss rocks associated with the Decelles batholith that were derived from the partial melting of the sedimentary rocks; and (3) a southern domain of lower metamorphic grade volcanic and sedimentary rocks that correspond to the Belleterre-Angliers greenstone belt (not shown in Figure 7.1; Mortensen and Card, 1993).

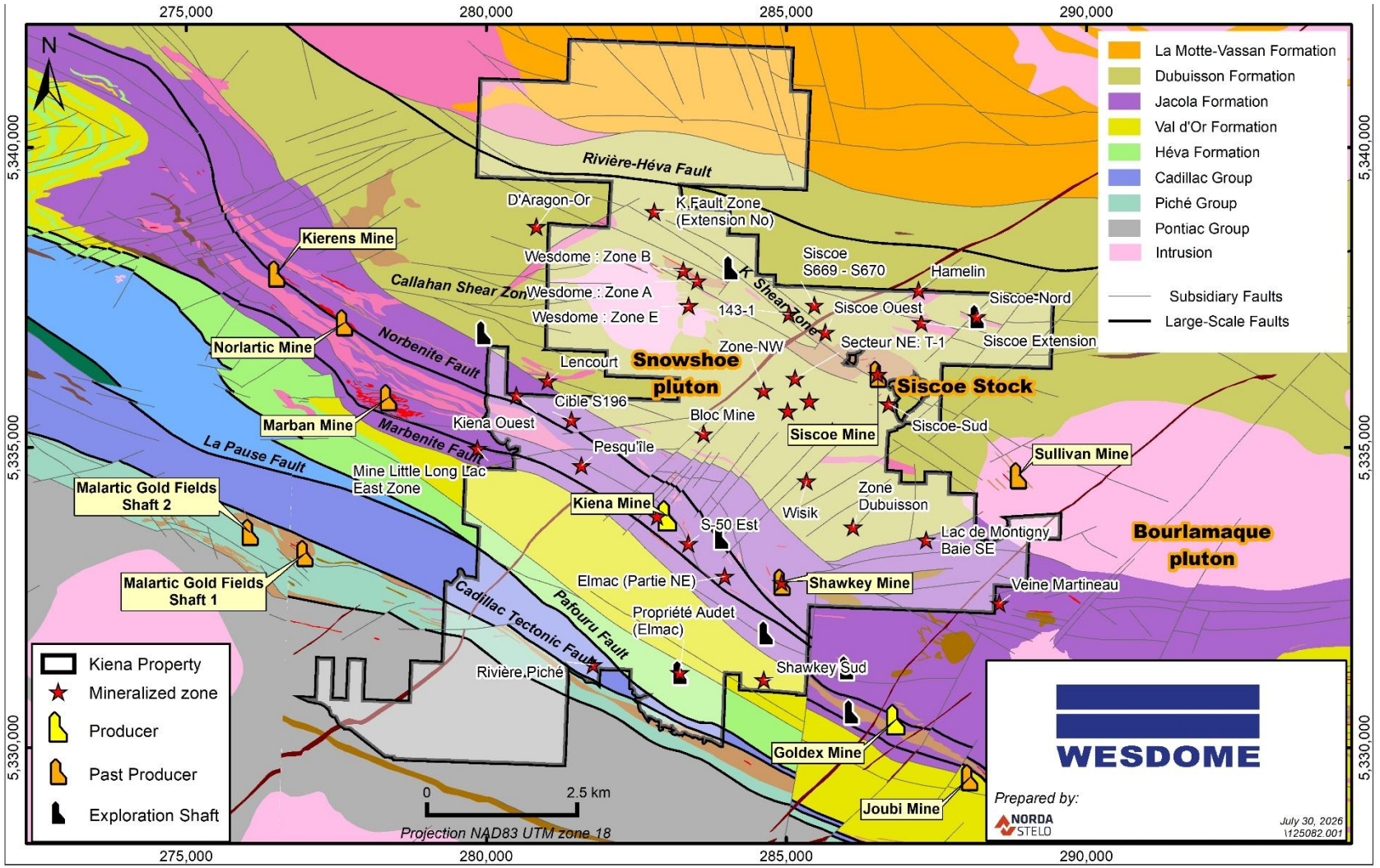
In the northern domain, the Pontiac Subprovince is primarily composed of monotonous successions of graywacke and mudstone, with minor intercalated conglomerate (Wilson, 1962; Rocheleau, 1980; Dimroth et al., 1982; Lajoie and Ludden, 1984). These sedimentary rocks are crosscut by younger intrusive rocks (Jemielita et al., 1990; Rive et al., 1990; Machado et al., 1991b; Mortensen and Card, 1993; Davis, 2002; De Souza et al., 2017). Detrital zircon populations indicate a depositional age of ≤2685 Ma for the sedimentary rocks in the Pontiac Subprovince (Mortensen and Card, 1993; Davis, 2002; De Souza et al., 2017). Structural studies along the Abitibi-Pontiac contact indicate that the AGB was thrust over the northern Pontiac Subprovince (Camiré and Burg, 1993; Benn et al., 1994; Daigneault et al., 2002; Bedeaux et al., 2017).

7.2 Geology of the Kiena Mine Complex Area

The Kiena Complex area of the southern AGB consists of volcano-plutonic assemblages, including the Malartic and Louvicourt groups, that are intruded by calc- alkaline plutonic rocks (Figure 7.4). The Malartic Group consists of the following formations, from oldest to youngest: the Lamotte–Vassan, Dubuisson, and Jacola formations (Figure 7.4). This group is mostly composed of komatiitic and basaltic to andesitic flows (Pilote et al. 2000, 2015) and became progressively more differentiated over time (Pilote et al. 1999). The Malartic Group corresponds to a deep ocean-floor volcanic environment (Dimroth et al. 1982; Scott et al. 2002) that formed between 2704 and 2714 Ma (Pilote et al. 1999). The Louvicourt Group conformably overlies the Malartic Group and represents a transition toward a volcanic arc environment (Scott et al. 2002). Its lower part, such as the Val-d'Or Formation, is synchronous with the Jacola Formation (ca. 2704 Ma; Pilote et al. 1999). The Val-d'Or Formation consists of andesitic, dacitic, and rhyolitic flows as well.

From south to north, the Kiena Complex area is underlain by the lithologies of the Pontiac Group (PO), the Piché Group (PG), the Cadillac Group (CG), and formations belonging to the Louvicourt Group and the Malartic Group.

The following description of the Kiena Complex area geology is mostly modified and summarized from Champagne et al. (2002), Champagne (2004), Scott et al. (2002), Olivo and Williams-Jones, (2002), Scott (2005), Pilote et al. (1998a, 1998b, 1999, 2014a, 2014b, 2015a, 2015b, 2015c), Pilote (2015a, 2015b), Monecke et al., 2017, and references therein.



Source: modified after Pilote (2013, 2015a, 2015b)

Figure 7.4 Kiena Mine Complex property geology with historical and active mines and mineralized zones

7.2.1 Stratigraphy

The E-trending successions of folded and faulted volcanic rocks of the AGB were subdivided into formally named rock units. Stratigraphic criteria were successfully applied in mapping individual mining camps in the AGB. However, regional stratigraphic correlation across and between mining camps is hampered by the common structural nature of boundaries separating higher ranking lithostratigraphic units. Additionally, the glacial cover is extensive in some areas, which further complicates stratigraphic correlation.

The AGB in the Val-d'Or–Malartic region is divided into two stratigraphic groups based on the regional tectonic framework and volcano-sedimentary stratigraphy: the basal Malartic Group comprising the La Motte-Vassan (LVF), Dubuisson (DF) and Jacola Formations (JF), and the upper Louvicourt Group comprising the Val-d'Or (VDF) and Héva Formations (HF) (Figure 7.4 and Figure 7.5).

7.2.1.1 Pontiac Group (PO)

To the south of Kiena Mine Complex area, the LLCFZ consists of a complex first-order structure that marks the contact between the Pontiac subprovince to the south and the Abitibi subprovince to the north (Card, 1990). The Pontiac Group (PO) (Figure 7.4 and Figure 7.5), that is located only in the Pontiac Subprovince, covers the sector to the south of the LLCFZ. The PO consists of turbiditic units (mostly greywacke and siltstone) with rare monomict conglomerate intercalations intruded by thin ultramafic units (Goulet, 1978; Dimroth et al., 1982; Ludden and Hubert, 1986). It is interpreted as an accretionary prism formed by the subduction of the Pontiac Subprovince under the Abitibi Subprovince (Camiré and Burg, 1993; Card, 1990; Davis, 2002). It is contemporaneous with the Cadillac Group with a maximum age between 2682 Ma and 2685 Ma (Mortensen and Card, 1993; Davis, 2002). The sedimentary strata of the Pontiac and Cadillac groups are interpreted as synorogenic flysch-type assemblages (Mueller et al., 1996; Daigneault et al., 2002), whereas Dimroth et al. (1982) considered the Pontiac Group to have been deposited in a foreland belt.

The metamorphic grade increases rapidly southward in the Pontiac Group (Imreh, 1976; Card, 1990; Camiré and Burg, 1993; Benn et al., 1994), from the biotite-chlorite zone along the southern contact of the LLCFZ, to garnet and staurolite zones within about 2 km to the south (Sansfaçon and Hubert, 1990; Fallara et al., 2005; Grant et al., 2005; Piette-Lauzière et al., 2014).

7.2.1.2 Piché Group (PG)

The CLLFZ contains a thin (<1.5 km thick) and discontinuous band of volcanic rocks known as the Piché Group (Figure 7.4) that is composed of talc schist derived from altered ultramafic volcanic rocks (Latulippe 1976; Landry 1991; Simard et al. 2013). These rocks are sometimes considered as the physical expression of the LLCFZ (Dimroth et al., 1982). The Piché Group was first identified in the Malartic–Val-d'Or region as a narrow band of volcanic rocks overlaying the volcanic basement. Except for local studies (Latulippe 1976; Landry 1991; Simard et al. 2013), the overall Piché Group geometry and lithology remain poorly documented. It remains unclear whether this group represents a single coherent unit or an assemblage of slivers of various origins and ages.

This knowledge gap limits the understanding of the evolution of the LLCFZ (Bedeaux et al., 2018).

The PG comprises moderately to highly strained ultramafic and mafic volcanic rocks, ferrodiorite, and gabbro-diorite (Dimroth et al., 1983; Bedeaux et al., 2017; Poulsen, 2017). It is cut by a 2708.8 ± 1.0 Ma tonalitic intrusion (David et al., 2018) and is inferred to represent slivers of Malartic Group rocks (Dimroth et al., 1983; Pilote et al., 2015a).

In the Kiena Mine Complex area, the PG is an east-striking subvertical panel (80° dip to the north). It is composed of >50% ultramafic rocks (Bedeaux et al., 2018) that appear as talc-carbonate rocks with well-defined foliation in which small gabbro bodies are observed. The remaining <50% of the PG comprises intermediate volcanic rocks including massive and pillowed flows, as well as lapilli and tuffaceous volcaniclastic rocks (Bedeaux et al., 2018). This segment also contains minor boudinaged basaltic flows, and diorite dykes.

Numerous gold deposits are spatially associated with the ultramafic rocks and Fe−tholeitic mafic volcanic rocks of the PG, including the world-class Lapa deposit (Simard et al., 2013, Mercier-Langevin et al. 2017), and a portion of the Canadian Malartic gold mine (De Souza et al., 2017, 2019, and 2020).

7.2.1.3 Cadillac Group (CG)

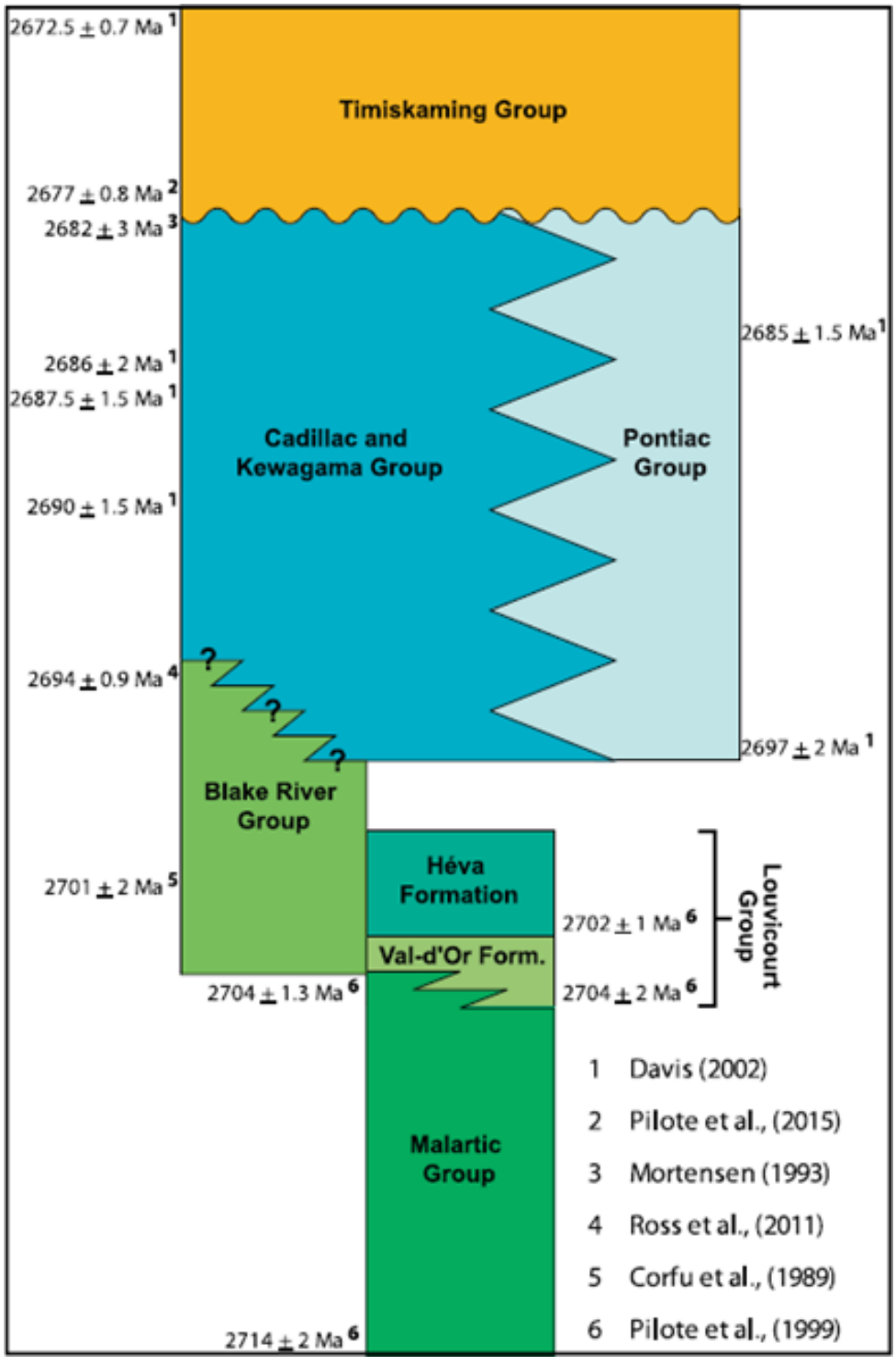
The Cadillac Group (CG) (Figure 7.4 and Figure 7.5) crops out extensively immediately to the north of the LLCFZ, stretching from Rouyn Noranda in the west (Rocheleau, 1980; Dimroth et al., 1982) to Val-d'Or (Figure 7.5) in the east (Pilote, 2015a). The CG (≤2687 Ma; Davis, 2002) consists of sedimentary rocks including greywacke, pelitic schist, polymictic conglomerate, and iron formation (Trudel et al., 1992). Daigneault et al. (2002) proposed that the sedimentary rocks of the Cadillac Group represent an extensive volcano-sedimentary apron sequence that straddles the LLCFZ.

The CG was deposited in a 150-km-long and 5-km-wide flysch-type sedimentary basin along the LLCFZ to the north that rested unconformably over volcanic assemblages (Mueller and Donaldson, 1992). The group is interpreted to be a lateral equivalent of the Porcupine Group in Ontario (Ayer et al., 2002b; Thurston et al., 2008).

The sedimentary unit narrows down to a few hundred metres thickness southeast of the Kiena Mine Complex (Figure 7.4). It is composed mostly of turbiditic sedimentary rocks with localized interlayering of polymictic conglomerate. The CG is identified based on its distinctive banded iron formation (Dimroth et al., 1982). Deposition age of the sedimentary rocks is estimated at 2687 Ma ±3 (Davis, 2002).

7.2.1.4 Louvicourt Group (LG)

An east-trending belt of volcanic rocks, that belongs to the Blake River assemblage (2704-2695 Ma; Figure 7.1 to Figure 7.3) crops out farther to the east between Cadillac and Val-d'Or (Jenkins et al., 1989; Taner and Trudel, 1991; Olivo et al., 2006, 2007; Pilote, 2013, 2015a). Originally, these volcanic rocks were assigned to the Malartic Group (Gunning and Ambrose, 1940). Latulippe (1976) assigned these rocks to the Upper Malartic Group. Scott et al. (2002) reassigend both formations to the Louvicourt Group (LG) (Figure 7.5), which was further divided into the Val-d'Or (VDF) and Héva (HF) formations.



Source: Figure from Bedeaux et al. (2018). Stratigraphic relationships are based on Dimroth et al. (1982), Tourigny et al. (1988), Mueller et al. (1996), and Scott et al. (2002).

Figure 7.5 Stratigraphic chart of the Kiena Mine Complex area with the relevant isotopic ages

Héva Formation (HF)

The Héva Formation (HF) can be as thick as 2.5 km and is composed of laterally extensive massive to pillowed basalt flows, gabbroic sills and dykes, and minor felsic to mafic volcaniclastic deposits (Scott et al., 2002). Volcaniclastic units are characterized by coarse or fine tuff horizons with millimetre-scale laminations and are intruded by gabbro. The volcanic rocks of the HF have a U-Pb age of 2702 ±2 Ma (Scott et al., 2002).

Val-d'Or Formation (VDF)

The Val-d'Or Formation (VDF) has a stratigraphic thickness of 3 km to 5 km and is dominated by massive pillowed andesitic to rhyolitic flows and associated volcaniclastic deposits. Diorite intrusions represent a minor component. Andesite forms up to 1-km-thick and 9-km-long amalgamed flow units. Individual flows vary up to 80 m thickness. The flows are intercalated with 5-40-m-thick amalgamated volcaniclastic beds. The pillows exhibit a variety of forms, from strongly amoeboid to lobed. Felsic flows are laterally more restricted but can be traced for 1 km to 3 km. Volcaniclastic units reach up to 40 m in thickness and are composed of lapilli tuff, lapilli and block tuff, and, to a lesser extent, fine to coarse tuff. The VDF yielded a U-Pb age of 2704 ±2 Ma (Scott et al., 2002).

7.2.1.5 Malartic Group (MG)

Volcanic rocks of the Tisdale assemblage (2710-2704 Ma; Figure 7.1 to Figure 7.3) crop out extensively to the north of the LLCFZ between Cadillac and Val-d'Or (Jenkins et al., 1989; Taner and Trudel, 1991; Olivo et al., 2006, 2007; Pilote, 2013, 2015a). The volcanic rocks in this area belong to the Dubuisson and Jacola formations. As originally proposed by Gunning and Ambrose (1940), both formations are part of the Malartic Group (MG) (Figure 7.5). Latulippe (1976) revised the stratigraphic nomenclature and distinguished a Lower and Upper MG. According to this stratigraphic nomenclature, the Dubuisson Formation forms the upper part of the Lower MG, whereas the Jacola Formation represents the lower part of the Upper MG. Based on a subsequent revision of the stratigraphic nomenclature by Scott et al. (2002), the MG today encompasses the La Motte-Vassan, Dubuisson, and Jacola formations.

Jacola Formation (JF)

The Jacola Formation (JF) has an apparent stratigraphic thickness of 1 km to 2 km and consists of basalt and komatiite. Basaltic flows are typically non-vesicular, ranging from massive to pillowed, and sometimes occur as flow breccia. Mafic volcaniclastic deposits, that are primarily formed by quench fragmentation, are locally abundant. Individual basalt flows can be traced for up to 5 km distance along strike. Individual komatiite units reach 100 to 200 m in thickness and range from massive to pillowed. Locally, spinifex-textured komatiite flows are observed. The top of the JF was dated at 2703.8 ±1.3 Ma (U-Pb age; Scott et al., 2002).

The main mineralized zones at the Kiena Mine Complex, including the Kiena Deep, Deep A and S50 zones, are hosted in the Jacola Formation.

Dubuisson Formation (DF)

The Dubuisson Formation (DF) (2708 ±2 Ma) consists mainly of pillowed and massive basalt with various interbedded komatiitic flows (Imreh, 1980; Pilote et al., 1999). Ultramafic and mafic flows are similar to those described in the LVF but occur in different proportions. The DF belongs to the Tisdale assemblage.

La Motte-Vassan Formation (LVF)

Ultramafic and mafic volcanic rocks of the Kidd-Munro assemblage (2720-2710 Ma) (Figure 7.1 to Figure 7.3) also crop out extensively surrounding the La Motte, La Corne, and Preissac batholiths. In the Kiena Mine Complex area, they were assigned to the La Motte-Vassan Formation, which forms the basal portion of the MG as it was originally defined by Gunning and Ambrose (1940). Komatiite occurs as sheet and tube-shaped flows that are intercalated with pillowed or massive basalt flows (Latulippe, 1976; Imreh, 1984; Pilote et al., 2009). Komatiite is more abundant than basalt (Imreh, 1980). A well-exposed example of spinifex-textured komatiite flows of the Kidd-Munro assemblage is located at Spinifex Ridge north of Rivière-Héva (Champagne et al., 2002; Champagne, 2004; Houlé et al., 2017). The komatiite succession at Spinifex Ridge is interpreted to be age-equivalent to the 2714 ±2 Ma komatiite succession of the La Motte-Vassan Formation at the Marbridge Ni deposit that is located to the southwest (Pilote et al., 2009; Houlé et al., 2017). The age of the LVF (2714 ±2 Ma) suggests that it may be contemporaneous with the upper part of the Kidd-Munro assemblage (Figure 7.1 to Figure 7.3). The LVF consists of komatiite, as well as tholeiitic and magnesian basalt metamorphosed to amphibolite facies. The base of the sequence is mostly represented by komatiite with some minor intercalated basalt. However, a decrease in the proportion of komatiite is observed towards the top of the sequence (Imreh, 1984). Komatiite units are mainly found as two morphofacies: classic sheet flows with spinifex textures or tube-shaped flows, or mega-pillows. The basalt flows are usually massive or pillowed (Imreh 1980).

7.2.2 Intrusive Rocks

Pre-2695 Ma mafic to ultramafic intrusions are found throughout the southern AGB. Many of these intrusions form sills or lenticular units that crosscut stratigraphy at a low angle. The intrusions range from peridotite to gabbro and diorite in composition. In the Kiena Mine Complex area, the pre-2695 Ma Bourlamaque batholith (2699 ±1 Ma; Wong et al., 1991) is a good example of synvolcanic intrusive rocks.

Many of the intrusions hosted within the AGB were emplaced between 2695 Ma and 2660 Ma broadly concurrently with the deposition of the Porcupine and Timiskaming successor basin sedimentary rocks. These syn-sedimentary intrusions range in composition from granodioritic to granitic and from dioritic to quartz monzodiorite (Monecke et al., 2017).

In the Kiena Mine Complex area, 2695–2685 Ma intrusions were emplaced immediately prior to the deposition of the Timiskaming assemblage. A number of small granodiorite, tonalite and monzonite bodies range in age 2694 to 2685 Ma, including the Camflo stock (Jemielita et al, 1990), Kiena porphyry dykes (Morasse et al., 1995), Lamaque stock (Jemielita et al., 1989), Norlartic dykes (Pilote et al., 1993), Sigma-Lamaque feldspar porphyry dykes (Wong et al., 1991), and Snowshoe stock (Morasse et al., 1995).

Another set of intrusions were emplaced between 2679 and 2660 Ma during and immediately after the deposition of the Timiskaming assemblage (Monecke et al., 2017). Several small monzonite intrusions from the Malartic area yielded U-Pb zircon and titanite ages of ~2678 Ma (De Souza et al., 2017).

Granitic or granodioritic intrusions younger than 2660 Ma are rare in the southern AGB and typically found in large, polyphase batholithic complexes (Monecke et al., 2017; Beakhouse, 2011). The La Corne batholith is a good example and represents a large intrusion post-2660 Ma (Feng and Kerrich, 1991; Powell et al., 1995; Ducharme et al., 1997).

The youngest igneous activity in the Kiena Complex area corresponds to the emplacement of Proterozoic diabase dykes that cut across the Superior Province along a NE trend.

7.2.3 Structural Elements from Kiena Complex

Although the structural geology of individual mining camps is well established, there is no widely agreed model for the structural evolution and generation of structures in the southern Abitibi Greenstone Belt (Monecke et al., 2017). This is in part due to the highly variable quality of exposures, strain heterogeneity, the lack of temporal constraints and, most importantly, variable preservation of early structures in the different mining camps. Actually, the structural and tectonic evolution of the southern AGB is not yet widely accepted.

Pilote et al. (2015b) established the nomenclature for the various structural elements in the Kiena Mine Complex area, as described below.

The oldest regional schistosity is S1. It is systematically subparallel to bedding (S0). Within the formations of the Malartic Group, the overall S1 trend is NW-SE. Both S0 and S1 fabrics are coplanar and show a moderate to steep dip to the north. S1 contains the primary stretching lineation L1. In the southern and central parts of the Property, S0 and S1 are jointly folded by Z-folds, with an average axial plane of N095°/85° and generally E-W-trending axial planar cleavage (S2). The F1 and F2 fold axes are parallel to the plunges of the L1 stretching lineation contained in S1.

A late S3 cleavage is the product of kinking and chevron folds in highly altered units showing a strong pre-existing anisotropy. Dykes, mainly tonalite and monzonite, are deformed and affected by S2. They trend to the SE, subparallel to the trace of the La Pause Fault. In places, they exhibit a stretching lineation with a shallow westward plunge.

7.2.4 Large-scale Fault Zones

The Kiena Complex area has a series of large-scale shear zones and related subsidiary faults trending ESE-WNW to SE-NW, subparallel to stratigraphy and dipping steeply to the north (Figure 7.3). They are, from south to north: Larder Lake-Cadillac Fault Zone (LLCFZ); Parfouru Fault (PF); Marbenite Fault (MF), Norbenite Fault (NF); Callahan Fault (CF); K Shear Zone (KSZ); and Rivière Héva Fault (RHF). The Kiena Complex area is cut by all of them. Most faults at surface have been interpreted by geophysics and traced on high-resolution aeromagnetic maps. Some faults correspond to a break in metamorphic grade.

The shear zones contain dykes or stocks of monzonitic or tonalitic composition that vary widely in age (pre-, syn- or post-tectonic) and are spatially associated with gold mines (Norlartic, Marban, Kiena, Sullivan, Goldex, Siscoe, Joubi, Sigma and Lamaque). The observed diversity in the styles and ages of gold mineralization related to these large-scale shear zones demonstrates that several distinct episodes of mineralization occurred.

7.2.4.1 Larder Lake-Cadillac Fault Zone (LLCFZ)

The LLCFZ in the AGB is a first order gold-bearing structure on a province-wide scale, accounting for half of the gold production and reserves in Abitibi and more than 25% in Canada (based on data by Dubé and Gosselin, 2007). The LLCFZ is a 250-km-long, moderately to steeply dipping structure with a curvilinear trace (Figure 7.2 and Figure 7.4). It dips northward or southward depending on location along its strike (Poulsen, 2017). A remarkable characteristic of the LLCFZ is that over much of its 250−km length it marks the contact of a persistent band of volcanic rocks, which in places is only 1 km to 100 m thick. Composed mainly of ultramafic komatiite and tholeiitic basalt, the volcanic rocks provide sharp lithologic contrasts with adjacent sedimentary units (Poulsen, 2017).

The LLCFZ in the Kiena Mine Complex area is sharply defined as the contact between the southward-facing volcanic successions of the Malartic Group and the younger folded, but dominantly northward-facing, graywacke-mudstone successions of the Pontiac Group to the south (Poulsen, 2017). The LLCFZ is confined to a 200-m-wide high-strain zone containing thin, strongly deformed, but distinctive lithologic units. From north to south, these are porphyritic diorite that intrudes mafic rocks of the Malartic Group, graywacke and mudstone with lenses of conglomerate (assigned by most workers to the Cadillac Group), and felsic to ultramafic volcanic rocks of the Piché Group (Robert, 1989). The ultramafic talc-chlorite-carbonate schist of the Piché Group is compositionally a komatiitic to komatiitic basalt. Spinifex textures are locally preserved (Robert et al., 1990). The anomalous high strain is manifested by shape fabrics in primary lithic clasts and phenocrysts, intense schistosity, and common minor folds that result in strong transposition of layers (Robert, 1989). The gold deposits of the Val-d'Or district are dominantly of the quartz vein type and located to the north of LLCFZ.

Located south of the Kiena Mine Complex, the LLCFZ is generally oriented N110° and dips steeply to the NNE.

7.2.4.2 Parfouru Fault (PF)

The PF is an ESE-WNW shear zone that dips steeply (75°) to the north or northeast and is interpreted as an early synvolcanic structure (Daigneault, 1996; Bedeaux et al., 2017). The shear zone can reach 300 m wide and has been traced for tens of kilometres.

7.2.4.3 Marbenite Fault (MF)

This major second order gold-bearing fault trends ESE-WNW to SE-NW and dips steeply to the northeast. The MF was first observed at the Marban mine (Trudel and Sauvé, 1992; Sauvé et al., 1993; and Beaucamp, 2010). Similar to the LLCFZ, the MF is characterized by the presence of ultramafic talc-chlorite-carbonate schist that came from strongly deformed and metamorphosed komatiitic basalt and/or komatiite. The MF is represented by an anastomosed schist that sometimes is folded in some places. Thin mylonitic fabrics are also present within the schist in some places. According to Dubé and Mercier-Langevin (2020), the MF is an early fault in Val-d'Or region and may represent an early structure corresponding to D1 phase of deformation.

In the Kiena Complex area, the MF is more than 100 m thick. It hosts the South Zone from the 27 Level to 32 Level and the S50 Zone from the 57 Level to 100 Level. A subsidiary folded fault, located 400 m north of the MF, merges with the MF master fault at a depth of 500 m. This subsidiary fault hosts a large part of the S50 Zone between the 12 Level and 54 Level.

7.2.4.4 Norbenite Fault (NF)

The Norbenite Fault (NF) is a major second-order gold-bearing fault that strikes WNW and dips 40-60° to the northeast in the Norlartic Mine area where the fault was first observed (Trudel and Sauvé, 1992; Sauvé et al., 1993). This fault also hosts the gold−bearing Kierens Zone that was accessible by underground working from Norlartic mine. Like the MF, the NF is an early fault in Val-d'Or region and may represent an early structure corresponding to D1 phase of deformation (Dubé and Mercier-Langevin, 2020).

The NF is 15 m to 110 m wide and has been traced for more than 10 km. The VC Zone at Kiena occurs within this shear zone. The fault affects mainly the komatiitic units and occasionally the basaltic units of the JF. It can be divided into two or three branches in some places. Similar to the LLCFZ and the MF, the NF is characterized by the presence of ultramafic talc-chlorite- carbonate schist that came from strongly deformed and metamorphosed komatiitic basalt and/or komatiite.

7.2.4.5 Callahan Shear Zone (CSZ)

The CSZ strikes N090° and dips 60-80° to the north. The CSZ can reach up to 200 m in width (Beaudoin et al., 1987).

7.2.4.6 K Shear Zone (KSZ)

The KSZ is a shear zone 300 m to 600 m wide that has been traced for more than 3 km. It strikes N295° and dips 80° northeast. It is composed of talc and chlorite schists, actinolite schists and minor sericite schists, and bodies of pure talc and massive actinolite (Olivo and Williams-Jones, 2002; Olivo et al., 2007). The shear hosts the K Zone at the former Siscoe mine and bounds the Main Zone to the south. The volcanic domain north of the KSZ is at upper greenschist to amphibolite facies.

7.2.4.7 Rivière-Héva Fault (RHF)

The RHF is an 18-km-long ESE-WNW shear zone that dips steeply (80°) to the north or northeast (Daigneault, 1996). The shear zone can reach 300 m wide and has been traced over many kilometres. This structure corresponds to a change in metamorphic grade, from greenschist facies in the south to amphibolite in the north.

7.2.5 Mineralization Types

The information of this section was taken from Turcotte et al. (2015) and Beausoleil et al. (2019). Gold mineralization in the Property occurs in all rock types except the Proterozoic dykes but is more common in intrusive bodies and basalt as these acted as competent rock units that promoted fracturing during deformation. Gold mineralization is concentrated where there is a marked competency contrast between these competent units and the adjacent deformed komatiite and/or chlorite-talc schists.

According to Couture et al. (1994), there are at least two main gold mineralizing events in the region: young deposits in which the gold mineralization did not experience much deformation after its emplacement; and early mineralization in which mineralized bodies are commonly affected by D1 asymmetric folds, are highly strained and are locally dismembered. In a few deposits, both generations are present. Precise U-Pb zircon dating of an inter-mineral granodiorite dyke assigns a minimum age of 2686 ±2 Ma to the gold mineralization at the Kiena Mine (Morasse et al., 1995). This age reveals that gold mineralization postdates volcanism and the Snowshoe plutonism but predates regional syn-metamorphic deformation (ca. 2677-2645 Ma).

Gold-bearing veins in the region exhibit a great variety of orientations, mineralogy and crosscutting relationships. For the purpose of this report, they are classified into the following three main types:

- Type 1: early quartz-carbonate veins cut by various dykes
- Type 2: deformed veins within a shear zone
- Type 3: relatively weak deformed late quartz±tourmaline veins cutting all intrusive types and previous gold-bearing vein systems

On occasion, all three types may occur together.

At least 63 mineralized zones have been observed on the Property and are described in Turcotte et al. (2015). The veins of these zones have been categorized as Type 1, 2 or 3 based on their principal characteristics.

In general, mineralized zones on the Property occur near a large-scale fault. They are often associated with a subsidiary shear zone that may be proximal, adjacent or host to the mineralization. Alteration minerals are dominantly albite, carbonates and pyrite with lesser chlorite and silica.

The gold occurrences found in shear zone settings are mainly restricted to competent units, and thus the size and shape of the mineralized zones often depend on the size, shape and concentration of the competent intrusive or basalt. Generally, it is possible to observe a flexure in the shear zone.

In zones of structural dislocation, three settings for gold mineralization have been recognized:

- Shattered intrusive bodies, such as diorite or feldspar porphyry dykes, enclosed in talc-chlorite schist.
- Zones of fracturing and brecciation in large bodies, such as basalt.
- Visible gold in quartz veins localized in schist and komatiite or in basalt and flow breccia near the contact with the schist and komatiite.

In large bodies of basalt, fracturing was generally restricted to narrow zones, and subsequent mineralization resulted in narrow and often closely spaced mineralized zones. In narrower dykes, the whole body is affected by fracturing, and subsequent mineralization was able to spread throughout the dyke, forming large, mineralized zones. Three factors control the size and shape of mineralized zones associated with dykes in shear zone settings: the size of individual dykes, the density of the swarms, and the shear zone folding intensity.

Quartz veins with visible gold are usually found in a folded shear zone (schist). Generally, the veins seem to fill the available space created during the shear zone fracturing. The quartz veins density clearly increased, going toward the nose of the fold. In some areas, two or three zones are stacked in the nose of the fold.

7.3 Mineralized Zones

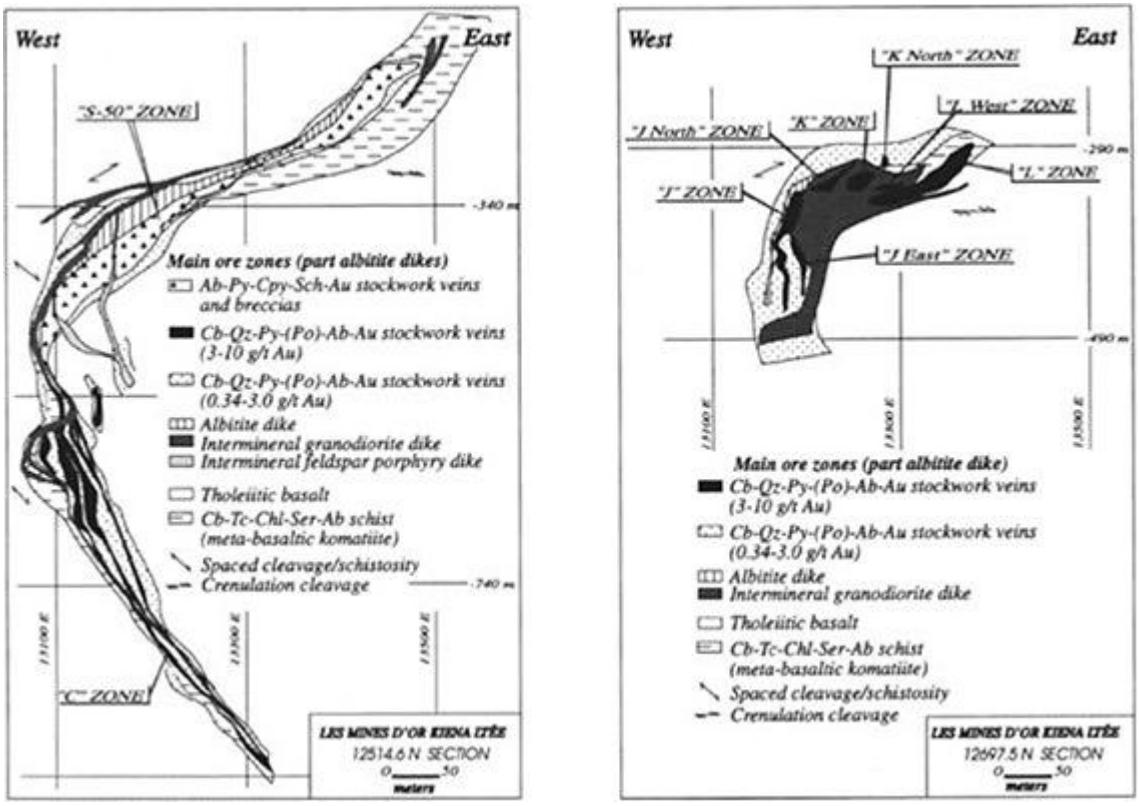
Past gold production on the Property came from the Kiena, Siscoe and Shawkey mines. A summary of the geological setting and mineralization is presented for each of these past producers. The following sections are modified and updated from Turcotte et al. (2015), Beausoleil et al. (2019), Richard and Torrealba (2019), Corkal et al. (2020), and Athurion et al. (2021).

7.3.1 Kiena Mine

Historically, a total of seven zones were mined at Kiena. Six are aligned in an N-S corridor (from south to north): South, S50, Kiena Deep, VC, North and 388. Those zones are situated in a sector where the Marbenite and Norbenite faults are changing direction. Regionally, those faults are N290º but change direction to N320º near those five zones. The sixth zone, Martin, is about 1.2 km east of the Kiena shaft. Martin Zone is located near the contact with the Norbenite fault.

7.3.1.1 S50 Zone

Discovered in April 1961, the S50 Zone was the main mineral deposit at Kiena (Figure 7.6). It consists of a multistage carbonate- albite-pyrite stockwork, breccia and replacement vein system (Morasse et al., 1995; Morasse, 1998). It is located on the N-S limb of a local fold adjacent to the Marbenite fault (MF) and is more or less concordant with the upper contact of a moderately west-dipping tholeiitic flow with a variably altered and schistose basaltic komatiite assigned to the Jacola formation (JF). The mineralized zone measures between 225 m and 600 m long, between 10 m and 50 m wide, and has a vertical extent of 250 m to 1,000 m.



Source: Morasse et al., 1995

Figure 7.6 Geological cross-section of S50 Zone

The S50 Zone is associated with an intermediate to felsic dyke complex composed of a pre- mineralization albitized diorite (albitite) dyke swarm and post-mineralization granodiorite and feldspar porphyry dykes. It comprises Type 1 veins consisting of two mineralized types (from oldest to youngest):

1. Carbonate (ankerite)-pyrite-Au replacement veins, also known as the “Breccia 1” mineralization type.
2. Albite stockwork veins and breccias with disseminated pyrite, chalcopyrite, scheelite and gold, also known as the “Breccia 2” mineralization type.

These Type 1 veins are cut by various dykes, including porphyry dykes that are weakly mineralized by Type 3 calcite-quartz-pyrite-Au stockwork veins. The S50 Zone was divided into seven individual mineralized zones (A, B, C, D, J, K, L) based on the attitude and composition of the mineralization and the presence or absence of a granodiorite dyke. These mineralized zones can be regrouped into a high-grade core consisting of the A, B and D Zones and the lower part of the C, and a lower-grade mineralized shell comprised of the J, K and L Zones and the upper part of C (Figure 7.6). The C Zone is transposed within the MF.

Almost all zones in the MF are thin and elongated lenses and have a pitch angle of 60° to the east, making an angle of around 30° with the down-plug axis of the fault plane. This probably represents the stretching lineation in the fault zone.

7.3.1.2 S50 and B Zone (formerly S50 Deep Extension)

The S50 and B zones comprise a sheeted mineralized system spatially associated with the Marbenite Fault (“MF”) corridor (Figure 7.7). The S50 lenses are located at a shallower depth than the B zones, separated by a mostly barren interval where the lenses pinch. Both systems form parallel to, or are locally hosted within, sheeted zones adjacent to the fault.

The S50 system consists of five principal mineralized lenses (S50_100, S50_101, S50_102, S50_103, and S50_104) separated from each other by 5 m to 15 m of weakly mineralized material. These lenses are spatially associated with a mylonite zone near the contacts of basalt, komatiite, and talc-chlorite-carbonate schist. Mineralization is characterized by albitized breccias containing 1% to 2% disseminated pyrite and pyrrhotite, which are locally crosscut by quartz veins carrying visible gold.

Historically referred to as the S50 Deep Extension, the B zones correspond to the extension of the mineralized system at depth. This deeper zone contains four main lenses (ZB_142, ZB_143, ZB_144 and ZB_145) that mirror the S50 structural and mineralization style. In this deeper part of the system, the mineralization is also controlled by the contacts of a felsic dyke which can be tracked along the corridor.

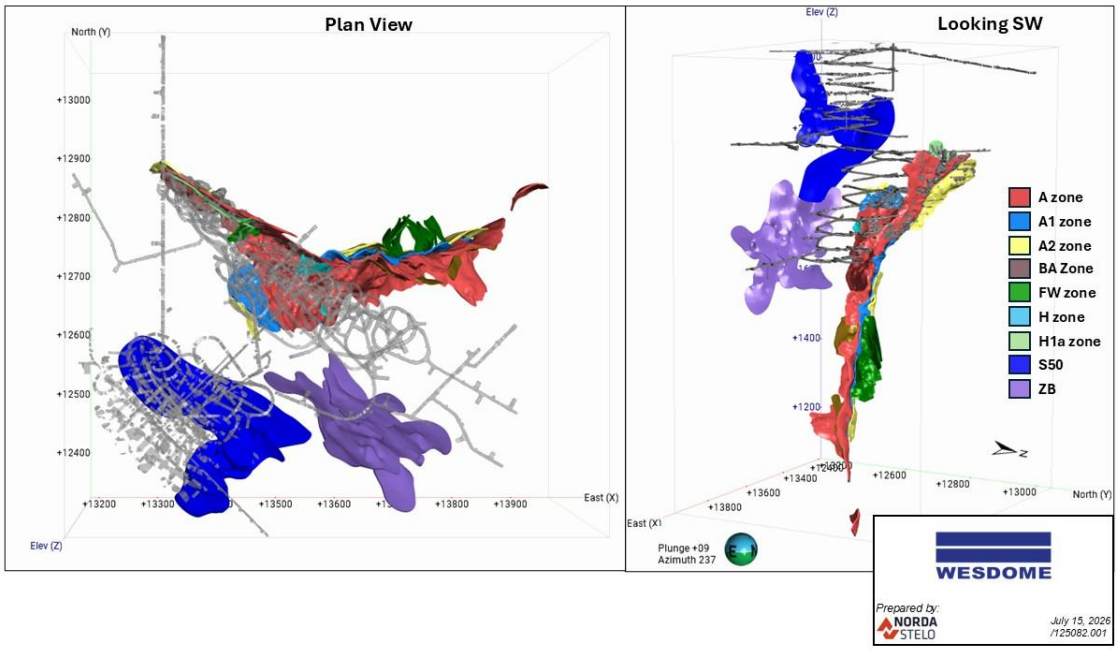


Figure 7.7 B Zone (formerly S50 Deep Extension) mineralized zones (left: looking northwest; right: looking southwest)

7.3.1.3 VC Zone

The VC Zone is approximately 700 m north of the S50 Zone and is bounded to the north by the Norbenite Fault. The following description of the VC Zone is mostly modified and summarized from Beauregard and Gaudreault (2005). The VC Zone was mined by Wesdome between 2006 and 2013. A total of 841,625 t of material with an average grade of 4.16 g/t Au was mined from this zone.

The mineralized zone occurs as four vertical E-W pinch-and-swell lenses (VC1, VC2, VC3 and VC4) in locally brecciated albitized basalt. The four lenses were mined over a vertical extent of 475 m. In cross-section, the lenses occur in a pseudo-en echelon pattern within a steep south- plunging corridor 100 m across. In plan view, the individual lenses are 100 m to 180 m long and average 8 m to 10 m wide, with a maximum width of 30 m. Gold mineralization is associated with quartz veins and carbonate-quartz-pyrite veins (Turcotte et al., 2015), presenting a similar mode of occurrence as seen in the S50 Zone.

In 2017, VC6 Zone was discovered when DDH 6187 intercepted a mineralized basalt and a non-mineralized granodiorite dyke. DDH 6187 was drilled down-dip of the zone and returned a value of 5.24 g/t on 48.7 m.

7.3.1.4 VC1 and VC6

Four mineralized lenses were defined at depth in the extension of the VC1. The VC1_114 lens is the continuity at depth of the VC1 lens and is interpreted to a depth of 315 m below the last level mined (i.e., 67 Level). In plan view, the VC1_114 lens is 65 m long and averages 4 m to 6 m across. The VC1_114 lens is generally associated with a diorite dyke located within the talc-chlorite schist. The dyke contains 1-5% pyrite and quartz-chlorite-pyrite veinlets ranging from 2 mm to 5 cm. In places, quartz veins are present within the dyke or at its contact. Visible gold is usually observed within the quartz veins and veinlets. The three other lenses are located about 10 m north of the VC1_114 lens. VC1_111, VC1_112 and VC1_113 are subparallel to VC1_114. The best results from VC1 (VC1_113 lens) were obtained in DDH 6205 where a diorite dyke hosting quartz veins with visible gold returned a 7.5 m interval grading 262.09 g/t Au or 36.54 g/t Au cut at 90 g/t. Another significant intersection within VC1 (VC1_111 lens) comes from hole 6531. This hole returned an average grade of 36.44 g/t Au (20.48 g/t Au cut at 90 g/t) over 6.1 m. This gold intersection, located at the elevation of the 107 Level, is characterized by the presence of visible gold within white to grey quartz veinlets. Stockwork is hosted by an albitized and pyritized basalt.

Two mineralized lenses were defined in the VC6 area. The VC6_123 lens is located 150 m southeast of VC1_114. The mineralization is typical of the S50 Zone. The lens is elongated in shape, plunging to the south-west and measuring 185 m high by 80 m wide with thicknesses ranging from 5 m to 12 m. The lens is oriented NE, parallel to a 20 m thick chlorite-carbonate shear zone that bounds the mineralization to the northwest. It is hosted in a sheared basalt and in minor porphyritic or dioritic dykes. The main alteration minerals are chlorite and carbonates, with minor patches of albite, silica and/or amphibole alteration. Pyrite and pyrrhotite account for less than 3% of the rock. Locally, visible gold was observed in quartz-carbonate veinlets. This zone is crosscut by a massive, slightly sheared and barren granodiorite dyke. The dyke was possibly deformed at the same time as the volcanic host rocks. The VC6_124 lens was defined with the drillholes completed during the 2020 Program. This lens is subparallel to the VC6_123 and located northwest of it, in a similar environment on the other side of the chlorite-carbonate shear zone. Figure 7.8 presents the VC1 and the VC6 mineralized lenses.

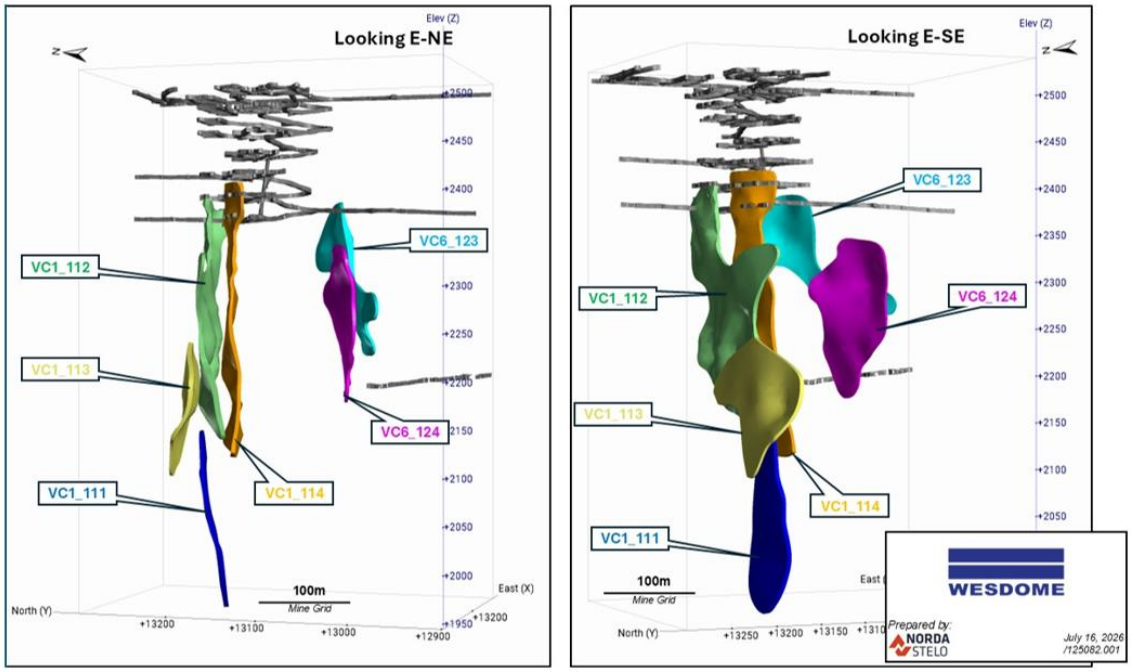


Figure 7.8 VC1 and VC6 mineralized zones (left: looking east-northeast; right: looking East-southeast)

7.3.1.5 North Zone

The North Zone (formerly the No. 1 Zone) was first encountered by surface drilling in 1938. The zone is 900 m north of the S50 Zone and 200 m north of the NF (Figure 7.3). It consists of two parallel lenses shaped like flattened tubes, each measuring 10 m by 60 m to 90 m in plan view and plunging 70° north, which can be traced over a length of at least 520 m. From 2007 to 2013, Wesdome extracted 458,860 t of material from the North Zone with an average grade of 2.44 g/t Au.

The main structural control for the gold mineralization is a sodium-rich diorite intrusion in basalt host rock. Mineralization occurs as a quartz-carbonate-sulphide matrix-filling in brecciated and albite-altered diorite, and as quartz-carbonate-pyrite veins and veinlets in basalt wall rock (Turcotte et al., 2015). These veins and veinlets are predominantly developed in a steeply dipping orientation that is suggestive of a sheeted or ribbon-vein system. There are subsidiary veinlets at oblique and sub-random orientations, which may be described as a pseudo-stockwork. Well-developed albitized envelopes with disseminated pyrite encompass the quartz-carbonate veins, and it is common to observe 5-10% disseminated pyrite where intense and closely spaced veining is developed. The North Zone is cut by unmineralized granodiorite and feldspar porphyry dykes.

7.3.1.6 388 Zone

The following description of the 388 Zone is mostly modified and summarized from Laplante (2000). The 388 Zone has been defined as a small deposit parallel to the North Zone at a distance of 300 m to the north (Figure 7.3). It was mined by Wesdome from 2007 to 2013. A total of 146,268 t of material was mined from the zone at an average grade of 3.01 g/t Au.

The 388 Zone has a vertical extend of 100 m. Gold mineralization is associated primarily with a single major quartz vein 2 m wide that developed in albitized basalt alongside a diorite dyke. The vein is rather erratic and structurally meanders within an irregular zone of altered basalt 3 m to 6 m wide. Small, scattered quartz-carbonate veinlets with minor pyrite occur in the wall rock.

7.3.1.7 South Zone

The South Zone lies 100 m to the south of the S50 Zone in the MF deformation corridor. It strikes northwest and dips 65° northeast. Discovered in 1981 (hole S-129), the South Zone includes the hanging wall and footwall lenses, which are 18 m apart. They were mined on three levels only (between levels 27 and 32) over a vertical extent of 55 m. They are parallel and concordant to the enclosing volcanic host rocks, predominately basalts with minor diorite dykes and komatiitic ultramafic flows. The basalts are strongly chloritized and carbonatized with local silicification and brecciation (quartz-carbonate veining) accompanied by low concentrations of pyrite (5%). The mineralization is similar to that observed in the S50 Zone. The South Zone is generally strongly fractured by the fault zone. Wesdome tried to mine this zone in 2012 and 2013, but after producing 37,076 t with an average grade of 1.74 g/t Au, production was abandoned due to dilution problems.

7.3.1.8 ZS-130, ZS-131, ZS-132, ZS-133 and ZS-135

Five mineralized lenses have been defined in the South Zone area (Figure 7.9). Wesdome extended the footwall and hanging wall lenses up-plunge to near-surface and 200 m down-plunge, and these extensions are now named the ZS_131 and ZS_132 lenses, respectively. ZS_130 is located less than 20 m south of ZS_131 and is subparallel to it. The maximum lateral extension of the ZS_130 is 500 m, but both ends are poorly drilled up to date. ZS_135 is a small lens intercalated between ZS_130 and ZS_131, with lateral extents of 150 m and vertical extents of 175 m. The thickness of the alteration and mineralization envelope that encloses the four lenses ranges from 25 m to 60 m. A fifth lens (ZS_133) was defined near the contact with the S50 Zone, in a distinct band of basalt. The ZS_133 is located 25 m north of ZS_132 and has a vertical extent of 285 m with thicknesses ranging from 3 m to 6.5 m.

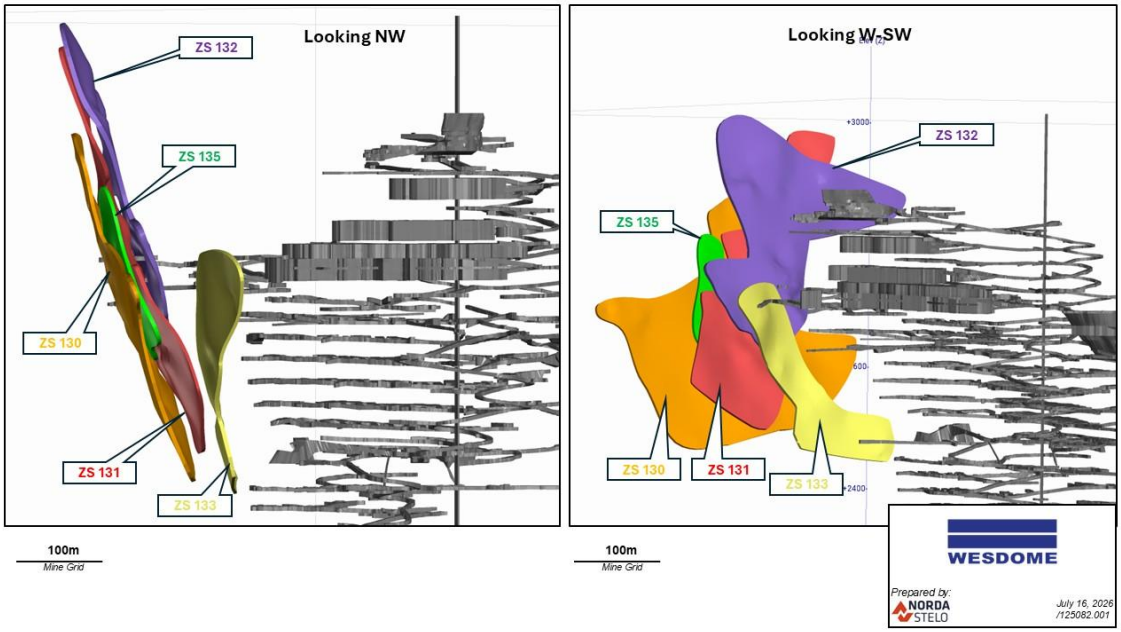


Figure 7.9 Zone South mineralized zones (left: looking northwest; right: looking west-southwest)

7.3.1.9 Kiena Deep A Zone

The first hole that intersected the Kiena Deep A Zone (KDAZ) was 4320 collared from the 91 Level in December 2007. This hole cuts a quartz vein containing about 10 specks of visible gold within a talc-chlorite schist. A value of 28.23 g/t Au over 1 m was obtained. In January 2010, two more holes (4928 and 4929) were drilled in the KDAZ from the 91 Level. Hole 4928 returned an average grade of 12.31 g/t Au (8.42 g/t Au cut) over 12.8 m. Hole 4929 cut an average grade of 25.42 g/t Au (14.73 g/t Au cut) over 10.5 m. In 2012, four more holes were drilled from the same level with the following best results: hole 5965B with 66.77 g/t Au (11.04 g/t Au cut) over 3 m, hole 5966 with 51.86 g/t Au (21.49 g/t Au cut) over 7.5 m, hole 5967 with 10.17 g/t Au (8.20 g/t Au cut) over 5.4 m, and hole 5974 with 42.49 g/t Au (8.80 Au g/t cut) over 14.9 m. The six subsequent holes also intersected the KDAZ and cut gold-bearing quartz veins and veinlets hosted by a talc-chlorite schist, like in hole 4320. In June 2016, Wesdome tried again to explore the area of the KDAZ.

Contrary to previous beliefs, the KDAZ is not the extension of the S50 Zone. The structures, mineralization type, host rocks, and grades are completely different. The KDAZ represents a local “M” shape fold where the north limb is adjacent to Norbenite fault (NF) and plunges to 45° toward ESE at the top of the zone and begins to dip steeply at the middle of the zone. The geology and structures were interpreted in 3D by Ravenelle (2018) based on drillhole data and reviewed by Beausoleil et al. (2019), Richard and Torrealba (2019) with the collaboration of Wesdome’s geologists.

The KDAZ is divided into three main complexly folded sheared lenses: ZA, ZA1 and ZA2 family. The lenses occur along an “M” shaped fold associated with the NF (North limb) and a subsidiary fault of MF (South limb) (Figure 7.10).

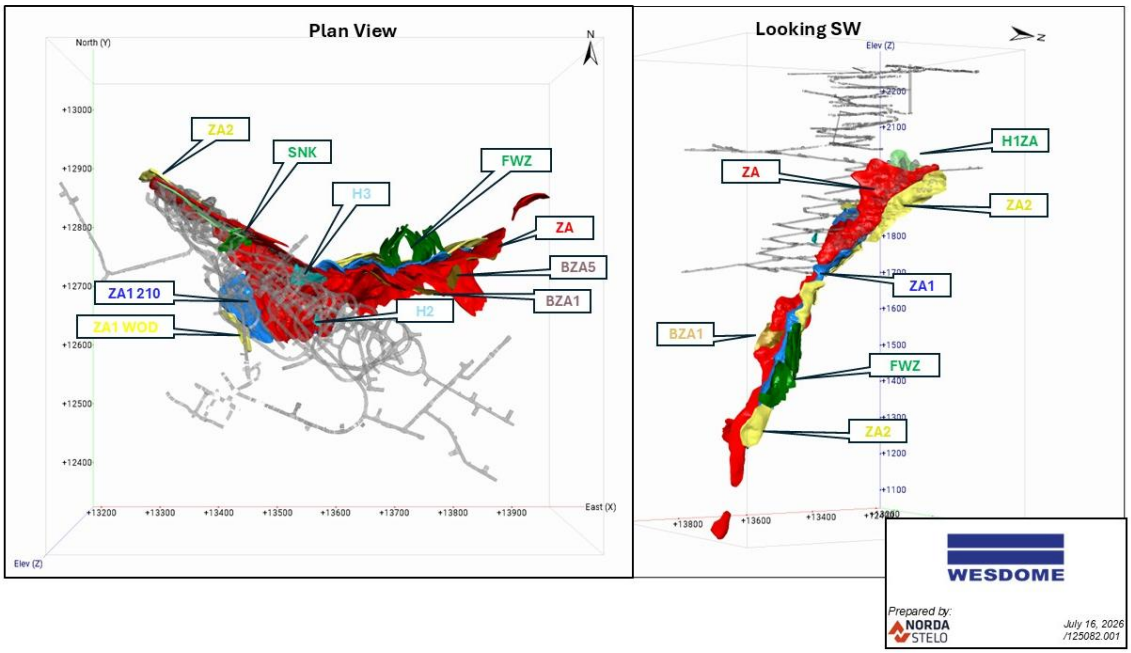
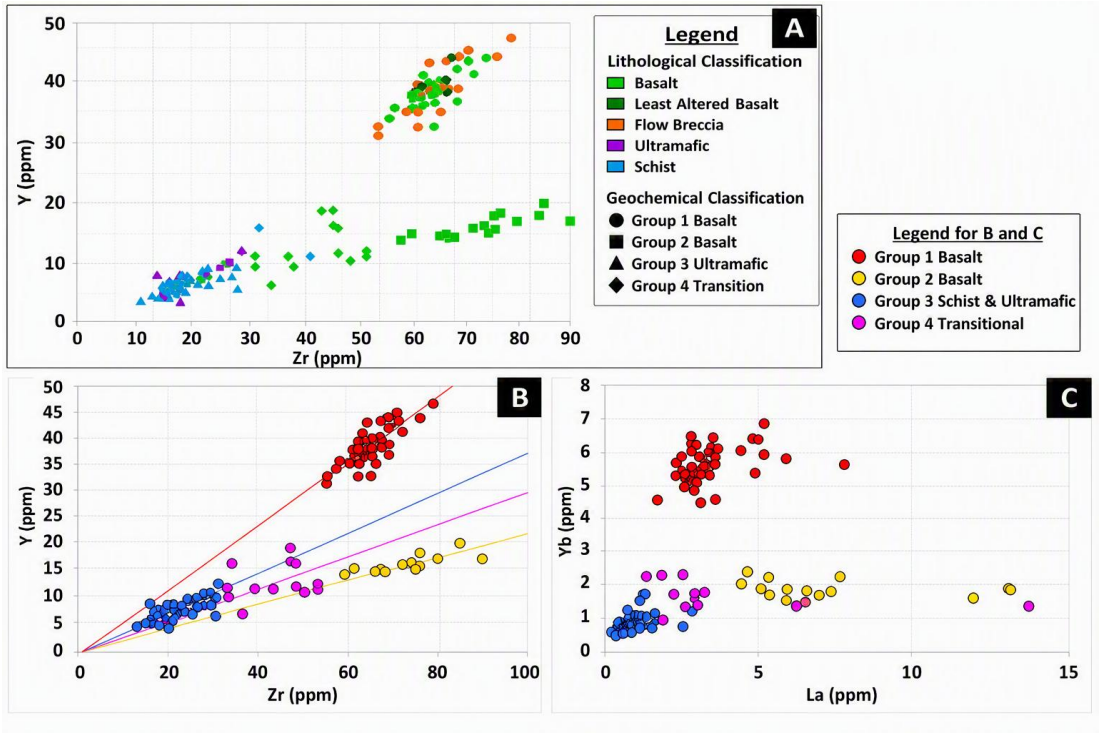


Figure 7.10 Kiena Deep A Zones folded within the schist (left: looking northwest; right: looking south-southwest)

The lithologies that host the KDAZ that are ultramafic komatiite, schist, basalt, flow breccia basalt, and feldspar porphyry dyke typical of Jacola Formation. According to Kobylinski (2022), the main lithologies can be divided into four groups in this study based on their whole rock geochemistry. Figure 7.11 shows the lithological and geochemical groupings using assumed immobile elements Zr, Y, La, and Yb (Kobylinski, 2022). Geochemical Group 1 consists of tholeiitic basalt, Group 2 consists of basalt, Group 3 consists of ultramafic komatiite and ultramafic-derived schist, and Group 4 is a transitional unit between Group 2 and Group 3 (MacLean & Barrett, 1993).



Source: Kobylinski, 2022
A. Zr and Y, assumed to be immobile elements, were used to differentiate the geochemical groups of rocks at the Kiena Complex which show differences not Whole rock chemical data shows differences between the geochemical groups at the Kiena Complex. A. Zr and Y, assumed to be immobile elements, were used to differentiate the geochemical groups of rocks at the Kiena Complex which show differences not recorded in lithologies observed during core logging.
B. Shows geochemical groups differentiated by Zr and Y with respective trendlines. C. Graph showing geochemical groups sorted using Yb and La.

Figure 7.11 Whole rock chemical data shows differences between the geochemical groups at the Kiena Complex

Basalts

Basalt is present in the hanging wall of the folded shear zone that hosts the KDAZ lenses. Basalt is generally massive and Its contact with schist and/or ultramafic rocks is undulating, indicating that it has undergone deformation. Locally, the basalt can be weakly to strongly foliated and fractured. There are two basalt groups that have distinct textural features at the thin section scale, but these groups cannot be easily distinguished at the hand specimen scale. Group 1 Basalts contain randomly oriented medium to coarse (0.5-2 mm) grains of metamorphic amphibole, and locally minor amounts of coarse-grained hydrothermal amphibole. Fine to medium grained (up to 0.2 mm) albite and quartz are interstitial to amphibole and locally these are overprinted by chlorite stringers. At distances greater than 30 m from gold mineralization (least altered' basalt samples), Group 1 Basalt also contains trace subhedral epidote. Group 2 Basalts consist mainly of medium to coarse (up to 0.4 mm) grained albite with anastomosing chlorite stringers and local patches of carbonate alteration. Hydrothermal amphibole grains, where present, are stringy with a radial habit and commonly overprint chlorite.

Ultramafic komatiites

Ultramafic komatiites occur in the foot wall of the KDAZ. In hand sample, it is dark grey in colour with local patches of randomly oriented, coarse (1-30 mm) hydrothermal amphibole grains and/or patches of white talc alteration. Hydrothermal amphibole grains are locally altered by carbonate. Up to 50% vol. of the ultramafic unit consists of green chlorite stringers and deformed white carbonate ± quartz stringers. Ultramafic komatiites are locally foliated (Figure 7.12).

Source: Kobylinski, 2022

Figure 7.12 Ultramafic Komattite from hole 6456

Schists

Schists dominate the foot wall of the shear zone under the KDAZ. In hand sample it is a foliated fine-grained grey/blue rock with up to 50% vol. green chlorite stringers and deformed white carbonate ± quartz stringers. Locally, there are scattered pyrite cubes and minor clusters of sulphide minerals. Polished thin section analysis shows local augen, boudin, and crenulation structures. The main mineral constituents are talc, carbonate, chlorite, hydrothermal amphibole, and muscovite or phengite. Shear veins with visible gold are present in the schists (Figure 7.13).

Source: Kobylinski, 2022

Figure 7.13 Schist from hole 6495

Flow Breccia Basalts

The Flow Breccia Basalts are present within the hanging wall Basalt as lenses that are parallel to the axial plane of the folded KDAZ gold mineralization. Hand samples contain grey/green subrounded fragments with foliated green chlorite margins. Patchy white carbonate alteration and/or carbonate stringers in the blocks are locally present. Randomly oriented medium to coarse (up to 5 mm) hydrothermal amphibole grains that overprint the chlorite margins are common. Up to 3% vol. disseminated pyrrhotite, chalcopyrite ± pyrite are both locally present within the blocks. Some quartz veins and/or veinlets with visible gold can be also present as a stockwork. (Figure 7.14)

Source: Kobylinski, 2022

Figure 7.14 Flow Breccia Basalt from hole 6445

Feldspar Porphyry Dykes

The Feldspar Porphyry Dykes contain medium-coarse (0.5-5 mm) grained grey to pink plagioclase with local chlorite stringers. They locally crosscut the other lithologies that host the KDAZ. These dykes are often observed in the vicinity of gold mineralization. They are massive to foliated. Locally, they are weakly shared. It appears to have taken place in an earlier fault. In the KDAZ, one of these dyke (Dyke 03) is generally present near of the contact between hanging wall basalts and schists, intruding basalt, or forming the contact basalt/schist, or intruding the schist. Dyke 03 is folded and his shape seem follow a pattern of the deformation like those observed for mineralized lenses of KDAZ. This dyke helped to the understanding of complex geology during the interpretation of the KDAZ by geologists (Figure 7.15).

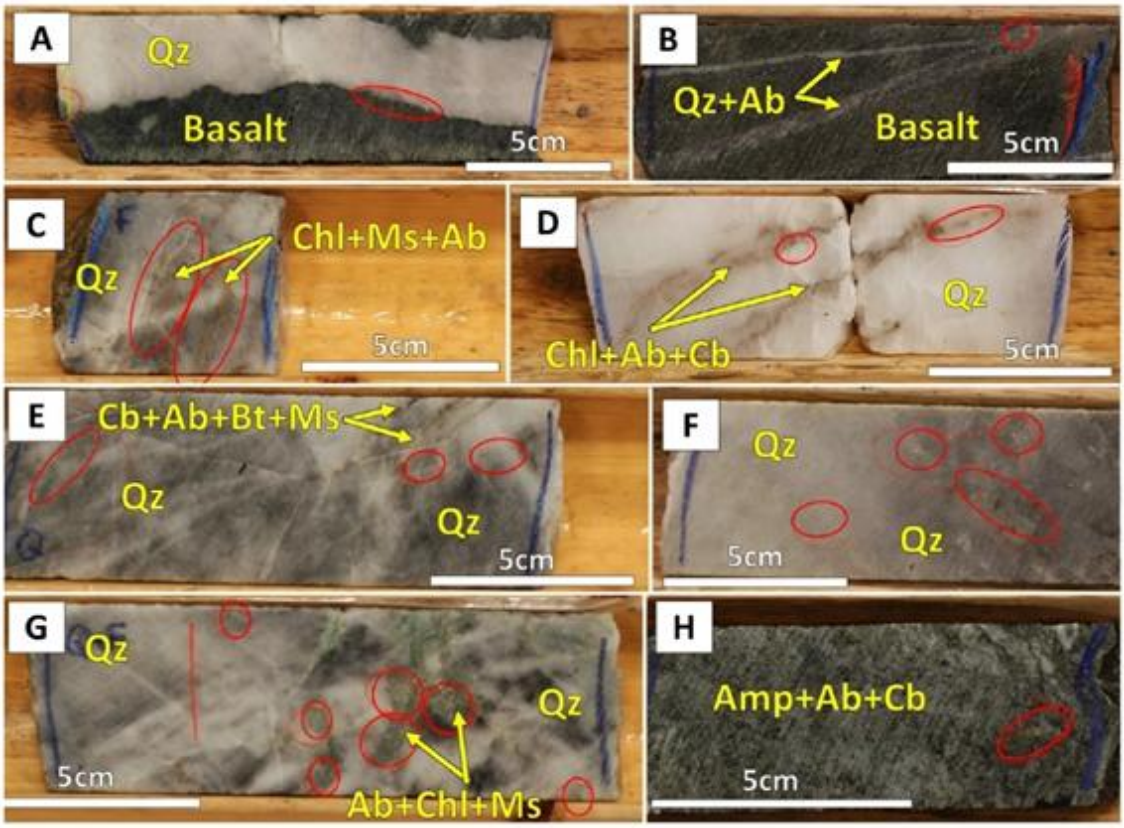
Photo from Kiena Mine geologist

Figure 7.15 Feldpar Porphyry Dyke from hole N120-K009

Gold Mineralization from KDAZ

Gold mineralization from KDAZ is mainly hosted within quartz veins. These quartz veins are within a folded/sheared deformation corridor at and/or near the contact between the basalt and ultramafic komatiite ± schist lithologies. These quartz veins are grouped together and form three subparallel lenses along a steeply plunging fold. Within each lens, sheared quartz veins are folded and sometimes are dismembered and boudinaged (pinch and swell) showing a complexity of the gold mineralization in the KDAZ.

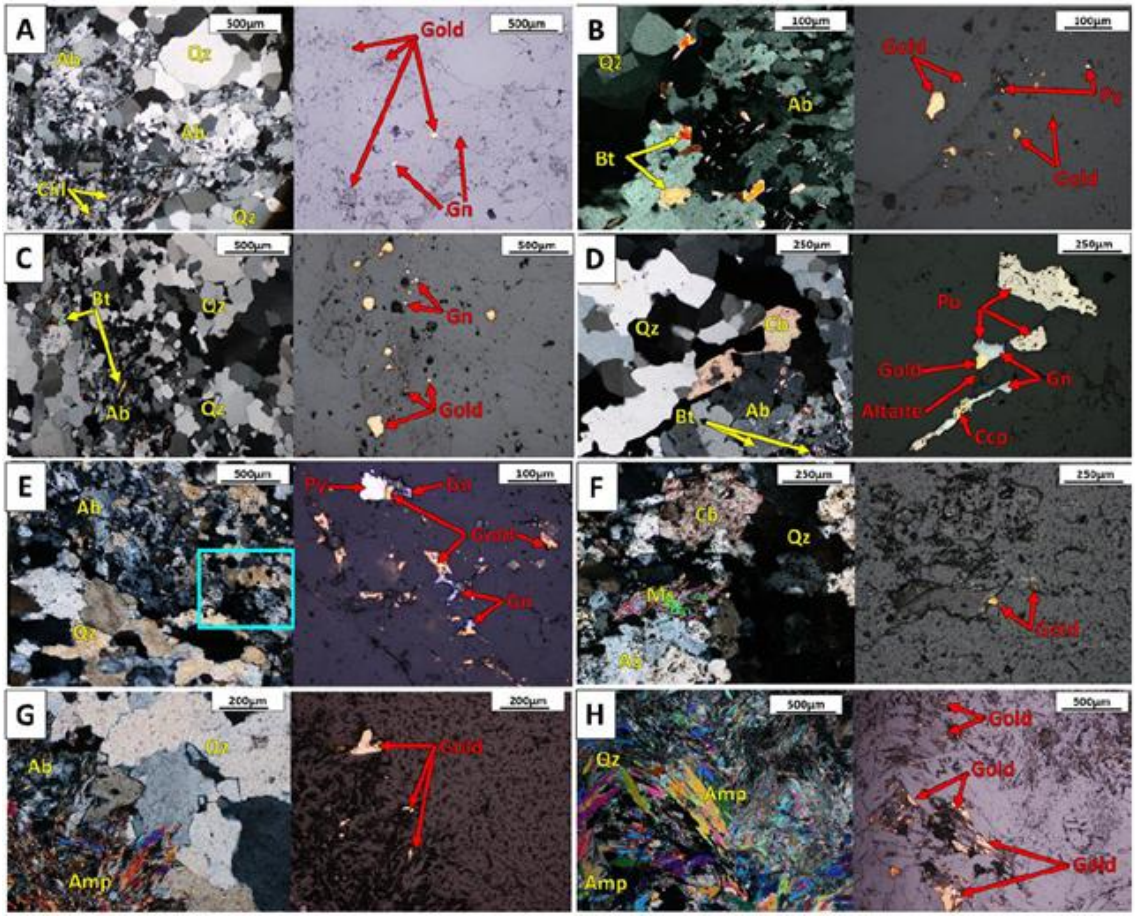
The veins of the KDAZ are mainly composed of quartz, with minor albite, chlorite, and carbonate. Sulphide minerals make up less than 2% vol. of the host rock and less than 2% vol. of the mineralized veins. Sulphide minerals present are typically pyrite with trace chalcopyrite, pyrrhotite, galena, and sphalerite. In hand samples, quartz has a variable opacity, ranging from clear to opaque, and the colour ranges from white (Figure 7.16 A, D) to dark grey (Figure 7.16 B, F). Gold grade and the colour of the quartz were compared in the drill core examined by Kobylinski (2022), and no correlation was observed between these two variables. Grey quartz appears to be locally brecciated with white quartz between breccia fragments (Figure 7.16 C, E, G).



A. Host rock is strongly chlorite altered basalt. B. Host rock is strongly chlorite altered basalt. C. Strongly brecciated quartz, strong deformation near vein, and deformed mineralized fractures. Mineralized fractures contain dominantly albite, brown chlorite, muscovite with minor gold, galena, pyrite and carbonate. D. Strong deformation near vein and deformed mineralized fractures. Mineralized fractures contain dominantly albite, brown chlorite, carbonate with minor gold, pyrite and chalcopyrite. E. Strongly brecciated quartz, strong deformation near vein, and deformed mineralized fractures. Mineralized fractures contain dominantly carbonate, albite, and chlorite with minor biotite, muscovite gold and galena. F. Deformed mineralized fractures. Mineralized fractures contain VG and likely albite with chlorite. G. Strongly brecciated quartz, strong deformation near vein, and deformed mineralized fractures. Deformed mineralized fractures contain dominantly albite, muscovite, with minor chlorite, gold, and chalcopyrite. H. Gold in planar contact with amphibole (actinolite) within highly altered wallrock. Source: Kobylinski, 2022

Figure 7.16 Examples of mineralized vein hand samples from the KDAZ. Visible gold (VG) circled in red

Gold is found mainly along fine (up to 3 mm thick), irregular, mineralized fractures that contain corroded albite and are hosted within the quartz veins. Figure 7.17 shows photomicrographs of textural relationships of gold, including finer gold grains within corroded albite (Figure 7.17 A-C), coarser gold grains at the contact of the albite fractures and quartz (Figure 7.17 D-E), gold in planar contact with muscovite (Figure 7.17 F), in planar contact with galena and/or pyrite (Figure 7.17 D, E), and at the contact of wallrock and the mineralized quartz vein (Figure 7.17 G). Minor gold is locally present along cleavage and fracture planes of actinolite grains in strongly amphibole altered wallrock proximal to veins (Figure 7.17 H).

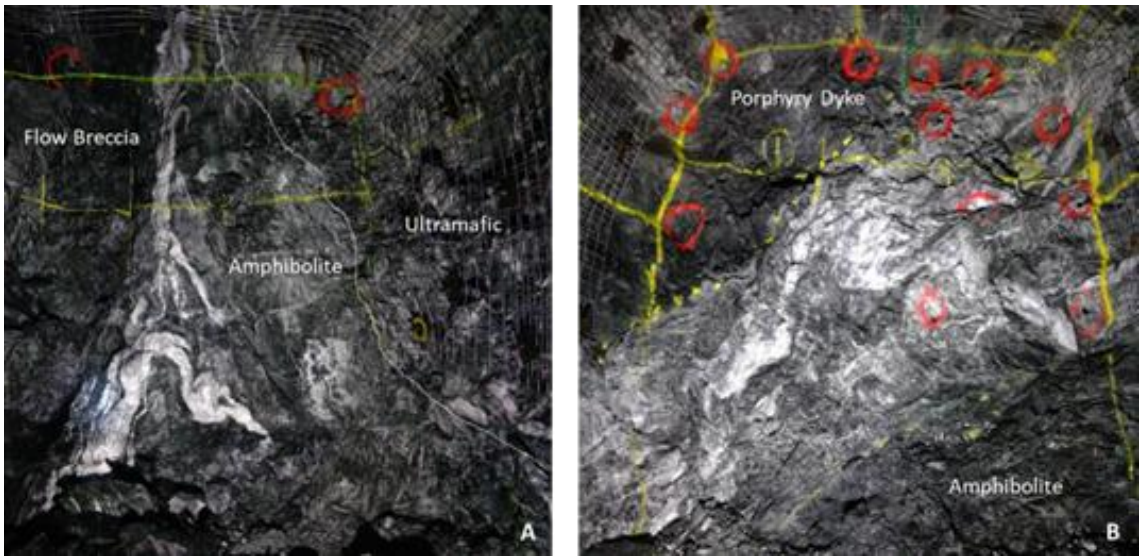


A. Sample showing gold mineralized fracture with albite, chlorite, gold and minor galena cutting quartz. B. Sample showing coarser gold at the boundary of quartz and mineralized fracture and finer gold within albite along mineralized fracture. C. Sample showing coarser gold at the boundary of quartz and mineralized fracture and finer gold within albite along mineralized fracture. D. Sample showing gold in planar contact with galena, and proximal to pyrrhotite, altaite, and chalcopyrite. E. Sample showing gold in planar contact with pyrite, and in planar contact with galena. The blue box in the cross polarized light image shows the location of the reflected light image. F. Sample showing gold in planar contact with mica. G. Sample showing gold at contact of mineralized quartz vein and wallrock. H. Sample showing gold in planar contact with amphibole, not within quartz vein. Source: Kobylinski, 2022

Figure 7.17 Examples of KDAZ gold grain locations in thin. Cross polarized light and reflected light photomicrographs for each sample

Geology from underground development

The 2020 underground development in the KDAZ at the 111-Level, allowed us to observe the geological complexity associated to ZA lens gold mineralization. A metric deformed corridor containing gold mineralization characterized the ZA lens. Intense folding of quartz veins is observed within a sheared corridor. An important amphibolization seen to be closely related to the folded laminated veins (Figure 7.18). It is probable that the protolith of the amphibolitized rock is an ultamafic komatiite. Mineralization also seems to have taken place during multiple veining events. Although visible gold is frequently seen in deformed quartz veins, it has also been possible to observe visible gold several times with the amphiboles corresponding to the amphibolitized corridor. Despite the geological complexity and the intense deformation observed, the ZA lens corridor shows good geological continuity over several tens of metres.

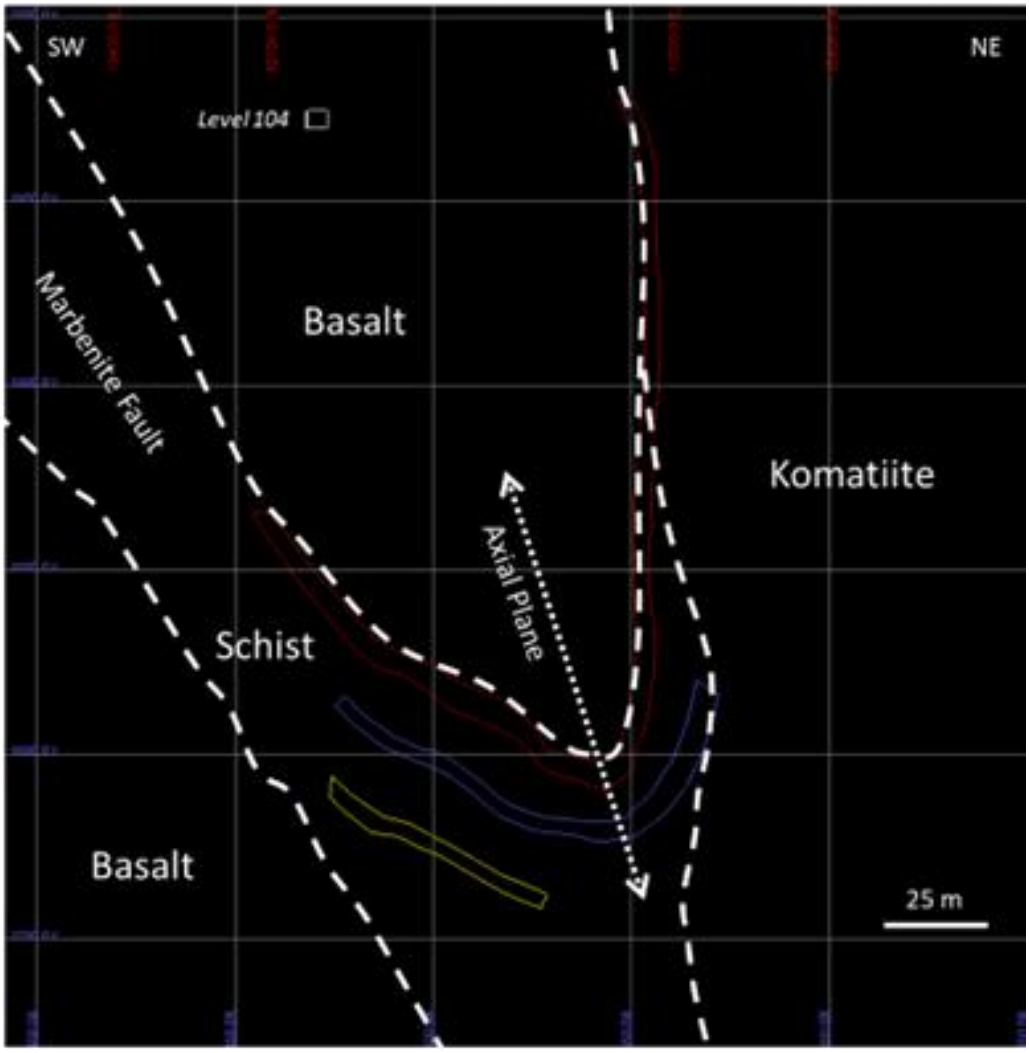


Source: Wesdome, 2020

Figure 7.18 ZA Development at the 111 Level; A) NE Subvertical area; B) Fold hinge area

The main lenses ZA, ZA1 and ZA2 are coplanar to the MF to the SW, conforms to the fold hinge in the middle part and is subvertical to the NE. The axial plan of the isoclinal fold undulates and plunges abruptly to the ESE (Figure 7.19). Lens ZA is located at the contact of the basalt domain and the chlorite-carbonite schist. We generally observe a feldspar porphyry dyke in the hanging wall of the ZA, which is a guide for the interpretation. This dyke seems to have undergone the same deformation as the host schist. The ZA has a horizontal footprint of 150 m and a vertical extent is over 1 km with thicknesses ranging from 3 m to 18 m.

ZA1 and ZA2 lenses are subparallel to the ZA and are entirely in the chlorite-carbonate schist of the fault along with minor intermediate dykes. ZA1 shows a vertical extent of 550 m and a horizontal footprint of 120 m with thicknesses ranging from 3 m to 8 m. ZA2 is composed of 4 differents lenses than ZA and ZA1. The ZA2 lense closer to surface is mostly mined out at the time of preparing the MRE_2025 Resources and was part of the Bulk tonnage initially prepared after the 2021 PFS. The lower part of the ZA2 extends from –1400 to 1800 meters at dept and passes along the new Footwall lenses (nine lenses). The overall vertical extent of the ZA2 lenses is 850 m. The lenses ZA, ZA1 and ZA2 are still open at dept and there is extension on both flanks of ZA. Growth and Definition drilling is ongoing in these areas from Drill platforms on 134 Level.



Source: Wesdome, 2021

Figure 7.19 Typical cross-section of the Kiena Deep A Zones (1615NE)

7.3.2 Siscoe Mine

The geology of the Siscoe mine is predominantly felsic intrusive rock of the Siscoe Stock and tholeiitic basalts with minor intercalations of ultramafic lavas belonging to the DF. The contact between the Siscoe Stock and the DF is marked by the K Shear Zone. Most of the producing veins are located in the stock (85-90% of total production), although minor amounts of gold were also extracted from the shear zone and from small veins hosted in volcanic rocks of the DF. Type 1, 2 and 3 veins were documented in the most productive gold vein systems of the mine. Type 1 veins correspond to the Siscoe Main Zone that produced almost half of the total production from the mine, and to the Siscoe, Hope, F and G veins. Type 2 veins correspond to the dismembered quartz veins of the K Zone. Type 3 veins correspond to the Siscoe C Vein, the first producer at the mine that yielded some 40,000 oz of gold, and to the Siscoe No. 27 Vein.

7.3.3 Shawkey Mine

The rocks that underlie the Shawkey mine area belong to the Jacola Formation. The characteristic lithologies found on the Property consist of ultramafic to mafic flows at the base of the sequence, followed by massive and minor pillowed basalts, basaltic flow and pillow breccia, tuff breccia and basaltic tuffs. The Shawkey No. 1 Vein is located about 250 m northeast of the NF in a secondary shear called the Martin Shear Zone. This shear zone is filled by a quartz vein (the Main Vein) accompanied by quartz stringers (Type 2 veins) in the walls. The Main Vein is hosted by altered basalts cut by dioritic dykes.

7.3.4 Other Mineralized Zones on the Property with Current Mineral Resources

For the 2025 MRE, a total of 94 mineralized zones were modelled. Of these, 91 zones are included in the current Mineral Resource estimate, classified as Measured, Indicated, or Inferred Resources. The 94 lenses comprise 56 recently updated wireframes, 24 wireframes carried forward from previous work completed between 2021 and 2024, and 14 newly constructed wireframe solids.

7.3.4.1 Presqu'ile Zones

Discovered in 2012, the Presqu'île Zone is a gold occurrence located 1.4 km northwest of the Kiena Mine (Figure 7.4). It lies approximately 800 m southwest of the Northwest Zone, and 100 m northeast of the Marbenite Fault, in the Jacola Formation. Mineralization in the Presqu'île area consists of a series of steeply dipping, subparallel, smokey quartz-carbonate-chlorite veins mineralized with pyrite, chalcopyrite, minor sphalerite, galena and visible native gold. The veins are hosted in mafic volcanic tuffs and flows, along a sheared contact with komatiite flows. Mineralization is associated with a moderate carbonation and chloritization (Ducharme, 2013).

The Presqu'île Zones comprise five subparallel mineralized lenses. This gold mineralized system spans approximately 300 m in length and continues to at least 400 m below surface. The mineralized lenses are generally oriented at N300° with a dip of 55°–60° northeast (Figure 7.20).

A bulk tonnage was prepared in 2025 composed of mineralized development material from June to December 2025, for a total of 15,422 out of 17,400 tons (remaining 1,978 tons extracted in January 2026). Milling of bulk samples were done from September 2025 to early 2026.

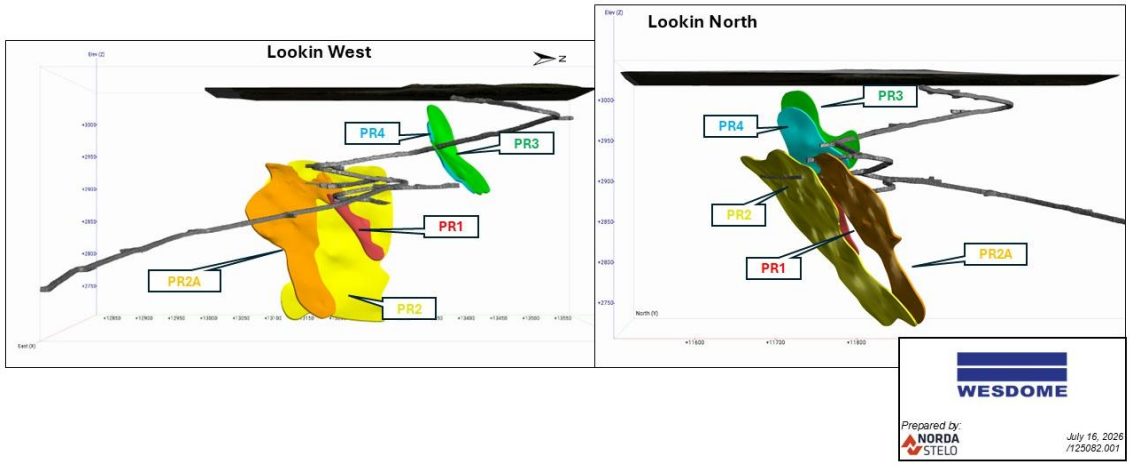


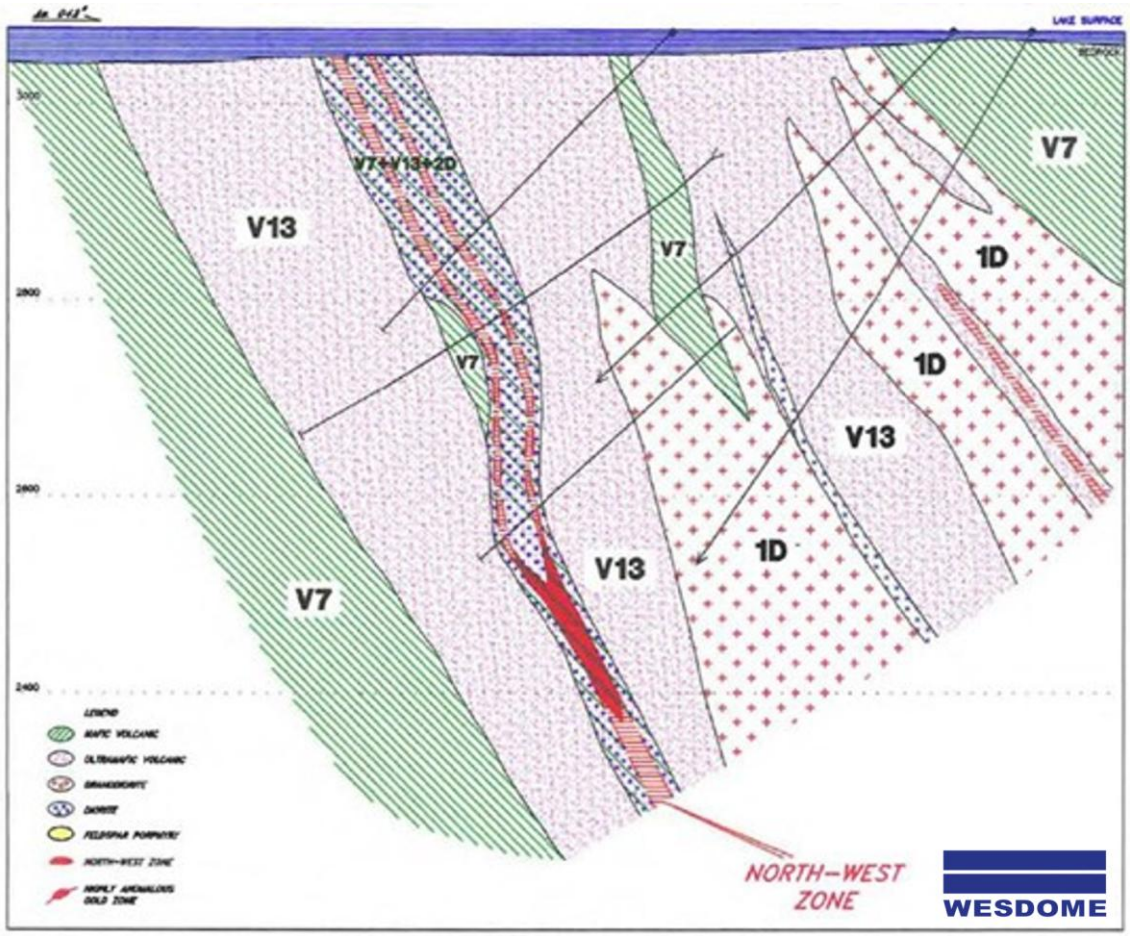
Figure 7.20 Presqu'île Zones

7.3.4.2 Northwest Zone

The following description of the Northwest Zone is mostly modified and summarized from Robinson (1962), Lebel (1989) and Donovan (1994).

Diamond drillhole No. 2 of Martin Gold Mines Ltd. intersected a wide zone of quartz stringer - schist to the northwest of Parker Island. The Northwest Zone (see Figure 7.4 and Figure 7.21) lies 750 m northwest of the North Zone and is located about 100 m north of the Norbenite Fault.

The local geology is represented by moderately to strongly altered mafic to ultramafic volcanic flows intruded by diorite to granodiorite dykes. It appears that the most significant gold mineralizing event is directly associated with a highly altered (silicified, pyritized, carbonated and albitized) diorite dyke. The thickness of the gold-bearing diorite ranges from 7 m to 70 m. The diorite dyke is enclosed in weakly sheared chlorite-talc schist. The mineralized zone is associated with 5% quartz-carbonate veinlets, accompanied by pyrite.



Source: Donovan, 1994

Figure 7.21 Simplified geology cross section of the Northwest Zone

This Northwest Zone was modelled in 3D and strikes N330° and dips 50°–70° ENE (Figure 7.22). The mineralized zone has a lateral extent of 350 m and a vertical extent of 250 m.

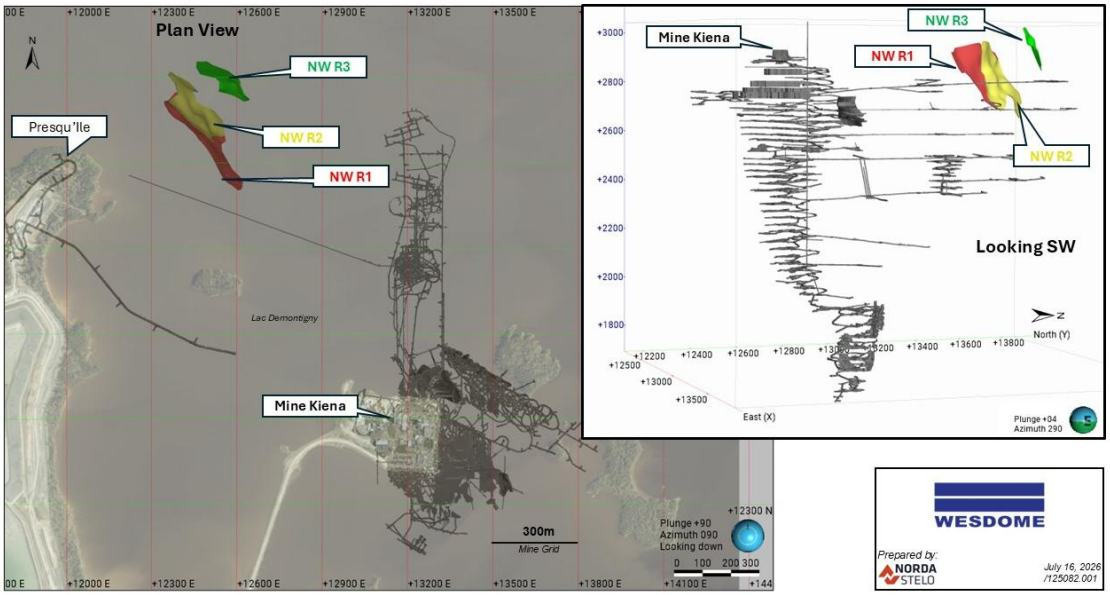


Figure 7.22 Northwest Zone

7.3.4.3 Dubuisson Zones

The section of the Dubuisson Formation encountered to date consists of a sequence of massive or foliated schistose komatiites with intercalations of talc-chlorite schist, basalt, albitized diorite dykes, and feldspar porphyry dykes.

Dubuisson Zone

Discovered in 2008, the Dubuisson Zone is located approximately 3,500 m east of the Kiena shaft and its central infrastructure, and about 1,000 m east of the end of development heading 3314 on the 33rd level. It lies 1.7 km northeast of the Norbenite Fault.

The Dubuisson Zone is known to contain at least four lenses of gold mineralization, oriented E-W. Gold is hosted by brittle, fractured, albitized, carbonated and chloritized diorite and chloritized feldspar porphyry dykes within a broad section of the deformed ultramafic sequence. Sheared talc-chlorite schist is located near or adjacent to the dykes hosting the gold mineralization.

Mineralization consists of a stockwork (stacking) of quartz-albite±tourmaline-pyrite veinlets commonly carrying free gold within diorite dykes, and a stockwork of quartz-tourmaline-chlorite-pyrite veinlets commonly carrying free gold within feldspar porphyry dykes. In some cases, the mineralization is also in the talc-chlorite schist adjacent to the feldspar porphyry or diorite dykes. The host rocks display alterations containing disseminated pyrite.

Dubuisson North Zone

The Dubuisson North Zone was discovered in 2012 by underground drilling from drift 33−14 (level 330 m) about 200 m to the south of the Dubuisson Zone. The Dubuisson North Zone lies 1.9 km northeast of the Norbenite Fault. At least two steeply dipping E−W lenses have been partially delineated and defined above a depth of 300 m.

The geological setting and mineralization of the zone is very similar to the Dubuisson Zone. Mineralization consists of stockwork quartz-carbonate±albite±chlorite±tourmaline veining carrying pyrite and native gold hosted by feldspar porphyry and/or albitized diorite dykes encased in komatiites and talc-chlorite schist. Gold mineralization is often close to a shear zone (talc-chlorite schist). In some cases, mineralization is also present in the talc-chlorite schist adjacent to the feldspar porphyry or diorite dykes.

Four lenses of the Dubuisson Zone were modelled in 3D (the most continuous) and two lenses were modelled in the Dubuisson North Zone, up to date (Figure 7.23). The Dubuisson lens is dipping 85° north and has lateral and vertical extents of 200 m and 275 m, respectively. The Dubuisson N1, N2 and N4 lenses are dipping 80° SW and 65° NE, respectively and have similar extents as the Dubuisson lens.

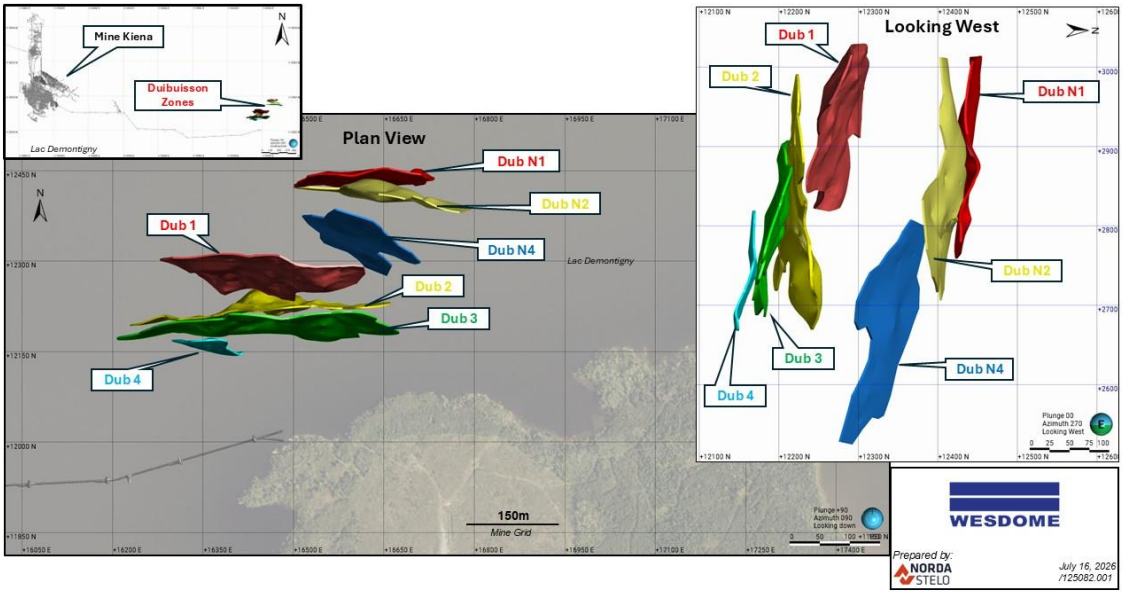
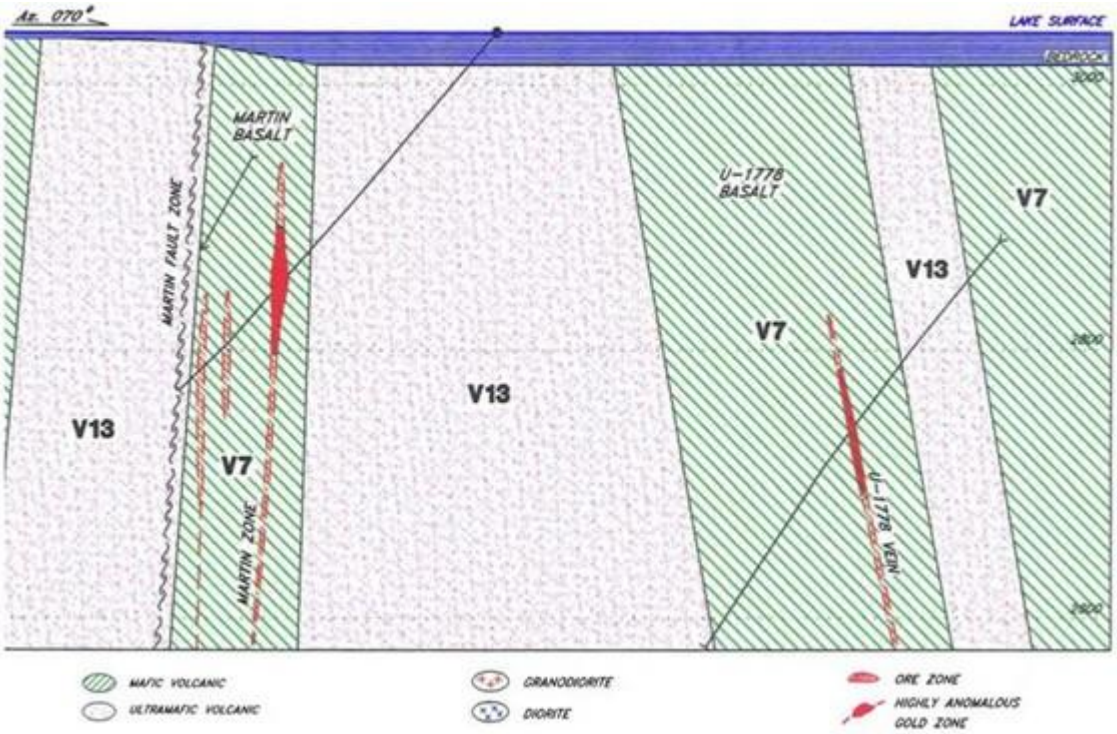


Figure 7.23 Dubuisson and Dubuisson North Zones

7.3.4.4 Martin Zone

The following description of the Martin Zone is mostly modified and summarized from Lebel (1991), Lebel (1992), and Donovan (1994).

The Martin Zone lies 300 m northeast of the Norbenite Fault and is approximately 900 m to the east of the S50 Zone (Figure 7.4). The zone strikes approximately N340°. This zone is hosted by silicified, brecciated, pyritized, and albitized basalts. The basalt is cut by numerous quartz veins and granodiorite dykes. The zone is observed close to a major faulted/sheared komatiite (talc-chlorite schist) and brecciated basalts related to the Martin Shear Zone (Figure 7.24). This shear strikes northwest and dips steeply to the southwest. Gold mineralization is present as quartz-carbonate±albite veins with pyrite−chalcopyrite±native gold.



Source: Donovan, 1994

Figure 7.24 Simplified geology cross section of the Martin and U-1778 Zones

In the past years, some exploration development has been conducted in the Martin Zone. Between 2007 and 2013, one drift and one sublevel were subsequently developed in the zone at the 33 Level. A total of 12,538 t of material was extracted from the zone at an average grade of 2.76 g/t Au. The Martin Zone was modelled in 3D for the purpose of the herein Mineral Resources update. The mineralized lens has a vertical extent of 300 m and a lateral extent of 270 m (Figure 7.25). A resources estimation has been updated in 2024, after the zone was mined out for a total of 86,920 tons over three years of production from 2022 to early 2024.

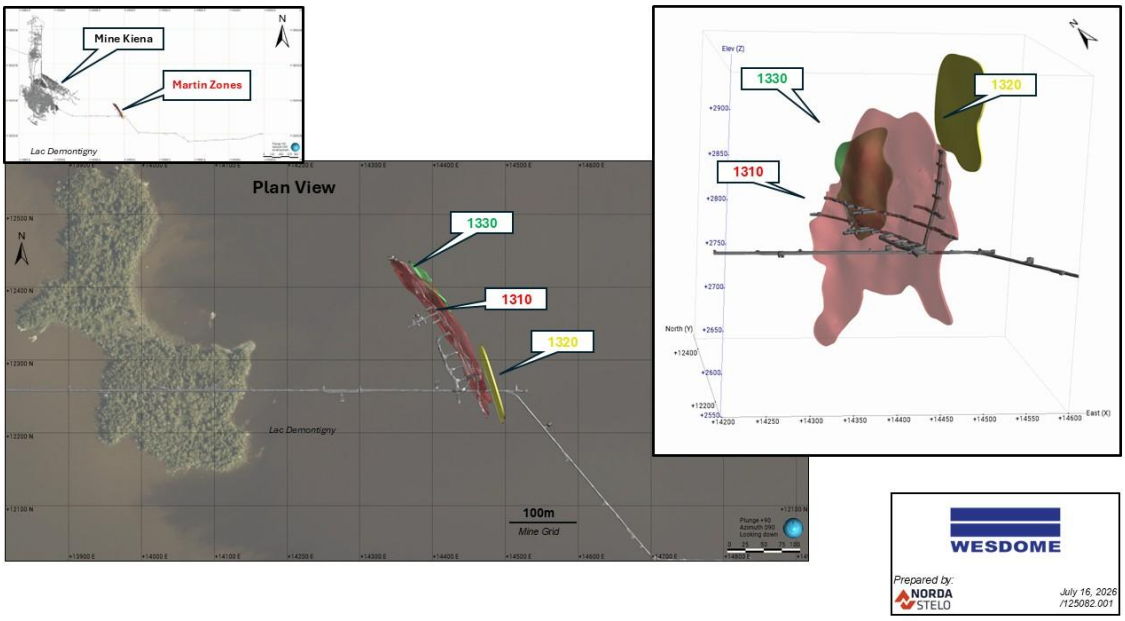


Figure 7.25 Martin Zone

7.3.4.5 Wesdome Deposit

The following description of the Dorval-Siscoe Shaft and Wesdome Deposit area is mostly modified and summarized from Ingham (1947), Sauvé (1987), Gardiner (1987; 1988), Sauvé et al. (1993), and Turcotte and Pelletier (2009), and references therein.

The area lies in the northwest extension of the K Zone of the Siscoe mine. Virtually all of the property geology is known from diamond drillholes. The geologic units that crop out on the Wesdome property are as follows: 1) dominant tholeiitic basalts and andesites with intercalations of ultramafic lavas belonging to the Dubuisson Formation; 2) intrusive rocks, referred to as the Snowshoe Batholith; and 3) dyke swarms commonly observed throughout the property, but particularly abundant in basaltic rocks in the area east of the Snowshoe Batholith.

Volcanic rocks are split into two major groups: ultramafics and basaltic rocks. The ultramafic rocks are dark green to black in colour and very soft, often talcose, in nature. These rocks are heavily altered and rich in serpentinite and magnetite. Local concentrations of biotite, actinolite, and quartz are commonly observed in thin sections. The ultramafic flows are readily identifiable on magnetic maps, and typically generate topographic depressions filled with overburden material. A wide variety of basaltic rocks occur throughout the property, including pillowed and massive flows (tabular types), and minor porphyritic and variolitic flows. The basaltic rocks range in colour from dark green to jet black and are typically fine grained. These rocks retain little of their original texture, having been recrystallized. Textures range from massive to locally schistose.

All of the volcanic flows strike WNW and dip vertically to steeply northwards. Tops indicators in pillowed flows indicate the rocks are younger to the south. The rocks can be divided into two major domains: those to the south and southeast of the Snowshoe Batholith, and those to the north and northeast of the plug. The former domain is characterized by flows that curve southwards along the margin of the plug, and strike at N120° in the southeast portion of the area. The latter domain is characterized by the mirror image or flows that curve northwards along the northwest periphery of the plug to emerge on the northwest edge trending N300°. This pattern is particularly evident on gradiometer aeromagnetic maps of the region, which clearly shows a large sausage-like area of low magnetic contrast enclosed by an envelope of highly magnetic ultramafic rocks. The Snowshoe Batholith forms the western limits of the structure, while Siscoe Island (the Siscoe mine) forms the eastern end of the “sausage”.

The K Shear Zone of the Siscoe mine crosscuts the northeast corner of the area. Several drillholes intersected the zone but failed to return significant gold values. Ingham (1947) reported significant gold values in actinolite schist, interpreted as an extension of the K Shear Zone in this sector.

The Snowshoe Batholith is a circular intrusive mass in the centre of the property that slightly exceeds 1 km in diameter. The limits of the stock are fairly well defined from drilling and a magnetic survey but are poorly understood in the northwest corner of the Property. Rocks of the Snowshoe Batholith are light grey to white in colour and equigranular. The composition is variable, locally ranging from granodiorite to quartz−diorite and monzodiorite.

Dyke swarms are common throughout the Project but are particularly abundant in basaltic rocks in the area east of the stock. The absence of dykes in the plug suggests that the dykes predate plug emplacement. Locally, dyke rocks may account for up to 50% of the volcanics. The dykes range in thickness from 1 m to 200 m, with an average of less than 10 m. The orientation of these dykes is poorly understood, but exposures on several islands indicate that most of them strike E-W and dip subvertically. Many of the shear zones on the Project host dyke-like material. Typically, the dykes are mottled grey−green and often display a porphyritic texture. The dykes are easily distinguished from the main intrusive plug by an increase in mafic minerals.

The most widespread mineralization is found in volcanic rocks intruded by subvolcanic porphyritic quartz diorite dykes to the northeast and east of the Snowshoe Batholith. But, gold intersections in diamond drillholes have also been observed within the Snowshoe Batholith. This may reflect a lack of drilling in this area. Up to now, the best mineralization on the Wesdome deposit has occurred in basaltic rocks that have been heavily intruded by porphyritic quartz diorite dykes. The structures hosting mineralization (quartz veins and shear zones) generally strike at N120° and dip 45°–75° southwest. Locally, the dip can be less than 45°. The veins cut the basaltic rocks and felsic dykes.

Mineralization can be split into three distinct types: 1) pyritiferous quartz veins; 2) albite alteration zones; and 3) pyritiferous shear zones. A large number of zones are found on the Wesdome deposit. The zones are named using letters; the most northerly is the “A” Zone, and the others were assigned sequential letters moving southward.

Wesdome A Zone

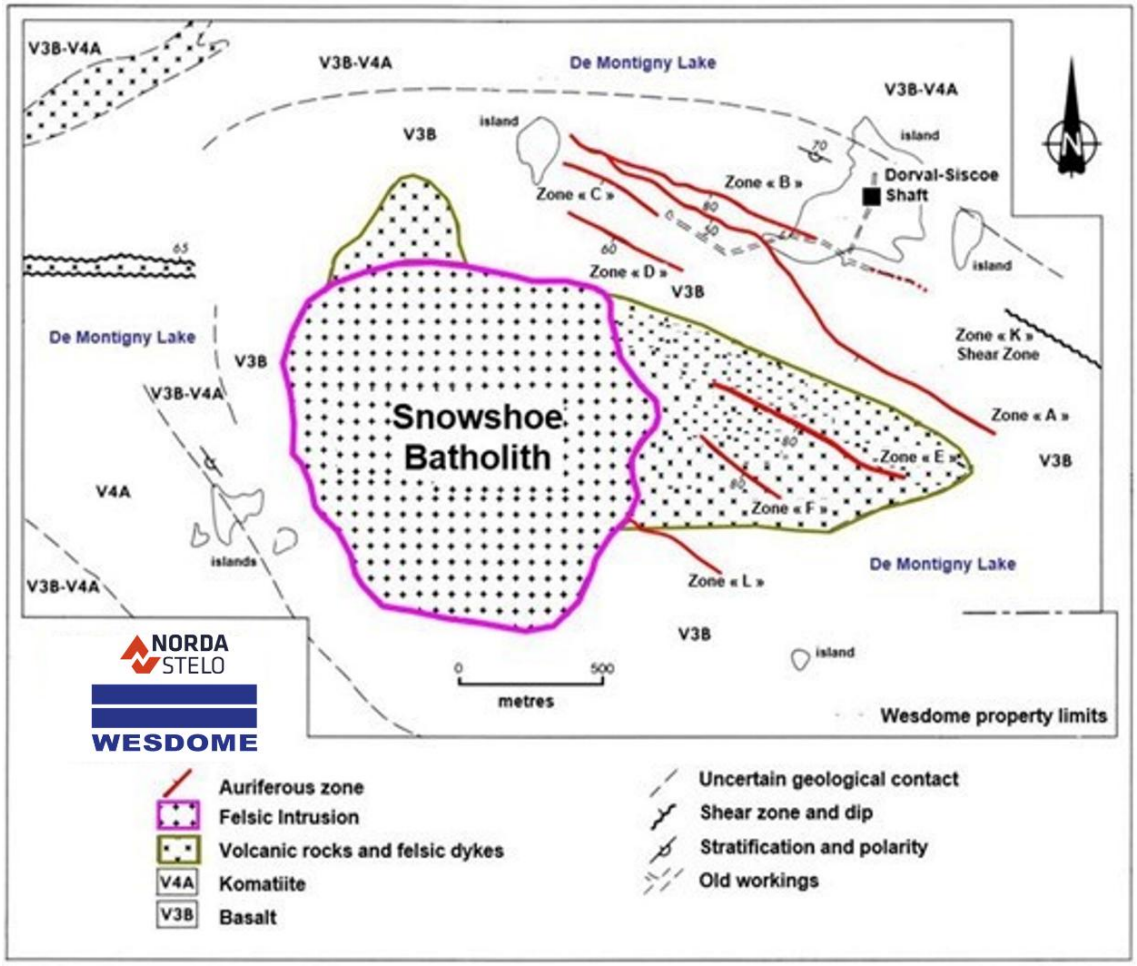
The Wesdome A Zone is located 300 m southwest of the K Shear Zone (see Figure 7.4 and Figure 7.26). It strikes N120° and dips 50° south. The zone has been traced for 900 m in strike length and extends more than 500 m in known depth. Typically, the zone is between 1–2 m thick and consists of quartz ribbons 15–80 cm thick, enclosed in heavily silicified and carbonatized basalt and/or dioritic dyke. Minerals commonly include 1% to 5% pyrite, minor tourmaline, and rare breccia zones. The mineralized material shoots are aligned downdip. These areas are typified by an increase in the amount of pyrite and a corresponding increase in intensity of alteration (albitization) in wall rocks. An old drift 600 m southwest of the Dorval- Siscoe shaft explored the zone for 200 m. Drift mapping has demonstrated the ribbon-like nature of the veins, and the lenticular nature of the gold mineralization. The Wesdome A Zone therefore consists of a number of en echelon vein systems enclosed in a weak shear zone that dips south at 50°. The Wesdome A Zone is split into two distinct zones in one sector.

A total of seven mineralized lenses were modelled in 3D in the Wesdome A Zone (Figure 7.26) as a result of the conversion of Polygonal resources. These lenses are named, Wesdome A, Wesdome AF, Wesdome A1, Wesdome AH and Wesdome AH1, Wesdome AH2 and Wesdome AH3.

Wesdome B Zone

The Wesdome B Zone is located 300 m southwest of the K Shear Zone (Figure 7.4 and Figure 7.26). The Wesdome B Zone consists of a strong shear zone oriented N110° and dipping subvertically (70°–85°) to the south and is approximately 10 m thick. Mineralization is discontinuous and consists of numerous quartz-tourmaline-pyrite veins oriented parallel to the contacts of the shear zone. Continuation eastwards from the Wesdome B Zone coincides with a shear zone explored by underground drifting roughly 200 m south of the Dorval-Siscoe shaft. This zone was modelled in 3D (Figure 7.28).

According to Gardiner (1988), this shear zone could be the equivalent of the Siscoe K Shear Zone as it continues onto the Wesdome deposit area; however, Wesdome believes this premise must be tested with more drilling, especially since it is not supported by the recent interpretation by Pilote et al. (2015c).



Adapted and modified from Gardiner, 1988; Sauvé at al., 1993; Turcotte and Pelletier, 2009

Figure 7.26 Distribution of main mineralized zones on the Wesdome property

Wesdome C and D Zones

The Wesdome C and D Zones are located 400 m southwest of the K Shear Zone (Figure 7.4 and Figure 7.26). They consist of weak shear zones striking N120° and dipping about 60°–70° south. The zones are hosted by basalt. Mineralization consists of quartz-carbonate veins and veinlets, accompanied by pyrite and other minor sulphide minerals. These zones were weakly sheared and/or schistose.

These two zones were modelled in 3D, see Figure 7.27.

Wesdome E Zone

The Wesdome E Zone is located 800 m southwest of the K Shear Zone (see Figure 7.4 and Figure 7.27). This zone is a large quartz-carbonate vein ranging in thickness from 0.7 m to 8.0 m, confined within a large shear zone striking N120° and dipping about 50°–80° south. The E Zone contains abundant wall rock fragments (up to 15%).

A total of five mineralized lenses were modelled in 3D in the Wesdome E Zone (Figure 7.27) as a result of the conversion of Polygonal resources. These lenses are named, Wesdome E, Wesdome E0, Wesdome E1, Wesdome E3 and Wesdome E4.

Wesdome F Zone

The Wesdome F Zone is located 1 km southwest of the K Shear Zone (see Figure 7.4 and Figure 7.27). The Wesdome F Zone is a complex series of small pyritiferous quartz-carbonate veins and alteration zones. The zone is confined within a weak shear zone striking N120° and dipping approximately 55°–65° south. The thickness is typically 2−3 m. The zone is complexly splayed.

A total of five mineralized lenses were modelled in 3D in the Wesdome F Zone (Figure 7.27) as a result of the conversion of Polygonal resources. These lenses are named, Wesdome F, Wesdome F1, Wesdome F2, Wesdome F4 and Wesdome F6.

Wesdome L Zone

The Wesdome L Zone is located 1.3 km southwest of the K Shear Zone (see Figure 7.4 and Figure 7.27). The Wesdome L Zone constitutes an albitized quartzitic diorite injected by a mineral assemblage of quartz±carbonate±tourmaline±albite accompanied by pyrite± chalcopyrite±galena±native gold. A weak shear zone is associated with the zone. This zone was modelled in 3D, see Figure 7.27.

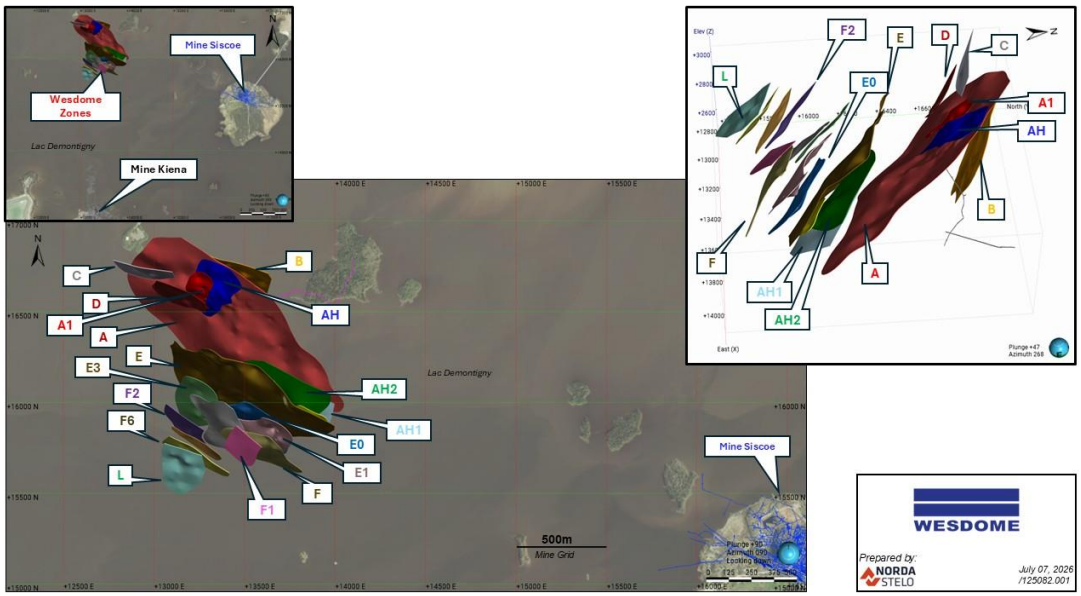


Figure 7.27 Wesdome Deposit 3D Model

7.3.4.6 Shawkey 22 Zone and Zone 134

The Shawkey 22 Zone and Zone 134 are in the eastern part of the Kiena property, near the historic Shawkey Mine area (Figure 7.28). Zone 134 lies between the Shawkey 22 sector and the Wesdome Zone and may form part of a broader structurally controlled mineralized corridor developed within volcanic and intrusive rocks.

The Shawkey 22 Zone is interpreted to be characterized by quartz-tourmaline-carbonate stockwork veining and disseminated sulphides hosted in altered volcanic rocks and, locally, intrusive bodies. Mineralization at Zone 134 appears to consist mainly of disseminated sulphides and quartz-carbonate veining associated with altered mafic volcanic rocks and locally dioritic intrusions.

Both zones appear distinct from the high-grade vein systems of the Kiena Deep sector and may be associated with broader mineralized envelopes developed along regional structural corridors. Drilling completed to date has identified broad intervals of low- to moderate-grade gold mineralization, suggesting potential for larger mineralized systems. Exploration at Zone 134 is still at an early stage and is focused on evaluating the continuity and gold potential of the corridor.

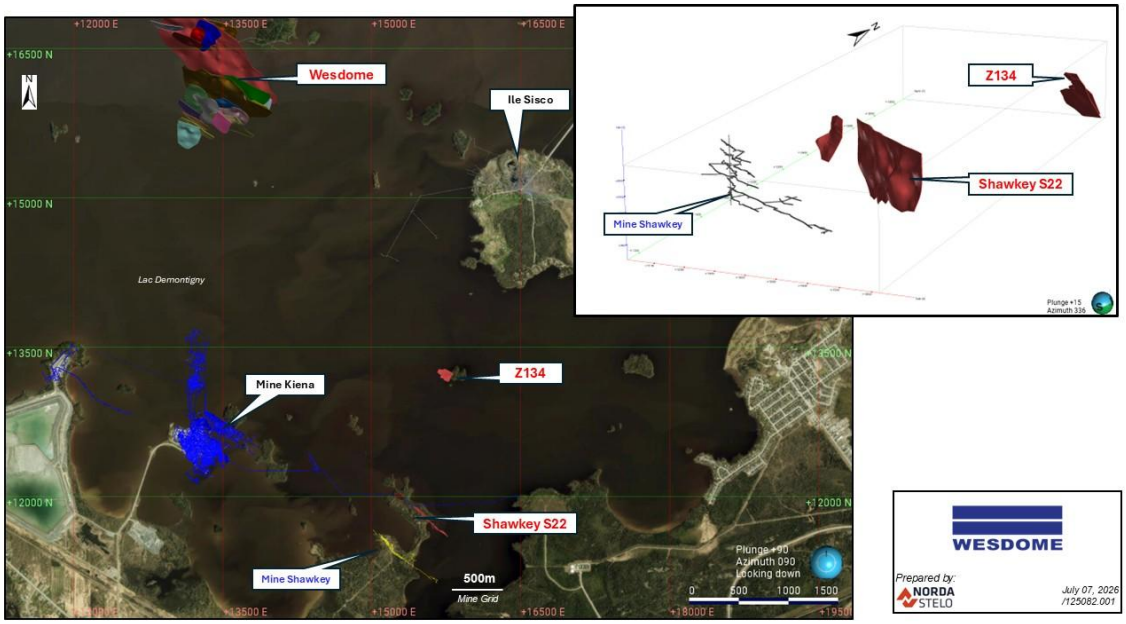


Figure 7.28 Shawkey 22 and 134 Zones

8. DEPOSIT TYPES

Gold mineralization on the Kiena Mine Complex shares many geological attributes with other vein-type gold deposits of the Val-d'Or district and with orogenic gold deposits (also known as lode gold, greenstone-hosted quartz-carbonate vein, or mesothermal deposits) in terms of host rock composition, mineralogy and hydrothermal alteration.

The extensive fracturing in the region is the primary control for the formation of mineralized zones on the Property. Thus, gold mineralization is mainly hosted in fractured competent units that acted as fluid conduits and precipitation sinks, both during and after deformation. Alteration, notably albitization, likely played a key role in host unit competency. The competency contrast between intrusive bodies, or basalts, and the talc-chlorite schists may be responsible for strain localization at the rheological boundary, and it induced a secondary permeability that provided greater access to hydrothermal gold-bearing fluids during episodic shear zone movements.

The presence in the same area of more than three types of gold-bearing veins exhibiting a wide range of orientations, mineralogy and crosscutting relationships, and the fact that several generations of dykes and veins are involved, suggests that gold mineralization was the product of multiple mineralizing phases (Beausoleil et al., 2019).

8.1 Archean Greenstone-Hosted Orogenic Gold Deposits

The Kiena Mine Complex mineralization presents characteristics of typical Archean greenstone-hosted orogenic gold deposits. The following description is mostly modified and summarized from Simard et al. (2013), unless specified otherwise.

Greenstone-hosted quartz-carbonate vein deposits occur in deformed greenstone belts of all ages worldwide, particularly in belts containing variolitic tholeiitic basalts and ultramafic flows intruded by intermediate to felsic porphyry intrusions, locally crosscut by albitite or lamprophyre dyke swarms (Dubé and Gosselin, 2007).

Archean greenstone-hosted orogenic gold deposits are typically distributed along first-order compressional to transpressional crustal-scale fault zones (Figure 8.1), characterized by multiple strain increments (e.g., Cadillac–Larder Lake Fault Zone) that mark the convergent margins between major lithological boundaries, such as volcano-plutonic and sedimentary domains. These major fault zones represent long-lived, lithosphere-scale structures that focused fluid flow during regional deformation and metamorphism (Bedeaux et al., 2017; Poulsen, 2017; Dubé and Mercier-Langevin, 2020). Large-scale carbonate alteration commonly occurs along these major fault zones and associated subsidiary structures (Dubé and Gosselin, 2007). This gold deposit type is, however, seldom located directly within these first-order structures.

Although these major or first-order faults are interpreted as primary hydrothermal pathways to higher crustal levels (Eisenlohr et al., 1989; Colvine, 1989; McCuaig and Kerrich, 1998; Kerrich et al., 2000; Neumayr and Hagemann, 2002; Kolb et al., 2004; Dubé and Gosselin, 2007), only a few significant gold deposits are hosted within the major faults themselves, such as the Ajjanahalli mine (Dharwar Craton, South India) (Kolb et al., 2004), and the McWatters mine, and Orenada deposit in the Abitibi Subprovince (Robert, 1989; Morin et al., 1993; Neumayr et al., 2000; 2007; Simard et al., 2013). Significant gold mineralization, however, is more commonly hosted in second- and third-order shear zones within the broader deformation corridors rather than in the first-order faults (Eisenlohr et al., 1989; Dubé and Mercier-Langevin, 2020).

Structurally, these shear zones range from brittle–ductile to ductile depending on formation depth, typically between 5 km and 10 km (Hodgson, 1993; Robert and Poulsen, 2001; Dubé and Gosselin, 2007). At depths greater than approximately 10 km, gold mineralization is more commonly associated with disseminated sulphides rather than discrete quartz–carbonate veins (Witt and Vanderhor, 1998).

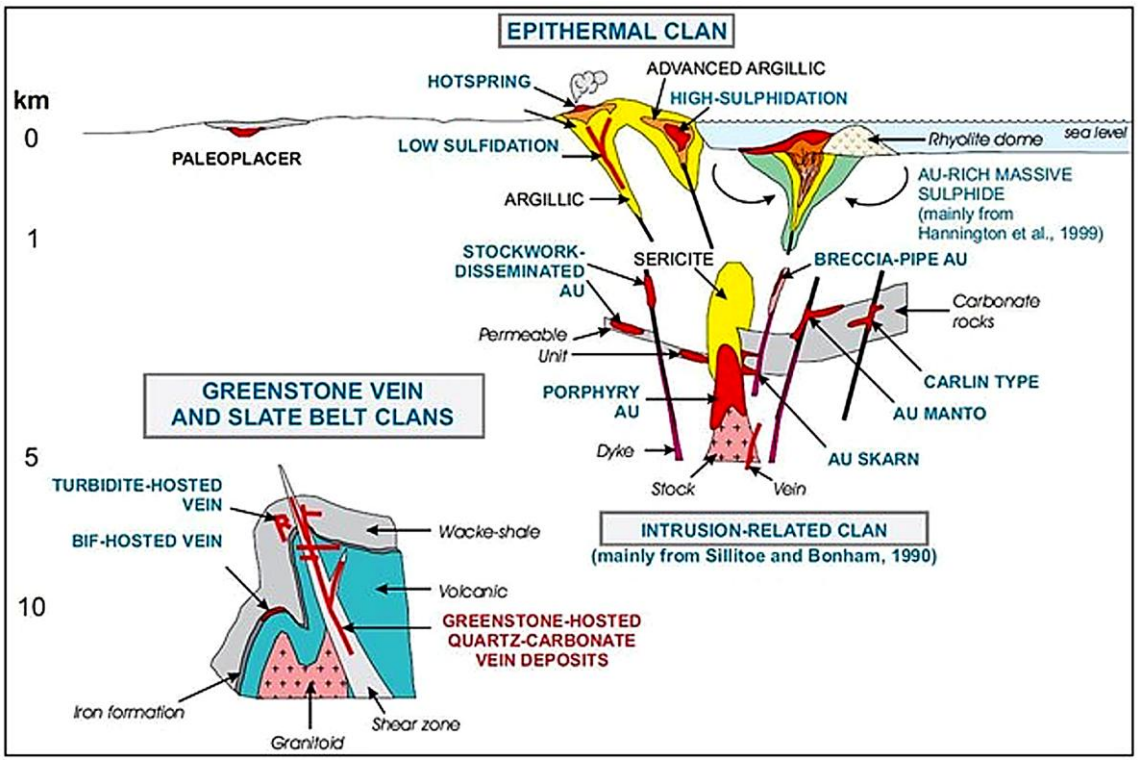
In the Val-d'Or area, including the Kiena Mine Complex, gold deposits are predominantly associated with subsidiary shear zones north of the Larder Lake–Cadillac Fault. These structures formed syn- to late D2 (Robert, 1990), or equivalently regional D3 (Dubé and Mercier-Langevin, 2020). This deformation corresponds to the principal regional shortening event in the southern Abitibi, characterized by east-trending regional folds and a steep axial planar foliation resulting from north–south compression (Dimroth et al., 1983; Daigneault et al., 2002; Dubé and Mercier-Langevin, 2020).

In the Abitibi Greenstone Belt, late-orogenic gold mineralization is regionally dated between ca. 2665 and 2640 Ma and postdates Timiskaming sedimentation (Dubé and Mercier-Langevin, 2020). This mineralizing event is associated with regional shortening and transpression linked to tectonic inversion of earlier extensional basins. Gold mineralization is spatially associated with major crustal-scale deformation zones and related subsidiary shear zones, which acted as conduits for hydrothermal fluids generated during prograde metamorphism and regional deformation.

At the deposit scale, the nature, distribution, and intensity of the wall-rock alteration are primarily controlled by host-rock composition, rheology, and metamorphic grade. At greenschist facies, alteration haloes typically consist of iron-carbonatization and sericitization, with sulphidation of immediate vein selvages (mainly pyrite, less commonly arsenopyrite) (Dubé and Gosselin, 2007).

Gangue minerals are mainly quartz and carbonate, with variable amounts of white mica, chlorite, scheelite and tourmaline. Sulphides generally comprise less than 10% of the mineralized material. The main minerals consist primarily of native gold associated with pyrite, pyrrhotite and chalcopyrite without significant vertical zoning. Mineralization is syn- to late-deformation and typically post- peak greenschist-facies or syn-peak amphibolite-facies metamorphism (Dubé and Gosselin, 2007).

There is general consensus that greenstone-hosted quartz-carbonate vein deposits are related to metamorphic fluids generated during accretionary and collisional processes. These fluids are produced by prograde metamorphism and thermal re-equilibration of volcano-sedimentary sequences. Deep-seated, gold-bearing metamorphic fluids are channelled to higher crustal levels through major crustal-scale faults and deformation zones and precipitated as veins or replacement-style mineralization within second- and third-order structures in response to changes in pressure–temperature conditions, fluid pressure cycling, and physico-chemical parameters (Dubé and Gosselin, 2007).



Source : Dubé et al., 2001; modified from Poulsen et al., 2000

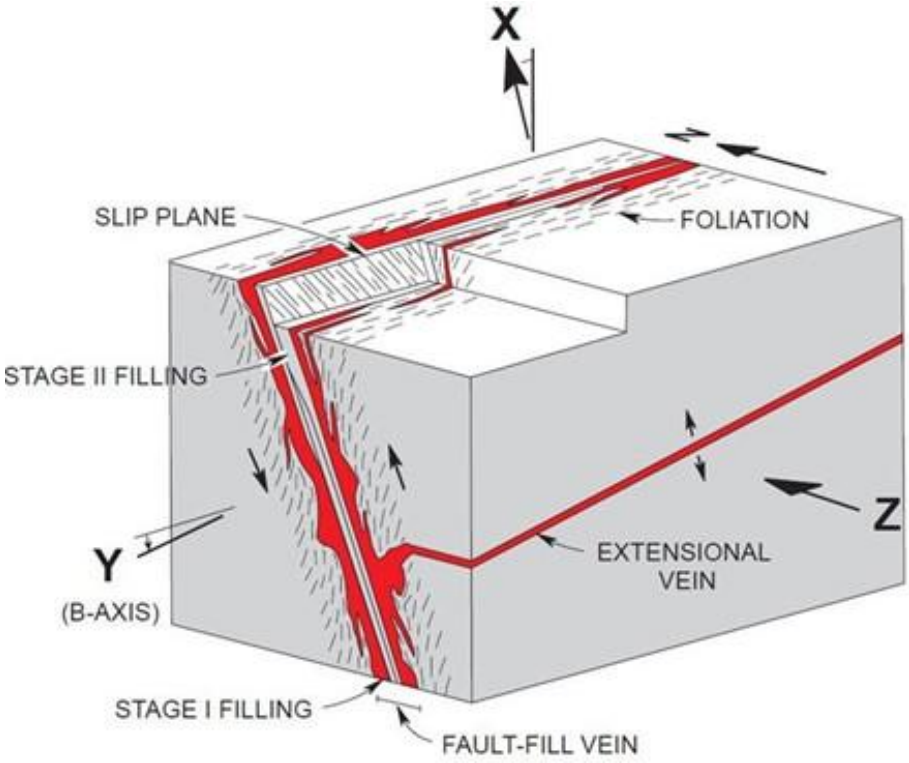
Figure 8.1 Inferred crustal levels of gold deposition showing the different types of gold deposits and the inferred deposit clan Gold Mineralization in the Val-d'Or District

The following is taken from Couture et al., (1994), who published a detailed description and chronology of the Archean greenstone-hosted quartz carbonate vein of the Val-d'Or district.

Gold mineralization occurs in all rock types but is more commonly located within intrusive bodies that acted as competent rock units promoting fracture during deformation. In the Val-d'Or district, there are two main generations of gold quartz veins: young deposits in which the gold mineralization did not experience much deformation after its emplacement; and early mineralization in which mineralized bodies are commonly affected by D2 asymmetric folds, are highly strained and locally dismembered. In a few deposits both generations are present.

At least two major gold mineralizing events have been recognized in the Val-d'Or district on the basis of morphological and structural features, mineralization and alteration mineral assemblages, and crosscutting relationships with dated intrusive rocks (Robert, 1990, 1994; Sauvé et al., 1993; Couture et al., 1994). The older mineralizing event is manifested by veins and breccias (e.g., Norlartic, Marban, Kiena mines, and Main mineralized zone at Siscoe mine) that are mainly associated with second-order shear zones and commonly folded or boudinaged by D1 deformation. These veins and breccias are cut by diorite and tonalite dykes, which have U-Pb zircon ages of 2692 ±2 (Pilote et al., 1993) and 2686 ±2 Ma (Morasse et al., 1995). The younger gold event, which produced the Sigma, Lamaque, Perron-Beaufor, Shawkey, Wesdome and Camflo deposits, as well as the C Vein (quartz-tourmaline) at the Siscoe mine, is represented by veins commonly associated with third-order shear zones. These veins clearly crosscut plutonic rocks intruded between 2694 ±2 Ma (Wong et al., 1991) and 2680 ±6 Ma (Jemielita et al., 1990), and they may have formed during the last stages of D1 deformation.

Young gold mineralization is characterized by networks of shear-hosted quartz-carbonate±tourmaline±scheelite veins and associated subhorizontal extension veins. This is well documented at the Sigma mine and also occurs in other deposits east of Val−d'Or, namely Lamaque, Perron, and L.C. Béliveau. Mineralized veins and associated structures crosscut all rock types except Proterozoic dykes. In the Sigma deposit (Robert and Brown, 1986) the gold-bearing quartz-tourmaline vein system is hosted by andesite of the Val-d'Or domain (2705 ±1 Ma, Wong et al., 1991; 2706 ±3 Ma, Machado et al., 1991), porphyritic diorite, and feldspar porphyries (2704 ±3 Ma and 2694 ±2 Ma, respectively, Wong et al., 1991) metamorphosed to greenschist facies. The porphyritic diorite is deformed, but feldspar porphyry dykes cut D2 folds and thus postdate regional D2 folding (Robert and Brown, 1986). The vein network consists of coeval and cogenetic steeply dipping shear-hosted veins and sub-horizontal extensional veins (Robert and Brown, 1986; Figure 8.2). Preserved delicate vein-filling textures and crosscutting relationship indicate that gold mineralization postdates the youngest intrusion as well as metamorphism and much of the deformation (Robert and Brown, 1986). Rutile associated with the mineralization has been dated by U-Pb at 2599 ±9 Ma (Wong et al., 1991). Similar vein geometry and morphology were also described in the Lamaque mine (Daigneault, 1983), where most of the mineralization is hosted by small circular tonalite plugs crosscutting porphyry intrusion similar to that of Sigma. Jemielita et al. (1990) reported U -Pb ages of 2685 ±3 and 2682 ±2 Ma for the Lamaque Main tonalite plug and 2593 ±5 Ma for rutile associated with gold mineralization. Similar age relationships can be inferred from structural studies at the Perron and Béliveau mines (Tessier, 1990; Gaumond, 1986, respectively). West of Val-d'Or, significant gold was extracted from the post-D2 Camflo quartz monzonite dated at 2680 ±6 Ma (Jemielita et al., 1990) and 2685 ±10 Ma (Zweng et al., 1993), whereas titanite and rutile, associated with the gold mineralization, yield ages of 2625 ±7 Ma (Jemielita et al., 1990) and 2621 Ma (Zweng et al., 1993).



Source: Robert, 1990; Modified after Dubé and Gosselin, 2007

Figure 8.2 Schematic diagram of the geometric relationships between the structural elements of veins and shear zones and the deposit-scale strain axes

9. EXPLORATION

This item presents the issuer's exploration work on the Property since 2007 and was modified and updated from the previous technical report on the Property from Athurion et al. (2021).

9.1 Surface Exploration

9.1.1 Exploration Drift (eastern area)

In 2007, Wesdome completed six (6) drill holes on the No. 22 Zone from surface. This provided information in advance of an exploration drift on the 330-metre level. In 2009, positive results on the Dubuisson Zone prompted Wesdome to initiate an underground exploration and development program on the new zone. Since 2007, about 2 km were drifted eastward in order to reach the Dubuisson Zone. Only 150 to 200 m were missing to reach the zone. A series of drilling bays was also excavated in the exploration drift. Drilling bays are spaced 150 m apart and provide excellent access for exploration drilling. In addition, geological mapping was performed on the back of the drift, yielding a lot of geological and structural information.

9.1.2 Geophysical Compilation

In 2006, Wesdome compiled the ground magnetic data from all the surveys performed by Placer Dome (Kiena Gold Mines Ltd, Falconbridge Mines Ltd, Geola Inc., and Val−d'Or Geophysics Inc.). The available digital data covers all the Quebec Wesdome Project, as well as adjacent properties. The digital data was obtained from Abitibi Geophysics, who combined all previous surveys into a single database. The final product was processed using GeoSoft software.

9.1.3 Ground Magnetic Survey

In 2009, Harold Ferderber carried out a 140-km ground magnetic survey in the area Dubuisson and Dubuisson North areas. The survey covered 6.9 km^2. The lines were oriented N030° and spaced 50 m apart. Meegwich Consultants Inc. provided the processed magnetic data and contour maps to generate magnetic total field and magnetic gradient maps. The purpose of the survey was to elaborate the geological interpretation of the Dubuisson Zone. The survey revealed the presence of folds and fault zones.

Two magnetically interpreted folds with ENE-trending axial fold traces are believed to occupy in the northern half of the survey area. A series of magnetic lineaments trending N080° to N085° Az, which extend beyond the survey area (as observed in the previous property-wide compiled magnetic map), are interpreted to represent E-W regional D2(?) deformation "shear structures" crossing the survey area. These lineaments are characterized by the juxtaposition of truncated magnetic highs and could also be host to some diorite intrusions belonging to the same trend. A second series of parallel lineaments trending about N345° Az is characterized by the curvature and/or termination of "mag highs" and "lows", possibly representing deformation corridors for which the relative timing remains to be determined. A third series of lineaments trending about N025° to N035° Azimut are characterized by multiple offsets of "mag highs" and "lows" and are interpreted to represent late NE-trending faults.

9.1.4 Airborne Magnetic Survey

Prospectair Geosurveys Inc. conducted a heliborne high-resolution magnetic (Mag) survey over the Property from February 4 to 19, 2018. The results are presented in the report by Dubé (2018). The strong linear magnetic features affecting most of the surveyed block are characteristic of alternating sequences of mafic volcanics and sediments or intermediate to felsic volcanics, locally punctuated by small intrusive stocks or dykes. Two large areas show magnetic lows. The first is in the centre of Lac De Montigny and corresponds to a large, deformed intermediate to felsic intrusion; the second covers most of the southwestern part of the block and is characteristic of sedimentary rocks.

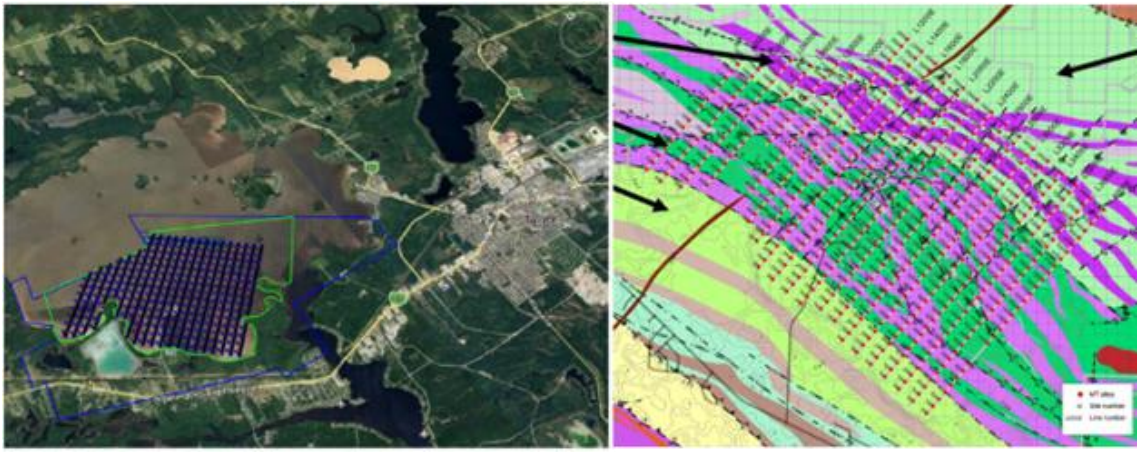
Most magnetic lineaments found in the surveyed block trend E-W to NNW-SSE, except near the postulated central intrusion where lineaments are rather organized parallel to its pseudo-circular contact. Magnetic lineaments are mostly related to rock formations enriched with magnetic minerals (magnetite and/or pyrrhotite). Some offsetting structures were detected throughout the block, representing faults, fractures, and shear zones. (Dubé, 2018)

9.1.5 Ground Magneto Tellurics (MMT) survey

From February 2, 2020, to March 3, 2020, Wesdome hired Quantec Geosciences Ltd. to perform a TITAN magnetotelluric (MT) survey over the Kiena Mine Complex. The following information was taken from the Quantec report (Tournerie, 2020) unless specified otherwise. A total of 543 sites distributed along 21 profiles oriented at N041° were surveyed. Survey points were mostly on top of the Lac de Montigny ice and surveying was performed using a snowmobile (Figure 9.1).

The MT data were analyzed using 3D inversion and a total of 13 main features over the area were exposed. The features generally presented a subvertical structure with a depth extension close to 1 km.

According to Tournerie (2020), the more resistive and less resistive zones seem to identify the principal units, faults, or contact over the area. Based on the geologic information available, they observed that the more resistive zones seemed to map the basalt units while the less resistive zones seemed to be associated with the ultramafic units. Quantec did the survey perpendicular to the inferred lithological units, which are interpreted as a sequence of mafic and ultramafic units (Figure 9.1).



Source: Tournerie, 2020

Figure 9.1 General location map of the survey (left) and TITAN-MT survey points over the SIGEOM geological map (right)

9.1.5.1 Procedure

The MT method is a natural source utilizing electromagnetic (EM) waves that measures the variation of both the electric (E) and magnetic (H) fields on the surface of the earth to determine the distribution at depth of the resistivity of the underlying rocks.

The objective of the inversion of MT data is to compute a distribution of the resistivity of the surface that explains the variations of the MT parameters, i.e., the response of the model that fits the observed data. The solution, however, is not unique, and different inversions must be performed (different programs, different conditions) to test and compare solutions for artefacts versus a target anomaly.

The depth of the investigation is determined primarily by the frequency content of the measurement. Depth estimates from any individual soundings may easily exceed 20 km. However, the data can only be confidently interpreted when the aperture of the array is comparable to the depth of investigation.

The inversion model is dependent on the data, but also on the associated data errors and the model norm. The inversion models are not unique; they may contain artefacts of the inversion process and therefore may not accurately reflect all the information apparent in the actual data. Inversion models need to be reviewed in context with the observed data and model fit. The user must understand the model norm used and evaluate whether the model is geologically plausible.

2D inversion parameters

2D inversions were performed on the data for two selected profiles, L0200E and L2400E.

The 2D inversions presented in the Report were carried out along each profile using the CGG2D inversion algorithm. For each profile, the strike direction is perpendicular to the profile for all sites.

The 2D inversions were performed using resistivity and phase data interpolated at six frequencies per decade, assuming 10% and 5% error for the resistivity and phase, respectively, which is equivalent to 5% error on the impedance component Z. For each profile, static shift was included as a parameter of the inversion.

The topography was included in the inversions of each profile. To accommodate topographic and near surface variation (i.e., the lake), the vertical mesh was set with 10 m thick cells for the first 50 m, and then the thickness of the cells increased logarithmically (factor 1.06) with depth. Each 2D inversion started from a half space model of 1,000 Ω·m.

3D inversion parameters

The 3D inversion was carried out using the CGG RLM-3D inversion code. The 3D inversions of the MT data were completed over an area of approximately 4 km x 3 km. All MT sites (i.e., 543 stations) from this current survey were used for the 3D inversion.

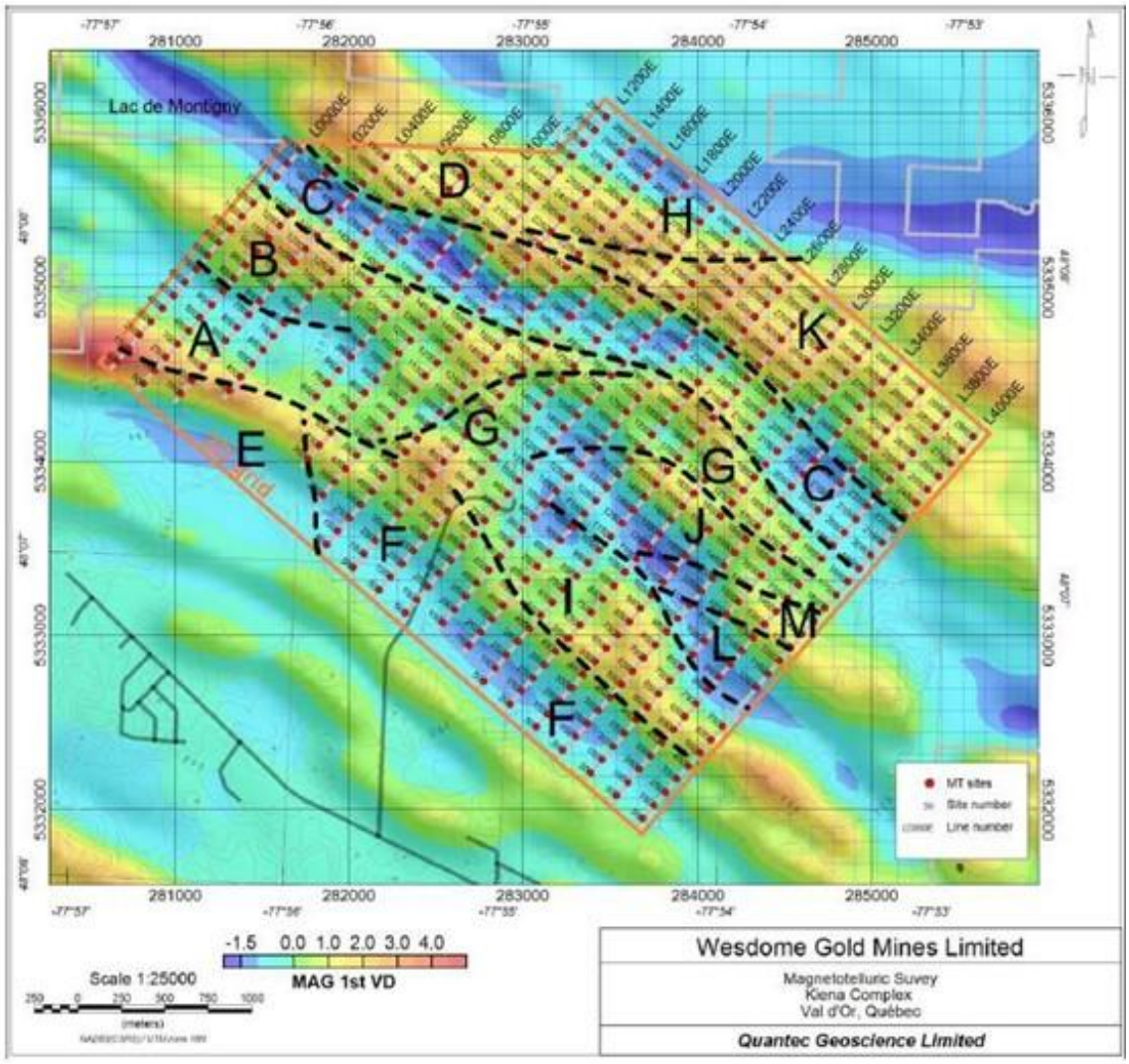
A summary of the 3D inversion parameters is provided in Table 9.1.

Table 9.1 3D MT inversion parameters

Number of sites	543 MT sites
Mesh cell size (core mesh)	X-Grid (EW): 121 x 33.33 (~4 km) Y-Grid (NS): 88 x 33.33 (~3 km) Z-Grid: 75 cells covering ~4.5 km
Padding coverage	Over 40 km in each X, Y, and Z direction
Data used	Complex Impedances Zxx, Zxy, Zyx, Zyy at 24 frequencies from 10 kHz to 0.01 Hz sampled at 5 frequencies per decade (gap between 4 and 0.1 Hz); location of the magnetic sensor provided for each site; data rotation to X (i.e. Ex) at 309 deg.

9.1.5.2 Results and Recommendations

Two-dimensional (2D) sections were prepared for each line of sampling (21 lines) and the results of the data in 3D were presented as cross-sections of the resistivity along the profiles and as elevation plan maps. Figure 9.2 presents the magnetic 1st vertical derivative map with inferred structural features from the MT3D model. The 13 main features are labelled A to M in the figure. The more and less resistive zones seem to identify the principal units, faults, or contacts over the area. Quantec suggested reviewing the resistivity model with known geology and drilling information.



Source: Tournerie, 2020

Figure 9.2 Magnetic 1st vertical derivative map with inferred structural features from the MT3D model

9.1.6 Drone Magnetic Survey

In 2025, Wesdome commissioned Abitibi Geophysics to complete a high-resolution drone magnetic survey over the Kiena Property. Data acquisition was completed between July 3 and October 2, 2025, using UAV-based magnetic systems equipped with total-field magnetometers. The survey consisted of 407 north-south oriented flight lines spaced at 30 m, complemented by 20 tie lines spaced at 600 m, for a total coverage of 2,159 line-km. The nominal terrain clearance ranged from approximately 10 m above Lac De Montigny to 28–30 m over forested areas.

The survey data were collected using RTK GPS positioning and corrected for diurnal variations. Quality control procedures were implemented before, during, and after data acquisition, including instrument testing, magnetic interference checks, data review, and validation at the base of operations. All recorded data were reviewed and validated, with 100% of the acquired readings accepted.

The magnetic data were processed to generate Total Magnetic Intensity (TMI), Reduction-to-the-Pole (RTP), derivative products, and three-dimensional magnetic susceptibility inversion models. The interpretation improved the understanding of the geological and structural framework of the Property by delineating lithological contacts, intrusive bodies, faults, shear zones, and other structural features potentially associated with gold mineralization.

The interpretation identified magnetic responses associated with ultramafic intrusions, mafic volcanic rocks, altered zones, and structural corridors. The survey also improved the understanding of the geometry of intrusive bodies, including the Snowshoe Pluton, and identified new exploration targets, including an interpreted intrusive body between the Wesdome and Siscoe deposits at approximately 900 m below surface and additional anomalous features beneath the Dubuisson area. These targets were incorporated into Wesdome's exploration strategy and scheduled for drill testing during the 2026 exploration program.

The drone magnetic survey methodology, processing, and interpretation are described in Chemam (2025).

9.2 Underground Exploration

In August 2017, Wesdome developed an exploration ramp to provide additional underground drilling platforms. The exploration ramp allowed shorter holes to be drilled with better angles and accelerated access to the Kiena Deep lenses.

Ramp development started at the 100 Level. The CMAC-THYSSEN Mining Group Inc. was contracted to perform underground development. The first drilling bay was completed in October 2017, and diamond drilling began in the Kiena Deep Zone.

From August 2017 to November 2018, a total development of 2.2 linear kilometres allowed diamond drilling to be done from a more optimal direction (i.e., to the northwest) to intersect the steeply plunging lens to the southeast and provide drilling platforms that allowed definition drilling in the central area of the Kiena Deep A Zone. The enhanced drill platforms also made it easier to drill several step-out exploration holes.

In 2019, development continued with a new exploration ramp on the 79 Level. Totalling 575.5 m of development, the 79 Level ramp has been completed in early 2020. It provides optimal drill platforms for testing the possible up-plunge extension of the Kiena Deep A Zone and extensions of VC Zones between the 670-m level and the 1,070-m level. Prior to the COVID-19 suspension on March 25, 2020, a total of 172 m of new development was achieved in the main ramp, below the 1,070 m elevation.

Activities at Kiena restarted on May 11, 2020. Down ramp development continued to enhance and increase drill platforms and provide access to the lower areas of the A Zone. Access development from the 109 Level (main ramp) was completed towards the A Zone on the 111 Level (secondary ramp) to position Wesdome to perform underground development of the A Zone. From May to December 2020, a total of 240 m of new development was achieved in the main ramp below 1,090 m elevation.

As of January 2021, the ramp has advanced below the 111 Level (1,110 m) and progression is ongoing towards the 112 Level.

Production of Kiena Mine started in November 2022, opening the way to access more workplaces.

The excavation of an exploration ramp from the surface to access the near-surface Presqu'île Zone commenced in 2024. This ramp can also be integrated with Kiena's existing underground ramp network, providing access to the surface for the existing operation and ventilation benefits. It will provide a second access for conveyance of material and personnel as early as June 2026, freeing time for additional ore hoisting via the shaft.

In 2024, a total of 300 meters of underground development was also carried out at 109 Level for a new exploration drift and two new drilling platforms. It provides optimal drill platforms for testing the possible down-plunge extension of VC Zone below 1090m vertical depth. The exploration drift at 109 Level was extended in 2025.

In 2025, the progress of the ramp, past 134 Level, gave the opportunity to develop the 134 exploration drift. The 134 Level gave access to do more drilling for growth, exploration at dept and helped to secure workplaces to do delineation drilling in proximity to future production areas.

9.3 Underground Presqu'île Bulk Sample Program

The 2025 bulk sample program consisted of:

- Underground access and level development
- Geological truthing with mapping, chip sampling and muck sampling
- Milling and processing

The main objectives of the 2025 Presqu'île bulk sample program were to gain further knowledge on the geological settings, to better understand the mineralized zones, shears and mineralization controlling structures, and to improve the understanding of the gold content and distribution. The bulk sample was also a good way to find the continuity of the model.

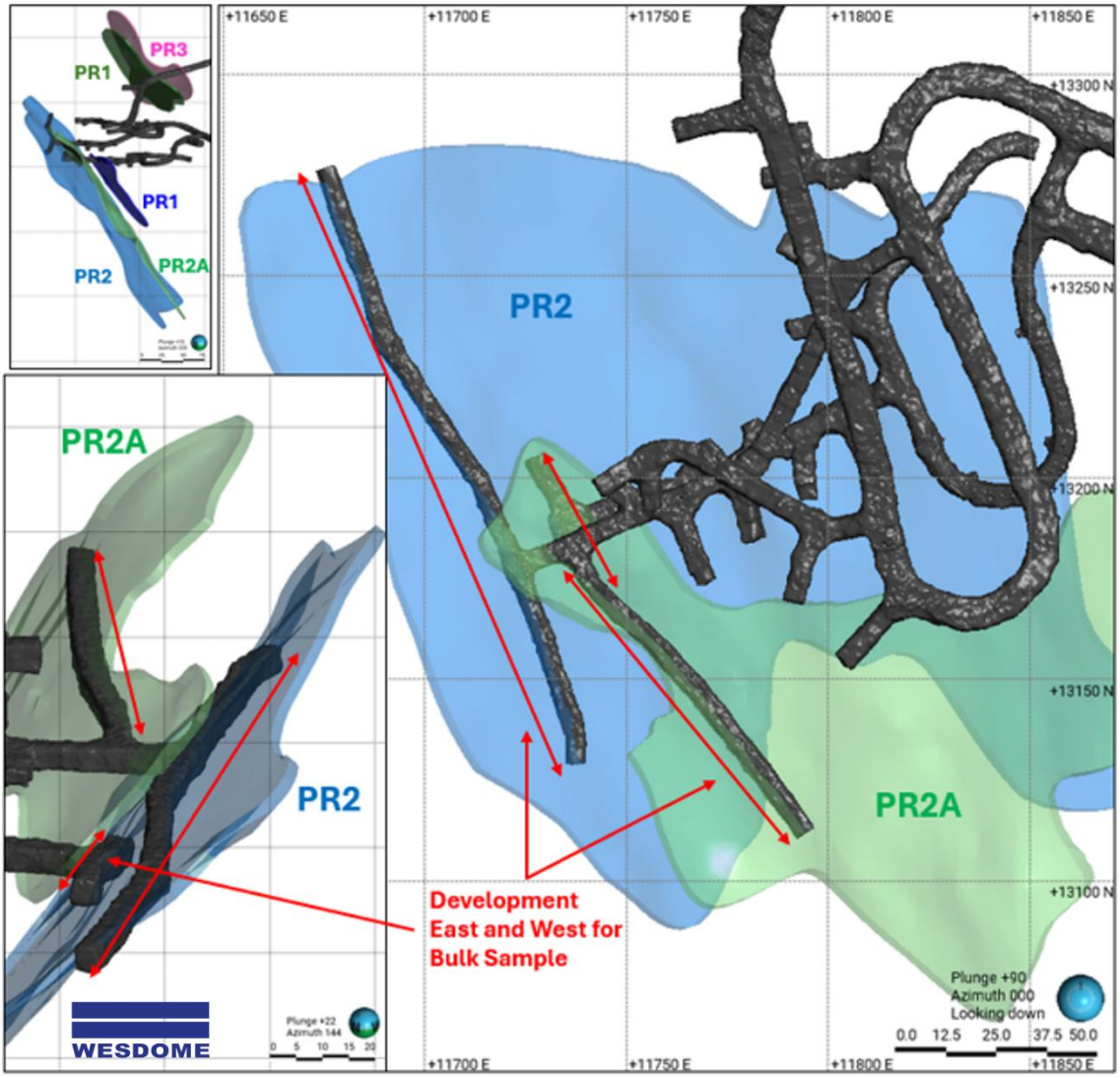
Milling and processing of the material was performed on-site existing infrastructure from September 2025 (15,422 tons out of 17,400 tons, 88.6%) and will be finished in early 2026.

The Mill has been in operation since 2022 and processing ore from underground development and production from Kiena Deep (2022 to date) and Martin area (2022 to 2024).

The bulk sample consisted of an average of 5.2 m wide x average of 5.3 m high lateral development on the 13 and 15 Levels along the PR2 and the PR2A Zones (Figure 9.3 and Figure 9.4). A total of approximately 70 drift rounds in 2025 were blasted, which allowed for thorough geotechnical assessment and geological mapping, photographing and sampling from the faces of every two rounds of development. Chip sampling was completed systematically to determine average grade for each 2 drift rounds, muck was taken for every round, one sample every 3 buckets. A total of 388 mucks from 13 Level and 99 muck from 15 Level, and 527 chip samples from 13 Level and 125 chip samples from 15 Level were collected in addition to quality control samples. During the development of this portion of the PR2 and PR2A zones, visible gold was observed a few times of the faces.

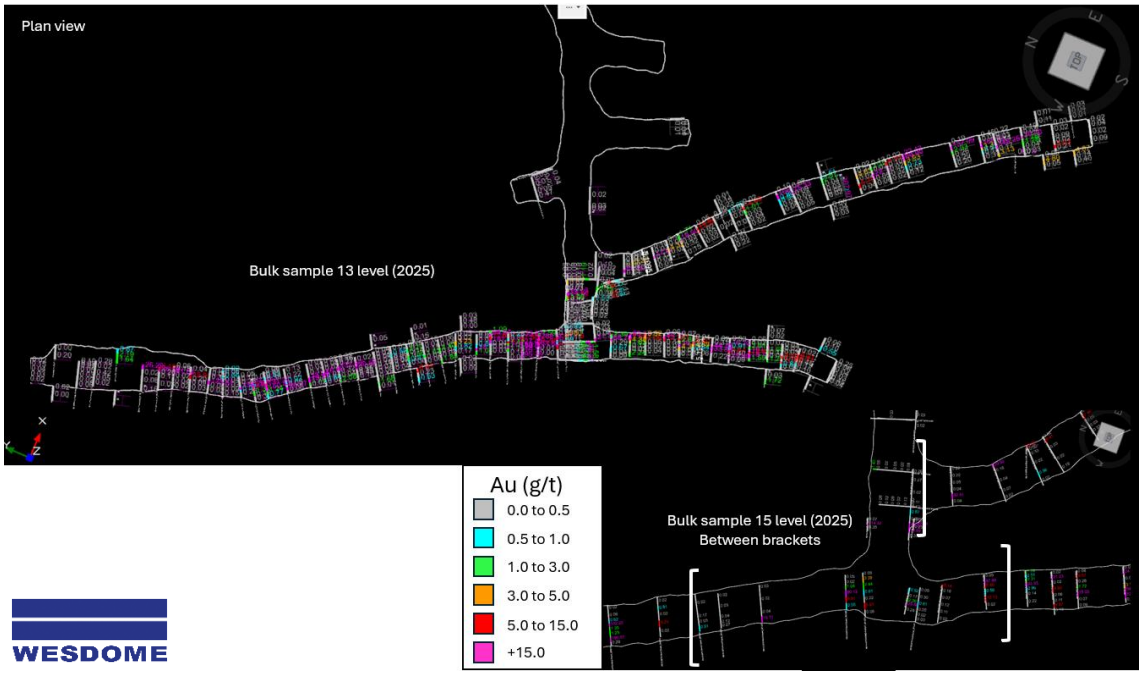
The initial lateral development has confirmed the continuity of the veins with gold mineralization along strike. Visible gold is associated with quartz veins that are located within an overall zone of strong continuity.

The veins are located within the porphyric basalt with presents of shears and occasional local faults. Detailed muck and chip samples (uncapped) are presented in Figure 9.5, show the grade and geological continuity (Red for Ore Rounds and Blue for Waste Rounds).



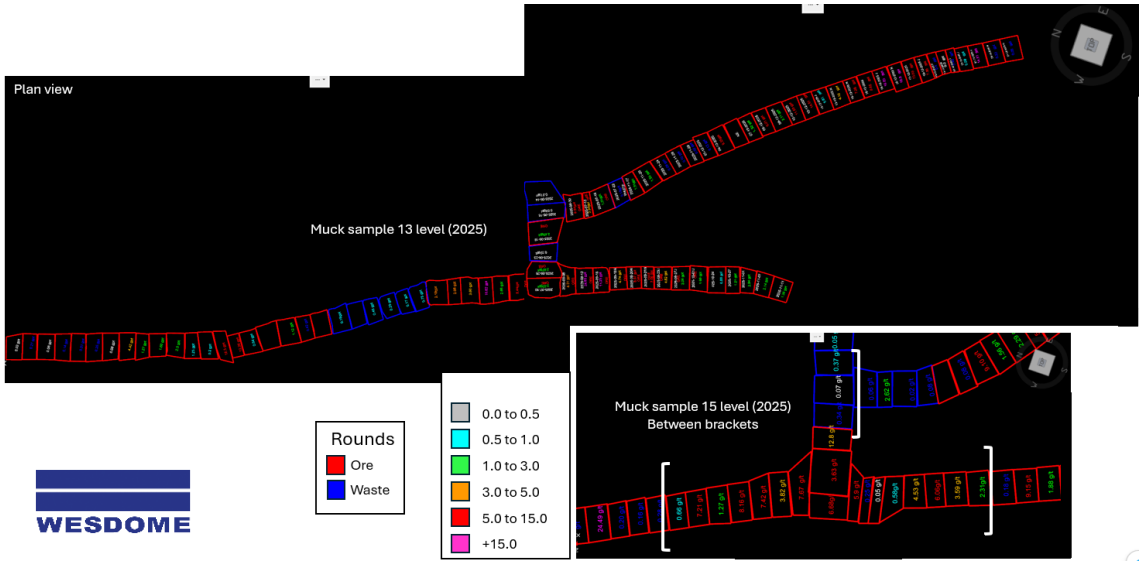
Source: Wesdome, 2026 (Bazzaoui and Gonthier, 2025)

Figure 9.3 Bulk sample location



Source: Wesdome, 2026 (Bazzaoui and Gonthier, 2025)

Figure 9.4 Plan view of the channels on 13 and 15 levels for PR2 and PR2A Zones and contour of the mine development



Source: Wesdome, 2026 (Bezzaoui and Gonthier, 2025)

Figure 9.5 Muck preliminary results

9.3.1 Underground Access and Level Development

The down ramp at Kiena Deep was advanced beyond 134 Level in 2025. A new Portal for a ramp originating from Surface was started in 2024 and a ramp build to access Presqu'île Bulk sample and to connect the surface to the existing infrastructures. Both the Bulk and the new ramp access from Presqu'île are to be completed in Q2, 2026.

9.3.2 Chip Channel Sampling

Chip channel samples were taken by the geologist following Kiena Mine sampling procedures.

To avoid any bias, the sample location was almost always taken at the same height in the face (-1 m from the back). Rarely, when the scissor lift was not available, samples had to be taken at shoulder height. The location and length of the samples were defined using lithological contacts and varying characteristics in the rock (sulphides percentage, vein proportions, etc.). Samples were taken along a painted horizontal line to remain consistent in each drift round. When developing in the mineralized zone, the face was systematically chipped on its full width. During the crosscutting, perpendicular to the mineralized zone, both drift walls were sampled.

9.3.3 Muck Sampling

Muck samples were taken for each drift round by the scoop operator, one sample for every three buckets, during the re-mucking process. Sampling was done following the Kiena Mine underground sampling procedures.

9.3.3.1 Procedures

Each drift round was systematically sampled during the program. Samples were taken directly from the scoop bucket with a designated hand-scoop to assure a relatively similar weight for each sample. Samples weighed on average 2.3 kg and a sampling rate of about 1 sample was taken for every 3 buckets of material.

9.3.4 Processing

The mill that is part of the Kiena Mine Complex has been milling the material of the Bulk sample, as of end 88% of tons were stockpiled, but mill process started late in 2025 and will finish early 2026. For this reason, we do not have the final ounces recover in 2025 for the Bulk at Presqu'île.

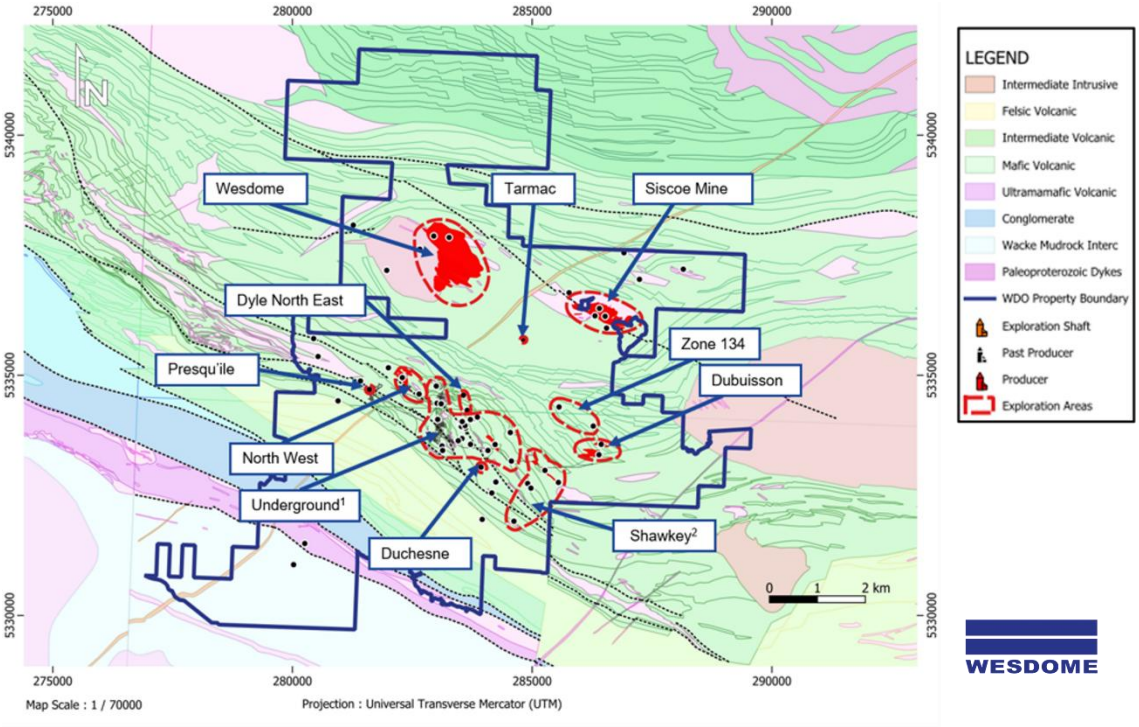
9.4 Exploration Target

The Kiena Property hosts numerous exploration opportunities at varying stages of advancement across the Kiena mine corridor and the broader land package. As part of Wesdome's ongoing exploration strategy, a portfolio of exploration targets has been identified and evaluated to support the prioritization of future exploration programs and assess the potential for mineral resource growth.

The exploration targets have been grouped into three categories based on their geological confidence, data density, proximity to existing mining infrastructure, and level of exploration maturity:

- Near-Mine Exploration Targets, which comprise opportunities within or adjacent to existing mining infrastructure and known mineralized systems.
- Historical Mine and Advanced Exploration Targets, which include former producing deposits and advanced-stage exploration areas where mineralization remains open beyond previously defined limits; and
- Greenfield Exploration Targets, which represent early-stage regional opportunities identified through geological, geochemical, geophysical, structural, and limited drilling datasets, where exploration has outlined prospective areas but additional work is required to evaluate their mineral resource potential.

This classification framework supports the systematic evaluation and ranking of exploration opportunities across the Property and helps guide the allocation of exploration capital over the short-, medium-, and long-term. The exploration targets presented herein were derived from an evaluation of 63 individual exploration opportunities identified across the Kiena Property, of which 25 were selected, grouped, and aggregated to define the reported Exploration Targets. The location of the reported exploration targets is shown in Figure 9.6.



Notes: 1. Underground refers to the location of the main mining activities at the Kiena property, as well as the near mine, Norbenite Footwall, VC, and K109 exploration targets. 2 Shawkey refers to the location of the Shawkey 22 and Shawkey 10 exploration targets. 3. The exploration targets presented herein were derived from an evaluation of 63 individual exploration opportunities identified across the Kiena property. Twenty-five of these opportunities were grouped and aggregated to define the reported exploration targets.

Figure 9.6 Exploration targets across the Kiena Property

In addition to these categories, Wesdome ranks exploration opportunities using a six-tier framework that reflects the level of geological confidence and available supporting information. Tiers 1 to 3 correspond to measured and indicated, and inferred mineral resources, respectively.

Exploration targets are classified as Tiers 4 to 6. Tier 4 targets represent mineralized areas within interpreted mineralized domains that are not currently classified as Mineral resources due to insufficient drill spacing or geological confidence. Tier 5 targets comprise interpreted extensions of known mineralized domains supported by limited drilling and/or geological continuity beyond currently defined mineralization. Tier 6 targets represent conceptual exploration opportunities based primarily on geological interpretation, structural continuity, geophysical data, geochemical data, and regional targeting criteria, with limited or no direct drilling support. As the tier number increases, the uncertainty associated with the conceptual tonnage and grade ranges increases and therefore the level of geological confidence generally decreases.

The targets do not encompass all prospective areas identified across Wesdome's operating mines, as several mineralized systems remain open along strike and at depth beyond the limits of current drilling. In certain areas, the evaluation of exploration potential is further constrained by limitations on drill access from existing underground infrastructure, resulting in portions of prospective mineralized corridors remaining only partially tested.

Table 9.2 shows the exploration targets for the Kiena Property.

Table 9.2 Exploration Targets for the Kiena Property

Category	Exploration Target	Tier	Tonnage (kt)	Grade (g/t Au)	Gold (koz)
Near Mine Exploration Targets	Norbenite Footwall	5	560-800	7.0-12.0	130-310
	Kiena Deep	5	100-300	6.7-24.0	20-230
	Kiena Deep	6	120-370	10.0-13.2	40-150
	North West	5	350-500	4.0-7.5	45-120
	Dubuisson	5	900-1,300	2.4-7.9	70-325
	VC	6	170-240	5.2-7.3	30-55
	Presqu'île	5	140-200	2.1-14.0	10-90
	K109	4	40-60	3.7-5.7	5-10
	Sub-total		**2,380-3,770**	**4.5-10.8**	**350-1,290**
Historical Mine and Advanced Exploration Targets	Siscoe Mine	4	960-1,400	8.3-11.7	250-520
	Wesdome	4	2,500-3,600	2.0-6.6	160-760
	Shawkey 22	5	580-830	3.0-5.0	55-135
	Shawkey 10	4	260-310	4.0-9.5	35-115
	Sub-total		**4,300-6,140**	**3.7-7.7**	**500-1,530**
Greenfield Exploration Targets	Duchesne	5	220-310	2.0-5.0	15-50
	Tarmac	5	150-210	2.0-6.0	10-40
	Sub-total		**370-520**	**2.0-5.4**	**25-90**
TOTAL KIENA			**7,050-10,430**	**3.8-8.7**	**895-2,910**

9.4.1 Near Mine Exploration Targets

The near-mine exploration targets at Kiena are located within or adjacent to the existing Kiena Mine infrastructure and are associated with known mineralized corridors and extensions of established gold-bearing structures (Figure 9.7). These targets are considered prospective due to their proximity to existing mineral resources, favourable geological settings, and supporting drill results.

Norbenite Footwall

The Norbenite Footwall exploration target is located immediately below the Kiena Deep deposit in the footwall behind A Zone and the Norbenite Fault, a major structural feature that separates the target area from the currently defined Kiena Deep mineralization. Gold mineralization is associated with quartz veins hosted predominantly within competent basaltic rocks and is characterized by the presence of pyrite and locally visible gold. The exploration potential is supported by the continuation of favourable host lithologies and mineralized structures on the other side of the Norbenite Fault, as well as historical drilling that intersected gold mineralization within the target area. From older and recent drilling, it shows a zone spreading over 150 metres vertically with potential of up-dip extension to a near 300 metres, just above existing footwall zones. There is also potential for extension at depth.

Kiena Deep (Tiers 5 and 6)

Down-plunge extension of the Kiena Mine is a mineralized system below the current mineral resource footprint. The target is supported by the continuation of the host stratigraphy, favorable structural controls, and the presence of high-grade gold mineralization at depth. Mineralization remains open down-plunge, and additional drilling is required to evaluate the continuity, extent, and economic significance of the system beyond the currently defined resources.

Northwest

The Northwest exploration target is located northwest of the Kiena Mine infrastructure and is associated with a mineralized zone striking approximately N330° and dipping moderately to steeply northeast, proximal to the Norbenite fault corridor. Historical drilling has identified gold mineralization hosted within structurally controlled quartz-vein systems and associated alteration zones. Existing geological modelling outlines a mineralized body with substantial strike and vertical continuity; however, mineralization remains open in several directions and warrants additional drilling to evaluate its full extent and potential.

Dubuisson

The Dubuisson exploration target is located approximately 3.5 kilometres east of the Kiena shaft and central mine infrastructure, within the Dubuisson Formation. Gold mineralization is hosted within brittle, fractured, albitized, carbonated, and chloritized diorite and feldspar porphyry dykes emplaced within a strongly deformed ultramafic sequence. Mineralization is closely associated with sub-horizontal extensional quartz-carbonate-albite-chlorite-tourmaline veining containing pyrite and native gold and commonly occurs adjacent to talc-chlorite shear zones. Multiple mineralized lenses have been identified within two main zones, the Dubuisson North Zone and Dubuisson South Zone, demonstrating significant vertical and lateral continuity. The exploration target encompasses extensions beyond the currently modelled mineralized lenses where geological continuity and limited drilling indicate potential for additional mineralization. The style of mineralization suggests that it may also be amenable to a bulk tonnage style of extraction.

VC

The VC Zone target represents the potential extension of mineralization north of the S50 Zone within the Kiena Deep mining environment. The target is supported by historical drilling, existing Mineral resources, and the interpreted continuity of the mineralized system along the Norbenite structural corridor.

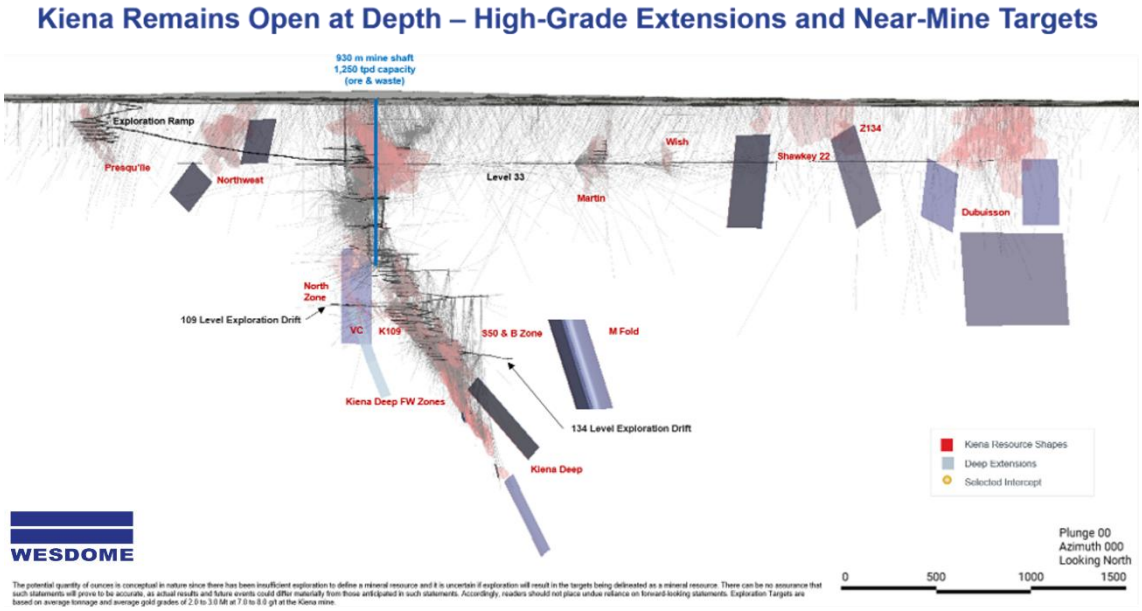
Presqu'île

The Presqu'île exploration target comprises extensions to the currently defined Presqu'île mineral resource. The target is based on the interpretation of favourable geological and structural controls that continue beyond the limits of the existing mineral resource and remain only partially tested by drilling. Historical drilling and geological modelling indicate that mineralization may be constrained to the waste near the contact between porphyritic basalt and komatiite; however, the system remains open to the west, with opportunities for additional resource growth through systematic step-out drilling. The exploration target represents areas where geological continuity is interpreted but where drill density is currently insufficient to support mineral resource classification.

K109

The sector K109 is composed of four lenses, mainly in basalt, with occasional contacts with komatiites and the presence of veining of quartz, chlorite, carbonate with presence pf pyrrhotite and stockwork of quartz, tourmaline, carbonate (containing) sulphides. The grade continuity is not always present, there is a low deformation in the zone, and the envelope is generally around two metres with dilution.

The first official resource for the K109 area (inferred resource only) was prepared for year-end 2023. The exploration drift at the 109 Level in Kiena mine, was developed with the initiative of crossing at proximity to the second lens. The target remains open for further investigation.



Source, Wesdome, 2026

Figure 9.7 Near Mine Exploration Targets on the Kiena Property

9.4.2 Historical Mine and Advanced Exploration Targets

The historical mine exploration targets comprise former producing areas and associated mineralized corridors where historical mining and drilling demonstrate the presence of significant gold mineralization. These areas remain incompletely tested and offer potential for the identification of additional mineralized zones beyond the limits of historical development.

Siscoe Mine

The Siscoe Mine exploration target is located within the K-Shear deformation corridor in the northeastern portion of the Kiena land package. The target includes the down-plunge and along-strike extensions of the historic Siscoe Mine, as well as underexplored segments of the K-Shear structure, which extends across a significant portion of the property. Historical mining, legacy drilling, and recent geological interpretations indicate strong potential for the continuation of gold mineralization beyond the limits of the historical workings and within previously untested sections of the deformation corridor.

The high-resolution drone magnetic survey completed in 2025 has refined the geometry and contacts of a deep-seated intrusive body (Figure 9.9). Both the K-Shear and the Siscoe Mine are spatially associated with the northern contact of this intrusion, highlighting the potential importance of this structural and lithological setting in controlling gold mineralization. Additional drilling and geological evaluation are required to assess the extent, continuity, and controls of mineralization along this highly prospective deformation corridor.

Wesdome

The Wesdome exploration target encompasses the historical Wesdome deposit area, located along the northwest extension of the K-shear that hosts the K Zone at the historic Siscoe Mine. The area is underlain predominantly by mafic volcanic rocks of the Dubuisson Formation, intrusive rocks of the Snowshoe Batholith, and numerous dyke swarms. Gold mineralization is associated with several structurally controlled zones, including the Wesdome A, B, C, and D zones. The main mineralized zone is Wesdome A, characterized by quartz-carbonate veining associated with pyrite, which has been defined over a strike length of approximately 1 kilometre and to a vertical depth of 500 m. The zone is oriented N300° and dips 45-50° to the southwest. The Wesdome B Zone comprises a strong subvertical shear zone containing quartz-tourmaline-pyrite veins, while the C and D zones consist of weaker shear structures hosting quartz-carbonate vein mineralization accompanied by pyrite and minor sulphides. Historical exploration and underground development demonstrate the presence of a significant mineralized system; however, several structural interpretations remain untested and additional drilling is required to evaluate extensions and potential connections with the broader Siscoe mineralized corridor (Figure 9.9).

Shawkey 22 and 10

The Shawkey exploration target is located in the southeastern portion of the Kiena land package within the southern structural corridor. Gold mineralization is associated with structurally controlled quartz-carbonate veining and alteration developed within a regional deformation zone that extends across the property, whilst Shawkey 10 also includes diorite hosted mineralization associated with quartz tourmaline veining, similar to the Dubuisson deposit.

The target area includes the Shawkey 22 Zone, where historical and recent drilling has outlined a mineralized system over a broad strike extent and to several hundred metres below surface. The exploration potential is supported by drilling results demonstrating the continuity of gold mineralization along strike and at depth, together with its location within a prospective regional corridor situated between the Kiena Mine and other significant gold deposits in the Val-d'Or mining district.

The style of mineralization at Shawkey suggests that, subject to further drilling and technical evaluation, it may also support bulk tonnage mining methods, similar to Dubuisson. Additional drilling is required to further evaluate the continuity, extent, and grade distribution of the mineralized system.

9.4.3 Greenfield Exploration Targets

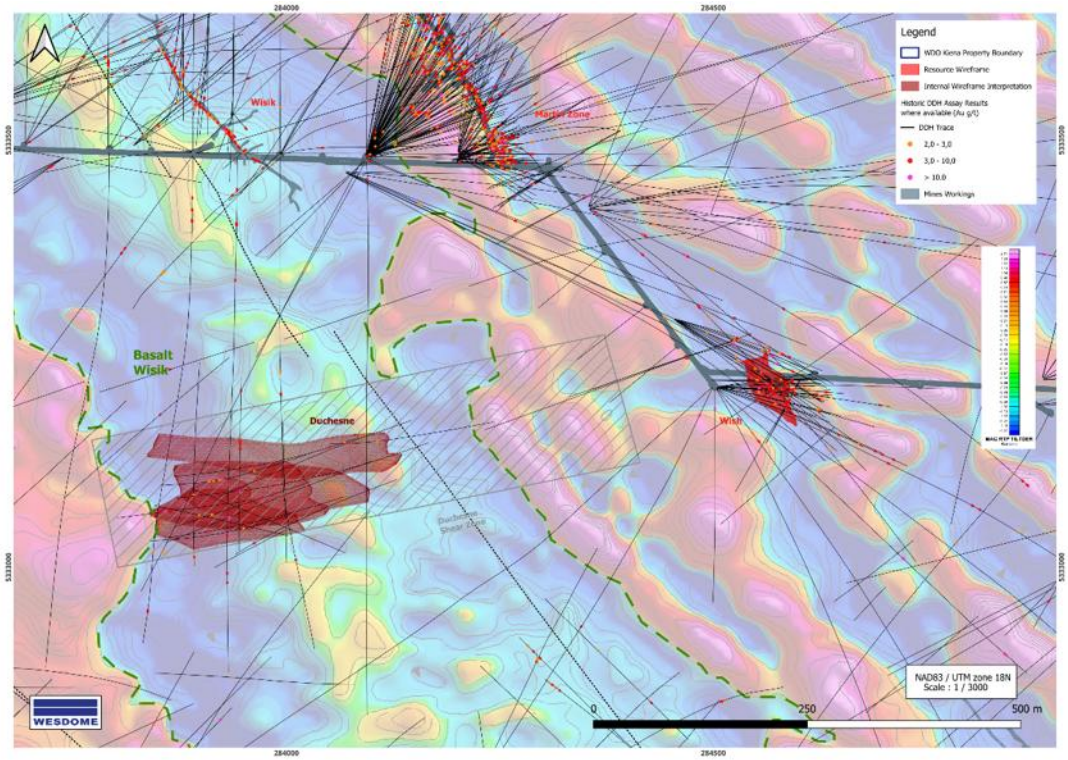
The greenfield exploration targets are located outside the currently defined mining areas and are supported by favourable geological settings, structural interpretation, historical drilling, and exploration results. These targets represent opportunities for the discovery of new mineralized systems and the expansion of known mineralized trends across the property.

Duchesne

The Duchesne exploration target is located in the southeastern portion of the Kiena regional land package within the southern deformation corridor. Gold mineralization is interpreted to be structurally controlled and associated with deformation-related quartz-carbonate veining developed within favourable host rocks.

The exploration potential is supported by historical drilling and geological interpretation indicating the presence of a mineralized system extending over a meaningful strike length and depth extent. Recent exploration activities have contributed to an improved understanding of the geometry and controls on mineralization, supporting the potential for additional discoveries within the target area.

Further drilling and geological evaluation are required to better define the continuity and extent of mineralization.

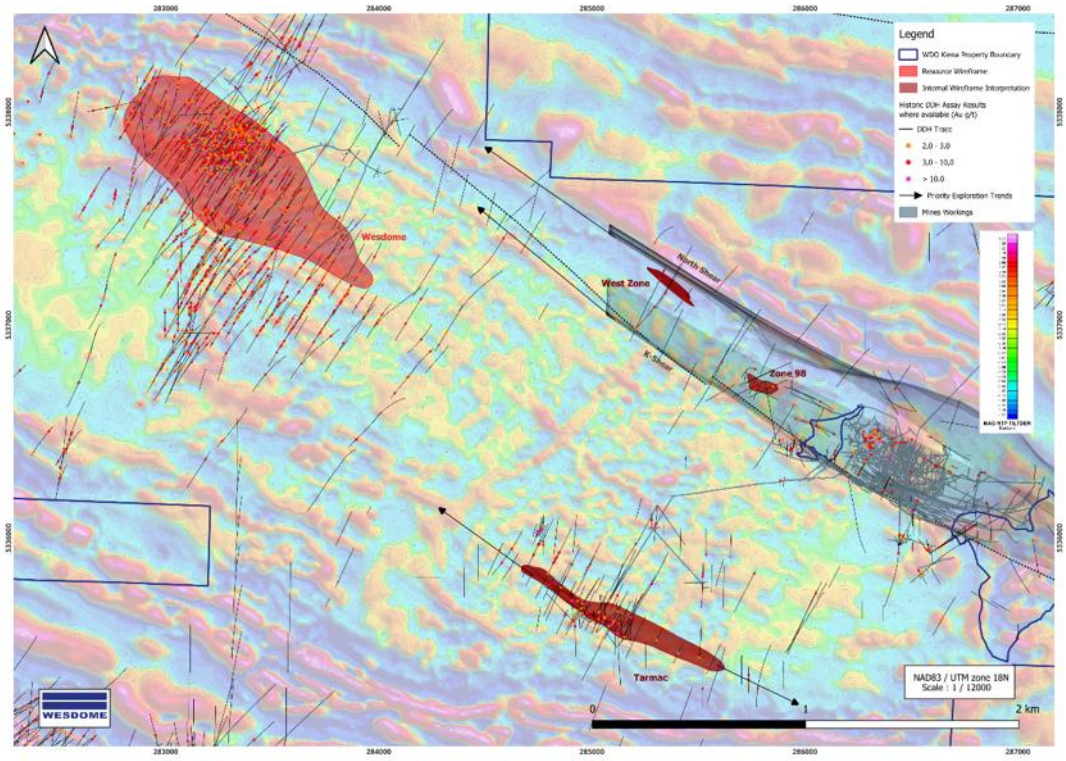


Source: Wesdome, 2026

Figure 9.8 Duchesne Exploration Targets, location on the Kiena Property

Tarmac

The Tarmac exploration target is located within the northern deformation corridor of the Kiena regional land package and is spatially associated with the contact of a recently interpreted intrusive unit. Historical drilling has intersected high-grade gold mineralization; however, exploration activity has been limited over the past several decades. The target remains open in multiple directions and represents an opportunity to evaluate the continuity and extent of mineralization through additional drilling and geological interpretation.



Source: Wesdome, 2026

Figure 9.9 Tarmac location Near Wesdome and K-Shear extension (Siscoe Workings) on the Kiena Property

10. DRILLING

This section summarizes Wesdome's drilling activities on the different mineralized zones of the Project since October 2007.

Drilling data was provided by the issuer's geology team or obtained by the QPs during their site visits and subsequent discussions. Much of what is contained in this section was taken and modified from past and recent technical reports and press releases published by the issuer.

Highlights of historical drilling by the former owners are presented in Chapter 6.

10.1 Drilling Methodology

Surface drilling has been carried out by several contract drilling services companies that include C.S.O.B. (2007, 2008, 2009, 2010, 2011, 2011, 2012, 2013), Forage à Diamant Benoit Ltée. (now Major Drilling Group International Inc.) (2007, 2008), Major Drilling Group International Inc. (2009, 2010, 2011 and 2014), Forage Orbit Garant Inc. (since 2021 from barges on the lake), Machines Roger International Inc. (2021), Forage Spektra (2022 to 2025), Forage Performax Inc. (2012), G4 Drilling Group (2015), Forage Giroux Inc. (2023), Forage Hébert Inc. (2014, 2020, 2021). Surface drilling is predominantly completed using NQ diameter core (47.6 mm). In 2025, three HQ diameter holes were drilled at the Dubuisson sector for metallurgical testing purposes.

Underground drilling has been carried out by various contractors historically; however, Forage Orbit Garant Inc. has been the primary contractor in recent years and is currently responsible for underground drilling activities. Underground drilling is conducted using NQ diameter core, with telescoping to BQ diameter in zones of poor ground conditions (e.g., faults, shears, and schistose intervals). Electric diamond drill rigs are used for underground operations.

10.2 Drillhole Location and Set-up

Diamond drill holes are generally planned using vertical cross-sections and plan views to optimize the angle of intersection with mineralized zones. The coordinate system in use is a local mine grid. Drillhole planning, targeting, and follow-up are currently conducted using Leapfrog in conjunction with GeoticLog for geological data management. Mine planning and production activities are carried out using Deswik, while geological modelling and resource estimation are performed using Datamine. Historically, software such as Geotic Mine, GeoticGraph, AutoCAD, and Promine were also used.

During 2007 and 2015, surface drill hole collars were surveyed and marked using foresights and backsights by Wesdome personnel. A handheld Garmin GPSMAP 76CSx with a UTM 1983 NAD83 system was used to record position data. Compass and chain methods were employed to locate the foresight and backsight pickets. Once the drill rig was positioned at the planned location, the azimuth and inclination of the hole were confirmed at a downhole depth of 9 m in solid rock.

In winter, when drilling took place from the ice surface of Lac De Montigny, an ice road was constructed from late December to late January. To accommodate the drill rigs, the road was made of at least 48 in of solid ice for Major Drilling Group standard drill rigs (2009 drill program), or 30 in of solid ice for G4 Drilling Group small drill rigs (2015 drill program). The planned positions of the collar and the foresights and backsights were marked using the same handheld Garmin GPSMAP 76CSx and using the same UTM 1983 NAD83 positioning system with standard wooden pickets supported by packed snow. In summer, drilling from the lake used a barge-mounted drill. The barge drill was positioned using one buoy for the collar and three buoys for the foresights, all positioned using the same handheld Garmin GPSMAP 76CSx and using the same UTM 1983 NAD83 positioning system.

From 2016 to 2021, drillhole collars were established by a surveyor who drew a line between the front sight spad and a back sight spad. The drillers aligned themselves according to the surveyed line and collared the hole at the most suitable place. After drilling, collars were initially surveyed by contract surveyors, and later by a Wesdome technician. Collar azimuth and dip were measured when possible.

Since 2022, surface drill alignment has been carried out using a Reflex TN14 Gyrocompass^{MC} system. Downhole deviation surveys were conducted using a REFLEX Sprint-IQ gyro tool between 2022 and 2024, and a REFLEX OmniX-42 system in 2025. During drilling, survey measurements are collected at 30 m intervals, followed by a continuous multi-shot survey at 3 m intervals upon completion of the hole. Survey data are transmitted and managed via the IMDEXHUB-IQ platform.

Downhole surveying between 2007 and 2015 was recorded at 50 m intervals using a REFLEX EZ-Shot^{TM} instrument. Since 2016, deviation surveys have been conducted using the REFLEX EZ-Trac system, with a combination of single-shot and multi-shot measurements depending on ground conditions. Casing locations and elevations were subsequently surveyed using differential GPS methods.

For drill holes completed from land-based setups, casings are generally left in place and identified with a capped marker fitted with a flag displaying the drill hole identification number. The casings are surveyed after the drill rig has left the drill site. Collar location, azimuth, and initial dip are surveyed, while elevation is measured at the point where the casing intersects with the ground surface.

For drill holes completed from barge-mounted setups, the collars are surveyed while the drill rig remains in position. Elevation is measured at the water surface. These drill holes are cemented over a vertical depth of approximately 100 m; consequently, the length of the cemented interval varies depending on the hole inclination. Following completion of the cementing procedure, the casings are removed.

Generally, holes are drilled with maximum stabilization using appropriate core barrel configurations. Surface drilling between 2007 and 2015 used an 18-inch shell with a hexagonal core barrel, while underground drilling since 2016 has used extended stabilization assemblies, including multiple hexagonal core barrels and longer shells in poor ground conditions.

10.3 Core Logging Procedures

In the core shack, Wesdome employees remove the tape and place the boxes on the logging tables. The geologists rotate the core so that all the pieces are oriented in one way to show a cross-sectional view for logging. They verify that distances are correctly indicated on the wooden blocks placed every 3 m. The core is then measured, and the boxes are labelled.

Rock Quality Designation (RQD) and recovery are measured by geologists or geological technicians. For every 3 m core run, the total length of fragments shorter than 10 cm is recorded in a Rock Quality Designation (RQD) log. Any measurement with a value over 100% for the RQD was considered not valid. The ideal core recovery is 100%; however, it is not always possible due to ground conditions or sometimes loss of drill core during the coring process, e.g., grinding, etc. Rock conditions for the Project are generally considered to be very good. The average core recovery for the Project is 98%.

Wesdome geologists use GeoticLog logging software to record the data. Lithologies (principal and secondary), alteration, mineralization, veins, structures, magnetism, samples, and assay results are compiled in the database. Once logged by the geologist, all drill cores are photographed wet, four boxes at a time. Once the core is photographed, it is assigned to the core saw operator for splitting and sampling.

Sample lengths typically range from 0.5 to 1.50 m. The sampled core is considered representative. Once logged and labelled, the core of each selected interval is sawed in half using a typical table-feed circular rock saw. One half is placed in a numbered plastic bag for shipment to the laboratory, and the other half returns to the core box as a witness (reference) sample. A tag bearing the sample number is left in the box at the end of the sampled interval. After the sampling process, the core boxes are stored under roofed racks in the outdoor core storage area. Every box is labelled with an aluminum tag displaying the hole number, the box number and the From-To meterage. An Excel spreadsheet serves as an inventory of box locations in the core storage area.

10.4 Drillhole Coring

Recovered drill cores by the drilling contractor are in NQ and BQ size. Drillholes are generally started in NQ caliber in mafic rocks. When the drillhole reaches the komatiites, schists or a major fault, BQ caliber is used, otherwise NQ rods get stuck at the bottom of the hole. The core is collected in a standard drilling tube, and the driller's helper carefully places the core into wooden core boxes at the drill rig. The driller helper also marks the depth (m) after each 3 m runs with wooden blocks and wraps the boxes with tape once it is full. Core trays are numbered with a permanent marker indicating the drillhole number and the sequential box number.

Generally, the drillhole is abandoned in the komatiites or schists. Occasionally, it is possible to pierce and stop the drillhole in the mafic units; if this occurs, the drillhole is terminated by the geologist.

Once the drillhole is terminated and the final downhole survey reading is collected, the drill crew pulls the rods for mobilization to the next drill site. Every hole is systematically grouted with cement. The collars of surface holes are covered with a steel cap inscribed with the identification of the hole collar and the casing left in the hole, whereas underground drill holes are identified by a conical plug with a metal tag displaying the hole number.

10.5 2007 to 2025 Drilling Programs

Wesdome drilled 4,430 diamond drill holes (surface and underground) totaling 970,804 m on the Project from 2007 to 2025. Drilling completed between 2007 and 2015 is presented as a cumulative total in Table 10.1, while drilling completed from 2016 to 2025 is reported on a yearly basis to reflect recent exploration and definition programs.

Figure 10.1 provides drill hole locations from 2007 to 2015 on the Project.

Figure 10.2 provides drill holes locations from 2016 to 2025 on the Project.

Table 10.1 Summary of Wesdome Diamond Drilling Programs 2007 to 2025 [1, 2]

Year	Zone/Area	Surface		Underground		Total	
		Drill holes	Length (m)	Drill holes	Length (m)	Drill holes	Length (m)
2007-2015	Kiena Mine Complex (multiple zones)	366	140,175.14	1,732	248,896.61	2,098	389,071.75
2016	Kiena Deep	-	-	42	19,142.50	42	19,142.50
2017	Kiena Deep Sector, S50, VC1, VC6 Zones	-	-	108	32,851.60	108	32,851.60
2018	Kiena Deep (A, B, B-Prospect, Upper Quartz), S50, South, VC1, VC6 Zones	-	-	154	44,081.60	154	44,081.60
2019	Kiena Deep (A, A1, A2, VG, Upper Quartz), Fault, VC1, VC6 Zones	-	-	222	59,097.50	222	59,097.50
2020	Kiena Deep (A, A2), VC1, VC6, Shawkey West, Presqu'île Zones, Geoctechnical holes	12	6,428.90	170	49,669.60	182	56,098.50
2021	Kiena Deep (A, A2, B), K109, NE, Martin, VC1, VC6, Wisik, Shawkey West/10/22/1, Duchesne, Presqu'île, 1778, Zones	58	33,073.70	155	46,646.25	213	79,719.95
2022	Kiena Deep (A, A2), 1778, Footwall, K109, Martin, Wish, South, VC, Wisik, Shawkey West/10, NE, Presqu'île, Dubuisson, Tarmac Zones	110	27,389.00	199	45,293.10	309	72,682.10
2023	Kiena Deep (A, A2), 1778, Footwall, Martin, Wish, Sneak, Presqu'île, S196, Shawkey 22, K109 Zones	59	14,464.77	238	32,679.05	297	47,143.82
2024	Kiena Deep (A, A2), H3, Footwall, VC, Presqu'île, Dubuisson, Duchesne, Northeast, Northwest, Wish Zones	95	29,595.90	338	52,050.45	433	81,646.35
2025	Kiena Deep (A, A2, B), Footwall, VC, Wish, Presqu'île, Dubuisson, Northwest, 134, Wesdome, Shawkey 22 Zones	120	37,869.00	252	51,398.90	372	89,267.90
TOTAL		**820**	**288,996**	**3,610**	**681,807**	**4,430**	**970,804**

Note: [1]Some drilling tallies may differ from previous reports issued by the issuer due to improvements to the project database.
[2]Drilling completed between 2007 and 2015 is presented as a cumulative total. Detailed drilling by zone for this period is available in historical technical reports available on the issuer's website and on SEDAR

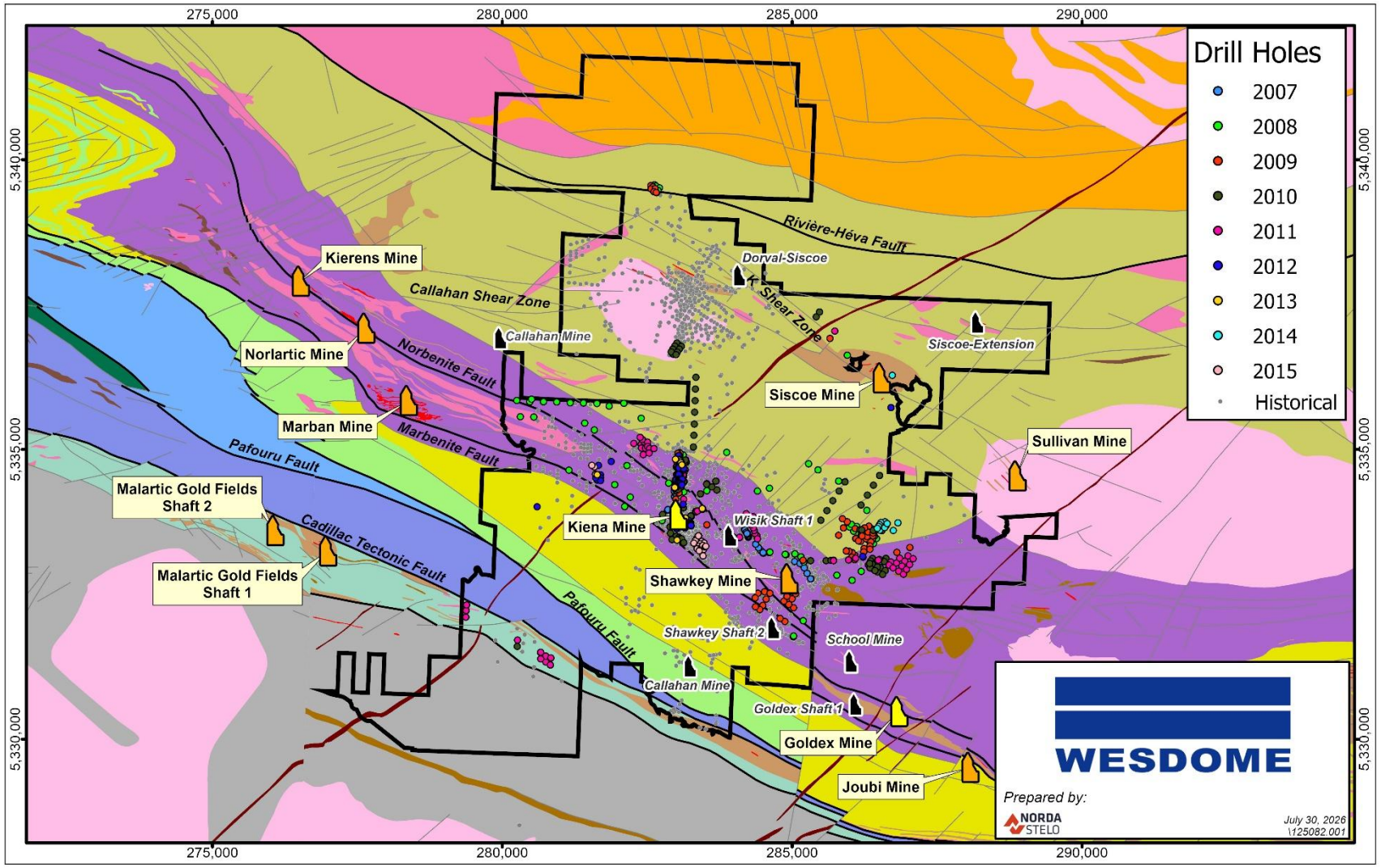


Figure 10.1 Kiena Mine Complex Drill Hole Locations 2007 to 2015

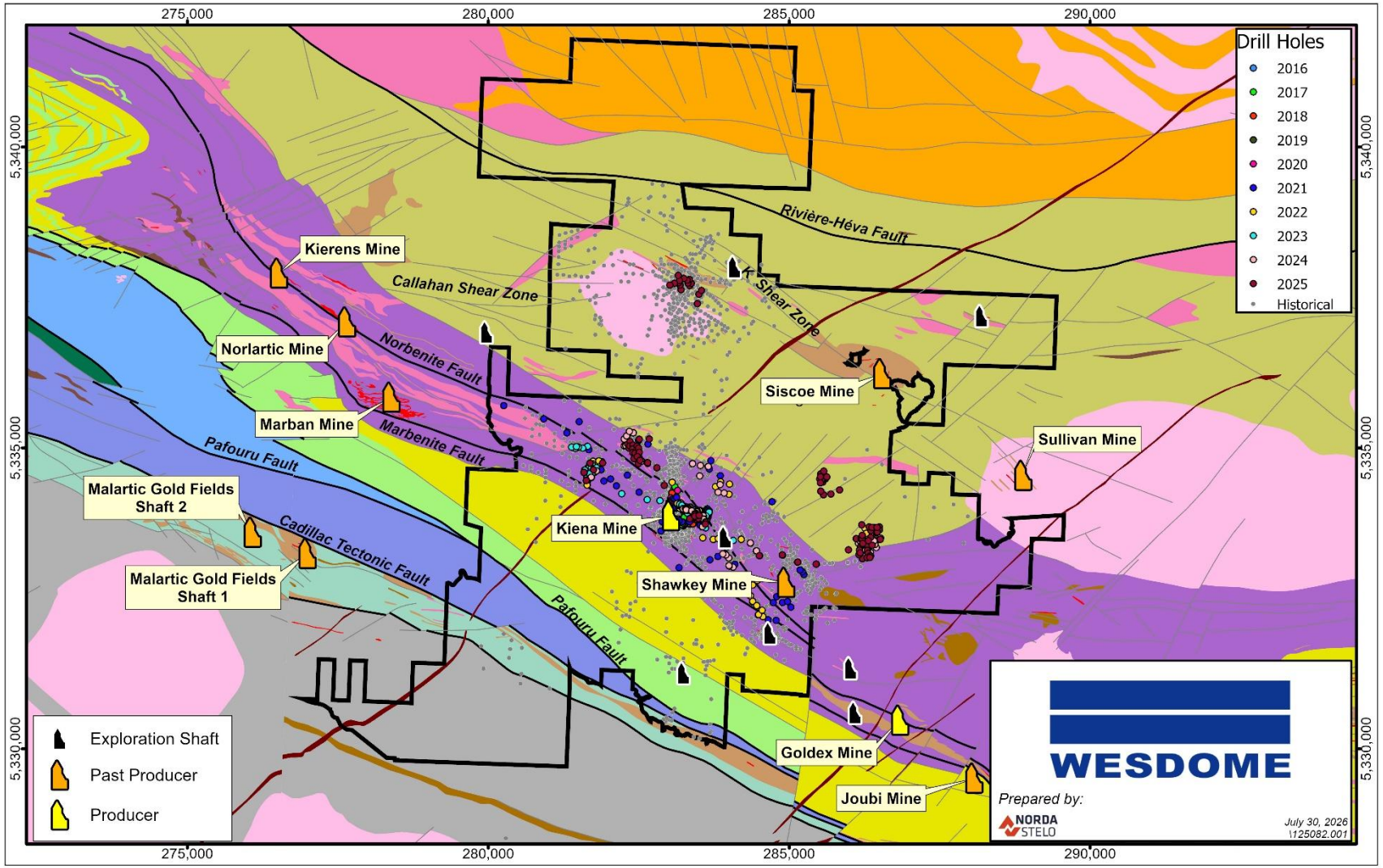


Figure 10.2 Kiena Mine Complex Drill Hole Locations 2016 to 2025

10.5.1 2007-2015 Drilling Programs

Between 2007 and 2015, Wesdome conducted extensive surface and underground drilling at the Kiena Mine Complex in Val-d'Or, Quebec to evaluate the continuity and gold potential of the Shawkey, Dubuisson, S-50, Martin, Northwest, Presqu'île, Siscoe, and Wesdome zones. During this period, a total of 366 surface drill holes (140,175.14 m) and 1,732 underground drill holes (248,896.61 m) were completed (Table 10.1).

In 2007, initial drilling on the Shawkey No. 22 Zone and several underground areas confirmed narrow, high-grade gold-bearing veins. From 2008 to 2010, drilling tested lateral and down-dip extensions of the Siscoe 98, Shawkey No. 10 and No. 22, Dubuisson, and Wesdome L and M zones, leading to new gold discoveries, including the Dubuisson and Presqu'île zones, while also evaluating the Cadillac Tectonic Zone and the S-50 Zone. Drill results included both high-grade intercepts (locally reaching several tens of g/t Au) and broader, lower-grade intervals typically associated with pyritic quartz-carbonate-tourmaline veins hosted in faults or shear zones.

Drilling campaigns from 2011 to 2013 confirmed the continuity of the Martin, Northwest, and Dubuisson North zones, while the 2014–2015 programs tested lateral and depth extensions of the S-50, Dubuisson North, Presqu'île, and Siscoe zones in support of future resource estimation. Overall, these drilling campaigns provided key information on the geometry, continuity, and distribution of gold mineralization across the complex.

For further details regarding the drilling programs and assay results, the reader is invited to consult the NI 43-101 technical reports for the Kiena Mine Complex (2008, 2009, 2010, 2011, and 2015), together with relevant press releases issued by Wesdome Gold Mines Ltd., available on the issuer's website and on SEDAR+.

10.5.2 2016 Drilling Program

In June 2016, Wesdome initiated underground exploration drilling at the Kiena Mine Complex in Val-d'Or, Quebec, completing 42 underground drill holes totaling 19,142.50 m using up to four drill rigs (Table 10.1). The program was designed to investigate the depth potential of the S-50 Zone and test a possible Z-fold repetition of mineralization approximately 1,200 m below surface.

Drilling led to the discovery of a new mineralized system, the Kiena Deep Zone, developed along a north-northwest (NNW) trending contact between altered basalt and komatiite. Step-out drilling traced the mineralized system over approximately 550 m along strike and across a vertical extent of about 400 m between roughly 1,000 m and 1,400 m depth. Two main mineralization styles were identified: high-grade extensional quartz veins hosted in basalt and quartz stockwork and breccia-style veining within sheared ultramafic rocks, establishing the Kiena Deep system as a significant new exploration target at depth.

Table 10.2 presents the significant results of the 2016 program.

Table 10.2 Significant results of the 2016 Program

Hole ID	From (m)	To (m)	Core Length (m)	Assay Au (g/t)	Cut Grade* (g/t Au)	Zone
U-6124	491.50	508.90	17.40	94.35	18.03	S-50 Testing for repetition of S−50 Zone along a Z fold interpretation
U-6125	695.05	712.00	16.95	192.95	18.80	
	740.00	745.00	5.00	238.81	15.71	
U-6130A	469.00	477.20	8.20	8.43	3.82	
6124C	456.70	458.80	2.10	48.68	18.74	Kiena Deep Extension
6124C	468.70	469.90	1.20	38.89	18.06	
6124C	510.00	511.50	1.50	71.42	34.28	
6130A	670.20	672.37	2.17	30.34	30.34	
6131A	422.10	424.50	2.40	27.80	7.69	
6131A	449.50	450.50	1.00	28.97	28.97	
6131A	478.90	479.50	0.60	749.96	34.28	
6152	358.50	365.30	6.80	9.17	6.28	
6152	373.00	374.00	1.00	20.22	20.22	
6149	276.80	277.80	1.00	30.43	30.43	
6124B	438.40	439.90	1.50	32.21	19.17	
6124B	457.80	458.90	1.10	20.22	16.35	
6146	377.50	388.50	11.00	6.63	6.63	
6147	490.00	498.20	8.20	7.67	5.53	
6134	797.00	806.80	9.80	18.67	5.44	
6155	401.40	405.50	4.10	110.23	5.91	
	421.40	423.40	2.00	14.89	14.89	
6134	440.00	441.00	1.00	27.97	27.97	
6137	444.10	425.50	8.40	34.27	6.78	
6142	438.70	439.30	0.60	306.10	34.28	
	475.50	486.00	10.50	6.23	5.67	
	581.30	583.70	2.40	41.39	11.62	
	598.80	604.00	5.20	24.92	10.03	
6143	489.40	493.00	3.60	11.40	5.81	
	504.00	518.00	14.00	43.05	5.35	
6144	609.00	617.00	8.00	10.45	5.23	
	629.00	631.70	2.70	18.04	16.07	
6145A	408.80	424.20	15.40	14.61	3.08	
6150	418.70	419.40	0.70	37.71	34.28	
6151	170.00	174.00	4.00	4.68	4.68	
6151	385.50	386.00	0.50	29.52	29.52	
6152	393.00	394.50	1.50	9.11	9.11	

Hole ID	From (m)	To (m)	Core Length (m)	Assay Au (g/t)	Cut Grade* (g/t Au)	Zone
	457.10	458.60	1.50	8.75	8.75	
6154	335.00	351.00	16.00	3.47	3.47	
	405.70	410.00	4.30	124.98	13.98	
	447.50	448.70	1.20	44.85	34.28	
6155	388.50	405.50	17.00	28.00	2.84	
6156	274.00	275.00	1.00	50.14	34.28	
	412.00	414.00	2.00	41.89	18.53	
	437.00	444.30	7.30	20.28	10.20	
6157A	477.00	477.60	0.60	27.25	27.25	
	516.50	521.30	4.80	10.37	9.49	

Notes: * Assay intervals include values cut to an arbitrary, historic 1 oz / ton or 34.28 g/t Au
For additional information and details regarding the 2016 drilling program, refer to Wesdome news releases dated August 24, 2016, September 15, 2016, November 15, 2016, and February 8, 2017, available on the issuer's website and on SEDAR+

10.5.3 2017 Drilling Program

In 2017, Wesdome continued underground exploration drilling at the Kiena Mine Complex in Val-d'Or, Quebec, completing 108 underground drill holes totaling 32,851.60 m using four drill rigs (Table 10.1). Drilling focused on defining the extent, continuity, and geometry of the Kiena Deep gold system, while also evaluating nearby targets including the VC Zone and S-50 Zone, both located near existing mine infrastructure and open at depth.

Results confirmed that Kiena Deep mineralization occurs as a multi-vein quartz stockwork and breccia system associated with altered komatiite–tholeiitic basalt contacts. Drilling also demonstrated that the VC Zone continues at depth, highlighting its potential to increase resources near existing workings. The VC Zone consists of east–west striking, sub-vertical lenses of calcite-quartz stockwork veining hosted along deformed komatiite–basalt contacts interpreted as part of the northern extension of the S-50 structural corridor, with mineralization commonly associated with albitized diorite dykes.

Table 10.3 presents the significant results of the 2017 program.

Table 10.3 Significant results of the 2017 Program

Hole ID	From (m)	To (m)	Core Length (m)	Estimated True Width (m)	Assay Au (g/t)	Cut Grade* (g/t Au)	Zone
6166	519.20	528.00	8.80		12.81	8.38	Kiena Deep
6179	524.70	539.00	14.30		5.19	5.19	
Incl.	524.70	529.90	5.20		11.38	11.38	
6165	0.00	14.80	14.80		4.12	3.50	S-50
6168	1.00	8.00	7.00		5.92	5.92	
6188	3.00	12.20	9.20		10.34	8.13	
6192	32.50	37.80	5.30		8.23	8.23	
6205	299.50	307.00		5.60	262.13	17.70	VC Zone Delineation drilling close to existing mine infrastructure
6201	267.30	271.20		3.00	10.28	8.56	
6208	243.80	247.20		3.00	9.26	9.26	
6207	231.00	234.40		3.00	6.36	6.36	
6186	233.40	237.90	4.50	1.60	34.37	24.16	Untested gap between Kiena Deep B and A zones
6241A	193.50	197.60	4.10	2.60	5.25	5.25	
6243	111.90	112.80	0.90	0.70	23.07	23.07	
6250	76.70	89.70	13.00	12.70	4.17	4.17	
Incl.	79.70	81.70	2.00	2.00	17.40	17.40	
6187	41.40	79.00	37.60	6.10	6.68	6.02	VC Zone Testing extension near existing underground development including the S-50 and VC zone sectors
Incl.	58.50	79.00	20.50	3.4	10.01	8.80	
6191	28.50	45.50	17.00	6.00	6.61	5.15	
Incl.	42.00	44.30	2.30	0.8	34.83	24.00	
6228	51.70	54.70	3.00	2.20	98.51	19.63	
6231	29.80	36.40	6.80	4.70	8.07	8.07	
6190	7.00	13.00	6.00	5.00	17.89	16.30	S-50 Testing extension near existing underground development including the S-50 and VC zone sectors
6211	32.30	45.50	13.20	10.90	4.68	4.68	
6222A	26.40	27.10	0.70	0.30	18.50	18.50	

Notes: * Assay intervals include values cut to an arbitrary, historic 1 oz / ton or 34.28 g/t Au
For additional information and details regarding the 2017 drilling program, refer to Wesdome news releases dated June 21, 2017, September 25, 2017, and February 8, 2018, available on the issuer's website and on SEDAR+

10.5.4 2018 Drilling Program

In 2018, Wesdome completed 154 drill holes totaling 44,081.6 m at the Kiena Mine Complex in Val-d'Or, Quebec using up to five drill rigs (Table 10.1). Drilling targeted the gap between the Kiena Deep B and A zones, the up-plunge extension of the Kiena Deep A Zone, deeper portions of the A Zone, and in-mine targets including the VC and S-50 zones, in addition to definition drilling to upgrade resources to reserves.

Drilling confirmed a quartz stockwork and breccia system at the Kiena Deep B Zone associated with altered komatiite–basalt contacts. Drilling at the Kiena Deep A Zone extended mineralization along a NNW-trending basalt–komatiite contact and confirmed continuity of gold mineralization plunging approximately 45° to the southeast.

Table 10.4 presents the significant results of the 2018 program.

Table 10.4 Significant results of the 2018 Program

Hole ID	From (m)	To (m)	Core Length (m)	Estimated True Width (m)	Assay Au (g/t)	Cut Grade* (g/t Au)	Zone
6275	199.50	217.70	18.20	10.40	39.58	12.60	Extension and infill of Kiena Deep A zones
6278	181.90	188.40	6.50	4.30	29.80	6.12	
6279	169.10	172.20	3.10	1.90	112.08	28.24	
6287	294.70	296.20	1.50	0.60	22.69	22.69	
6288	284.70	297.60	12.90	7.60	33.92	10.47	
6289	335.60	337.00	1.40	0.80	200.30	13.34	
6295	186.30	195.20	8.90	6.40	9.94	6.16	
6296	216.50	223.00	6.50	5.50	43.32	6.84	
6290	292.10	295.30	3.20	2.70	28.77	10.47	
6290	303.00	328.70	25.70	20.00	25.95	7.27	
6299	397.00	407.20	10.20	7.70	29.58	9.75	
6299	429.00	443.40	14.40	10.80	77.37	12.78	
6300	471.80	485.00	13.20	6.40	132.12	13.37	Kiena Deep A Northern and southern extensions
6308	260.90	273.50	12.60	10.40	42.55	6.81	
6309	328.60	336.40	7.80	7.10	16.47	7.59	
6322	105.80	118.00	12.20	8.60	12.74	8.09	
6325	489.00	502.00	13.00	8.10	138.04	16.42	
6317	74.10	84.50	10.40	10.40	17.79	5.33	
6326	260.40	264.00	3.60	3.60	37.03	6.99	
6332	88.80	92.60	3.80	2.40	58.30	12.22	
6339	153.90	160.10	6.20	5.30	53.63	18.38	Kiena Deep A Confirm the overall continuity of the Kiena deep A Zone and improve the understanding Kiena Deep Zone A
6321	251.40	256.50	5.10	5.10	177.25	6.47	
6336	552.10	565.00	12.90	6.80	18.73	7.02	
6333	64.50	72.90	8.40	5.80	37.34	6.82	
6338	151.90	154.90	3.00	2.60	163.85	13.11	
6338	164.50	176.60	12.10	11.90	14.07	10.34	
6376	234.70	240.80	6.10	5.40	21.05	5.12	
6367	203.90	213.00	9.10	9.10	13.50	10.28	
6366	210.10	212.50	2.40	1.90	43.68	12.12	
6380	185.00	195.30	10.30	8.60	17.79	8.86	

Hole ID	From (m)	To (m)	Core Length (m)	Estimated True Width (m)	Assay Au (g/t)	Cut Grade* (g/t Au)	Zone
6383	553.00	577.00	24.00	16.50	28.00	14.10**	
6375	171.10	182.20	11.10	8.50	82.39	17.84**	
6370	129.40	138.30	8.90	8.00	120.60	44.58**	
6384	573.60	586.80	13.20	9.30	26.39	17.76**	
6398	63.70	69.60	5.90	5.40	19.17	18.10**	
6384A	280.00	310.60	30.60	15.00	33.72	28.36**	Kiena Deep A Zone
6378	221.30	228.30	7.00	5.00	36.50	18.35**	
6392	166.80	168.20	1.40	1.30	153.40	35.38**	
6402	59.10	66.70	7.60	7.60	*51.92	*17.89**	
6409	559.60	564.30	4.70	3.60	39.79	20.00**	
6404	98.50	109.50	11.00	6.00	18.20	18.20**	
6406	51.90	62.30	10.40	5.20	66.41	23.36**	

Notes: * Assay intervals include values cut to an arbitrary, historic 1 oz / ton or 34.28 g/t Au
** high assays arbitrarily cut to 90.00 g/t Au
For additional information and details regarding the 2018 drilling program, refer to Wesdome news releases dated April 24, 2018, May 17, 2018, June 26, 2018, July 17, 2018, September 11, 2018, October 31, 2018, December 12, 2018, January 28, 2019, and April 25, 2019, available on the issuer's website and on SEDAR+

10.5.5 2019 Drilling Program

In 2019, Wesdome completed 222 underground drill holes totaling 59,097.5 m at the Kiena Mine Complex using five drill rigs (Table 10.1). Drilling focused on infill drilling of the Kiena Deep A Zone, testing the interpreted up-plunge extension toward the VC Zone, and evaluating the down-plunge potential below the 1,400 m vertical level.

Drilling confirmed the continuity and geometry of high-grade mineralization in the A Zone and extended mineralization approximately 100 m down plunge, bringing the interpreted extent to more than 830 m. Drilling also returned significant intersections below the VC zones, supporting the interpretation that the A Zone may be folded where it intersects the VC1 and VC6 zones.

Table 10.5 presents the significant results of the 2019 program.

Table 10.5 Significant results of the 2019 Program

Hole ID	From (m)	To (m)	Core Length (m)	Estimated True Width (m)	Assay Au (g/t)	Cut Grade* (g/t Au)	Zone
6419	47.70	56.80	9.10	8.50	16.83	16.83	Kiena Deep A Zone
6421	38.00	48.30	10.30	3.10	51.31	25.00	Kiena Deep A Zone
6427	591.10	604.00	12.90	4.80	18.41	18.41	Kiena Deep A Zone
6446	66.80	69.90	3.10	3.00	81.28	24.76	Kiena Deep A Zone
6437	321.00	328.00	7.00	3.00	6.92	6.92	Kiena Deep A Zone
6456	182.90	201.90	19.00	14.40	68.24	28.12	Kiena Deep A Zone
6450	93.50	97.80	4.30	3.80	126.25	23.57	Kiena Deep A2 Zone
6449	56.50	65.50	9.00	7.30	44.54	17.04	Kiena Deep A1 Zone
6449	80.90	85.50	4.60	4.50	37.64	28.50	Kiena Deep A1 Zone
6505	499.70	504.40	4.70	4.30	52.43	31.36	Kiena Deep A Zone
6531	529.70	534.80	5.10	3.90	31.10	24.31	VC1 Zone
6486	55.80	69.00	13.20	13.20	141.44	22.95	Kiena Deep A Zone
6545	255.90	259.00	3.10	2.40	185.79	29.34	Kiena Deep A Zone
6559	67.60	74.50	6.90	4.50	70.87	39.87	Kiena Deep A Zone
6568	85.20	95.70	10.50	6.50	33.50	15.49	Kiena Deep A Zone
6548	470.50	472.50	2.00	1.70	30.43	30.43	VC1 Zone
6556	241.40	244.40	3.00	2.20	17.44	17.44	VC6 Zone
6586	451.60	457.60	6.00	5.00	12.72	12.72	VC1 Zone
6580	725.00	735.00	10.00	5.60	114.84	32.84	Kiena Deep A2 Zone - Down Plunge
6580W1	290.20	307.40	17.20	11.60	25.29	21.02	
6580W2	332.70	342.40	9.70	4.20	86.45	31.69	
6592	239.00	248.20	9.20	7.00	66.79	16.76	Kiena Deep A Zone - Definition Drilling
6593	225.40	235.90	10.50	8.50	106.27	37.75	
6606	128.90	139.80	10.90	8.00	30.45	18.96	Kiena Deep A1 Zone - Definition Drilling

Notes: * All assays cut to 90.0 g/t Au.
True widths are estimated.
For additional information and details regarding the 2019 drilling program, refer to Wesdome news releases dated, April 25, 2019, July 31, 2019, December 10, 2019, and February 19, 2020, available on the issuer's website and on SEDAR+

10.5.6 2020 Drilling Program

10.5.6.1 Underground Drilling

In 2020, Wesdome completed 170 underground drill holes totaling 49,669.6 m using seven drill rigs at the Kiena Mine Complex (Table 10.1). Drilling initially focused on definition drilling of the Kiena Deep A Zone, successfully upgrading a significant portion of inferred resources to the indicated category, before shifting toward expansion drilling at the A Zone, VC Zone, and other prospective targets within the mine area.

Drilling confirmed the continuity of high-grade mineralization and extended the A Zone to more than 880 m down plunge. Work on the VC1 Zone returned several high-grade intersections and confirmed that it represents a separate structure with a different orientation than the A Zone, transitioning from sulphide-rich mineralization in upper levels to quartz-rich veins with visible gold at depth.

Table 10.6 presents the significant results of the 2020 underground program.

Table 10.6 Significant results of the 2020 Underground Program

Hole ID	From (m)	To (m)	Core Length (m)	Estimated True Width (m)	Assay Au (g/t)	Cut Grade (g/t Au)	Zone
6599	244.50	247.50	3.00	2.80	108.19	30.53	Kiena Deep A Zone
6660*	285.20	290.30	5.20	5.00	47.81	42.83	
6583	628.90	641.30	12.40	6.10	41.30	23.24	Kiena Deep A2 Zone
6584W1	245.20	258.30	13.10	4.00	151.06	35.40	
6584W2	275.20	286.00	10.80	3.50	96.03	25.70	
6668	138.30	141.00	2.70	2.60	157.67	27.30	Kiena Deep A Zone
6583W1	356.80	363.30	6.50	3.00	55.13	21.42	Kiena Deep A1 Zone
6654	256.40	258.40	2.00	1.90	76.70	63.95	VC1 Zone
6688	212.30	215.30	3.00	2.90	5.48	5.48	VC1 Zone
6740W4	349.00	357.00	8.00	5.00	325.93	46.80	Kiena Deep A2 Zone
6740W4	304.20	337.00	32.80	15.00	22.83	14.57	Kiena Deep A1 Zone
6704W3	258.00	294.50	36.50	6.00	24.12	8.37	Kiena Deep A2 Zone
6738C	516.00	520.60	4.60	4.10	20.00	20.00	VC1 Zone
6742W2	299.50	321.50	22.00	NA	11.93	11.93	New Footwall Zone
6742W2	238.90	261.10	22.20	6.00	142.36	22.29	A2 Zone

Notes: All assays cut to 90.0 g/t Au.
* Metallic Sieve Analysis Pending
True widths are estimated.
For additional information and details regarding the 2020 drilling program, refer to Wesdome news releases dated May 11, 2020, September 15, 2020, February 10, 2021, and March 23, 2021, available on the issuer's website and on SEDAR+

10.5.6.2 Surface Drilling

In 2020, Wesdome completed 12 surface drill holes totaling 6,428.90 m using two drill rigs (Table 10.1). Drilling focused on the Shawkey West Zone, located approximately 1,700 m southeast of the mine shaft, and the Presqu'île Zone, about 1,500 m northwest of the mine shaft.

At the Presqu'île Zone, five holes tested the down-plunge extension of Zones 1 to 4, confirming gold mineralization along a steeply east-plunging trend and helping to further define the existing near-surface resource. At Shawkey West, seven holes targeted multiple gold-bearing structures along either side of a breccia flow, leading to the discovery of a new zone, Bourgo, oriented perpendicular to the general northwest–southeast trend.

Results provided important information on the continuity, orientation, and geometry of the mineralized zones, supporting future exploration and resource modeling in both the Shawkey West and Presqu'île areas.

Table 10.7 presents the significant results of the 2020 surface program.

Table 10.7 Significant results of the 2020 Surface Program

Hole ID	From (m)	To (m)	Core Length (m)	Assay Au (g/t)	Cut Grade (g/t Au)	Zone
PR-20-001	193.80	194.30	0.50	1515.00	90.00	A2 Zone
	237.85	240.00	2.15	23.10	23.10	
PR-20-002	257.00	258.00	1.00	0.84	0.84	Zone 1
PR-20-003	281.40	281.90	0.50	35.10	35.10	Zone 1
PR-20-004	323.75	324.50	0.75	3.29	3.29	Zone 2
PR-20-005	346.80	349.00	2.20	1.13	1.13	Zone 2
SW-20-005	332.50	333.00	0.50	18.35	18.35	New area
SW-20-006	784.50	785.00	0.50	8.67	8.67	New area
SW-20-007	251.70	252.20	0.50	27.10	27.10	Bourgo

Notes: All assays cut to 90.0 g/t Au.
The true widths of the intersections of the Presqu'île zones are believed to be of 70% or higher of the intersected length.
For additional information and details regarding the 2020 surface drilling program, refer to Wesdome news releases dated September 29, 2021, available on the issuer's website and on SEDAR+

10.5.7 2021 Drilling Program

10.5.7.1 Underground Drilling

In 2021, Wesdome completed 155 underground drill holes totaling 46,646.25 m using seven drill rigs (Table 10.1). The program focused on expansion drilling at the Kiena Deep A Zone, VC Zone, and other prospective targets within the mine area to extend known high-grade zones and identify additional mineralization for future resource updates.

Drilling led to the discovery of a new Footwall Zone along the footwall of the A2 Zone, defined within a 50 m wide corridor. Gold mineralization occurs in quartz ± visible gold veins hosted in amphibolite-altered komatiite and basaltic komatiite units, with local occurrences in deformed basalt and ultramafic flow breccias. Structural deformation affects both the Footwall and A Zones, with folding, shearing, and faulting evident. Step-out drilling indicates that the Footwall Zone runs parallel to the A Zone and extends at least 300 m down plunge, remaining open laterally and at depth. Additional high-grade intersections in and around the A Zone resource block model demonstrate the potential to expand the existing resource estimate. The Footwall Zone is now considered a key target for ongoing drilling and highlights the broader untested potential of the Kiena gold system.

Table 10.8 presents the significant results of the 2021 underground program.

Table 10.8 Significant results of the 2021 Underground Program

Hole ID	From (m)	To (m)	Core Length (m)	Estimated True Width (m)	Assay Au (g/t)	Cut Grade (g/t Au)	Zone
6742W6	164.70	170.60	5.90	NA	59.72	28.87	New Zone
6742W6	253.60	271.60	18.00	NA	34.20	16.66	New Zone
6739W3	283.90	308.10	24.20	6.70	46.23	36.64	A1 Zone
6742W6	117.20	124.70	7.50	4.00	135.83	26.47	A1 Zone
6760W1	676.00	727.20	51.20	NA	41.19	25.67	New Zone
6742W3	342.60	357.90	12.30	NA	27.71	27.70	New Zone
6742W10	414.00	423.00	9.00	NA	16.67	14.90	New Zone
6750	60.00	67.50	7.50	4.70	122.14	26.74	A Zone
6742W3	227.90	235.90	8.00	7.10	96.10	47.35	A1 Zone
6735	326.80	344.10	17.30	7.00	24.52	21.07	A1 Zone
6762	444.60	452.00	7.40	3.90	132.09	27.64	A Zone
6752W4	265.70	272.90	7.20	3.50	34.31	32.32	A2 Zone
6762W2	325.50	341.50	16.00	NA	13.37	12.98	Footwall Zone
6762W1	294.40	303.50	9.10	NA	20.11	18.54	Footwall Zone
6796W3*	304.00	334.10	30.10	5.00	74.61	24.82	A1 Zone
6752W9*	541.50	578.80	37.30	6.0	38.34	18.23	A Zone
6752W8*	176.00	206.30	30.30	7.00	35.91	27.01	A Zone
6796W6	94.00	144.70	50.70	5.5	92.11	23.27	A1 Zone
6796W4	145.20	193.20	48.00	5.00	18.70	9.02	A1 Zone
6752W10	748.90	832.10	83.20	NA	13.94	9.94	New deep Zone

Notes: All assays cut to 90.0 g/t Au.
True widths are estimated.
NA: True widths are unknown at this time.
*True widths are estimated based on 3D model construction.
For additional information and details regarding the 2021 drilling program, refer to Wesdome news releases dated March 23, 2021, May 19, 2021, September 29, 2021, and February 8, 2022, and June 1, 2022, available on the issuer's website and on SEDAR+

10.5.7.2 Surface Drilling

In 2021, Wesdome initiated a regional surface exploration drilling program at the Kiena Mine Complex targeting the Presqu'île and Shawkey areas located northwest and southeast of the Kiena Mine, respectively, within the Jacola Formation. Beginning in July 2021, two drill rigs operating from barges tested the continuity of gold anomalies in the Presqu'île area, where previous drilling had outlined a small near-surface mineral resource. In total, 58 surface drill holes totalling 33,073.7 m were completed during the program, including 42 holes testing the Shawkey area and 16 holes targeting the Presqu'île Zone (Table 10.1). Eleven of the holes drilled at Presqu'île intersected gold mineralization and helped define a steeply east-plunging mineralized trend. In early September 2021, a third drill rig was mobilized to the Shawkey area to follow up on

historical gold anomalies and newly intersected mineralization. Eight holes intersected a new mineralized structure referred to as the Bourgo Zone, consisting of quartz veins with low sulphide content hosted in komatiitic basalt. Additional drilling was planned to further evaluate the extent and orientation of mineralization in both areas.

Table 10.9 presents the significant results of the 2021 surface program.

Table 10.9 Significant results of the 2021 Surface Program

Hole ID	From (m)	To (m)	Core Length (m)	Assay Au (g/t)	Cut Grade (g/t Au)	Zone
PR-21-006	370.70	374.20	3.50	0.38	0.38	Zone 2
PR-21-007	399.00	402.90	3.90	0.24	0.24	Zone 2
PR-21-008	311.50	312.40	0.90	63.90	63.90	Zone 2
PR-21-009	334.00	336.00	2.00	20.90	20.90	Zone 2
PR-21-010	195.80	198.00	2.20	15.26	15.26	Zone 2A
PR-21-012	46.50	52.50	6.00	1.29	1.29	Zone 3
PR-21-014	391.50	394.50	3.00	5.49	5.49*	Zone 2A
PR-21-019	94.00	98.00	4.00	42.30	13.30*	Zone 3
SW-21-009	513.00	514.50	1.50	20.80	20.80	Bourgo
SW-21-013	109.20	110.30	1.10	29.40	29.40	Bourgo
SW-21-014	194.00	195.90	1.90	4.49	4.49	Bourgo
S-21-831	402.00	474.00	72.00	2.32	2.07	Zone 10
S-21-823	348.60	378.00	29.40	2.27	2.09	Zone 10

Notes: All assays cut to 90.0 g/t Au.
*Assays cut to 35.0 g/t Au
True widths are estimated. The true widths of the intersections of the Presqu'ìle zones are believed to be of 70% or higher of the intersected length.
For additional information and details regarding the 2021 surface drilling program, refer to Wesdome news releases dated September 29, 2021, September 8, 2022, and May 23, 2023, available on the issuer's website and on SEDAR+.

10.5.8 2022 Drilling Program

10.5.8.1 Underground Drilling

In 2022, Wesdome completed 199 underground drill holes totaling 45,293.10 m at the Kiena Mine Complex in Val-d'Or, Quebec using seven drill rigs (Table 10.1). Drilling focused primarily on testing areas proximal to the Kiena Deep A Zone. Results confirmed the presence of the South Limb Zone at depth, associated with the A Zone, suggesting potential to increase the strike extent of high-grade mineralization.

Drilling confirmed the South Limb Zone at depth, extended the A Zone ~125 m down plunge (now continuous from 1,100 m to 2,000 m below surface), and intersected two new zones in the hanging wall basalt, including a quartz-carbonate vein with visible gold returning 2,850 g/t Au over 1.5 m. Results also continued to define and expand the Footwall zones, highlighting potential for additional ounces in competent basalt and increased mining flexibility.

Table 10.10 presents the significant results of the 2022 underground program.

Table 10.10 Significant results of the 2022 Underground Program

Hole ID	From (m)	To (m)	Core Length (m)	Estimated True Width (m)	Assay Au (g/t)	Cut Grade (g/t Au)	Zone
N103-6839W4	260.40	261.90	1.50	NA	2,849.67	35.00	New Basalt Zone
N103-6839W2	97.50	138.80	41.30	NA	11.55	9.70	New Basalt Zone
N112-6838A	266.20	272.60	6.40	4.30	36.00	32.37	A1 Zone (South Limb)
N 103-6839W3	254.60	267.00	12.40	5.50	20.33	18.99	A Zone (South Limb)
N103-6839W1A	163.20	216.70	53.50	NA	10.39	5.91	New Basalt Zone
N112-6861	339.00	349.00	10.00	6.40	75.64	35.79	A zone
N103-6840W5	385.00	390.00	5.00	NA	23.69	23.69	North Limb zone
N103-6840W6	289.00	293.00	4.00	NA	26.84	24.84	North Limb zone
N103-6840W7	273.00	278.00	5.00	3.80	84.27	63.57	South Limb A zone
N112-6861	429.40	451.20	21.80	4.30	33.61	10.82	Footwall_2 zone
N103-6839W4	289.00	311.80	22.80	NA	4.07	4.07	Hanging Wall Basalt zone

Notes: Assays capped at 90.0 g/t Au for A zone and capped at 35.0 g/t Au for the Hanging Wall Basalt zones.
True widths are estimated based on 3D model construction.
For additional information and details regarding the 2022 surface drilling program, refer to Wesdome news releases dated November 16, 2022, and February 14, 2023, available on the issuer's website and on SEDAR+

10.5.8.2 Surface Drilling

In 2022, surface exploration drilling was conducted proximal to the Kiena Mine within the prospective Jacola Formation to evaluate targets along strike of the Shawkey zones, eastward toward the Dubuisson area, westward at the Presqu'île Zone, and farther north at the Thompson-Tarmac area. A total of 110 drill holes totaling 27,389 m were completed using barge-mounted and conventional surface drill rigs (Table 10.1).

At Shawkey, 22 holes intersected broad zones of diorite-hosted alteration and mineralization, including one hole returning 2.3 g/t Au over 72.0 m, with disseminated pyrite, locally visible gold, and stockworks of quartz-carbonate-tourmaline veins with albite-sericite alteration. The mineralized zone has been extended approximately 200 m along strike and up dip and remains open northwest and at depth.

In the Dubuisson area 13 holes confirmed mineralization along shear zones (DUB 1, 2 and 3) and at their intersections, with disseminated pyrite (up to 7%) and local visible gold in quartz-carbonate-tourmaline stockworks.

Drilling at Presqu'île (64 holes) confirmed several narrow, steeply east-plunging subparallel zones hosted in porphyritic basalt, with quartz-carbonate-chlorite veins (<40 cm) containing pyrite, chalcopyrite, sphalerite, galena, and locally visible gold; the PR-2A Zone remains open along strike and at depth.

At the Thompson-Tarmac area, 7 holes successfully relocated the historic Thompson Zone, confirming continuity over approximately 300 m strike with gold associated with chalcopyrite-bearing veins in altered basalts adjacent to diorite. Collectively, the 2022 surface drilling confirmed continuity of known mineralized zones, identified new structures such as the Bourgo Zone, and extended potential feed for the Kiena mill.

Table 10.11 presents the significant results of the 2022 surface program.

Table 10.11 Significant results of the 2022 Surface Program

Hole ID	From (m)	To (m)	Core Length (m)	Estimated True Width (m)	Assay Au (g/t)	Cut Grade (g/t Au)	Zone
Shawkey Zone							
S-22-852	330.50	350.6	20.10		3.00	3.00	Zone 10
Dubuisson Zone							
DB-22-001	73.00	97.00	24.00		5.01	4.60	Dubuisson New Zone
DB-22-002	201.60	210.90	9.30	4.59	4.98	4.98	Dubuisson Zone 1
DB-22-003	184.50	209.70	25.20	17.22	9.80	9.80	Dubuisson Zone 2
DB-22-004	250.50	254.70	4.20	2.57	11.43	11.43	Dubuisson Zone 3
Presqu'île Zone							
PR-22-034	234.00	237.30	3.30	3.00	24.25	10.63	Presqu'île -1 Zone
PR-22-026	196.20	205.60	9.40	9.20	29.98	13.12	Presqu'île -2A Zone
PR-22-024	185.20	189.00	3.80	3.70	44.99	18.45	Presqu'île -2A Zone
PR-22-029	234.50	238.00	3.50	3.30	27.62	12.74	Presqu'île -2 Zone
Thompson-Tarmac Area							
TM-22-001	225.10	231.50	6.40		5.98		Thompson
Incl.	225.10	228.50	3.40		9.97		Thompson
TM-22-002	60.00	61.90	1.90		2.69		
TM-22-003	197.60	198.45	0.85		4.03[1]		Thompson
TM-22-004B	138.00	139.50	1.50		4.06		1PF
TM-22-004B	295.50	299.50	4.00		1.21		Thompson
Incl.	298.50	299.50	1.00		2.82		Thompson
TM-22-005	222.40	224.50	2.10		2.45		

[1]All assays capped at 35 g/t. Au. True width cannot be estimated at this stage of the exploration program as the exploration model is not updated for Shawkey.
[2] All assays capped at 50 g/t Au. True widths are estimated based on 3D model construction. True width cannot be estimated at this stage of the exploration program for DB-22-001.
[3] All assays capped at 35 g/t. Au.
True widths are estimated based on 3D model construction.
[4]Average grade from the two gravimetric analyses of the pulp and the duplicate reject.
For additional information and details regarding the 2022 surface drilling program, refer to Berthelot, 2025, and to Wesdome news releases dated September 8, 2022, May 23, 2023, available on the issuer's website and on SEDAR+

10.5.9 2023 Drilling Program

10.5.9.1 Underground Drilling

In 2023, Wesdome completed 238 underground drill holes totaling 32,679.05 m using four drill rigs (Table 10.1). Drilling focused on definition and delineation of mineralization in advance of planned mining, as well as testing historic zones and anomalous intercepts along strike to the east of the Kiena Mine.

Results provided improved understanding of the local geometry and grade distribution within known mineralized zones and confirmed continuity of high-grade gold mineralization. Drilling along the 33 Level also identified areas for further follow-up along strike, supporting ongoing exploration and resource confidence.

Table 10.12 presents the significant results of the 2023 underground program.

Table 10.12 Significant results of the 2023 Underground Program

Hole ID	From (m)	To (m)	Core Length (m)	Estimated True Width (m)	Assay Au (g/t)	Cut Grade (g/t Au)	Zone
N033-6901[2]	533.80	535.30	1.50	NA	36.40	36.40	Wish area
N033-6889[2]	430.80	432.70	1.90	NA	5.10	5.10	Wish area
N103-6807W2[1]	455.20	462.90	7.70	5.30	13.10	13.10	South Limb A Zone
N103-6807W5[1]	121.80	127.60	5.80	5.00	30.30	17.70	South Limb A Zone
N103-6807W4[1]	159.40	165.40	6.00	1.60	25.20	18.40	South Limb A Zone
N103-6839W7[1]	480.40	488.00	7.60	5.60	18.20	18.20	South Limb A Zone
N103-6864W4[1]	245.00	250.70	5.70	5.50	17.30	17.30	South Limb A Zone
N127-6890[1]	363.00	368.30	5.30	3.00	35.70	20.90	FWZ_4

Notes: [1]Assays capped at 90.0 g/t Au. True widths are estimated based on 3D models where available.
[2]Assays uncapped.
For additional information and details regarding the 2023 underground drilling program, refer to Wesdome news releases dated April 8, 2024, available on the issuer's website and on SEDAR+

10.5.9.2 Surface Drilling

In 2023, surface exploration drilling was completed at the Presqu'île Zone, located approximately 1.3 km northwest of the Kiena Mine Complex, with the objective of increasing the size and confidence of the mineral resources for Zones PR-1, PR-2, and PR-2A. A total of 14,464.8 m was drilled in 59 holes (Table 10.1). Drilling confirmed the continuity of the gold mineralization and validated the existing geologic model. The program also demonstrated potential for down-plunge extensions to the east of Zones PR-2 and PR-2A, which remain excellent targets for follow-up drilling from surface or underground via an exploration ramp. Limited testing of lateral extensions east and west of the Northwest Zone returned encouraging results, including 31.5 g/t Au over 3.2 m in hole S-23-857, highlighting the potential of the zone.

Table 10.13 presents the significant results of the 2023 surface recent in-fill drilling program at the Presqu'île Zone.

Table 10.13 Significant results of the 2023 Surface Program

Hole ID	From (m)	To (m)	Core Length (m)	True Width (m)	Assay Au (g/t)	Cut Grade (g/t Au)	Zone
PR-23-058A	392.00	396.60	4.60	4.30	9.31	9.31	PR-2 Zone
PR-23-061	354.40	357.40	3.00	2.80	5.02	5.02	PR-2A Zone
PR-23-069	235.00	238.00	3.00	2.80	9.41	9.41	PR-2A Zone
PR-23-070	207.50	210.50	3.00	2.90	32.51	30.01	PR-2A Zone
PR-23-073	230.70	233.70	3.00	2.50	9.06	9.06	PR-2A Zone
PR-23-075A	195.70	199.70	4.00	3.20	6.97	6.97	PR-2A Zone
PR-23-076	159.60	163.60	4.00	3.70	14.94	14.94	PR-2A Zone
PR-23-077	174.00	180.40	6.40	6.00	6.12	6.12	PR-2 Zone
PR-23-077	153.00	157.00	4.00	3.20	7.12	7.12	PR-2A Zone
PR-23-084	164.60	169.90	5.30	4.00	13.96	13.96	PR-2 Zone

Notes: All assays capped at 90 g/t. Au.
True widths are estimated based on 3D model construction.
For additional information and details regarding the 2023 surface drilling program, refer to Wesdome news releases dated September 19, 2023, and November 18, 2024, available on the issuer's website and on SEDAR+

10.5.10 2024 Drilling Program

10.5.10.1 Underground Drilling

In 2024, Wesdome completed 338 underground drill holes totaling 52,050.45 m at the Kiena Mine Complex in Val-d'Or, Quebec using five drill rigs (Table 10.1). Drilling focused on the Kiena Deep area, particularly the Footwall Zone adjacent to the existing Kiena Deep A Zone.

Drilling continued to intersect high-grade mineralization over mineable widths and confirmed the continuity of mineralization at depth, extending the Kiena Deep deposit to at least approximately 1,875 m below surface.

Table 10.14 presents the significant results of the 2024 underground program.

Table 10.14 Significant results of the 2024 Underground Program

Hole ID	From (m)	To (m)	Core Length (m)	Estimated True Width (m)	Assay Au (g/t)	Cut Grade (g/t Au)	Zone
N103-6911W1[1]	285.50	292.90	7.40	5.50	16.50	13.40	South Limb A Zone
N103-6911W2[1]	203.10	206.70	3.60	3.00	7.50	7.50	South Limb A Zone
N127-6913[1]	337.40	340.90	3.50	2.00	55.60	25.70	FWZ_3
N127-6912[1]	247.10	253.80	6.70	3.00	22.00	19.60	BZA_1
N127-6912[1]	327.10	338.20	11.10	5.00	13.80	13.80	FWZ_2
N127-6894[1]	340.00	362.10	22.10	6.00	218.87	30.27	A1 Zone
Incl.	351.40	352.40	1.00		988.00	90.00	A1 Zone
Incl.	352.40	353.20	0.80		1,920	90.00	A1 Zone

Hole ID	From (m)	To (m)	Core Length (m)	Estimated True Width (m)	Assay Au (g/t)	Cut Grade (g/t Au)	Zone
N127-6893[1]	335.00	348.50	13.50	5.30	49.67	31.71	FWZ_1
N127-6915[1]	323.30	333.90	10.60	7.00	18.07	18.07	FWZ_3
N033-6904[2]	272.50	276.00	3.50	NA	26.33	26.33	Wish
N127-6948[1,2]	387.40	391.70	4.30	2.40	482.79	53.72	A1 Zone
Incl.	387.40	388.40	1.0		565.00	90.00	A1 Zone
Incl.	388.40	389.40	1.0		1,460.00	90.00	A1 Zone
N127-6949[1,2]	357.40	372.50	15.10	6.50	330.96	44.79	A1 Zone
Incl.	357.40	358.20	0.80		2,210.00	90.00	A1 Zone
Incl.	358.20	359.00	0.80		677.00	90.00	A1 Zone
Incl.	364.00	365.20	1.20		342.00	90.00	A1 Zone
Incl.	365.20	366.40	1.20		1,515.00	90.00	A1 Zone
N127-6950[1,2]	368.80	378.00	9.20	5.90	119.37	33.18	A1 Zone
Incl.	372.60	373.40	0.80		619.00	90.0	A1 Zone
Incl.	376.40	377.20	0.80		391.00	90.00	A1 Zone
N033-6998[1,2,3]	294.40	297.70	3.30	NA	13.81	13.81	Wish
N033-6998[1,2,3]	458.30	461.80	3.50	NA	25.39	25.39	Wish

Notes:
[1]Assays capped at 90 g/t. Assays for Wish Area capped at 35 g/t.
[2] Cut off grade of 3.14 g/t assigned for individual assays and no more than two continuous samples below cut off grade (internal dilution) were used within composite band for geological continuity.
[3] True widths currently unavailable.
For additional information and details regarding the 2024 underground drilling program, refer to Wesdome news releases dated April 8, 2024, November 18, 2024, and June 25, 2025, available on the issuer's website and on SEDAR+

10.5.10.2 Surface Drilling

In 2024, surface exploration drilling at the Kiena Mine Complex targeted multiple deposits and exploration zones, including Presqu'île, Dubuisson, Duchesne, Northwest, and Northeast. A total of 29,595.9 m was completed in 95 holes (Table 10.1). At Presqu'île, 6,638 m in 20 holes tested lateral and down-plunge extensions of Zones 2 and 2A, confirming continuity and returning high-grade gold in early assays. The Dubuisson Zone received 11,968.40 m in 38 holes, which confirmed deposit continuity, identified down-plunge extensions, and supported resource modeling. In the Duchesne Zone, 1,882.8 m in 6 holes intersected high-grade gold-bearing brecciated quartz-pyrite veins within mafic volcanic rocks. The Northwest Zone was tested with 5,616.0 m in 21 holes, returning high-grade intercepts along the down-plunge extension, while the Northeast Zone received 3,490.7 m in 10 holes targeting multiple shear zones, with assays pending. Overall, the 2024 surface drilling confirmed continuity, extended known mineralization, and identified potential high-grade targets for follow-up drilling.

Table 10.15 presents the significant results of the 2024 surface program.

Table 10.15 Significant results of the 2024 Surface Program

Hole ID	From (m)	To (m)	Core Length (m)	Estimated True Width (m)	Assay Au (g/t)	Cut Grade (g/t Au)	Zone
Presqu'île Zone[1]							
PR-24-088	226.40	229.40	3.00	2.60	62.12	42.29	PR-2A
PR-24-089	233.40	236.00	2.60	2.30	32.95	32.95	PR-2A
Dubuisson Zone[1,2]							
DB-24-022	59.80	63.00	3.20	NA	9.45	9.45	DUB_S1
DB-24-023	194.40	200.30	5.90	NA	18.11	16.75	DUB_S3
DB-24-024	83.80	103.30	19.50	NA	9.10	9.10	DUB_S1
DB-24-045	80.90	90.70	9.80		12.60	12.60	Dubuisson
DB-24-045	105.80	108.80	3.00		9.10	9.10	
DB-24-045	205.30	217.20	11.90		17.00	16.60	
DB-24-045	254.50	261.70	7.20		20.80	20.80	
Duchesne Zone[1,2]							
DU-24-003	140.20	143.40	3.20	NA	24.40	19.24	DUC Area
Northwest Zone[1,2]							
NW-24-005	134.40	137.30	2.90	NA	92.97	24.83	NW Area

Note:
[1] Assays capped at 90.0 g/t Au.
[2] True width is unavailable at this time.
For additional information and details regarding the 2024 surface drilling program, refer to Wesdome news releases dated November 18, 2024, available on the issuer's website and on SEDAR+

10.5.11 2025 Drilling Program

10.5.11.1 Underground Drilling

In 2025, Wesdome continued underground exploration drilling at the Kiena Mine Complex in Val-d'Or, Quebec, completing 252 underground drill holes totaling 51,398.90 m using five drill rigs. Drilling focused on upgrading inferred resources and testing the continuity and extensions of high-grade mineralization within the Kiena Deep and Footwall zones, while also advancing additional targets including the VC, B, and Wish zones.

Drilling continued to better define the Footwall Zone, extending known mineralized lenses and improving confidence in the geological model. Drilling also confirmed the high-grade nature of the A1 and A2 lenses on the North Limb of Kiena Deep, intersecting high-grade mineralization within the competent basalt hanging wall. Conversion drilling at the B Zone identified multiple stacked lenses with locally visible gold, suggesting potential to provide incremental mill feed near existing infrastructure. Drilling in the Wish Zone confirmed the down-plunge extension of mineralization, while exploration to the east intersected additional gold-bearing intervals warranting follow-up.

Table 10.16 presents the significant results of the 2025 underground program.

Table 10.16 Significant results of the 2025 Underground Program

Hole ID	From (m)	To (m)	Core Length (m)	True Width (m)	Assay Au (g/t)	Cut Grade (g/t Au)	Zone
N127-7035	76.60	79.50	2.90		2,349.88	32.63	Kiena Deep – North Limb (A lenses)
N127-7035	105.00	108.60	3.60	3.30	88.98	23.23	A1 Zone
N127-7035	113.30	116.80	3.50	3.30	8.95	8.95	A2 Zone
N127-7035	125.20	129.30	4.10		29.05	29.05	A2 Zone
N127-7035	136.80	140.00	3.20		12.55	12.55	A2 Zone
N127-7053	421.20	425.00	3.80	3.10	70.23	52.29	BFW_4 Zone
N127-7053	446.00	449.80	3.80	2.00	14.32	14.32	FW6A Zone
N127-7061	303.70	322.30	18.60	6.10	17.60	12.70	FWZ4 Zone
N127-7062	306.70	312.30	5.60	2.50	43.40	22.30	FWZ2 Zone
N127-7063	265.00	275.10	10.10	3.50	16.60	10.10	FWZ2 Zone
N127-7058	323.80	329.00	5.20	3.10	161.30	33.30	A Zone
N130-K020	115.20	123.50	8.80	6.30	49.70	22.50	A2 Zone
N127-7059	212.00	221.70	9.70	3.50	12.90	12.90	A Zone
N125-7039	138.00	141.50	3.50		39.17	25.74	B Zone
N134-7138	353.00	370.70	17.70	2.50	14.10	14.10	FWZ5A
N134-7110	268.10	271.10	3.60	3.20	15.30	15.30	A2 Zone
N134-7172	136.00	138.00	2.00	1.90	23.10	18.00	B Zone
N134-7170	183.50	190.00	6.50	5.20	5.60	5.60	B Zone
N134-7169	128.70	131.40	2.70	2.10	12.60	8.30	B Zone
N033-7003	21.00	24.50	3.00		10.84	10.84	Wish Zone
N033-7081	79.00	82.10	3.10		6.21	6.21	Wish Zone

Notes:
[1]Assays capped at 90 g/t. Assays for Wish Area capped at 35 g/t.
[2] Cutoff grade of 3.14 g/t assigned for individual assays and no more than two continuous samples below cutoff grade (internal dilution) were used within composite band for geological continuity.
[3] True width currently unavailable.
For additional information and details regarding the 2024 underground drilling program, refer to Wesdome news releases dated June 25, 2025, and March 26, 2026 available on the issuer's website and on SEDAR+

10.5.11.2 Surface Drilling

In the summer of 2025, Wesdome completed 120 surface drill holes totaling 37,869.0 m using three drill rigs. The program tested four high-priority targets: Dubuisson, Northwest, 134, Presqu'île, and Wesdome.

At Dubuisson, one drill rig focused on infill and geotechnical drilling to support reserve growth and assess the lateral continuity of mineralization. The other two rigs evaluated the potential of regional targets, including the 134 Zone northwest of Dubuisson and the Northwest target located between Presqu'île and Kiena.

Drilling returned promising high-grade results across all targets, with the highlight being a new zone at Dubuisson North intersected by drill hole DB-25-068, returning 4.1 g/t Au (uncut) over 25.8 m core length. Located approximately 100 m below and lateral to the Dubuisson North Zone, this intercept is interpreted to lie between the Dubuisson North and South zones and represents a compelling opportunity to expand the Dubuisson deposit at depth. The combined grade and thickness suggest potential for future bulk-tonnage mineralization at Kiena.

Table 10.17 presents the significant results of the 2025 surface program.

Table 10.17 Significant results of the 2025 Surface Program

Hole ID	From (m)	To (m)	Core Length (m)	True Width (m)	Assay Au (g/t)	Cut Grade (g/t Au)	Zone
Dubuisson Zone[1,2,6]							
DB-25-068	410.40	436.20	25.80		4.10	4.10	New Dubuisson Zone
Incl.	412.50	418.60	6.10		6.10	6.10	
Incl.	423.40	425.30	1.90		3.80	3.80	
Incl.	428.60	432.10	3.50		8.10	8.10	
Incl.	434.10	436.20	2.10		3.60	3.60	
DB-25-051	257.20	260.20	3.00		19.40	19.40	Dubuisson
DB-25-064	160.70	170.00	9.300		8.10	8.10	Dubuisson
DB-25-064	177.90	187.20	9.30		10.70	10.70	Dubuisson
Northwest Zone[1,3,6]							
NW-25-023	326.90	328.10	1.20		203.00	90.00	Northwest
134 Zone[1,4,6]							
Z134-25-004	241.80	243.60	1.80		56.80	42.60	134 Zone
Wesdome Zone[1,5,6]							
WD-25-009	181.00	184.40	3.40		8.50	8.50	Wesdome
WD-25-006	179.60	185.40	5.80	5.60	6.00	6.00	Wesdome
WD-25-008	271.30	274.30	3.00	2.90	10.50	10.50	Wesdome

Notes:
[1] Assays capped at 90 g/t.
[2] Cut off grade of 2.6 g/t assigned for individual assays from Dubuisson and no more than four continuous samples below cut off grade (internal dilution) were used within composite band for geological continuity.
[3] Cut off grade of 3.2 g/t assigned for individual assays from Northwest Zone and no more than two continuous samples below cut off grade (internal dilution) were used within composite band for geological continuity.
[4] Cut off grade of 3.2 g/t assigned for individual assays from 134 Zone and no more than two continuous samples below cut off grade (internal dilution) were used within composite band for geological continuity.
[5] Cut off grade of 3.2 g/t assigned for individual assays from Wesdome Zone and no more than two continuous samples below cut off grade (internal dilution) were used within composite band for geological continuity.
[6] True width currently unavailable.
For additional information and details regarding the 2025 surface drilling program, refer to Wesdome news releases dated October 27, 2025, and Decembre 8, 2025, available on the issuer's website and on SEDAR+

10.6 2026 Drilling Program Post-Estimate

The ongoing 2026 drilling program, Wesdome Gold Mines Ltd. plans ~125,000 m of underground and surface exploration at the Kiena Mine Complex. Underground drilling is utilizing up to six drill rigs, including underground delineation drilling in the Presqu'île sector. Surface exploration is utilizing 5 drills for a total of 11 drill rigs during the peak summer season.

Surface exploration activities commenced in March 2026 in the southern portion of the property targeting the Pontiac sediments. This program, completed by Fusion Drilling, comprised six drill holes totaling approximately 3,614 m.

During the summer 2026 exploration campaign, up to five surface drill rigs are planned to be active, including one land-based rig in the Shawkey sector and four barge-mounted rigs operating on Lac de Montigny. Planned drilling areas include the Dubuisson, Northwest, Wesdome, Tarmac, and Zone 134 sectors, as well as the K Shear corridor located northwest of the former Siscoe Mine.

Primary objectives of the 2026 exploration program include:

- Testing down-plunge extensions of high-grade domains within the Kiena Deep system.
- Evaluating the expansion potential of bulk-tonnage style mineralization near the mine.
- Expanding near-mine and regional exploration targets through step-out drilling; and
- Identifying new mineralized zones along favourable structural corridors.

The 2026 drilling program is principally focused on resource growth and exploration targeting rather than infill drilling and is expected to support future resource expansion and the identification of additional mineralized zones.

At the effective date of the report (June 24th, 2026), Wesdome had completed over 26,553 m of the planned 125,000 m program for 2026. The Surface Summer exploration campaign started on June 17th.

The 2026 drill holes are not included in the 2025 MRE. The authors do not believe that the omission of these holes will materially affect the 2025 MRE, and the decision to leave them out is in accordance with the current geological models.

11. SAMPLE PREPARATION, ANALYSES AND SECURITY

The issuer's geology team provided the information discussed below. The QPs reviewed the quality assurance / quality control ("QA/QC") procedures and the results of the drilling programs.

This item describes the sample preparation, analysis and security procedures for the project's diamond drilling programs, covering the drill holes in the databases used for the 2025 MRE.

11.1 Core Handling, Sampling and Security

Since February 9, 2019, Wesdome Gold Mines Ltd. has submitted diamond drill core samples to ALS Global in Val-d'Or, Québec for analytical testing. Since 2021, surface exploration samples have also been analyzed at various ALS Global facilities across Canada. In addition, selected partial delineation drilling samples and channel samples are processed at the Kiena mine laboratory. Sample transportation is carried out by Manitoulin Transport.

Diamond drill core is boxed and sealed at the drill rigs and transported by the drillers to the underground station and brought to surface via the service cage at the end of each shift. A technician from Wesdome takes over the core handling and brings it to the core shack. After being logged and sampled, individual sample bags are placed in rice bags along with the list of samples. QA/QC samples are prepared and bagged ahead of time by Wesdome personnel and are batched at the core shack following the geologist's instructions. Batches are shipped daily to the ALS Global facility in Val-d'Or, Quebec. Batches and shipments contain variable numbers of samples.

11.1.1 Gold Assays Samples

To create representative and homogenous samples, sampling honours lithological contacts, i.e., no sample crossed a major lithological boundary, alteration boundary or mineralization boundary.

Sampling intervals are determined by the geologist during logging and marked on the core boxes or on the core itself using coloured lumber pencils with a line drawn at right angles to the core axis. Sample lengths typically range from 0.5 m to 1.50 m with a preferred length of 1.0 m for the mineralized zones. The sampled core is considered representative. Two shoulder samples, each having a sample length of approximately 1.0 m to 1.5 m, are collected from the non-mineralized core above and below the mineralized intervals.

Samples are numbered in consecutive order utilizing sample tag books containing numerical sequences of 50 pre-labeled triplicate water durable sample tags (three tags per sheet). The first of the tags remained with the sample tag book as an archival record of the samples' parameters. The geologist puts 2 tags in the core box, 1 serves as permanent sample in the core box and the second one is inserted in the sample bag when the splitted core is sent to lab.

The sample sequence includes blank samples, duplicate samples and Certified Reference Materials (CRMs) that are inserted into the sample stream using sample numbers that are in sequence with the core samples. A CRMs sample, consisting of material of known metal content and internationally recognized and verified, is included in the sample sequence by the trained core sampler. A “blank” sample is material technically devoid of any metals. Blanks and CRMs are stored in a designated secure area in the core shack. There is never any written reference to the location of any control samples on sample bags, sample tags or dispatch documentation for the assay lab.

Once logged and labelled, the core of each selected interval is sawed in half using a typical table-feed circular rock saw. The core saw operator, trained in core cutting procedures, executes the core cutting at the Wesdome core shack. The logging geologist has already clearly marked out all pertinent cores for cutting and sampling. The core is sawn in half, along its length, with a diamond saw. One half (consistently from the same half of the split core) is put into the plastic sample bag and the other half is retained and kept in the core box for later reference.

The paired sample tags are then torn with one tag stapled to the core box at the start of its sample interval and the other tag placed into the sample bag with the core sample. When cutting, the core saw operator looks for visible gold inside the veins and reports it to the geologist when positively observed. The sample tag number is also written on the outside of the sample bag using a permanent marker. The bag will then be closed using a zip tie and stored in sequence prior to sample dispatch preparation. Sample bags are packed in large ‘rice’ bags sealed with a zip tie that is ‘broken’ or opened at the assay laboratories only. The range of sample numbers inside the bag is written on the rice bag. The sealed rice bags are stored in the core shack in Val-d’Or until shipping to the laboratories.

11.1.2 Core Density Samples

New specific gravity (SG) tests were conducted on 39 samples. SG was measured by water displacement method at the ALS laboratory using the OA-GRA08 ALS method (see method below).

About 0.10 m to 0.20 m of core was selected for each density measurement. The dry mass was measured followed by the submerged mass. Both measurements were recorded and the density was measured using the following formula:

$$Specific\ Gravity = MassDry\ in\ air / (MassDry\ in\ air - MassSubmerged\ in\ water)$$

11.2 Laboratory Preparation and Assays

11.2.1 Lab Accreditation and Certification

ALS has the ISO/IEC 17025:2005 accreditation through the ALA (Canadian Association for Laboratory Accreditation Inc). It is an independent commercial laboratory.

11.2.2 ALS Sample Analysis Procedure

At ALS laboratories, samples are sorted, bar-coded and logged into the ALS Webtrieve program. Damaged samples are documented and Wesdome personnel are informed. Samples are dried to constant weight and weighted (WEI-21). The sample is then crushed to P70 2,000 µm (CRU-31). A split is collected using a riffle splitter (SPL-21) and a reject duplicate split is prepared from that original sample (SPL-21d). A pulverization split of 250 g is then prepared for both the original and duplicate split (PUL−31; PUL−31d) at P85 75 µm. A pulp duplicate is also prepared from the original sample (SPL-34). When a metallic sieve analysis is conducted (Au- SCR21), a pulverization of 1,000 g P95 106 µm is done (PUL-35a).

Samples are then analyzed by fire assay (FA) with atomic absorption (AA) spectroscopy from 30 g pulps (Au-AA23). The lower detection limit is 0.005 g/t. When assay results are higher than 3 g/t, the sample is re-assayed with a gravimetric finish (Au-GRAV21) on a 30 g pulp. If results are higher than 10 g/t, gravimetric finish is done and the Metallic sieve method (Au-SCR21) is also conducted. In this case, 1,000 g is pulverized and screened to 100 µm. Duplicate assay is done on screen undersize and the entire oversize fraction is assayed.

Results are provided through a secure server and downloaded, by the geologist in charge of the project, in Excel format and the official certificate (sealed and signed) in PDF format.

As part of ALS internal quality control program, four QA/QC samples are inserted by ALS per batch of 24 samples (one blank, two standards and one pulp duplicate). A method blank and a certified reference material is applied and reported for each furnace load to monitor the fire assay process. A duplicate crushed sample is drawn at random and assayed for each work order to monitor precision.

11.2.3 Sample Shipping and Security

The following procedures are applied to ensure a safe and secure management of materials and data as it pertains to core samples at the Kiena Mine Complex:

- All core samples submitted for preparation and analysis to the laboratories are secured in rice bags with zip ties and collected directly at the core shack by the laboratory under the supervision of a member of Kiena's team.
- The lab is notified by email that the samples are en route and is instructed to notify Kiena's geologists when the samples arrive at the prep lab.
- The sample shipment contains a sample submittal form as well as a sample dispatch list detailing the security tag number, rice bag number and the number of samples contained in each rice bag.
- The sample submittal form and sample dispatch list are electronically transmitted to the laboratories once the shipment has left the core shack.
- Samples are sent to: ALS, 1324, rue Turcotte Val-d'Or, Qc, J9P 3X6.
- Results are downloaded by Bruno Turcotte, Superintendent Geologist for Wesdome, via a secure server, as Excel files.
- QA/QC data is evaluated before the samples are integrated into a master database.

- The core boxes are stored under roofed racks in the outdoor core storage area enclosed by secure fencing. The exact location of each hole in the outdoor core library is recorded in an Excel spreadsheet for future reference.
- The sample pulps and rejects are stored at the Kiena Mine Complex.

11.3 Quality Assurance and Quality Control

Canadian National Instrument 43-101 (NI 43-101) Standards of Disclosure for Mineral Projects requires mining companies reporting results in Canada to comply with the CIM Best Practice Guidelines. The guidelines describe the elements required in the reports, but do not provide guidance for Quality Assurance and Quality Control (QA/QC) programs.

QA/QC programs have two components: Quality Assurance (QA) deals with the prevention of problems using established procedures, while Quality Control (QC) aims to detect problems, assess them and take corrective actions. QA/QC programs are implemented, overseen and reported on by a Qualified Person (QP) as defined by NI 43−101.

QA programs should be rigorous, applied to all types and stages of data acquisition and include written protocols for: sample location, logging and core handling; sampling procedures; laboratories and analysis; data management; and reporting.

QC programs are designed to assess the quality of analytical results for accuracy, precision and bias.

The materials conventionally used in mineral exploration QC programs include standards, blanks, duplicates, and check assays. Definitions of these materials are presented hereunder:

- Standards are samples of known composition that are inserted into sample batches to independently test the accuracy of an analytical procedure. They are acquired from a known and trusted commercial source. Standards are selected to fit the grade distribution identified in the Kiena mineralization.
- Blanks consist of material that is predetermined to be free of elements of economic interest to monitor for potential sample contamination during analytical procedures at the laboratory.
- Duplicates are samples submitted to assess both assay precision (repeatability) and to assess the homogeneity of mineralization. Duplicates can be submitted from all stages of sample preparation with the expectation that better precision is demonstrated by duplicates further along in the preparation process.
- Check Assays consist of a selection of original pulps that are submitted to a second analytical laboratory for the same analysis as at the primary laboratory. The purpose is to assess the assay accuracy of the primary laboratory relative to the secondary laboratory.

As per NI 43-101, quality control samples were inserted into the sample batches sent to the laboratory. Inserts included pulp duplicate samples, blank samples and standards. Check assays at a secondary laboratory were also performed during the 2021-2025 QA/QC programs.

Table 11.1 summarizes the QA/QC samples submitted to the laboratories along with routine drill core samples.

Table 11.1 Samples submitted to the laboratories for analysis between 2021 and 2025

Type of sample	Quantity	%
Primary drill core samples	216,815	**82.6%**
Blanks	12,255	**4.7%**
CRMs	12,078	**4.6%**
Reject duplicates	9,848	**3.8%**
Pulp duplicates	9,848	**3.8%**
Check assays	1,601	**0.6%**
Total	**262,445**	**100%**

11.3.1 Duplicates

Duplicate samples are submitted to assess both assay precision (repeatability) and to assess the homogeneity of mineralization.

Pulp duplicates consist of second splits of prepared samples ready to be analyzed and are indicators of analytical precision, which may also be affected by the quality of pulverization and homogenization. Reject duplicates are obtained from the coarse reject material and provide an indication of variability introduced during sample preparation, including crushing and splitting stages.

The QA/QC program included the routine insertion of both pulp and reject duplicates throughout the sampling sequence. A total of 9,848 duplicate pairs were analyzed between 2021 and 2025 for the Kiena project.

Figure 11.1 and Figure 11.2 present scatterplots comparing original samples and their corresponding duplicates. For pulp duplicates, the coefficient of determination (R^2) is 0.7369, indicating a moderate to good correlation and acceptable analytical precision, although some dispersion is observed, particularly at higher grades.

Reject duplicates show a higher correlation, with an R^2 value of 0.8654, suggesting good reproducibility of results despite the additional variability associated with sample preparation. The majority of data points for both duplicate types fall within the ±10% error bounds, supporting the overall reliability of the assay data.

Overall, the results indicate good repeatability and acceptable precision of the analytical process for both pulp and reject duplicates, with no significant systematic bias observed.

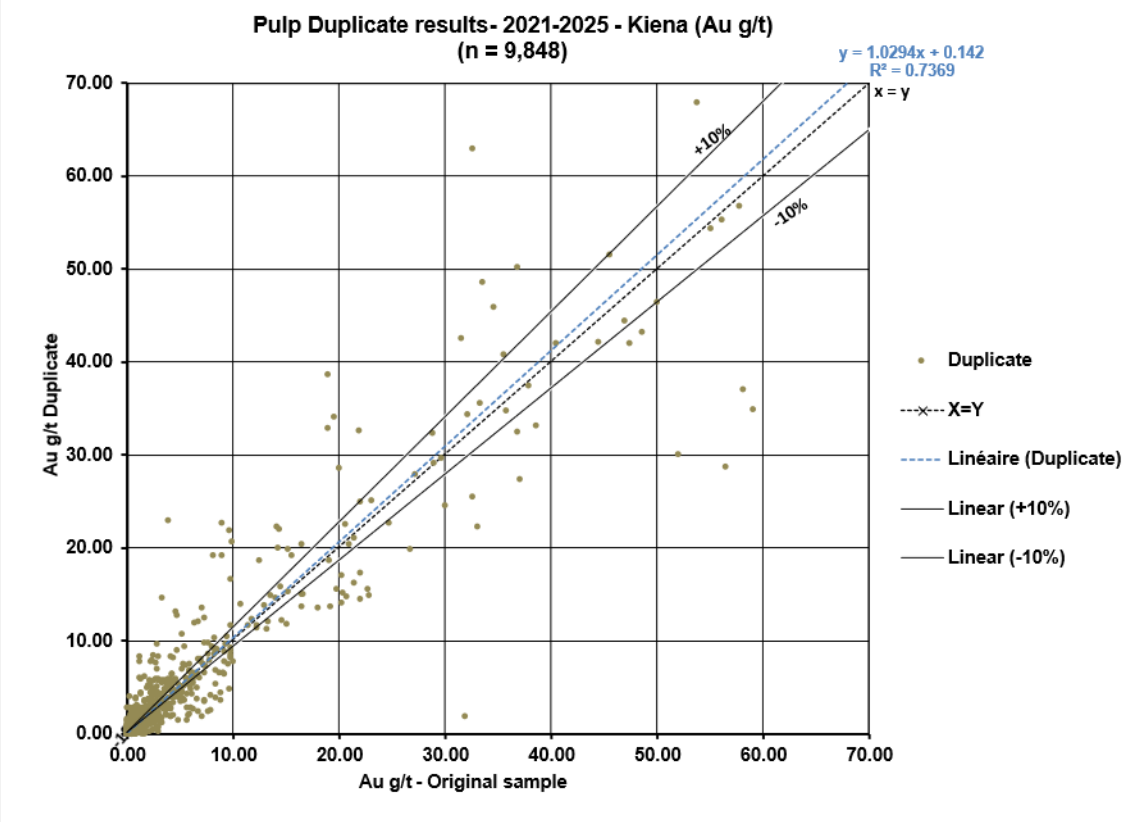


Figure 11.1 Scatterplot with linear trend of the Pulp duplicates and original samples results for the 2021-2025 drilling program (n= 9,848)

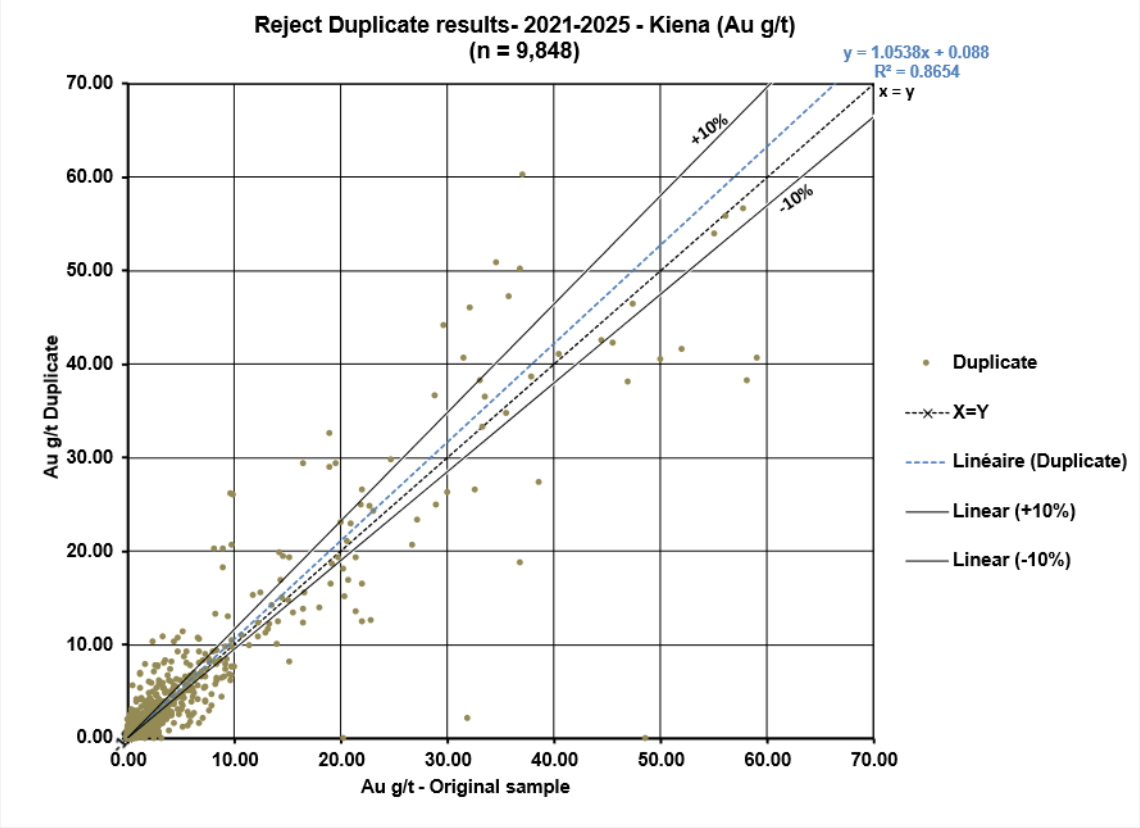


Figure 11.2 Scatterplot with linear trend of the Reject duplicates and original samples results ALS for the 2021-2025 drilling program (n= 9,848)

11.3.2 Blanks

Blanks are used to monitor for potential sample contamination that may take place during sample preparation and/or assaying procedures at the laboratory. Sample of barren crushed white marble (blank) were used by Wesdome.

One blank sample was inserted for every 20 samples.

According to Wesdome's QA/QC protocol, if any blank yields a gold value above the 10×LOD threshold (0.025 ppm Au), all samples from the affected batch should be reanalyzed. Three types of blank materials were inserted throughout the 2021-2025 drilling programs at Kiena: a Blanc material (1,701 insertions), a Bomix material (10,139 insertions), and a Fournier rock blank material (414 insertions), for a combined total of 12,254 blank insertions. One additional blank from the MNG program (1 insertion) was included in this dataset solely for completeness, as its single data point does not warrant a standalone graph.

The Blanc and Bomix materials are standard commercially prepared blank pulps, while the Fournier blank consists of a rock sample from the 1G or 1GD lithological unit, considered barren and used as a field blank representative of the local geology. Given its nature as a rock blank rather than a prepared pulp, the Fournier material is inherently more susceptible to background gold variability, which should be taken into account when interpreting its performance.

Of the 12,255 blanks analyzed, 660 blank samples exceeded the 10×LOD threshold (>0.025 ppm Au), representing an overall failure rate of 5.39%. The failures break down as follows: 182 for the Blanc (10.7%), 336 for the Bomix (3.3%), and 142 for the Fournier (34.3%). The single MNG blank returned a value below the failure threshold. Results for each blank type are presented in Figure 11.3 (Blanc), Figure 11.4 (Bomix), and Figure 11.5 (Fournier).

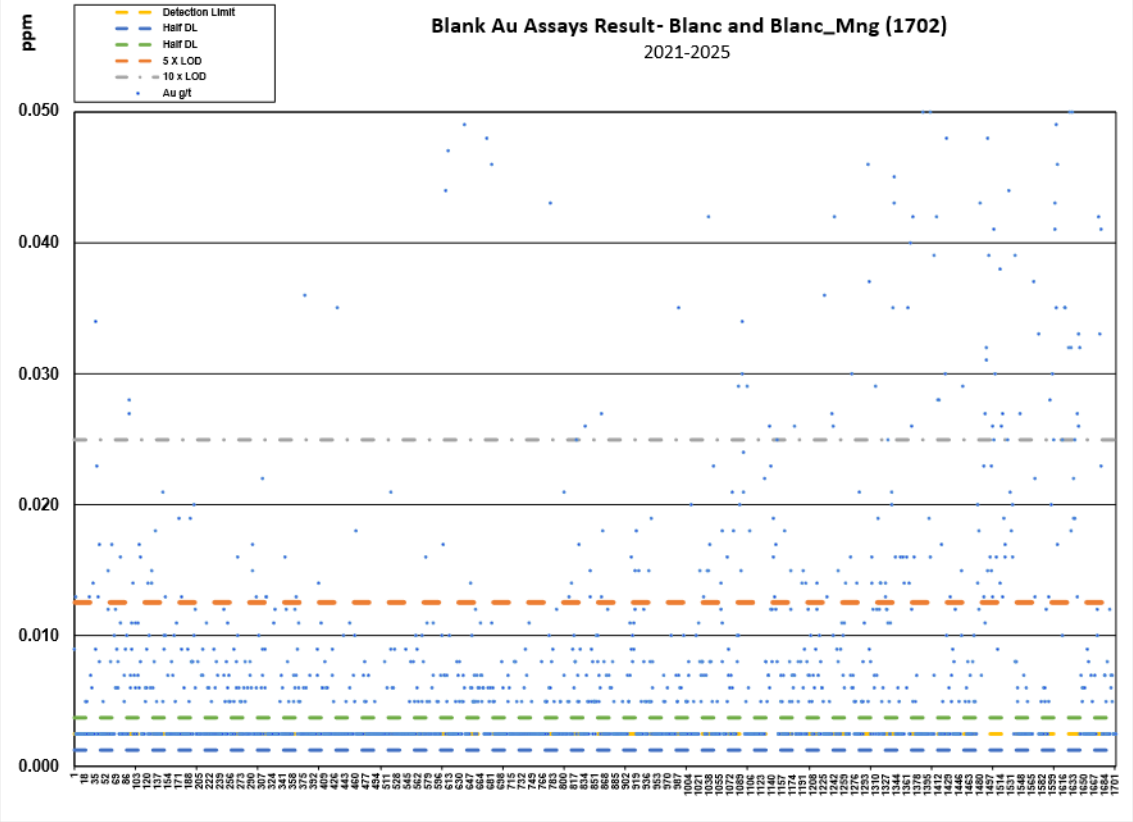


Figure 11.3 Blank Au Assay Results – Blanc Material (n=1,702) – 2021-2025 drilling program - Detection limit of 0.005 (g/t)

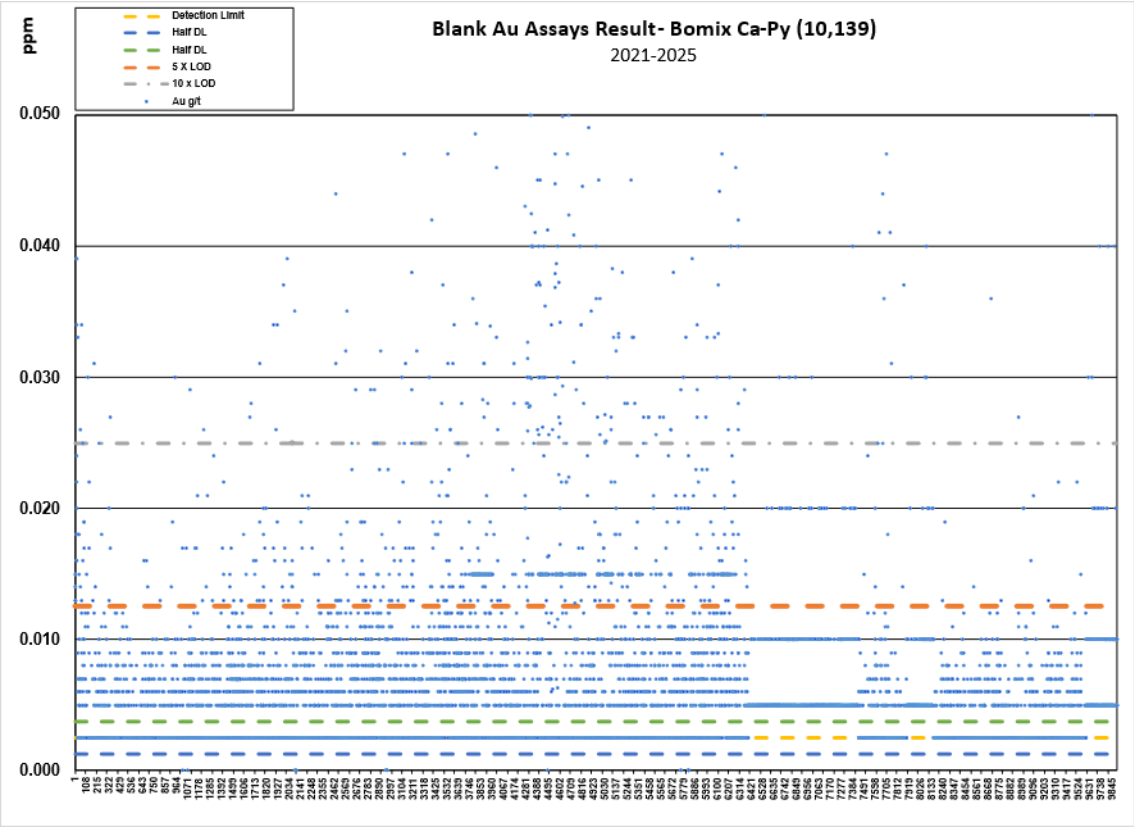


Figure 11.4 Blank Au Assay Results – Bomix Material (n=10,139) – 2021-2025 drilling program - Detection limit of 0.005 (g/t)

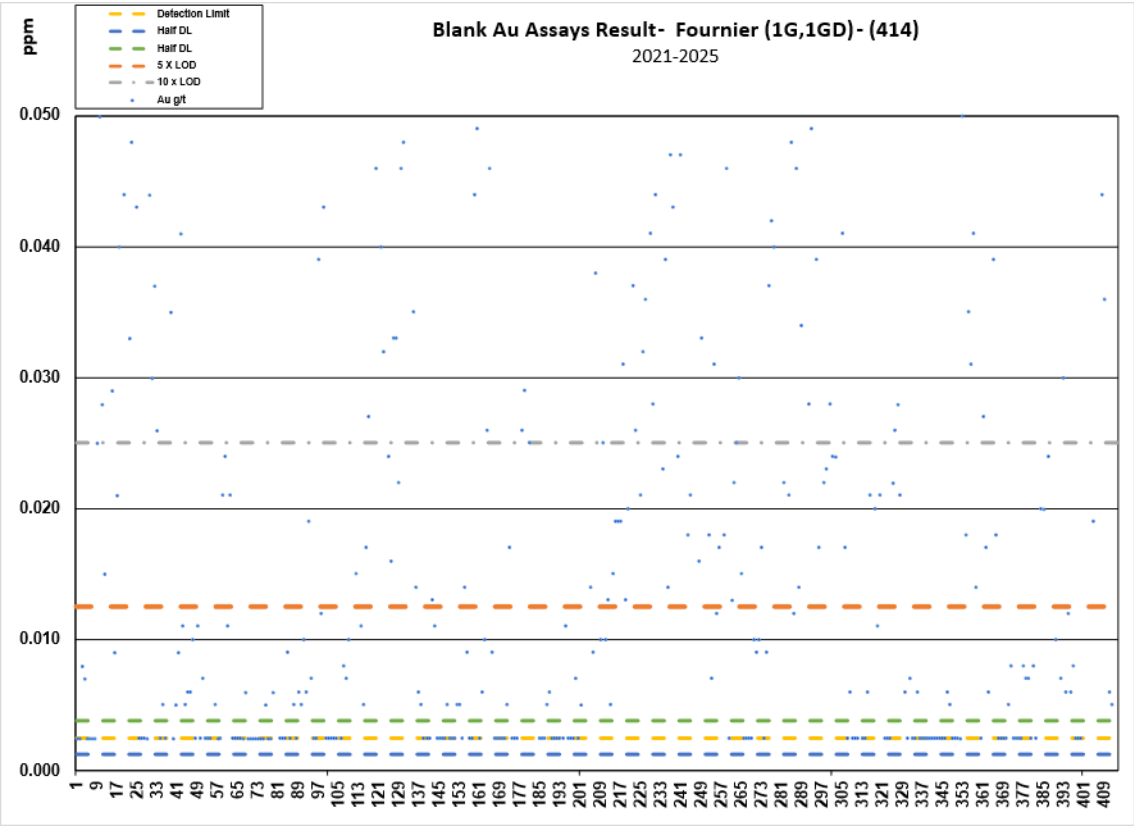


Figure 11.5 Blank Au Assay Results – Fournier (1G,1GD) Blank Material (n=414) – 2021-2025 drilling program - Detection limit of 0.005 (g/t)

Generally, the blanks indicate little to no widespread contamination at the laboratory. Occasional elevated values across all blank types, as illustrated in Figure 11.3 to Figure 11.5, are consistent with isolated contamination events during sample pulverization or batch processing rather than a persistent analytical bias. Re-assay of affected batches was requested where applicable, and no systematic issue with the ALS laboratory was identified.

Considering the overall low failure rate, the rock-blank nature of the Fournier material, and the sporadic character of the failed samples, the QP is of the opinion that blank performance is satisfactory and does not materially affect the reliability of the gold assay database for the purpose of this FS.

11.3.3 Certified Reference Materials (Standards)

Accuracy and precision are monitored by the insertion of Certified Reference Materials (CRMs). A suite of commercially available CRMs is used on the Project. One sample was inserted for every 20 samples. Table 11.2 shows the CRMs used for between 2021-2025 Program.

Table 11.2 Standard certified reference materials used at the Kiena Mine Complex during the 2021 to 2025 drilling campaign

Standard (CRMs)	Certified gold value (g/t)	Quantity inserted	Mean grade (Au g/t) w/o gross outliers	Lower process limit (mean - 3SD)	Upper process limit (mean + 3SD)	Failed (outliers)	Gross outliers	(%) passing QC
OREAS L14	3.24	430	3.264	3.18	3.3	18	2	95.35%
OREAS211	0.768	179	0.761	0.687	0.849	5	0	97.21%
OREAS235	1.59	96	1.566	1.476	1.704	2	1	96.88%
OREAS238	3.03	688	3.108	2.790	3.270	25	4	95.78%
OREAS241	6.91	70	6.796	5.983	7.837	2	3	92.86%
OREAS242	8.67	86	8.568	8.025	9.315	3	0	96.51%
SF100	0.86	610	0.846	0.845	0.875	16	1	97.21%
SF141	0.883	404	0.873	0.859	0.907	14	2	96.04%
SI81	1.79	444	1.744	1.766	1.814	8	2	97.75%
SI96	1.801	347	1.775	1.774	1.828	13	4	95.10%
SJ111	2.812	624	2.765	2.8057	2.8183	18	1	96.96%
SJ95	2.789	415	2.758	2.741	2.837	13	3	96.14%
SK109	4.102	211	4.038	4.012	4.192	9	1	95.26%
SK112	4.113	115	4.146	4.017	4.209	0	0	100.00%
SK120	4.075	334	4.083	3.985	4.165	9	0	97.31%
SK137	4.089	972	4.082	3.990	4.188	26	12	96.09%
SL108	5.744	381	5.878	5.618	5.87	8	6	96.33%
SL119	5.867	120	5.083	5.759	5.975	4	0	96.67%
SL123	5.899	363	5.834	5.782	6.016	14	1	95.87%
SL136	5.885	1280	5.848	5.753	6.017	31	3	97.34%
SL76	5.96	52	5.769	5.804	6.116	1	0	98.08%
SN104	9.182	263	8.898	9.011	9.353	9	1	96.20%
SN117	8.443	216	8.260	8.335	8.551	4	2	97.22%
SN124	8.476	172	8.387	8.329	8.623	3	0	98.26%

Standard (CRMs)	Certified gold value (g/t)	Quantity inserted	Mean grade (Au g/t) w/o gross outliers	Lower process limit (mean - 3SD)	Upper process limit (mean + 3SD)	Failed (outliers)	Gross outliers	(%) passing QC
SN91	8.679	72	8.430	8.511	8.847	1	1	97.22%
SP116	19.091	429	17.709	18.782	19.400	12	1	96.97%
SP133	18.14	215	17.693	17.81	18.47	3	3	97.21%
SP89	18.455	304	18.096	18.221	18.689	7	1	97.37%
SQ131	30.68	437	30.318	29.99	31.37	13	1	96.80%
SQ87	30.868	767	29.650	30.244	31.492	26	9	95.44%

The selection of the CRMs was based on anticipated cut-off grade and the 10 g/t re-analysis metallic sieve grade.

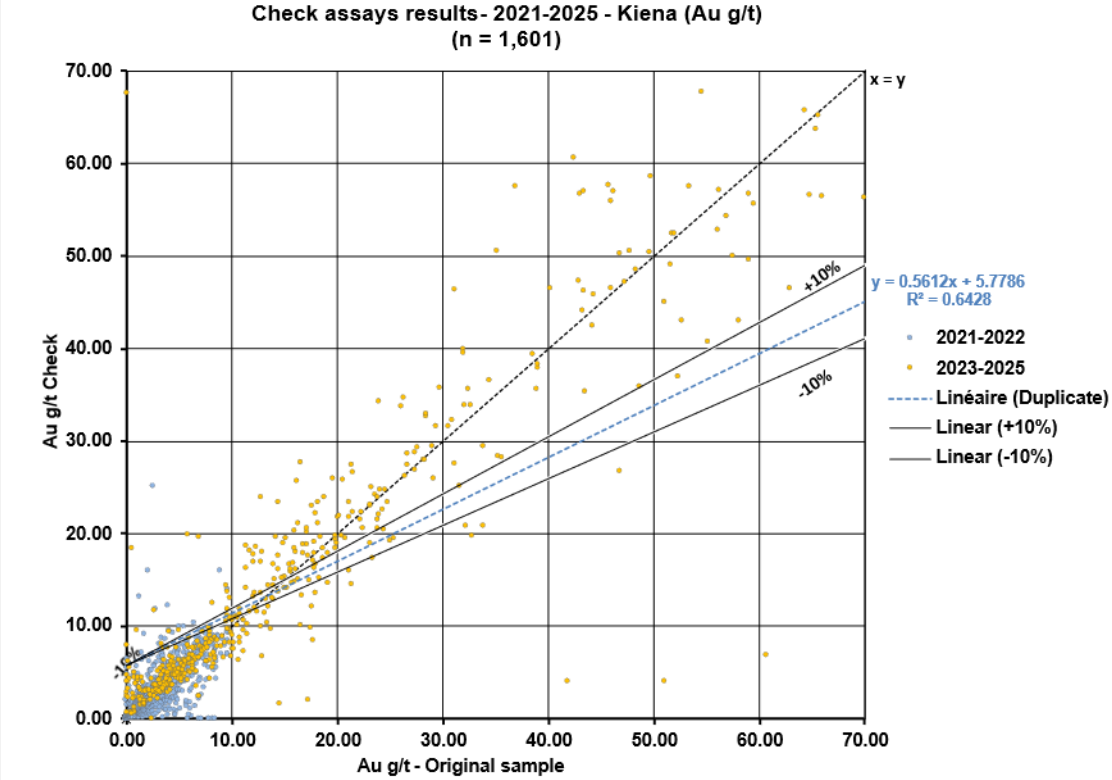
CRMs were considered failed by Wesdome when a gold result exceeded three standard deviations (±3 SD) beyond the expected value. If the analytical value exceeded the ±3 SD control limits, systematic re-assaying was not always requested. For each failed standard, Wesdome QC protocol stipulates that only samples included with mineralized zone material should be reanalyzed. If there is no significant gold result within the batch of 20 samples, no re-assay is ordered. During the 2021-2025 drilling programs, 30 CRMs representing 31 different standard references were inserted, totalling 12,078 insertions. A total of 229 failed CRMs (outliers) were recorded across all standards, representing an average failure rate of approximately 1.9%. 32 gross outliers were also identified. The overall passing rate averaged 96.6%. Considering the low failure rate, the location of these failed CRMs, and the actions taken when such failures occurred, the QP is of the opinion that the failed CRMs are not material for the purpose of this FS and show the natural statistical spread in the data.

11.3.4 Check Assays

As part of the Wesdome QA/QC program, rejects from a selection of samples were submitted to a second laboratory to assess both the assay precision (repeatability) and the homogeneity of mineralization. Rejects Check Assays consists of the resulting crushed material from the original assay procedure being sent to a different laboratory. This material will then need to be pulverized and assayed by the second laboratory.

Figure 11.6 presents the scatterplot of check assay results for the Kiena deposit, based on 1,601 duplicate pairs collected between 2021 and 2025. Results are colour-coded by period: samples from 2021-2022 were reassayed by SGS laboratory, while samples from 2023 to 2025 were reassayed internally at the Kiena site. The overall correlation is moderate (R^2 = 0.6428), which is consistent with the high nugget effect typical of this mineralization. The regression line plots below the X=Y line at higher grades, reflecting the expected reproducibility challenges associated with atomic absorption finish. Both periods show a similar distribution, suggesting that the transition to internal analysis did not significantly impact the quality of check assay results.

Based on these observations, metallic sieve should continue to be used and perhaps even used for lower grades; currently metallic sieve is used for samples above 10 g/t Au.



Note that Wesdome's protocol ensures that samples returning grades above the 3 g/t Au threshold using the atomic absorption methodology are re-assayed using the gravimetric finish methodology.

Figure 11.6 Scatterplot showing results from the check assay program for the atomic absorption methodology

11.4 Conclusion

The QP reviewed the sample preparation, analytical and security procedures, as well as the insertion rates and performance of blanks, standards, duplicates, and check assays.

The authors are of the opinion that the sample preparation, security, analysis and QA/QC protocols followed generally accepted industry standards and that the data is valid and of sufficient quality for the purpose of this FS. The authors are of the opinion that the sample preparation, security, analysis and QA/QC protocols performed by the issuer followed generally accepted industry standards and that the data is valid and of sufficient quality for a mineral resource estimation.

12. DATA VERIFICATION

The 2025 Mineral Resource Estimate (2025 MRE) in this Report is based on drill data from several eras of drilling on the Kiena Mine Complex that includes holes completed in the 1940s.

For the purpose of the 2025 MRE, Serge Gonthier, Principal Geologist, Resources and Geology, P. Geo., and Qualified Person for Wesdome, and Christopher Grondin, Resources Engineer, P. Eng. MBA also from Wesdome, performed a basic verification on the resource database. All data was provided by Wesdome in a local mine coordinate system. The drill database close-out date for the resource estimate is December 30, 2025; data from 8,497 DDH (1,344,536.8 m) was incorporated in the resource estimate block model area, from a Broader Kiena Property drillhole database consisting of 10,755 DDH (1,948,153.1 m).

12.1 Site Visit

Serge Gonthier, P. Geo., Qualified Person (QP) for Wesdome, worked at site on multiple occasion from 2023 to 2025 for an extended period of time (7 weeks (35 days) in 2023, 9 weeks (45 days) in 2024 and 6 weeks (28 days) in 2025).

The site visit included a visual inspection of diamond drill core, a tours of the core storage facility, Visit Underground with the production team and site visit of drill rigs, extensive meeting and work on site with Wesdome personel, also discussions and validation of the current geological interpretations with Wesdome geologists.

In addition, the site visits included direct observation of drilling operations, a review of sampling, sample preparation and assay procedures, the QA/QC program, downhole survey methodologies, and the logging of lithologies, alteration, and structural features (Figure 12.1 to Figure 12.3). In support of the geological interpretation and resource modelling, Mr. Gonthier also visited Wesdome's corporate office on several occasions during the past three years to work directly with Wesdome's geological team.

12.2 Sample Preparation, Analytical, QA/QC and Security Procedures

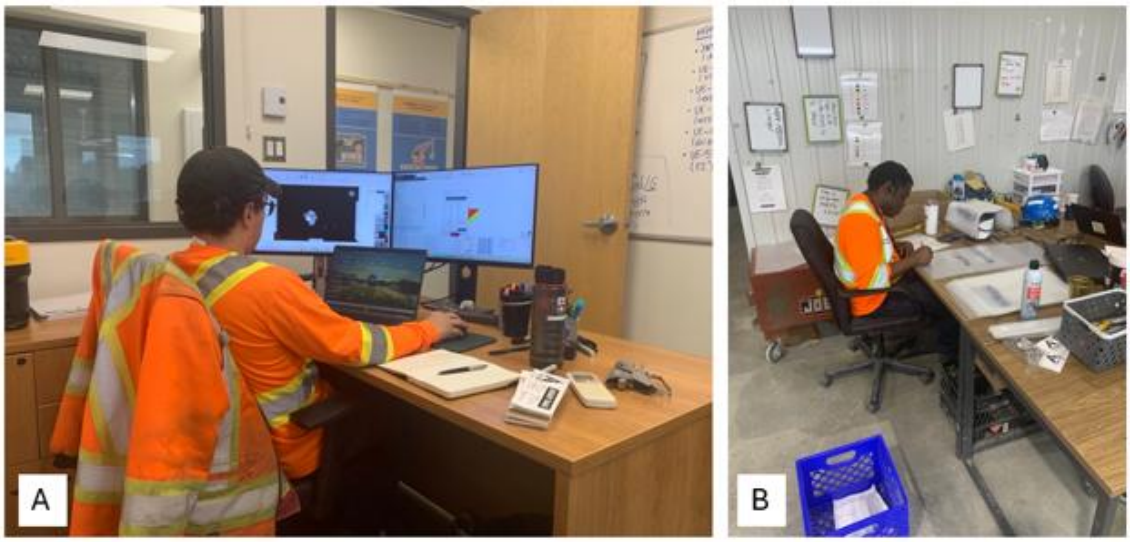
Wesdome procedures are described in Chapters 10 and 11 of the current Report. Discussions held with on-site geologists and technicians confirmed that the procedures were adequately applied.

Serge Gonthier reviewed sections of the mineralized diamond drill core while visiting the Project (Figure 12.1). All diamond drill core boxes were labelled and properly stored (Figure 12.2). Sample tags were present in the boxes, and it was possible to validate sample numbers and confirm the presence of mineralization in witness half-core samples from the mineralized zones.

The historical data used in the 2025 MRE was established before the implementation of the National Instrument NI 43-101. Little information is available about sample preparation, analytical, QA/QC or security procedures. Although it is reasonable to assume that the companies conducted their exploration activities in accordance with prevailing industry standards at the time, the QPs relied on the validation work completed in 2020 as part of the previous BBA 2021 PFS. This validation included comparisons between historical and current data populations and supported the conclusion that the historical drill holes were suitable for inclusion in the 2025 MRE.

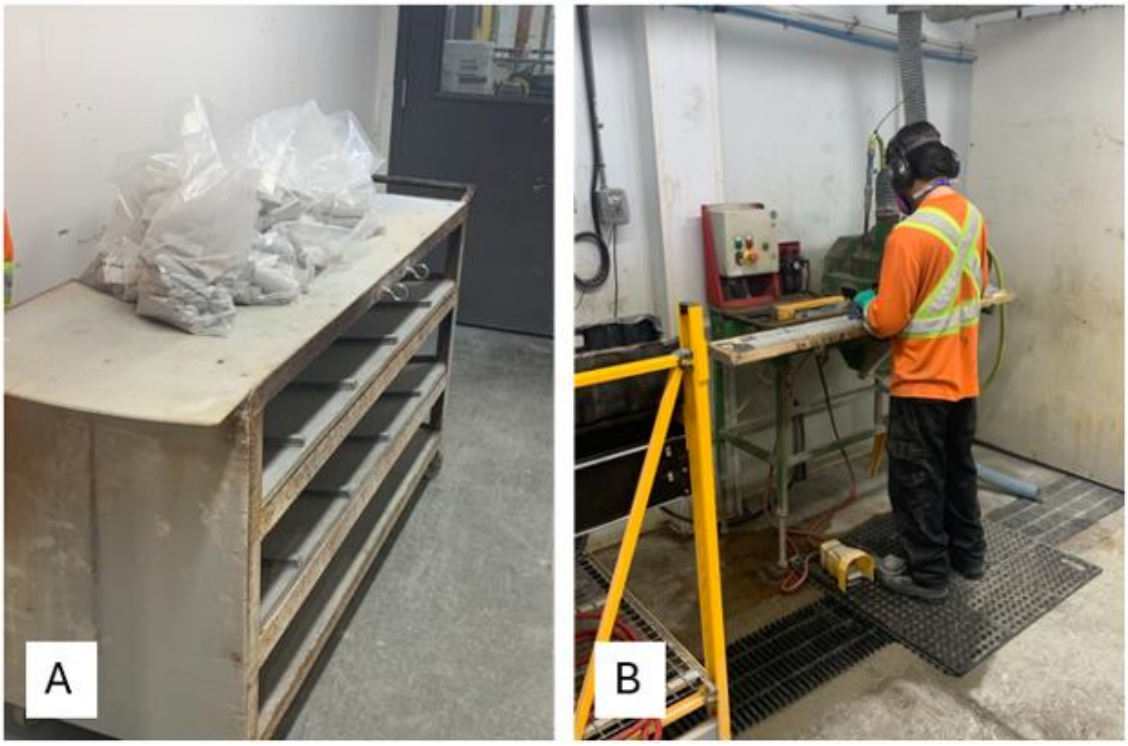
A) Core logging facility with Wesdome's employee describing the core;
B) Core logging and storage facility

Figure 12.1 Core review in the core logging facility during the site visits



A) Geologist workplace;
B) Tech preparation room workplace

Figure 12.2 Sampling procedures review during the site visits



A) Sample batches being prepared to be ready to send to the laboratory; B) Core cutter at work on core saw

Figure 12.3 Sampling procedures review during the site visits

12.2.1 Drillhole Location

For drilling conducted between 2019 and 2020, drill collars have been surveyed using a Leica TS16. The collar data was verified for location discrepancies. For the historical data, approximately 10% of the drillholes intersecting mineralized zones were previously checked by BBA in PFS 2021 against the historical paper logs (Corkal et al., 2020). For surface drilling completed between 2020 and 2025, drill hole collar locations were surveyed by qualified surveyors using Trimble survey equipment. Underground drill hole collar surveys were completed by Kiena surveyors using a Leica[MC].

12.2.2 Downhole Survey

Downhole survey data for the 2019-2020 drilling programs were checked for discrepancies. Spurious measurements are tagged by the Wesdome geologist as “false” in the database and are not considered by the software for the modelling. For the historical data, surveys of approximately 10% of the drillholes intersecting mineralized zones were previously checked by BBA as part of the 2021 PFS. The verification included a comparison against historical paper drill logs available at the Kiena Mine Complex (Corkal et al., 2020).

For drilling campaigns completed between 2020 and 2024, downhole surveys were conducted using Reflex TN14 Gyrocompass instruments for drill hole alignment and positioning, EZ-Gyro[MC] instruments for deviation measurements, as well as Reflex Gyro Sprint-IQ[MC] and OMNIx42[MC] tools.

For underground drilling, the Reflex TN14 Gyrocompass was used for downhole surveys. Exceptions include the deep drill holes N-0336817, N-0336821, N-0336826, N-0336856, N-0336871, N-0336971, N-0336972, and N-0336973, for which the Reflex ACT III[MC] instrument was used for azimuth measurements. Deviation measurements were collected using the EZ-Gyro[MC] instrument.

12.2.3 Assays

Serge Gonthier, P. Geo, Principal Geologist, Resources and Geology, and Christopher Grondin Resources Engineer, P. Eng, MBA, both from Wesdome had access to the original assay certificates provided directly by ALS for all holes completed by Wesdome on the Project between 2019 and 2025. Original drill logs and assay certificates for historical DDH were also stored at the Kiena Mine Complex office.

All assays from ALS were compiled and verified for the 2019-2025 drilling programs. Assay results for approximately 10% of the historical DDH intersecting mineralized zones previously verified by BBA as part of the 2021 PFS against original historical logs and laboratory certificates (Corkal et al., 2020). The assays recorded in the database were compared to the original certificates from the different laboratories. Minor discrepancies were noted and modified for the historical DDH.

Within the assay database, gravimetric finish results supersede values obtained using an atomic absorption (AA) finish. For samples analyzed using the metallic sieve procedure, the value recorded as “Au (g/t AVG)” corresponds to the gold grade obtained from the metallic sieve method. Values reported below analytical detection limits were assigned a value of zero (0) in the database.

12.2.4 Underground Voids

Underground workings were imported from the Wesdome working files, which are maintained and updated by the Geology Department and validated by the Mine Planning team. Underground voids from previous Mineral Resource Estimates were reviewed during the 2018 MRE, including validation of the accuracy and robustness of the 3D wireframe shapes.

The underground void model includes shafts, drifts, raises, stopes, and the ramp development completed since 2017 on the Kiena Deep side, as well as the new portal and ramp access developed on the Presqu’île side.

The QPs consider that the precision and details from the voids are acceptable and reliable for the current estimate.

12.3 Conclusion

The QPs are of the opinion that the drilling, sampling and assaying protocols in place are adequate. The database for the Kiena Mine Complex is of good overall quality. In the QPs opinion, the Project database is suitable for use in the estimation of mineral resources.

13. MINERAL PROCESSING AND METALLURGICAL TESTING

This chapter summarizes metallurgical testwork carried out for the Project from 2018 to 2026. Section 13.1 presents the testwork performed for the preliminary economic assessment (PEA) in 2018 and 2019. Section 13.2 presents the 2020 metallurgical testwork program, based on the PEA observations and the former operation, designed and managed by Soutex. The testwork was performed by Base Metallurgical Laboratories located in Kamloops, British-Columbia, between September and December 2020. Following the exploration of the Presqu'île and Dubuisson zones, metallurgical testwork programs for these ores were developed and managed by Soutex—first for the Presqu'île zone in 2023 (Section 13.2.1), and subsequently for the Dubuisson zone from 2025 to 2026 (see Section 13.2.2).

13.1 Historical Testwork

13.1.1 2018 Metallurgical Testwork

In 2018, Wesdome mandated CTRI (Noël, 2019) to perform preliminary gold leaching tests on mineralized material from the Kiena Deep A and S50 Zones. The objective of the testwork was to benchmark the leaching performance of the Kiena Deep A Zone to the previously mined S50 Zone. Fifteen 48-hour cyanidation tests in 4L bottles on gold mineralized material were performed. The mineralized material received included 57 sub-samples for a total of 92 kg that were divided to produce five composites: four for the Kiena Deep A Zone and one for the S50 Zone.

The 57 sub-samples were assayed for gold individually and a blended sample recipe was prepared. The resulting composite charges were assayed for gold and used for direct cyanidation for each composite.

Cyanidation tests were conducted for each composite in 4L bottles for 48 hours. The cyanidation parameters used were:

- Grind: 80% passing 75 µm
- Cyanide: 500 g/t NaCN
- Lead Nitrate: 75 g/t
- pH: 11.3 (maintained with lime)

No air or oxygen was added during the tests, and the lead nitrate was added in the bottle one hour prior to the addition of cyanide to simulate the real circuit. At the end of each test, the solid residue and the solution were collected and sent for gold assaying.

The gold recoveries for all cyanidation tests are shown in Table 13.1. The 48-hour recoveries for the Kiena Deep A Zone cyanidation tests ranged from 98.4% to 99.7%. The 48-hour recoveries for the S50 Zone gave a value of 95.7%, which is in the range of the historical data from the Kiena Mill.

Table 13.1 CTRI Cyanidation test results

Composites	NaCN (kg/t)	CaO (kg/t)	Au Tails (g/t)	Recovery (%)	Re-calc Head (g/t)
Kiena Deep A Zone – 1	0.15	1.22	0.19	98.8	16.4
Kiena Deep A Zone – 2	0.18	1.23	0.23	98.4	13.88
Kiena Deep A Zone – 3	0.11	1.14	0.02	99.7	7.12
Kiena Deep A Zone – 4	0.11	1.3	0.16	99.3	22.21
S50 Zone	0.21	1.56	0.12	95.7	2.83

Lime consumption for all cyanide tests ranged from 1.1 kg/t to 1.6 kg/t. The consumption of NaCN varied between 0.11 kg/t and 0.21 kg/t. The S50 Zone reagent consumption was higher than the Kiena Deep A Zone probably due to the presence of sulphur (pyrite) in the S50 Zone.

13.1.2 2019 Metallurgical Testwork

In 2019, BBA was selected by Wesdome to design and manage the 2019 testwork program for the Kiena Mine Complex PEA project. The metallurgical testwork was performed at SGS Lakefield (SGS, 2020). Sample selection and sample preparation planning were performed by BBA in order to prepare composites for the Kiena Deep A, A1 and A2 zones.

13.1.2.1 Comminution Tests

The comminution test results are summarized in Table 13.2. The SMC and BWi values showed that the three zone samples are moderately soft and the BWi test suggested that the samples are moderately soft even at finer sizes. According to SGS, the Bond Abrasion Test results are in the range of slightly abrasive to moderately abrasive.

Table 13.2 Comminution test results

Sample Name	Relative Density	SMC Parameters			Work Indices (kWh/t)			Ai
		A x b	ta	SCSE	CWi	RWi	BWi	(g)
A	2.82	54	0.5	8.8	9.5	13.2	12.5	0.181
A1	2.89	55.2	0.49	8.9	N/A	12.2	12	0.207
A2	2.84	52.3	0.48	9	N/A	13	12.7	0.213

13.1.2.2 Gravity and Cyanidation Tests

Whole ore leaching (WOL) tests were conducted on the three master composites: A, A1 and A2. Common conditions for leaching testwork were:

- Grind: 80% passing 75 µm
- Cyanide: 2.4 kg/t NaCN (1.5 g/L maintained)
- pH: 11.3 (maintained with lime)
- DO: 8-10 mg/L (using air)

- Leaching time: 48 hours
- Pulp density: 40%

Cyanidation tests were conducted in 2L bottles for each composite. Due to higher gold grade and the presence of coarse gold in the composites, it was decided to use a higher cyanide concentration (2.4 kg/t NaCN) than the one used historically at the Kiena Mill (0.5 kg/t NaCN). Slurry was aerated with air at the beginning of the testwork including preconditioning and lead nitrate was added at the beginning of the preconditioning. The cyanide and pH were monitored at regular intervals to maintain the proper conditions.

The WOL test results summary is shown in Table 13.3. WOL recoveries for Composites A and A2 are 99% with and without the preconditioning step. The WOL recovery for Composite A1 without preconditioning is 95% and with preconditioning is 100% (approximately). All samples consumed 20-25% of the added NaCN.

Table 13.3 WOL Test results of all three master composites

Test ID	Lead nitrate addition (g/t)	Reagent consumption		Au extraction, including mill clean out, %					Head average (g/t) (direct and calculated)
		NaCN (kg/t)	CaO (kg/t)	2h	6h	24h	48h	Normalized % Au extraction	
A-FWOL.A	250	0.49	0.93	48	89	96	99	99	19.6
A-FWOL.B	0	0.51	0.78	25	54	90	99	99	
A1-FWOL.A	250	0.47	0.84	40	69	100	100	100	11.8
A1-FWOL.B	0	0.6	0.72	23	45	82	95	95	
A2-FWOL.A	250	0.45	0.89	59	86	99	99	99	16.9
A2-FWOL.B	0	0.5	0.76	27	61	88	99	99	

Gold recoveries for samples A and A2 with preconditioning reached 85-90% in approximately six hours. More than 80% of the gold was recovered in less than 25 hours. Pre-conditioned samples reached recoveries above 95% in 25 hours while non-pre-conditioned samples reached recoveries between 80% and 90% in 25 hours.

Knelson/Mozley gravity test results are shown in Table 13.4. The tests resulted in 58.9%-66.7% gold recovery for the three samples.

Table 13.4 Knelson/Mozley gravity test results

Sample name	Grind size, P_{80}, µm	Gravity concentrate			Tailings assay Au, g/t	Head (calc) Au, g/t	Head (direct) Au, g/t
		Wt %	Assay Au, g/t	Au Rec. %			
A	251	0.1	16,044	60.7	7.8	19.9	21.3
A1	254	0.1	9,374	66.7	2.9	10.7	10.8
A2	246	0.1	11,717	58.9	6.7	16.4	17.8

Gravity tails leaching (GTL) was conducted on the three master composites: A, A1 and A2. The leach testwork conditions were the same as the WOL tests except for the cyanide addition which was 1.5 kg/t. The cyanidation tests were conducted in 2L bottles. The gravity tails leaching test results summary is shown in Table 13.5.

Table 13.5 Gravity tails leaching test results

Zone	Test ID	P_{80} (µm)	Reagent consumption		Au extraction, including mill clean out, %					Head average (g/t) direct and calculated
			NaCN (kg/t)	CaO (kg/t)	2h	6h	24h	48h	Normalized % Au extraction	
A	FGT.101.A	73	0.20	0.89	57	90	~99	98.2	98.3	7.82
	CGT.201.A	98	0.22	0.84	55	87	98	96.8	97.1	
	FGT.102.B	73	0.21	0.85	38	77	~99	97.9	98.1	
	CGT.202.B	98	0.18	0.71	35	75	98	96.5	96.7	
	FGT.103.A	73	0.31	0.88	63	96	~99	97.5	97.8	
	CGT.203.A	98	0.33	0.91	56	91	~99	96.6	96.9	
	FGT.104.A	73	0.23	0.93	53	89	~99	97.8	98.1	
	CGT.204.A	98	0.18	0.95	44	79	98	96	96.2	
A1	FGT.101.A	75	0.2	0.84	55	85	98	96.5	97.1	3.8
	CGT.201.A	98	0.35	0.82	52	83	98	95.3	95.8	
	FGT.102.B	75	0.37	0.81	45	78	~99	96.2	96.8	
	CGT.202.B	98	0.32	0.79	41	71	98	94.9	95.5	
	FGT.103.A	75	0.32	0.89	57	87	~99	96.5	97.1	
	CGT.203.A	98	0.31	0.8	51	78	91	95.3	95.8	
	FGT.104.A	75	0.19	0.92	50	82	98	96.6	97.4	
	CGT.204.A	98	0.28	0.86	41	75	98	95.4	96.1	
A2	FGT.101.A	70	0.44	0.92	76	94	~99	97.6	97.6	6.63
	CGT.201.A	106	0.33	0.88	72	88	95	95.7	95.5	
	FGT.102.B	70	0.45	0.87	39	67	97	97.8	97.7	
	CGT.202.B	106	0.39	0.83	37	67	95	95.5	95.2	
	FGT.103.A	70	0.35	0.79	84	96	99	97.4	97.4	
	CGT.203.A	106	0.36	0.88	77	92	~99	96.7	96.5	
	FGT.104.A	70	0.24	1.03	35	66	96	95.1	96.2	
	CGT.204.A	106	0.24	0.96	62	88	97	96.3	96.2	

The results indicated that gravity concentration followed by GTL could yield extremely high gold recoveries. It also indicated that recoveries higher than 95% could be achieved with WOL.

WOL samples consumed more NaCN than GTL samples and, lime consumption was average for this type of mineralized material. However, a deeper analysis of the data shows that most of the cyanide consumption for the WOL tests occurred during the second half of the cyanidation while less than 10% of the gold was dissolved and no more cyanide was added. An example of this observation is shown on Figure 13.1.

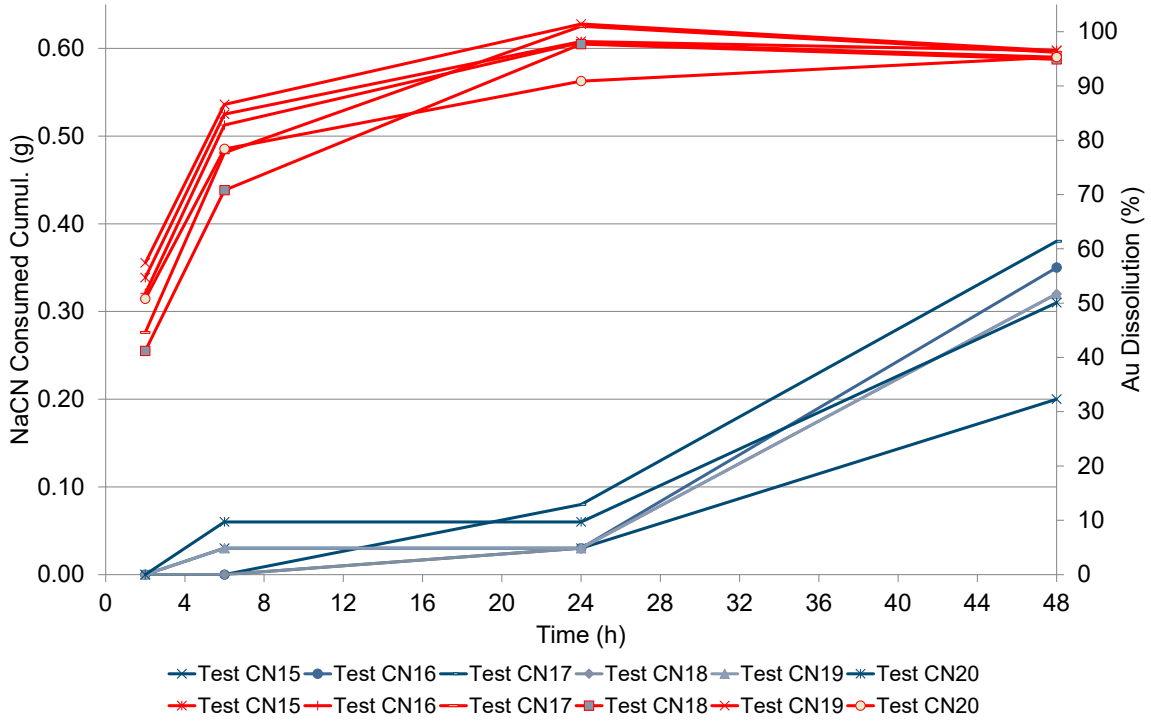


Figure 13.1 NaCN Consumption (blue) and au dissolution (red) tests at 1.0 g/l NaCN

During this testing phase, the cyanidation of gravity tails was not conducted immediately after the gravity process so the samples were subjected to many hours of natural oxidation in the slurry which can explain a lower cyanide consumption. Furthermore, the WOL tests were performed at a higher cyanide concentration and air addition that could have promoted cyanide evaporation. As a result, it cannot be concluded that the absence of a gravity circuit would result in an increase in cyanide consumption.

13.1.2.3 Solid and Liquid Separation Tests

Tailings thickening tests required a dosage of 9 g/t and 12 g/t of flocculent for composite A and composites A1 and A2 respectively. These dosages were found to be relatively low when they were benchmarked with similar mineralized material types.

13.1.2.4 Conclusions

The main conclusions drawn from the PEA metallurgical testwork were:

- The comminution test results have shown that all samples were moderately soft and in the range of slightly abrasive to moderately abrasive.
- The WOL tests resulted in gold recoveries of between 95.7% and 99.7% while GTL tests resulted in gold recoveries of between 99% and 99.3%.

- Pre-conditioning lead nitrate addition was found to have a minimal effect on the overall gold recoveries, but it improved the leach kinetics in both the WOL and GTL tests.
- The majority of WOL test samples reached their maximum gold recoveries in approximately 48 hours whereas the majority of the GTL test samples reached their maximum gold recoveries in approximately 24 hours.
- It cannot be concluded that the absence of a gravity circuit would result in an increase in cyanide consumption since WOL and GTL tests were not performed at the same cyanide concentrations and GTL samples were subjected to many hours of natural oxidation in the slurry after gravity separation.
- Gold recoveries of between 59% and 67% were achieved in Knelson/Mozley gravity tests indicating that a gravity circuit would not significantly increase the overall gold recovery but would increase the kinetics and reduce the variability in the leaching circuit.
- Slightly increased gold recovery was achieved by finer grinding (75 microns) and a higher amount of NaCN addition.
- NaCN consumption in WOL and GTL tests were less than 0.6 kg/t, which is considered low. However, in GTL, samples consumed 26% to 54% less cyanide than the amounts consumed in WOL. However, the initial CN addition was not the same for WOL and GTL tests and the majority of the CN was consumed in the last 24 hours, when most of the gold was already leached.
- SNF Flomin 913 VHM was found to be the most effective and efficient flocculant among the flocculants tested. The dosage range of 9-12 g/t was found to be relatively low.

13.1.3 2020 Metallurgical Testwork

Following the PEA, a metallurgical testwork program was developed to further characterize the ore from the Kiena Deep deposit and VC Zone in a context of a PFS. The objectives of the PFS are to develop the process design criteria and assess the possibility of processing the material from the Kiena Deep deposit in the Kiena concentrator. S50 and Martin zones were added to the resources late in the PFS so they could not be tested. However, S50 Zone was substantially mined in the past therefore its metallurgical characteristics are well known. S50 and Martin will represent 11.5% of the total run of mine and 3.9% of the total gold ounces. It is therefore not considered as a significant risk.

13.1.3.1 Composite and Sample Selection

The testwork was realized on composite samples made from drill cores. The number of composite samples was determined according to the homogeneity of the material within the deposit.

The material was located in four zones which were constituting the mine plan at that time. The drill core sections were selected to have material dispersed evenly in the whole mass of each zone and to have a total mass sufficient for metallurgical testing requirements. Once the core sections were chosen, a length from the section located in the zone was selected making sure that the grades remained within the expected range.

Four composite samples were used for the metallurgical testwork program called A Zone, A1 Zone, A2 Zone and VC Zone along with five variability samples (A Zone 6388, A Zone 6428A, A1 Zone 6502, A2 Zone 6383 and A2 Zone 6580 BW2). Considering the volume of ore and the short period of the mine life, the number of composites is considered sufficient to evaluate the metallurgical performance. The different core sections' cut grade (cut value at 90 g/t) and length used to form the composite samples for the study are listed below in Table 13.6.

Table 13.6 Sample selection for the PFS

Zone	Hole ID	From m	To m	Au grade g/t	Composite samples kg	Variability samples kg
A	6559	67.6	76.3	56.24	10.1	0
	6388	110.8	122.3	12.02	13.0	10
	6550	302.1	309.6	20.88	8.7	0
	6660	285.15	290.3	52	6.0	0
	6291	320.5	327	17.5	7.5	0
	6428A	173.4	185.7	5.39	14.6	10
A1	6465	78.4	83.9	64.17	5.2	0
	6606	128.9	139.8	30.45	10.4	0
	6431	192.9	200.5	9.8	7.3	0
	6502	221.8	229.7	24.9	5.8	10
	6540	244.1	249.3	10.48	5.0	0
	6509	426	434	22.41	7.6	0
	6581	632	639.1	25.85	6.8	0
A2	6450	93.5	97.8	128.25	4.2	0
	6555	703.1	712.5	17.89	9.1	0
	6601	486.6	496.7	24.06	9.8	0
	6383	553	577	28.01	13.6	10
	6580BW2	332.7	342.4	86.44	9.4	10
VC	6201	265.1	271.2	6.61	12.2	0
	6523	423.9	428.6	23.99	9.4	0
	6586	451.6	457.6	12.72	12.0	0
	6556	484.7	490.7	3.67	12.0	0

Each composite sample was analyzed and characterized with multiple tests listed below:

- Head assays and mineralogical characterization
- Comminution tests
- Gravity tests
- Leaching tests
- Cyanide destruction tests
- Sedimentation and filtration tests

The following sections of this report present a more in-depth view of the different types of tests and their respective results.

13.1.3.2 Head Assays and Mineralogical Characterization

In order to determine the major mineral components of the samples and the possible deleterious elements present in them, mineralogical characterization and analytical assays were done.

The following mineralogical characterization was done:

- Bulk Mineralogical Analysis (BMA) at 106 µm

The following analytical assays were done:

- Full ICP-MS scan
- Total Organic Carbon, Sulphur (S2-) assay by Leco
- Mercury (Hg) assay by Cold Vapour Atomic Absorption Spectrometry (CVAAS)
- Satmagan for magnetic susceptibility
- Metallic screens for gold grade
- Silver grade

13.1.3.3 Mineralogical Characterization

BMA at 106 µm was done to define the mineral composition of the composite samples. The results are presented in Table 13.7.

Table 13.7 Mineral composition (%) of composite samples

Minerals	Mineral compositions (wt. %)			
	A Zone	A1 Zone	A2 Zone	VC Zone
Chalcopyrite	<0.1	<0.1	<0.1	<0.1
Pentlandite (1)	<0.1	<0.1	0.1	<0.1
Sphalerite/Galena	<0.1	<0.1	<0.1	<0.1
Pyrrhotite	0.1	0.3	0.4	0.2
Pyrite	0.2	0.1	0.1	0.4
Iron Oxides (2)	0.3	0.1	0.3	0.5
Ilmenite	0.6	0.8	0.7	0.6
Quartz	14.9	14.7	25.8	12.7
Chlorite	26.7	23.7	19.7	28.5
Amphibole (Actinolite)	3.9	20.2	16.8	5.2
Plagioclase Feldspar	7.7	7.3	12.6	14.1
Talc	16.7	14.7	9.2	10.8
Dolomite/Ankerite	25.1	14.2	10.3	21.3
Calcite	2.2	2.1	3.0	4.4

Minerals	Mineral compositions (wt. %)			
	A Zone	A1 Zone	A2 Zone	VC Zone
Andradite	0.6	0.2	0.1	0.2
Biotite/Phlogopite	0.3	0.1	0.4	0.2
Akimotoite	0.2	0.3	0.2	0.3
Pyroaurite/Sjogrenite	<0.1	0.1	0.1	0.1
Pyroxene (Augite/Diopside)	0.1	0.2	0.1	<0.1
Muscovite/Illite	0.1	<0.1	<0.1	<0.1
Epidote	<0.1	<0.1	<0.1	<0.1
Ti Minerals	0.1	0.1	<0.1	0.1
Apatite	0.1	0.3	0.1	0.2
Zircon	<0.1	<0.1	<0.1	<0.1
Others (3)	0.3	0.4	0.2	0.3

Notes:
8. “Pentlandite” includes trace amounts of Millerite and Polydimite;
9. “Iron Oxides” includes Hematite, Magnetite, Steel/Pure Iron, Goethite and Limonite;
10. “Others” includes trace amounts of Barite, Diaspore/Corundum, Sb Mineral and unresolved mineral species.

The sulphur repartition according to the sulphur-bearing mineral of the samples are presented in Table 13.8.

Table 13.8 Sulphur bearing mineral of composite samples

Mineral	Sulphur of total sulphur (%)			
	A Zone	A1 Zone	A2 Zone	VC Zone
Chalcopyrite	2.2	7.6	3.0	1.0
Pentlandite	3.1	3.4	10.2	0.9
Sphalerite/Galena	1.2	0.2	0.2	0.2
Pyrrhotite	21.5	66.5	64.3	30.3
Pyrite	71.9	22.2	22.3	67.7
Barite	<0.1	0.1	<0.1	<0.1

Pyrite and pyrrhotite were identified as the predominant sulphur bearing minerals. The analysis on sulphides composition indicates the presence of pentlandite and chalcopyrite. Quartz, chlorite, amphibole, talc, feldspars, and dolomite were the predominant non-sulphide gangue minerals and varied quite significantly between samples.

13.1.3.4 Analytical Assays

A full ICP-MS scan was conducted to measure the elements composition of the composite and plant samples. The elements composition determined from QEMSCAN and the chemical assay are summarized in Table 13.9.

Table 13.9 Chemical composition (%) of the samples

Sample ID	Assay						
	Au - SFA	Au	Ag	S	Ni	Cu	Zn
	g/t	g/t	g/t	%	g/t	g/t	g/t
A Zone	15.1	15.30	1.5	0.15	314	87	40
A1 Zone	40.0	20.30	1.9	0.15	283	69	35
A2 Zone	11.6	14.80	1.5	0.22	223	48	28
VC Zone	19.8	9.18	1.5	0.25	246	67	39
A Zone 6388	2.99	3.47	1.2	0.79	77	199	52
A Zone 6428A	1.42	4.09	0.6	0.18	542	39	39
A1 Zone 6502	10.9	11.00	1.7	0.14	349	41	38
A2 Zone 6383	30.0	33.10	1.7	0.19	304	53	34
A2 Zone 6580BW2	41.9	37.10	5.8	0.3	129	48	25

The Total Organic Carbon (TOC), Sulphur (S2-) assay by Leco and Gold grade are presented in Table 13.10.

Table 13.10 Total organic carbon, sulphur (S2-) and gold grade of samples

Sample ID	Element			
	Au - FA	S	C	TOC
	g/t	%	%	%
A Zone	15.30	0.149	2.74	0.0366
A1 Zone	20.30	0.148	1.69	0.0279
A2 Zone	14.80	0.223	1.50	0.0256
VC Zone	9.18	0.253	2.60	0.0252
A Zone 6388	3.47	0.786	0.78	0.0278
A Zone 6428A	4.09	0.179	3.21	0.0202
A1 Zone 6502	11.00	0.139	3.13	0.0328
A2 Zone 6383	33.10	0.189	1.55	0.0285
A2 Zone 6580BW2	37.10	0.295	1.13	0.0262

Metallic screens for gold grade measurements were conducted on the composite and variability samples. The results are presented in Table 13.11.

Table 13.11 Metallic screen for gold grade samples

Sample	Head portion	Au assay (g/t)	Dist. Au (%)
A Zone	+100 mesh	56.10	17.6
	-100 mesh	13.05	82.4
	Total	15.10	100.0
A1 Zone	+100 mesh	335.00	39.7
	-100 mesh	25.35	60.3
	Total	40.00	100.0
A2 Zone	+100 mesh	36.20	14.8
	-100 mesh	10.40	85.2
	Total	11.60	100.0
VC Zone	+100 mesh	158.00	32.0
	-100 mesh	14.00	68.0
	Total	19.80	100.0
A Zone 6388	+100 mesh	14.00	19.1
	-100 mesh	2.52	80.9
	Total	2.99	100.0
A Zone 6428A	+100 mesh	0.85	2.8
	-100 mesh	1.45	97.2
	Total	1.42	100.0
A1 Zone 6502	+100 mesh	137.00	47.7
	-100 mesh	5.91	52.3
	Total	10.90	100.0
A2 Zone 6383	+100 mesh	209.00	29.1
	-100 mesh	22.25	70.9
	Total	30.00	100.0
A2 Zone 6580BW2	+100 mesh	262.00	28.3
	-100 mesh	31.55	71.7
	Total	41.90	100.0

Clay XRD measurements were conducted on the A, A1 and A2 composites. The results are presented in Table 13.12. These tests were performed as part of the sedimentation and filtration testwork. VC Zone was not included as it is marginal compared to Kiena Deep.

Table 13.12 Semi-quantitative X-ray diffraction results for the composites

Sample	Fraction	Crystalline mineral assembly (relative proportions based on peak height)			
		Major	Moderate	Minor	Trace (1)
		(>30%)	(10% -30%)	(2% -10%)	(<2%)
A Zone	Bulk	-	chlorite, talc, dolomite, quartz, plagioclase	amphibole	calcite, ilmenite
	Clay	talc	chlorite	-	-
A1 Zone	Bulk	talc	chlorite, amphibole	dolomite, quartz, plagioclase	calcite, ilmenite
	Clay	talc	chlorite	-	-
A2 Zone	Bulk	-	chlorite, quartz, talc, amphibole, plagioclase	dolomite	calcite, ilmenite
	Clay	-	talc	chlorite	-

Note
1. Tentative identification due to low concentrations, diffraction line overlap or poor crystallinity

Silver levels between 0.6 and 5.8 g/t were measured in the composites. Low levels of total organic carbon were also measured. Screened metallic assays for gold indicated the presence of coarse “free” gold particles in the composites, and gold content measured between 1.4 to 41.9 g/t. Nickel, copper, and zinc were present in varying minor amounts and could impact cyanide consumption and downstream processes, such as cyanide destruction. No other deleterious element, mineral or potential issue was identified according to these tests.

13.1.3.5 Comminution Testwork

The comminution tests were conducted to the composite samples (A, A1, A2 and VC) to determine ore hardness. The tests performed were SMC, and Bond ball mill work index. A relative work index was also estimated for the variability samples, using the grind calibration for each sample, and the work indices for the known samples. The results are presented in Table 13.13.

Table 13.13 Comminution test results of the composite and variability samples

Sample ID	DWi	DWi	SCSE	A x b	BWi	Relative Wi (estimate)
	kWh/m^3	%	kWh/t		kWh/t	kWh/t
A Zone Composite	5.18	31	8.79	54.327	10.68	-
A1 Zone Composite	4.41	22	8.20	64.020	10.82	-
A2 Zone Composite	5.33	33	8.92	51.903	12.76	-
VC Composite	3.46	14	7.44	80.801	-	9.9
A Zone 6388	-	-	-	-	-	10.0
A Zone 6428A	-	-	-	-	-	8.8
A1 Zone 6502	-	-	-	-	-	12.5
A2 Zone 6383	-	-	-	-	-	12.9
A2 Zone 6580BW2	-	-	-	-	-	21.8

SMC tests resulted in A x b values of 52 to 81, which is on the soft end of the JK Tech database, between the 14th and the 33rd hardness percentile. Likewise, Bond Ball mill work indexes varied between 10.7 and 12.8 kWh/t at a closing screen size of 106 µm, which would be considered soft in ball mill grinding duty. Relative work index estimates on the other samples indicate there is a variation in hardness, with one sample estimated at 22 kWh/t.

13.1.3.6 Gravity and Leaching Testwork

Leaching tests were carried out for the four composite samples (A, A1, A2 and VC) and the variability samples to determine the gold recovery from the leaching process. Two grind sizes were tested (80 µm and 120 µm) as well as other different operating conditions to study the effects on the gold recoveries. Both the WOL and GTL tests were performed. From the initial stage of optimization testing, the WOL at a grind of 80 µm with 75 g/t lead nitrate addition was chosen as the final conditions. These conditions were used on the variability samples.

There was significant coarse, visible gold recovered to the gravity concentrate at low mass recovery. Gold recovery varied from 20 to 71 percent in gravity concentrate. No significant final gold recovery difference between WOL and GTL was observed on the Kiena Deep composite samples after 48 hours of leaching. This comparison is presented on Figure 13.2.

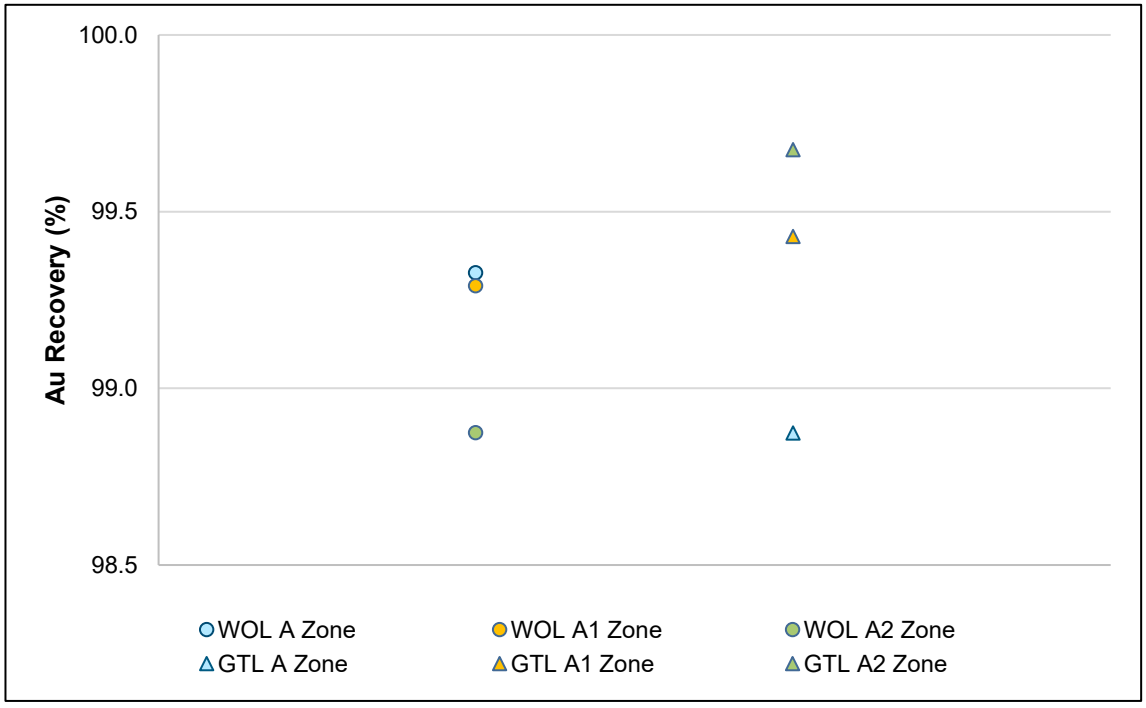


Figure 13.2 Gold recovery for the composites at 80 µm, 75 g/t Pb(NO3) 2 addition

Lead nitrate was critical to improving leach kinetics, especially for the WOL tests, and in assisting leaching of any free coarse gold in the samples.

The cyanide consumption comparison is presented on Figure 13.3.

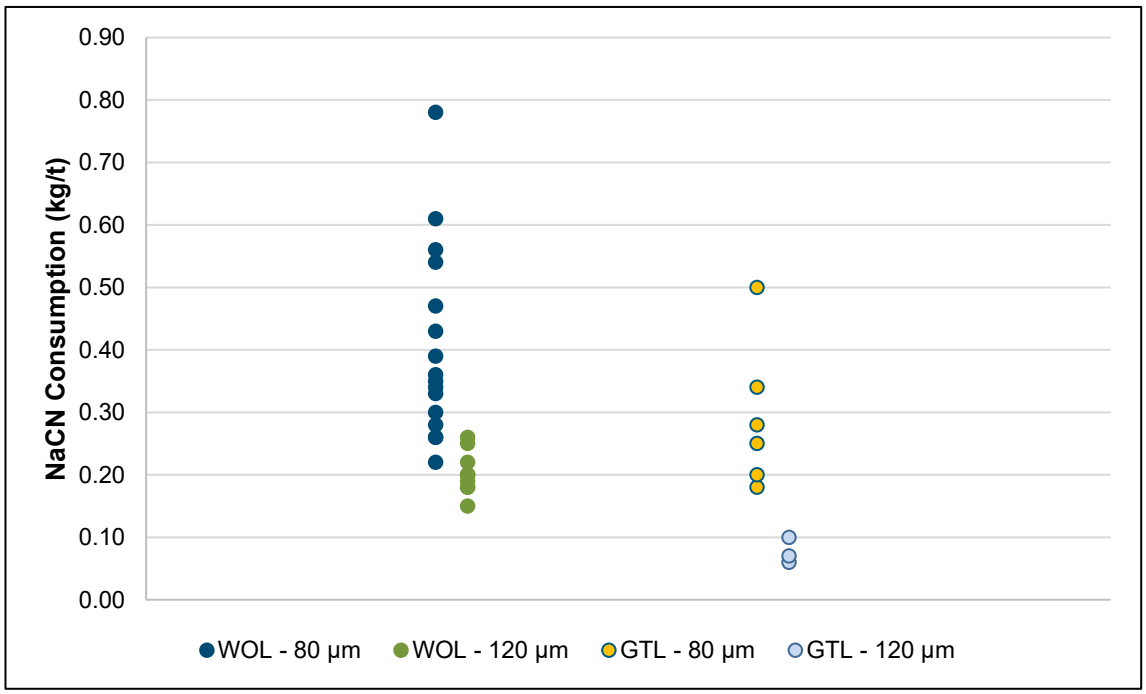


Figure 13.3 Cyanide consumption for leach tests at 80 and 120 µm

Lower cyanide consumption was obtained during the GTL tests and could be the result of sulphides' oxidation during the gravity recovery process and storage of the gravity tails. For the test performed at 80 µm, the gravity tails were reground while the tests at 120 µm were done directly on the material coming from the gravity tests. The cyanide consumption observed is in line with the expected effect of oxidation of gravity tails material as the gravity concentrate that has been reground shows a cyanide consumption similar to WOL.

The effect of the lead nitrate addition is shown on Figure 13.4. The dotted lines show the range of the various tests.

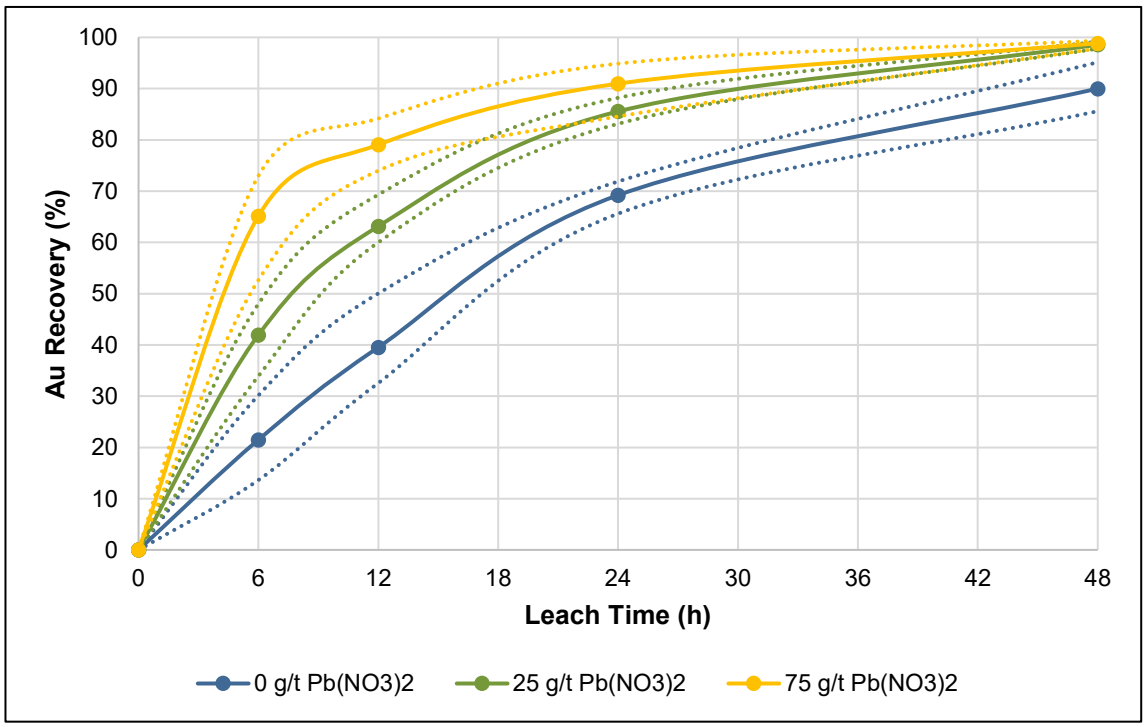


Figure 13.4 Lead nitrate effect for WOL tests on Deep composite at 80 µm

Overall, the majority of the gold was extracted after 24 hours, but an additional 1.2% to 29.7% gold extraction was measured between 24 and 48 hours. Tests without lead nitrate had significantly slower kinetics, as well as significant variance in triplicate tailings assays most likely due to the presence of large nuggets of native gold with low surface area not fully leaching due to slow kinetics.

The effect of the grind size is shown on Figure 13.5.

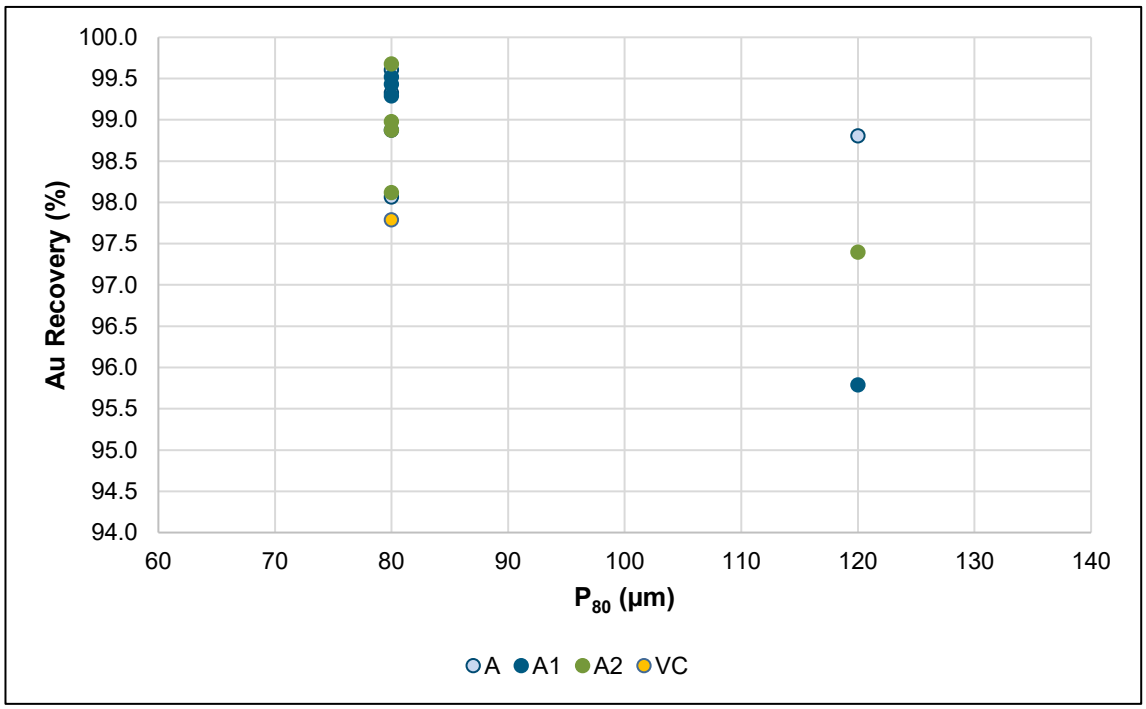


Figure 13.5 Effect of the grind size on the final recovery

Tests at the finer primary grind of 80µm had increased gold extraction of one to three percent for over 120 µm for the three composites.

The gold recovery results for the WOL tests in the conditions of an estimated grind size of 80 µm, 500 ppm for the NaCN concentration, 75 g/t Pb (NO_3) 2 addition, and air addition is presented on Figure 13.6.

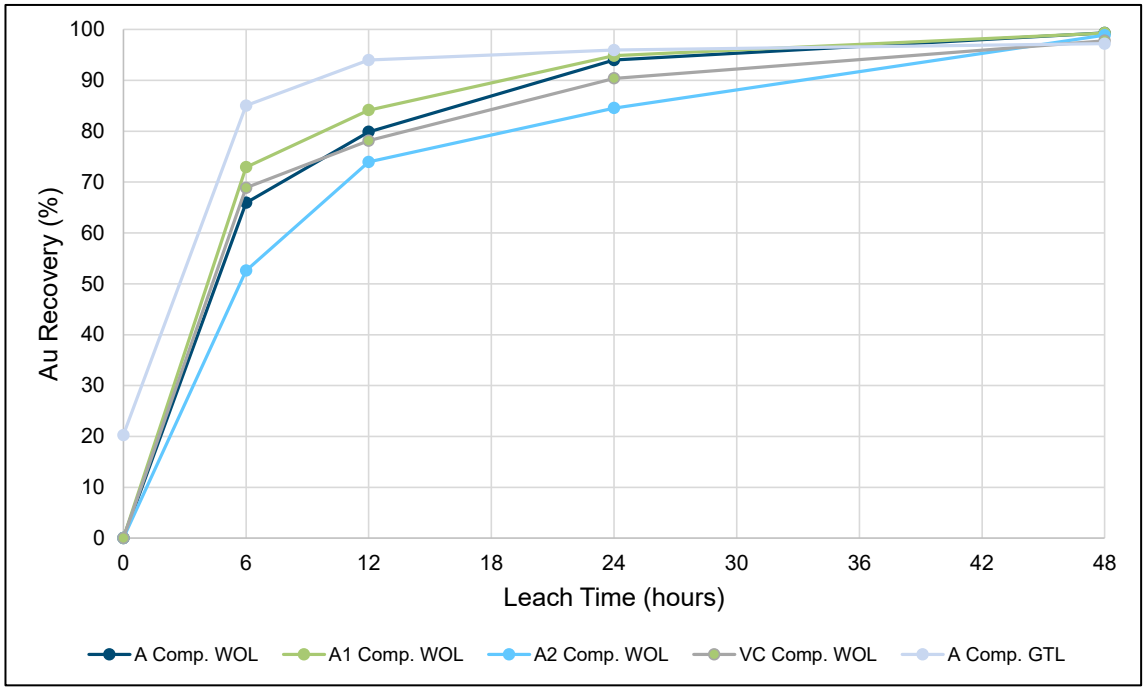


Figure 13.6 Gold recovery without gravity separation

As a comparison, the GTL performed on A Zone composite for the same conditions is presented. These results were collected during the test numbers 22, 24, 26 and 39. The three composite samples from Kiena Deep (A, A1, A2) have very similar gold recovery trends. Their final gold recovery percentage varies from 98.9 to 99.3% after 48 hours. The VC Zone composite has a lower recovery percentage than the three Kiena Deep composites at 97.8%.

13.1.3.7 Cyanide Destruction

The SO_2-air tests were performed on the Kiena Deep super composite of around 60 kg made of zones A, A1 and A2 material in similar proportions (1/3 each) to establish the reagents consumption. Table 13.14 shows the cyanide destruction feed solution composition and Table 13.15 show the cyanide destruction test conditions and final CN_{WAD} and metal concentration.

Table 13.14 Cyanide destruction feed solution composition

CN_{wad}	CN total	Cu	Fe	Ni	Zn
ppm	ppm	ppm	ppm	ppm	ppm
205.23	218.23	3.81	4.65	2.05	1.285

Table 13.15 Cyanide destruction test results

Test	SO_2:CN ratio	Cu addition	Retention time	Final CNWAD concentration	Final metals concentration (ppm)			
	-	ppm	min	ppm	Cu	Fe	Ni	Zn
C1	5	50	60	2.0				
C2	6	25	60	2.7	0.32	0.03	1.03	<0.01
C3	6	50	60	2.1	0.50	0.01	0.90	<0.01
C4	7	50	60	1.8	0.52	0.14	0.75	<0.01
C5	7	50	90	1.6	0.29	0.01	0.68	<0.01
C6	5	10	60	2.9	0.02	0.07	1.24	<0.01

The detoxified solutions measured between 1.8 and 2.9 CNWAD after 60 minutes. Even with conditions of 7:1 SO_2:CN ratio, 50 ppm Cu addition, and 90 min retention time, the final CNWAD did not meet the 1 ppm target. The presence of nickel in the solutions influences the final solution CNWAD levels. The majority of nickel in the effluent is in the form of cyanide complexes thus explaining the CNWAD concentrations. However, the SO_2-air process is well known to have the capacity to reduce all CNWAD species. Additional testwork is recommended to find the optimal reagents dosage that will eliminate the nickel cyanide. It is nonetheless expected that the reagents dosage will be in the same order of magnitude as the ones used for this testing thus the impact on operation costs will be low.

13.1.3.8 Sedimentation and Filtration Testwork

Dewatering tests were conducted on the cyanide destruction tails of the Kiena Deep super-composite. Two scenarios were tested, including thickening and pressure filtration on unclassified tailings, as well as on the fine fraction of tailings screened at 53 µm, simulating a cycloning step.

13.1.3.9 Sedimentation Testwork

Sedimentation tests were carried out on the Kiena Deep super-composite (A, A1, A2) with the presence of a flocculant. Tests were performed on the leach feed, the whole cyanide destruction tails and on classified cyanide destruction tails which were screened to -53 µm to simulate a cycloning step before thickening.

Table 13.16 below shows the results for pre-leach thickening tests. Table 13.17 shows the results for the whole cyanide destruction tails thickening tests and Table 13.18 shows the results for the classified cyanide destruction tails.

Table 13.16 Settling results for the pre-leach super-composite

Test	pH	Flocculant dosage	Feed density	Settling rate	Final density	Turbidity
	-	g/t	%	mm/s	%	NTU
S1	10	0	13.2	0.17	59.9	383
S2	10	10	13.1	3.44	59.6	105
S3	10	20	13.4	4.31	56.8	49
S4	8.2	20	13.5	6.38	58.3	64
S5	11	20	13.3	3.94	57.7	4
S6	10	30	13.4	5.89	60.6	43
S7	11	30	13.3	4.53	48.2	6

The pre-leach test performed at a pH of 11 and flocculant dosage of 20 g/t gave the best results in terms of turbidity and underflow density.

Table 13.17 Settling results for whole cyanide destruction tails super-composite

Test	pH	Flocculant dosage	Feed density	Settling rate	Final density	Turbidity
	-	g/t	%	mm/s	%	NTU
S10	8.4	20	13.5	2.96	52.7	0
S11	8.4	30	13.7	3.15	50.6	0
S12	8.4	40	13.9	3.17	51.1	0
S13	8.4	40	14.0	3.29	54	0
S14	10	40	13.8	3.8	54.6	0
S15	11	40	14.2	3.55	53.7	0
S16	8.4	40	10.8	6.73	52.8	14
S17	8.4	40	15.0	4.07	51.6	9
S18	8.4	40	20.2	1.88	53.3	4

The whole cyanide destruction tails tests performed at a pH of 8.4 gave similar results for floc dosages of 20, 30 and 40.

Table 13.18 Settling results for classified cyanide destruction tails super-composite

Test	pH	Flocculant dosage	Feed density	Settling rate	Final density	Turbidity
	-	g/t	%	mm/s	%	NTU
S19	8.4	20	14.0	0.95	48.1	19
S20	8.4	40	14.2	1.32	45.9	10
S21	8.4	60	14.0	2.49	44.7	7
S22	8.4	60	18.1	0.49	46.4	0
S23	8.4	60	9.6	2.93	45.4	7
S24	8.4	80	13.7	2.29	46	7

The <53 µm classified material had slower settling rates, requiring higher flocculant dosages, and lower final settled density.

The settling rates obtained from testwork are significantly higher than the expected rise rate within the thickeners.

13.1.3.10 Filtration Testwork

Filtration tests were carried out for the Kiena Deep super-composite in a Micronics MicroPress plate pressure filtration unit with a chamber diameter of 150 mm and varying chamber widths to adjust the cake thickness. One series of tests was done on the thickened whole cyanide destruction tails, one on the whole un-thickened cyanide destruction tails and the last series on the classified (-53 µm) un-thickened cyanide destruction tails. Figure 13.7 below shows the cake moisture evolution for the three series of tests.

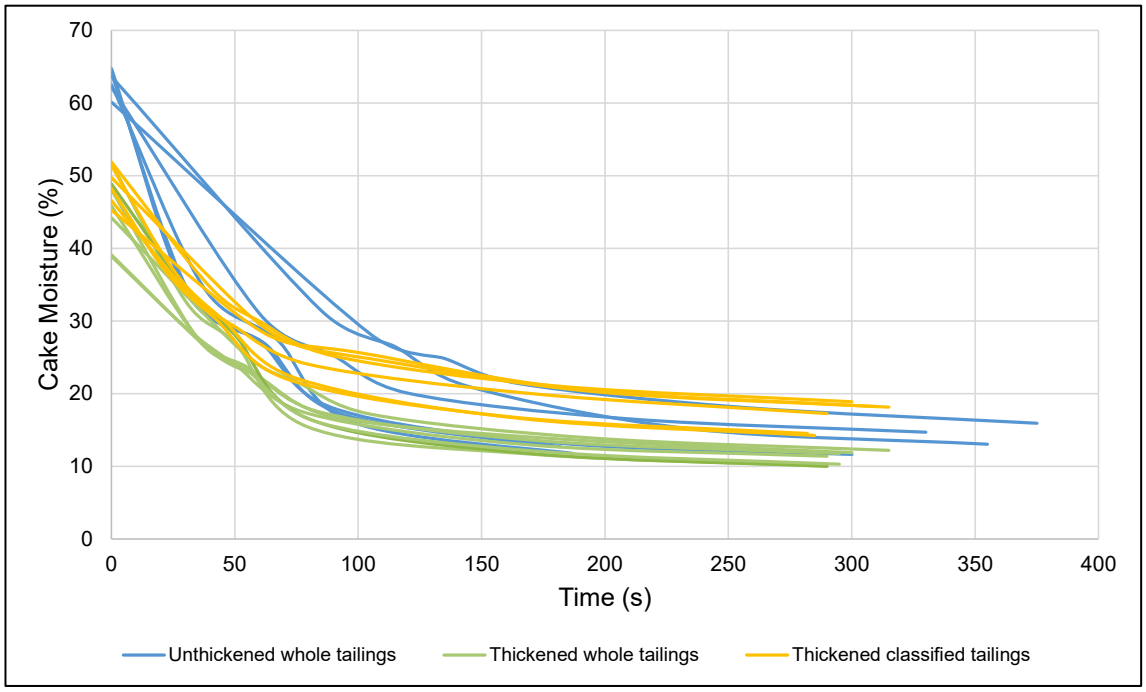


Figure 13.7 Filtration results for the super-composite cyanide destruction tails

The tests consisted of three phases:

- Cake formation which consists in filling the unit with slurry using a diaphragm pump between 60 and 90 psi.
- Cake pressing which consists in squeezing the chamber for 20-30 seconds at a pressure of 150 psi.
- Cake blowing which consists in blowing compressed air through the chamber for various time periods.

The filtrate was collected and measured for each stage. The cake moisture could then be calculated.

The first cake moisture measurement was done after the cake formation. The thickened sample produced the lowest moisture content during cake formation followed by the un-thickened whole tailings and thickened classified tailings. Both the thickened whole tailings and the thickened classified tailings showed similar initial filtration rates but the classified tailings sample final moisture was higher. Well formed filter cake was generated for all tests even at a high cake thickness and showed good filtering properties. The final moisture content for the unclassified tailings was between 10% and 12% water for thickened cyanide destruction tails (P2), and between 12% and 16% water for un-thickened cyanide destruction tails (P1). Pressure filtration on the classified tailings produced final cakes of between 14% and 19% water (P3).

13.1.4 2020 Bulk Sample Processing

A bulk sample of 7032 tonnes from the Kiena Deep Zone was processed in the Kiena mill under the supervision of Soutex in November and December 2020 over a period of 12 days, in order to validate the feed grades and metallurgical performances of the Kiena Deep ore using the equipment already in place in the mill. The metallurgical balance was not completed at the time of this study so the Au feed grade and recovery could not be confirmed. However, the following observations were made:

- At a feed rate of around 950 t/d and a P_{80} of around 67 µm, the combined SAG and ball mill power draw was in the 925 to 950 kW range, or 20 to 24 kWh/t which indicates a higher power consumption than what could be expected from the comminution testwork results. This is normal considering that the mill was running at a lower throughput than the design value.
- Final Au tails were between 0.15 and 0.25 g/t most of the time with higher values from time to time which are consistent with the cyanidation testwork.
- The final gold recovery was at 98.2 % and the recovery calculation was based on a complete inventory of the mill at the end of the custom milling period that includes all the gold that was trapped in the grinding circuit.
- The cyanide concentration was maintained at 500 ppm (NaCN) and the pH was controlled by lime titration that was between 500 and 700 ppm (CaO). Lead nitrate addition was set at 75 g/t.
- The cyanide consumption was at 0.85 kg/t (NaCN), the lime consumption was at 1.28 kg/t (CaO), for cyanidation circuit only as there was no cyanide destruction, and the lead nitrate consumption was at 0.078 kg/t, which is coherent with metallurgical testwork.
- The grinding media consumption was at 0.23 for 125 mm balls (SAG) and 0.95 kg/t for 50 mm balls (Ball Mill).
- The 50 mm ball consumption could be considered accurate, but the 125 mm ball is lower than what could be expected since the ball charge of the SAG mill was higher than needed at the beginning of processing period.

13.2 Current Testwork

The current testwork include the tests that were performed on samples from the Presqu'île zone in 2023 and on samples from the Dubuisson zone in 2026.

13.2.1 Presqu'île Zone Metallurgical Testwork

The testwork on Presqu'île zone sample was designed in such a way that it only considers the Kiena mill flowsheet and includes chemical and mineralogical characteristics, grindability and gold leach.

13.2.1.1 Composite and Sample Selection

Samples were collected from two (2) lenses of the Presqu'île Zone, namely Zone 2 and Zone 2A. The testwork was conducted using composite samples from each lens. A total of four (4) composite samples (two (2) per lens) were prepared for the leaching testwork.

Due to the larger quantity of material required for the comminution testwork, only two (2) composite samples, one per lens, were prepared for this phase.

The different core sections and lengths used to generate the composite samples are listed in Table 13.19 and in Table 13.20.

Table 13.19 Sample Selection for Zone 2

Survey	From	To	Sample number	Zone	Au (g/t)	Length (m)	Mass (kg)
Drill Composite #1							
PR-22-023	229.5	231	E757812	2	3.3	1.5	3.0
PR-22-023	231	232.5	E757813	2	1.5	1.5	3.1
PR-22-023	232.5	234	E757814	2	6.6	1.5	3.3
PR-22-023	234	234.9	E757816	2	8.9	0.9	1.9
Total					4.7	5.4	11.4
Drill Composite #2							
PR-22-028	284	285.2	E758225	2	2.1	1.2	2.3
PR-22-028	285.2	286.3	E758226	2	2.6	1.1	2.2
PR-22-028	286.3	286.8	E758227	2	101.0	0.5	1.0
PR-22-028	286.8	288	E758229	2	0.6	1.2	2.3
Total					14.1	4.0	7.8
Drill Composite #3							
PR-22-029	234.5	235.8	E758353	2	0.3	1.3	2.8
PR-22-029	235.8	237	E758354	2	39.0	1.2	2.3
PR-22-029	237	238	E758356	2	2.2	1.0	2.4
Total					12.8	3.5	7.5
Drill Composite #4							
PR-22-035	240.5	241.5	E758804	2	0.7	1.0	2.4
PR-22-035	241.5	242.5	E758805	2	0.1	1.0	2.3
PR-22-035	242.5	243.5	E758806	2	8.3	1.0	2.4
Total					3.0	3.0	7.1

Survey	From	To	Sample number	Zone	Au (g/t)	Length (m)	Mass (kg)
Drill Composite #5							
PR-22-036	288.5	289.5	E758882	2	0.1	1.0	2.5
PR-22-036	289.5	290.5	E758883	2	31.6	1.0	2.0
PR-22-036	290.5	291.5	E758885	2	0.1	1.0	2.5
Total					9.0	3.0	6.9
Drill Composite #6							
PR-22-042	178.2	179.2	E759385	2	0.7	1.0	2.1
PR-22-042	179.2	180.2	E759386	2	56.3	1.0	2.0
PR-22-042	180.2	181.2	E759388	2	13.6	1.0	2.0
Total					22.9	3.0	6.1
Drill Composite #7							
PR-22-051	173	174	E760411	2	0.01	1.0	2.4
PR-22-051	174	175	E760412	2	6.53	1.0	2.2
PR-22-051	175	176	E760413	2	0.97	1.0	2.6
PR-22-051	176	177	E760414	2	20.60	1.0	2.1
Total					6.42	4.0	9.4

Table 13.20 Sample Selection for Zone 2A

Survey	From	To	Sample number	Zone	Au (g/t)	Length (m)	Mass (kg)
Drill Composite #8							
PR-21-010	193.5	195	C042481	2A	0.26	1.5	3.1
PR-21-010	195	195.8	C042482	2A	0.10	0.8	1.6
PR-21-010	195.8	196.4	C042483	2A	33.10	0.6	0.9
PR-21-010	196.4	197.4	C042485	2A	0.08	1.0	2.2
PR-21-010	197.4	198	C042486	2A	22.70	0.6	1.0
PR-21-010	198	199	C042487	2A	0.02	1.0	1.9
Total					4.98	5.5	10.7
Drill Composite #9							
PR-22-024	185.2	186.4	E757884	2A	102.50	1.2	2.2
PR-22-024	186.4	187.7	E757885	2A	36.80	1.3	2.7
PR-22-024	187.7	189	E757886	2A	0.10	1.3	2.9
Total					41.74	3.8	7.8
Drill Composite #10							
PR-22-026	194	195.1	E758032	2A	0.01	1.1	2.3
PR-22-026	195.1	196.2	E758033	2A	0.00	1.1	2.3
PR-22-026	196.2	197.2	E758034	2A	69.00	1.0	2.1
PR-22-026	197.2	198.2	E758036	2A	0.19	1.0	2.1
Total					16.18	4.2	8.8

Survey	From	To	Sample number	Zone	Au (g/t)	Length (m)	Mass (kg)
Drill Composite #11							
PR-22-052	157.3	158.3	E760479	2A	4.16	1.0	2.2
PR-22-052	158.3	159.3	E760481	2A	1.38	1.0	2.2
PR-22-052	159.3	160.3	E760482	2A	0.01	1.0	2.3
Total					1.81	3.0	6.6
Drill Composite #12							
S744	186.2	187.2	CA-218914	2A	88.34	1.0	n.d.
S744	187.2	188.3	CA-218915	2A	1.84	1.1	n.d.
S744	188.3	189.2	CA-218916	2A	0.89	0.9	n.d.
S744	189.2	190.4	CA-218917	2A	0.01	1.2	n.d.
Total					21.71	4.2	n.d.
Drill Composite #13							
S753	176.7	177.7	CA-228482	2A	0.01	1.0	n.d.
S753	177.7	178.2	CA-228483	2A	26.98	0.5	n.d.
S753	178.2	179.2	CA-228484	2A	0.01	1.0	n.d.
S753	179.2	180.5	CA-228637	2A	0.01	1.3	n.d.
Total					3.56	3.8	n.d.

The composite were made of drill hole located inside the zone that is included in the reserve and are considered as representative.

13.2.1.2 Head Assays and Mineralogical Characterization

To determine the major mineralogical components of each lens and identify any potentially deleterious elements, mineralogical characterization and analytical assays were performed.

The following mineralogical characterization was carried out:

- QEMSCAN Analysis at 75 µm

The following analytical assays were conducted:

- Metallic screen assay for gold grade
- X-ray fluorescence (XRF) for major oxide grades
- Full ICP-MS scan

QEMSCAN Analysis at 75µm was done to define the mineral composition of the samples. The results are presented in Table 13.21.

Table 13.21 Mineral Composition

Survey	Zone	Au (g/t)		Chalcopyrite %	Pyrite %	Pyrrhotite %	Sphalérite %	Calcite %
		Wesdome	ALS					
PR 22-023	2	4.71	3.98	<0.1	0.12	<0.1	<0.1	7.8
PR 22-028	2	14.09	11.04	<0.1	0.19	0.13	<0.1	8.3
PR 22-029	2	12.83	11.71	0.16	0.24	<0.1	<0.1	8.4
PR 22-035	2	3.04	3.18	0.13	<0.1	0.46	0.09	6.2
PR 22-036	2	8.97	11.82	<0.1	0.23	<0.1	<0.1	7.9
PR 22-042	2	22.92	33.01	0.08	0.23	0.61	<0.1	6.5
PR 22-051	2	6.42	8.78	<0.1	0.23	0.08	<0.1	9.2
PR 22-010	2A	4.98	1.62	<0.1	0.44	<0.1	<0.1	13.6
PR 22-024	2A	41.74	38.83	0.07	0.66	<0.1	0.38	5.2
PR 22-026	2A	16.18	13.00	0.07	<0.1	0.20	<0.1	5.6
PR 22-052	2A	1.81	3.99	<0.1	0.40	0.17	<0.1	6.9
S744	2A	21.71	10.27	0.30	0.26	<0.1	2.09	4.4
S753	2A	3.56	6.89	<0.1	<0.1	<0.1	<0.1	7.6

A full ICP-MS scan was conducted to measure the elements composition of the samples. The results are presented in Table 13.22.

Table 13.22 Chemical Composition

Survey	Zone	Ag	As	Co	Cu	Fe	Ni	Pb	S	Zn
		ppm	ppm	ppm	ppm	%	ppm	ppm	%	ppm
PR 22-023	2	1.48	6.0	39.3	114.0	5.71	152.5	34.0	0.08	116
PR 22-028	2	2.89	7.6	41.5	67.4	5.22	108.5	48.6	0.15	100
PR 22-029	2	2.12	5.6	47.2	180.0	6.38	190.0	18.8	0.25	64
PR 22-035	2	4.17	1.7	37.9	387.0	5.70	101.5	168.5	0.25	351
PR 22-036	2	1.61	8.0	43.5	87.3	5.55	154.0	49.4	0.18	103
PR 22-042	2	19.25	1.0	37.4	251.0	5.42	108.0	137.5	0.45	133
PR 22-051	2	1.74	4.9	49.9	80.8	6.45	255.0	42.5	0.21	135
PR 22-010	2A	1.14	9.8	53.8	99.8	6.15	352.0	11.8	0.29	127
PR 22-024	2A	11.80	8.4	34.0	315.0	4.71	121.0	421.0	0.50	2,780
PR 22-026	2A	5.16	4.5	39.2	63.6	5.25	113.0	29.5	0.11	74
PR 22-052	2A	1.04	5.4	47.7	73.0	6.62	193.0	91.7	0.29	167
S744	2A	8.04	12.5	35.1	744.0	4.19	139.0	1,380.0	1.02	>10000
S753	2A	1.19	3.7	51.4	43.9	6.74	195.5	13.4	0.06	171

The core samples show sulphide contents generally below 1%, with the exception of sample S744, which contains 1.02% sulphides along with a higher zinc concentration. This is consistent with a sphalerite content of approximately 2.1%.

The concentration of pyrrhotite, a more reactive sulphide mineral, is low, ranging from 0.1% to 0.6%. At these levels, pyrrhotite is not expected to have a significant impact on the cyanidation process.

Copper concentrations vary between 40 and 750 ppm. The corresponding chalcopyrite content—given that chalcopyrite contains approximately 35% copper—indicates that most of the copper is present in this mineralogical form. The observed chalcopyrite levels are not expected to adversely affect the cyanidation process.

Silver concentrations range between 1 and 5 ppm, with the exception of three samples, which show values between 8 and 20 ppm.

Gold grades in the samples range from 1.62 to 33.83 g/t, based on analyses incorporating metallic screen preparation.

13.2.1.3 Comminution Testwork

Comminution testwork was conducted on composite samples from Zones 2 and 2A to characterize ore hardness. The test program included SMC testing and Bond ball mill work index determinations. The results are summarized in Table 13.23 and Table 13.24.

Table 13.23 Bond Ball Mill Work Index Test Results

Zone	F80 µm	Recirculating screen µm	P_{80} µm	Mass per revolution g	WiBM kWh/t
2	2,444	106	77	1.10	16.6
2A	2,459	106	79	1.20	15.6

Table 13.24 SMC Test Results

Zone	Particle size mm	Dwi kWh/m³	DWi %	Mia kWh/t	Mih kWh/t	Mic kWh/t	SCSE kWh/t	A x b
2	22,4 X 19	8.2	69	22.1	17.0	8.8	10.9	34.0
2A	22,4 X 19	6.7	51	18.9	13.9	7.2	9.9	41.6

The SMC test results yielded A×b values of 34.0 and 41.6, which are within the range of average values reported in the JKTech database. Similarly, the Bond ball mill work indices ranged from 15.6 to 16.6 kWh/t at a closing screen size of 106 µm, indicating ore hardness slightly above the overall JKTech database average.

13.2.1.4 Leaching Testwork

Leaching tests were carried out for the four composites samples. Results are presented in Table 13.25.

Table 13.25 Leaching Test Results

Parameter	Unit	Value							
Composite		2-1	2-2	2A-1	2A-2	2-1	2-2	2A-1	2A-2
K_{80}	µm	68	75	72	80	68	75	72	80
pH		11.1	11.0	11.1	11.1	11.0	11.0	11.0	11.0
NaCN Concentration	ppm	500	500	500	500	253	253	253	253
NaCN Consumption	kg/t	0.04	0.19	-	0.15	0.22	0.28	0.05	0.12
CaO Consumption	kg/t	0.55	0.35	0.52	0.42	0.43	0.57	0.49	0.37
Feed Gold grade - Calculated	g/t	7.68	16.28	2.59	24.31	7.04	19.09	5.63	25.43
Feed Gold grade - Measured	g/t	8.90	15.97	4.17	20.70	8.90	15.97	4.17	20.70
Tails Gold grade	g/t	0.07	0.14	0.01	0.16	0.09	1.07	0.06	0.40
Au Extraction 24h	%	96.5	98.1	95.9	99.2	79.0	38.8	67.4	84.9
Au Extraction 72h	%	99.2	99.1	99.6	99.4	98.8	94.4	99.0	98.4

Figure 13.8 and Figure 13.9 present leaching kinetics results at 500 and 250 ppm NaCN.

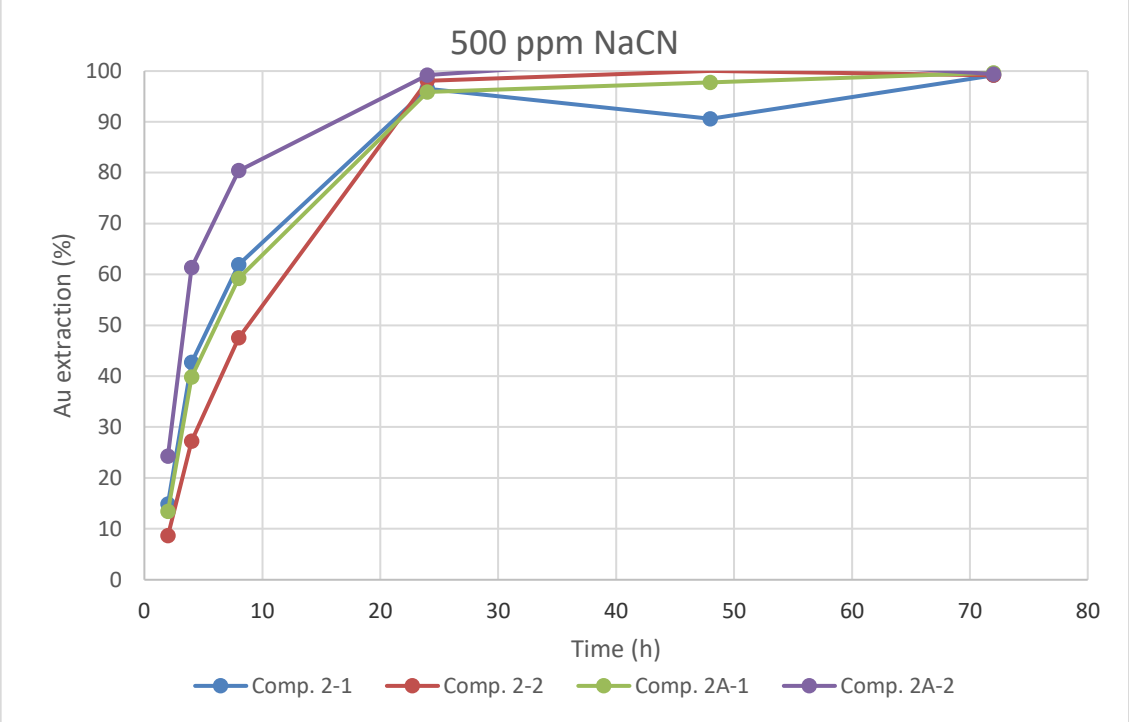


Figure 13.8 Leaching Kinetic

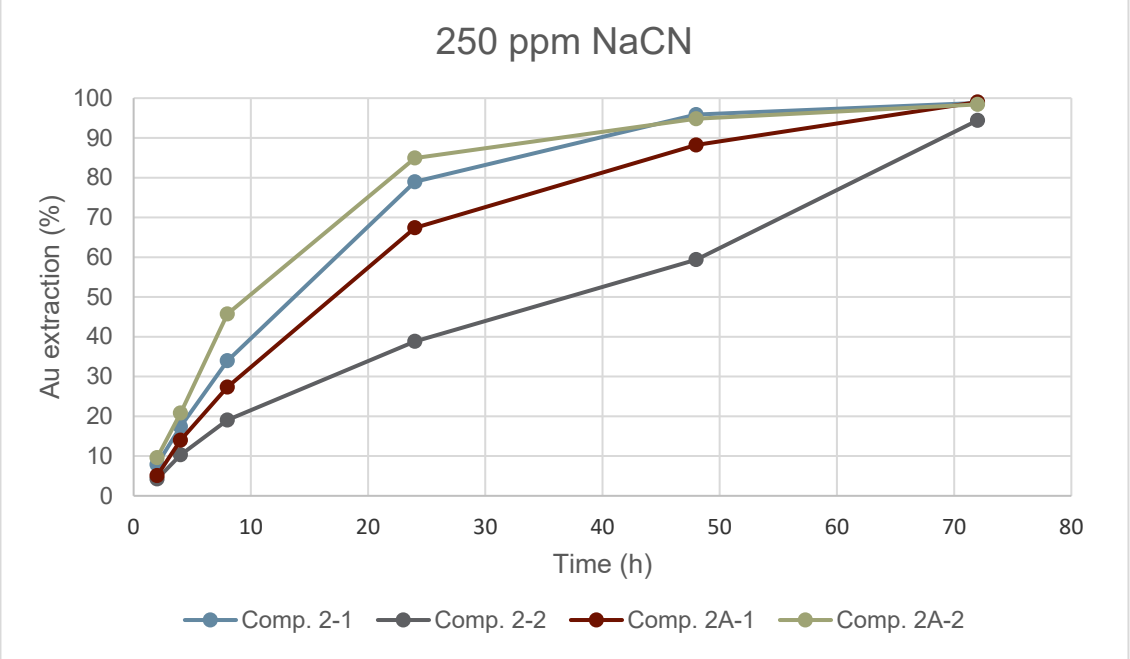


Figure 13.9 Leaching Kinetic

Cyanidation tests performed on the four (4) composite samples at a cyanide concentration of 500 ppm (NaCN) achieved gold dissolution in excess of 99% after 72 hours of leaching. In contrast, tests conducted at 250 ppm cyanide exhibited slower dissolution kinetics, which is consistent with established gold leaching theory.

Lime and cyanide consumption were relatively low, indicating the absence of significant cyanide- or lime-consuming components. This observation is consistent with the mineralogical characterization.

13.2.2 Dubuisson Zone Metallurgical Testwork

The metallurgical testwork on the Dubuisson Zone was done with an approach similar to the one performed on Presqu'île.

13.2.2.1 Composite and Sample Selection

Samples were collected from two (2) zones of interest of the Dubuisson Zone, namely Zone DUB-S2/S3 and Zone DUB-N2. The testwork was conducted using composite samples from each zone. Every approximately 1.0 m interval of drill core was used for head assays. Composite samples of every ~5.0 m interval were produced for Head Assays and mineral characterization. Four (4) master composites were produced, one (1) for DUB-N2, one (1) for DUB-S2 and two (2) for DUB-S3. These composites were also used to generate ten (10) sub-composite that were submitted to chemical and mineralogical analysis.

The different core sections and lengths used to generate the composite samples are listed in Table 13.26.

Table 13.26 Sample Selection for Dubuisson Zone

Zone	Interval	Length (m)	Sub-composite #	Master composite #
N2	DB-RN2-1	1.2	1	MC-3
N2	DB-RN2-2	1.0		
N2	DB-RN2-3	0.9		
N2	DB-RN2-4	1.1		
N2	DB-RN2-5	1.1	2	
N2	DB-RN2-6	1.0		
N2	DB-RN2-7	1.2		
N2	DB-RN2-8	1.2		
S2	DB-RS2-1	1.2	3	MC-4
S2	DB-RS2-2	1.1		
S2	DB-RS2-3	0.7		
S2	DB-RS2-4	1.2		
S2	DB-RS2-5	0.9	4	
S2	DB-RS2-6	0.7		
S2	DB-RS2-7	1.0		
S2	DB-RS2-8	1.3		
S2	DB-RS2-9	1.2		
S3	DB-RS3-1	0.5	5	MC-5
S3	DB-RS3-2	0.7		
S3	DB-RS3-3	1.0		
S3	DB-RS3-4	0.7		
S3	DB-RS3-5	1.0		
S3	DB-RS3-6	1.2		
S3	DB-RS3-7	1.2	6	
S3	DB-RS3-8	1.0		
S3	DB-RS3-9	0.9		
S3	DB-RS3-10	1.2		
S3	DB-RS3-11	1.1		
S3	DB-RS3-12	1.0	7	MC-6
S3	DB-RS3-13	0.7		
S3	DB-RS3-14	1.0		
S3	DB-RS3-15	1.0		
S3	DB-RS3-16	0.5		
S3	DB-RS3-17	0.7		
S3	DB-RS3-18	0.8	8	
S3	DB-RS3-19	1.1		

Zone	Interval	Length (m)	Sub-composite #	Master composite #
S3	DB-RS3-20	1.0		
S3	DB-RS3-21	0.9		
S3	DB-RS3-22	1.0		
S3	DB-RS3-23	1.0	9	
S3	DB-RS3-24	1.1		
S3	DB-RS3-25	1.2		
S3	DB-RS3-26	0.9		
S3	DB-RS3-27	1.0		
S3	DB-RS3-28	0.8	10	
S3	DB-RS3-29	1.0		
S3	DB-RS3-30	0.7		
S3	DB-RS3-31	0.7		
S3	DB-RS3-32	0.9		
S3	DB-RS3-33	1.2		

13.2.2.2 Head Assays and Mineralogical Characterization

To determine the major mineralogical components of each drill sections and identify any potentially deleterious elements, mineralogical characterization and analytical assays were performed.

The following mineralogical characterization was carried out:

- QEMSCAN Analysis at 75 µm

The following analytical assays were conducted:

- Metallic screen assay for gold grade
- Whole Rock Analysis (WRA) by X-ray fluorescence (XRF) for major oxide grades
- Full ICP-MS scan

QEMSCAN Analysis at 75µm was done to define the mineral composition of the samples. The results are presented in Table 13.27.

Table 13.27 Mineral Composition

Mineral Abundance (wt%)	Sub Comp #									
	1	2	3	4	5	6	7	8	9	10
Pyrite	0.33	0.32	1.87	1.59	1.46	1.57	1.19	1.86	0.97	1.59
Other Sulphides	0.01	0.03	0.03	0.04	0.01	0.00	0.04	0.00	0.02	0.01
Quartz	15.8	3.83	13.5	15.4	12.1	10.00	23.3	15.3	17.0	42.8
Plagioclase	21.2	16.6	33.7	25.2	44.8	53.9	39.1	40.6	58.5	27.9
K-Feldspar	0.01	0.02	0.10	0.03	0.06	0.20	0.23	0.14	0.33	0.25

Mineral Abundance (wt%)	Sub Comp #									
	1	2	3	4	5	6	7	8	9	10
Muscovite	0.22	0.17	0.11	0.50	0.89	1.51	0.77	0.97	1.04	0.30
Talc	18.1	32.7	3.60	6.95	1.57	0.04	0.48	0.13	0.04	0.31
Chlorite	18.0	20.1	19.2	19.7	15.8	12.7	15.0	15.0	8.98	10.2
Clays	4.91	5.65	5.69	6.49	5.80	4.81	6.63	4.96	4.62	7.36
Other Silicates	0.02	0.03	0.09	0.11	0.11	0.33	0.18	0.25	0.20	0.08
Fe-Oxides	0.34	0.36	0.08	0.11	0.22	0.62	0.85	0.28	0.29	0.15
Other Oxides	0.90	0.84	0.96	0.90	1.47	1.27	1.15	1.24	0.93	0.54
Calcite	0.77	0.93	0.77	1.18	3.42	2.60	2.21	2.38	1.67	0.66
Dolomite-Ankerite	19.1	18.2	20.1	21.3	11.6	9.69	8.30	16.3	5.01	7.64
Apatite	0.21	0.26	0.19	0.43	0.61	0.68	0.48	0.56	0.39	0.11
Other	0.00	0.01	0.02	0.03	0.03	0.05	0.04	0.02	0.04	0.02
Total	100	100	100	100	100	100	100	100	100	100

A full ICP-MS scan was conducted to measure the elements composition of the samples. The results are presented in Table 13.28.

Table 13.28 Chemical Composition

Mineral Abundance (wt%)	Assay Method	Sub Comp #									
		1	2	3	4	5	6	7	8	9	10
Al	QEMSCAN	4.31	4.07	5.91	5.24	7.09	7.84	6.57	6.46	7.96	5.12
	Chemical	4.57	4.35	5.78	5.21	6.94	7.76	6.83	6.32	7.63	5.03
Ca	QEMSCAN	4.58	4.45	4.84	5.24	4.29	3.70	3.06	4.83	2.30	2.08
	Chemical	3.65	3.97	4.53	4.90	4.07	3.72	3.02	4.95	2.32	2.09
Fe	QEMSCAN	4.60	5.04	5.24	5.40	4.79	4.43	4.54	4.60	2.78	2.98
	Chemical	5.62	6.01	6.14	6.26	5.32	4.70	4.72	4.81	3.24	3.67
K	QEMSCAN	0.02	0.02	0.03	0.06	0.10	0.18	0.11	0.12	0.15	0.06
	Chemical	0.04	0.02	0.06	0.07	0.11	0.19	0.14	0.13	0.18	0.10
Mg	QEMSCAN	7.73	10.5	5.37	6.14	3.53	2.63	2.97	3.75	1.72	2.32
	Chemical	8.27	11.3	6.09	6.76	4.12	2.71	3.43	3.85	1.94	2.98
Mn	QEMSCAN	0.05	0.02	0.08	0.10	0.08	0.09	0.06	0.08	0.05	0.03
	Chemical	0.09	0.09	0.00	0.11	0.09	0.08	0.07	0.09	0.05	0.05
Na	QEMSCAN	1.76	1.37	2.79	2.08	3.69	4.43	3.22	3.34	4.83	2.32
	Chemical	2.03	1.47	2.92	2.31	4.07	5.04	3.84	3.68	5.32	2.60
S	QEMSCAN	0.18	0.18	1.00	0.86	0.78	0.84	0.65	0.99	0.52	0.85
	Chemical	0.20	0.24	1.16	0.97	0.86	0.87	0.54	0.94	0.48	0.79

Mineral Abundance (wt%)	Assay Method	Sub Comp #									
		1	2	3	4	5	6	7	8	9	10
Si	QEMSCAN	23.6	21.3	22.8	22.4	24.6	25.7	27.8	24.5	29.4	32.5
	Chemical	23.4	20.4	21.5	21.3	23.5	24.5	26.5	23.4	28.5	31.2
Ti	QEMSCAN	0.32	0.33	0.39	0.37	0.53	0.48	0.45	0.55	0.41	0.25
	Chemical	0.25	0.23	0.32	0.37	0.44	0.51	0.43	0.43	0.32	0.23

The core samples show sulphide contents generally below 1%, with the exception of sample Sub Comp 3, which contains 1.16% sulphides.

13.2.2.3 Comminution Testwork

The comminution testwork was conducted on composite samples from Zone DUB-N1 made from sub-composite 1 and 2 and Zone DUB-S2/S3 made from composite 3 to 10 to characterize ore hardness. The test program included a Bond ball mill work index determinations. The results are presented in Table 13.29.

Table 13.29 Bond Ball Mill Work Index Test Results

Zone	F_{80} µm	Recirculating screen µm	P_{80} µm	Mass per revolution g	WiBM kWh/t
DUB-N1	2,277	106	85	2.00	10.8
Dub-S2/S3	2,434	106	79	1.30	14.6

There is a significant difference of work index between the two zone. It could be observed from the Table 13.27 that the DUB-N1 zone contains less pyrite and more talc than the DUB-S2/S3 zone which could explain the lower work index value.

13.2.2.4 Leaching Testwork

Leaching tests were carried out on four (4) composite samples. Bottle roll tests were conducted on each composite. Results are presented in Table 13.30.

Table 13.30 Leaching Test Results

Parameter	Unit	Value							
Composite		MC-3	MC-3	MC-4	MC-4	MC-5	MC-5	MC-6	MC-6
K_{80}	µm	60	90	60	90	60	90	60	90
pH		11.0	11.0	11.0	11.0	11.0	11.0	11.0	11.0
NaCN Concentration	ppm	500	500	500	500	500	500	500	500
NaCN Consumption	kg/t	0.36	0.1	0.39	0.21	0.4	0.16	0.28	0.22
CaO Consumption	kg/t	1.45	0.98	1.12	0.94	1.03	8.47	0.77	0.9
Feed Gold grade - Calculated	g/t	0.62	0.62	2.41	2.41	3.85	3.85	1.79	1.79
Feed Gold grade - Measured	g/t	2.97	0.55	7.81	8.92	4.14	3.52	2.87	2.36
Tails Gold grade	g/t	0.03	0.04	0.09	0.29	0.12	0.17	0.12	0.08

Parameter	Unit	Value							
Au Extraction 24h	%	93.4	90.3	88.4	78.9	89.5	88.5	90.2	94.1
Au Extraction 48h	%	99.2	94.2	97.2	94.6	95.5	92.7	94.6	97.9
Au Extraction 72h	%	99.0	92.7	98.8	96.8	97.1	95.2	95.8	96.6

Figure 13.10 presents leaching kinetics results for the test done with a P_{80} of 60µm.

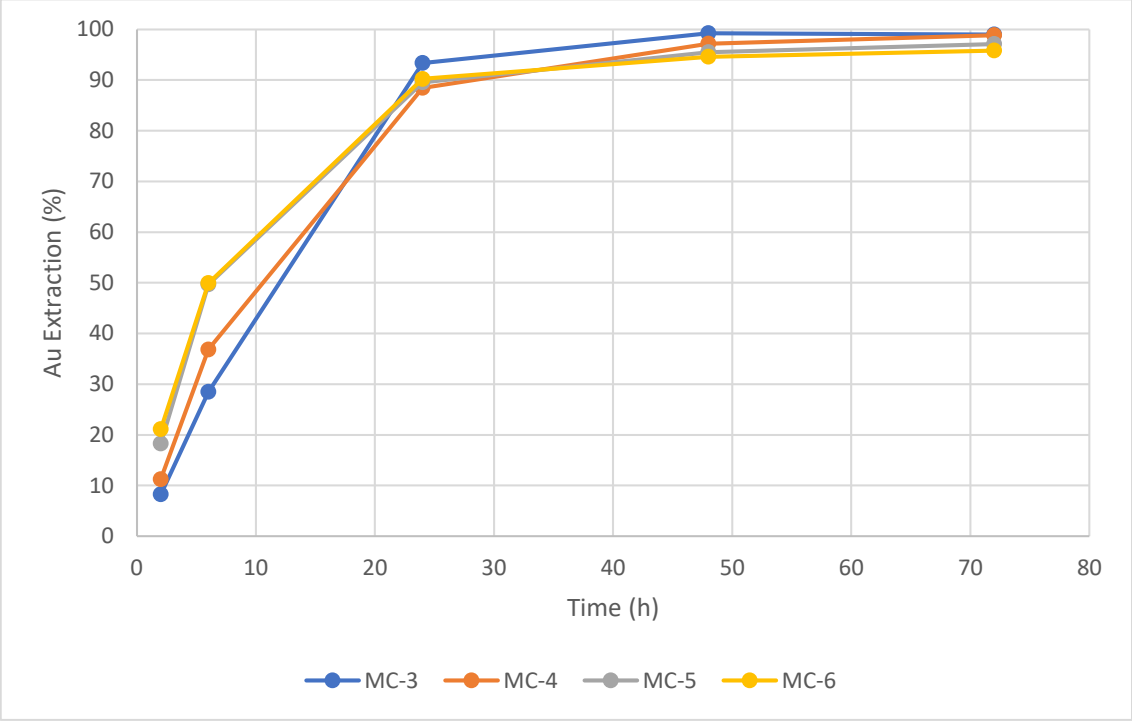


Figure 13.10 Gold Leach Kinetic

Cyanidation tests were performed on four (4) composite samples, with variable P_{80} of 60 and 90 µm on each composite, at a cyanide concentration of 500 ppm (NaCN). Other tests with a higher P_{80} were also performed but the results are not presented since they only confirm a lower gold dissolution. Gold dissolution exceeded 95% after 72 hours of leaching for all composites with a 60µm P80 composites. After 48 hours, the gold dissolution was not significantly different for the tests with a 60µm P_{80} than at 72 hours while it was slightly lower for the test with a 90µm P_{80}.90% for all samples, except for CN-06 and CN-11, which achieved 79.7% and 74.2% dissolution, respectively.

13.2.3 Extraction of Metallurgical Data for Process Design Criteria

Since the Kiena concentrator is to process the material from the Kiena Deep deposit along with material from the Presqu'île zone, the metallurgical data obtained from the metallurgical testwork program was used to develop the process design criteria and evaluate the Kiena process performance.

The grindability test results and leaching test results were used to evaluate the performance of the grinding circuit and leaching circuit and the reagent consumption. The WOL and GTL test results were used to determine the need for a gravity circuit. The cyanide destruction tests were used to evaluate the reagent consumption. The sedimentation test results were used to evaluate the performance of the thickeners. The filtration test results were used to size the filtration plant and evaluate its performance.

The Kiena process design criteria and process are detailed in Chapter 17.

13.3 Testwork Interpretation

13.3.1 Head Assays and Mineralogical Characterization

Silver levels that were measured in the composites did not represent issues in the leaching process. Low levels of total organic carbon were also measured, which did not cause preg-robbing of gold in the leaching process. Screened metallic assays for gold indicated the presence of coarse “free” gold particles in the composites. A full ICP-MS scan, a Sulphur (S2-) assay by Leco, as well as a Clay XRD were also completed on each Deep Zone composite. Nickel, copper, and zinc were also present in varying minor amounts and could impact cyanide consumption and downstream processes, such as cyanide destruction as it was observed with nickel in the cyanide destruction testwork. No other deleterious element, mineral or potential issue was identified according to these tests.

Bulk Mineralogical Analysis (BMA) at 106 µm and 75 µm using QEMSCAN were completed on the composites. Pyrite and pyrrhotite were identified as the predominant sulphur bearing minerals. Pyrrhotite can be more reactive in cyanide leaching, leading to an increase in reagent consumption but at these levels, only a minor impact would likely be measured, and no impact was observed during the tests. The Presqu’île and Dubuisson zone contains less pyrrhotite. The analysis on sulphides composition indicates the presence of pentlandite and chalcopyrite which explain the presence of nickel and copper in the cyanidation effluent. No other potential issue was identified according to these test results.

Quartz, chlorite, amphibole, talc, feldspars, and dolomite were the predominant non-sulphide gangue minerals and varied quite significantly between samples.

13.3.2 Comminution Testwork

Comminution testing consisting of SMC and bond ball mill work index tests were completed on the composites of Deep and Presqu’île zone. The composites are characterized as relatively soft from SAG milling and ball milling perspectives for Deep zone, with A x b values of between 52 to 81, and Bond work indexes of 10.7 to 12.8 kWh/t, at a closing screen size of 106 µm and in the average for Presqu’île zone, with A x b values of 34.0 and 41.6, and Bond work indexes of 15.6 and 16.6 kWh/t, at a closing screen size of 106 µm. For the Dubuisson zone, only Bond Ball Mill work index was done and give values of 10.8 and 14.6 kWh/t which is in the same range as the other zones.

Comparative work indexes indicated a wide range of hardness for the variability samples from Deep zone. The comminution testwork results, along with the bulk sample processing indicate that the grinding installed power (1,000 hp for the SAG mill and 900 hp for the ball mill) is sufficient for the hardness range identified in the testwork at the design throughput. Based on the specific power consumed by the grinding circuit being between 20 and 24 kWh/t, the P_{80} of 60 µm and assuming a 90% power transmission to the pinion, the operating Bond work index value is between 15 and 18 kWh/t.

Regarding Presqu'île and Dubuisson zones, a processing capacity of 1,200 t/d, corresponding to the nominal capacity of the grinding circuit, can be achieved with material from Presqu'île Zone 2A and Dubuisson. In contrast, throughput must be reduced to approximately 1,100 t/d when processing material from Zone 2 to maintain a P_{80} of 75 µm. However, the mining plan considers a throughput of less than 1000 t/d and no issue are expected.

13.3.3 Gravity and Leaching Testwork

Leaching tests were carried out for the four composite samples (A, A1, A2 and VC) and the variability samples. From the initial stage of optimization testing, WOL at a grind of 80 µm with 75 g/t of lead nitrate addition was chosen as the final conditions. Under these conditions, the three composite samples from Kiena Deep (A, A1, A2) had very similar gold recovery trends with their final gold recovery percentage ranging from 98.9% to 99.3% after 48 hours. The VC Zone composite had a lower recovery percentage than the three Kiena Deep composites at 97.8%.

- Although gravity testing on the three main composites indicated coarse, free gold, WOL and GTL tests indicated there was no significant difference to final recovery with or without inclusion of gravity for a leach time of 48h but with higher kinetics that make dissolution almost complete after 24h for the GTL. In operation, coarse gold remains in the grinding circuit until it is small enough to report the cyclones overflow adding substantial leaching time that is not reflected in the testwork. As a result, gravity separation was not included in the process design.
- Lead nitrate was critical to improving leach kinetics, especially for the WOL tests, and in assisting leaching of any free coarse gold in the samples.
- Finer primary grinding from 120 to 80 µm increased gold extraction by about 1% to 3% for the three main composites.
- The sodium cyanide consumption ranged from 0.22 to 0.78 kg/t for the composite samples. The lime consumption ranged from 0.42 to 0.75 kg/t for the composite samples.

Regarding Presqu'île and Dubuisson zones, based on the dissolution kinetics curves obtained at a cyanide concentration of 500 ppm, this residence time is more than sufficient to achieve the gold dissolution observed after 72 hours of cyanidation. In addition, as cyanide is added in the grinding circuit, gold particles coarser than 75 µm—i.e., those requiring longer cyanidation times—are retained within the grinding circuit until dissolution reduces their size sufficiently to allow their exit from the circuit.

The concentration of dissolved heavy metals is relatively low and at levels that are not expected to impact the gold recovery circuit. Silver concentrations are also relatively low, although silver is recovered along with gold in the carbon-in-pulp circuit. The observed silver levels are not expected to affect circuit performance, and a portion of the silver will be recovered in the doré produced.

13.3.4 Cyanide Destruction

Cyanide Detox and dewatering tests were conducted on a Master composite constructed from equal parts of the A, A1, and A2 zones composites. Detox testing using SO_2/air consistently reached a residual CNWAD of about 2 to 3 ppm, higher than the target of 1 ppm. The cyanide destruction tests showed good copper elimination, but nickel concentrations remained high. The nickel in solution is complexed with cyanide thus is the CNWAD species that has not been completely eliminated. Reagents optimization will be necessary to lower the nickel and CNWAD in the cyanide destruction effluent. Additional testing is recommended, using SO_2:CN ratios around 8:1, to further refine the conditions required, as well as assess the variability in cyanide destruction requirements on various samples.

No cyanide detoxification or dewatering testwork has been conducted on samples from the Presqu'île and Dubuisson Zone. Copper and nickel concentrations in the cyanide leach solution are at levels that could potentially impact final effluent quality. However, these concentrations are expected to decrease when the ore is blended with material from other zones exhibiting lower chalcopyrite contents.

If tailings are managed without cyanide detoxification, elevated concentrations of dissolved heavy metals could adversely affect the natural degradation of cyanide within the tailings storage facility. Conversely, if the cyanide tailings are treated using the SO_2/air detoxification process currently installed, the presence of these metals is not expected to affect either treatment efficiency or reagent consumption.

13.3.5 Sedimentation Testwork

Sedimentation tests were carried out on the Kiena Deep super-composite with the presence of a flocculant. Tests were performed on the leach feed, the whole cyanide destruction tails (P_{80} around 80 µm) and on classified cyanide destruction tails (P_{80} around 37 µm).

A flocculant dosage of 20 g/t gave the best results on the pre-leach sample while similar results were obtained for floc dosages between 20 and 40 g/t on the whole cyanide destruction tails. Higher flocculant dosages were required for the classified cyanide destruction tails resulting in lower final settled densities. The settling rates obtained from testwork are significantly higher than the expected rise rate within the thickeners.

13.3.6 Filtration Testwork

All tests showed good filtering properties. The final moisture content for the unclassified tailings was between 10% and 12% water for thickened cyanide destruction tails, and between 12% and 16% water for un-thickened cyanide destruction tails. Pressure filtration on the classified tailings produced final cakes of between 14% and 19% moisture. Tailings filtration is not envisioned at the moment but should dry stacking be necessary in the future, tailings filtration is expected to perform well but air blowing

duration will need to be optimized to meet the final moisture requirements. No filtration testwork were performed on Presqu'île and Dubuisson zone but it is not expected to observed different performance what the ore from these zones will be mixed with Kiena Deep zone.

13.4 Conclusions and Recommendations

The different metallurgical testwork series that were conducted for the Kiena Mine covers all the different zones that will be processes for the period of the present technical report. The following conclusions and recommendations can be drawn:

- The comminution test results have shown that all samples from Kiena deep zone are moderately soft, which is supported by the observations made during the bulk sample processing while the samples from Presqu'île are harder but will always be mixed with other zone resulting in softer mill feed.
- Since the grinding circuit has some inefficiencies at lower throughputs than its design capacity, the higher-power consumption values observed during the bulk sample processing must be used for the grinding power evaluation as the throughput of the grinding circuit will be in the same range as it was during the bulk sample processing.
- No significant difference in gold recovery was observed with Kiena Deep zone samples between GTL and WOL after 48 hours of leaching time and no gravity testwork were conducted on Presqu'île and Dubuisson zone. Furthermore, only minor cyanide consumption reductions, if any, could be achieved. By considering a leaching of 48 hours, the installation of a gravity circuit in the plant is not recommended.
- Higher gold recoveries were obtained at a finer grind size. For achieving the highest gold recoveries, it is suggested to keep the final grind size at around 60 µm which is easy to obtain considering the available grinding power.
- The historical processing of Kiena Deep zone ore from 2020 until now shown that predicted recovery were met confirming the validity of recovery prediction.
- The addition of lead nitrate has a significantly positive effect on leach kinetics for Kiena Deep Zone; therefore, a dosage of 75 g/t is recommended.
- All the leach tests were performed at a NaCN addition of 500 ppm. It is suggested that the NaCN addition be maintained at around 500 ppm.
- The different testwork allows to predict the recovery that cold be obtained for all zone and the current mill process flowsheet will allows to reach those predicted performances.
- A flocculant dosage of 20 g/t gave the best results on the pre-leach sample while similar results were obtained for floc dosages between 20 and 40 g/t on the whole cyanide destruction tails. A dosage of 20 to 25 g/t for each thickener is recommended.
- All tests showed good filtering properties. Should dry stacking be necessary in the future, tailings filtration is expected to perform well but air blowing duration should be the subject of future tests to meet the final moisture requirements.

14. MINERAL RESOURCE ESTIMATES

14.1 Introduction

This updated Mineral Resource Estimate incorporates historical diamond drilling data and recent diamond drilling programs.The 2025 MRE presented herein is a Technical Report entitled "Update of the Mineral Resource Estimate for the Kiena Mine Complex" completed on March 13th, 2026. It includes diamond drill data and Channels data as of December 30th, 2025.

14.2 Methodology

The herein MRE covers the whole Kiena Mine Complex project (Figure 14.1).

The geological wireframes were constructed in Leapfrog Geo™ by Christopher Grondin (Engineer of Resources) and Serge Gonthier (Principal Geologist, Resources and Geology) of Wesdome with the help of Bruno Turcotte (Superintendent of Geology) of Wesdome. Leapfrog Geo v 2024.1 was also used to generate mineralized intercepts. Datamine Studio RM version 2.0.66.0 was used for compositing, 3D blocks modelling, interpolation and classification. Statistical studies were undertaken using Excel and Snowden Supervisor v. 9.1.

The methodology for the estimation of the mineral resources involved the following steps:

- Revision and design of Mineral envelopes
- Database verification and validation
- Drillhole intercept
- Basic statistics and composite generation for each unit
- Capping
- Geostatistical analysis including variography
- Block modelling and grade interpolation
- Block model validation
- Resource classification
- Cut-off grade calculation
- Reasonable prospects of eventual economic extraction assessment
- Preparation of the mineral resource statement

Only sectors having new data available were revised and updated. Included in this Report are the previous Projects and Models reported with new CoG, but unchanged since the PFS 2021 (Prepared by BBA) for which there is no new information available but is on Kiena Mine area. Every block model mineral resource estimate for this 2025 MRE using the same methodology as the block model mineral resource estimate for the zones in the former Kiena Mine area.

An extensive review of the Datamine Studio RM project was carried out by Wesdome Principal Geologist, Resources and Geology, Serge Gonthier (QP) and Wesdome Engineer of Resources Christopher Grondin. Some key steps were conducted again for comparison and validation purposes. During these reviews, compositing and capping, block model coding, interpolation, classification and reporting process were validated.

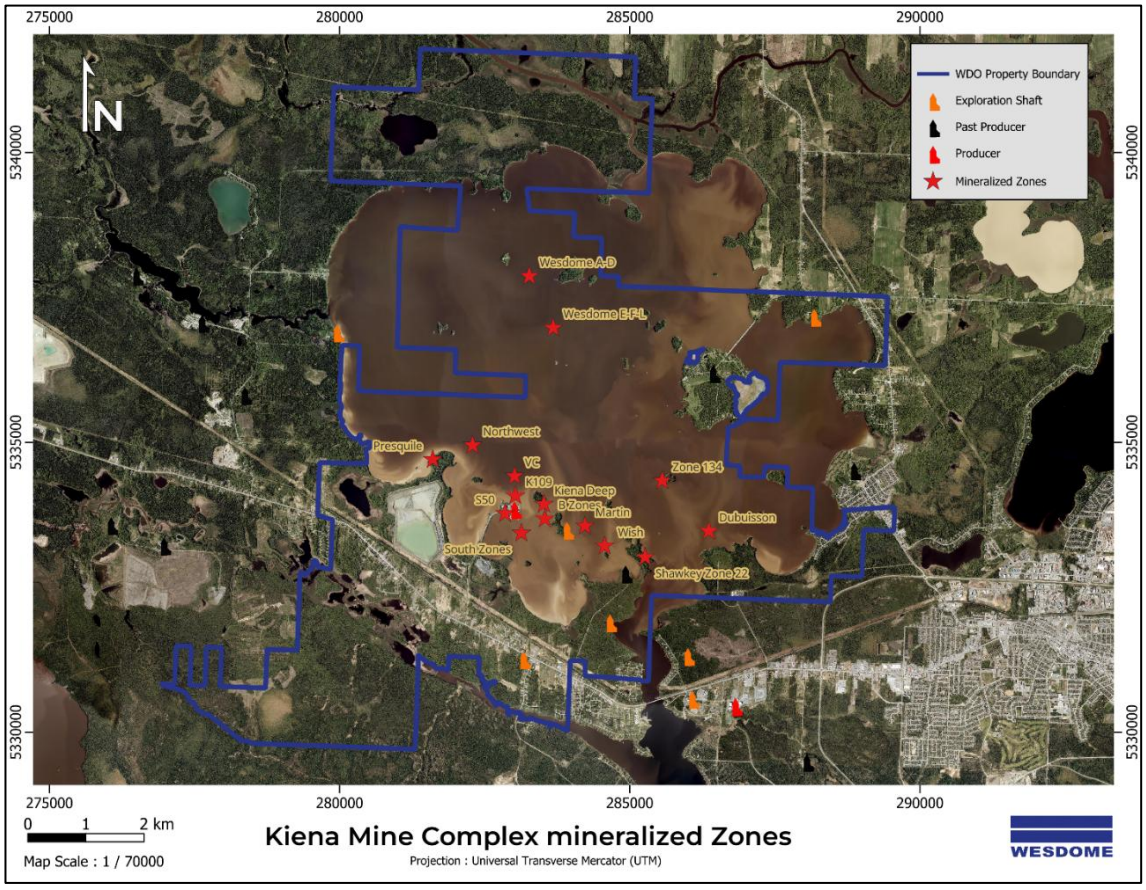


Figure 14.1 2025 MRE block model resource's location

14.3 Resource Database

As of December 30, 2025, the Project resource database used for the 2025 Mineral Resource Estimate (MRE 2025) comprised 788 surface-collared and 7,709 underground-collared diamond drillholes, totaling 1,344,536.8 m of drilling. The average diamond drillhole (DDH) length was 151.6 m. Within this database, a subset of 2,357 drillholes intersected 4,370 mineralized lens intercepts, representing a cumulative mineralized interval of 26,195 m.

The broader Kiena Property drillhole database consists of 2,583 surface-collared and 8,172 underground-collared diamond drillholes, with a cumulative drilled length of 1,948,153.1 m (Figure 14.2). However, only the Project resource database with MRE 2025 status was used for the mineral resource estimation.

The resource estimation for the Project relies on historical and recent drilling programs and Channels near production sector, when available.

The resource database was validated before proceeding with the resource estimation. The validation is detailed in Chapter 12 of this Report. Minor variations have been noted during the validation process but have no material impact on the 2025 MRE.

The QPs are of the opinion that the database is appropriate for the purposes of the mineral resource estimation and that the sample density allows a reliable estimate to be made of the size, tonnage and grade of the mineralization in accordance with the level of confidence established by the mineral resource categories as set forth in the CIM Standards.

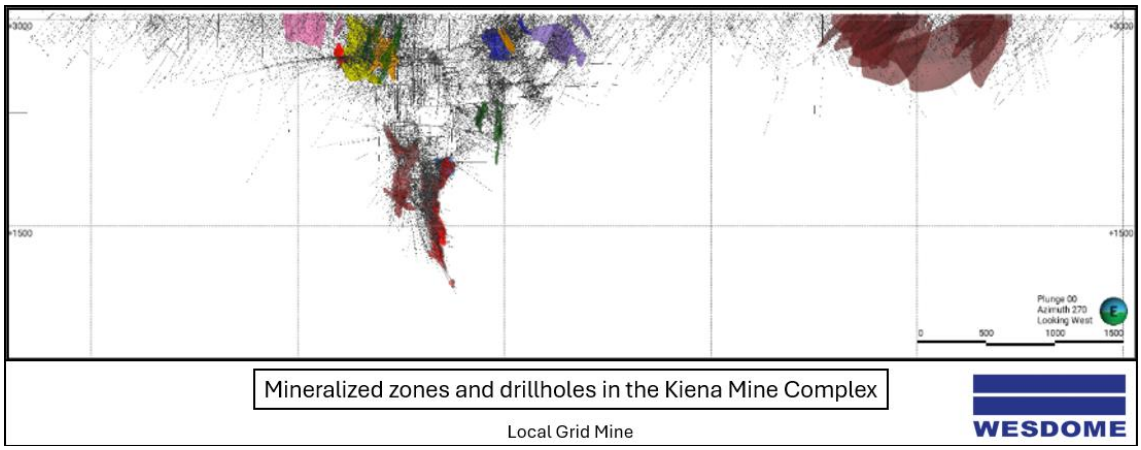


Figure 14.2 3D view looking west of the 3D model and of the drillholes included in this resource estimate

14.4 Geological Interpretation and Modelling

A total of 94 mineralized lenses were interpreted for the purpose of the 2025 MRE (Table 14.1).

Table 14.1 Mineralized lenses of the 2025 MRE

Zone	Wireframe name	Blockcode	Source	Zone	Wireframe name	Blockcode	Source
Kiena Deep A	ZA	200	Updated	Wesdome	W_A	2010	Updated
	ZA1	210	Updated		W_A1	2020	Updated
	ZA1_WOD	211	New 3D Model		W_AF	2030	Updated
	ZA1_216	216	Updated		W_AH	2040	Updated
	ZA2_222	222	Updated		W_AH1	2050	Updated
	ZA2_223	223	New 3D Model		W_AH2	2060	Updated
	ZA2_226	226	Updated		W_AH3	2070	Updated
	ZA2_228	228	Updated		W_B	2110	Updated
	H1ZA	310	Updated		W_C	2120	Updated
	H2	320	Updated		W_D	2130	Updated
	H3	330	Updated		W_E	2210	Updated

Zone	Wireframe name	Blockcode	Source	Zone	Wireframe name	Blockcode	Source
	H5	350	Updated		W_E0	2220	Updated
	BZA_1	410	Updated		W_E1	2230	Updated
	BZA_2	420	Updated		W_E3	2240	Updated
	BZA_5	450	New 3D Model		W_E4	2250	Updated
	SNK_510	510	Updated		W_F	2320	Updated
	FWZ_1	610	Updated		W_F1	2330	Updated
	FWZ_2	620	Updated		W_F2	2260	Updated
	FWZ_3	630	Updated		W_F4	2270	Updated
	FWZ_4	640	Updated		W_F6	2280	Updated
	FWZ_5	650	Updated		W_L	2310	Updated
	FWZ_5A	655	New 3D Model	Shawkey_22	S22_1	1510	Updated
	FWZ_6	660	Updated		S22_2	1520	Updated
	FWZ_6A	665	New 3D Model	B	ZB_142	142	New 3D Model
	FWZ_7	670	Updated		ZB_143	143	New 3D Model
Z_134	134_1	1501	New 3D Model		ZB_144	144	New 3D Model
	134_2	1502	New 3D Model		ZB_145	145	New 3D Model
S50	S50_100	100	Carried out	VC1	VC1_111	111	Carried out
	S50_101	101	Updated		VC1_112	112	Carried out
	S50_102	102	Carried out		VC1_113	113	Carried out
	S50_103	103	Carried out		VC1_114	114	Carried out
	S50_104	104	Carried out	VC6	VC6_123	123	Carried out
Presqu'ile	PI_1	1110	Updated		VC6_124	124	Carried out
	PI_2	1120	Updated	Wish	Wish_1350	1350	Carried out
	PI_2A	1125	Updated		Wish_1360	1360	Carried out
	PI_3	1130	Updated	South	ZS_130	130	Carried out
	PI_4	1140	Updated		ZS_131	131	Carried out
Dubuisson	DUB1	1201	Updated		ZS_132	132	Carried out
	DUB2	1202	Updated		ZS_133	133	Carried out
	DUB3	1203	Updated		ZS_135	135	Carried out
	DUB4	1204	New 3D Model	K109	K109_1	181	Carried out
	DUB_n1	1220	Updated		K109_2	182	Carried out
	DUB_n2	1230	Updated		K109_3	183	Carried out
	DUB_n4	1240	New 3D Model		K109_4	184	Carried out
Martin	MART_1310	1310	Carried out	Northwest	NW_1410	1410	Updated
	MART_1320	1320	Carried out		NW_1420	1420	Updated
	MART_1330	1330	Carried out		NW_1430	1430	New 3D Model

14.4.1 Geological Model

The Herein Block Model comprises 94 mineralized lenses. Of these, 56 lenses were updated since the 2024 Mineral Resource Estimate (MRE) using information from new drilling, while 24 lenses were carried forward from the 2024 MRE without modification (Table 14.1). The remaining 14 lenses were newly interpreted and modelled in three dimensions (3D) for the 2025 MRE to incorporate additional mineralized domains into the block model. Three lenses, 2320 and 2330 from Wesdome Domains and 184 from K109, have no Resources reported, since they fell out of Inferred categorization.

Geological wireframes were interpreted and constructed in Leapfrog Geo™ by Christopher Grondin (Resource Engineer) and Serge Gonthier (Principal Geologist, Resources and Geology) of Wesdome, with input from Bruno Turcotte (Superintendent, Geology) of Wesdome.

All the mineralized lenses have a minimum thickness between 2 and 3 m, the Wesdome Zone have a minimum thickness fixed to 2.4 m based on their low dipping angle (Figure 14.3 and Figure 14.4). They were modelled using geological knowledge of the deposit, grade continuity and geological information provided in the DDH logs (i.e., lithology, alteration and structure) and in the historical underground mappings. Geological interpretation of the basalt and schists units was also carried out for the purpose of better constraining the mineralized lenses. These zones are further described in Section 7.3 of this report.

As the Kiena Deep A lenses are folded, they were subdivided into four subdomains representing the two limbs, the central part and the hinge for each mineralized envelope (Figure 14.5). The two parts of the Kiena Deep A1 are also represented.

The QPs reviewed the geological model in 3D view, plan view and cross-section and is of the opinion that the level of detail to which the geology model was constructed represents adequatelythe Complexity of the deposit. In the QPs opinion, the geological model is appropriate for the size,grade distribution and geometry of the mineralized lenses and is suitable for the resource estimationof the Kiena Mine Complex.

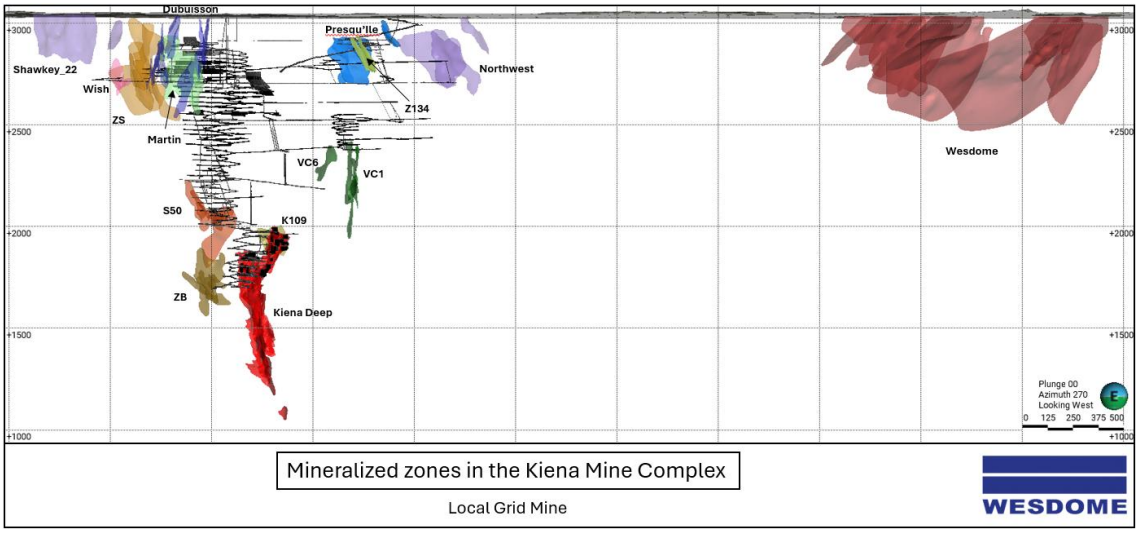


Figure 14.3 3D view showing the mineralized zones and undergrounds voids in theKiena Mine Complex area looking west

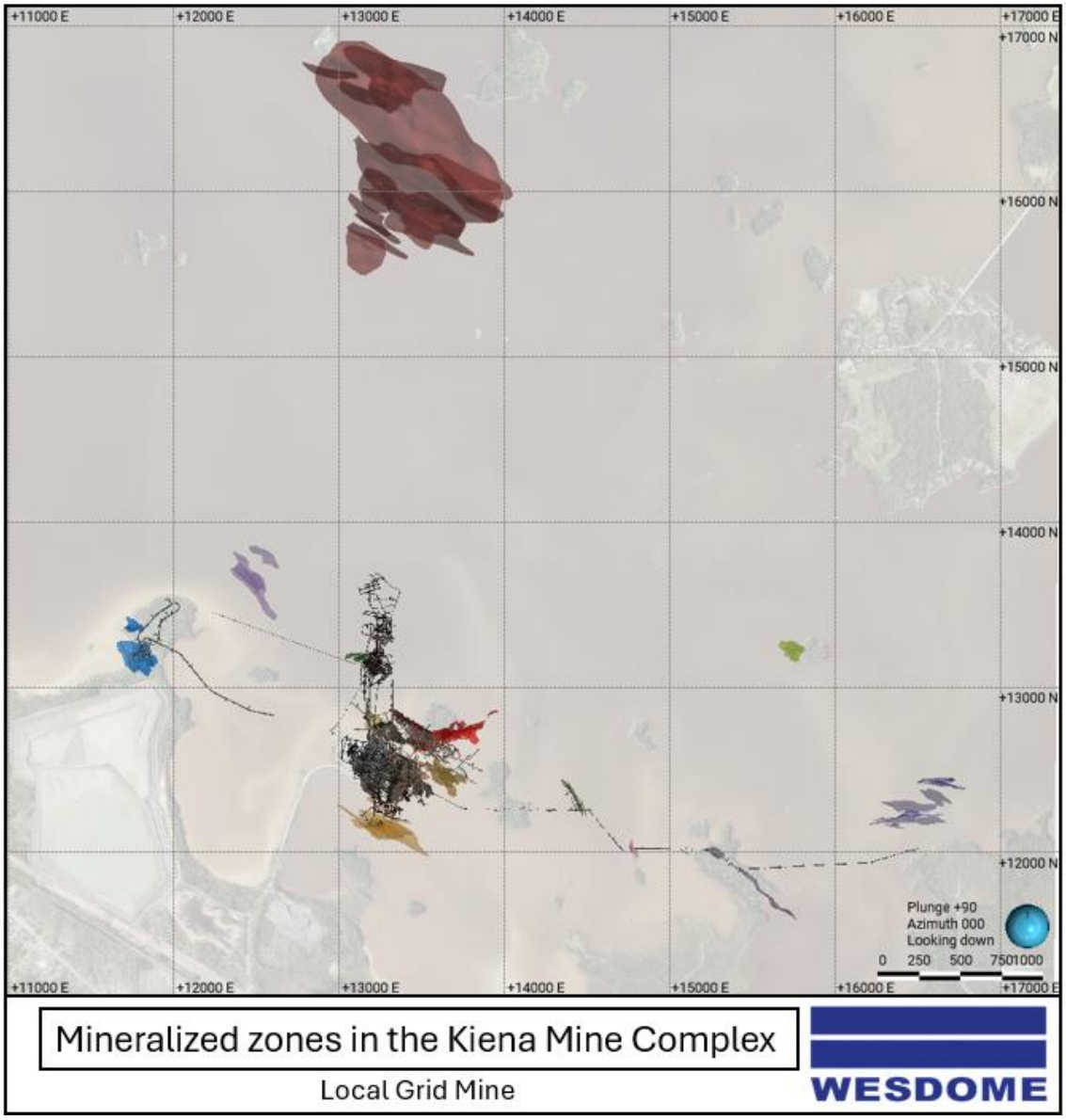


Figure 14.4 Plan view showing the mineralized zones and undergrounds drifts in the Kiena Mine Complex area looking down

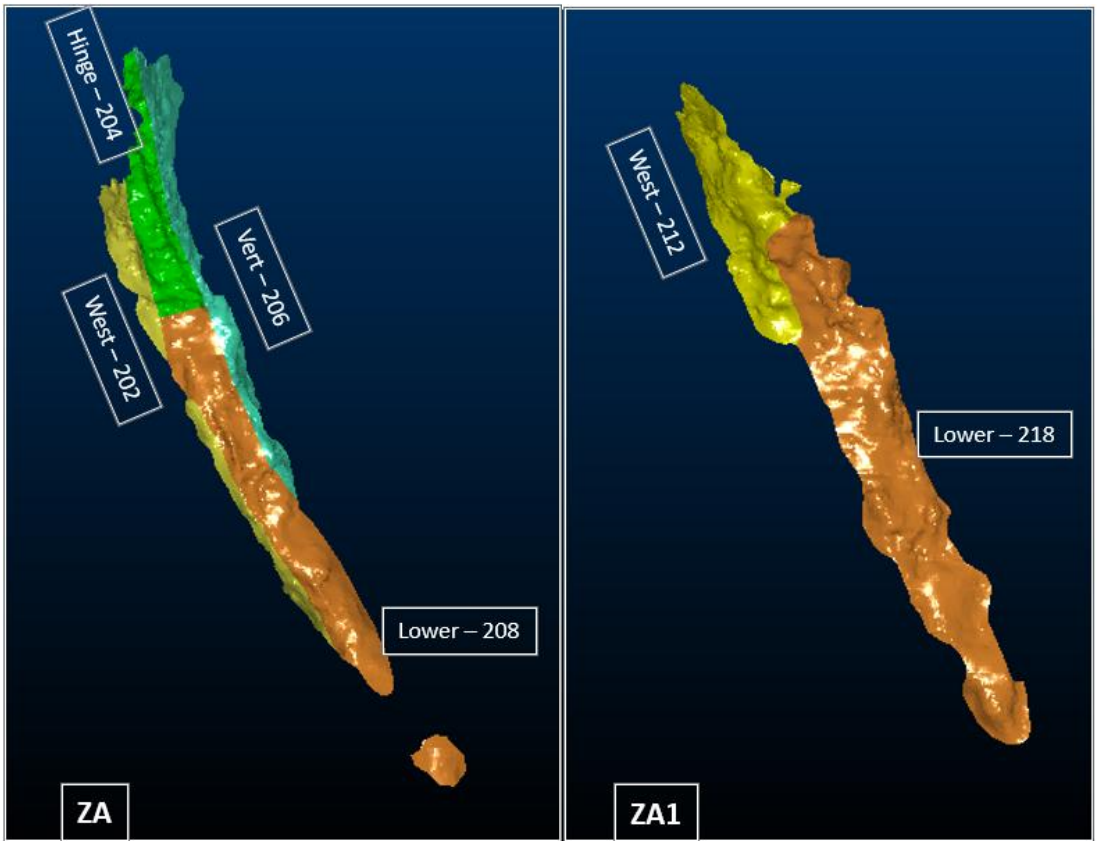


Figure 14.5 Subdomains of the Kiena Deep Zone A (ZA and ZA1 lenses)

14.4.2 Voids Model

The void model for the 2025 MRE was provided by Wesdome. Figure 14.4 presents a 3D view of the underground voids used for the 2025 MRE. Validations were made to make sure that any newdevelopment was considered for the 2025 MRE.

14.4.3 Overburden and Topography

The topographic surface and the overburden-rock interfaces were created by Wesdome in Leap Frog software and are based on the collar elevation coordinates of the drillholes and the lithological description.

14.5 Data Analysis

14.5.1 Raw Assay Statistics

All raw assay data that intersected the mineralized lenses were assigned individual blockcodes. These coded intercepts were used to produce basic statistics on sample lengths and grades.

A total of 28494 assays is included in the modelled wireframe. Basic statistics on the raw assays are presented in Table 14.2.

Table 14.2 Basic statistics on raw assays for each zone

Zone	Mineralized lens	Raw assays					
		Blockcode	Count sample	COV	Max (g/t Au)	Min (g/t Au)	Mean (g/t Au)
VC1	VC1_111	111	57	3.20	178.50	0.00	7.79
	VC1_112	112	465	3.15	147.57	0.00	3.30
	VC1_113	113	95	7.38	2,578.56	0.00	35.85
	VC1_114	114	416	2.03	51.95	0.00	2.55
VC6	VC6_123	123	254	2.13	54.93	0.00	3.03
	VC6_124	124	138	2.28	35.80	0.00	1.70
South	ZS_130	130	551	2.93	96.62	0.00	1.57
	ZS_131	131	460	1.94	43.50	0.00	2.36
	ZS_132	132	554	1.66	28.80	0.00	1.60
	ZS_133	133	161	4.30	105.60	0.00	1.99
	ZS_135	135	153	2.88	36.50	0.00	1.39
Kiena Deep A	ZA	200	7327	4.58	2769.58	0.00	17.47
	ZA1	210	3368	6.07	4190.00	0.00	20.96
	ZA1_WOD	211	39	2.34	40.70	0.00	3.22
	ZA1_216	216	268	3.86	556.78	0.00	12.47
	ZA2_222	222	207	3.50	228.56	0.01	6.45
	ZA2_223	223	40	2.64	292.00	0.02	22.79
	ZA2_226	226	559	3.67	771.00	0.00	15.34
	ZA2_228	228	272	3.51	222.00	0.00	6.17
	H1ZA_310	310	349	6.65	908.00	0.00	8.06
	H2_320	320	60	1.98	58.32	0.01	6.53
	H3_330	330	96	2.60	393.00	0.01	20.06
	H5_350	350	54	4.18	335.00	0.00	12.33
	BZA1_410	410	675	3.19	153.50	0.00	3.90
	BZA2_420	420	276	3.57	251.00	0.01	5.30
	BZA5_450	450	115	2.39	174.00	0.07	8.89
	SNK_510	510	237	3.71	1115.00	0.01	30.09
	FWZ_610	610	205	3.38	272.00	0.01	6.95
	FWZ_620	620	196	3.34	504.00	0.01	13.11
	FWZ_630	630	89	2.94	291.00	0.01	15.85
	FWZ_640	640	220	3.36	298.00	0.00	8.38
	FWZ_650	650	213	4.06	1330.00	0.00	30.80
	FWZ_655	655	57	3.55	555.00	0.00	23.05
	FWZ_660	660	76	2.80	276.00	0.01	15.58
	FWZ_665	665	57	2.71	101.00	0.01	8.36
	FWZ_670	670	39	1.42	136.00	0.06	22.21

Zone	Mineralized lens	Raw assays					
		Blockcode	Count sample	COV	Max (g/t Au)	Min (g/t Au)	Mean (g/t Au)
S50	S50_100	100	489	1.46	42.17	0.00	1.92
	S50_101	101	453	1.69	52.64	0.00	2.28
	S50_102	102	821	3.03	256.67	0.00	3.67
	S50_103	103	259	3.78	134.46	0.00	2.44
	S50_104	104	181	3.09	58.96	0.00	2.30
B Zone	142	142	69	4.18	137.00	0.01	3.96
	143	143	61	1.82	53.77	0.02	4.13
	144	144	195	2.00	72.37	0.00	3.88
	145	145	51	1.26	16.39	0.03	2.15
Presqu'ile	PI_1	1110	37	1.58	35.10	0.01	4.66
	PI_2	1120	409	2.38	239.36	0.00	9.16
	PI_2A	1125	198	2.51	193.00	0.00	11.82
	PI_3	1130	25	2.87	151.00	0.01	12.01
	PI_4	1140	20	2.78	155.88	0.02	13.79
Dubuisson	DUB South 1	1201	675	2.52	109.96	0.00	3.51
	DUB South 2	1202	379	2.64	121.22	0.00	5.03
	DUB South 3	1203	246	2.42	101.50	0.00	4.28
	DUB South 4	1204	36	3.16	103.50	0.03	5.70
	DUB_N1	1220	181	6.93	654.34	0.01	7.20
	DUB_N2	1230	152	2.81	101.41	0.01	5.12
	DUB_N4	1240	81	2.07	41.94	0.01	2.61
Martin	Mart_1310	1310	904	2.34	173.44	0.00	3.64
	Mart_1320	1320	25	3.20	207.86	0.00	15.30
	Mart_1330	1330	121	1.59	27.77	0.01	2.44
NorthWest	NW_1410	1410	156	2.63	82.80	0.00	3.41
	NW_1420	1420	110	1.46	24.34	0.00	2.73
	NW_1430	1430	36	2.34	39.94	0.00	4.20
Z134	Z134_1	1501	49	4.39	126.50	0.00	4.13
	Z134_2	1502	25	2.38	30.01	0.01	2.79
Wish	Wish_1350	1350	86	1.76	33.80	0.00	3.04
	Wish_1360	1360	34	3.11	105.54	0.00	5.91
K109	K109_1	181	66	1.20	13.85	0.01	2.93
	K109_2	182	69	2.15	42.00	0.00	2.72
	K109_3	183	45	1.19	30.00	0.02	4.23
	K109_4	184	21	0.98	12.05	0.02	3.13

14.5.2 Compositing

Compositing of drillhole samples was performed in order to homogenize the database for the statistical analysis and remove any bias associated with the sample length that may exist in the original database. The composite length was determined using original sample length statistics andthe thickness of the mineralized zones.

Figure 14.6 shows the sample length distribution within the mineralized lenses for the Kiena Deep Zone A Zone.

As a result, 28,525 composites from DDH with an average length of 1 m were generated with a minimal length of 0.25 m, when necessary, to redistribute the tails evenly between all the composites of the drillhole.

Also, there were 3,705 composites from Channels with an average of 1 m that were generated with the same requirement, when necessary, to be used for the local evaluation in the BM where mined out area were found accessible.

Compositing was done within each mineralized lens in order to ensure that composite samples did not cross domain boundaries.

Grades of 0.00 g/t Au were assigned to all missing intervals prior to the compositing process.

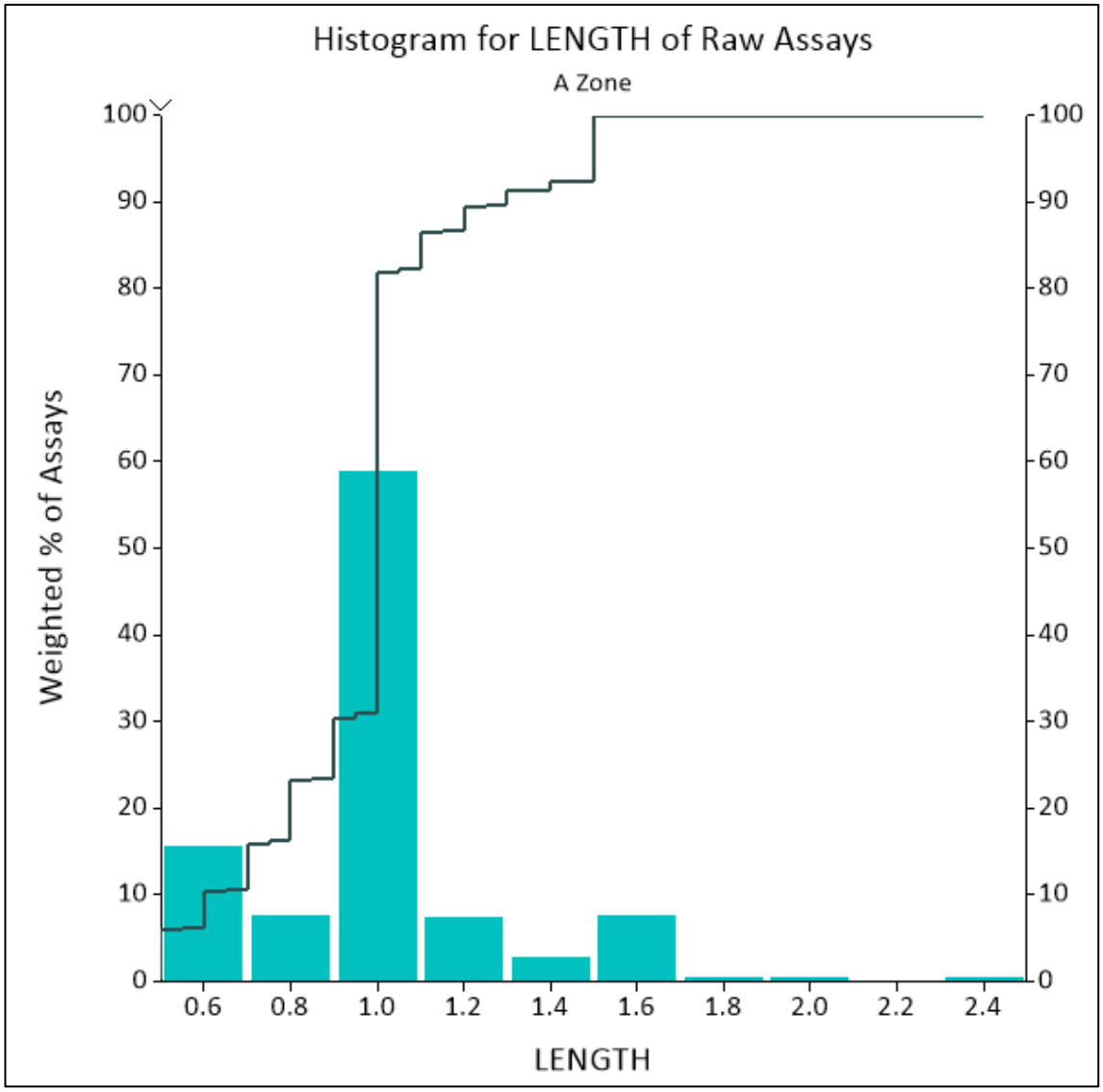


Figure 14.6 Example of sample length distribution within the Kiena Deep A Zone

14.5.3 Outlier Handling

An outlier is an observation that appears to be inconsistent with most of the data. It is common practice to statistically examine the higher grades within a population and to trim the outlier to a lower grade value based on the results of a statistical study. The capping is performed on high-grade values considered to be outliers. High-grade capping was done on the composited assay data and established on a per zone or lens type basis. To facilitate statistical studies, mineralized lenses were sometimes grouped by geographic location.

In addition, for some lenses of the Kiena Deep Zone A Zone, a three-step capping strategy was conducted. In this strategy, three capping values are established, and the selected capping value decreases as interpolation search distances increase. This strategy allows to restrict the impact ofhigh grades at greater distance from the drillhole intersect by using lower capping values (Table 14.3).

The capping values were defined by searching for abnormal breaks or change of slope on the grade distribution probability plot while making sure that the coefficient of variation of the capped data was ideally lower than, or around 2.00 and no more than 10% of the total contained metal was enclosed within the first 1% of the highest-grade samples. The use of various statistical methods allows for a selection of the capping threshold in a more objective and justified manner.

Basic statistics for composite assays and capped composites (DDH) are summarized in Table 14.3 and capped composites (Channels) in Table 14.4. For the mineralized lenses where a multi-capping strategy was applied, the statistics of the capped composites correspond to the statistics of the first capping value. Figure 14.7 to Figure 14.12 show graphs supporting the capping threshold decisions (DDH). Other figures supporting the capping threshold decisions (DDH) can be found in Appendix II. Figure 14.13 to Figure 14.15 showgraphs supporting the capping threshold decisions (Channels). Other figures supporting the capping threshold decisions (Channel) can be found in Appendix II.

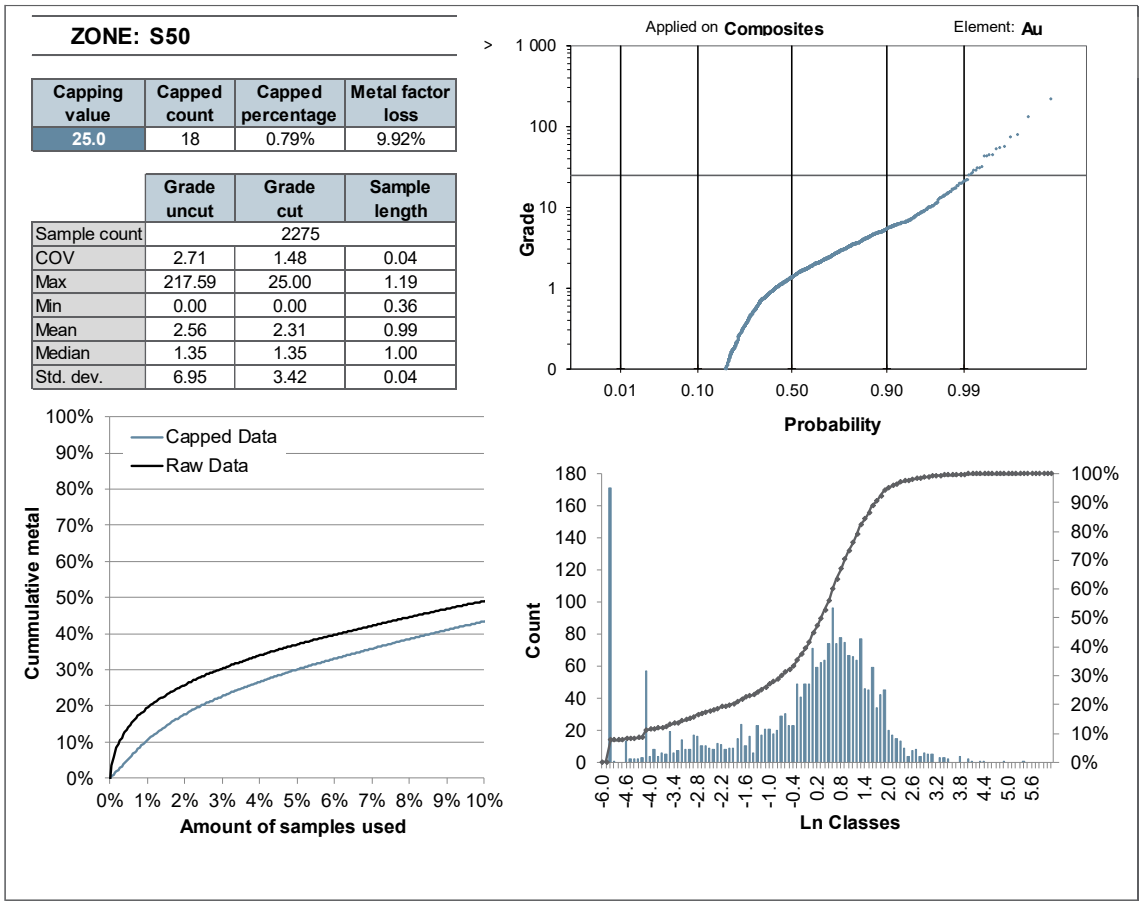


Figure 14.7 Graphs supporting (DDH) capping threshold decisions on composites for the S50 Zone(blockcodes 100 to 104)

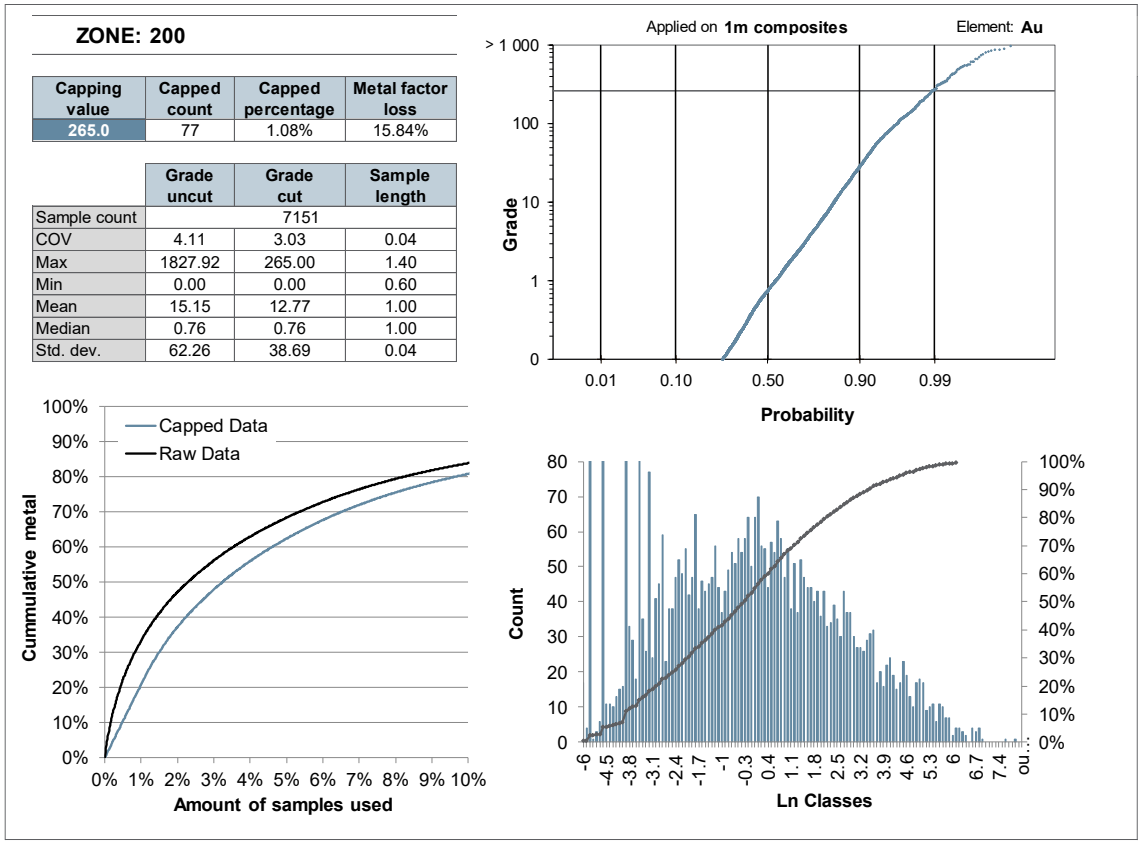


Figure 14.8 Graphs supporting (DDH) capping threshold decisions on composites for the Kiena Deep A Zone subdomains (blockcodes 202, 204, 206 and 208)

Note that the graphs and the statistics are presented for the first capping value.

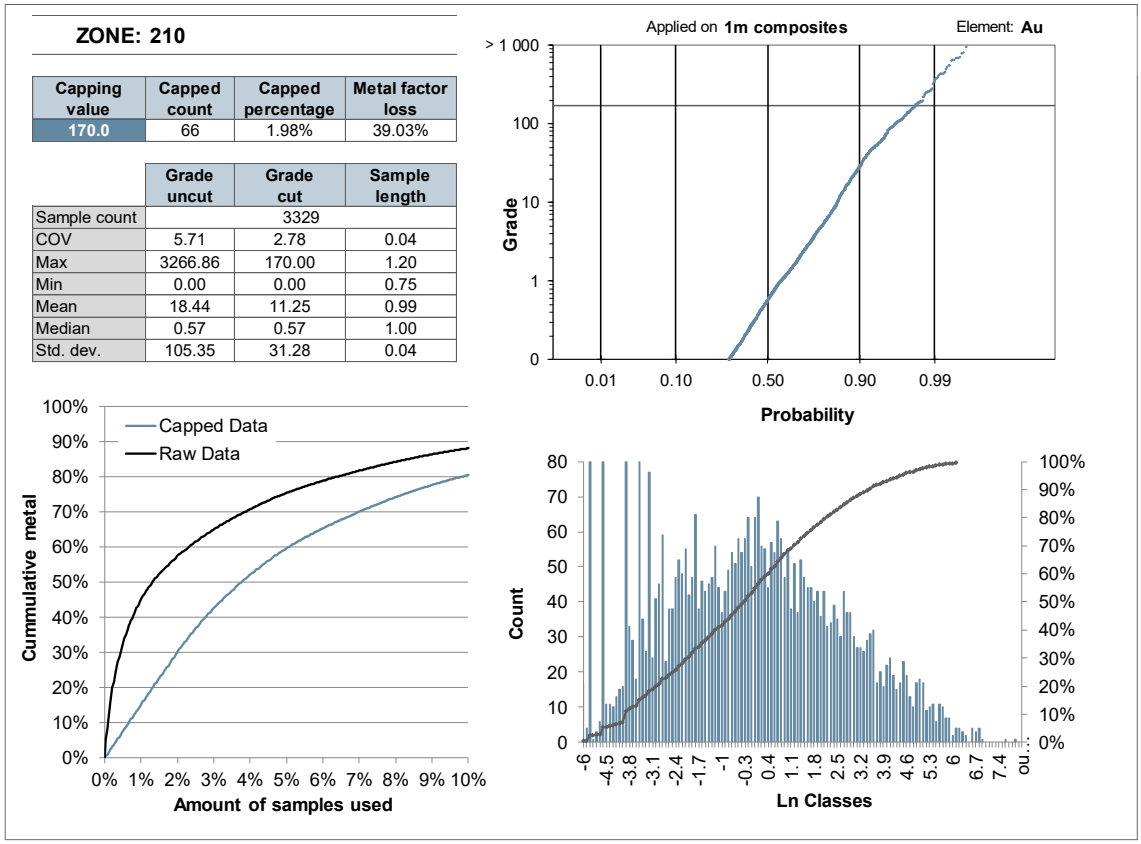


Figure 14.9 Graphs supporting (DDH) capping threshold decisions on composites for the Kiena Deep, A1 Zone subdomains (blockcodes 212, 218) Including ZA1 Wod 211 (West of Dyke)

Note that the graphs and the statistics are presented for the first capping value.

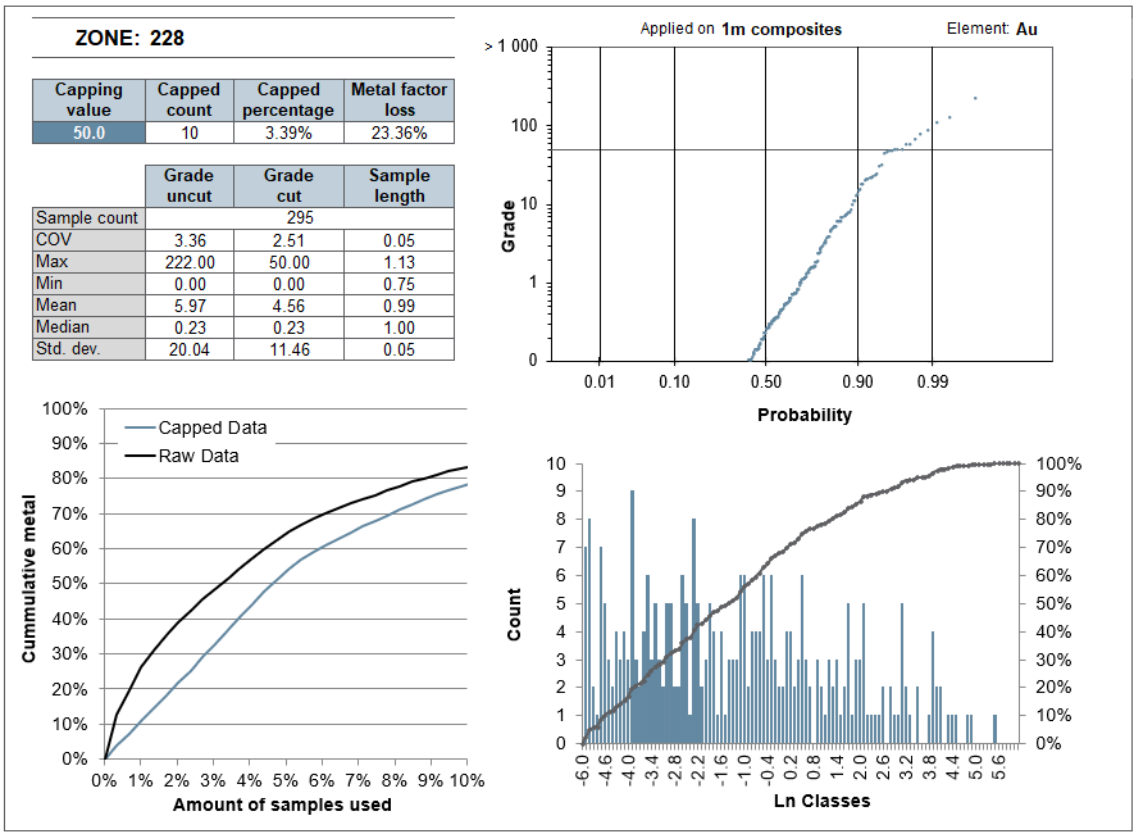


Figure 14.10 Graphs supporting (DDH) capping threshold decisions on composites for the Kiena Deep A2 Zone 228, (blockcode 228)

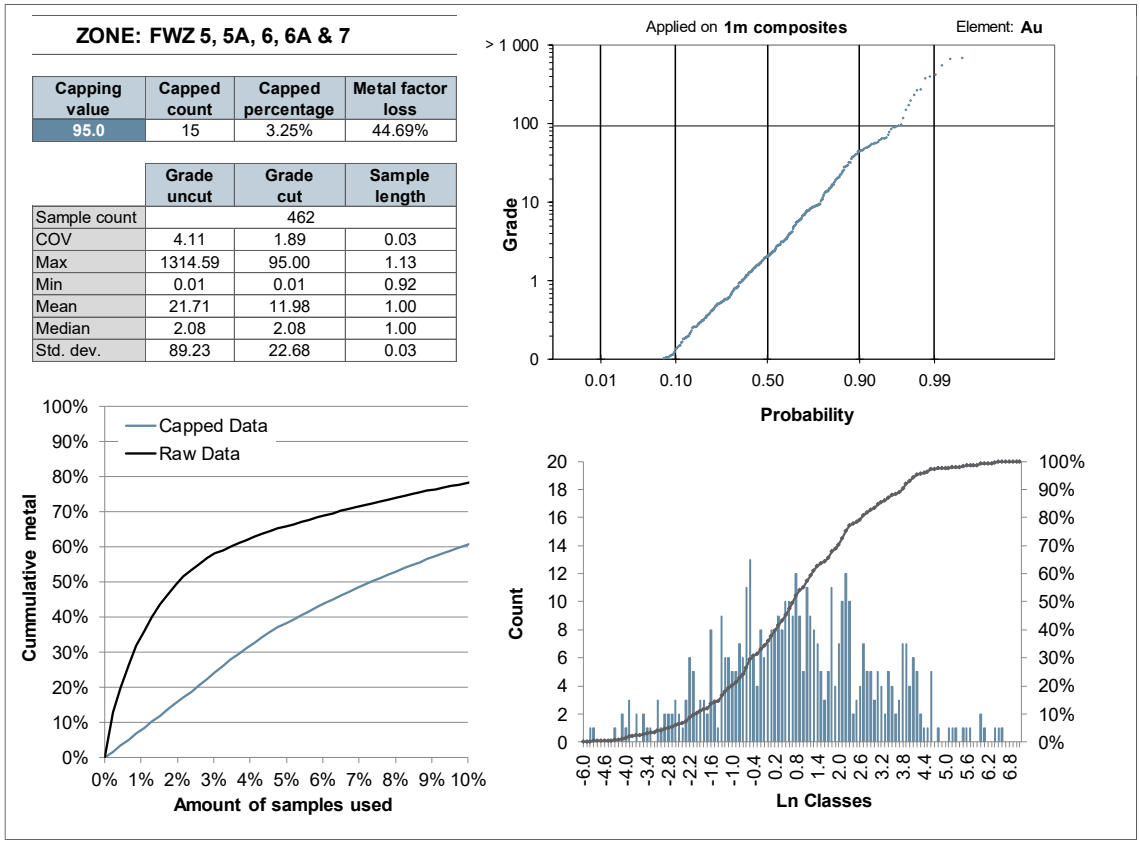


Figure 14.11 Graphs supporting (DDH) capping threshold decisions on composites for the Kiena Deep, FWZ5, FWZ5A, FWZ6, FWZ6A and FWZ7 Zones, (blockcodes 650, 655, 660, 665 and 670)

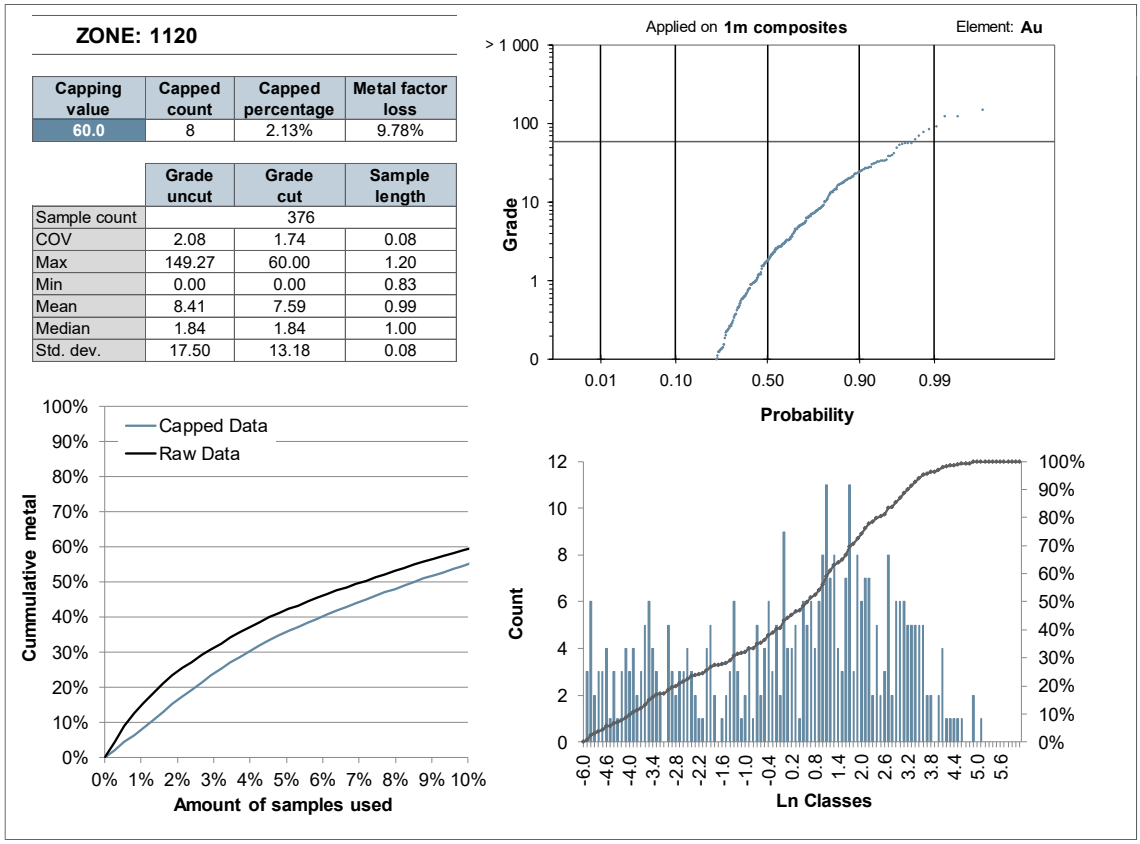


Figure 14.12 Graphs supporting (DDH) capping threshold decisions on composites for the Presqu'ile, PR2 Zone, (blockcode 1120)

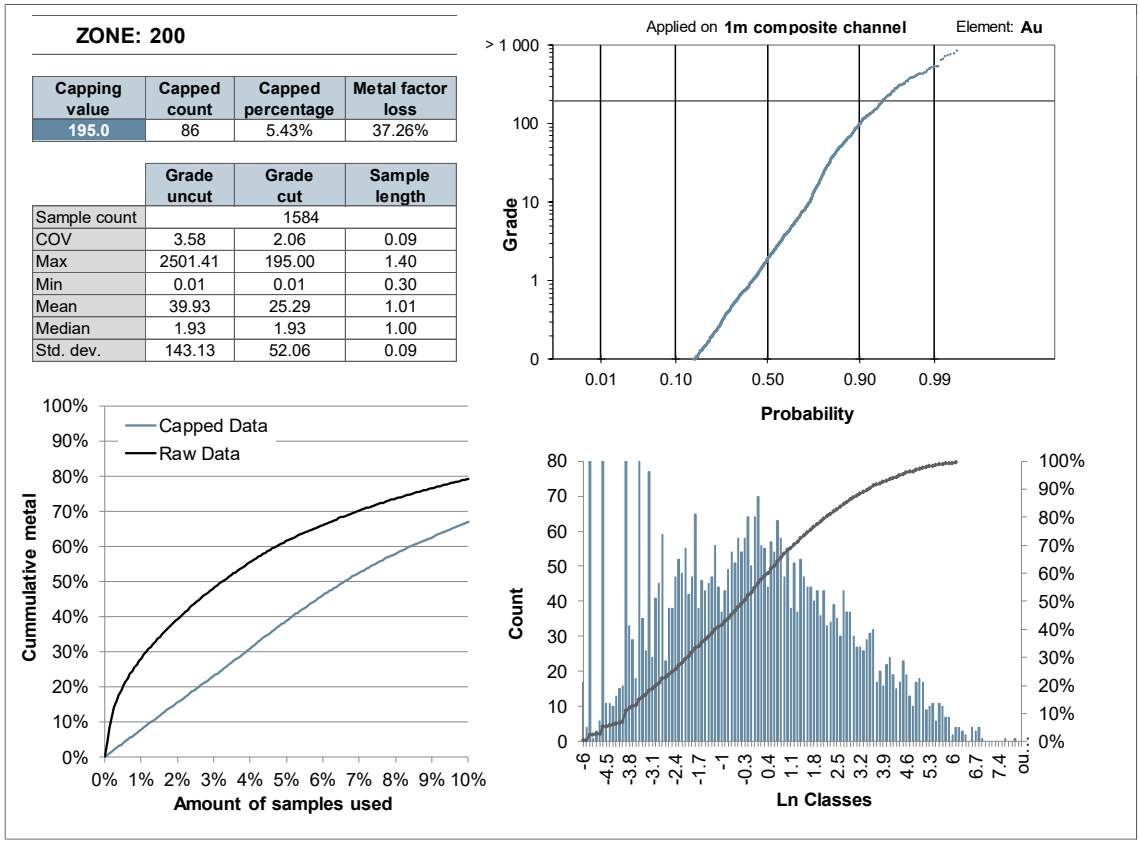


Figure 14.13 Graphs supporting (Channels) capping threshold decisions on composites for the Kiena Deep A Zone, (blockcode 200)

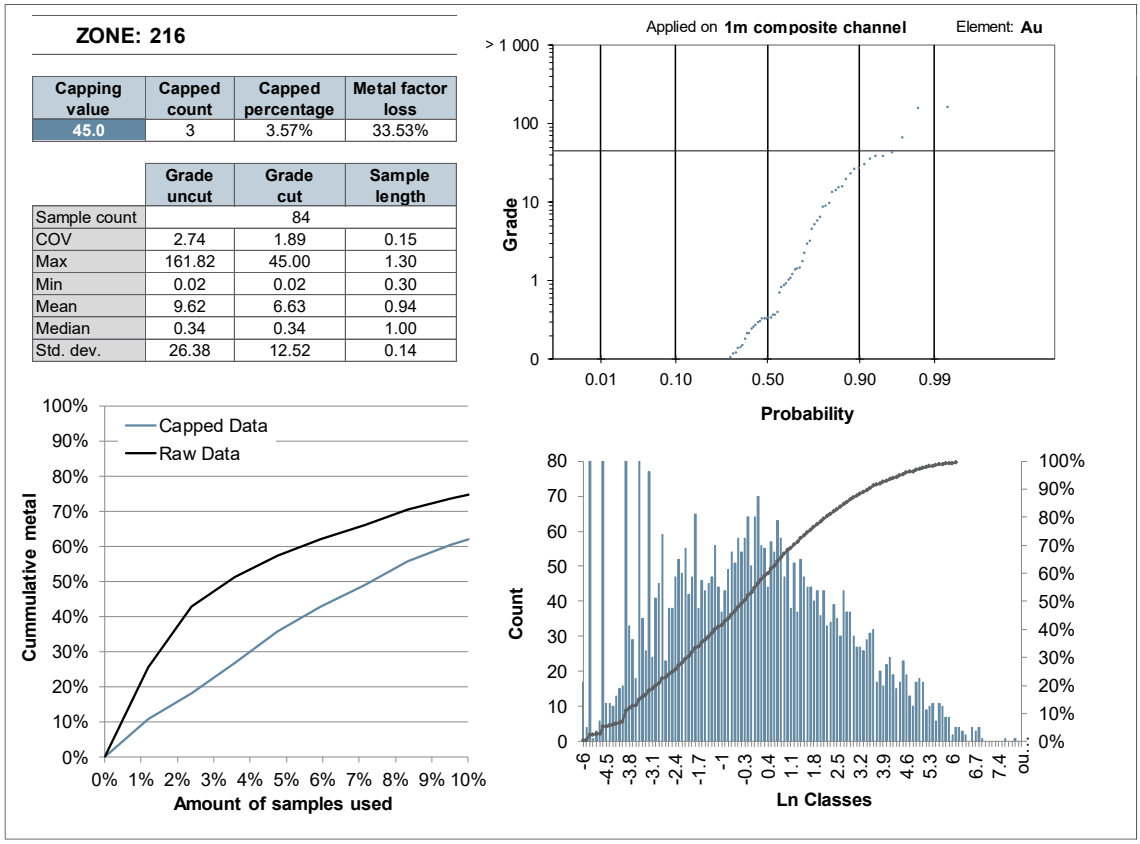


Figure 14.14 Graphs supporting (Channels) capping threshold decisions on composites for the Kiena Deep A1_216 Zone, (blockcode 216)

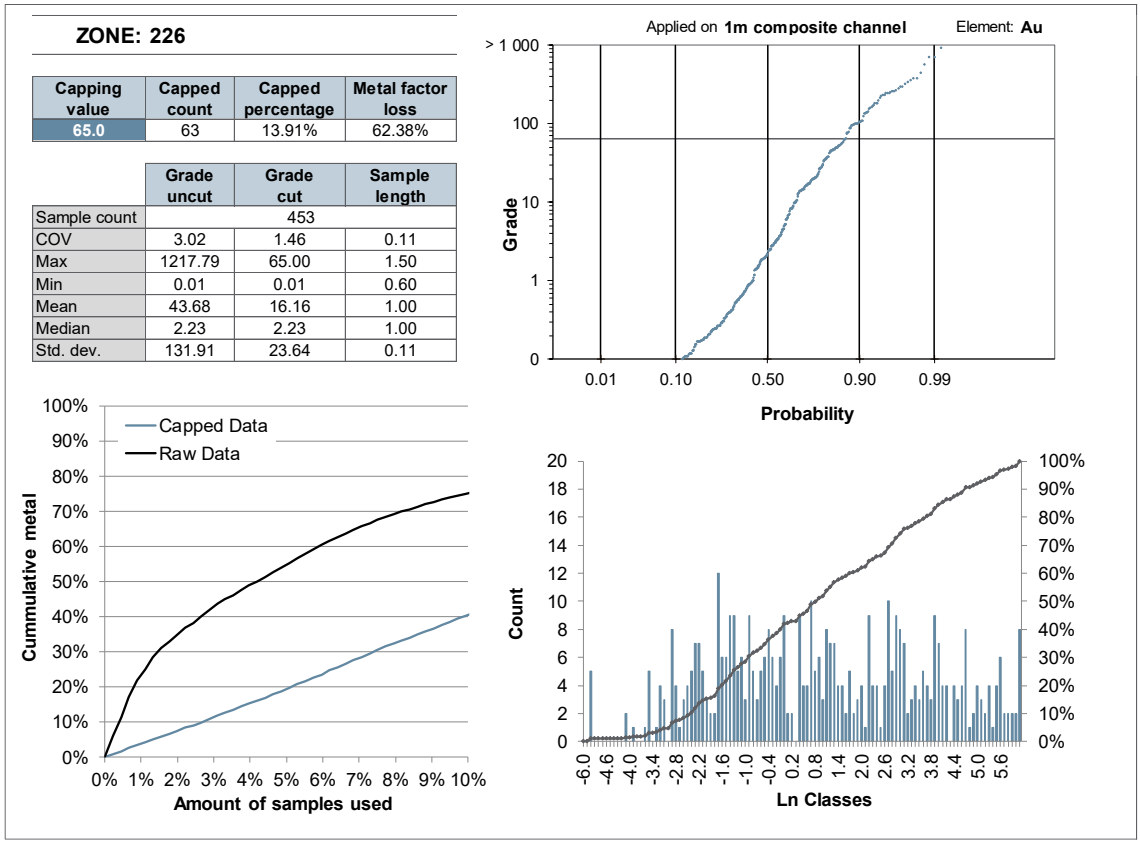


Figure 14.15 Graphs supporting (Channels) capping threshold decisions on composites for the Kiena Deep A2_226 Zone, (blockcode 226)

Table 14.3 Basic statistics on composites and high-grade capping value from DDH samples for each zone

NAME (for information)	Rockcode	Zone	CAPPING on 1m COMPOSITES Au g/t													
			Nsample	Uncut COV	Max	Min	Uncut Mean	Median	Standard Deviation	Skewness	2025 Capping (Au g/t)	Nb Capped	Cut Mean	Cut COV	% Samples Capped	%Cut_Metal Factor
Zone S50	S50_100	100	2275	2.71	217.59	0.00	2.56	1.35	6.95	17.92	25	18	2.31	1.48	0.79%	9.93%
	S50_101	101														
	S50_102	102														
	S50_103	103														
	S50_104	104														
Zone B	ZB_142	142	395	2.47	137.00	0.01	3.36	1.77	8.28	11.74	45	3	3.12	1.67	0.76%	7.21%
	ZB_143	143														
	ZB_144	144														
	ZB_145	145														
Zone VC1	VC1_111	111	1098	11.00	1738.79	0.00	4.87	0.51	53.59	30.98	30	19	2.64	2.04	1.73%	44.84%
	VC1_112	112														
	VC1_113	113														
	VC1_114	114														
Zone VC6	VC6_123	123	443	2.03	47.86	0.00	2.51	0.77	5.09	4.88	25	5	2.37	1.76	1.13%	5.54%
	VC6_124	124														
Zone South	ZS_130	130	2345	2.72	105.60	0.00	1.49	0.34	4.04	15.11	20	10	1.39	1.83	0.43%	6.03%
	ZS_131	131														
	ZS_132	132														
	ZS_133	133														
	ZS_135	135														

NAME (for information)	Rockcode	Zone	CAPPING on 1m COMPOSITES Au g/t													
			Nsample	Uncut COV	Max	Min	Uncut Mean	Median	Standard Deviation	Skewness	2025 Capping (Au g/t)	Nb Capped	Cut Mean	Cut COV	% Samples Capped	%Cut_Metal Factor
K109	K109_1	181	244	1.43	36.31	0.01	2.86	1.16	4.08	3.38	16	2	2.75	1.26	0.82%	3.83%
	K109_2	182														
	k109_3	183														
	k109_4	184														
Kiena Deep Zone A	ZA	200	7151	4.11	1827.92	0.00	15.15	0.76	62.26	10.61	265, 100, 60	77	12.82	3.03	1.08%	15.84%
Kiena Deep Zone A1	ZA1	210	3329	5.71	3266.86	0.00	18.44	0.57	105.35	16.01	170,100, 60	66	11.25	2.78	1.98%	39.03%
Kiena Deep Zone A1	ZA1_216	216	209	2.80	278.79	0.00	11.38	0.47	31.92	4.85	55	13	7.65	2.02	6.22%	32.51%
Kiena Deep Zone A2	ZA2_222	222	196	2.89	120.00	0.01	5.89	0.44	17.02	4.78	25	10	3.65	1.87	5.10%	38.43%
	ZA2_223	223	34	2.05	191.82	0.03	19.20	4.23	39.37	3.34	100	2	15.55	1.66	5.88%	19.33%
	ZA2_226	226	487	2.82	440.65	0.01	12.21	0.72	34.44	6.47	65	25	9.01	1.92	5.13%	26.64%
	ZA2_228	228	295	3.36	222.00	0.00	5.97	0.23	20.04	6.43	50	10	4.56	2.51	3.39%	23.36%
Hanging Wall 1 - Zone A	H1ZA	310	368	7.28	908.00	0.01	6.93	0.07	50.46	15.90	30	15	2.81	2.52	4.08%	60.72%
Vein in Basalt	H2_320	320	55	1.75	43.90	0.01	6.04	0.68	10.59	2.30	NA	0	6.04	1.75	0.00%	0.00%
Vein in Basalt	H3_330	330	131	2.73	318.67	0.00	13.81	1.21	37.74	5.48	50	8	8.90	1.71	6.11%	35.09%
Vein in Basalt	H5_350	350														
Basalt Zone	BZA_1	410	1283	2.88	201.04	0.00	4.46	1.37	12.86	8.44	35	24	3.64	1.81	1.87%	18.47%
	BZA_2	420														
	BZA_5	450														
Sneak Zone	SNK_510	510	246	3.65	1115.00	0.01	28.76	0.75	104.98	6.70	110	13	14.46	2.11	5.28%	49.11%
Footwall	FWZ1	610	761	3.27	464.43	0.00	9.39	1.61	30.68	7.91	85	18	7.42	2.24	2.37%	20.69%
	FWZ2	620														
	FWZ3	630														
	FWZ4	640														

NAME (for information)	Rockcode	Zone	CAPPING on 1m COMPOSITES Au g/t													
			Nsample	Uncut COV	Max	Min	Uncut Mean	Median	Standard Deviation	Skewness	2025 Capping (Au g/t)	Nb Capped	Cut Mean	Cut COV	% Samples Capped	%Cut_Metal Factor
	FWZ5	650	462	4.11	1314.59	0.01	21.71	2.08	89.23	9.39	95	15	11.98	1.89	6.25%	44.69%
	FWZ5A	655														
	FWZ6	660														
	FWZ6A	665														
	FWZ7	670														
Presqu'île	PR_2	1120	376	2.08	149.27	0.00	8.41	1.84	17.50	4.23	60	8	7.59	1.74	2.13%	9.78%
	PR_2A	1125	193	2.39	193.00	0.00	11.45	0.30	27.32	3.46	85	9	10.18	2.14	4.66%	11.31%
	PR_1	1110	81	2.89	151.00	0.01	9.67	0.62	27.97	4.06	35	5	4.94	1.86	6.17%	49.12%
	PR_3	1130														
	PR_4	1140														
Dubuisson	DUB_1	1201	706	2.29	68.80	0.01	3.43	0.79	7.86	4.99	55	5	3.38	2.22	0.71%	1.46%
	DUB_2	1202	387	2.26	118.31	0.00	4.92	1.06	11.11	5.24	45	7	4.51	1.88	1.81%	8.43%
	DUB_3	1203	268	2.14	50.77	0.01	3.82	0.55	8.18	3.58	NA	0	3.82	2.14	0.00%	0.00%
	DUB_4	1204	36	2.46	56.83	0.03	4.73	1.16	11.63	3.65	55	1	4.68	2.44	2.78%	1.06%
	DUB_N1	1220	190	7.30	588.91	0.01	5.93	0.18	43.28	13.02	55	2	2.92	2.67	1.05%	50.97%
	DUB_N2	1230	147	2.60	98.01	0.01	4.86	0.48	12.65	5.16	45	3	4.12	2.03	2.04%	15.33%
	DUB_N4	1240	90	1.70	32.16	0.01	2.44	1.02	4.15	4.68	NA	0	2.44	1.70	0.00%	0.00%
Martin	Mart_1310	1310	1034	2.51	166.91	0.00	3.44	1.27	8.62		30	8	3.08	1.52	0.77%	10.69%
	Mart_1320	1320														
	Mart_1330	1330														
Wish	Wish_1350	1350	126	2.56	80.35	0.00	3.28	0.34	8.40	6.71	30	1	2.88	1.87	0.79%	11.70%
	Wish_1360	1360														
NorthWest	NW_1410	1410	302	2.36	82.80	0.00	3.26	1.32	7.69	6.96	40	2	3.01	1.87	0.66%	8.32%
	NW_1420	1420														
	NW_1430	1430														

NAME (for information)	Rockcode	Zone	CAPPING on 1m COMPOSITES Au g/t													
			Nsample	Uncut COV	Max	Min	Uncut Mean	Median	Standard Deviation	Skewness	2025 Capping (Au g/t)	Nb Capped	Cut Mean	Cut COV	% Samples Capped	%Cut_Metal Factor
Z_134	1501	1501	67	3.58	87.30	0.01	3.10	0.41	11.11		25	1	2.17	2.25	1.49%	31.08%
	1502	1502														
Shawkey	s22_1510	1510	501	3.67	126.30	0.00	2.74	0.22	10.05	8.30	35	6	2.22	2.56	1.20%	18.76%
	s22_1520	1520														
Wesdome	W_A	2010									25	11	2.34	1.62	0.90%	7.77%
	W_A1	2020														
	W_AF	2030														
	W_AH	2040														
	W_AH1	2050														
	W_AH2	2060														
	W_AH3	2070														
	W_B	2110									25	1	1.76	1.61	0.34%	0.42%
	W_C	2120														
	W_D	2130														
	W_E	2210									25	2	2.75	1.50	0.35%	0.66%
	W_E0	2220														
	W_E1	2230														
	W_E3	2240														
	W_E4	2250														
	W_F2	2260														
	W_F4	2270														
	W_F6	2280														
	W_L	2310									25	1	2.76	1.59	0.79%	9.81%
	W_F	2320														
	W_F1	2330														

Table 14.4 Basic statistics on composites and high-grade capping value from Channels samples for each zone where Channels are available

NAME (for information)	Rockcode	Zone	Channel CAPPING on 1m COMPOSITES Au g/t													
			Nsample	Uncut COV	Max	Min	Uncut Mean	Median	Standard Deviation	Skewness	2025 Capping (Au g/t)	Nb_Capped	Cut Mean	Cut COV	%Samples Capped	%Cut_Metal Factor
Kiena Deep Zone A	ZA	200	1584	3.58	2501.41	0.01	39.93	1.93	143.13	9.62	195	86	25.29	2.06	5.43%	37.26%
Kiena Deep Zone A1	ZA1	210	543	3.05	1307.31	0.01	37.21	0.97	113.65	5.81	155	43	21.83	2.08	7.92%	40.21%
Kiena Deep Zone A1_216	ZA1_216	216	84	2.74	161.82	0.02	9.62	0.34	26.38	4.64	45	3	6.63	1.89	3.57%	33.53%
Kiena Deep Zone A2_226	ZA2	226	453	3.02	1217.79	0.01	43.68	2.23	131.91	5.92	65	63	16.16	1.46	13.91%	62.38%
Hanging Wall 1A	H1ZA	310	132	4.47	1105.27	0.00	23.58	0.16	105.47	8.59	30	16	5.88	1.77	12.12%	74.50%
Sneak Zone + H3	SNK_510 H3_330	510, 330	75	2.57	337.56	0.00	22.11	0.81	56.89	4.08	175	3	17.96	2.12	4.00%	17.25%
Martin	Mart_1310, Mart_1330	1310, 1330	590	2.45	253.50	0.01	5.95	2.50	14.59	11.44	6	180	3.00	0.82	30.51%	49.47%
Presqu'île	Pr_1, PR_2, PR_2A	1110, 1120, 1125	245	2.20	232.21	0.01	13.43	1.05	29.53	3.65	75	14	11.22	1.82	5.71%	16.14%

14.5.4 Density

Bulk density is an important parameter used to calculate tonnages for the estimated volumes derived from the resource-grade block model.

No new studies were prepared for the MRE 2025. The density established in the previous PFS have been used, the details for that study are reported below

The specific gravity (SG) measurement was determined by the water displacement method. A summary of the SG data is presented in Table 14.5.

Table 14.5 Summary of the density measurements

Lithology	Count SG	Min SG	Max SG	Average SG
1P	4	2.68	2.77	2.72
3G	5	2.85	2.97	2.90
I3	3	2.71	2.74	2.73
I3A	9	2.73	2.85	2.83
M16	5	2.86	2.97	2.91
M8	39	2.70	2.95	2.83
M8Tc	5	2.80	2.87	2.82
V10	5	2.86	3.00	2.92
V3B	23	2.73	2.94	2.83
V3Py	1	2.78	2.78	2.78
V3Stwk	9	2.72	2.97	2.84
V4	3	2.87	2.98	2.94
V4Ba	3	2.82	2.91	2.86
VN	7	2.70	2.93	2.80

For the 2025 MRE, a fixed density value of 2.80 was used for all mineralized zones of the Project corresponding to the density value used when the mine was operating and close to the average ofthe schist unit (M8/M8Tc), which hosts most of the mineralized zones.

A fixed density of 0.00 g/cm^3 was assigned to underground workings.

14.5.5 Variogram Analysis

A semi-variogram is a common tool used to measure the spatial variability within a lens. Typically,samples taken far apart will vary more than samples taken close to each other. A variogram gives ameasure of how much two samples taken from the same mineralized zone will vary in grade depending on the distance and orientation between those samples and therefore allowing building search ellipsoids and assigning kriging weights to be used during interpolation.

Three-dimensional directional variography using the Snowden Supervisor v9.1 software was carried out on the composites. Variograms were modelled in the three orthogonal directions to define a 3D ellipsoid for each unit. In some lenses where the number of composites was not sufficient to complete the variography study, the variography results of the most representative mineralized lens or of a group of mineralized lenses showing similar geological environment and azimuth/dip orientation were selected to establish the ranges of the search ellipsoids. The three directions of ellipsoid axes were set by using the variogram fans and visually confirmed with geological knowledge of the zone. Lag distances were set according to drillhole grid spacing specific to the structural domain analyzed.

Then, a mathematical model was interpreted to best-fit the shape of the calculated variogram for each direction. Three components were defined for the mathematical model: the nugget effect, the sill, and the range.

All variography tests were modelled with a nugget effect, as determined from the downhole semi- variograms and two spherical structures.

Only Material from DDH source were used for Variography. The Channels population were not considered, since it is used only in specific cases in ID^2 for local interpolation mixed with drill holes data.

Table 14.6 presents the chosen variogram model parameters for each zone. Figure 14.16 to Figure 14.18 illustrate examples of the variography results.

Table 14.6 Variogram model parameters for each mineralized zone

Zone	Blockcode	Nugget	First structure				Second structure			
			Sill	Range X (m)	Range Y (m)	Range Z (m)	Sill	Range X (m)	Range Y (m)	Range Z (m)
S50	100	0.23	0.23	20	10	5	0.54	28	20	10
	101	0.23	0.23	20	10	5	0.54	28	20	10
	102	0.23	0.23	20	10	5	0.54	28	20	10
	103	0.23	0.23	20	10	5	0.54	28	20	10
	104	ID[3]								
B	142	ID[3]								
	143	ID[3]								
	144	ID[3]								
	145	ID[3]								
VC1	111	0.23	0.3	25	18	6	0.47	50	35	10
	112	0.23	0.3	25	18	6	0.47	50	35	10
	113	0.3	0.41	25	15	5	0.29	40	30	10
	114	0.3	0.41	25	15	5	0.29	40	30	10
VC6	123	0.14	0.3	18	10	5	0.56	35	20	10
	124	0.14	0.3	18	10	5	0.56	35	20	10
South	130	0.05	0.64	15	15	5	0.31	45	32	8
	131	0.05	0.64	15	15	5	0.31	45	32	8
	132	0.05	0.64	15	15	5	0.31	45	32	8
	133	0.05	0.64	15	15	5	0.31	45	32	8
	135	0.05	0.64	15	15	5	0.31	45	32	8
Kiena Deep A	202	0.245	0.634	14	12	6	0.121	37	42	10
	204	0.345	0.371	8	4	4	0.283	55	25	15
	206	0.204	0.603	19	17	10	0.19	40	34	15
	208	0.1	0.613	16	11	10	0.28	65	25	15

Zone	Blockcode	Nugget	First structure				Second structure			
			Sill	Range X (m)	Range Y (m)	Range Z (m)	Sill	Range X (m)	Range Y (m)	Range Z (m)
	211_wod	0.24	0.08	20	15	10	0.68	40	35	15
	212	0.24	0.08	20	15	10	0.68	40	35	15
	216	0.252	0.551	10	4	4	0.197	35	20	15
	218	0.21	0.699	13	4	5	0.091	66	25	10
	222	0.244	0.639	5	12	5	0.117	20	15	10
	223	ID^2								
	226	0.252	0.551	10	4	4	0.197	35	20	15
	228	0.299	0.57	25	67	8	0.131	61	68	10
	310	0.204	0.603	19	17	10	0.19	40	34	15
	320	ID^2								
	330	0.197	0.606	6	5	2	0.197	33	17	10
	350	0.197	0.606	6	5	2	0.197	33	17	10
	410	0.2	0.317	8	3	5	0.483	45	40	9
	420	0.242	0.661	4	9	1	0.097	20	20	10
	450	ID^2								
	510	0.3	0.39	17	14	10	0.31	30	26	15
	610	ID^2								
	620	ID^2								
	630	ID^2								
	640	ID^2								
	650	ID^2								
	655	ID^2								
	660	ID^2								
	665	ID^2								
	670	ID^2								

Zone	Blockcode	Nugget	First structure				Second structure			
			Sill	Range X (m)	Range Y (m)	Range Z (m)	Sill	Range X (m)	Range Y (m)	Range Z (m)
Presqu'île	1110	ID^3								
	1120	ID^3								
	1125	ID^3								
	1130	ID^3								
	1140	ID^3								
Dubuisson	1201	ID^3								
	1202	ID^3								
	1203	ID^3								
	1204	ID^3								
	1220	ID^3								
	1230	ID^3								
	1240	ID^3								
K109	181	ID^2								
	182	ID^2								
	183	ID^2								
	184	ID^2								
Martin	1310	0.15	0.61	17	17	10	0.24	35	30	16
	1320	0.15	0.61	17	17	10	0.24	35	30	16
	1330	0.15	0.61	17	17	10	0.24	35	30	16
NorthWest	1410	ID^3								
	1420	ID^3								
	1430	ID^3								
Wish	1350	ID^2								
	1360	ID^2								
Z_134	151	ID^3								
	1502	ID^3								

Zone	Blockcode	Nugget	First structure				Second structure			
			Sill	Range X (m)	Range Y (m)	Range Z (m)	Sill	Range X (m)	Range Y (m)	Range Z (m)
Shawkey_22	1510	ID[3]								
	1520	ID[3]								
Wesdome	2010	0.21	0.32	44	17	7	0.47	67	41	10
	2020	0.21	0.32	44	17	7	0.47	67	41	10
	2030	0.21	0.32	44	17	7	0.47	67	41	10
	2040	0.21	0.32	44	17	7	0.47	67	41	10
	2050	0.21	0.32	44	17	7	0.47	67	41	10
	2060	0.21	0.32	44	17	7	0.47	67	41	10
	2070	0.21	0.32	44	17	7	0.47	67	41	10
	2110	0.3	0.31	23	23	3	0.39	60	60	10
	2120	0.3	0.31	23	23	3	0.39	60	60	10
	2130	0.3	0.31	23	23	3	0.39	60	60	10
	2210	0.16	0.55	25	25	4	0.29	50	50	10
	2220	0.16	0.55	25	25	4	0.29	50	50	10
	2230	0.16	0.55	25	25	4	0.29	50	50	10
	2240	0.16	0.55	25	25	4	0.29	50	50	10
	2250	0.16	0.55	25	25	4	0.29	50	50	10
	2260	0.16	0.55	25	25	4	0.29	50	50	10
	2270	0.16	0.55	25	25	4	0.29	50	50	10
	2280	0.16	0.55	25	25	4	0.29	50	50	10
	2310	0.11	0.37	30	30	5	0.52	55	55	10
	2320	0.11	0.37	30	30	5	0.52	55	55	10
	2330	0.11	0.37	30	30	5	0.52	55	55	10

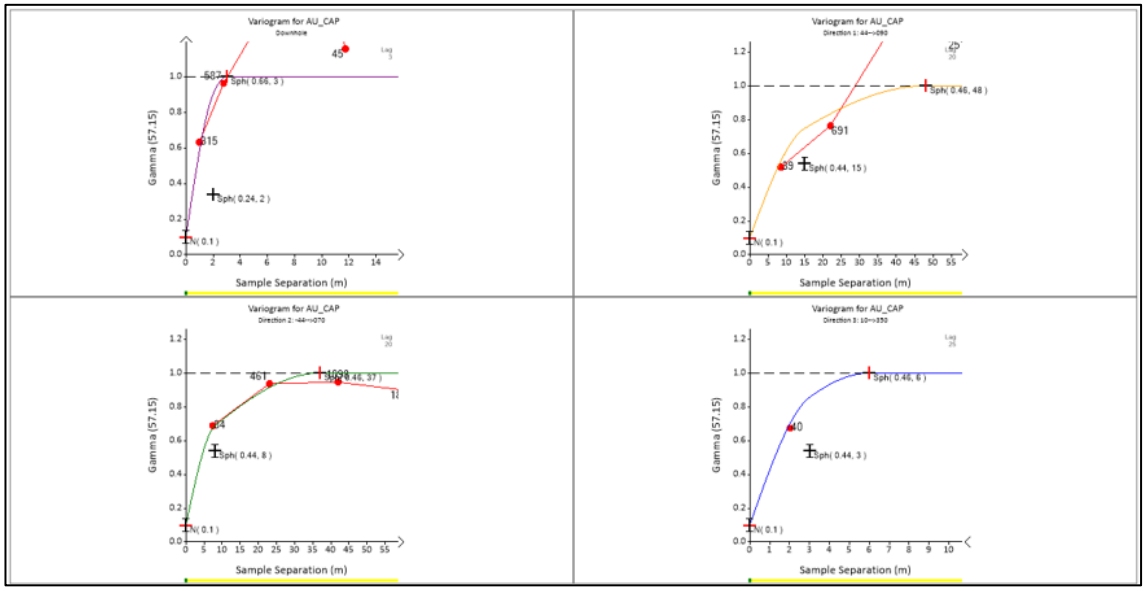


Figure 14.16 Example of the variography study for the Dubuisson South 2 zone

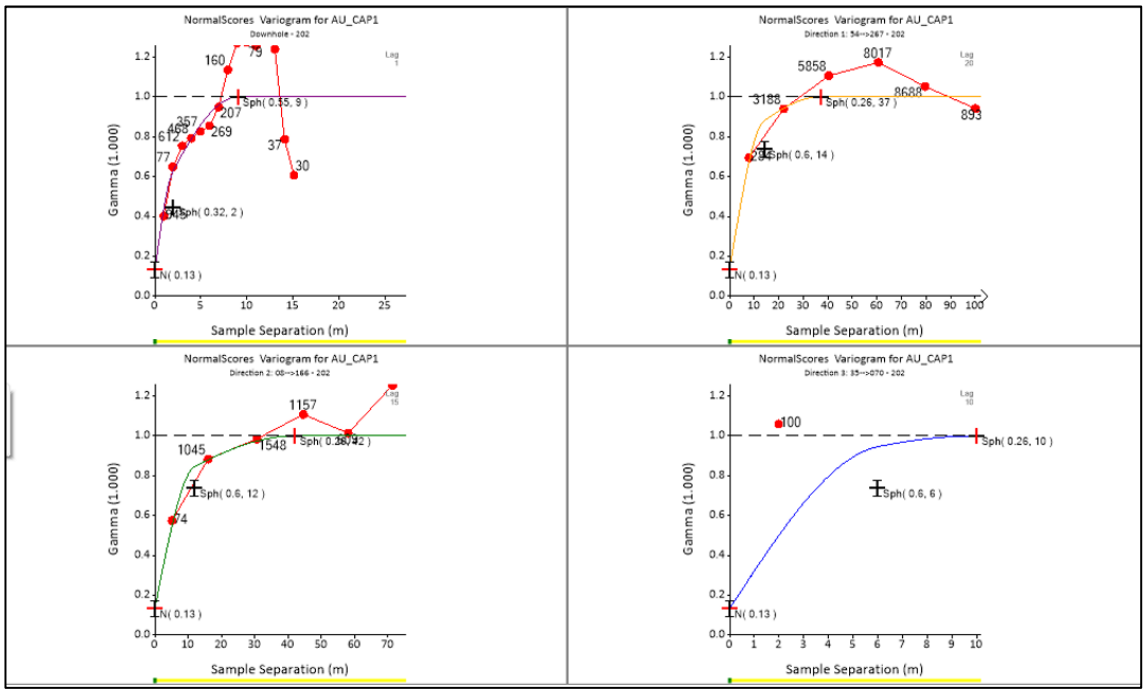


Figure 14.17 Example of the variography study for the Kiena Deep Zone A, domain 202

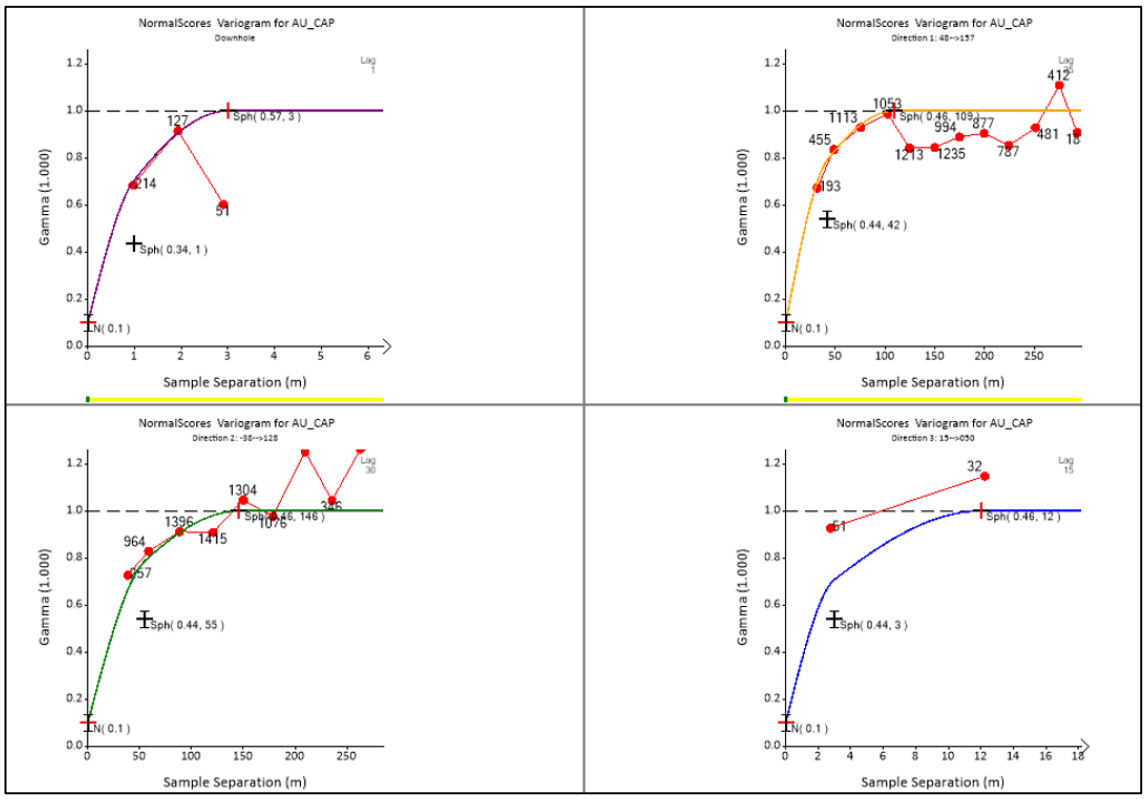


Figure 14.18 Example of the variography study for the Northwest group lens

14.6 Block Modelling

The block models for the Kiena Mine Complex were set in Datamine® Studio RM 2.0.66.0.

14.6.1 Block Model Parameters

For the current 2025 MRE, 5 block models were created between 2021 and 2024, A total of 6 Updated Resources were made and 2 new Resources added. S50 includes Resources numbers from B zone. A total of 14 pre-existing updated, or new Resources are included at Kiena in MRE_2025.

Table 14.7 provides the parameters used for each of the block models. Individual parent block cellshave dimensions of 3 m long (X-axis) by 3 m wide (Y-axis) by 3 m vertical (Z-axis).

The size of the parent cells was chosen to best match the drilling pattern, thickness of the lenses, complexity of the geology model and underground mine planning.

The block model was coded using the sub-blocking method. Parent blocks were divided into sub- blocks when intersected with wireframes. Sub-blocking allows you to subdivide the parent cells into smaller blocks to better fit the dimensions and volumes of the wireframes. A resolution of 3 m in each axis direction was applied in the division of the parent blocks for all of the block models. Consequently, the minimum sub-block size is 1.0 m long (X-axis) by 1.0 m wide (Y-axis) by 1.0 m vertical (Z-axis). All blocks falling

within a wireframe were assigned to the corresponding solid block code. Multiple properties near mine operation at Kiena Deep, using same bloc model as Kiena Deep (parameters), the Models are VC, South Zone, S50 and B Zone.

Table 14.7 Parameters of the Kiena Mine Complex block models

Kiena_Deep	X	Y	Z	Presqu'île	X	Y	Z
Blk Size (m)	3	3	3	Blk Size	3	3	3
Min	12600	11800	900	Min	11300	12800	2300
Max	14600	13500	3100	Max	12299	13799	3098
Dim	2000	1700	2200	Dim	999	999	798
nbr Blk	666	566	733	nbr Blk	333	333	266
Origin	12600	11800	1100	Origin	11300	12800	2300
Min sub-cells (m)	1	1	1	Min sub-cells (m)	1	1	1
Dubuisson	**X**	**Y**	**Z**	**Wesdome**	**X**	**Y**	**Z**
Blk Size	3	3	3	Blk Size	3	3	3
Min	15850	11700	2100	Min	12575	15200	2200
Max	17548	12798	3099	Max	14348	17399	3100
Dim	1698	1098	999	Dim	1773	2199	900
nbr Blk	566	366	333	nbr Blk	591	733	300
Origin	15850	11700	2100	Origin	12575	15200	2200
Min sub-cells (m)	1	1	1	Min sub-cells (m)	1	1	1
Martin	**X**	**Y**	**Z**	**Wish & Shawky_22**	**X**	**Y**	**Z**
Blk Size	3	3	3	Blk Size	3	3	3
Min	13960	11860	2300	Min	14500	11400	2400
Max	14785	12772	3101	Max	15925	12450	3150
Dim	825	912	801	Dim	1425	1050	750
nbr Blk	275	304	267	nbr Blk	475	350	250
Origin	13960	11860	2300	Origin	14500	11400	2400
Min sub-cells (m)	1	1	1	Min sub-cells (m)	1	1	1
S50 & B zones	**X**	**Y**	**Z**	**Zone 134**	**X**	**Y**	**Z**
Blk Size	3	3	3	Blk Size	3	3	3
Min	12600	11800	1100	Min	14350	12685	2300
Max	14598	13498	3098	Max	16690	13660	3095
Dim	1998	1698	1998	Dim	2340	975	795
nbr Blk	666	566	666	nbr Blk	780	325	265
Origin	12600	11800	1100	Origin	14935	12685	2100
Min sub-cells (m)	1	1	1	Min sub-cells (m)	1	1	1

14.6.2 Search Ellipsoid Strategy

The ranges of the ellipsoids used for the interpolation were established using the variography studyand correspond to the range of the first structure for the first pass, to the second structure for the second pass and to 2 or 2.5 times the second structure for the third pass. In the Wesdome Zone, a fourth pass corresponding to four times the second structure was added as the drill spacing is larger in this zone. The third and fourth passes were designed to adequately populate all the blocks of the mineralized zones.

It is noteworthy to mention at this point that the classification was mostly based on drillhole spacingand, therefore, some interpolated blocks were not converted into the Inferred classification.

Table 14.8 provides search ellipsoid ranges and orientation by interpolation passes and capping from DDH interpolation.

Locally where there is mined out, development and Channels available with good geological cartography, a local ID^2 interpolation is run with a merge dataset composed of the DDH composites previously available for interpolation and the Channels composites, from a different population of samples. Although there is also a QA/QC validation, the method for sampling differs, also the channel sampling follows development and sometime is concentrated in High Grades area. This information is to be used with precautions to avoid any mistakes, the capping is made separately for channels only, since a different population and limited use in search. After the two populations are used in single exercise to evaluate locally and replace the DDH only interpolation where it is possible.

Table 14.9 provides search ellipsoid ranges interpolation, passes and capping from Channels interpolation.

Table 14.8 Search ellipsoid ranges and orientation by interpolation passes

Zone	BLOCKCODE	Interpolation Pass	Orientation Datamine			Ranges			Capping
			Z	X	Z	X	Y	Z	
S50_100 @ 103	100, 101, 102, 103	P1	55	55	110	20	10	10	25
		P2				28	20	10	
		P3				56	40	20	
S50_104	100	P1	55	55	110	30	30	30	25
		P2				60	60	60	
		P3				120	120	120	
ZB_140	142, 143, 144, 145	P1	70	60	110	30	30	30	45
		P2				60	60	60	
		P3				120	120	120	
VC1_111 @ 112	111,112	P1	170	85	100	25	18	10	30
		P2				50	35	10	
		P3				100	70	20	

Zone	BLOCKCODE	Interpolation Pass	Orientation Datamine			Ranges			Capping
			Z	X	Z	X	Y	Z	
VC1_113 @ 114	113, 114	P1	150	95	100	25	15	10	30
		P2				40	30	10	
		P3				80	60	20	
VC6_123 @ 124	123, 124	P1	160	80	130	18	10	10	25
		P2				35	20	10	
		P3				70	40	20	
ZS_130 @ 135	123, 131, 132, 134, 135, 136	P1	30	75	105	15	15	10	20
		P2				45	32	10	
		P3				90	64	20	
K109-1	181	P1	0	0	0	15	15	15	16
		P2				35	35	35	
		P3				70	70	70	
K109-2	182	P1	85	60	70	20	20	10	16
		P2				35	35	15	
		P3				70	70	30	
K109-3	183	P1	80	35	100	20	20	10	16
		P2				35	35	15	
		P3				70	70	30	
K109-4	184	P1	0	0	0	15	15	15	16
		P2				35	35	35	
		P3				70	70	70	
ZA_West	202	P1	75	55	100	19	21	10	265
		P2				37	42	15	100
		P3				74	84	30	60
ZA_Hinge	204	P1	140	60	80	28	10	10	265
		P2				55	25	15	100
		P3				110	50	30	60
ZA_Vert	206	P1	210	90	50	30	15	10	265
		P2				40	34	15	100
		P3				100	68	30	60
ZA_Lower	208	P1	340	85	300	30	15	10	265
		P2				65	25	15	100
		P3				100	50	30	60
ZA1_West	212	P1	70	55	120	20	15	10	170
		P2				40	35	15	100
		P3				80	70	30	60

Zone	BLOCKCODE	Interpolation Pass	Orientation Datamine			Ranges			Capping
			Z	X	Z	X	Y	Z	
ZA1_Lower	218	P1	130	70	60	33	13	10	170
		P2				66	25	15	100
		P3				132	50	30	60
ZA1_WOD	211	P1	70	55	120	20	15	10	170
		P2				40	35	15	
		P3				80	70	30	
ZA1_216	216	P1	50	70	160	18	10	10	55
		P2				35	20	15	
		P3				70	40	30	
ZA2	222	P1	80	60	140	10	10	10	45
		P2				20	15	15	
		P3				40	30	30	
ZA2	223	P1	120	60	115	15	15	15	100
		P2				30	30	30	
		P3				60	60	60	
ZA2	226	P1	50	70	160	18	10	10	65
		P2				35	20	15	
		P3				70	40	30	
ZA2	228	P1	120	70	70	31	34	10	50
		P2				61	68	15	
		P3				122	136	30	
H1ZA_300	310	P1	-160	85	-135	30	15	10	30
		P2				40	25	15	
		P3				80	50	30	
H2_320	320	P1	90	70	115	10	10	3	N/A
		P2				20	20	3	
		P3				40	40	6	
H3_330	330	P1	130	50	70	17	10	10	50
		P2				33	17	15	
		P3				66	34	30	
H5_350	350	P1	120	60	115	17	10	10	50
		P2				33	17	15	
		P3				66	34	30	
BZA1	410	P1	200	90	180	23	20	10	35
		P2				45	40	15	
		P3				90	80	30	

Zone	BLOCKCODE	Interpolation Pass	Orientation Datamine			Ranges			Capping
			Z	X	Z	X	Y	Z	
BZA2	420	P1	0	80	120	10	10	10	35
		P2				20	20	15	
		P3				40	40	30	
BZA5	450	P1	120	60	115	15	15	15	35
		P2				30	30	30	
		P3				60	60	60	
SNK	510	P1	150	80	105	17	14	10	110
		P2				30	26	15	
		P3				30	26	15	
FWZ_1 @4	610 @ 640	P1	120	60	115	15	15	15	85
		P2				30	30	30	
		P3				60	60	60	
FWZ_5 @7	650 @ 670	P1	120	60	115	15	15	15	95
		P2				30	30	30	
		P3				60	60	60	
Presqu'île 1120	1120	P1	55	70	20	14	12	5	60
		P2				45	40	10	
		P3				90	80	20	
Presqu'île 1125	1125	P1	55	60	80	16	14	5	85
		P2				42	40	10	
		P3				84	80	20	
Presqu'île 1110	1110	P1	180	180	180	20	20	20	35
		P2				40	40	40	
		P3				80	80	80	
Presqu'île 1130	1130	P1	180	180	180	20	20	20	150, 35
		P2				40	40	40	
		P3				80	80	80	
Presqu'île 1140	1140	P1	180	180	180	20	20	20	150, 35
		P2				40	40	40	
		P3				80	80	80	
DUB_1201	1201	P1	160	90	85	20	15	10	55
		P2				50	30	15	
		P3				100	60	30	
DUB_1202	1202	P1	180	95	-100	15	10	10	45
		P2				50	40	15	
		P3				100	80	30	

Zone	BLOCKCODE	Interpolation Pass	Orientation Datamine			Ranges			Capping
			Z	X	Z	X	Y	Z	
DUB_1203	1203	P1	160	90	85	30	20	10	
		P2				60	30	15	no cap
		P3				120	60	30	
DUB_1204	1204	P1	180	180	180	20	20	20	
		P2				40	40	40	55
		P3				60	60	60	
Dubuisson_N1	1220	P1	-150	180	100	30	20	10	55
		P2				60	40	30	
		P3				120	80	60	
Dubuisson_N4	1240	P1	180	180	180	20	20	20	
		P2				40	40	40	no cap
		P3				60	60	60	
Martin_1310 @ 1330	1300	P1	-125	85	-120	30	30	30	30
		P2				60	60	60	
		P3				120	120	120	
WISH 1350,1360	1350,1360	P1	65	80	95	20	20	20	30
		P2				40	40	40	
		P3				80	80	80	
Shawkey_22_1	1510	P1	45	90	75	30	30	30	35
		P2				50	50	50	
		P3				100	100	100	
Shawkey_22_2	1520	P1	-140	65	80	30	30	30	35
		P2				50	50	50	
		P3				100	100	100	
NorthWest_1410	1410	P1	40	65	-95	40	40	40	40
		P2				80	80	80	
		P3				120	120	120	
NorthWest_1420	1420	P1	40	65	-95	40	40	40	40
		P2				80	80	80	
		P3				120	120	120	
NorthWest_1430	1430	P1	50	75	50	40	40	40	40
		P2				80	80	80	
		P3				120	120	120	

Zone	BLOCKCODE	Interpolation Pass	Orientation Datamine			Ranges			Capping
			Z	X	Z	X	Y	Z	
Wesdome_Group 2000 A, A1, AF, AH, AH1, AH2, AH3	2010 @ 2040	P1	-140	50	-160	44	17	10	30
		P2				67	41	20	
		P3				134	82	40	
		P4				268	164	80	
	2050, 2060	P1	-155	45	-150	44	17	10	30
		P2				67	41	20	
		P3				134	82	40	
		P4				268	164	80	
	2070	P1	-155	50	-160	44	17	10	30
		P2				67	41	20	
		P3				134	82	40	
		P4				268	164	80	
Wesdome_Group 2100 B, C, D	2110 @ 2130	P1	-160	70	-120	23	23	10	30
		P2				60	60	20	
		P3				120	120	40	
		P4				240	240	80	
Wesdome_Group 2200 E, E0, E1, E3, E4, F2, F4, F6	2210 @2280	P1	-150	70	-125	25	25	10	30
		P2				50	50	20	
		P3				100	100	40	
		P4				200	200	80	
Wesdome_Group 2300 L, F, F1	2310 @ 2330	P1	-160	45	95	30	30	10	30
		P2				55	55	20	
		P3				110	110	40	
		P4				220	220	80	
Zone_134_1, Zone_134_2	2501, 2502	P1	180	180	180	30	30	30	25
		P2				50	50	50	
		P3				100	100	100	

Table 14.9 Search ellipsoid ranges and omnidirectional by interpolation passes for Local ID² mixed DDH and Channels composites (Measured area where mined out available)

Zone	Blockcode	Interpolation pass	Orientation Datamine			Ranges			Capping
			Z	X	Z	X	Y	Z	
ZA_West	202	P1	0	0	0	15	15	15	195
ZA_Hinge	204	P1	0	0	0	15	15	15	195
ZA_Vert	206	P1	0	0	0	15	15	15	195
ZA1_West	212	P1	0	0	0	15	15	15	155
ZA1_Lower	218	P1	0	0	0	15	15	15	155
ZA1_WOD	211	P1	0	0	0	15	15	15	155
ZA1_216	216	P1	0	0	0	15	15	15	45
ZA2	226	P1	0	0	0	15	15	15	65
H1ZA_310	310	P1	0	0	0	15	15	15	30
H3_330	330	P1	0	0	0	15	15	15	175
SNK	510	P1	0	0	0	15	15	15	175

14.6.3 Interpolation Parameters

Estimation and search parameters were evaluated through Kriging Neighborhood Analysis (KNA).

KNA was conducted on each unit and on the most representative mineralized lenses or on a groupof lenses sharing similar geological environment and azimuth/dip orientation with the Snowden Supervisor software. KNA provides a quantitative method of testing different estimation parameters(i.e. block size, discretization and min/max of composites used for the interpolation) by evaluating their impact on the quality of the results. The interpretation of these helps select the optimal value for each parameter.

Following this study, the parameters provided in Table 14.10 were chosen for the interpolation of the block models.

Table 14.10 Interpolation parameters

Zone	Interpolation pass	General Parameters			
		Min	Max	Max composite per DDH	Min number of DDH
S50_100 @ 103, ZA1_216, ZA2, H1ZA, H2, H3, H5, BZA1, BZA2, BZA5, SNK, FWZ, Martin, Shawkey_22, Northwest	P1	12	24	4	3
	P2	8	24	4	2
	P3	8	24	4	2
S50_104, ZB_140	P1	12	24	4	3
	P2	9	24	4	3
	P3	9	24	4	3

Zone	Interpolation pass	General Parameters			
		Min	Max	Max composite per DDH	Min number of DDH
VC1, VC6, ZS, ZA, ZA1, Dubuisson	P1	12	24	4	3
	P2	8	24	4	2
	P3	4	24	4	1
K109, Presqu'île	P1	9	12	3	3
	P2	6	12	3	2
	P3	4	12	3	2
WISH, Zone_134	P1	9	12	3	3
	P2	6	12	3	2
	P3	6	12	3	2
Wesdome	P1	9	12	3	3
	P2	6	12	3	2
	P3	4	12	3	2
	P4	3	12	3	1

14.6.4 Interpolation Methodology

The interpolation was performed on the capped composited data with three (or four, in the Wesdome Zone) passes characterized by increasing search ranges (Table 14.8).

For the ZA and ZA1, a three-step capping process was applied on composites to limit extrapolation of very high-grade samples at higher distances (Table 14.8). In those cases, the first interpolation passes used composites with the highest capping value and following passes used lower capping values on composites. For example, in the Kiena Deep Zone A1 (blockcodes 212 and 218), composites were capped at 170 g/t Au for the first pass, 100 g/tAu for the second pass, and 60 g/t Au for the third pass.

The block model grades were estimated using ordinary kriging (OK) methods unless local development and Channels present, in this case local and limited distance interpolation with ID^2 was prepared and included in the final version of the bloc model, where available (only some areas mined out of Kiena Deep, ZA, ZA1, ZA2, H330, H1ZA, SNK and Martin). The list of the different methods of interpolation for the other sectors is as follows: K109, FWZ, BZA5, Wish mineralized lenses that have been estimated using inverse distance squared (ID^2), B Zone, Presqu'île, Dubuisson, Shawkey_22 and Northwest mineralized lenses that have been estimated using inverse distance squared (ID^3), methods as the ID^2 and ID^3 method honored best the composites than the OK method.

Hard boundaries between the mineralized lenses were used to prevent grades from adjacent lenses being used during interpolation. As a block was estimated, it was tagged with the corresponding pass number.

For comparison purposes, additional grade models were generated using: 1) inverse distance squared (ID^2); 2) nearest neighbors (NN); and 3) OK on uncapped composited data.

14.7 Block Model Validation

Every step of the block modelling process was revised to ensure fair representation of the available data in the Project resource models.

More specific validations were completed on the block model including visual review of the interpolated grades in relation to the raw and composited data, checks for global and local bias, graphical validation (swath plots), statistical analysis of the model and comparison to otherestimation methods.

14.7.1 Visual Validation

Block model grades were visually compared against drillhole composite grades and raw assays in cross-section, plan, longitudinal and 3D views (Figure 14.19). This visual validation process also included confirming that the proper coding was done within the various mineralized lenses and checks for global and local bias.

The visual comparison shows that the block models are consistent and correlate well with the primary data without excessive smoothing.

Visual comparisons were also conducted between ID^2, ID^3, OK and NN interpolation scenarios. The OK scenario produced a grade distribution honoring drillhole data and the style of mineralization observed on the Kiena Mine Complex for most of the zones and was therefore retained as the interpolation method.

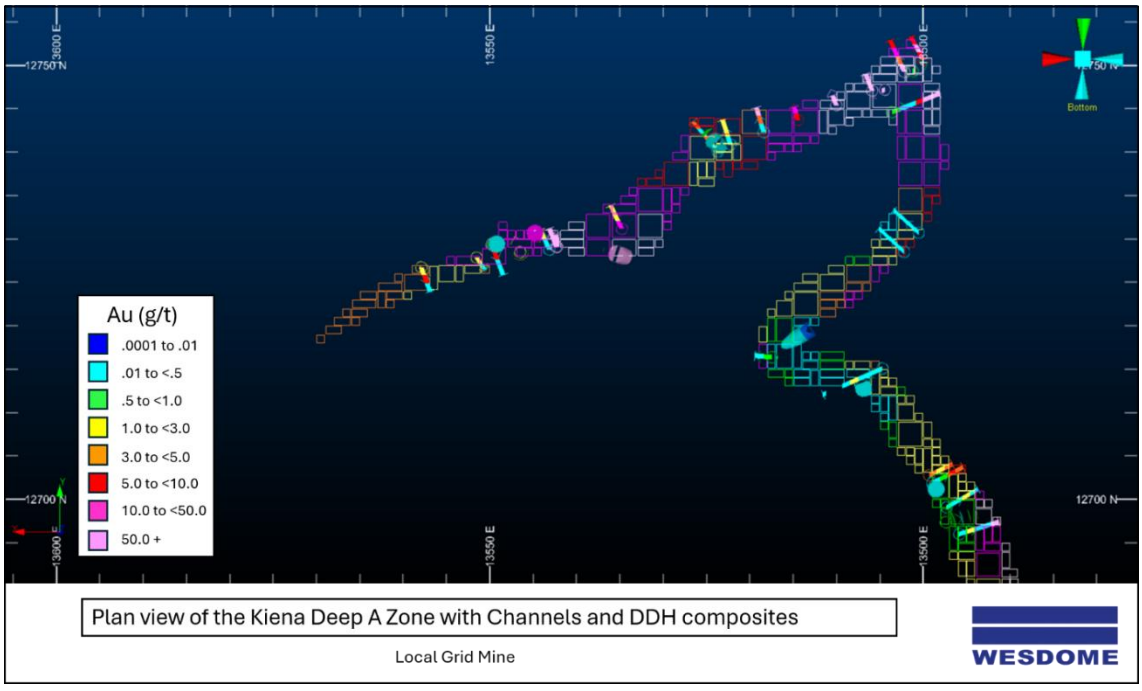


Figure 14.19 Comparative example of the grade distribution between the blocks and the composites in plan view

14.7.2 Statistical Validation

Grade averages for the OK, NN, ID^2 and the ID^3 models were tabulated in Table 14.11. This comparisondid not identify significant issues. As expected, block grade averages are generally lower than thecomposite grades and initial grades were well represented throughout the estimation process.

The average grades generated by the ID^2 and ID^3 interpolation method are very close to those reported from the OK interpolation method. This information provides a general indication that the resourcemodel is reasonable.

Table 14.11 Comparison of the block and composite mean grades at a zero Cut-off Grade blocks

Sector	Lens/blockcode	Number of Composites (DDH)	Capped Composite Mean (DDH)	Number of Composites (Channels)	Capped Composite Mean (Channels)	Number of blocks	OK Grade model	ID^2 or ID^3 Grade model	UNC Grade model
S50	100 @ 104	2275	2.31	n/a	n/a	118181	1.99	2.04	2.11
B Zone (3)	142 @ 145	395	3.12	n/a	n/a	108299	3.29	3.25	3.39
VC1	111 @ 114	1098	2.64	n/a	n/a	50249	2.57	n/a	5.18
VC6	123 @ 124	443	2.37	n/a	n/a	23378	2.08	n/a	2.13
ZS	130 @ 133, 135, 140	2345	1.39	n/a	n/a	328891	1.49	n/a	1.61
K109 (1)	181 @ 184	244	2.75	n/a	n/a	29851	n/a	3.02	3.04
A (2)	200	7151	12.82	1584	25.29	110398	13.80	13.86	19.81
A1(2)	210 @ 211	3329	11.25	543	21.83	71368	11.10	10.81	19.95
A1_216 (2)	216	209	7.65	84	6.63	10380	7.23	7.19	10.93
ZA2_222	222	196	3.65	n/a	n/a	4080	3.90	3.98	5.08
ZA2_223 (1)	223	34	15.55	n/a	n/a	1212	18.49	17.93	23.46
ZA2_226 (2)	226	487	9.01	453	16.16	12000	9.19	9.12	28.03
ZA2_228	228	295	4.56	n/a	n/a	20773	5.26	5.22	6.99
H1ZA (2)	310	368	2.81	132	5.88	22429	3.00	3.38	12.16
H2 (1)	320	55	6.04	n/a	n/a	853	5.59	6.17	6.17
H3 & H5 (2)	330,350	131	8.9	75	17.96	8173	9.10	9.38	18.41
BZA (1)	410,420,450	1283	3.64	n/a	n/a	46662	3.83	3.67	4.67
SNK (2)	510	246	14.46	24	16.03	12073	10.57	11.37	17.82
FWZ 1 @ 4 (1)	610 @ 640	761	7.42	n/a	n/a	41052	11.49	10.15	13.39
FWZ 5 @ 7 (1)	650 @ 670	462	11.98	n/a	n/a	43449	12.39	12.26	15.27
Presqu'île_1120 (2)(3)	1120	376	7.59	140	13.2	46196	7.76	7.81	n/a
Presqu'île_1125 (2)(3)	1125	193	10.18	83	10.65	28414	9.04	9.36	n/a
Presqu'île (3)	1110,1130,1140	81	4.94	22	0.79	28327	5.23	6.91	n/a

Sector	Lens/blockcode	Number of Composites (DDH)	Capped Composite Mean (DDH)	Number of Composites (Channels)	Capped Composite Mean (Channels)	Number of blocks	OK Grade model	ID^2 or ID^3 Grade model	UNC Grade model
Dubuisson (3)	1201	706	3.38	n/a	n/a	36285	3.89	3.65	n/a
	1202	387	4.51	n/a	n/a	34633	2.98	3.13	n/a
	1203	268	3.82	n/a	n/a	33654	3.27	3.13	n/a
	1204	36	4.68	n/a	n/a	5203	2.65	3.30	n/a
	1220	190	2.92	n/a	n/a	24613	2.73	2.70	n/a
	1230	147	4.12	n/a	n/a	26808	3.77	3.79	n/a
	1240	90	2.44	n/a	n/a	32949	1.81	1.67	n/a
Martin (2)	1310,1320,1330	1034	3.08	590	5.95	50491	2.74	n/a	3.72
Wish (1)	1350,1360	126	2.88	n/a	n/a	12758	2.40	2.35	n/a
Northwest (3)	1410,1430	302	3.01	n/a	n/a	183969	n/a	3.03	n/a
Z_134 (3)	1501,1502	67	2.17	n/a	n/a	44607	2.48	2.47	n/a
Shawkey_22 (3)	1510,1520	501	2.22	n/a	n/a	87988	n/a	2.24	n/a
Wesdome 2000	2010 @ 2070	1225	2.34	n/a	n/a				
Wesdome 2100	2110 @ 2130	292	1.76	n/a	n/a				
Wesdome 2200	2210 @ 2280	571	2.75	n/a	n/a				
Wesdome 2300	2310 @ 2330	126	1.59	n/a	n/a				

(1) The ID^2 interpolation method was used for these mineralized lenses for the current MRE.
(2) The ID^2 used for interpolation in Mined out area with incorporation of Channels population for current MRE. Replace locally only DDH interpolation.
(3) The ID^3 interpolation method was used for these mineralized lenses for the current MRE.

14.8 Mineral Resource Classification

The mineral resources for the Kiena Mine Complex were classified in accordance with CIM Standards.

14.8.1 Mineral Resource Definition

The "CIM Definition Standards for Mineral Resources and Reserves" prepared by the CIM Standing Committee on Resource Definitions and adopted by the CIM, provides standards for the classification of Mineral Resources and Mineral Reserves estimates as follows:

Inferred Mineral Resource:

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

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

Indicated Mineral Resource:

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

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

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

Measured Mineral Resource:

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

Geological evidence is derived from detailed and reliable exploration, sampling and testing, also the use of Mined out area, including development UG, and is sufficient to confirm geological and grade or quality continuity between points of observation.

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

14.8.2 Mineral Resource Classification for the Kiena Mine Complex

Following the previous definitions, the estimated block grades were classified into Inferred and Indicated Mineral Resource categories using drill spacing, a minimum number of drillhole and recognition of grade and geological continuity within the lenses.

No Measured resources were defined for the Kiena Mine Complex at this stage.

The following parameters were used for the classification for all mineralized lenses in the KienaMine Complex:

- Inferred Mineral Resources were defined for blocks within the units that have been informed by a minimum of two drillholes within 40 m of a drillhole (80 m of drill spacing);
- Indicated Mineral Resources were defined for blocks within the units that have been informed by a minimum of three drillholes within 12.5 m of a drillhole (25 m of drill spacing).
- Measured Mineral Resources were defined within 10 meters limit, above and below, Mined out area.

When needed, a series of clipping boundaries were created manually in longitudinal views to either upgrade or downgrade classification in order to homogenize the groups of resources by removing artificial features and isolated blocks or group of blocks due to automatically generated classification. All remaining estimated but unclassified blocks were flagged as “Exploration Potential”.

Figure 14.20 shows an example of the classification.

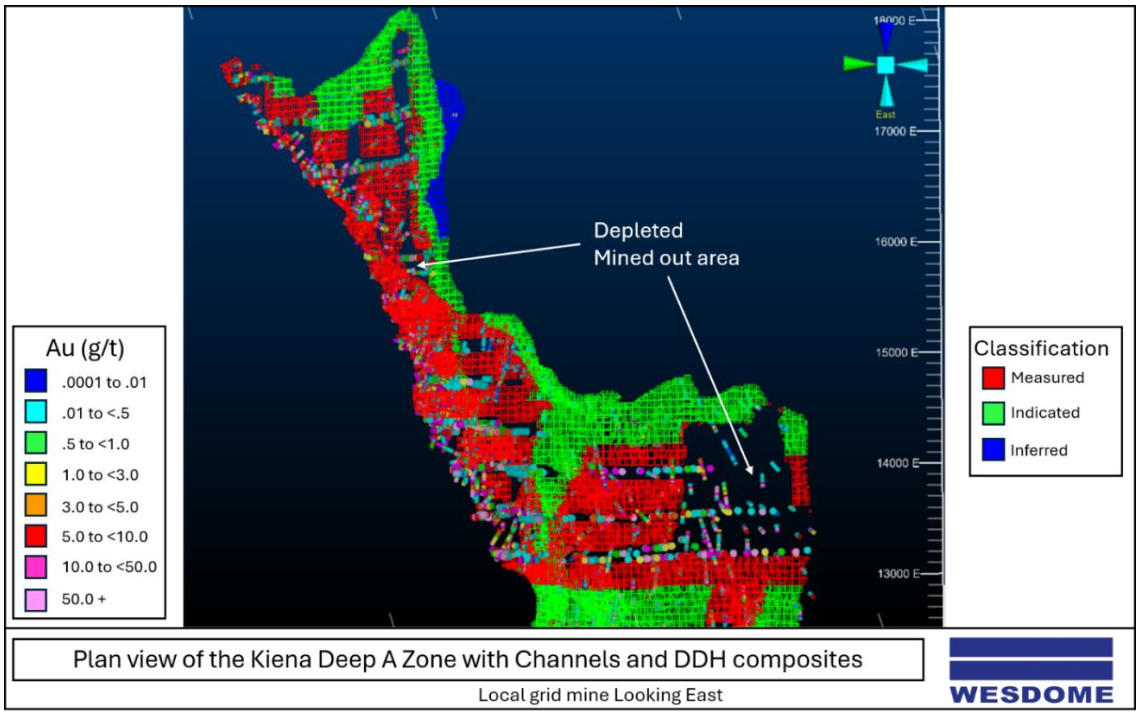


Figure 14.20 Mineral Resource classification example for Kiena Deep A zone (200)

14.9 Reasonable Prospect for Economics

For this Project, mineral resources were estimated for an underground scenario.

According to the CIM best practice guidelines (2019), “Mineral Resource statements for **underground mining** scenarios must satisfy the “reasonable prospects for eventual economic extraction” by demonstration of the spatial continuity of the mineralization within a potentially mineable shape. In cases where this potentially mineable volume contains smaller zones of mineralization with grades or values below the stated cut-off (sometimes referred to as “must take”material), this material must be included in the Mineral Resource estimate. At a minimum, these constraints can be addressed by creating constraining volumes.”

14.9.1 Cut-off Grade

For the Project, variations of rock characteristics, metallurgy, mining methods and mine access within the mineral resource model necessitate more than one cut-off grade or economic limit for different parts of the deposit.

The cut-off grade parameters presented in Table 14.12 and Table 14.13 are based on discussions with Wesdome and benchmarking against the mine’s observed cost structure.

The underground cut-off grade used for the Mineral Resource Estimate varies between 2.42 g/t and 3.20 g/t depending on zone.

All parameters are based on reasonable technical and economic factors. The QPs of this report section believe that the calculated cut-off grades and the parameters used are relevant for a mineral resource estimate, as they are relevant to the grade distribution of the Project and that the mineralization exhibits sufficient continuity.

Table 14.12 Cut-off Grade parameters

Parameter	Unit	Value
Operating Costs		
Mining Cost - Rock	CAD/t mined	Varies by zone – See Table 14.13
Processing Cost	CAD/t processed	44.88
General & Administration	CAD/t processed	Varies by zone – See Table 14.13
Transportation Costs	CAD/t processed	0
Revenue		
Selling Price	USD/oz	2,100.00
Exchange Rate	USD/CAD	1.35
Selling Price	CAD/oz.	2,835.00
Selling Cost	CAD/oz.	5.65
Conversion Factor	g/oz.	31.10354768
Mill parameters		
Mill Recovery	%	Varies by zone – See Table 14.13
MRE Cut-off grade	g/t	Varies by zone – See Table 14.13

Table 14.13 MRE Cut-off Grade variable parameters

Zone name	Mining Cost - Rock	General & Administration	Mill Recovery	MRE Cut-Off Grade
Kiena Deep	177.59	59.39	98.5 %	3.15
S50	177.59	59.39	98.5 %	3.15
VC Zone	177.59	59.39	98.5 %	3.20
ZB	177.59	59.39	98.5 %	3.15
South Zone	187.44	50.07	97%	3.20
K109	167.14	50.07	97%	2.97
Presqu'île	133.63	50.48	97%	2.60
Dubuisson	142.45	50.48	97%	2.70
Martin	118.60	50.07	97%	2.42
North West	187.44	50.07	97%	3.20
Wesdome	187.44	50.07	97%	3.20
Wish	118.60	50.07	97%	2.42
Shawkey_22	118.60	50.07	97%	2.42
Z134	187.44	50.07	97%	3.20

14.9.2 Underground Material

For the current 2025 MRE, the QPs have validated that sufficient continuity is found in the reportedblocks, but no mineable shape were used to declare the 2025 MRE. Clipping boundaries were, however, used to classify the resource, and a total of three (3) mineralized lenses (2320, 2330 (Wesdome) and 184 (K109)) were also excluded from the 2025 MRE statement based on their lack of continuity above the Cut-off Grade or the absence of Inferred resources due to the insufficient drill spacing.

14.10 Kiena Mine Complex Mineral Resource Estimate

The Measured + Indicated, (M+I) and Inferred 2025 MRE (inclusive of Mineral Reserves) for the Kiena Mine Complex is presented in Table 14.14.

The Measured, Indicated, (M+I) and Inferred 2025 Mineral Resource Estimate (exclusive of mineral reserves) for the Kiena Mine Complex is presented in Table 14.15. In this case, mineral resources included in the mineral reserve solids are designed to support the FS and use a Crown Pillar of 60 m from surface (Figure 14.21).

Table 14.14 Measured, Indicated, (M+I) and Inferred Kiena Mine Complex 2025 Mineral Resource Estimate per zone (inclusive of Mineral Reserves)

2025 Resources												
Zone	Measured			Indicated			Measured + Indicated			Inferred		
	Tonnes (000)	Grade (g/t Au)	Ounces (000)	Tonnes (000)	Grade (g/t Au)	Ounces (000)	Tonnes (000)	Grade (g/t Au)	Ounces (000)	Tonnes (000)	Grade (g/t Au)	Ounces (000)
Kiena Deep	254	18.8	153	1,324	14.4	615	1,578	15.1	768	175	13.0	73
S50	10	4.5	1	78	4.6	12	88	4.6	13	94	4.9	15
VC Zone	-	-	-	125	5.1	21	125	5.1	21	178	5.9	34
ZB	-	-	-	127	4.7	19	127	4.7	19	136	5.3	23
South Zone	-	-	-	48	4.6	7	48	4.6	7	147	4.4	21
K109	-	-	-	-	-	-	-	-	-	122	4.8	19
Presqu'île	44	13.4	19	256	10.0	82	300	10.5	101	55	9.8	17
Dubuisson	-	-	-	451	6.7	97	451	6.7	97	519	5.0	84
Martin	61	3.8	7	78	4.3	11	139	4.1	18	103	3.9	13
North West	-	-	-	-	-	-	-	-	-	368	5.8	69
Wesdome	-	-	-	-	-	-	-	-	-	2,020	4.5	295
Wish	-	-	-	29	4.4	4	29	4.4	4	11	3.3	1
Shawkey_22	-	-	-	-	-	-	-	-	-	159	6.1	31
Z 134	-	-	-	2	4.4	0.3	2	4.4	0	55	6.9	12
Total Measured	**370**	**15.2**	**181**	-	-	-	-	-	-	-	-	-
Total Indicated				**2,519**	**10.7**	**868**	-	-	-	-	-	-
Total M+I							**2,888**	**11.3**	**1,049**	-	-	-
Total Inferred										**4,151**	**5.3**	**707**

2. The qualified persons for the 2025 MRE, as defined by National Instrument ("NI") 43-101 guidelines,is Serge Gonthier, P. Geo. from Wesdome. The effective date of this MRE is December 30, 2025.
3. These mineral resources are not mineral reserves as they do not have demonstrated economic viability.
4. These mineral resources are inclusive of mineral reserves.
5. The mineral resource estimate follows CIM Definitions (2014) for mineral resources.
6. Results are presented in situ and undiluted and considered to have reasonable prospects for economic extraction,below a 60 m crown pillar.
7. The resources include 94 mineralized lenses with a minimum true thickness of 2.0 to 3 m (2.4 m for Wesdome Zones)using the grade of the adjacent material when assayed or a value of zero when not assayed. High-grade capping varies from 6 to 265 g/t Au (when required) and was applied to composited assay grades for interpolation using an Ordinary Kriging, ID^2 or ID^3 when required, based on 1.0 m composite and block size of 3 m x 3 m x 3 m, with bulk density values of 2.8 (g/cm^3). A three-step capping strategy was applied, where capping value decreased as interpolation search distance increased, in order to restrict high-gradeimpact at greater distance. Indicated resources are manually defined and encloses areas where drill spacing is generally less than 30 m, blocks are informed by a minimum of three drillholes, and reasonable geological and grade continuity is shown.
8. The estimate is reported for potential underground scenario at zone specific Cut-off Grades. The Cut-off Grades were calculated using a gold price of US$2,100 per ounce, a USD:CAD exchange rate of 1.35 (resulting in C$2,835 per ounce gold price); refer to Table 14.13 and Table 14.13+1 for unit costs used in estimate.
9. The number of metric tonnes and ounces were rounded to the nearest hundred and the metal contents are presented in troy ounces (tonne x grade/31.10348). Rounding may result in apparent summation differences between tonnes, grades and contained metals content.
10. The QPs are not aware of any known environmental, permitting, legal, title-related, taxation, socio-political or marketing issues, or any other relevant issues not reported in this Report that could materially affect the mineralresource estimate.

Table 14.15 Measured, Indicated, (M+I) and Inferred Kiena Mine Complex 2025 MRE per zone (exclusive of Mineral Reserves and in Mine shapes)

2025 Resources												
Zone	Measured			Indicated			Measured + Indicated			Inferred		
	Tonnes (000)	Grade (g/t Au)	Ounces (000)	Tonnes (000)	Grade (g/t Au)	Ounces (000)	Tonnes (000)	Grade (g/t Au)	Ounces (000)	Tonnes (000)	Grade (g/t Au)	Ounces (000)
Kiena Deep	41	12.6	16	286	8.0	74	327	8.6	90	99	13.8	44
S50	5	4.9	1	38	4.9	6	43	4.9	7	21	5.6	4
VC Zone	-	-	-	167	4.3	23	167	4.3	23	185	5.7	34
ZB	-	-	-	62	5.2	10	62	5.2	10	71	5.9	13
South Zone	-	-	-	47	4.1	6	47	4.1	6	134	4.3	19
K109	-	-	-	-	-	-	-	-	-	99	4.7	15
Presqu'île	7	8.2	2	54	5.5	10	61	5.8	11	31	11.2	11
Dubuisson	-	-	-	155	4.5	23	155	4.5	23	337	4.8	53
Martin	33	3.8	4	64	4.4	9	97	4.2	13	70	4.1	9
North West	-	-	-	-	-	-	-	-	-	250	6.6	53
Wesdome	-	-	-	-	-	-	-	-	-	1,508	4.9	235
Wish	-	-	-	19	4.4	3	19	4.4	3	8	3.5	1
Shawkey_22	-	-	-	-	-	-	-	-	-	122	6.4	25
Z 134	-	-	-	-	-	-	-	-	-	41	7.1	9
Total Measured	**85**	**8.4**	**23**	-	-	-	-	-	-	-	-	-
Total Indicated				**893**	**5.7**	**163**	-	-	-	-	-	-
Total M+I							**977**	**5.9**	**186**	-	-	-
Total Inferred										**2,970**	**5.5**	**525**

11. The qualified persons for the 2025 MRE, as defined by National Instrument (“NI”) 43-101 guidelines,is Serge Gonthier, P. Geo. from Wesdome.
12. These mineral resources are not mineral reserves as they do not have demonstrated economic viability.
13. These mineral resources are exclusive to mineral reserves and using Mine shapes.
14. The mineral resource estimate follows CIM definitions (2019) for mineral resources.
15. Results are presented in situ and undiluted and considered to have reasonable prospects for economic extraction,below a 60 m crown pillar.
16. The resources include 94 mineralized lenses with a minimum true thickness of 2.0 to 3 m (2.4 m for Wesdome Zones)using the grade of the adjacent material when assayed or a value of zero when not assayed. High-grade capping varies from 6 to 265 g/t Au (when required) and was applied to composited assay grades for interpolation using an Ordinary Kriging, ID^2 or ID^3 when required, based on 1.0 m composite and block size of 3 m x 3 m x 3 m, with bulk density values of 2.8 (g/cm^3). A three-step capping strategy was applied, where capping value decreased as interpolation search distance increased, in order to restrict high-gradeimpact at greater distance. Indicated resources are manually defined and encloses areas where drill spacing is generally less than 30 m, blocks are informed by a minimum of three drillholes, and reasonable geological and grade continuity is shown.
17. The estimate is reported for potential underground scenario at zone specific Cut-off Grades. The Cut-off Grades were calculated using a gold price of US$2,100 per ounce, a USD:CAD exchange rate of 1.35 (resulting in C$2,835 per ounce gold price); refer to Table 14.13 and Table 14.13+1 for unit costs used in estimate.
18. The number of metric tonnes and ounces were rounded to the nearest hundred and the metal contents are presented in troy ounces (tonne x grade/31.10348). Rounding may result in apparent summation differences between tonnes, grades and contained metals content.
19. The QPs are not aware of any known environmental, permitting, legal, title-related, taxation, socio-political or marketing issues, or any other relevant issues not reported in this Technical Report that could materially affect the mineral resource estimate.

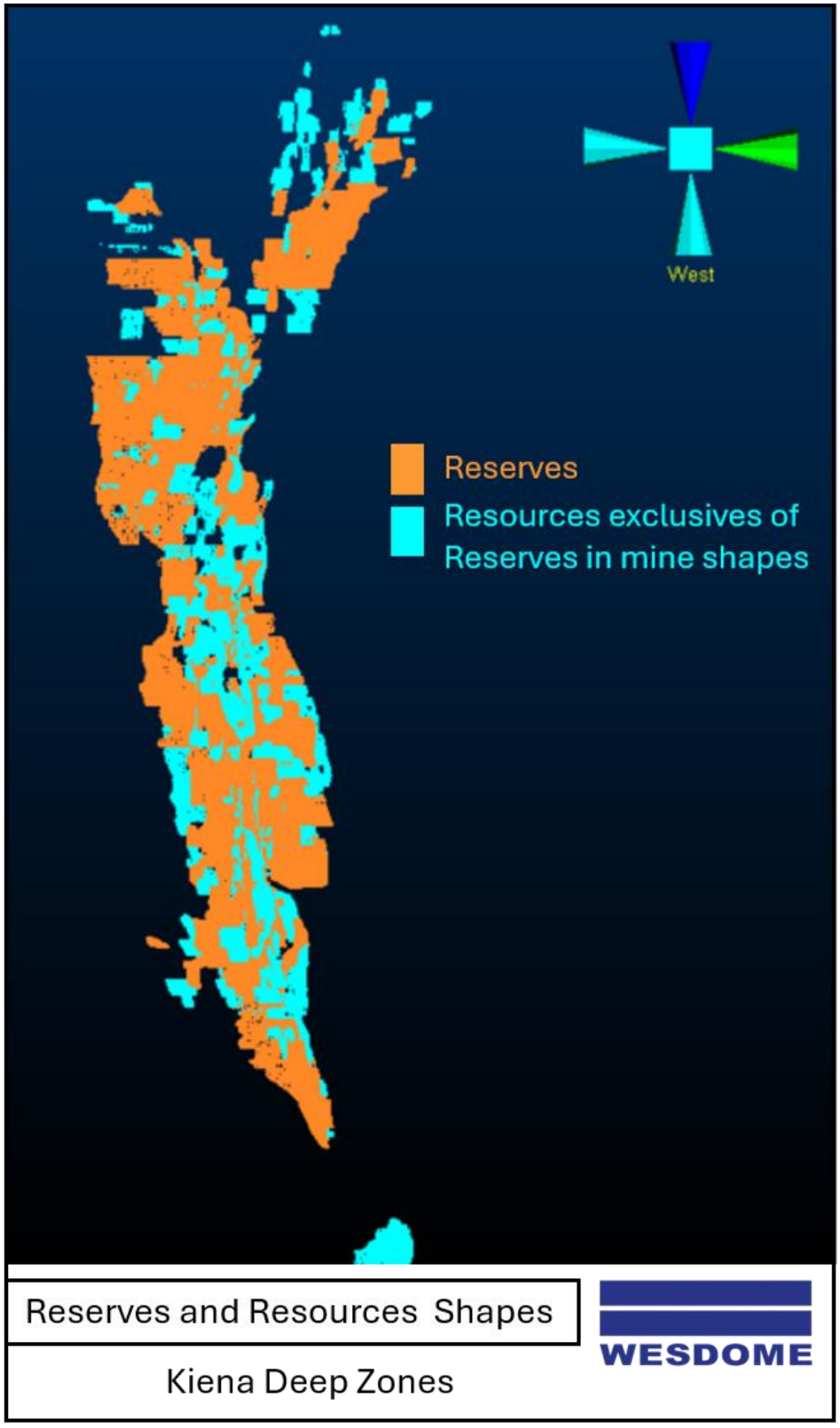


Figure 14.21 3D view showing wireframes of reserve shapes and Exclusive Resources from Mine shapes for Kiena Deep Zone

15. MINERAL RESERVE ESTIMATES

15.1 Introduction

This chapter describes the methodology, assumptions, and modifying factors applied in the conversion of Mineral Resources to Mineral Reserves for the Kiena Project FS. The Mineral Reserve estimate has been prepared in accordance with the CIM Definition Standards for Mineral Resources and Mineral Reserves (2014), as adopted by the CIM Council and incorporated by reference into National Instrument 43-101.

The Mineral Reserve estimate represents the economically mineable portion of the Measured and Indicated Mineral Resources following the application of modifying factors appropriate for a FS. These modifying factors include mine design, production scheduling, mining dilution, mining recovery, metallurgical recovery, geotechnical considerations, environmental, social and regulatory factors, economic assumptions, and other technical considerations necessary to demonstrate economic viability.

The Mineral Reserve estimate is based on the reserve-based LOM plan developed for the Kiena Deep, Presqu'île, and Dubuisson mining areas and incorporates detailed underground mine designs, production schedules, and supporting technical studies completed as part of this FS.

The following sections describe the estimation methodology, cut-off grade determination, planned mining dilution, mining recovery, stope design and optimization process, environmental, social and regulatory modifying factors, and the resulting Mineral Reserve estimate.

15.2 Estimation Procedure

The Mineral Reserve estimate was prepared using the Mineral Resource block model, delivered on February 11, 2026, incorporating geological information available as of December 31, 2025, as the basis for estimating the mineable tonnage and grade included in the LOM plan. Only Measured and Indicated Mineral Resources were considered for conversion to Mineral Reserves. Inferred Mineral Resources were treated as waste during mine design, production scheduling, and economic evaluation and were not included in the Mineral Reserve estimate.

The estimation process consisted of developing detailed underground mine designs that incorporated appropriate mining geometries, geotechnical constraints, infrastructure requirements, production sequencing, and applicable modifying factors. Stope shapes were generated and evaluated using the mine design criteria developed for each mining area and were subsequently validated through detailed production scheduling and economic assessment.

The initial mineable stope envelopes were developed using the applicable BCOG for each mining area. The BCOG was used to define mineralized volumes capable of supporting the required mine development and meeting the minimum economic criteria for reserve estimation.

Following the generation of the initial stope envelopes, the reserve shapes were optimized by applying the applicable MCOG to mineralized blocks located within the established mineable envelopes where no additional mine development was required to access the material. This approach allows the recovery of additional economically mineable material while preserving the overall economic viability of each mining block and avoiding the inclusion of isolated mineralization requiring uneconomic development.

The final Mineral Reserve Estimate was established following completion of the underground mine design and LOM production schedule. The estimate incorporates the modifying factors appropriate for a FS, including mining dilution, mining recovery, metallurgical recovery, geotechnical considerations, mining and infrastructure constraints, environmental and permitting considerations, and the economic assumptions supporting the Mineral Reserve estimate. The methodology and principal modifying factors applied in the estimation of the Mineral Reserves are described in the following sections of this chapter.

15.3 Cut-off Grade Determination

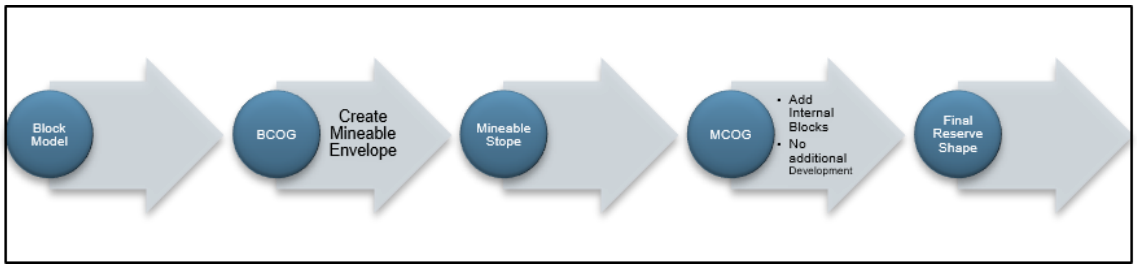
The Mineral Reserve Cut-off Grades were developed specifically for the Kiena FS using technical, operational, and economic parameters representative of the planned underground mining operation. Separate COG were established for the Presqu'île, Kiena Deep, and Dubuisson mining areas to reflect differences in mining geometry, mining costs, and metallurgical recovery.

The Cut-off Grade calculations are based on a longhole stoping mining method and incorporate the reserve economic assumptions adopted for this FS, including a gold price of US$1,800/oz, an exchange rate of 1.35 CAD/US$, refining costs, processing costs, mining costs, general and administrative costs, and the applicable metallurgical recoveries for each mining area. A limited portion of the Presqu'île mining area is subject to a 1% NSR royalty. As this royalty affects only a small portion of the planned Mineral Reserve, the general COG calculations were performed without considering royalties. A site-specific verification was subsequently completed for the affected area to confirm that the adopted COG remained appropriate and that the royalty had no material impact on the economic viability of the Mineral Reserve Estimate.

Two (2) economic Cut-off Grades were established for each mining area:

- **Break-Even Cut-off Grade**, used to define the initial mineable stope envelopes. The BCOG incorporates the full mining cost, including the development required to establish and access a new mining block.
- **Marginal Cut-off Grade** applied only to mineralized blocks located within previously established mineable stope envelopes where no additional development is required. Since the primary development has already been economically justified through the BCOG evaluation, the MCOG excludes the incremental development cost, allowing the recovery of additional mineralized material while maintaining the overall economic viability of the mining block.

This two (2)-stage approach maximizes the recovery of economically mineable material without introducing isolated stopes or requiring uneconomic access development and is considered representative of the expected mining sequence.



The Break-Even Cut-off Grade was calculated using the following relationship:

$$BCOG = \frac{C_{total}}{(P_{Au} - S_{Au}) \times R_{Au} \times (1 - R_f)}$$

Where:

COG Cut-off Grade, in grams per tonne of gold (g/t Au)

C_{total} Total operating cost, in CAD per tonne of mined material (mining, processing, G&A, environment, sustaining capital)

P_{Au} Gold price, in CAD per gram (converted from $/oz at market rate and exchange rate)

S_{Au} Selling cost, in CAD per gram (converted from $/oz at market rate and exchange rate)

R_{Au} Gold metallurgical recovery, expressed as a decimal (e.g., 92.1% = 0.921)

R_f Royalty as a decimal (e.g., 5.0% = 0.05)

For the calculation of the **Marginal Cut-off Grade**, the development component included in the mining cost was removed from the economic evaluation. All remaining economic assumptions remained unchanged.

The economic assumptions used in the cut-off grade calculations are summarized in Table 15.1. The resulting BCOG and MCOG values for each mining area are presented in Table 15.2.

Table 15.1 Cut-off grade calculation parameters

Parameter	Unit	Presqu'île	Kiena Deep	Dubuisson
Mining method	-	Longhole stoping (16.5 m floor-to-floor)	Longhole stoping (15 m floor-to-floor)	Longhole stoping (20 m floor-to-floor)
Gold price	US$/oz	1,800	1,800	1,800
Exchange rate	CAD/US$	1.35	1.35	1.35
Royalty	%	0.0	0.0	0.0
Refining cost	US$/oz	5.65	5.65	5.65
Processing cost	CAD/t milled	50.20	50.20	50.20
Metallurgical recovery	%	97.0	98.5	97.0
Mining recovery[1]	%	100	100	100
Mining dilution[1]	%	0	0	0
Mining cost (BCOG)	CAD/t mined	188.72	240.98	210.50
Mining cost (MCOG)[2]	CAD/t mined	166.00	217.40	180.56
G&A + Environment	CAD/t milled	80.00	80.00	80.00

Notes:
1. Mining recovery and mining dilution are applied during the detailed mine scheduling and reserve estimation process in Deswik. For cut-off grade calculations, values of 100% mining recovery and 0% mining dilution were used to determine the economic cut-off grades prior to the application of modifying factors.
2. The mining cost used for the MCOG excludes the development cost required to establish new mining accesses.

Table 15.2 Base and Marginal Cut-off Grades

Mining Area	BCOG (g/t Au)	MCOG (g/t Au)
Presqu'île	4.25	3.95
Kiena Deep	4.85	4.55
Dubuisson	4.55	4.15

15.4 Planned Mining Dilution

Planned mining dilution was incorporated into the Mineral Reserve estimate through a combination of stope shape optimization, ELOS modelling, and backfill dilution assumptions representative of the planned longhole stoping methods employed at Kiena.

The equivalent ELOS values used in the Mineral Reserve estimate were established by the Qualified Person responsible for the rock mechanics aspects of the FS. The recommended ELOS values were developed based on the anticipated rock mass behaviour, mining method, stope geometry, hydraulic radius, mining sequence, and the geotechnical characteristics of the various lithological domains represented in the resource block model.

The ELOS values were subsequently incorporated into the Deswik stope optimization process, where they were applied to estimate planned external dilution and generate mineable stope shapes representative of the expected operating conditions. Distinct ELOS values were assigned to the hanging wall and footwall according to the predominant lithologies within each mining area, recognizing the different expected rock mass behaviour of each geotechnical domain.

For Kiena Deep, separate ELOS values were established for the schist, transition, and basalt lithologies. At Presqu'île, a single ELOS value was developed and applied across the entire mining area to reflect the representative stope geometry, mining method, and geotechnical conditions associated with the planned mining approach. For Dubuisson, separate ELOS values were assigned to the schist and other host rock lithologies. These values were subsequently applied during the stope optimization process to generate mineable stope shapes representative of the expected operating conditions.

The planned dilution assumptions adopted for the Mineral Reserve estimate are summarized in Table 15.3.

Backfill dilution was evaluated separately from the external rock dilution and was applied only where a stope wall was in contact with cemented paste backfill. A dilution thickness of 0.35 m per exposed stope wall was assumed based on operating experience at Kiena and industry practice for longitudinal longhole stoping with paste backfill. The resulting dilution tonnage was assigned a gold grade of 0 g/t. The principal assumptions used to estimate backfill dilution are summarized in Table 15.4.

No additional dilution was applied to sill pillar stopes resulting from rock sill pillar failure, as these mining sequences are designed to maintain adequate stability throughout extraction. Similarly, no dilution was assumed from the stope floor.

The grade of the external dilution was estimated using the gold grades contained within the adjacent resource block model through the Deswik stope optimization process. Consequently, the planned dilution incorporated into the Mineral Reserve estimate reflects both the expected overbreak volume and the grade of the surrounding material adjacent to each stope.

Across the LOM, the resulting planned external waste dilution averages 28%, while the total planned dilution, including backfill dilution, averages 32%. These values represent the overall outcome of the stope optimization process and the planned dilution assumptions applied throughout the Mineral Reserve estimate.

The planned mining dilution methodology adopted for this FS is considered representative of the expected mining performance and reflects both historical operating experience at Kiena Mine Complex and engineering judgement regarding the anticipated geotechnical behaviour of each mining area.

Table 15.3 Planned External Dilution Parameters

Mining Area	Dominant Lithology	Hanging Wall ELOS (m)	Footwall ELOS (m)	Method
Kiena Deep	Schist	2.00	1.00	Longhole stoping
Kiena Deep	Transition	1.00	0.50	Longhole stoping
Kiena Deep	Basalt	0.50	0.25	Longhole stoping
Presqu'île	All Lithologies	0.70	0.30	Longhole stoping
Dubuisson	Schist	0.65	0.65	Longhole stoping
Dubuisson	Other Lithologies	0.45	0.45	Longhole stoping

Table 15.4 Backfill Dilution Assumptions

Parameter	Value
Paste backfill dilution thickness	0.35 m per exposed stope wall
Applied Au grade	0.0 g/t
Applied only where paste contacts stope wall	Yes
Additional sill pillar dilution	None
Floor dilution	None

15.5 Mining Recovery

Mining recovery assumptions were established by the Qualified Person responsible for the mining aspects of the FS based on historical operating performance at the Kiena Mine, engineering judgement, the selected mining method, and the anticipated mining performance associated with the proposed mine design. Particular consideration was given to improvements incorporated into the mining strategy, including reduced hydraulic radius, improved stope geometries, better managed stress redistribution resulting from the revised mining sequence, and other design modifications intended to improve stope stability and extraction efficiency.

Development headings were assigned a mining recovery of 100%, reflecting the expectation that all planned mineralized development will be fully excavated.

For production stopes, recovery factors were assigned according to the mining area and the anticipated mining conditions. The selected recovery factors reflect historical mining performance at Kiena while recognizing the expected improvements associated with the updated mining strategy adopted. Lower recovery factors were assigned where additional ore is expected to remain in place because of local geotechnical conditions, mining geometry, or operational considerations. Within Kiena Deep, a reduced mining recovery factor was assigned to stopes located in previously mined areas to account for the additional operational complexity and mechanical considerations associated with mining adjacent to existing underground excavations. Although the revised mining strategy is expected to reduce stress concentrations through lower hydraulic radii and improved mining geometry, a conservative recovery factor was retained for these areas. Presqu'île and Dubuisson production stopes were assigned recovery factors considered representative of the expected mining performance for each mining area.

A mining recovery factor of 80% was applied to sill stopes. This reduced recovery reflects the additional operational and geotechnical constraints associated with sill pillar extraction. It recognizes that a portion of the mineralized material is intentionally left in place to maintain regional stability, preserve the integrity of adjacent excavations, and safely complete the mining sequence.

The mining recovery assumptions adopted for the Mineral Reserve estimate are summarized in Table 15.5.

Table 15.5 Planned Mining Recovery Factors

Mining Area	Mining Activity	Mining Recovery (%)
Kiena Deep – Basalt	Production stopes	92
Kiena Deep – Schist	Production stopes	90
Kiena Deep – Stopes in Previously Mined Areas	Production stopes	87
Presqu'île	Production stopes	90
Dubuisson	Production stopes	92
Sill stopes	Production stopes	80
Upper – 10 high stope	Production stopes	90
Upper – 15 high stope	Production stopes	85
All Mining Areas	Mineralized development	100

15.6 Stope Design and Optimization

The Mineral Reserve estimate is based on detailed stope designs developed using the DSO and subsequently reviewed and refined by the mine engineering team. The optimization process was completed using the February 11, 2026 Mineral Resource block model and the engineering design criteria established for each mining area.

The DSO was used to generate preliminary mineable stope envelopes using the BCOG and the geometric constraints representative of the selected longitudinal longhole stoping mining methods. Following the initial optimization, the stope shapes were further refined by incorporating the MCOG within previously established mineable envelopes where no additional mine development was required. This approach maximizes the recovery of economically mineable material while maintaining the overall economic viability of each mining block.

The optimization process incorporated mine-specific design parameters including stope height, strike length, minimum mining width, minimum pillar dimensions, sub shape constraints, planned mining dilution, and the applicable geotechnical recommendations. External dilution was incorporated using the ELOS values established by the Qualified Person responsible for the rock mechanics aspects of the FS, while mining recovery factors were applied following completion of the final stope designs.

Although preliminary stope geometries were generated using the Deswik optimization algorithms, all production stopes were subsequently reviewed and, where necessary, manually adjusted by the mine engineering team to ensure compatibility with the selected mining method, underground infrastructure, development layout, ventilation requirements, mining sequence, and geotechnical recommendations. Only stope shapes considered practical and mineable were retained in the final LOM plan and Mineral Reserve estimate.

A minimum inter-stope pillar width of 7 m was adopted throughout the Project. In addition, a 100 m crown pillar has been maintained between the underground workings and the overlying rock mass for all mining areas. The crown pillar dimensions adopted in this FS are considered conservative and are expected to be refined through additional geotechnical investigations and numerical modelling as mining progresses.

The principal stope optimization parameters adopted for each mining area are summarized in Table 15.6.

Table 15.6 Stope Optimization Parameters

Parameter	Kiena Deep	Presqu'île	Dubuisson
Mining method	Longitudinal Longhole Stoping	Longitudinal Longhole Stoping	Longitudinal Longhole Stoping
Optimization software[1]	Deswik Shape Optimizer (Exact Geometry)	Deswik Shape Optimizer (Exact Geometry)	Deswik Shape Optimizer (Exact Geometry)
Stope orientation	Vertical	Vertical	Vertical
Floor-to-floor height	15.0 m	16.5 m	20.0 m
Typical strike length	10 m	15 m	15 m
Minimum mining width - Undiluted	3.0 m	1.2 m	1.5 m
Maximum mining width	100 m	100 m	100 m
Minimum inter-stope pillar	7.0 m	7.0 m	7.0 m
Minimum sub shape length	5.0 m	5.0 m	5.0 m
Minimum sub shape height	5.0 m	8.3 m	10.0 m
External dilution[2]	ELOS methodology	ELOS methodology	ELOS methodology
Optimization sequence	BCOG followed by MCOG	BCOG followed by MCOG	BCOG followed by MCOG
Crown pillar[3]	100 m (current design)	100 m (current design)	100 m (current design)

1. Preliminary stope shapes generated by the Deswik Shape Optimizer were reviewed and refined by the mine engineering team before inclusion in the Mineral Reserve estimate.
2. External dilution was estimated using ELOS values developed by the Qualified Person responsible for the rock mechanics aspects of the FS.
3. The current 100 m crown pillar is a design constraint adopted for the FS. Additional geotechnical investigations and numerical analyses are expected to support future optimization of the crown pillar configuration.

15.7 Environmental, Social and Regulatory Modifying Factors

Environmental, social and regulatory considerations were reviewed as modifying factors for the Mineral Reserve estimate. The Kiena Mine is an operating underground mine located in Val-d'Or, Québec, and the Mineral Reserve estimate is based on the continuation and expansion of mining activities within an established mining complex.

Based on information available at the effective date of the Mineral Reserve estimate, no environmental, social, legal, title, taxation, socio-economic, marketing, political, or other relevant factors are known to the Qualified Person that would materially affect the Mineral Reserve estimate. The Mineral Reserve are supported by the current operating context of the Kiena Mine, existing site infrastructure, and the permitting framework applicable to the planned mining areas.

Regulatory approvals remain an important modifying factor for the Mineral Reserve estimate. In 2026, the Presqu'île zone secured a ministerial authorization for work related to the access ramp and the exploitation of the mineralized zone, as well as a mining lease. Obtaining this authorization supports the development and production planned for this mining area. These approvals are consistent with the inclusion of the Presqu'île mining area in the Mineral Reserve estimate.

The planned mining activities within the Dubuisson Zone extend beyond the limits of the existing Kiena Mining Lease and will require, among other regulatory approvals, the issuance of a Mining Lease and a Ministerial Authorization prior to the commencement of mining activities within that area. Wesdome intends to initiate the permitting process for these regulatory approvals in support of the planned future mining sequence. In the meantime, development work on the initial section of the planned access drifts toward the Dubuisson zone may proceed within the boundaries of the existing Kiena mining lease. As no new surface infrastructure or surface disturbance is planned to support the Dubuisson development, no additional environmental baseline characterization of the surface environment is currently anticipated as part of the permitting process.

The Kiena Mine is operated within a Canadian and Québec regulatory framework requiring compliance with applicable environmental, health and safety, mining, water management, tailings, closure, and reporting requirements. Wesdome maintains corporate environmental management practices, including incident response preparedness and an environmental policy reviewed annually and communicated to employees.

Social considerations were also reviewed as part of the modifying factor assessment. Kiena is in an established mining region with an existing workforce and operating history. No social factor has been identified by the Qualified Person that would materially affect the Mineral Reserve estimate.

The Qualified Person notes that environmental, social and regulatory requirements may evolve over time and that continued compliance with permits, authorizations, regulatory obligations, closure requirements, and stakeholder expectations is required to maintain the validity of the assumptions supporting the Mineral Reserve estimate. These matters are discussed further in the relevant sections of this Technical Report.

15.8 Reserve Classification

Mineral Reserves were classified following the CIM Definition Standards for Mineral Resources and Mineral Reserves (2014), as incorporated by reference in National Instrument 43-101. The classification reflects the level of confidence in the underlying Mineral Resources together with the Qualified Person's assessment of the applicable modifying factors.

Only Measured and Indicated Mineral Resources contained within mineable stope designs and demonstrated to be economically viable through the FS were considered for conversion to Mineral Reserves. Inferred Mineral Resources were treated as waste throughout the mine design, production schedule, and economic evaluation and were not considered in the estimation of Mineral Reserves.

Proven Mineral Reserves were derived exclusively from Measured Mineral Resources where the level of geological confidence, mine design, modifying factors, and economic analysis supported the highest level of confidence in the Mineral Reserve estimate.

Probable Mineral Reserves were derived from Indicated Mineral Resources and, where appropriate, from Measured Mineral Resources in areas where the Qualified Person determined that the overall confidence in one or more modifying factors did not support classification as Proven Mineral Reserves. These considerations may include, but are not limited to, mining geometry, geotechnical conditions, mine sequencing, operational constraints, or other technical or economic factors.

The Qualified Person considers that the level of engineering, mine planning, and evaluation completed as part of this FS provides an appropriate basis for the classification of the Mineral Reserves presented herein and that the resulting Mineral Reserve estimate is supported by reasonable mining, processing, economic, environmental, social, legal, and governmental assumptions.

15.9 Mineral Reserve Estimate

The Mineral Reserve estimate for the Kiena Project is summarized in Table 15.7. The estimate represents the economically mineable portion of the Measured and Indicated Mineral Resources following the application of the modifying factors appropriate for a FS, including mine design, production scheduling, mining recovery, planned dilution, metallurgical recovery, geotechnical constraints, environmental considerations, and the economic assumptions described in the preceding sections.

The Mineral Reserve estimate has an effective date of December 31, 2025. Although the Mineral Resource block model used for the reserve estimation was delivered on February 11, 2026, it incorporates geological information and drilling data available up to the effective date of December 31, 2025. The later delivery date reflects completion of the geological modelling process and preparation of the final block model following year-end data validation and model updates.

The Mineral Reserves comprise Proven and Probable Mineral Reserves distributed between the Kiena Deep, Presqu'île, and Dubuisson mining areas, together with proven stockpile and inventory material. The Mineral Reserve estimate is supported by detailed mine planning and production scheduling completed as part of this FS.

Table 15.7 presents the Mineral Reserve estimate for the Kiena Project.

Table 15.7 Kiena Project Statement of Mineral Reserves

Effective Date as December 31, 2025

Category	Tonnes (t)	Grade (g/t Au)	Contained Gold (oz)
Proven	***463,000***	***9.6***	***143,000***
Presqu'île	75,000	7.5	18,000
Kiena Deep	388,000	10.00	125,000
Stockpile and Inventory	0	-	-
Probable	***2,090,000***	***8.5***	***568,000***
Presqu'île	262,000	6.41	54,000
Kiena Deep	1,543,000	9.17	455,000
Dubuisson	285,000	6.44	59,000
Proven and Probable	**2,553,000**	**8.7**	**711,000**

Notes:

4. The Qualified Person responsible for the Mineral Reserve estimate is Éric Lecomte, P.Eng., Norda Stelo Inc. The Mineral Reserve estimate has an effective date of December 31, 2025 and has been prepared in accordance with the CIM Definition Standards for Mineral Resources and Mineral Reserves (2014) adopted by the CIM Council and incorporated by reference into National Instrument 43-101.
5. Mineral Reserves are estimated from Measured and Indicated Mineral Resources that have demonstrated economic viability through detailed mine planning and economic evaluation. Inferred Mineral Resources are treated as waste and are not included in the Mineral Reserve estimate.
6. The Mineral Reserve estimate is based on a gold price of US$1,800/oz, an exchange rate of US$1.00 = C$1.35, and refining costs of US$5.65/oz. The estimate incorporates the modifying factors appropriate for a Feasibility Study, including mine design, mine planning, production scheduling, mining recovery, planned dilution, backfill dilution, metallurgical recovery, geotechnical constraints, environmental considerations, and economic assumptions.
7. Mineral Reserves were estimated assuming longitudinal longhole stoping with paste backfill in the Kiena Deep, Presqu'île, and Dubuisson mining areas. Planned external dilution was estimated using lithology-specific ELOS values developed by the Qualified Person responsible for the rock mechanics aspects of the Feasibility Study. Mining recovery factors ranging from 87% to 92% were applied to production stopes depending on the mining area, lithology, and mining conditions. A mining recovery factor of 80% was applied to sill stopes.
8. Mineral Reserves are reported within mineable stope shapes generated using zone-specific Break -Even Cut-off Grades and subsequently optimized using Marginal Cut-off Grades (MCOG) for material located within previously established mineable envelopes where no additional mine development was required. The applied cut-off grades were:
    - Presqu'île: 4.25 g/t Au (BCOG) and 3.95 g/t Au (MCOG);
    - Kiena Deep: 4.85 g/t Au (BCOG) and 4.55 g/t Au (MCOG);
    - Dubuisson: 4.55 g/t Au (BCOG) and 4.15 g/t Au (MCOG).
9. The mining costs used to establish the cut-off grades were estimated at C$240.98/t mined for Kiena Deep, C$188.72/t mined for Presqu'île, and C$210.50/t mined for Dubuisson. Processing and General & Administrative costs were estimated at C$50.20/t milled and C$80.00/t milled, respectively. Metallurgical recoveries used for cut-off grade determination were estimated at 98.5% for Kiena Deep and 97.0% for the Presqu'île and Dubuisson mining areas.
10. Tonnage, grade, and contained gold have been rounded to reflect the precision of the estimate; therefore, totals may not sum due to rounding. Contained gold ounces are calculated from diluted tonnes and diluted grades before application of metallurgical recovery.

15.10 Factors that May Affect the Mineral Reserves

Areas of uncertainty that may materially impact the Mineral Reserve Estimate include the following:

- Commodity prices, market conditions, and foreign exchange rate assumptions
- Cut-off grade estimates
- Capital and operating cost assumptions
- Geological complexity and resource block modelling
- Stope stability, dilution and mining recovery factors
- Metallurgical recoveries and contaminants
- Rock mechanics (geotechnical) constraints and squeezing ground condition
- Availability of qualified workforce and critical mining equipment
- Availability and cost of electrical power and consumables

16. MINING METHODS

16.1 Introduction

The Kiena Gold Project is an operating underground gold mine located near Val-d'Or, Québec, Canada. The reserve-based LOM plan has been developed exclusively from Proven and Probable Mineral Reserves and includes mining from the Kiena Deep, Presqu'île, and Dubuisson deposits. The mine plan has been developed to sustain an average processing rate of approximately 900 t/d to 950 t/d, consistent with the Mineral Reserve estimate and the production schedule evaluated in this study while utilizing the current infrastructure.

Underground production will be primarily achieved using longitudinal retreat longhole stoping with paste backfill, which accounts for approximately 81% of the total production tonnage included in the LOM plan. This mining method is well suited to the geometry and geotechnical characteristics of the majority of the orebody and provides an efficient and flexible mining approach while maintaining acceptable recovery, dilution, and ground stability. The remaining 19% of the production tonnage will be mined using transverse longhole stoping in areas where the mineralized zones are wider and multiple veins can be economically mined within a single stope. Details of the selected mining methods and the associated design criteria are presented in the following sections of this chapter.

The LOM plan is founded on the continued production from the Kiena Deep mining area, which provides the base production rate of approximately 700 t/d. Production from the Presqu'île Zone is scheduled to progressively ramp up during 2026, contributing approximately 200 t/d and allowing the operation to achieve its planned production rate. Development of the Dubuisson Zone is scheduled to commence in early 2027 through the construction of a new decline providing access from the existing Kiena Mine infrastructure. Production from Dubuisson is expected to begin following the depletion of the Presqu'île Mineral Reserves and contribute approximately 250 t/d over the remaining mine life.

Mine development activities include the continued extension of the Kiena Deep decline to provide access to deeper mining horizons, completion of the remaining development required to establish full production from the Presqu'île Zone, and construction of the new Dubuisson decline together with the associated underground infrastructure required to support future production. Access to the Presqu'île mining area is provided through the existing portal ramp, while Kiena Deep is accessed through the existing underground decline system. The Dubuisson mining area will be accessed through the new decline connected to the existing mine via the Level 33 access drift.

The production sequence has been developed to maintain a relatively stable ore feed to the processing plant throughout the LOM. The Presqu'île Zone provides incremental production during the early years of the schedule, while the subsequent development of the Dubuisson Zone is intended to replace production from Presqu'île as its Mineral Reserves become depleted, thereby maintaining the planned production rate rather than increasing overall production capacity. This development strategy utilizes the existing processing plant, hoisting system, underground infrastructure, and mobile equipment while minimizing the requirement for major capital expansion.

The mining strategy has been developed to provide operational flexibility through multiple active mining fronts while maintaining an appropriate balance between mine development and production activities. Mine sequencing, production scheduling, equipment selection, ventilation requirements, and supporting infrastructure have been integrated to support the reserve-based mine plan presented in this Technical Report.

16.2 Rock Engineering and Geotechnical Design

16.2.1 Geomechanical Design Basis

The geotechnical program completed for the Kiena FS provides the engineering basis for the design of underground excavations, mining sequence, ground support systems, stope dimensions, crown pillars, and long-term underground infrastructure. The work was undertaken to characterize the expected ground conditions within the planned mining areas and to establish geotechnical design criteria appropriate for the selected longhole stoping mining method.

The geotechnical assessment builds upon the extensive operating experience accumulated at the Kiena Mine since the commencement of underground mining in 1981. This historical experience has been supplemented by investigations completed specifically for the FS during 2025 and early 2026, including laboratory testing, geotechnical core logging, underground mapping, empirical stability analyses, and numerical stress modelling. Previous geotechnical studies completed for the 2021 PFS were also reviewed and incorporated where applicable.

The scope of the geotechnical work includes the three (3) mining areas incorporated into the LOM plan:

- Kiena Deep
- Presqu'île
- Dubuisson

Although the three (3) mining areas will be mined using the same mining method, each exhibits distinct geological environments, stress conditions, mining history, and anticipated rock mass behaviour. Consequently, independent geotechnical characterization and design assessments were completed for each mining area to establish appropriate excavation geometries, support standards, stope dimensions, and dilution expectations.

Figure 16.1 illustrates the three (3) mining areas evaluated as part of the FS and highlights their relative location within the Kiena Mine Complex. The different mining depths and geological settings represented by these areas constitute the primary factors governing the geotechnical design approach adopted for the mine plan.

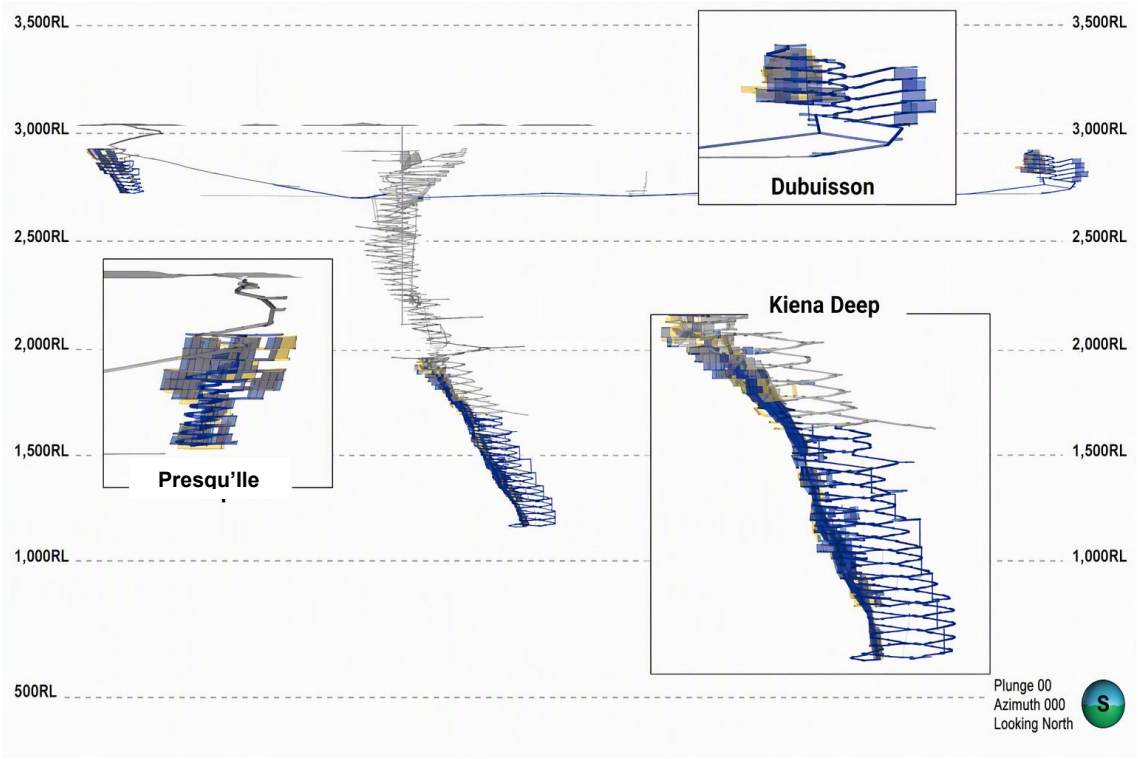


Figure 16.1 Overview of the Kiena Deep, Presqu'île and Dubuisson Mining Areas

Kiena Deep represents the deepest portion of the operation, with planned mining extending below approximately 1,000 m depth where elevated in-situ stresses become an important design consideration. Conversely, the Presqu'île and Dubuisson deposits are located at relatively shallow depths of approximately 300 m and are therefore expected to experience significantly lower stress conditions. These differences were considered throughout the geotechnical assessment and are reflected in the excavation design criteria, mining layouts, ground support strategies, and extraction sequencing adopted for each mining area.

Historical mining at Kiena has provided an extensive database of operational observations that forms an important component of the geotechnical design basis. Information obtained through underground development, production, geological mapping, and ground performance monitoring has been integrated with the investigations completed for the FS to establish representative design criteria for the planned mining areas. The principal geomechanical characteristics of each mining area are described in the following section.

The geotechnical assessment completed for the FS extends beyond the evaluation of existing ground conditions. The results were used directly to optimize the mine design by establishing appropriate excavation dimensions, support standards, stope geometries, stand-off distances, mining sequence, and dilution control measures. Consequently, the geotechnical work forms an integral component of the mine design rather than a standalone engineering assessment.

Overall, the available geological information, laboratory testing, underground observations, historical operating experience, geotechnical mapping, and numerical modelling provide an appropriate engineering basis for the FS mine design. These complementary datasets establish the geotechnical framework used to develop excavation design criteria, which are described in the following sections.

16.2.2 Geomechanical Review and Site Characterization

The geotechnical characterization completed for the FS established the engineering basis for evaluating the anticipated rock mass behaviour within each mining area and for developing the geotechnical design criteria adopted for the underground mine design. The characterization program combines historical operating experience, geological interpretation, laboratory testing, geotechnical drilling, underground mapping, empirical design methods, and numerical modelling to define the geomechanical conditions anticipated throughout the LOM.

The assessment covers the three mining areas included in the mine plan, namely Kiena Deep, Presqu'île, and Dubuisson. Although these mining areas share the same mining method, they differ significantly with respect to depth, host lithology, structural setting, stress environment, and level of operational experience. Consequently, each area was evaluated independently to establish appropriate design criteria while maintaining a consistent geotechnical design methodology across the Project.

Kiena Deep

Kiena Deep is located at depths greater than approximately 1,000 m below surface and represents the deepest portion of the planned operation. Mineralization is primarily hosted along the contact between schist and basalt units, with local porphyritic intrusions. Underground development and production completed over the last several years have provided valuable information regarding rock mass behaviour under high-stress conditions. The upper portion of the mining area, extending to approximately Level 139, has benefited from extensive underground access, drilling, geological mapping, and operational observations. Below Level 139, direct underground exposure becomes progressively more limited and geotechnical characterization relies increasingly on underground drilling completed ahead of mining. Although the available database is naturally less extensive than in developed areas, the geological continuity, drilling information, and ongoing mine development provide an appropriate basis for feasibility-level geotechnical design.

Historical mining at Kiena Deep has identified several geotechnical behaviours that have directly influenced the current mine design. These include localized convergence within schistose units, increased stope dilution where weaker rock masses are present, localized ground falls at major intersections, and mining-induced stress redistribution associated with deep underground extraction. These observations have been incorporated into the geotechnical analyses and were used to establish excavation geometries, support standards, mining sequence, and infrastructure stand-off distances adopted for the current mine plan.

An example illustrating the relationship between local geology and zones of reduced rock quality is presented in Figure 16.2.

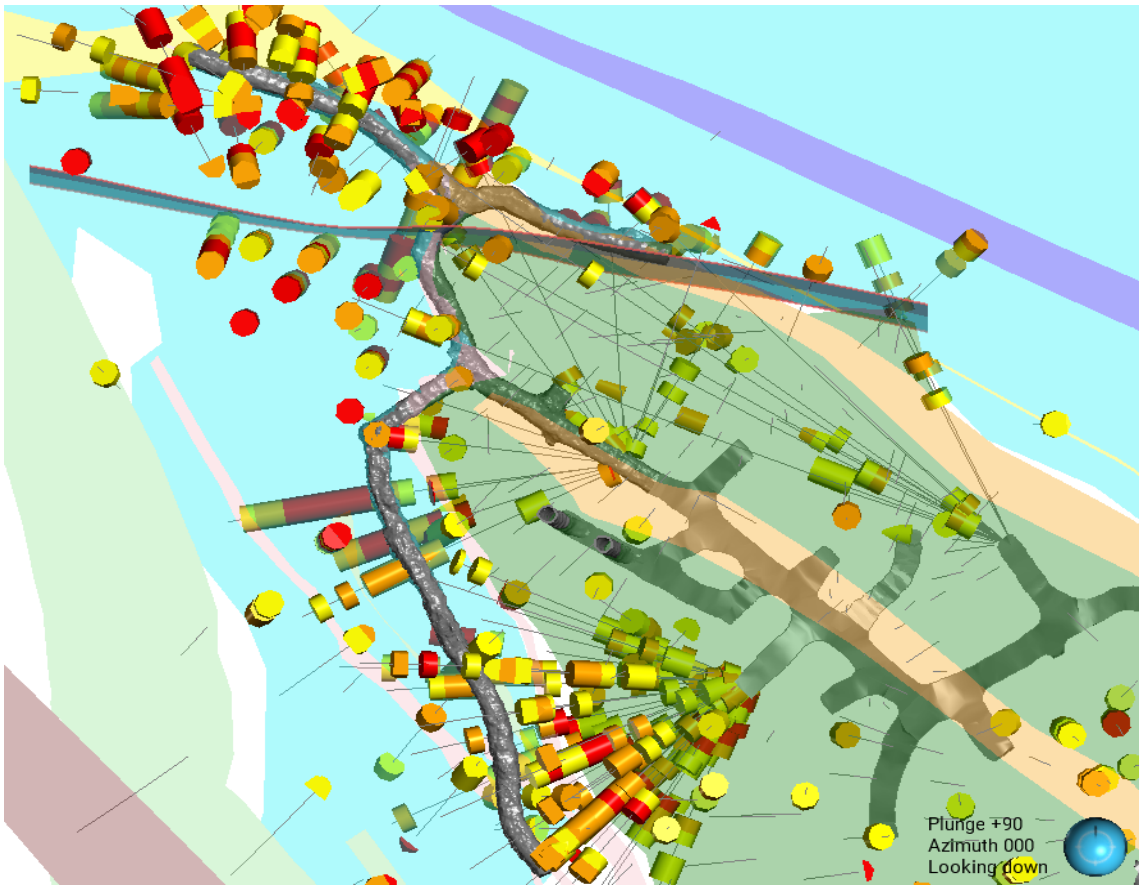


Figure 16.2 Relationship Between Local Geology and Rock Quality (RQD < 50%) at Kiena Deep Level 120

Figure 16.2 illustrates that zones of reduced rock quality are closely associated with specific lithological and structural conditions. These observations support the geotechnical domain model adopted for excavation design and ground support selection.

Presqu'île

The Presqu'île deposit is located at a depth of approximately 300 m below surface. The hanging wall is predominantly basalt, while the mineralization is hosted within komatiite. Although Presqu'île has a shorter operating history than Kiena Deep, underground development and the bulk sampling program have provided valuable site-specific information regarding rock mass behaviour under the anticipated mining conditions.

The available drilling, geological interpretation, and underground exposure provide an appropriate basis for geotechnical characterization of the planned mining areas. The relatively shallow mining depth results in substantially lower in-situ stress conditions compared with Kiena Deep, and the anticipated excavation response is therefore expected to be controlled primarily by local rock mass quality and geological structure rather than by stress-induced deformation.

Dubuisson

The Dubuisson deposit is also located at approximately 300 m below surface and consists of steeply dipping mineralized zones hosted within mafic volcanic rocks and porphyritic intrusions. Unlike Kiena Deep, commercial mining has not yet commenced within the Dubuisson mining area. Nevertheless, the deposit is considered analogous to the upper portions of the historic Kiena Mine because of its comparable mining depth and geological environment.

Geotechnical characterization of Dubuisson is based primarily on dedicated resource and geotechnical drilling completed during the exploration and FS programs. The available drilling information, together with the geological understanding developed from the Kiena Mine Complex, provides an appropriate basis for the empirical and numerical analyses completed as part of the FS.

Site Characterization Program

The site characterization program combined the extensive historical geotechnical information available from the Kiena Mine with investigations completed specifically for the FS. Historical information includes underground observations, geological mapping, core logging, laboratory testing, excavation performance, and previous geotechnical investigations, while the FS expanded this database through additional laboratory testing, detailed geotechnical core logging, underground mapping, and updated numerical analyses.

Representative examples of the actual definition and exploration drilling supporting the geotechnical characterization of the Presqu'île and Dubuisson mining areas are presented in Figure 16.3.

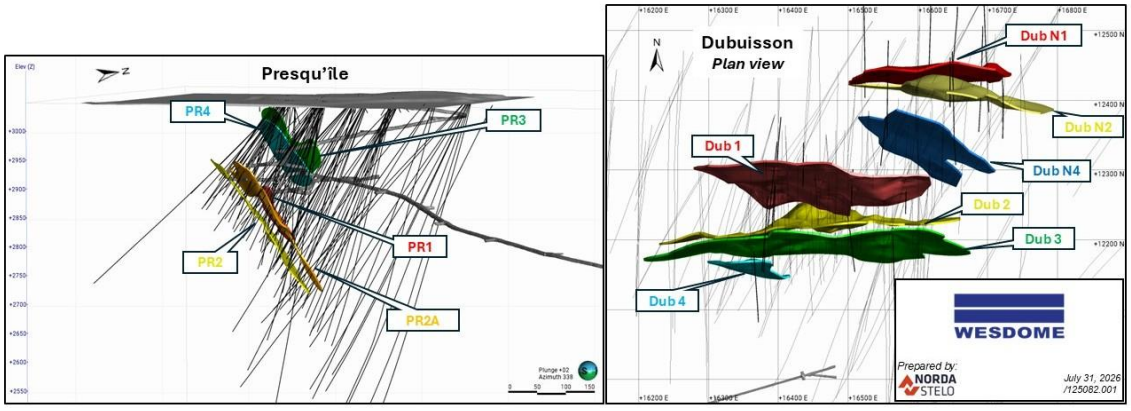


Figure 16.3 Drill Coverage at Presqu'île and Dubuisson

Figure 16.3 illustrates the definition and exploration drilling density available to support geological interpretation and geotechnical characterization within the two (2) shallow mining areas.

The distribution of the geotechnical database available for Kiena Deep is illustrated in Figure 16.4.

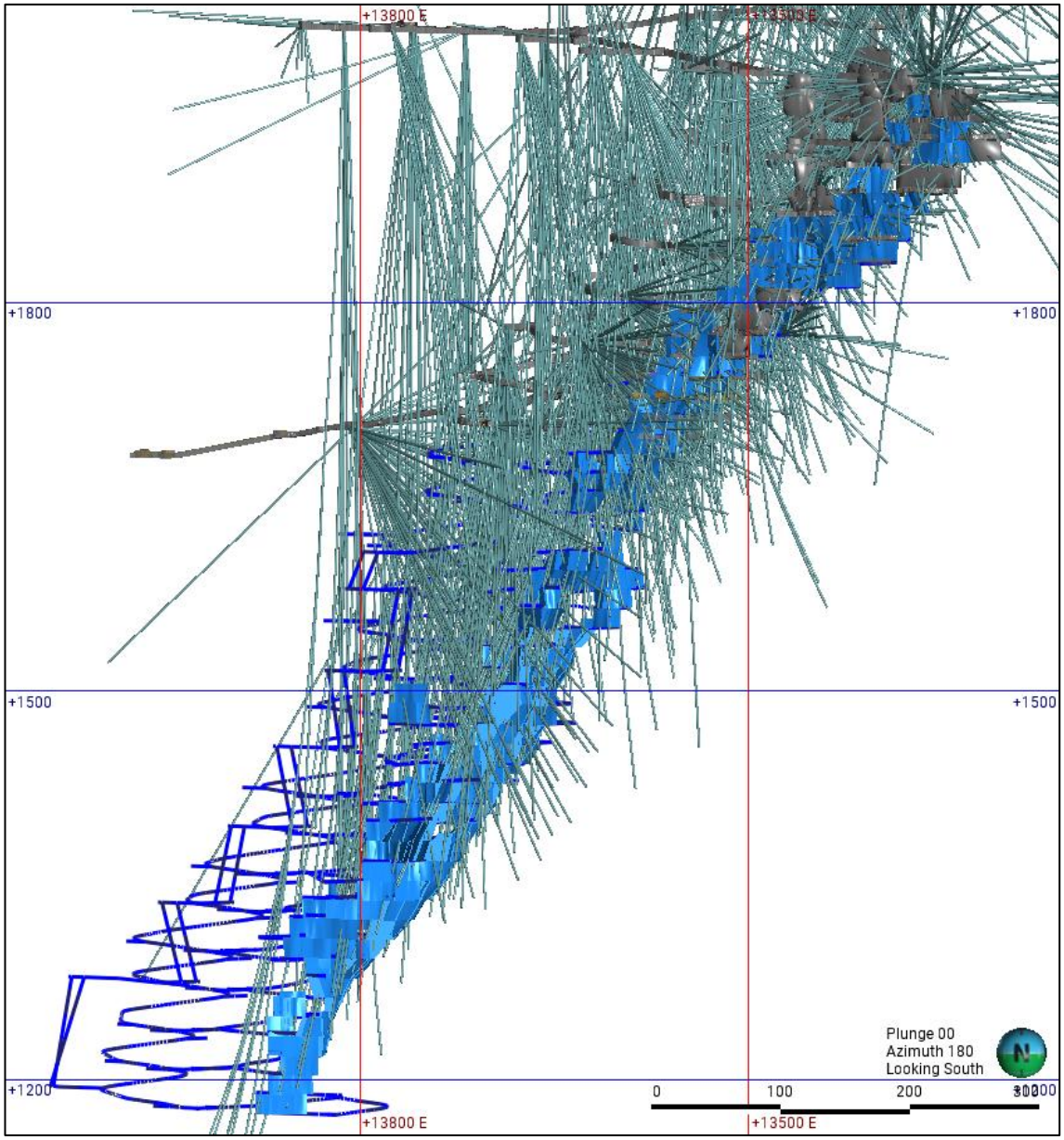


Figure 16.4 RQD Values in actual drilling of Kiena Deep

Figure 16.4 illustrates the progression of the geotechnical database with increasing mining depth at Kiena Deep. As development advances below the currently accessible levels, characterization relies progressively on underground drilling completed in advance of mining, which is consistent with the staged approach typically adopted for deep underground mining projects.

Overall, the available geological, geotechnical, laboratory, and operational information provides an appropriate characterization of the rock mass conditions expected within the three (3) mining areas. The combination of historical operating experience and targeted investigations completed for the FS provides sufficient confidence to establish the geotechnical design criteria presented in the following sections.

As mining advances below the currently developed levels, continued underground observations, geotechnical mapping, reconciliation of excavation performance, and additional drilling will allow refinement of local geotechnical domains in accordance with normal underground mine practice.

16.2.3 Rock Mass Characterization and Geotechnical Design Criteria

The geotechnical characterization program was undertaken to establish representative engineering properties for the principal lithological units encountered within the Kiena Deep, Presqu'île, and Dubuisson mining areas. The resulting database provides the foundation for the empirical and numerical analyses completed as part of the FS and supports the development of excavation design criteria, ground support standards, stope dimensions, crown pillar assessments, and dilution evaluations.

The geotechnical characterization program incorporates information collected throughout the operating history of the Kiena Mine together with investigations completed specifically for the FS. Historical information includes laboratory testing, underground mapping, rock quality logging, production observations, and previous geotechnical investigations completed for the 2021 PFS. During the FS, this database was expanded through additional laboratory testing, detailed geotechnical core logging, underground mapping, and updated rock mass classification. The FS program included approximately 196 laboratory tests, and more than 2,600 m of detailed geotechnical core logging, and underground mapping completed in active mining areas. These investigations significantly expanded the site-specific geotechnical database and, together with the extensive historical operating experience available at Kiena, provide an appropriate basis for feasibility-level geotechnical characterization. The characterization program was designed to provide representative coverage of the principal lithological units, mining areas, and anticipated excavation conditions, thereby supporting the empirical and numerical analyses completed as part of the mine design.

The objective of the characterization program was not only to establish representative engineering properties for each lithological unit, but also to validate the applicability of these properties to the planned mining areas and anticipated excavation conditions.

Laboratory Testing

Laboratory testing completed during the FS expanded the available database and provided updated intact rock properties for the principal lithological domains encountered throughout the project. Testing included determination of uniaxial compressive strength, Young's Modulus, Poisson's Ratio, and indirect tensile strength for the major rock types.

The representative laboratory results used to establish the intact rock mechanical properties for the principal lithological units are summarized in Table 16.1.

Table 16.1 Summary of Laboratory Test Results

Lithologies	UCS (MPa)				Modulus (E, in GPa)				Poisson's Ratio		Tensile Strength (MPa)			
	Point Value	Range		Number of Tests	Point Value	Range		Number of Tests	Point Value	Number of Tests	Point value	Range		Number of tests
Porphyry	85	70	100	22	60	55	65	5	0.30	5	12	9	15	23
Basalt	180	125	200	23	100	80	120	9	0.28	9	24	15	30	57
Komatiite	45	20	75	28	40	20	60	7	0.31	7	8	6	12	59
Diorite	110	75	125	22	55	50	60	4	0.38	4	11	9	15	22
Schist	15	5	25	33	25	20	30	4	0.33	4	2	1	3	10

The laboratory results confirm the significant mechanical contrasts between the principal lithologies encountered within the mine. Basalt exhibits the highest intact rock strength and stiffness, while schist represents the weakest and most deformable lithological unit evaluated. These differences are consistent with historical underground observations and provide the basis for differentiating excavation support requirements and expected excavation performance between geological domains.

The laboratory database developed during the FS complements previous testing completed throughout the operating history of the Kiena Mine and provides representative intact rock properties for feasibility-level engineering analyses.

Rock Mass Classification

While intact rock strength provides important information regarding material behaviour, excavation performance is primarily controlled by the characteristics of the rock mass rather than by intact rock properties alone. Consequently, rock mass classification formed a key component of the geotechnical characterization program.

Historically, rock quality assessments at Kiena relied primarily on Rock Quality Designation, which has proven particularly effective for identifying highly fractured zones, faults, and shear structures. During the 2021 PFS, the characterization program was expanded through the evaluation of Q values derived from representative drill holes and underground observations.

For the FS, the geotechnical database was further strengthened through additional geotechnical core logging and underground mapping, allowing characterization of the principal rock mass domains using internationally recognized rock mass classification systems.

Historical Q-index values for the principal lithologies are summarized in Table 16.2.

Table 16.2 Historic Rock Mass Assessments

Lithologies	Number	Q Index		
		Mean	Quartile 1	Quartile 2
Basalt	111	36.2	17.8	32.4
Komatiite	38	45.6	18.0	28.0

The historical database demonstrates that basalt generally exhibits good rock mass quality, while greater variability exists within other lithological domains depending on structural conditions and local geological complexity.

The distribution of representative Q' values within basalt is illustrated in Figure 16.5.

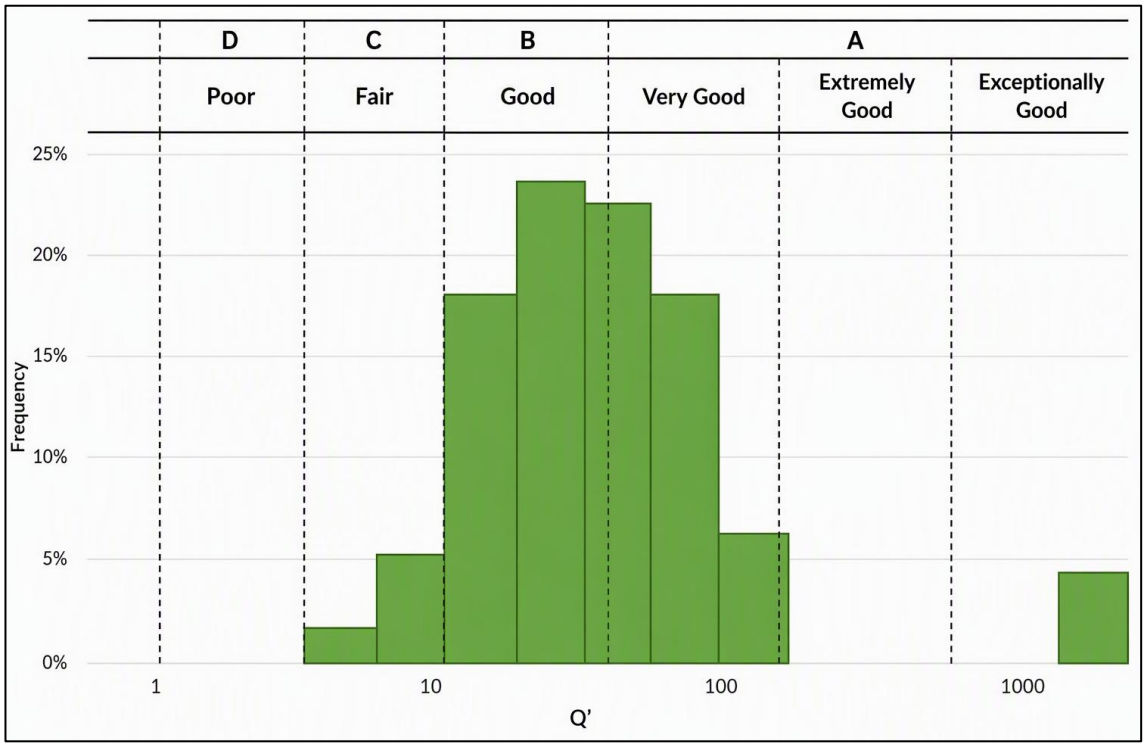


Figure 16.5 Frequency Distribution of Q' Values in Basalt

The frequency distribution presented in Figure 16.5 illustrates the relatively consistent rock mass quality observed within the basalt unit. This distribution supports the selection of representative design parameters for the basalt geotechnical domain adopted throughout the FS.

Updated rock mass classifications developed specifically for the FS are summarized in Table 16.3.

Table 16.3 Rock Mass Characterization Developed for the FS

Lithologies	Q index	RMR (Converted)
Porphyry	10	67
Basalt	10	67
Komatiite	3	54
Diorite	10	67
Schist	2	50

The updated classification incorporates information obtained through laboratory testing, geotechnical logging, underground mapping, and geological interpretation. These data form the basis of the empirical design methods adopted throughout the Study, including excavation support design, empirical stope stability assessment, and numerical modelling.

Representative Geotechnical Domains

The geotechnical characterization identified distinct domains based on lithology, rock mass quality, structural complexity, mining depth, and anticipated stress environment. These geotechnical domains establish the engineering framework used throughout the mine design to define excavation geometries, ground support standards, stope design criteria, and mining sequence.

Table 16.4 provides a comparative summary of the anticipated geotechnical environment within each mining area and represents the principal design basis used throughout the remaining geotechnical assessment.

Table 16.4 Summary of Expected Geotechnical Conditions by Mining Area

Area Description		Presqu'île	Dubuisson	Kiena Deep
General	Depth/Stress	Shallow (0-300m) / Low	Shallow (0-300m) / Low	Deep (1,090-1,770m)/High
	Mining Experience	Yes – Minimum (development and early extraction).	Non, new area	Yes – Moderate (development and sampling).
Development Area	Lithology	Varies (Schist, Dyke and Basalt).	Komatiite, Tuff, and Basalt	Varies (Schist, Dyke and Basalt).
	Structures	Yes, but not dominant	Minimal	Yes, but not dominant
	Rock Quality	80% Rock mass = RMR of 65-75 (Low end). 20% Rock mass = RMR of 30-40.	Rock mass RMR = 65-80 (mid-range).	Rock mass RMR = 50-65 (mid-range)
Production Areas	Lithology	Schist/Komatiite	Mafic volcanic tuffs, and flows, along a sheared contact with Komatiite.	Komatiite/Schist
	Structures	Diorite and feldspar porphyry Dykes.	Minimal	Folded/Disturbed and Lithologies Contact
	Rock Quality	Varies (RMR = 55-70 and RMR=25-35)	RMR = 65-80	RMR = 35-60

The comparison demonstrates the contrasting design environments represented by the three (3) mining areas.

Kiena Deep is characterized by elevated stress conditions associated with mining depths exceeding 1,000 m, together with greater variability in rock mass quality resulting from the presence of schist and geological contacts. These conditions require excavation layouts and support systems capable of accommodating stress-induced deformation and localized deterioration of the rock mass.

Conversely, the Presqu'île and Dubuisson deposits are located within significantly lower stress environments where excavation stability is expected to be governed primarily by local rock mass quality and geological structures rather than by mining-induced stress. Consequently, although the same mining method is planned throughout the project, the geotechnical design criteria differ according to the anticipated ground response within each mining area.

The characterization also confirms that historical mining experience available at Kiena Deep provides an important basis for validating the geotechnical interpretation developed for the FS, while the shallower Presqu'île and Dubuisson deposits benefit from geological conditions comparable to those encountered historically within the upper portions of the Kiena Mine.

Geotechnical Design Criteria

The geotechnical design criteria adopted for the FS were developed through the integration of laboratory testing, rock mass classification, underground observations, historical mining performance, empirical analyses, and numerical modelling. Rather than relying on a single dataset or analytical method, the design incorporates multiple complementary sources of information, including laboratory testing, empirical rock mass classification, underground mapping, production experience, numerical modelling, and excavation reconciliation.

This integrated approach provides a robust technical basis for the evaluation of excavation stability, ground support requirements, stope dimensions, dilution assessments, crown pillar design, and mining sequence. The resulting design criteria are subsequently applied throughout the mine design presented in the following sections of this chapter.

Overall, the available characterization is considered appropriate for a FS-level assessment. While additional information will naturally become available as mining progresses into the deepest planned levels of Kiena Deep, no material geotechnical data gaps have been identified in the current database that would preclude development of the proposed mine design. Continued geotechnical mapping, underground observations, reconciliation of excavation performance, and additional drilling will allow refinement of local geotechnical domains as part of normal mine operations.

16.2.4 Mine Design Optimization, Stope Stability and Dilution Control

The mine design developed for the FS incorporates the findings of the geotechnical investigations, numerical stress modelling, empirical stope stability assessments, and historical operating experience accumulated at Kiena. Rather than applying uniform design criteria across the three mining areas, the excavation geometries, mining sequence, stope dimensions, and stand-off distances were adapted to the anticipated geotechnical conditions within each geotechnical domain.

Historical mining experience at Kiena Deep demonstrated that excavation performance is influenced by the combined effects of rock mass quality, geological structure, excavation geometry, mining-induced stress redistribution, and mining sequence. Consequently, the geotechnical assessment was used not only to evaluate excavation stability but also to refine the mine design by optimizing excavation geometry, mining sequence, infrastructure stand-off distances, and ground support strategies based on the anticipated ground response.

Several modifications incorporated into the current mine plan were directly influenced by the results of the geotechnical assessment and the reconciliation of historical mining performance. These modifications include adjustments to excavation geometry, mining sequence, stope dimensions, development timing, and infrastructure stand-off distances. Collectively, these changes are intended to better manage stress redistribution, reduce excavation deterioration, and improve overall mining performance.

Empirical Stope Stability Assessment

Stope stability and dilution were evaluated using the empirical Stability Graph Method incorporating the ELOS methodology together with numerical stress modelling. These methods provide complementary assessments of expected excavation performance by considering both the mechanical characteristics of the rock mass and the influence of excavation geometry.

The Stability Graph Method and ELOS methodology evaluate excavation performance as a function of both rock mass quality and excavation geometry. Consequently, the predicted overbreak is influenced by several interrelated parameters including:

- Rock mass quality and structural condition
- Stress environment
- Stope geometry and hydraulic radius
- Orientation of the excavation relative to geological structures
- Blasting quality
- Excavation stand-up time and mining sequence

These parameters were evaluated collectively during the FS and used to establish representative stope dimensions and dilution assumptions for each mining area.

Expected Dilution by Mining Area

The geotechnical assessment indicates that the expected dilution varies between the three mining areas as a function of mining depth, stress environment, rock mass quality, and geological structure. Representative dilution parameters were therefore established separately for each mining area using the ELOS methodology and calibrated, where possible, against historical mining performance.

Conversely, excavation performance within Kiena Deep is expected to be influenced by both rock mass quality and elevated stress conditions associated with deep underground mining. In particular, stopes developed within schistose units are anticipated to experience greater overbreak than stopes located within basalt or competent contact zones.

Expected dilution parameters developed using the ELOS methodology are summarized in Table 16.5.

Table 16.5 Mine Production Parameters and Estimated Dilution by Mining Area

Area Description		Dubuisson	Presqu'île	Kiena Deep
LH Stope parameters	Size	20mH × 15mL	16.2H × 15mL	15mH × 10mL
	Sequence	Possible P/S – Flat	Possible P/S – Flat	Pillarless Pyramid Retreat
	Dilution Potential	Varies (0.5 – 2m)	Low (0.5m)	High (1 – 4m)

The dilution assumptions presented in Table 16.5 form the basis of the mine design and were subsequently incorporated into the Mineral Reserve estimate described in Chapter 15. These values also provided input to production scheduling and economic evaluation.

Validation Using Historical Mining Performance

Empirical analyses were calibrated using historical reconciliation completed at Kiena Deep. Comparisons between planned stope geometries and observed excavation performance provided an important validation of the expected behaviour of the principal lithological domains.

Representative reconciliation results are presented in Figure 16.6.

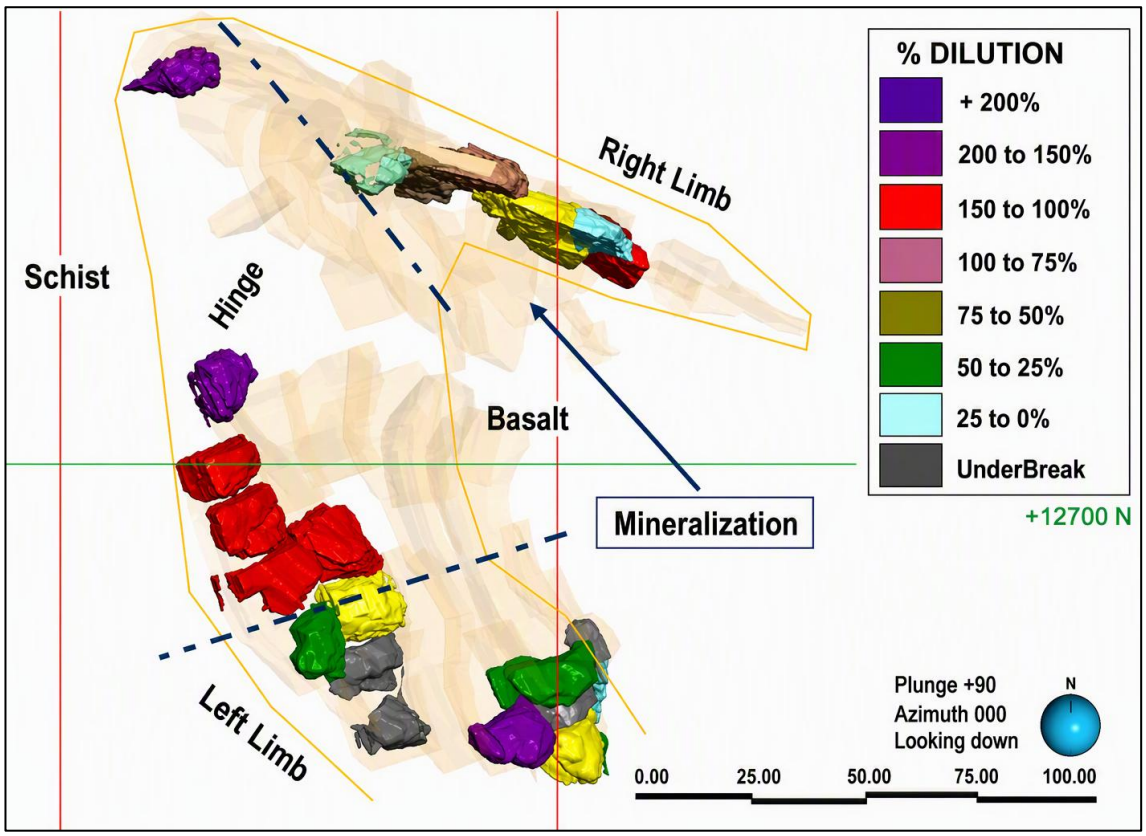


Figure 16.6 Top view form 1 to 1.2 km – Example of Stope Reconciliation by Lithological Domain at Kiena Deep

Figure 16.6 illustrates the relationship between geological domain and observed dilution, confirming that stopes developed within schist generally exhibit greater overbreak than excavations located within basalt. This historical performance provides an important calibration dataset for the empirical dilution assumptions adopted in the FS.

Unlike a greenfield project, the Kiena Mine benefits from an extensive operating history that allows empirical predictions to be compared with observed excavation performance. This historical reconciliation provides additional confidence in the empirical design criteria adopted for the FS.

Numerical Stress Modelling

Numerical stress modelling was completed to complement the empirical stability assessment by evaluating the influence of mining-induced stress redistribution on excavation stability throughout the LOM. The modelling complements the empirical ELOS assessment by evaluating the influence of mining-induced stresses on excavation stability throughout the LOM.

Representative modelling results are presented in Figure 16.7.

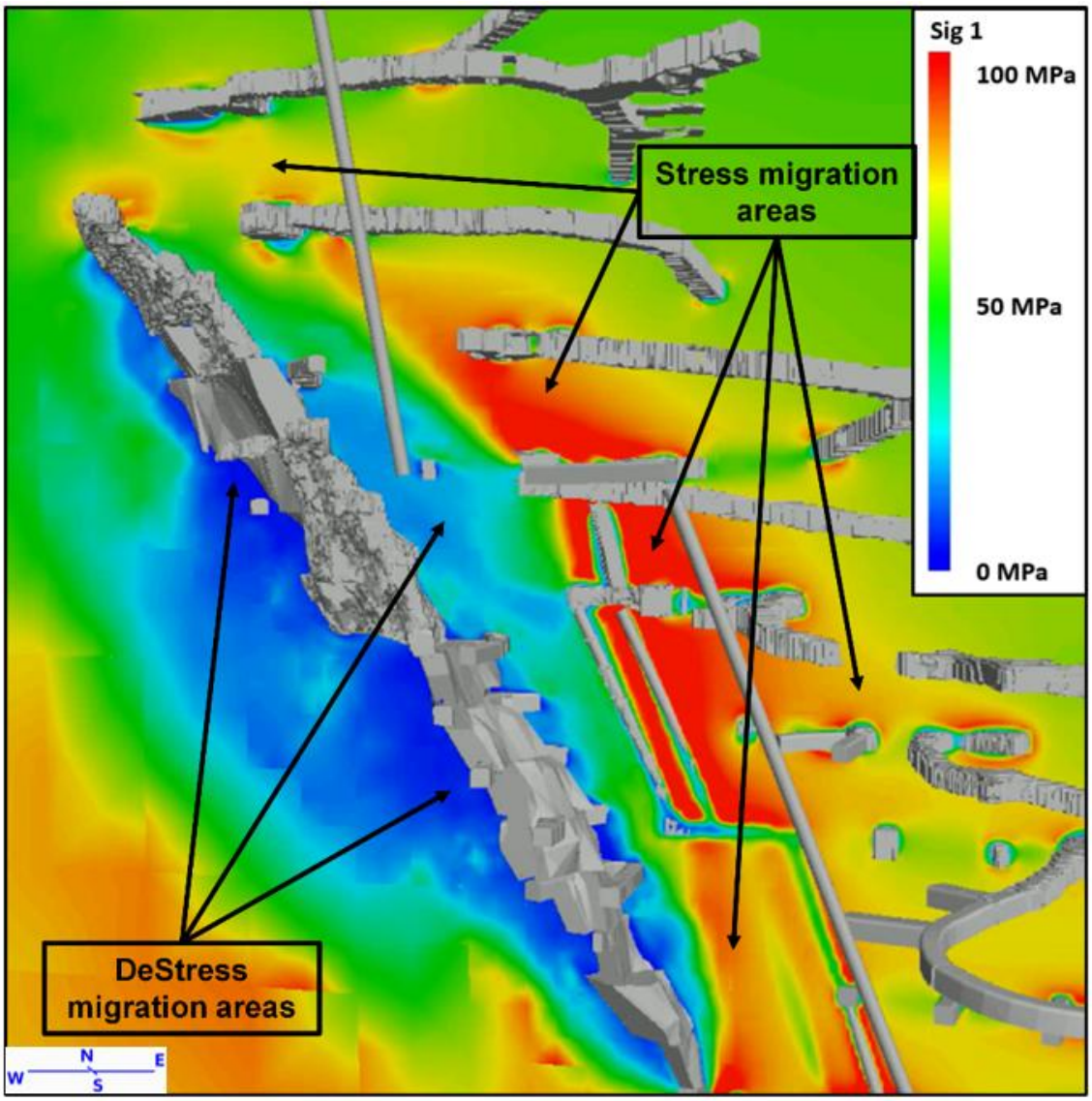


Figure 16.7 Numerical Stress Model Used to Establish Stand-off Distances (end of mine life stage)

The numerical analyses identify areas where elevated stress concentrations, relaxation zones, or excavation interaction may occur during mining. These results were incorporated into the development of excavation design recommendations, infrastructure layout, and mining sequence adopted for the mine plan.

The recommendations represent planning criteria intended to minimize adverse excavation interaction while maintaining mining flexibility. As with all underground operations, these criteria will continue to be refined through ongoing underground observations and operational experience.

Geotechnical Design Optimization

Historical mining at Kiena has provided valuable insight into the geotechnical response of the rock mass under deep mining conditions. The FS incorporates this experience through several refinements to the mine design intended to improve excavation performance and reduce operational risk.

Key design refinements incorporated into the current mine plan include:

- Optimization of excavation geometries to improve stope stability
- Sequencing refinements to proactively manage stress redistribution
- Refinement of the mining sequence aimed at optimizing stress redistribution and minimizing geotechnical risk
- Reduction of diminishing pillar formation
- Increased stand-off distances between active stopes and permanent infrastructure
- Use of development timing strategies intended to reduce excavation exposure to stress changes prior to mining
- Adoption of ground support standards appropriate for the anticipated ground response within each geotechnical domain

These refinements are based on the combined interpretation of historical operating experience, empirical analyses, numerical modelling, and engineering judgement. Collectively, they contribute to improved control of excavation stability, dilution, infrastructure performance, and long-term mine operability.

Table 16.6 summarizes the principal geotechnical considerations incorporated into the mine design and illustrates how the results of the geotechnical assessment influenced the development of the proposed mining strategy and excavation design criteria.

Table 16.6 Summary of Geotechnical Considerations Incorporated into the Mine Design

Geotechnical Observation	Mine Design Response	Expected Engineering Benefit
Historical excavation performance at Kiena Deep	Mine layouts refined	Increased confidence in excavation performance
Elevated stress conditions at depth	Mining sequence and excavation layouts optimized	Improved stress management
Variable rock mass quality between lithologies	Geotechnical domains established for design	Design criteria adapted to local ground conditions
Empirical and numerical analyses	Stope dimensions and stand-off distances established	Improved excavation stability and dilution control
Ground performance observations	Ground support standards adapted	Improved excavation serviceability and worker safety

Section Summary

The empirical stability analyses, numerical modelling, and historical reconciliation completed for the S demonstrate that the selected longhole stoping method is appropriate for the anticipated ground conditions within the three (3) mining areas. The geotechnical investigations have not only established representative dilution assumptions and excavation design criteria but have also directly influenced the mine design through modifications to excavation geometry, mining sequence, infrastructure layout, and operational practices.

The resulting mine design reflects the integration of historical operating experience, empirical design methods, numerical analyses, and engineering judgement to establish excavation layouts and mining practices appropriate for the anticipated geotechnical conditions throughout the LOM.

16.2.5 Ground Support Strategy

Ground support requirements for the Kiena were developed based on the geotechnical characterization, historical underground performance, empirical design methods, and numerical modelling completed as part of the FS. The recommended support standards are intended to provide excavation stability appropriate for the anticipated ground conditions within each mining area while remaining consistent with the current ground control practices and operational experience developed at the Kiena Mine.

The support philosophy recognizes that excavation performance is influenced not only by rock mass quality but also by excavation geometry, mining depth, geological structure, and mining-induced stress redistribution. Consequently, ground support requirements vary according to the anticipated failure mechanisms within each geotechnical domain rather than being based solely on lithology.

In shallow mining areas such as Presqu'île and Dubuisson, excavation behaviour is expected to be governed primarily by local rock mass quality and structural conditions. In contrast, support systems within Kiena Deep have been developed to accommodate both rock mass variability and the increased stress conditions associated with deep underground mining.

The recommended support systems include combinations of conventional reinforcement, yielding support elements, long tendons, surface support, and secondary reinforcement where required. Selection of individual support components was based on anticipated excavation behaviour, historical operating experience, and the engineering analyses completed during the Study.

Ground Support Design Criteria

Ground support recommendations were developed based on the geotechnical characterization completed for the FS and the engineering assessments described in the previous sections. The principal factors considered in the development of the support strategy include:

- Historical excavation performance at Kiena
- Laboratory testing and rock mass characterization
- Underground mapping and geotechnical observations

- Empirical rock support design methods
- Numerical stress modelling
- Engineering judgement based on anticipated excavation behaviour

This integrated approach allows the support system to be adapted to the expected ground conditions rather than applying uniform support standards throughout the mine.

Support Standards

Ground support standards have been developed for the principal excavation types and anticipated geotechnical conditions encountered throughout the Kiena Deep, Presqu'île, and Dubuisson mining areas. Separate support standards have been established for the following excavation categories:

- Kiena Deep excavations developed within schist and faulted ground
- Kiena Deep excavations developed within competent rock
- Presqu'île and Dubuisson level accesses
- All ramps System
- Intersections requiring secondary support
- Wider excavations where additional reinforcement is required

The recommended support standards are summarized in Table 16.7.

Table 16.7 Recommended Ground Support Standards by Mining Area and Excavation Type

Area: Kiena Deep		
Lithology	**Ground Support System for**	
Schist and Fault Zone	Primary Support (**5 m x 5 m drift)**	2.4 m Vulcan bolts installed on a 1.2 m x 1.2 m pattern with #4-gauge screen.
	Secondary Support	***Shoulder to Shoulder:*** 3.6 m Super Swellex installed on a 1.5 m x 1.5 m pattern with #0-gauge screen (mesh strap).
		Shoulder to 1.0 m Above the Floor: 3.5 m debonded cables installed on a 1.5 m x 1.5 m pattern with #0-gauge screen (mesh strap).
		Face Support, Shoulder to 3.0 m Above the Floor: 2.4 m Split Sets installed on a 1.2 m x 1.2 m pattern with #6-gauge screen (mesh strap)
All other areas	Primary Support (**5 m x 5 m drift)**	2.4 m #7 rebar installed on a 1.2 m x 1.2 m pattern with #6-gauge screen (mesh strap)
Area: Dubuisson and Presqu'île		
Zones	**Ground Support System for**	
Level Access	Primary Support (**5 m x 5 m drift)**	***Shoulder to Shoulder:*** 2.4 m #7 rebar installed on a 1.2 m x 1.2 m staggered pattern with #4-gauge screen.
		Shoulder to Floor: 2.4 m Split Sets installed on a 1.2 m x 1.2 m pattern with #6-gauge screen. *Note:* *In basalt, support from the shoulder down to 1.5 m above the floor.* *Replace SS5 with rebar when the drift height exceeds 6 m.*
		Face Support, Shoulder to 3.0 m Above the Floor: 2.4 m Split Sets installed on a 1.2 m x 1.2 m pattern with #6-gauge screen.
	Secondary Support (up to 8.5 m span)	***Shoulder to Shoulder:*** Rebar #10, 3.0 m long, installed on a 1.2 m x 1.2 m staggered pattern.
Ramp	Primary Support	***Shoulder to Shoulder:*** 2.4 m #7 rebar installed on a 1.2 m x 1.2 m staggered pattern with #4-gauge screen.
		Shoulder to 1.5 m Above the Floor: 2.4 m Split Sets installed on a 1.2 m x 1.2 m pattern with #6-gauge screen. *Note:* *For heights between 5.5 m and 6.5 m, replace SS5 with Rebar #6, excluding knife walls. Install SS5 on the last bolt row at 1.5 m above the floor.* *For heights greater than 6.5 m, secondary support is required.*
		Face Support, Shoulder to 3.0 m Above the Floor: 1.5 m Split Sets installed on a 1.2 m x 1.2 m pattern with #6-gauge screen.
	Secondary Support (up to 8.5 m span)	***Shoulder to Shoulder:*** Rebar #10, 3.0 m long, installed on a 1.2 m x 1.2 m staggered pattern.

The support standards include primary reinforcement, secondary reinforcement where required, long tendons, and surface support appropriate for the anticipated excavation behaviour. The recommended standards establish the baseline ground support requirements for the planned mine development while allowing site geotechnical personnel to adjust local support requirements based on observed ground conditions and routine ground control practices.

Surface Support

Surface support requirements were established according to the anticipated quality of the exposed rock mass.

Under Q fair to good ground conditions, welded wire mesh provides adequate surface confinement for routine development excavations as per Table 16.8 Where poorer ground conditions or localized instability are encountered, additional support measures such as shotcrete and, where warranted, reinforced shotcrete arches may be required to provide enhanced surface confinement and maintain excavation stability.

The selection of surface support should continue to be guided by routine underground geotechnical observations and excavation mapping as mining progresses.

Support Performance and Continuous Improvement

The recommended ground support standards represent the design basis adopted for the FS. As underground development progresses, support performance should continue to be evaluated through routine underground inspections, geotechnical mapping, rehabilitation records, reconciliation of excavation behaviour, and the mine's normal ground control management process. These activities will provide opportunities to validate the design assumptions and, where appropriate, refine local support practices as additional operational experience is gained.

Where excavation performance differs from anticipated behaviour, support standards may be refined through the mine's normal ground control management process. This continuous improvement approach allows the support system to evolve with increasing operating experience while maintaining consistency with the geotechnical design philosophy established for the Project.

Section Summary

The proposed ground support strategy has been developed specifically for the anticipated geotechnical conditions encountered within the Kiena Deep, Presqu'île, and Dubuisson mining areas. The support recommendations are based on laboratory testing, rock mass characterization, historical operating experience, empirical design methods, and numerical modelling completed for the FS.

The recommended standards are considered appropriate for the planned mining method and excavation geometries and are intended to manage the range of anticipated ground conditions throughout the LOM. Continued geotechnical monitoring, excavation mapping, and reconciliation of support performance will provide the basis for ongoing refinement of local support practices as mining advances into new areas of the mine.

16.2.6 Crown Pillar Design

The mine plan incorporates both sill pillars and crown pillars to support the long-term stability of the underground mine while protecting surface infrastructure and environmentally sensitive features. Sill pillars are used to separate mining horizons and facilitate the mining sequence, whereas crown pillars are maintained beneath selected surface features where long-term stability and prevention of surface breakthrough are required.

Within the Kiena project, the principal crown pillar is associated with the shallow Dubuisson mining area, where mining is planned beneath a surface water body. Consequently, the crown pillar design was developed using conservative design criteria consistent with the potential consequences associated with surface water inflow.

Design Methodology

The crown pillar assessment was completed using the empirical Scaled Span Method developed by Carter et al. (2008), which is widely accepted within the Canadian underground mining industry for the design of rock crown pillars.

The Scaled Span Method evaluates crown pillar stability by considering the interaction between excavation span, pillar thickness, rock mass quality, excavation geometry, and the desired probability of failure. The methodology establishes an empirical relationship between these parameters, allowing selection of an appropriate crown pillar geometry consistent with the required level of long-term stability.

For the Kiena Project, the design adopted the most conservative risk category (Class G) corresponding to a probability of failure of less than 0.5% for long-term performance exceeding 100 years. This design criterion reflects the potential consequences associated with surface water inflow and the long-term operational objectives of the mine.

The design philosophy adopted for the crown pillar assessment is illustrated in Table 16.8.

Figure 16.8 illustrates the empirical relationship between scaled span and acceptable probability of failure used to establish the crown pillar design criteria. The selected design criterion corresponds to the most conservative risk category considered appropriate for the planned mining conditions beneath the surface water body.

Table 16.8 Acceptable Risk Exposure Guidelines - Comparative Significance of Crown Pillar Failure (from Carter et al., 2008, modified from Carter & Miller, 1995)

Class	Probability of Failure (%)	Minimum Factor of Safety	Maximum Scaled Span, Cs (= Sc)	ESR (Barton et al., 1974)	Design Guidelines for Pillar Acceptability/Serviceable Life of Crown Pillar				
					Expectancy	Years	Public Access	Regulatory Position on Closure	Operating Surveillance Required
A	50–100	< 1	11.31Q0.44	> 5	Effectively zero	< 0.5	Forbidden	Totally unacceptable	Ineffective
B	20–50	1	3.58Q0.44	3	Very, very short-term (temporary mining purposes only; unacceptable risk of failure for temporary civil tunnel portals)	1	Forcibly Prevented	Not acceptable	Continuous sophisticated monitoring
C	10–20	1.2	2.74Q0.44	1.6	Very short-term (quasi-temporary stope crowns; undesirable risk of failure for temporary civil works)	2–5	Actively prevented	High level of concern	Continuous monitoring with instruments
D	5–10	1.5	2.33Q0.44	1.4	Short-term (semi-temporary crowns, e.g. under non-sensitive mine infrastructure)	5–10	Prevented	Moderate level of concern	Continuous simple monitoring
E	1.5–5	1.8	1.84Q0.44	1.3	Medium-term (semi-permanent crowns, possibly under structures)	15–20	Discouraged	Low to moderate level of concern	Conscious superficial monitoring
F	0.5–1.5	2	1.12Q0.44	1	Long-term (quasi-permanent crowns, civil portals, near-surface sewer tunnels)	50–100	Allowed	Of limited concern	Incidental superficial monitoring
G	< 0.5	>> 2	0.69Q0.44	0.8	Very long-term (permanent crowns over civil tunnels)	> 100	Free	Of no concern	None required

Crown Pillar Assessment

The Scaled Span methodology was applied using the representative rock mass characteristics established during the geotechnical characterization together with the planned excavation geometry and mining layout.

The empirical assessment incorporates the principal geological, geotechnical, and geometric parameters influencing crown pillar performance, including:

- Rock mass quality
- Excavation span
- Excavation geometry
- Crown pillar thickness
- Specific gravity of the rock mass
- Vein orientation
- Required probability of failure

The overall assessment methodology is illustrated in Figure 16.8.

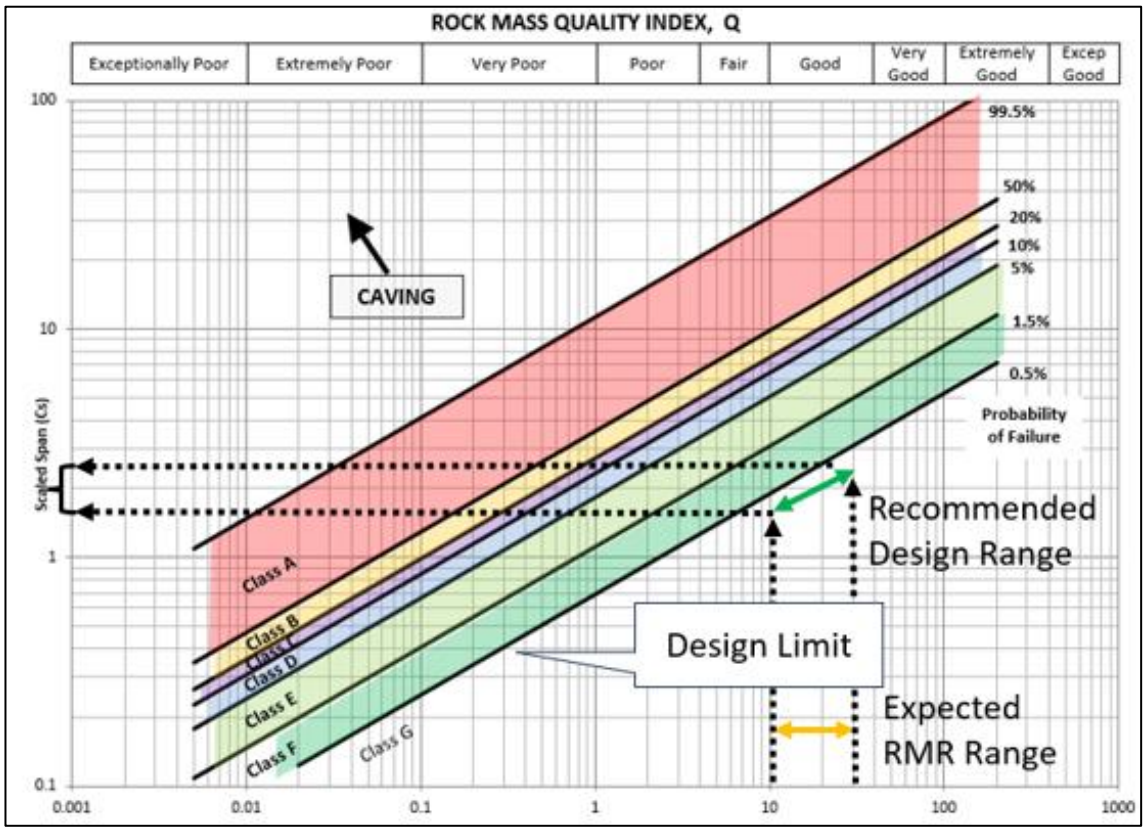


Figure 16.8 Scaled Span Crown Pillar Assessment Methodology

Figure 16.8 summarizes the principal engineering parameters incorporated into the empirical crown pillar assessment and illustrates how these parameters are integrated to establish the required crown pillar thickness for the selected design criteria.

The results of the assessment indicate that the proposed crown pillar geometry satisfies the selected design criteria. Accordingly, mining beneath the surface water body will maintain a 100 m thick crown pillar, consistent with the assumptions adopted for the FS.

Role of Backfill in Long-Term Stability

The mine design incorporates cemented backfill throughout the mining sequence, which contributes to the long-term stability of excavated stopes located beneath the crown pillar.

Although the crown pillar design is governed by the empirical Scaled Span assessment, the use of cemented backfill provides an additional measure of long-term stability by reducing the effective void volume beneath the crown pillar. Consequently, the potential for progressive caving or ravelling is reduced, thereby contributing to the long-term confinement of the overlying rock mass throughout the operating life of the mine.

The incorporation of backfill into the mine design therefore represents an important component of the overall crown pillar management strategy.

Potential Future Mitigation Measures

The FS mine plan has been developed assuming the crown pillar geometry described above and does not rely on additional mitigation measures to satisfy the selected design criteria.

Nevertheless, should future operating conditions or additional investigations warrant further refinement, several engineering measures remain available to further reduce long-term risk. These may include:

- Localized reinforcement of the crown pillar undercut
- Grouted cable bolts
- Steel sets
- Concrete arches
- Localized reduction of excavation width where appropriate

These measures are presented as potential future operational tools that may be implemented if warranted by future operating conditions or additional geotechnical information. They are not required to support the base-case mine design adopted for the FS.

Section Summary

The crown pillar assessment demonstrates that the proposed mine design satisfies the selected long-term stability criteria using a conservative empirical design methodology widely accepted within the mining industry. The adoption of a 100 m crown pillar beneath the surface water body, together with the planned use of cemented backfill, provides an appropriate level of confidence for FS level mine planning.

16.2.7 Deep Mining Considerations

The geotechnical investigations completed for the FS indicate that the proposed mining method and mine design are appropriate for the anticipated ground conditions within the Kiena project. As with any deep underground mining operation, excavation performance will continue to be influenced by geological variability, increasing in-situ stress, mining-induced stress redistribution, and operational sequencing. These factors have been considered during the development of the mine plan and have been incorporated into the mine design through excavation geometry, mining sequence, ground support standards, and infrastructure layout appropriate for the anticipated geotechnical conditions.

Squeezing Ground Conditions

Historical mining has demonstrated that localized squeezing behaviour may occur within schistose units at Kiena Deep, particularly where excavations are developed parallel to the schistosity under elevated stress conditions. These areas may experience progressive convergence requiring localized rehabilitation and additional ground support.

The anticipated behaviour of schist has been incorporated into the mine design through the selection of excavation geometries, yielding ground support systems, mining sequence, and operational practices intended to accommodate deformation while maintaining excavation serviceability.

Development within schist is therefore expected to remain more demanding than development within competent basalt; however, current operating experience demonstrates that these conditions can be effectively managed using the proposed excavation layouts, support standards, and routine geotechnical monitoring incorporated into the mine design.

As mining progresses to greater depths, continued underground observations and routine evaluation of excavation performance will allow local refinement of support practices where required.

Seismic Hazard Management

Mining at increasing depth is expected to result in higher stress conditions and may contribute to increased mining-induced seismic activity relative to the shallower portions of the mine.

Historical observations indicate that seismic responses have generally been associated with stress redistribution near sill pillar elevations, diminishing pillars, geological contacts, and major structural features. Numerical modelling completed for the FS was used to identify areas where mining sequence and excavation layout could be adjusted to reduce stress concentration and improve overall excavation performance.

The current mine design incorporates several measures intended to manage seismic hazard, including:

- Optimization of mining sequence
- Reduction of diminishing pillar formation where practical
- Increased stand-off distances between active mining and permanent infrastructure

- Excavation layouts developed to reduce stress concentration
- Appropriate ground support standards for anticipated failure mechanisms

In addition to the design measures incorporated into the current mine plan, the mine plans to implement a microseismic monitoring system during 2026 to improve the understanding of seismic response as mining progresses into deeper portions of Kiena Deep. This system will provide additional information to support operational decision-making and allow continued refinement of geotechnical models and mine design as underground development advances.

The implementation of seismic monitoring is considered part of the normal evolution of a deep underground mining operation and represents an additional tool for ongoing geotechnical risk management.

Operational Monitoring and Continuous Improvement

Geotechnical design does not conclude with completion of the FS. As underground development progresses, additional information will become available through routine underground mapping, geotechnical observations, excavation reconciliation, drilling, and production experience.

The continued collection and interpretation of site-specific geotechnical information will support:

- Refinement of local geotechnical domains
- Verification of numerical modelling assumptions
- Evaluation of ground support performance
- Reconciliation of dilution and excavation stability
- Refinement of excavation design where appropriate

This continuous improvement process is consistent with normal underground mining practice and provides increasing confidence in mine performance as development advances.

Remaining Geotechnical Uncertainty

The available geotechnical database is considered appropriate to support FS-level mine design. As expected for a deep underground mining project, uncertainty naturally increases within the deepest planned mining areas where direct underground exposure has not yet been obtained.

This uncertainty does not represent a material deficiency in the current Study but reflects the progressive nature of underground mine development. The current mine plan has been developed using the best available geological, geotechnical, laboratory, historical operating, and numerical modelling information available at the time of the FS.

Although these uncertainties are consistent with the level of confidence expected for a FS, they are expected to progressively decrease as underground development advances and additional operational information becomes available.

Continued Geotechnical Knowledge Development

The geotechnical work completed for the FS has established an appropriate engineering basis for the proposed mine design. As with any underground mining operation, the geotechnical understanding of the project is expected to continue to evolve as additional underground development and operational experience become available.

Routine underground development, geotechnical mapping, geological observations, excavation performance reconciliation, and ongoing operational monitoring will continue to refine the understanding of local ground conditions and provide opportunities to further validate the geotechnical interpretation adopted for the FS.

This progressive improvement in geotechnical knowledge is consistent with normal underground mining practice and is expected to further increase confidence in local design parameters as mining advances into deeper portions of the deposit. These activities are considered part of the normal evolution of an operating underground mine and are not prerequisites for implementation of the FS mine plan.

Section Summary

The geotechnical investigations completed for the FS support implementation of the proposed mine plan using the selected longhole stoping mining method. Although increasing mining depth within Kiena Deep is expected to present progressively more demanding ground conditions, these conditions are well understood based on historical operating experience and have been incorporated into the mine design through excavation geometry, mining sequence, ground support standards, infrastructure layout, and the extensive operational experience gained from historical mining at Kiena.

The remaining geotechnical uncertainties are considered consistent with those normally encountered in deep underground mining projects and do not preclude implementation of the proposed mine design within the assumptions adopted for the FS. Continued operational monitoring and routine geotechnical evaluation will provide additional confidence as mining progresses.

16.3 Hydrogeology

In the winter/spring of 2025, the study for three (3) zones: Dubuisson, Kiena Deep, and Presqu'île commenced with a review and data gap analysis of the current hydrogeological studies and data. Additionally, the requirements of Wesdome and other consultants involved in the study, were identified.

Upon review of the available information, it was identified at the start of the project that the groundwater model did not extend into the Dubuisson Zone and was based on limited testing in the deeper bedrock zones. These data gaps were addressed in 2025 summer and autumn field campaign.

For planning and scheduling purposes, the overall hydrogeological project was broken down into critical path, supporting information, and non-critical path items.

- Critical path:
  - Hydrostatic pressures and permeability data to support geomechanical study for Dubuisson (by ASA)
  - Derisking connectivity of Dubuisson underground workings with surface water or overburden groundwater aquifers
- Supporting information for pump sizing and costing:
  - Groundwater inflow estimates (Dubuisson) – based on current hydraulic tests
  - Groundwater inflow estimates (Kiena Deep & Presqu'île) – based on Richelieu Hydrogéologique existing model (provided) and benchmarking from the future Dubuisson hydrogeological study
- Non-critical path:
  - Provide hydraulic test data to support environmental studies by Wesdome for permitting purposes (by others)
  - Final reporting: Recommendations and Project risk register

The primary goals of the project were four-fold:

1. To de-risk the potential for a highly conductive fault or fracture zone that would potentially lead to desaturation of nearby overlying clays on land, and potential consolidation of the clays that can impact nearby rail or other infrastructures.
2. To de-risk the potential for a high permeability connection from the lake to the proposed underground workings leading to large dewatering needs.
3. To provide the geomechanical program engineer with flow rates and hydrostatic pressures within the Dubuisson underground study zone.
4. To assess the underground water balance estimates to help size future pumping needs.

In support of the geomechanical program, and to provide improved confidence in derisking dewatering and surrounding infrastructure impacts, a field program was developed and included the following components:

- A barge drilling campaign designed to take advantage of the geomechanical drilling program and perform packer tests on targeted zones. Drilled core was reviewed for potential high flow zones during the drilling, and packer tests were selected based on the zones requested by the geomechanical engineer (ASA) and based on the core condition observed during drilling.
- A land-based campaign that was primarily geared toward targeting mapped faults below the lake, and characterizing the fractured bedrock-overburden interface zone on land. The fault zone was tested using existing inclined diamond drill holes that intersected the fault, while the interface zone was tested using a newly drilled borehole with a monitoring well installed.

16.3.1 Hydrogeological Review and Studies

A hydrogeological review looked at historical and ongoing hydrogeological information and was constrained to the underground mining areas. Hydrogeological studies specific to surrounding infrastructure and environmental impacts, including the Tailings Storage Facilities and waste rock facilities are covered by other experts under their respective sections.

The following reports were available for review :

Guy Lauzier, 21 novembre 2025, Mine Kiena, Système de Pompage, Préliminaire, Kiena_Pompage_CritDesign_20251121.docx

Richelieu Hydrogéologique Inc., le 14 décembre 2022, Note technique - Calcul préliminaire du débit d'infiltration d'eau, Mine Kiena – Aménagement d'une rampe d'exploration

Richelieu Hydrogéologique Inc., le 10 novembre 2022, Étude hydrogéologique restreinte, Projet d'aménagement d'un lieu d'élimination de neige dans le secteur de la mine Kiena

Richelieu Hydrogéologique Inc., le 25 novembre 2024, Mine Kiena - Étude hydrogéologique, Projet d'aménagement d'une rampe d'exploration

Richelieu Hydrogéologique Inc., le 25 octobre 2024, Mine Kiena - Étude hydrogéologique, Projet d'aménagement d'une rampe d'exploration

Richelieu Hydrogéologique Inc., le 26 mars 2026, Mine Kiena - Étude hydrogéologique, Projet Dubuisson

Klohn Leonoff Ltd., June 21, 1993, Kiena Gold Mine Hydrogeology, Draft. PB 6026 0302, WP 652

Wood, January 14, 2021, Memo, Kiena Mine: Recommendations regarding Hydrogeological Monitoring

Wood, December 15, 2021, Memo, Kiena Mine: Initial work following report of Cyanide in monitoring wells, OMEMA2005

Wood, February 2, 2022, Memo, Kiena Mine: Initial work following report of Cyanide in monitoring wells, OMEMA2005

Wood, July 2022, Tailings Storage Facility – Monitoring Wells Installation Report, Kiena Mine Complex, Val D'Or, Quebec, Project # OMGM2004.5000

It is noted that the hydrogeology review and recommendations relied on external experts and reports. The scope was limited to the underground workings due to the Tailings Storage Facilities being managed by WSP who was responsible for the TSF component of the Study. Many of the above reports focus primarily on the TSF area and are of limited value to the underground mining component of the project. The current groundwater underground mining study does not include an environmental component, closure assessment or contaminant transport assessment for the tailings as that was managed by Wesdome's environmental team with input from WSP, SRK and Richelieu.

The key identified studies include hydrogeological modeling reports from the above list related to the KD and PI Zones. The modeling was performed by an independent consultant, Richelieu Hydrogéologie, under contract with Wesdome. The studies provided by Richelieu and Wesdome entailed the following evaluations:

- Modeling to estimate groundwater inflow to the future drift from Level 15 of the PI Zone to Level 33 of the KD Zone.
- Modeling to estimate groundwater inflow to the above drift with inclusion of dewatering the Presqu'île underground workings.
- Modeling to estimate the groundwater inflow into the Dubuisson workings and drift from Dubuisson Level 33 to Kiena Deep Level 33.

The above modeling was done under conditions of pumping and dewatering from Kiena Deep and was constrained to the upper 300 m of the zones. The rate used for pumping at KD is considered conservative, from a dewatering perspective, for all mining zones. It is considered highly conservative for the Kiena Deep dewatering requirements, potentially 2 to 3 orders of magnitude greater than expected conditions. As a result of this conservative pumping value used in the models for the other mining zones, the modeled dewatering estimates at the PI and DU Zones are slightly conservative.

The groundwater modeling for PI and KD, conducted prior to the current study, were based on limited bedrock permeability data from the mining zones and region, and mainly constrained to shallow depths. In 2025, Norda planned and executed several packer tests from the barge drilling being carried out to support the resource and geomechanical programs. The Dubuisson modeling was carried out by Richelieu in 2025 and 2026 and included this new permeability data of the bedrock in the DU Zone down to approximately 185 m depth resulting in improved estimates compared to previous modeling on the property. For this reason, Dubuisson was considered the best estimate for purposes of benchmarking and scaling groundwater inflow estimates.

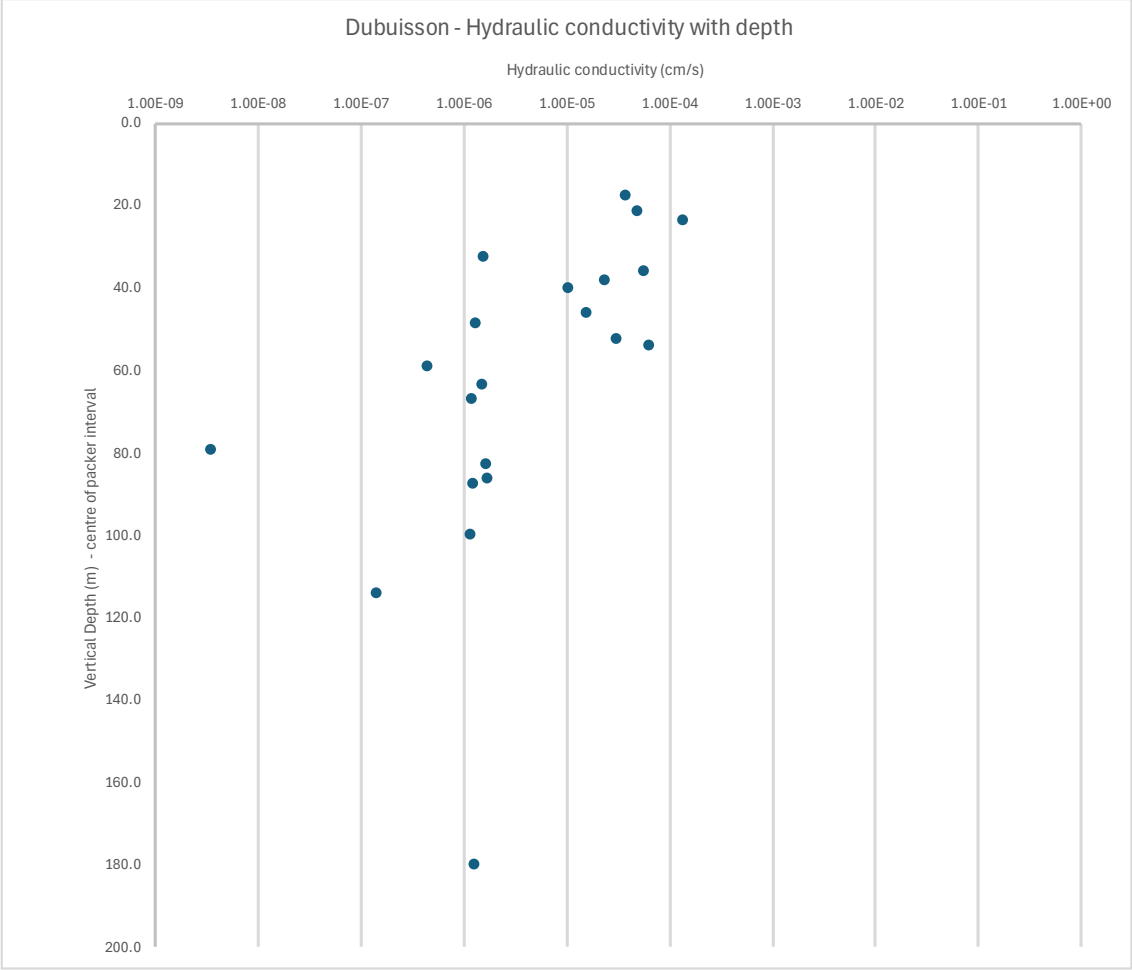


Figure 16.9 Dubuisson Zone hydraulic conductivity values – 2025 packer test program

The results also helped support previous assumptions that the permeability of the rock decreased significantly with depth and highly permeable fracture zones were unlikely. This supports the assumptions of lower risk due to connectivity with the overlying lake or aquifers within the overburden. Risks to surrounding infrastructure and excessive dewatering risks are considered low.

The Dubuisson permeability results confirm what is observed by mine personnel and consultants in the KD Zone. Permeability is low to very low for the majority of the rock with rare zones of moderate rock permeability at shallower depths. The descriptive terms used to describe hydraulic conductivity (permeability) are based on the following ranges (Table 16.9).

Table 16.9 Descriptive terms and typical assumed rock mass conditions based on permeability ranges (lugeons)

Lugeon Range	Classification	Hydraulic Conductivity Range (cm/sec)	Condition of Rock Mass Discontinuities	Reporting Precision (lugeons)
< 1	Very Low	$<1 \times 10^{-5}$	Very tight	<1
1 - 5	Low	1×10^{-5} - 6×10^{-5}	Tight	±0
5 - 15	Moderate	6×10^{-5} - 2×10^{-4}	Few partly open	±1
15 - 50	Medium	2×10^{-4} - 6×10^{-4}	Some open	±5
50 - 100	Hight	6×10^{-4} - 1×10^{-3}	Many open	±10
> 100	Very High	$>1 \times 10^{-3}$	Open closely spaced or voids	>100

For modeling purposes, Richelieu Hydrogéologie used a value of approximately 785 m³/d for an initial pumping rate at the Kiena underground mine. According to communications with Richelieu, this was based on reports provided by Wesdome regarding the pumping at the KD Zone. However, it is believed this value includes recirculation water from the operations which is pumped to the surface and recycled back into the underground workings. As such, the actual inflow and groundwater pumping is expected to be lower than this value.

16.3.2 Hydrogeological – Groundwater Inflow Estimates

Results from Dubuisson modeling indicate that a total inflow for the final workings is approximately 160 m³/d. This is closer to the ranges expected for the entire property including the KD and PI Zones. As such, for this Study the estimates for inflow and dewatering at the KD Zone are benchmarked based on DU Zone results.

Location	Groundwater infiltration Estimates (m³/day)	Date of Modeling results / Report	Reliability of groundwater models, and resulting benchmarks, based on reported correlation coefficients and/or other factors
*Kiena (Richelieu)**	*784.3 m³/day*	*March 26, 2026*	*Wesdome pump network figures and reports (very low)*
Kiena + Kiena Deep (Benchmark)	440 m³/day±	March 26, 2026	0.13 to 0.49 (low)
Dubuisson (modeled)	158.3 m³/day±	March 26, 2026	0.13 to 0.49 (low)
Presqu'île (modeled)	132.3 m³/day±	October, 2024	0.75 – 0.83 (moderate)
Presqu'île – Kiena track drift (modeled)	83.9 m³/day±	October, 2024	0.75 – 0.83 (moderate)
Kiena – Dubuisson track drift (scaled from modeled data)	35 m³/day±	March 26, 2026	0.13 to 0.49 (low)

*Kiena dewatering estimate as reported in the March 26, 2026 hydrogeological report for Dubuisson (*Richelieu Hydrogéologique Inc., le 26 mars 2026, Mine Kiena - Étude hydrogéologique, Projet Dubuisson*).
Note, modeled zone was only 300 m± thick and does not represent full mine workings.

The above values are based on very limited flow meter data. To improve the estimation of dewatering and confirm current estimates, flow meters are recommended at strategic points in the current Kiena Deep dewatering network. Following improved data, the current numerical groundwater models can be updated to consider more accurate dewatering at Kiena Deep and help improve model calibration and future dewatering estimates.

Based on the feedback from the Wesdome team and other consultants involved in the underground pumping evaluations, the actual infiltration estimates are expected to be on the lower end of (or below) the ranges identified in the Richelieu reports and resulting benchmarks scaled from these modeled results. Based on a personal communication with Richelieu on July 2, 2026, it was confirmed that the pumping rate of approximately 784 m^3/day for Kiena (between 0 and 300 m depths) was based on pumping data provided by Wesdome. However, for purposes of the current study, benchmarking using results from the groundwater inflow in the Dubuisson model, which is based on updated bedrock packer test permeability results, is recommended until further confirmation of current Kiena Deep pumping can be obtained with improved flow meter data.

Additionally, groundwater management can be reviewed and updated regularly with the dewatering requirements managed adaptively as new information becomes available during future studies and/or operations. Despite the low confidence in the modeled results, the risks associated with dewatering are considered low.

16.3.3 Hydrogeological – Geomechanical Support

In support of the geomechanical program for the DU Zone completed by others, Norda evaluated the groundwater conditions at subsurface to provide estimated hydrostatic pressures and flow conditions. The testing was limited by schedule and drill barge availability but is a considerable improvement in the permeability data available for underground conditions of the property compared to previous operations where very little deeper bedrock permeability data was available. Additionally, the core data and photos reviewed, along with the test results obtained, provided very little evidence for problematic conditions that would justify increased testing.

The results of the hydraulic testing are provided in the previous sections and indicate very low to moderate potential for flow. Instrumentation was not installed due to logistics of the barge drilling and schedule, so reductions in pressure with depth could not be ascertained. As such, a conservative approach was recommended to evaluate the pressure based on the maximum lake water level elevations. This is the highest hydrostatic pressures expected in the underground.

Future studies could provide less conservative groundwater pressure estimates if instrumentation is installed in deep bedrock, however the value of this is considered minimal unless otherwise recommended by the geomechanical engineer due to problematic zones sensitive to hydrostatic pressures.

16.4 Mine Design

16.4.1 Mining Areas

The Project comprises three (3) principal underground mining areas or zones:

- Presqu'île
- Kiena Deep and
- Dubuisson

Figure 16.10 illustrates the overall mine layout at the completion of the LOM plan, including the Presqu'île portal, the existing Kiena Mine shaft, the two (2) access drifts connecting the Dubuisson Zone to the Kiena Mine, and the principal underground ramp network.

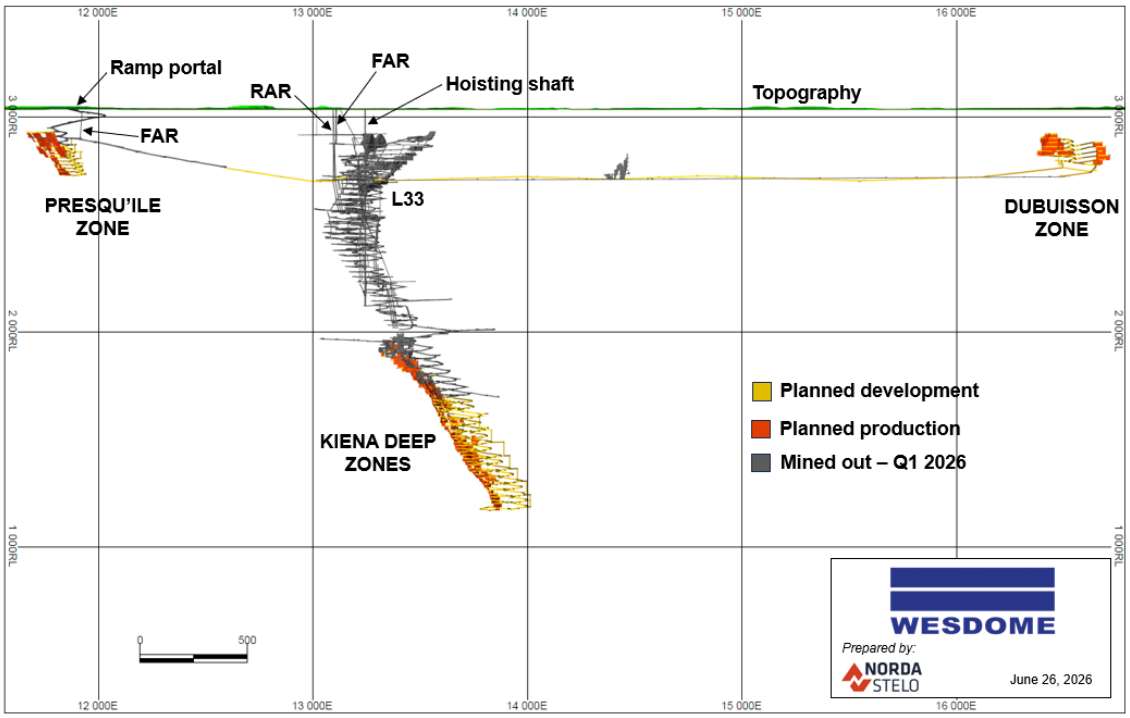


Figure 16.10 Longitudinal section of the mining zones, looking north

The Presqu'île Zone is located approximately 1.4 km west of the Kiena Mine shaft. Mineralization consists of several subparallel lenses striking approximately N300° and dipping between 55° and 60°. The mineable reserve blocks extend over approximately 320 m vertically and 250 m along strike. Access to the mining area is provided directly from surface through the Presqu'île portal and its associated ramp system.

The Kiena Deep mining area included in the LOM plan extends from approximately 1,095 m below surface over a vertical extent of approximately 770 m. The reserve blocks are hosted within multiple mineralized lenses exhibiting variable orientations but generally following a north-northwest trend with an average dip of approximately 55°. Mining activities are supported by the existing Kiena underground infrastructure, with continued ramp development providing access to progressively deeper mining levels throughout the mine life.

The Dubuisson Zone is a greenfield underground mining area with no existing underground development. It is located approximately 3.5 km east of the Kiena Mine shaft and approximately 400 m beyond the current eastern end of the Level 33 rail haulage drift. Mineralization consists of subparallel, subvertical veins striking generally east-west and dipping northward. The mineable reserve blocks extend approximately 320 m vertically, with maximum strike lengths of approximately 65 m and 170m in the northern and southern sectors, respectively. Access will be provided through the new Dubuisson Ramp, which will originate from Level 33 of the Kiena Mine. As the Dubuisson Zone has no direct access to surface, the extension of the existing Level 33 rail haulage drift will provide a secondary means of egress in accordance with the mine emergency escape strategy.

Within each mining area, internal ramp systems provide access to the production levels and associated mining fronts while supporting the efficient movement of personnel, mobile equipment, materials, and ore throughout the operation.

Based on the results of the geotechnical assessment and the selected mining methods, vertical level spacing has been established at 16.5 m in the Presqu'île Zone, 15 m in the Kiena Deep mining area, and 20 m in the Dubuisson Zone. These intervals represent an appropriate balance between ground stability, mining recovery, dilution control, and overall operating efficiency.

For each mining area, haulage drifts have been designed generally perpendicular to the orientation of the mineralized lens system, providing simultaneous access to multiple production areas. This layout maximizes operational flexibility, supports efficient mine sequencing, and facilitates the maintenance of the planned production rate throughout the LOM.

16.4.2 Design Philosophy

The mine design has been developed to maximize the utilization of the existing Kiena Mine infrastructure while supporting a safe, practical, and economically sustainable LOM plan. The design philosophy emphasizes the continued operation of the existing underground mine through the progressive integration of new mining areas while minimizing capital expenditures by leveraging the extensive existing shaft, underground development, hoisting, ventilation, electrical, dewatering, and surface infrastructure.

The production strategy is based exclusively on Mineral Reserves and has been developed to provide a continuous mill feed throughout the LOM while maintaining operational flexibility. During the initial years of the schedule, production is supplied primarily from the KD Zone. The PI Zone is progressively brought into production during 2026 to supplement the existing mining operations and increase the overall mine production rate. As the Presqu'île reserves are depleted, production is progressively replaced by the DUB Zone, thereby maintaining a relatively constant production profile while utilizing the existing processing plant and underground infrastructure.

The existing Kiena processing plant has sufficient installed capacity to accommodate the planned production rates without requiring major plant expansion. The mine plan has therefore been developed to optimize the utilization of the existing milling facilities while limiting additional capital investment.

The underground layout has been designed to maximize operational efficiency by minimizing haulage distances where practical, optimizing access development, and maintaining flexibility for ventilation, services distribution, equipment movement, and future mine development. The overall mine design also considers geotechnical constraints, mining method requirements, backfill sequencing, and operational interactions between the three (3) mining areas.

The design philosophy further incorporates the progressive development of the Dubuisson access ramp while maintaining uninterrupted production from the existing mining areas. This staged development approach reduces project execution risk, distributes capital expenditures over time, and provides sufficient development flexibility to sustain long-term production.

Overall, the mine design represents a balanced approach that optimizes capital efficiency, operational reliability, and long-term reserve extraction while utilizing the existing Kiena Mining Complex to the greatest practical extent.

16.4.3 Mine Design Criteria

Interlevel ramps are 5.0 m wide by 5.5 m high. The level drifts (haulage drift and ore drift) and level access drift are generally sized 5.0 m x 5.0 m. However, in KD Zone, the first six rounds of the level access are 5.0 m wide by 5.2 m high. The remucks are generally spaced every 150 m for development and production efficiency. A remuck bay is also planned at half distance between every level. When possible, the ventilation access drift will serve as remuck during ramp development. The roof of loading bay is raised to a height of 7.0 m to provide sufficient clearance for the LHD loader bucket during truck loading. Level developments are designed to respect the 3% average gradient to facilitate water runoff to a level drain sump. Concrete floor slabs of underground infrastructure including electrical stations and refuge stations are design with a 1% slope to ensure adequate drainage. To minimize maintenance and operator fatigue, ramps between levels will have a minimum turning radius of 25 m. An electrical station (or sub-station) will be established around the access crosscut from ramp at each production level.

The development profiles by type are listed in Table 16.10.

Table 16.10 Underground development design parameters

Heading	Width (m)	Height (m)	Average gradient
Presqu'île ramp	7.5	5.5	13.5%
Inter-level ramp	5.0	5.5	13.5%
Level access - Presqu'île	5.0	5.0	3.0%
Level access - Kiena Deep	5.0	5.2	3.0%
Level access - Dubuisson	5.0	5.5	3.0%
Ore drift	5.0	5.0	3.0%
Level haulage	5.0	5.0	3.0%

Heading	Width (m)	Height (m)	Average gradient
Ventilation access	5.0	5.0	3.0%
Safescape access	5.0	5.0	3.0%
Electrical station - Presqu'île	7.5	5.0	1.0%
Electrical station - Kiena Deep	7.5	5.0	1.0%
Electrical station - Dubuisson	5.5	5.0	1.0%
Electrical sub-station - Presqu'île	5.5	5.0	1.0%
Electrical sub-station - Kiena Deep	5.5	5.0	1.0%
Electrical sub-station - Dubuisson	5.0	5.0	1.0%
Loading bay	5.0	7.0	3.0%
Refuge station	5.0	5.0	1.0%
Remuck in ramp	6.0	5.0	3.0%
Remuck on level	5.0	5.0	3.0%
Mixing bay	5.0	5.0	-8.0%
Paste bay	5.0	5.0	3.0%
Pumping bay	5.0	5.0	3.0%
Pumping station	5.0	5.0	3.0%
Sump with Drain	5.0	5.0	-16.0%
Sump with Pump	6.0	5.0	-16.0%

The planned vertical developments include ventilation raise and secondary egress escapeway that will be equipped with permanent ladderway systems. The raise types and corresponding cross-sectional dimensions are summarized in Table 16.11.

Table 16.11 Vertical development type and size

Zone	Development heading	Type	Diameter
Presqu'île	Ventilation raise	Raise bore	4.9 m
	Escapeway	Raise bore	1.1 m
Kiena Deep	Ventilation raise	Raise bore	4.9 m
	Escapeway	Raise bore	1.1 m
Dubuisson	Ventilation Raise	Alimak raise	3.3 m

The ventilation raise of DUB Zone will be provided with manway.

16.4.4 Underground Mine Infrastructure

16.4.4.1 Existing Underground Infrastructure

The Kiena Mine Complex benefits from an extensive underground infrastructure network developed over several decades of mining and progressively upgraded to support the current operation. The existing infrastructure forms the backbone of the reserve-based LOM plan and significantly reduces the amount of new capital development required to support future mining activities.

The underground infrastructure includes the production shaft, loading pockets (2), underground crushing facilities, maintenance complex, underground ramp network, and numerous permanent service excavations. Additional infrastructure required to support the continued development of the Kiena Deep, Presqu'île and Dubuisson mining areas will be constructed progressively throughout the LOM.

The principal existing and planned underground infrastructure is summarized in the following sections, while the associated underground service systems are described in the section 16.7.

Shaft and Loading pocket Infrastructure

The Kiena Shaft is the principal vertical access to the underground mine and remains one of the key components of the existing underground infrastructure. The shaft currently extends to a depth of approximately 930 m below surface and supports personnel transportation, material handling, ore and waste hoisting and the distribution of essential mine services including electrical power, compressed air, process water, dewatering pipelines and fuel lines.

The original shaft infrastructure dates back to the historical development of the Kiena Mine. Initial shaft sinking was completed during the late 1930s as part of the early mine development program. As additional mineralized zones were discovered and mining progressively expanded to greater depths, the shaft was deepened in successive phases to support continued underground development and production, ultimately reaching its current operating depth of approximately 930 m.

The shaft comprises dedicated compartments for ore hoisting, personnel and material conveyance, together with service compartments housing the principal underground utilities. These include the main process water pipeline, dewatering pipeline, compressed air distribution, electrical cables, communication systems, and the underground fuel pipeline supplying the existing fuel bay on Level 64. The shaft therefore serves not only as the primary hoisting system but also as the principal utility corridor for the underground operation.

Historically, the Kiena Shaft represented the only connection between the underground workings and surface infrastructure, requiring all mobile equipment maintenance activities to be performed underground. More recently, completion of the connection between the Presqu'île portal and the existing Kiena ramp network has established a secondary access route, allowing underground mobile equipment to reach surface by ramp if required. Although this provides increased operational flexibility, the shaft continues to perform its primary production, hoisting and service functions, and remains the backbone of the underground infrastructure.

The shaft material handling system includes an underground loading pocket located on Level 86, which serves as the transfer point between the underground ore handling system and the shaft hoisting system. Ore is transported from the production areas through the underground haulage network, ore passes and the primary crushing system before reporting to the loading pocket, where it is temporarily stored and discharged into the production skips for hoisting to surface. The loading pocket forms an integral part of the shaft material handling infrastructure and is equipped with the mechanical systems and loading arrangements required to support continuous ore hoisting operations.

The loading pocket infrastructure has been rehabilitated and upgraded as part of the mine restart program, including improvements to the mechanical handling system, crash gates and instrumentation to support the safe and efficient operation of the ore and waste hoisting system.

Underground Crusher and Rock Breaker

The existing underground material handling infrastructure includes a 48-inch jaw crusher, a hydraulic rock breaker and associated ore receiving grizzlies located on Level 81 adjacent to the shaft ore handling system.

The jaw crusher provides the primary size reduction of underground ore prior to transfer to the shaft loading pocket located on Level 86 for hoisting to surface.

The hydraulic rock breaker is installed adjacent to the crusher and is positioned to service the ore receiving grizzlies. The unit is used to break oversized rock retained on the grizzly, ensuring that material can be safely transferred to the crusher while minimizing interruptions to the ore handling system.

Together, the crusher and rock breaker constitute integral components of the existing underground ore handling infrastructure supporting the shaft hoisting system.

Underground Maintenance Facilities

The primary underground maintenance complex illustrated in Figure 16.11 is located on Level 64 and serves as the principal maintenance centre for the underground mobile equipment fleet.

Historically, underground mobile equipment could not access surface facilities, as the Kiena Shaft was the only connection between the underground mine and surface. Consequently, the maintenance facilities were designed to perform routine servicing, preventive maintenance, and most mechanical repairs underground.

The maintenance complex includes:

- Service bays for preventive maintenance and mechanical repairs
- A wash bay for equipment cleaning
- Welding and fabrication facilities
- A workshop dedicated to handheld pneumatic drills, pumps and auxiliary mining equipment
- A small electrical repair shop and
- Storage areas for spare parts, maintenance consumables and operating supplies

Figure 16.11 Maintenances Facilities

Routine inspections, scheduled maintenance, and most corrective repairs are completed underground to maximize equipment availability and minimize production interruptions. The recent ramp connection now provides the capability to transport underground equipment to surface if required; however, routine maintenance continues to be performed primarily underground.

Permanent Underground Service Excavations

Permanent underground service excavations are distributed throughout the Kiena Mine to support mining operations and provide locations for the installation of the various underground utility systems. These excavations include electrical rooms, pumping stations, refuge chambers, fuel bays, paste distribution chambers, battery charging stations, and other utility excavations required for the operation of the mine.

These facilities have been developed progressively as mining advanced and will continue to be expanded as new mining areas are brought into production. The associated electrical, water, compressed air, fuel, ventilation, communications, dewatering, and paste distribution systems are described in Section 16.7.

16.4.4.2 Planned Underground Infrastructure

The reserve-based LOM plan requires only limited additions to the existing underground infrastructure, reflecting the extensive infrastructure already available at the Kiena Mine. Planned infrastructure development focuses primarily on extending the existing underground systems to support mining at increasing depth within the Kiena Deep mining area and the future development of the Presqu'île and Dubuisson mining areas.

The principal underground infrastructure additions include:

- The Dubuisson access decline
- New ventilation raises
- Additional underground maintenance facilities
- New electrical rooms and substations
- Additional pumping stations
- New refuge chambers
- An underground maintenance garage and fuel bay on Level 152
- Battery charging infrastructure
- Extensions of the underground service excavations required to support future mining

These infrastructure additions will be developed progressively in accordance with the mine development schedule to ensure that the required facilities are available before production commences within each mining area.

The extension of the various underground service systems associated with these infrastructure additions, including electrical distribution, communications, compressed air, process water, dewatering, fuel distribution, ventilation and paste reticulation, is described in Section 16.7.

16.4.5 Mine Access

Access to the three (3) mining areas is provided through a combination of existing and new underground infrastructure integrated within the Kiena Mine Complex. The underground access network has been designed to provide safe and efficient movement of personnel, mobile equipment, materials, ore, mine services, and emergency egress while supporting the planned production schedule throughout the LOM.

The KD Zone is accessed primarily through the existing Kiena production shaft together with the underground ramp system extending below the shaft infrastructure. The shaft remains the principal access for personnel, materials, mine services, and ore and waste hoisting throughout the LOM, while the ramp system provides access to the progressively deeper production horizons as mining advances.

The PI Zone is accessed through the existing Presqu'île portal and associated ramp system. During the preparation of this FS, the Presqu'île ramp was connected to the existing Kiena underground workings, establishing a continuous underground connection between the two mining areas. This connection significantly improves operational flexibility by allowing underground personnel, mobile equipment, materials, and mine services to move freely between the Kiena and Presqu'île operations. It also provides an alternative underground access route that enhances operational redundancy and emergency response capabilities.

The DUB Zone will be accessed through a new decline extending from the existing Kiena underground workings at Level 33. Development of this access is scheduled to commence in 2027 and will progressively establish the primary access to the Dubuisson mining area while production continues from the Kiena Deep and Presqu'île Zones. This phased development strategy reduces project execution risk, distributes capital expenditures over time, and provides sufficient development flexibility to sustain long-term production.

The underground mine is serviced by an extensive network of ramps, level accesses, haulage drifts, crosscuts, and service excavations developed over several decades of mining and progressively expanded to support the reserve-based LOM plan. Within each mining area, inter-level ramps provide access between successive production horizons, while level access drifts connect the primary ramp system to the production levels, ore drives, mine services, and underground infrastructure.

The underground access network has been designed to minimize haulage distances, facilitate the distribution of ventilation and underground services, provide efficient routing for utilities, and maintain multiple active mining fronts throughout the production schedule. Ramp gradients, cross-sectional dimensions, turning radii, and level spacing have been selected to accommodate the planned underground mobile equipment fleet while supporting the production rates evaluated in this FS.

Historically, the Kiena Shaft represented the only connection between the underground workings and surface, requiring all underground mobile equipment maintenance to be performed underground. Completion of the connection between the Presqu'île ramp and the Kiena underground workings now provides direct vehicle access between the underground mine and surface through the Presqu'île portal. Although this connection offers additional operational flexibility and allows underground equipment to be transported to surface when required, routine maintenance activities will continue to be performed primarily at the existing underground maintenance facilities in accordance with the planned operating strategy.

16.4.6 Level Layout Design

A typical production level includes an access drift, an electrical station (or sub-station), sump, paste bay, loading bay, sump ventilation access, a loading/unloading bay, a sump, a paste bay (or mixing bay for cemented rockfill), a haulage drift, and ore drifts. Depending on the location, a level may also include a refuge and other relevant infrastructure such as pumping bay and pumping station including settlement drifts.

The typical level layout of Kiena Deep Zone is shown in Figure 16.12.

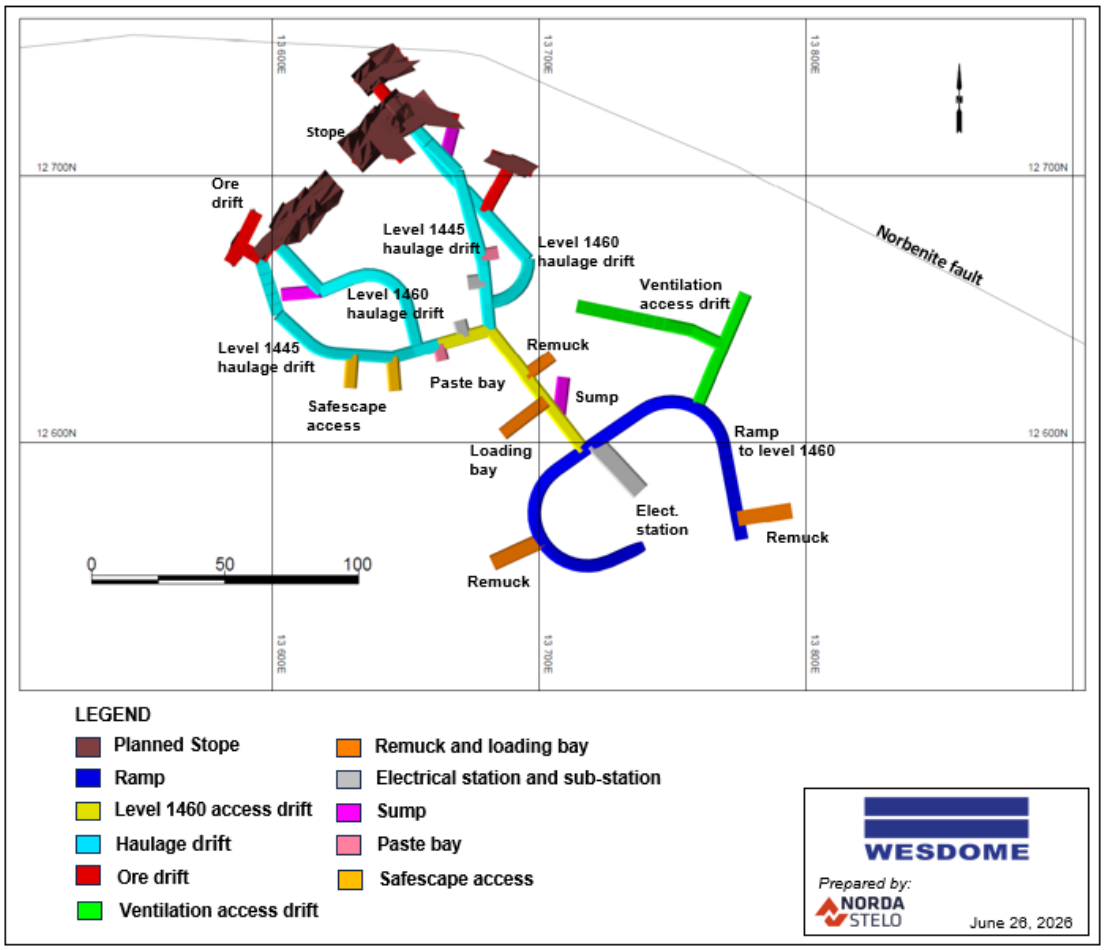


Figure 16.12 Typical level layout for the Kiena Deep Zone (Level 1460 and Level 1445)

The Level drifts in PI Zone does not include haulage drift. Figure 16.13 and Figure 16.14 illustrate the typical level layout for PI Zone and DUB Zone respectively.

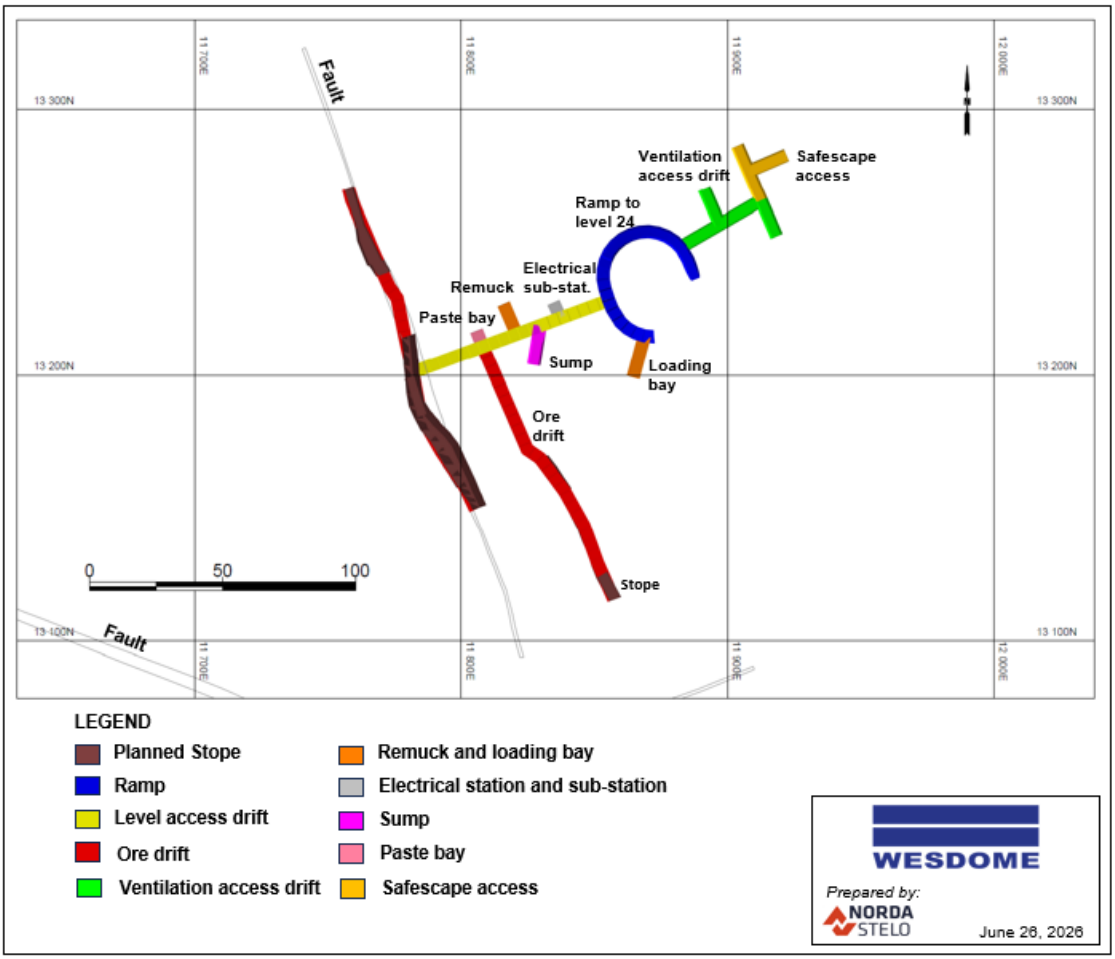


Figure 16.13 Typical level layout for the Presqu'île Zone (Levels 24)

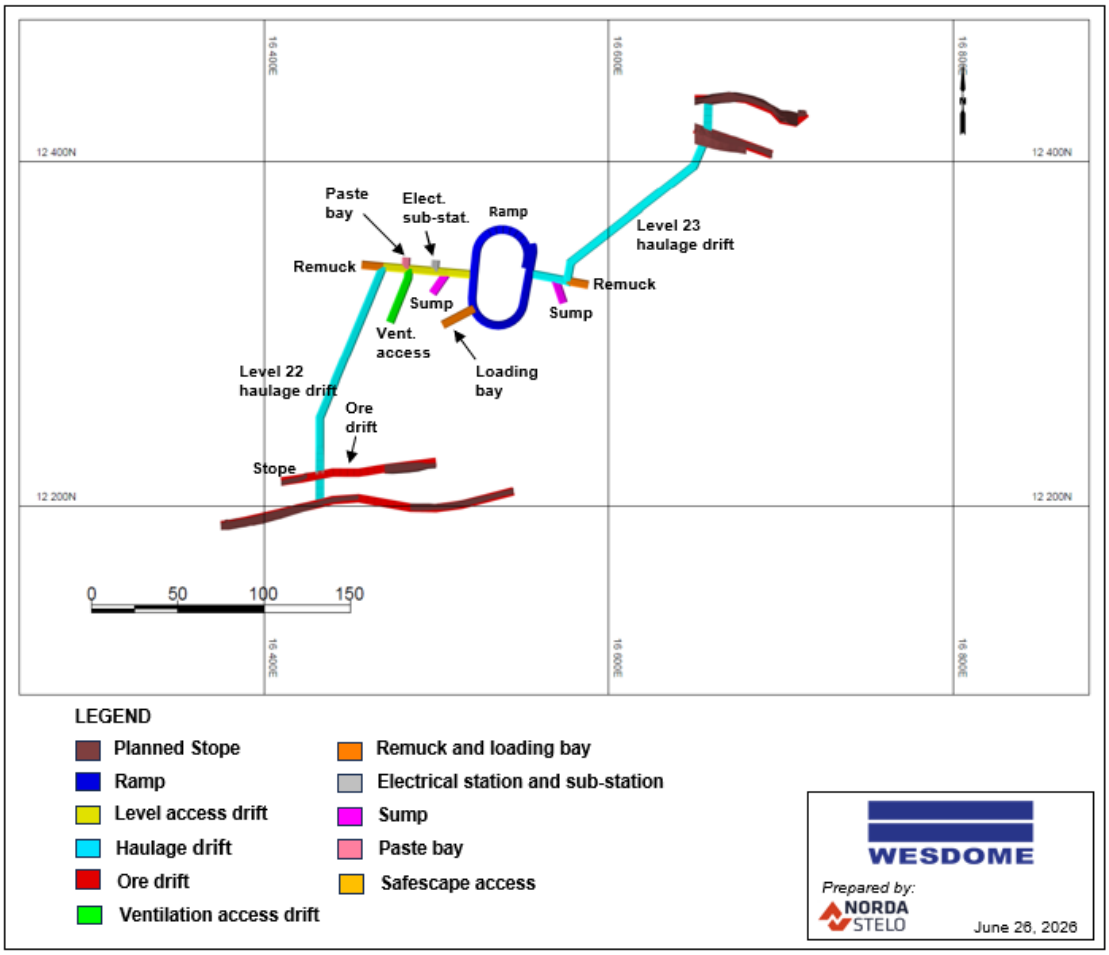


Figure 16.14 Typical level layout for the Dubuisson Zone (Levels 22 and 23)

16.4.7 Ore and Waste Handling System

The ore and waste handling system has been designed to maximize the utilization of the existing Kiena Mine shaft, crushing facilities, and surface infrastructure while minimizing new capital development. The selected material handling strategy reflects the geometry, location, production rate, and mining sequence of the Kiena Deep, Presqu'île, and Dubuisson mining areas.

The Kiena Deep mining areas are located below the existing shaft loading horizon, preventing the use of conventional gravity-fed ore passes to the shaft loading pocket. The PI Zone is accessed directly from surface and follows a progressively deepening orebody, making truck haulage to surface the most practical and economical solution. Although the DUB Zone is accessed from its lower elevations, the planned production rate, limited mining inventory, and relatively small number of active production stopes do not justify the construction of dedicated vertical ore pass infrastructure. Consequently, blasted ore from all production stopes will be mucked using LHD units and loaded directly into underground haul trucks for transport to the appropriate material handling facilities on Level 33 at Kiena.

16.4.7.1 Ore Handling

Ore produced from the PI Zone will be hauled from the production levels to surface using 30-tonne and 45-tonne underground haul trucks via the Presqu'île access ramp. The ore will be dumped on a surface stockpile pad located adjacent to the portal. An operating contractor will load the ore into highway haul trucks for transportation to the dedicated surface jaw crusher at the Kiena Mine. The crushed ore will be transferred to the surface ore storage bins, from which it will be reclaimed and fed to the process plant. The haul distance and highway truck fleet configuration will be finalized by the operating contractor prior to implementation.

Ore produced from the KD Zone will be hauled by underground trucks to the existing Level 79 ore pass system feeding the underground crushing station located on Level 81. The crushing station consists of a 48 × 81-inch jaw crusher preceded by a grizzly and hydraulic rock breaker to reduce oversized material prior to crushing. Crushed ore is discharged into the loading pocket located on Level 86 and hoisted to surface through the existing Kiena Mine shaft. On surface, the ore is discharged into the headframe ore bin and conveyed to the existing surface ore storage bins supplying the process plant.

Ore produced from the DUB Zone will be hauled by underground trucks through the access ramp connecting the Dubuisson workings to the Kiena Mine. Material will be transported to Level 33 ore pass and transferred to Level 54 crusher from which crushed material will be discharged into the dedicated ore loading facilities before being hoisted to surface through the Kiena Mine shaft. Hoisted ore will be discharged into the surface ore handling system and transferred to the existing surface ore storage bins feeding the process plant. Utilizing the existing shaft infrastructure eliminates the need for dedicated ore pass systems within the Dubuisson mining area while maximizing the use of existing mine infrastructure. Figure 16.15 shows the ore handling flowsheet of the Project.

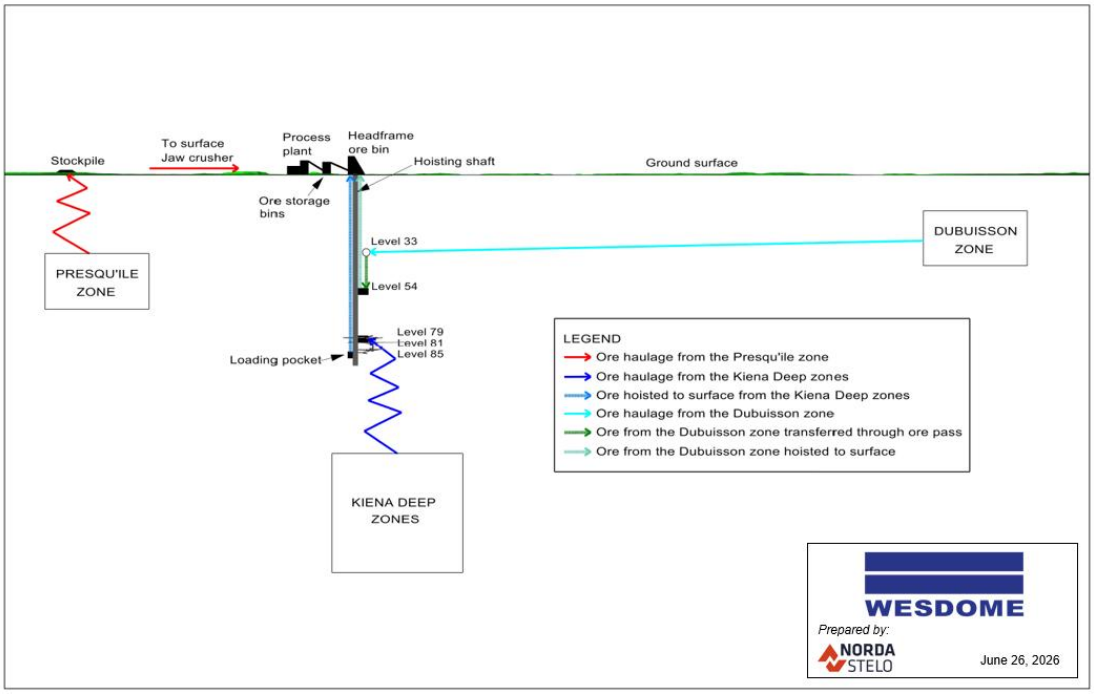


Figure 16.15 Ore handling flowsheet (not to scale)

16.4.7.2 Underground Haulage Fleet

Underground ore haulage will primarily be performed using the existing fleet of electric 42-tonnes and diesel 30-tonne underground haul trucks. The Presqu'île operation will additionally utilize 45-tonne underground haul trucks to optimize ramp haulage efficiency. As mining progresses to greater depths within the Kiena Deep mining area, battery-electric haul trucks will progressively be added to supplement the conventional diesel fleet. The use of battery-electric haul trucks is expected to reduce diesel emissions and heat generation within the primary haulage ramps, particularly during summer conditions when elevated rock temperatures increase underground ventilation requirements. This initiative also supports the Company's long-term decarbonization objectives while improving ventilation efficiency.

16.4.7.3 Waste Rock Handling

Waste rock generated from underground development will be managed according to its location and intended end use.

Waste rock generated within the PI Zone that is not required for underground backfilling activities will be hauled directly to surface through the Presqu'île ramp and placed in the designated surface waste rock storage area adjacent to the portal.

Waste rock generated from the KD Zones that is not required for underground backfilling activities will be hauled by underground trucks to the existing waste handling system, transferred to the shaft loading pocket, hoisted to surface through the Kiena Mine shaft, and deposited within the existing surface waste rock storage facilities.

Waste rock generated from the DUB Zone will be hauled through the access ramp to the existing Kiena Mine waste pass on Level 33, where it will be discharged into the dedicated waste loading pocket before being hoisted to surface through the Kiena Mine shaft and transported to the designated surface waste rock storage area.

Where practical, waste rock generated from underground development will be preferentially used underground to minimize the quantity of material requiring permanent surface disposal. Given the limited remaining capacity of the existing tailings management facility, paste backfill will remain the preferred backfill method throughout the operation. Waste rock will primarily be used as a 1.5 m operating layer placed over cured paste-filled stopes to provide a competent running surface and adequate tire traction for LHD mucking of the overlying production stope. During the initial mining phase of the PI Zone, waste rock will also be used as cemented rockfill, in accordance with the planned mining sequence, and for the construction of backfill barricades where required. Only waste rock not required for these underground applications will be transported to surface for permanent storage.

16.4.7.4 Hoisting System

The existing Kiena shaft remains the primary hoisting system for ore and waste generated from the Kiena Deep and Dubuisson mining areas. The shaft is equipped with dedicated ore and waste loading pockets and a skip hoisting system that transports material to surface. Hoisted ore is discharged into the headframe ore bin before being conveyed to the existing surface ore storage bins supplying the process plant. Hoisted waste rock is discharged into the dedicated surface waste handling system, where it is transferred by mobile equipment to the surface waste rock storage facilities.

Based on the assessment completed for the existing hoisting system, the shaft provides sufficient hoisting capacity to support the production rates contemplated in the reserve-based mine plan while accommodating ore, waste rock, personnel movement, and routine maintenance activities. The LOM average tonnage hoisted per day is evaluated to 1,460 t (Ore and Waste combined).

16.5 Mining Methods

The mineral reserves at Kiena will be extracted primarily using mechanized longhole stoping with cemented backfill. Two (2) longhole mining configurations have been selected to accommodate the varying geometry of the mineralized zones:

- Longitudinal longhole stoping, representing approximately 81% of the planned stope tonnage, is the primary mining method throughout the Kiena Deep, Presqu'île and portions of the Dubuisson deposits.
- Transverse longhole stoping, representing approximately 18% of the planned stopes and approximately 24% of the Kiena Deep ore tonnage, is applied locally where the orebody geometry is sufficiently wide to justify transverse extraction.

The selection of the mining method for each mining block was based on several technical criteria, including orebody width, dip, continuity, geotechnical conditions, expected dilution, recovery, productivity and overall mining economics. Both methods employ cemented paste backfill as the primary backfill material to maintain regional stability, maximize ore recovery and permit the extraction of adjacent stopes. Where operationally appropriate, CRF may be used as a replacement for pastefill during commissioning or maintenance of the paste distribution system.

16.5.1 Longitudinal Longhole Stoping

Longitudinal longhole stoping is the principal mining method and is applied where the orebody thickness allows extraction along strike while maintaining acceptable recovery and dilution.

A typical mining sequence is illustrated in Figure 16.16. Development begins with the establishment of the production level access, drill drifts and slot raise. Production drilling is completed from the upper sublevel using longhole production drills before blasting commences.

Primary stopes are generally blasted in two (2) stages. An initial blast creates the opening followed by a secondary blast to complete ore extraction. When operationally advantageous, the secondary blast may be loaded while mucking of the first blast is underway to improve equipment utilization and reduce cycle time.

Following ore extraction, the stope is completely mucked before being backfilled with cemented pastefill. Once the required curing period has been achieved, adjacent stopes can be mined. Where appropriate, cemented rockfill may replace pastefill, particularly in the PI Zone during construction of the permanent paste reticulation system.

The mining sequence has been developed to maintain adequate regional stability while maximizing mining flexibility and production continuity. Final stopes within a mining sequence or stopes adjacent to permanent natural pillars may remain unfilled where permitted by geotechnical design.

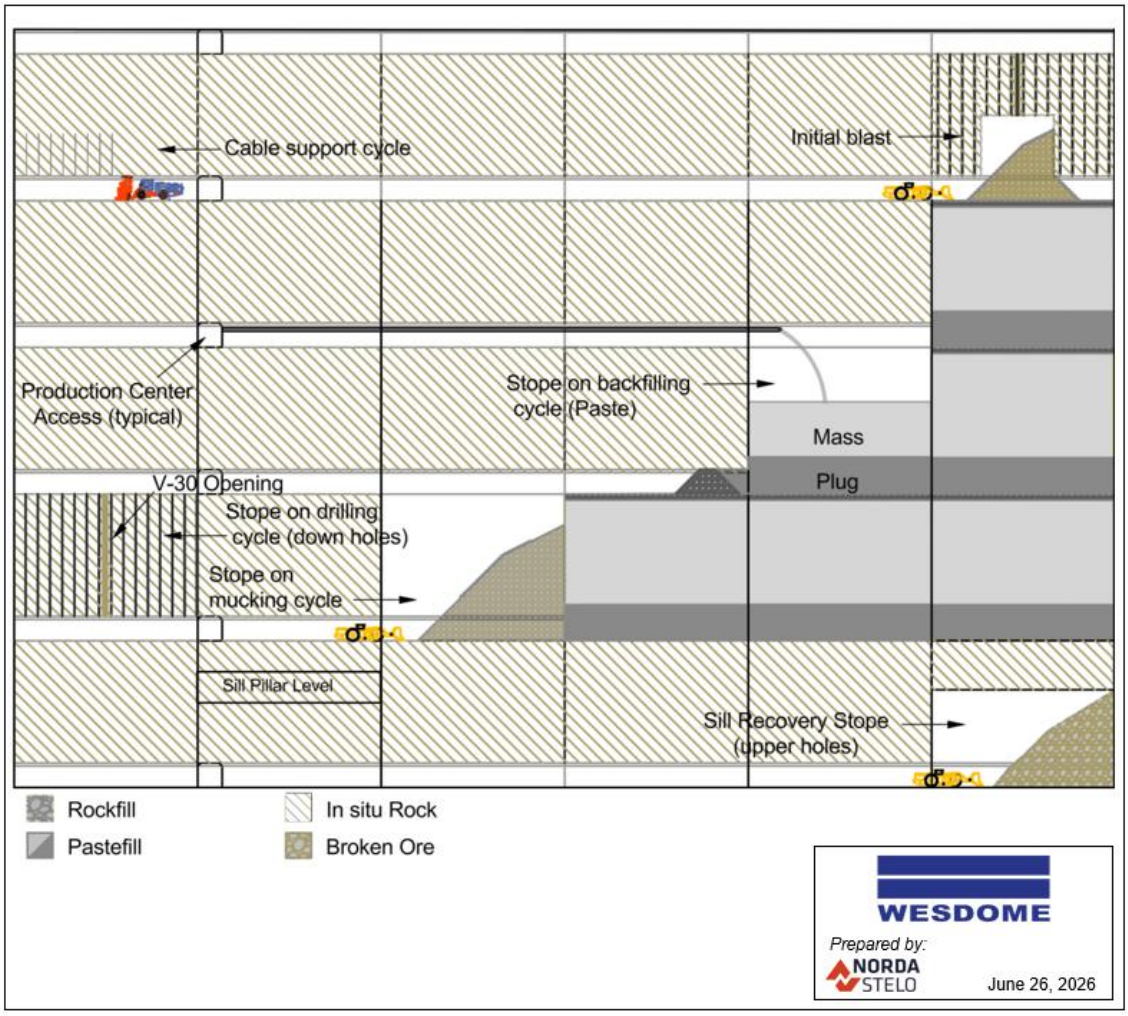


Figure 16.16 Mining cycle for longitudinal longhole stoping

16.5.2 Transverse Longhole Stoping

Transverse longhole stoping is planned only within selected portions of the KD Zone where the orebody width is sufficient to support transverse extraction. Approximately 20% of the planned stopes, representing approximately 24% of the ore scheduled from the KD Zone, will be mined using this method.

The spatial distribution of transverse stopes within the mining sequence is presented in Figure 16.17.

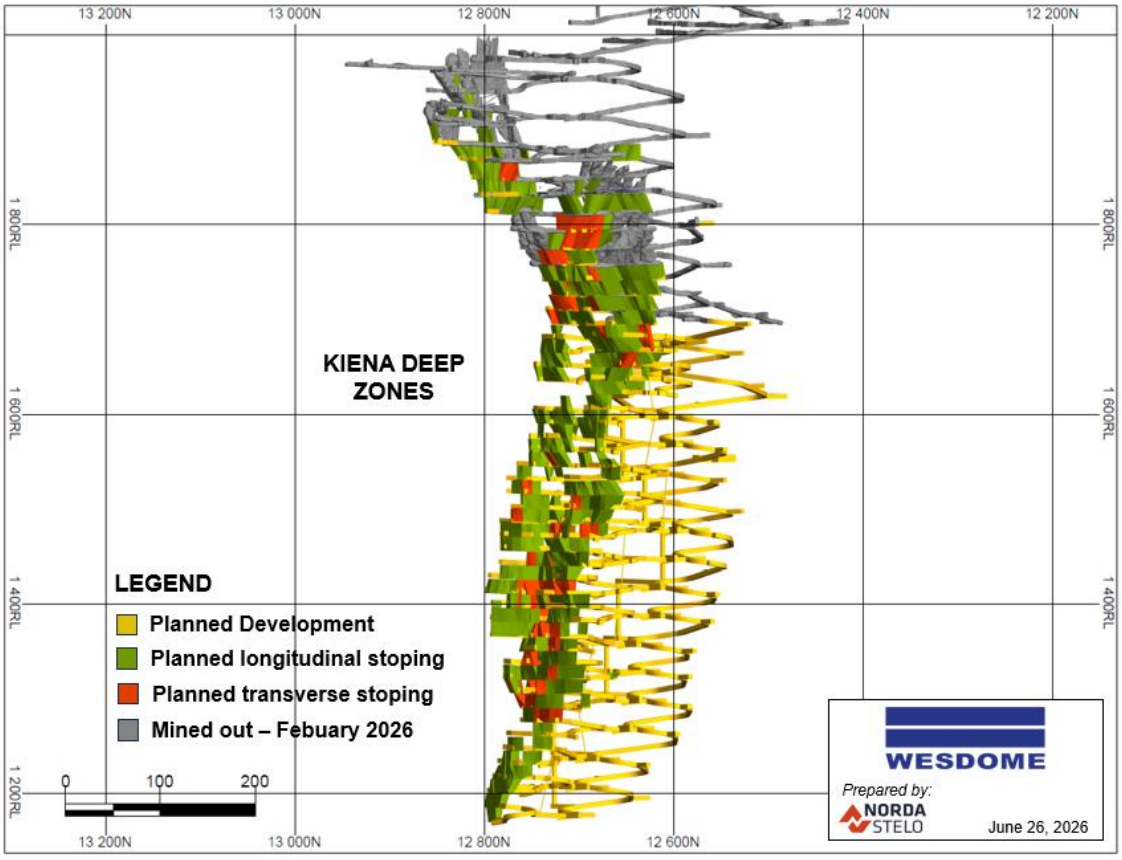


Figure 16.17 Spatial distribution of planned transverse longhole stopes within the Kiena Deep mining sequence

Similar to longitudinal stoping, mining begins with production drilling from the upper sublevel following completion of the slot raise. Primary stopes are extracted in an ascending sequence. Once adjacent primary stopes have been mined and backfilled, secondary stopes are recovered between the cemented primary stopes. This primary-secondary sequence provides adequate confinement for the secondary stopes while maintaining acceptable geotechnical stability.

Within each mining panel, extraction progresses from the extremity of the panel toward the primary haulage access to minimize ore haulage distances as mining advances. Most transverse stopes require two production blasts before complete mucking.

A typical transverse mining cycle is illustrated in Figure 16.18.

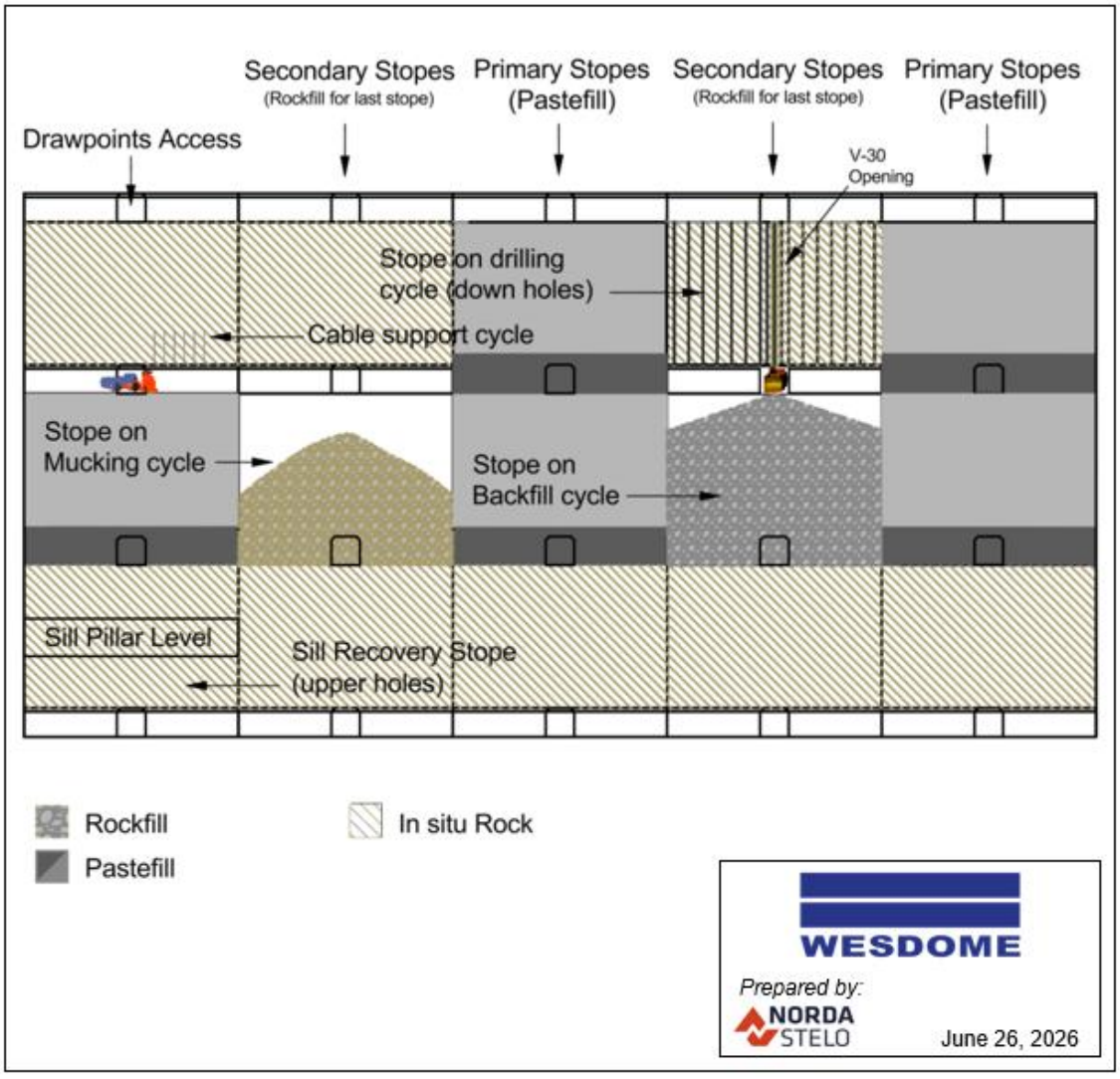


Figure 16.18 Mining cycle for transverse longhole stoping

16.5.3 Production Drilling and Blasting Practices

Production drilling will be completed using mechanized longhole drills operating from the upper sublevel. Prior to production drilling, a 30-inch (762 mm) slot raise is developed using an MRI raise drilling head mounted on a Cubex 5200 production drill, providing the initial free face required for production blasting.

Representative production drilling layouts for the Kiena Deep, Dubuisson and Presqu'île mining areas are presented in Figure 16.19, Figure 16.20 and Figure 16.21 respectively, while the principal drilling and blasting design parameters are summarized in Table 16.12.

Although the overall blasting philosophy remains consistent throughout the operation, drilling layouts have been optimized to reflect the geometry of each mining area.

Kiena Deep generally utilizes longitudinal stopes with a vertical height of approximately 15 m between production levels. Because production drifts are developed with a nominal height of approximately 5 m, many stopes achieve breakthrough into the lower drift after approximately 10 m of drilling. Wider stopes that do not intersect the lower drift require drill holes approaching the full stope height.

At the PI Zone, the vertical distance between production levels is approximately 16.5 m. Owing to the average orebody dip of approximately 55° and the relatively narrow vein width, production holes are designed to break through into the lower production drift, resulting in drill lengths that remain relatively short despite the larger vertical separation.

At the DUB Zone, the vertical interval between production levels is approximately 20 m. Similar to the other mining areas, the lower production drift has a nominal height of approximately 5 m, resulting in typical production hole lengths of approximately 15 m.

Production drilling will be performed primarily using longhole drill rigs ("buggy"-type production drills) capable of drilling 76 mm (3-inch) diameter production holes. Drill patterns have been optimized to balance fragmentation, drilling productivity, explosive consumption, and dilution control.

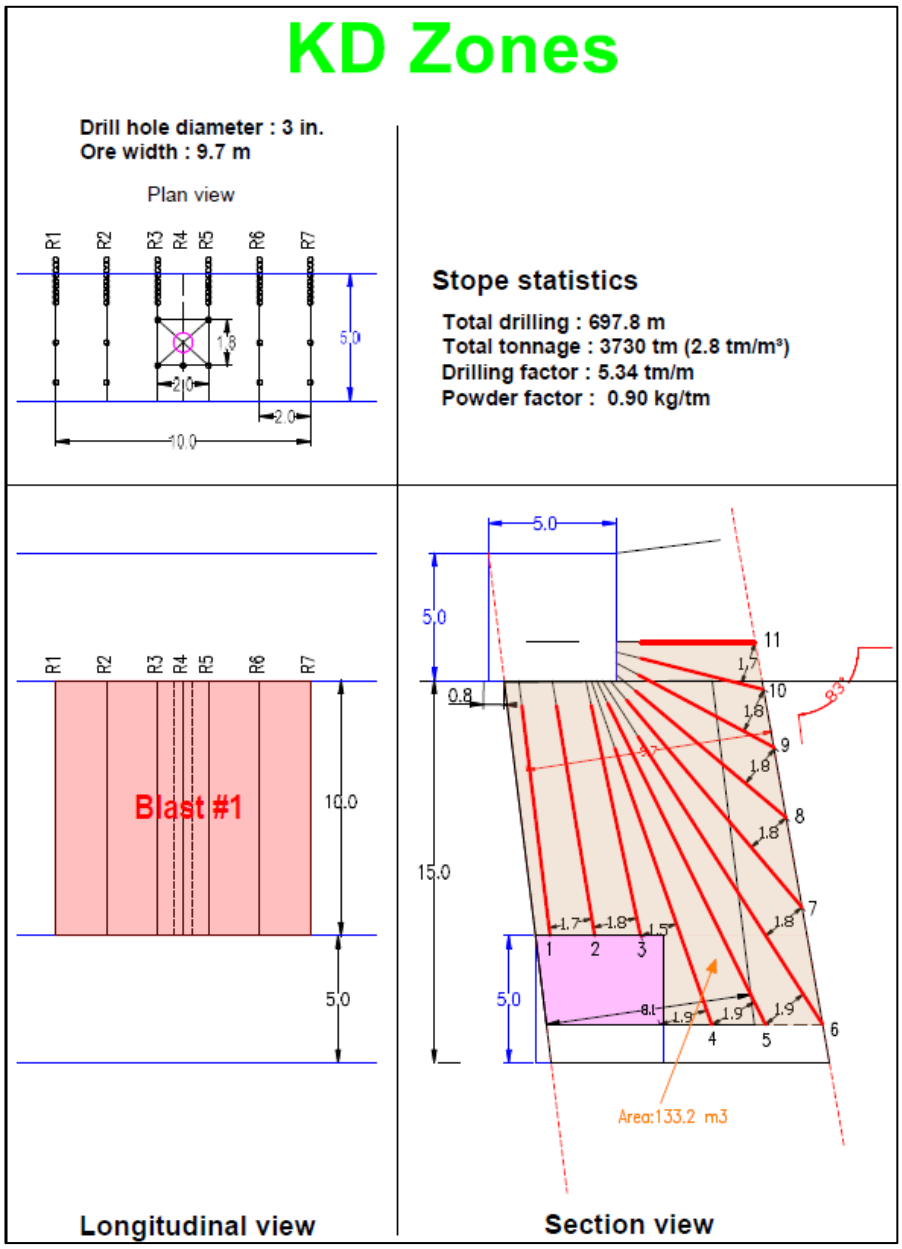


Figure 16.19 Representative production drilling patterns for the Kiena Deep mining zones

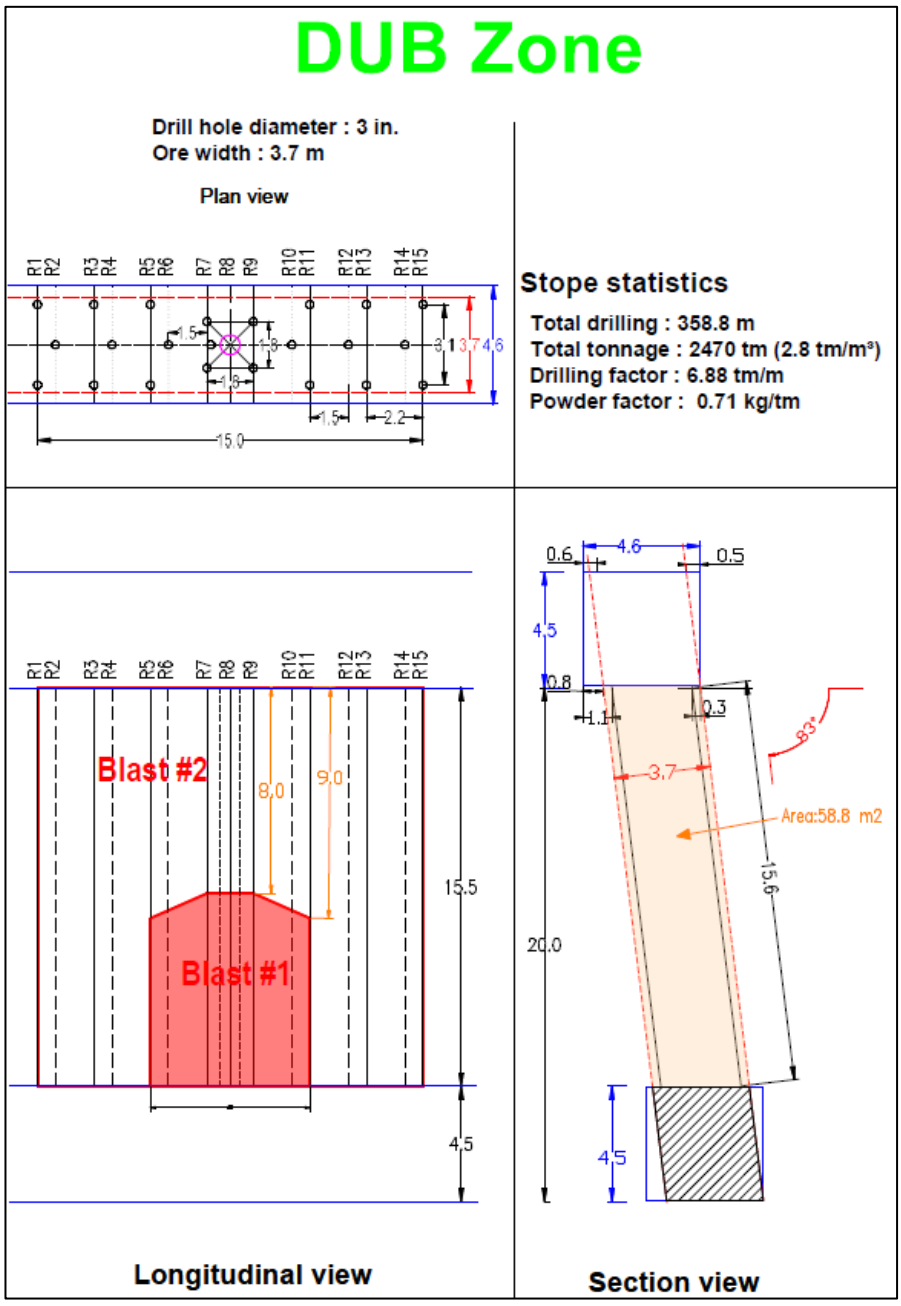


Figure 16.20 Representative production drilling patterns for the Dubuisson mining zone

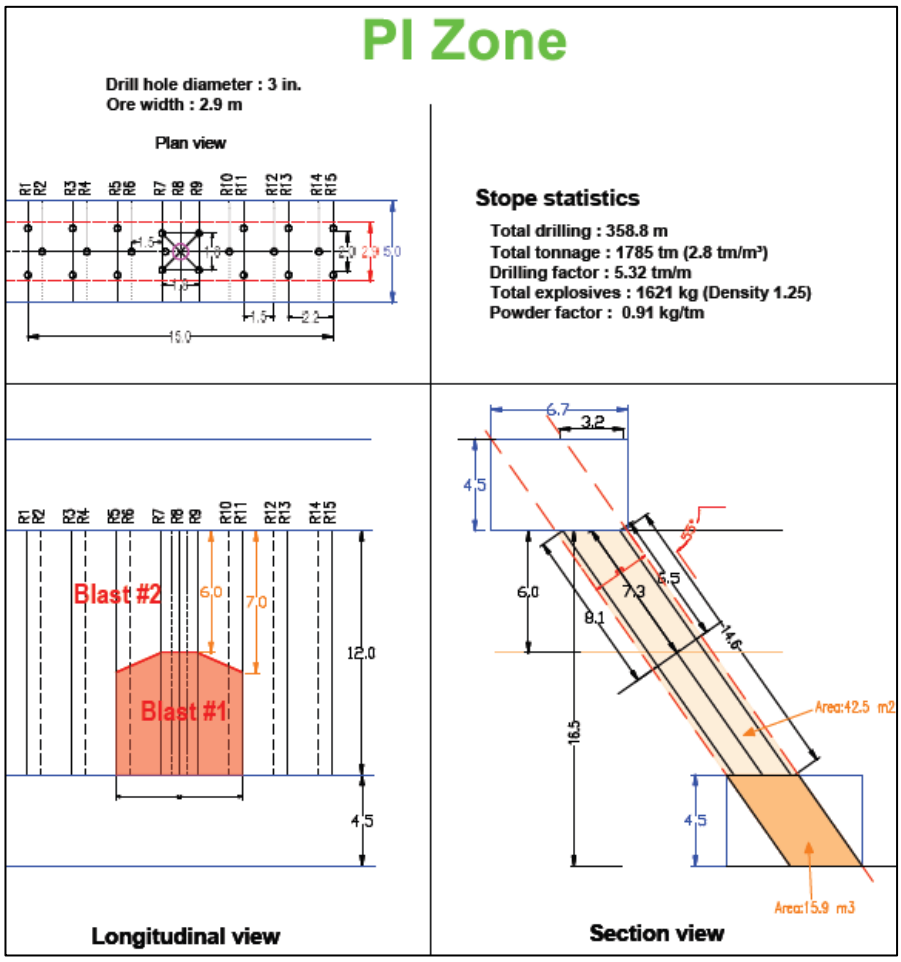


Figure 16.21 Representative production drilling patterns for the Presqu'île mining zone

Production blasting utilizes cartridge emulsion explosives initiated using non-electric detonators, boosters, and detonating cord. Explosive loading densities and initiation sequences have been developed for each drilling pattern to provide adequate fragmentation while limiting overbreak and minimizing ore dilution. Typical drilling factors range from approximately 5.3 to 6.9 m/t, while powder factors vary between approximately 0.7 and 0.9 kg/t, depending on stope geometry and mining width.

Table 16.12 Representative Production Drilling and Blasting Parameters

Parameter	KD	DUB	PI
Typical mining width (m)	9.7	3.7	2.9
Hole diameter	76 mm	76 mm	76 mm
Typical drilling factor (m/t)	5.34	6.88	5.32
Powder factor (kg/t)	0.90	0.71	0.91

The drilling and blasting parameters presented in Figure 16.19 and Table 16.12 form the basis for estimating drilling consumables, explosive consumption and production drilling productivity incorporated into the operating cost estimate.

16.5.4 Backfill

Backfilling is an integral component of the mining method and is required to maintain regional stability, provide confinement for adjacent stopes, and maximize overall ore recovery.

The primary backfill method for the Kiena operation is cemented paste backfill (pastefill). Pastefill is produced at the surface backfill plant and distributed underground through the paste reticulation system. The mine plan has been developed assuming pastefill as the permanent backfill solution for all mining areas continuing to use the existing paste backfill plant.

Originally, paste was only considered for Kiena Deep and CRF for Presqu'île and Dubuisson as the zones are roughly 2 km and 4 km away from the existing paste plant respectively. However, a high-level trade-off study was conducted looking at the possibility of pumping high slump paste and beyond (pseudo-paste) to these zones. This trade-off indicated that paste was favorable economically as well as having benefits of storing additional tailings underground which was another strong consideration as the footprint for TSF on surface is limited. This trade-off relied on approximations of the impact of water content on binder strengths. Based on the promising results of the trade-off, an on-site testwork campaign was coordinated jointly by SLR Consulting and Wesdome with the objective of understanding the impact of higher water content paste to validate the operating costs of a paste solution for the PI and DUB orebodies. The results from this testwork confirmed paste to be a technically viable solution for PI and DUB orebodies.

At the PI Zone, the initial production stopes will be backfilled using CRF while the underground paste reticulation system is being completed and commissioned. This temporary arrangement is planned only for the start-up period of the Presqu'île operation, with the transition to cemented paste backfill scheduled for July 2027. This temporary CRF system was costed by Norda.

Primary stopes are backfilled immediately following completion of mucking and are allowed to cure before adjacent stopes are extracted. This mining sequence provides the confinement required for the extraction of neighbouring stopes while maintaining the overall geotechnical stability of the mining sequence.

The required backfill strength is established according to stope geometry and mining sequence. The anticipated binder requirements for the typical mining widths for each zone are summarized based on operational data and the testwork data in Table 16.13.

Table 16.13 Minimum Binder Requirements

	7 Day Cure Time	14 Day Cure Time		
Zone	Plug	Under 11 m (275 kPa)	Over 11 m (375 kPa)	Underhand Under 11 m
KD	7.0%	3.5%	3.5%	9.5% (1.5 MPa)
PI	7.0%	4.5%	5.0%	7.5% (1 MPa)
DUB	7.5%	5.0%	5.5%	8.0% (1 MPa)

Figure 16.22 presents a typical CRF backfilling operation for longitudinal stope, where 20% of the mined out is filled with non cemented rockfill, and 80% is filled with CRF.

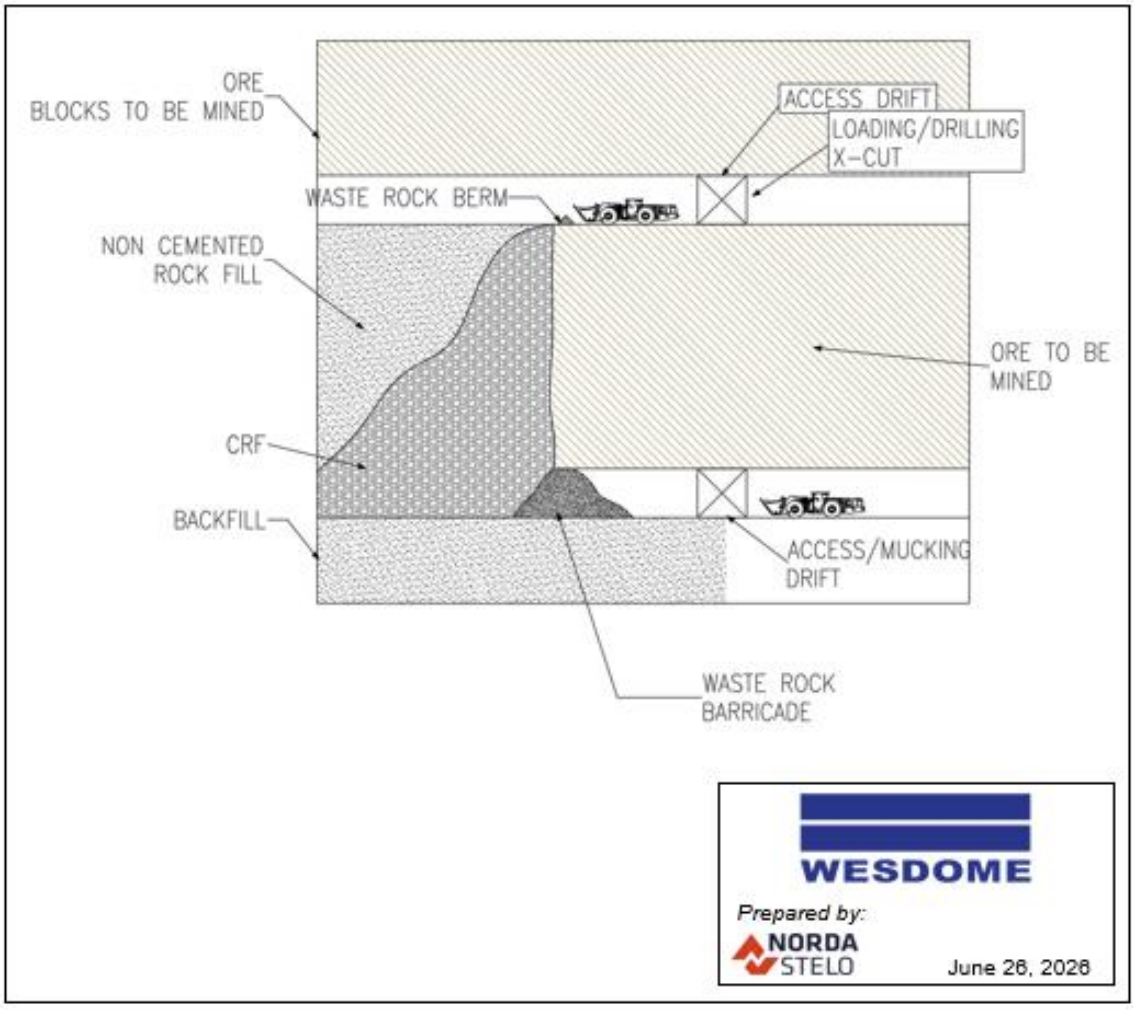


Figure 16.22 Schematic illustration of cemented rock fill placement in a longitudinal longhole

16.6 Mine Schedule

The mine schedule was prepared on a monthly basis and summarized annually for the period from January 2026 to December 2033. The schedule is based on Mineral Reserves only and reflects the planned production contribution from Kiena Deep, Presqu'île, and Dubuisson.

The production plan is constrained primarily by the rate of underground development advance and by the availability of production stopes. The schedule was developed to maintain a steady mill feed while sequencing production from KD, supplemented by PI beginning in 2026, and subsequently by DUB as PI production declines. This sequencing supports the replacement of mining fronts over the life of mine and maintains the use of existing underground infrastructure where practical.

16.6.1 Production Targets and Performance Parameters

The production schedule assumes mine and mill operating days based on 365 calendar days per year. Daily production rates presented in this section are calculated on a calendar-day basis.

Table 16.14 Mine Scheduling Performance Parameters

Parameter	Unit	KD	PI	DUB
Mining method	-	LLS	LLS	LLS
Nominal production contribution	t/d	~700	~200	~250
Ore density	t/m³	2.8	2.8	2.8
Development recovery	%	100	100	100
Stope recovery	%	85–92	90	90-92
Sill stope recovery	%	80	80	80
Production drill rate	m/d	100	100	160
LHD mucking rate	t/d	600	600	600
Paste fill placement rate	t/d	800	800	800

*LLS = Longitudinal Long Hole Stoping

The mine schedule incorporates development productivity assumptions for single-face and multi-face development headings, production drilling rates, stope mucking rates, backfill placement rates, and the required sequencing delays between development, production drilling, blasting, mucking, and backfilling. The schedule also considers the need to maintain an adequate inventory of available stopes while limiting excessive reliance on any single production area.

16.6.2 Mine Production Schedule

The annual mine production schedule is summarized in Table 16.15. The total ore mined includes both stope production and mineralized development. The average daily production rate is calculated using 365 calendar days per year. The schedule presented in the Table 16.16 indicates that KD remains the principal production source over the mine life. PI contributes to production from 2026 to 2030 and is progressively replaced by DUB, which begins contributing ore in 2030 and becomes a material production source from 2031 onward.

Development requirements are highest during the 2026 to 2031 period, reflecting the need to sustain production from Kiena Deep, complete the Presqu'île mining sequence, and establish access to the Dubuisson mining area. The annual underground development schedule is summarized in Table 16.17. Development requirements decrease during 2032 and 2033 as the mining areas mature and the scheduled Mineral Reserves are progressively depleted.

The mine plan has been developed to balance production continuity, development advance, and stope availability throughout the LOM. The production schedule incorporates the planned mining sequence, development requirements, backfill constraints, and anticipated operating limitations to maintain a consistent mill feed over the LOM. The resulting schedule is considered appropriate for a feasibility-level study. The annual underground development is further summarized by mining area in Table 16.18.

Table 16.15 Annual Mine Production Schedule

Item	Unit	Total	2026	2027	2028	2029	2030	2031	2032	2033
Total ore mined	kt	2,553.6	306.8	352.4	359.1	308.5	295.4	339.3	311.6	280.5
Average production rate	t/d	873	841	966	984	845	809	930	854	769
Average mined grade	g/t Au	8.7	8.6	8.9	8.4	10.2	9.3	8.1	8.3	7.5
Contained gold mined	koz Au	710.9	85.1	101.0	97.2	101.0	88.0	87.8	82.8	67.9
Waste mined	kt	2,602.7	457.6	424.9	398.6	269.4	292.8	346.5	334.1	78.8

Table 16.16 Annual Ore Production by Mining Area

Item	Unit	Total	2026	2027	2028	2029	2030	2031	2032	2033
KD ore mined	kt	1,930.4	244.9	266.5	279.6	241.8	239.7	227.9	232.9	197.1
PI ore mined	kt	338.4	61.9	85.9	79.5	66.7	44.3	0.1	0.0	0.0
DUB ore mined	kt	284.8	0.0	0.0	0.0	0.0	11.4	111.3	78.7	83.4

Table 16.17 Annual Underground Development by Cost Category

Item	Unit	Total	2026	2027	2028	2029	2030	2031	2032	2033
Capital development	m	28,323	3,975	5,642	4,193	3,726	4,262	3,757	2,769	0
Operating development	m	13,620	2,116	2,003	2,556	1,559	1,591	2,515	1,246	34
Total development	m	41,943	6,090	7,645	6,749	5,285	5,853	6,272	4,015	34

Table 16.18 Annual Underground Development by Mining Area

Item	Unit	Total	2026	2027	2028	2029	2030	2031	2032	2033
Kiena Deep	m	25,182	3,650	3,743	3,782	3,701	3,605	3,781	2,885	34
Presqu'île	m	6,302	2,394	2,451	1,457	0	0	0	0	0
Dubuisson	m	10,460	0	1,497	1,510	1,584	2,248	2,491	1,130	0
Total	m	41,943	6,090	7,645	6,749	5,285	5,853	6,272	4,015	34

Development activities are initially concentrated in Kiena Deep and Presqu'île to sustain near-term production while establishing the infrastructure required for future mining. Beginning in 2027, development progressively shifts toward the Dubuisson mining area to support its planned production start and ensure a seamless replacement of production from Presqu'île. Throughout the mine life, development in Kiena Deep continues to support ongoing production and access to deeper mining horizons.

16.7 Underground Mine services

16.7.1 Electrical Services

The underground electrical and communication infrastructure has been designed to support the planned mining activities within the Kiena Deep, Presqu'île and Dubuisson mining areas throughout the LOM. The network provides reliable power distribution and communication services to underground production, mine services, and supporting infrastructure while allowing the system to be expanded progressively as mine development advances.

Underground Electrical power is supplied from the existing 25 kV surface power line and the surface electrical infrastructure, which provide power to the KD Zones at 13.8 kV and to the remaining mining areas at 4160 V. Electrical power is transmitted underground to strategically located underground electrical rooms installed along the primary ramp system and at major mining horizons. Local transformers and motor control centres distribute power to the various underground loads, including mining equipment, ventilation systems, dewatering pump stations, crushing facilities, battery charging stations, underground services, and other mine infrastructure. The electrical distribution system has been designed using a modular approach that allows additional substations, switchgear, transformers, and power feeders to be installed as new mining areas are developed.

The underground electrical infrastructure includes:

- Medium-voltage switchgear and distribution equipment
- Underground primary and secondary electrical rooms
- Transformers and motor control centres (MCCs)
- Power distribution panels
- Variable frequency drives (VFDs) for major process and ventilation equipment
- Battery charging infrastructure for the planned electric haulage fleet
- Instrumentation, protection, and SCADA interfaces

The underground electrical demand has been estimated from the projected operating requirements of the mine and includes major consumers such as mining equipment, primary and secondary ventilation fans dewatering systems, crushing facilities, battery charging stations, underground services, and auxiliary infrastructure. Electrical loads have been developed based on the planned production schedule and will evolve as underground development progresses. The modular configuration of the electrical distribution system provides sufficient flexibility to accommodate future mine expansion and changes in production sequencing.

16.7.2 Communication Network

A mine-wide communication network will be installed progressively to provide reliable voice and data communications throughout the underground workings. The communication backbone consists of a fibre-optic network connecting the surface facilities with the underground electrical rooms and major infrastructure installations within the Kiena and Presqu'île mining areas, providing high-speed communication between underground operations and the surface control systems.

Considering the relatively limited production footprint and mine life of the Dubuisson mining area, deployment of a dedicated fibre-optic backbone is not planned for this zone. Communications within Dubuisson will instead be supported through the underground radio communication system and local network infrastructure appropriate for the operational requirements of the area. This approach reduces capital expenditures while providing communication capability appropriate for the planned scale of mining.

Wireless underground communications will be provided using a Leaky Feeder (radiating cable) system installed throughout the primary ramp network, production levels, and major infrastructure excavations. The system provides continuous radio coverage for production coordination, mine rescue, emergency response, equipment operators, and underground personnel and will be progressively extended as mine development advances.

The communication network has been designed to support:

- Voice communications
- Industrial Ethernet communications where fibre infrastructure is installed
- Supervisory control and data acquisition (SCADA)
- Ventilation on Demand
- Electrical distribution monitoring
- Pumping system monitoring
- Production reporting
- Equipment telemetry and diagnostics; and
- Security and access control systems

The communication infrastructure provides sufficient capacity to support the planned underground operations while allowing future expansion should additional digital mining technologies or automation systems be implemented during the operating LOM.

16.7.3 Compressed Air and Water Supply

Compressed air and process water are distributed throughout the underground mine using dedicated utility networks that supply the active mining areas, maintenance facilities, refuge stations, and other underground services. The distribution systems have been designed to support the planned mining activities while allowing progressive extensions as underground development advances into the Kiena Deep, Presqu'île, and Dubuisson mining areas.

Compressed air for the KD and DUB Zones is generated on surface by three (3) Sullair compressors (2 x LS-25S-300 and 1 x TS-32S-400) located in the compressor building adjacent to the hoist room. A diesel-powered standby compressor is provided to maintain compressed air supply during maintenance activities or in the event of an outage affecting the primary compressor system.

Compressed air is delivered underground through an 8-inch diameter Schedule 40 mild steel pipeline installed within No. 3 service compartment of the Kiena Shaft. From the shaft, the compressed air network is progressively distributed throughout the underground workings. The principal ramps and inter-level ramps are equipped with 4- inch diameter compressed air service lines, while production levels, haulage drifts, and service excavations are supplied through 2-inch diameter distribution lines. The compressed air system supplies production and development drilling equipment, maintenance facilities, service equipment, refuge stations, and other pneumatic services required for underground operations.

Compressed air serving the underground workings in the PI Zone is provided by three (3) compressors located on surface at Presqu'île, including two (2) Sullair TS-32-300L units and one (1) Sullair LS-25-200 unit. The compressed air distribution network consists of 6-inch-diameter pipeline.

Process water is supplied from surface through a dedicated 3-inch diameter Schedule 40 mild steel pipeline installed within the Kiena Shaft. Beyond the shaft, the water distribution network follows the underground ramp system and extends progressively to the active mining levels. Main ramps and inter-level ramps are equipped with 4-inch diameter process water lines, while production levels and haulage drifts are serviced by 2-inch diameter distribution lines. Pressure-reducing valves are installed at each production level to maintain operating pressures within the design criteria and ensure reliable water supply throughout the underground workings.

The compressed air and process water distribution systems have been designed in accordance with industry best practices and the extensive operating experience accumulated at the Kiena Mine. Both utility networks will be progressively extended as mining advances to deeper levels and into the Presqu'île and Dubuisson mining areas.

16.7.4 Mine Pumping Network

The underground mine dewatering network has been developed by extending the existing Kiena dewatering infrastructure to support mining at increasing depth within the Kiena Deep, Presqu'île, and Dubuisson mining areas. The overall design philosophy maximizes the use of the existing pumping infrastructure while minimizing new capital investment by extending pumping stations, pipelines, and associated underground facilities as mining advances. The selected dewatering concept is based on the proven operating experience at the Kiena Mine and has been adapted to support the reserve-based LOM plan.

The permanent mine dewatering system consists of the following principal components:

- Drainage boreholes installed where practical to promote gravity drainage.
- Drain sumps strategically located on each production level.
- Sump sumps equipped with submersible pump capable to handle muddy water containing elevated concentrations of suspended solids.

- Primary pumping stations including sump, settlement drifts (Sturda Weir) and Mono pumps bay equipped with two (2) Warmam DWU pumps, each with a maximum capacity of 90 m^3/h.
- Secondary pumping stations handling clarify water, without settlement drift, equipped with two (2) Warmam DWU pumps, each with a maximum capacity of 90 m^3/h.
- Permanent dewatering pipelines and associated pumping equipment.

Mine water is collected through strategically located drainage boreholes and drain sumps installed throughout the underground workings. Where practical, water is transferred by gravity to local collection sumps located on each production level, thereby minimizing pumping requirements and reducing operating costs.

Collection sumps equipped with submersible pumps transfer water to a series of half pumping stations distributed at approximately 120 m vertical intervals throughout the underground mine. The dewatering system consists of alternating primary and secondary pumping stations. Primary pumping stations incorporate settling facilities that allow suspended solids to settle before water is transferred to the next pumping stage, whereas secondary pumping stations provide intermediate pumping without clarification. Through this staged cascade arrangement, mine water is progressively conveyed to surface via the permanent mine dewatering network.

The locations of the planned primary and secondary pumping stations for each of the three (3) mining areas are presented in Table 16.19, while the overall dewatering strategy is illustrated in Figure 16.23. The modular staged-cascade arrangement provides operational flexibility and allows the dewatering system to be efficiently expanded as mining advances to deeper production horizons.

Table 16.19 Planned Primary and Secondary Pumping Station Locations

Mining zone	Pumping station type	Mine level	Primary function
Presqu'île	Secondary station	Level 17	Collection of clarified water from Level 29 pumping station and transfer to the Kiena Island main pumping station at Level 38
	Primary station	Level 29	Collection of dirty water from Level 31 and upper levels, clarification, and transfer to the Level 17 secondary pumping station.
Kiena Deep	Primary station	Level 1370	Collection of dirty water from Levels 1385 and 1400, clarification, and transfer of clarified water to the Level 130 pumping station.
	Secondary station	Level 1490	Collection of clarified water from the Level 1610 primary pumping station and transfer to the Level 1370 primary pumping station.
	Primary station	Level 1610	Collection of dirty water from Level 1610 and upper levels to Level 1400, clarification, and transfer of clarified water to the Level 1490 secondary pumping station.
	Secondary station	Level 1730	Collection of clarified water from Level 1850 and transfer to the Level 1610 primary pumping station.

Mining zone	Pumping station type	Mine level	Primary function
	Primary station	Level 1850	Collection of dirty water from lower levels and upper levels to Level 1625, clarification, and transfer to the Level 1730 secondary pumping station.
Dubuisson	Primary station	Level 27	Collection of dirty water from the Dubuisson mining area, clarification, and transfer to the Kiena Level 38 pumping station.

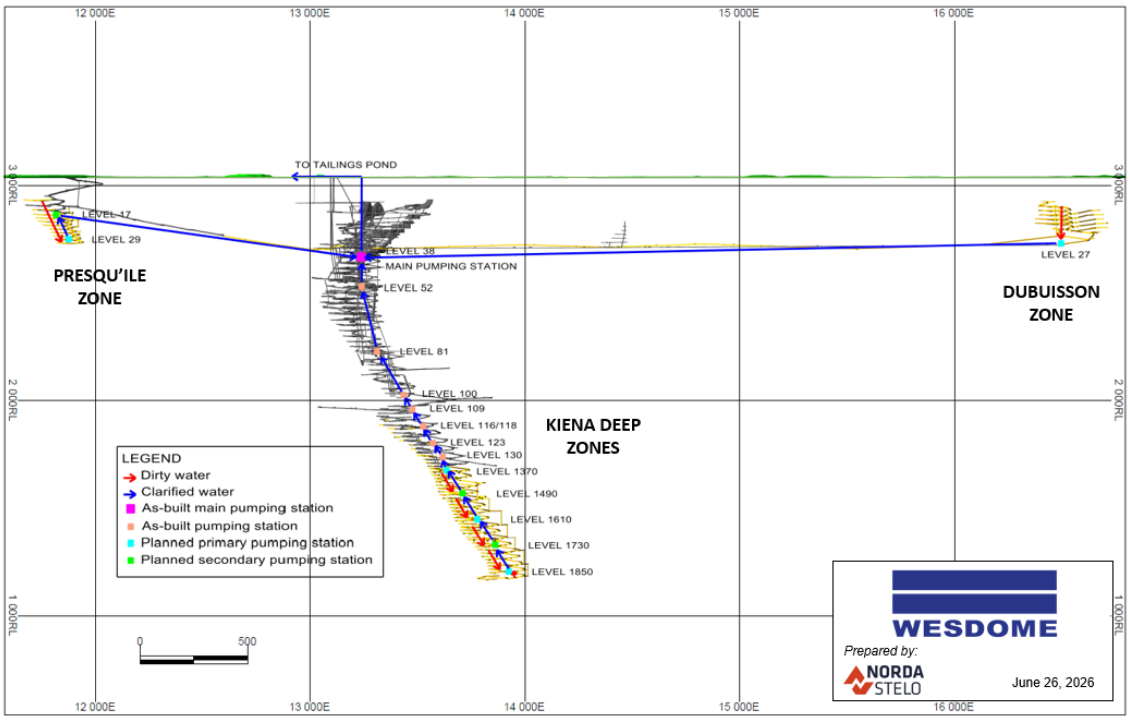


Figure 16.23 General Overview of the Mine Dewatering Strategy

The dewatering network has been sized based on the estimated operational and groundwater inflows anticipated throughout the LOM. The design inflows adopted for the permanent dewatering system are described below.

The design flow considered for the mine dewatering system includes both groundwater inflows into the planned underground excavations and water introduced through the operation of underground mining equipment. The estimated equipment water consumption and groundwater inflows adopted for the dewatering system design are summarized in Table 16.20.

Table 16.20 Estimated Mine Water Inflows and Equipment Water Consumption by Mining Area

Mining zone	Mining Equipment Water Consumption m³/d	Estimated Groundwater infiltration m³/d	Total inflow m³/d
Ramp development from Kiena Mine to Dubuisson	157	35±	**192±**
Dubuisson Zone	581	160±	**741±**
Kiena Deep (Including Kiena old mine)	621	440±	**1061±**
Presqu'île Zone (including ramp development from Presqu'île to Kiena)	576	216±	**792±**
Total	**1935**	**851±**	**2786±**
Total following Presqu'île Zone completion	**1359**	**851±**	**2210±**

Groundwater inflow estimates are based on hydrogeological modelling completed for the FS and represent the expected average groundwater inflows over LOM. Actual groundwater inflows may vary from these estimates as mining progresses. Continued groundwater monitoring before and during operations is recommended to confirm the design assumptions and refine the groundwater model where required. The above tabulated groundwater flow values do not contain contingency. Groundwater inflow for Kiena Deep is considered conservative since it was extrapolated based on conservative reduction in permeability with depth. The mine equipment consumption includes a contingency of 15% in addition to 5% for leakages in the pipes.

The current understanding is that mine water from all three (3) zones is sent to Level 33 which drains down to Level 38 at which point it is pumped to surface.

The peak mine water inflow corresponds to the period during which mining activities are conducted simultaneously in the Kiena Deep, Presqu'île, and Dubuisson mining areas. Following completion of mining in the PI Zone, the total mine water inflow is expected to decrease. Accordingly, the combined inflow from the active mining operations is estimated to reduce from approximately 2,786 m³/d to approximately 2,210 m³/d.

16.7.5 Fuel Distribution Network

Diesel fuel is supplied to the underground mine through a dedicated distribution network designed to provide reliable and efficient fueling of the underground mobile equipment fleet while minimizing equipment travel distances for refueling.

Fuel is delivered from the surface storage facilities through a dedicated pipeline installed within the Kiena Shaft to the primary underground fueling station located adjacent to the maintenance complex on Level 64. This facility serves as the principal underground fuel storage and distribution hub for the operation.

Figure 16.24 illustrates the configuration of the underground fuel distribution network extending from the primary fueling station on Level 64 to the satellite fueling stations located throughout the active mining areas. The network has been progressively expanded to support mining at increasing depth within the Kiena Deep mining area and will be further extended through the addition of a fueling station on Level 1520. This installation will reduce equipment travel distances for refueling, improve equipment utilization, and maintain operational efficiency as mining progresses to greater depths.

The underground fuel distribution system has been designed to allow the progressive extension of the network as new mining areas are developed. Mobile fuel distribution equipment will initially support the Presqu'île mining area until permanent underground infrastructure is established. As production advances into the Dubuisson mining area, the fueling strategy will continue to evolve in accordance with the mine development schedule and operational requirements.

The fuel distribution network has been developed based on the existing Kiena infrastructure and the planned LOM production schedule, providing sufficient flexibility to support the underground diesel equipment fleet throughout the operation.

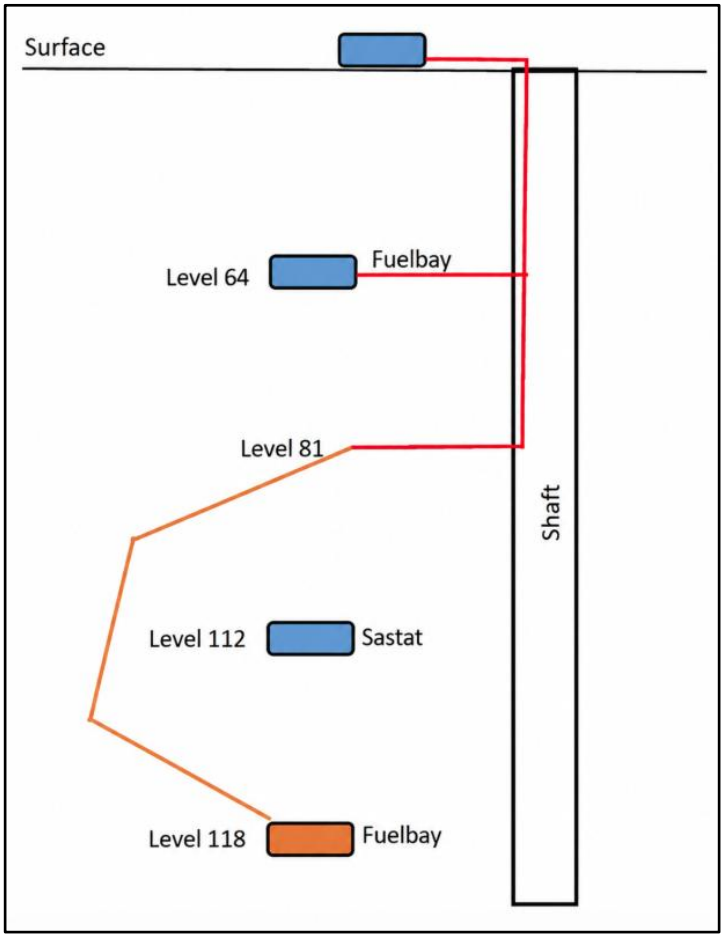


Figure 16.24 Underground Fuel Distribution Network

16.7.6 Secondary Egress and Emergency Escape System

The underground mine has been designed to provide independent secondary means of egress for all active mining areas in accordance with applicable regulatory requirements and accepted underground mining practices. The secondary egress strategy combines the use of existing mine infrastructure with new escape raises developed as mining progresses into deeper areas.

Upon completion of the connection between the Presqu'île ramp and the existing Kiena underground workings at Level 30, the Kiena Shaft and the Presqu'île portal will provide two (2) independent access and egress routes between surface and the active underground workings. In addition, ladders installed within the Kiena Shaft service compartment and the fresh air raise extending from surface to Level 17 provide supplementary emergency escape routes should normal access routes become unavailable.

Within the Presqu'île and Kiena Deep mining areas, secondary egress between production levels will be provided through 1.1 m diameter raisebored openings equipped with SafeEscape ladderways. This design provides a practical and cost-effective alternative to conventional manway raises by reducing the amount of excavation and associated construction costs while maintaining safe emergency access between levels.

Within the Dubuisson mining area, secondary egress will be established through the planned internal ventilation raise, which will be equipped with an Alimak-type ladderway system extending between the production levels. This arrangement provides an independent emergency escape route while utilizing infrastructure required for the mine ventilation network.

Refuge stations are strategically distributed throughout the underground workings in accordance with the mine emergency response plan to provide temporary safe refuge for underground personnel during emergency situations. Both production ramp and track drift will serve as emergency egress routes from Dubuisson zone.

The planned refuge chambers consist of two standardized underground chamber layouts (15 m long and 20 m long provide with supervisor office), that will be excavated on an alternating basis along the primary access and haulage drifts, at a distance not exceeding 1,000 m. The refuge chambers are equipped with concrete wall structures and steel doors. A continuous supply of compressed air is provided via the mine-wide underground compressed air.

16.7.7 Mine Ventilation

The existing ventilation system at the Kiena Mine Complex is being upgraded to provide sufficient fresh air to maintain a safe and productive underground working environment for personnel and the underground equipment fleet. Kiena Mine has acquired two (2) 1,400 hp main fans and one (1) 925 hp main fan, currently stored on surface. These main fans are scheduled for underground installation and commissioning as part of the planned ventilation system upgrade. Predictive ventilation network analysis was carried out using Ventsim, a ventilation modelling software.

16.7.7.1 Fresh Air Requirement

The fresh air rate used to dilute diesel equipment emissions corresponds to that appearing on the certificate of homologation issued by the CANMET Mining and Mineral Sciences Laboratories. Equipment fleet and utilization rates was determined in collaboration with the Kiena Mine ventilation team, based on the planned mine development sequence, production schedule, and underground equipment fleet required to meet the planned production schedule. Utilization rates were applied to account for the time when machines may be mechanically unavailable or simply not in use.

The production schedule anticipates that the start of production in the DUB Zone will coincide with the completion of production in the PI Zone. Four (4) of the production trucks operating in the KD Zones and all the production trucks operating in the DUB Zone will be battery-electric vehicles, to provide the minimum flowrate at the workplace. Table 16.21 presents the total fresh air rates required during full production.

Table 16.21 Fresh Air Requirement during Full Production

Zone	Maximum flowrate (CFM)	Maximum flowrate (m^3/s)
Presqu'île	230,520	108.8
Kiena Deep	358,084	169.0
Dubuisson	99,610	47.0

The estimates include a 15% contingency to account for air leakage within the primary ventilation circuit and for additional equipment that may be introduced over the LOM.

16.7.7.2 Primary Ventilation Network in Presqu'île and Dubuisson Zones

During the first full production phase, extending from the end of Q3 2026 to the end of Q4 2030, mining operations are limited to the PI and KD Zones, while development of the access ramp toward the DUB Zone continues. The primary ventilation network for this operating phase is illustrated in Figure 16.25.

In PI Zone, a 925 hp underground main intake fan installed on Level 13 delivers approximately 238 kcfm of fresh air to the production levels through the intake ventilation raises. The Presqu'île ramp serves as exhaust airway.

Approximately 536 kcfm of fresh air is supplied to the KD mining zones from surface through the intake ventilation raise by two (2) 500 hp surface main intake fans operating in parallel. Fresh air is distributed throughout the mine via the internal ramp network, while return air is exhausted through the ventilation raise system. A ventilation raise currently under development conveys fresh air from Level 100 to Level 123. Additional ventilation raise segments are planned to progressively extend the intake air circuit, providing fresh air directly to the advancing lower sections of the planned ramp.

Two (2) 1,400 hp underground main exhaust fans operating in parallel will be installed in 2026 within the ventilation chamber located at the eastern side of the ramp connecting PI and KD at about elevation of Level 30. Exhaust air from KD Zones exits to surface via the Presqu'île ramp portal. Two (2) booster fans, also operating in parallel and installed in the ventilation drift on Level 1460, provide the additional pressure required to maintain a total fresh air flow of approximately 366 kcfm throughout the KD ventilation network.

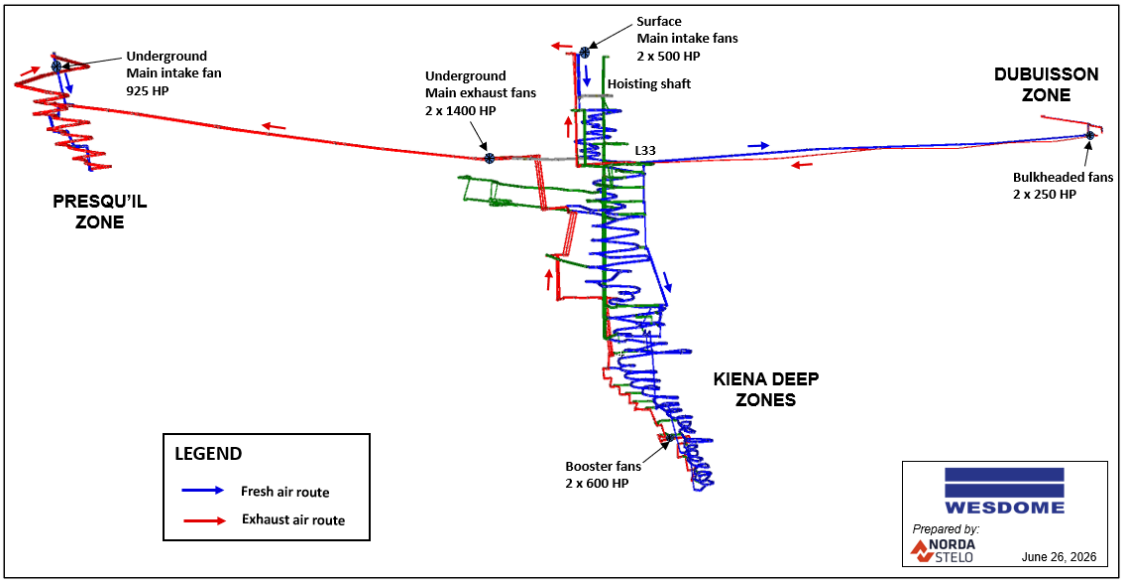


Figure 16.25 Isometric overview of the primary ventilation circuit - Looking northeast

16.7.7.3 Ventilation Stages for Development toward Dubuisson Zone

The temporary ventilation system used during development of the access ramp to the DUB Zone is implemented in successive stages. The ventilation strategy consists of progressively establishing permanent primary ventilation loops, thereby limiting the use of auxiliary forced ventilation to development headings located within approximately 1,000 m of the nearest permanent ventilation connection. Figure 16.26 illustrates the first stage of the secondary ventilation system, corresponding to the initial section of the access ramp toward the DUB Zone. Figure 16.27 presents the second stage, during which the first permanent primary ventilation loop is utilized to extend fresh air an additional 1,000 m by relocating the auxiliary fans and ventilation ducting used during Stage 1. Figure 16.28 illustrates the final stage of the ventilation development sequence, in which the last primary ventilation loop is established, extending the permanent Kiena ventilation network to the DUB Zone.

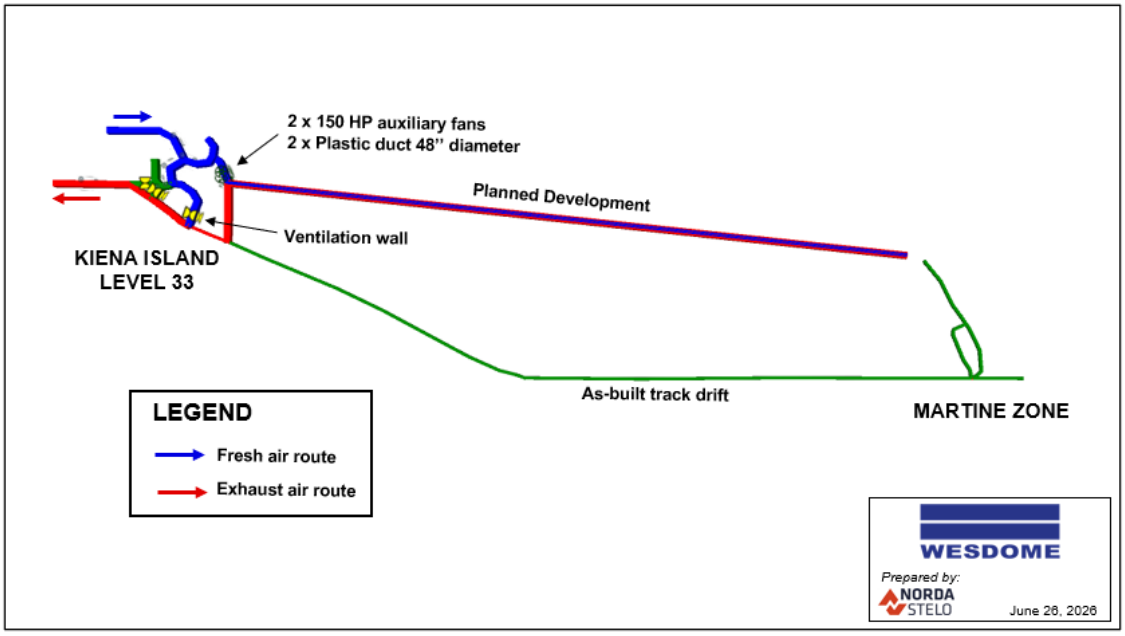


Figure 16.26 Stage 1 of the ventilation network for Dubuisson ramp development

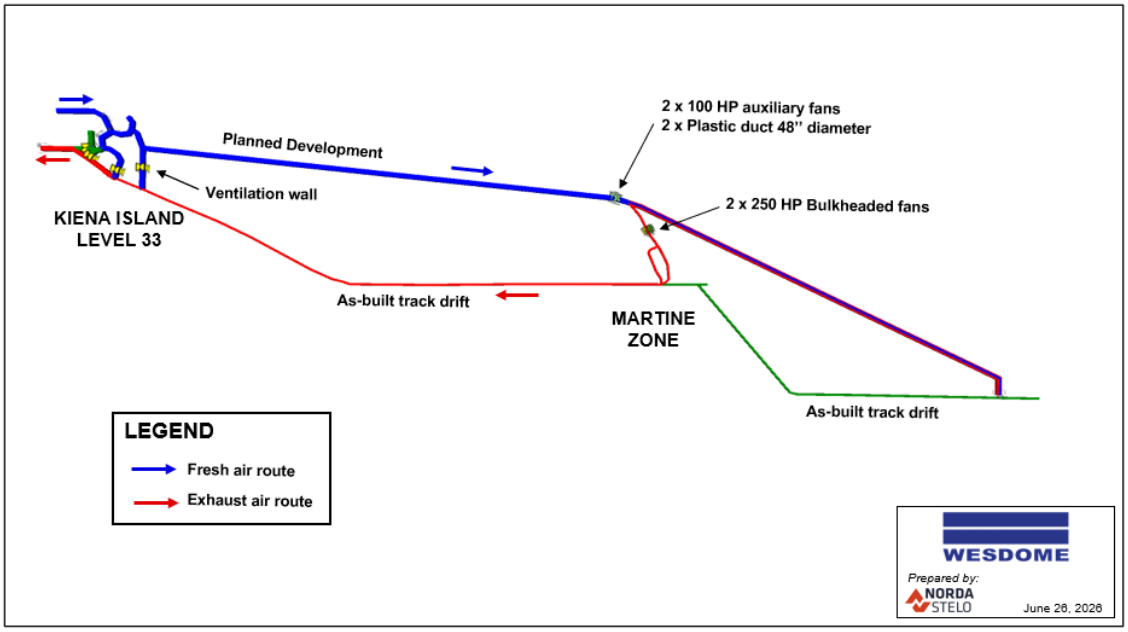


Figure 16.27 Stage 2 with the first ventilation loop for Dubuisson ramp development

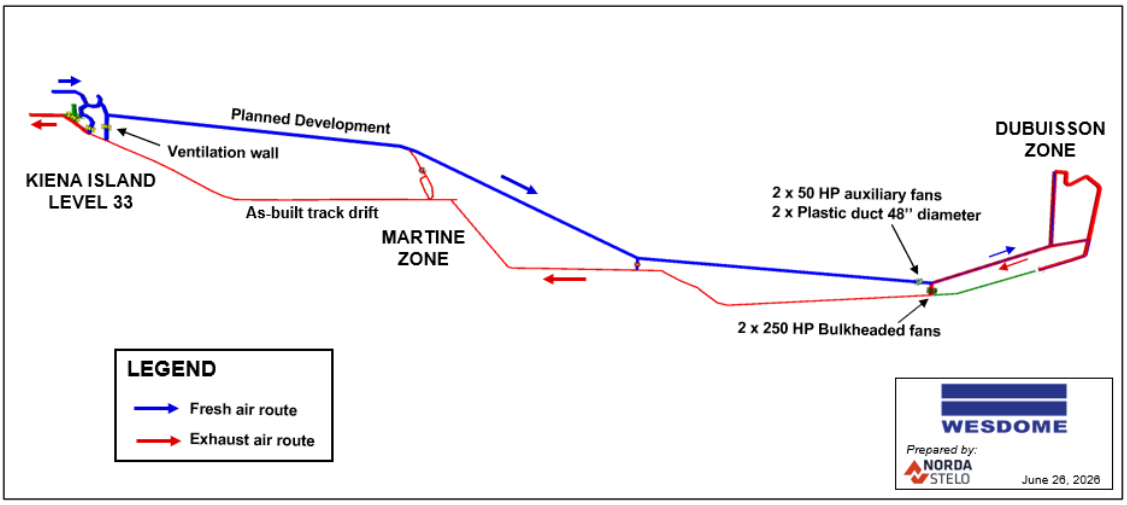


Figure 16.28 Stage 4 corresponding to completion of the last ventilation loop

16.7.7.4 Permanent Ventilation Network in Dubuisson Zone

Implementation of the primary ventilation network for the DUB Zone is scheduled for Q1 2031 and coincides with the commencement of production in the zone. The permanent ventilation network for the DUB Zone is illustrated in Figure 16.29.

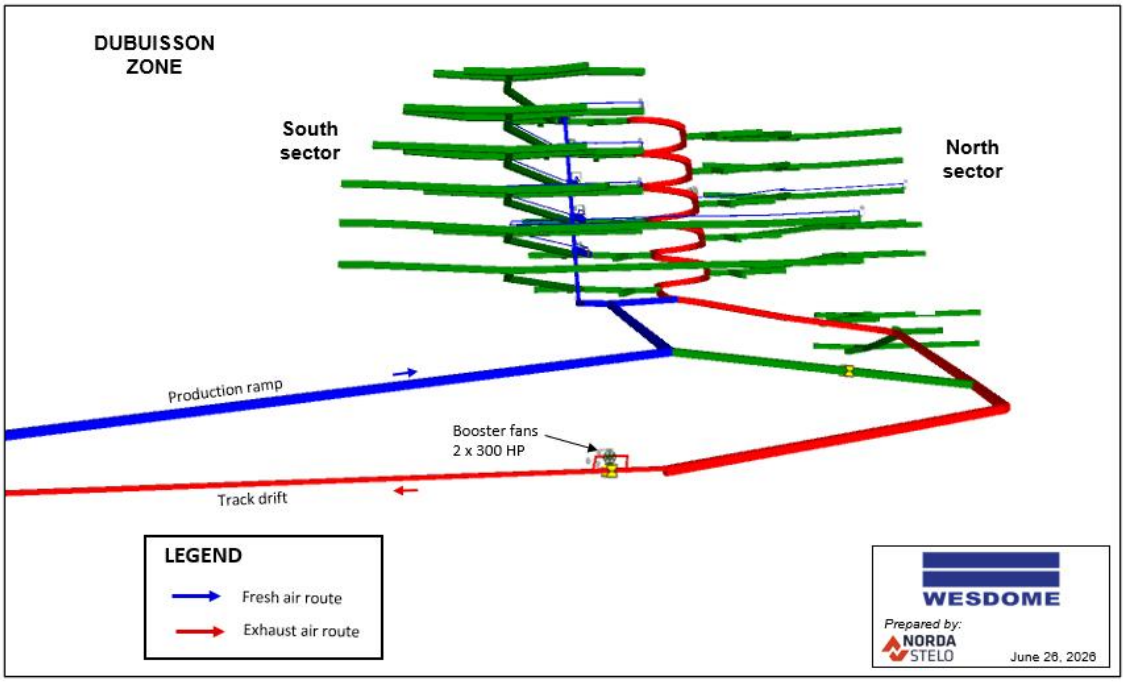


Figure 16.29 Isometric view of the permanent ventilation network in Dubuisson zone

The Ramp from Kiena to Dubuisson Zone and the ventilation raise are intakes, while the internal ramp and the track drift are exhaust paths. In the South Sector, fresh air is supplied through the intake ventilation raise. Each active production level receives fresh air through ventilation ducting equipped with a 75 hp auxiliary fan installed within a ventilation bulkhead at the entrance to the ventilation access drift. The inter-level ramps serve as the primary return airways and are subsequently reutilized to ventilate the North Sector.

To prevent recirculation of return air from the ramp into the intake ventilation raise, two (2) 300 hp booster fans installed in parallel within track drift maintain negative pressure in the drift section connecting the ramp to the ventilation access drift on Level 24. This avoids the need to install ventilation doors along the primary production haulage route used by production trucks.

16.7.8 Backfill System

The existing paste plant is located on surface near the concentrator. The plant is designed to produce paste at 80 tph at a nominal flow rate of 60 m^3/h, higher than the nominal throughput of the concentrator (1,500 t/d, =~63tph) which is allowed for utilizing a large buffer tank at the paste plant. This allows for a lower plant utilization, quicker filling times and more flexibility in backfill planning. The plant has the ability to feed a duty or standby borehole to underground via gravity or to feed a paste pump which is currently used only for disposal of tailings underground in the historical North Zone.

The Underground Distribution System has been designed to extend the existing system down to the Kiena Deep extension which can continue to utilize gravity distribution via a main 6-inch SCH 80 trunkline with SCH 40 Steel and HDPE pipe to reach the individual stopes on each level. Distribution to the PI and DUB Zones would tie-in to the existing system at the Level 33. Automated dumping/diversion has been planned for this location to account for the higher risk of blockage with the long distance pumping to these zones. A 6-inch SCH 80 trunkline would be placed down the access drift to the zones then distributed via boreholes and lower schedule piping once at the zone similar to Kiena Deep. These zones would require the use of the paste pump to deliver the higher slump paste to each deposit due to the distance from the paste plant. The existing paste pump would require a motor upgrade to accommodate the higher pumping pressures when compared to its existing duty of sending paste to the historical mining voids.

16.8 Mobile Equipment

16.8.1 Mobile Equipment Fleet

The Kiena mine plan is based on a conventional diesel underground mining fleet supplemented by battery-electric haulage equipment where operationally appropriate. The selected fleet reflects equipment currently operating at Kiena together with additional units required to support the planned production from the Kiena Deep, Presqu'île and Dubuisson mining areas throughout the LOM.

The underground haulage fleet has been selected to support the progressive expansion of mining to greater depths while maintaining production efficiency and managing underground environmental conditions. As mining advances deeper within the Kiena Deep mining area, virgin rock temperatures increase and seasonal surface temperatures can significantly influence underground working conditions during the summer months. Elevated ambient temperatures are particularly noticeable along the main haulage ramps, where diesel equipment contributes additional heat through engine operation and exhaust emissions.

To address these operating conditions, battery-electric 42-tonne haul trucks (Epiroc MT42 Battery Electric) have been incorporated into the KD haulage fleet. The use of battery-electric haulage reduces diesel heat generation and exhaust emissions within the primary haulage ramps, thereby decreasing the underground heat load and reducing ventilation requirements. In addition to improving the underground working environment, this strategy provides greater operational flexibility as mining continues to extend to deeper levels over the LOM.

The Dubuisson mining area presents additional ventilation challenges due to its significant distance from the existing Kiena workings. The current mine plan does not contemplate a dedicated fresh-air raise extending from Dubuisson to surface. Instead, fresh air will be supplied through the new access development, with return air routed through the existing rail drift connecting to the Kiena ventilation network. Consequently, only battery-electric haul trucks have been selected for ore and waste haulage within the Dubuisson mining area. This strategy minimizes diesel emissions and underground heat generation, reducing the required ventilation demand while maintaining acceptable air velocities within the rail drift and the overall ventilation circuit.

Development activities are carried out using two-boom hydraulic jumbo drills, while ground support installation is completed using mechanized bolting equipment. Ore development headings are supported using MacLean Omni Bolters, whereas rehabilitation and secondary support activities are performed using MacLean SSB bolters. Production slot raises are developed using dedicated raise drilling equipment.

The mining fleet is supplemented by a complete fleet of underground service equipment including scissor lifts, boom trucks, fuel and lubrication trucks, utility vehicles, personnel carriers, tractors, loaders, and other support equipment required for mine services and infrastructure maintenance.

The proposed fleet has been sized to maintain the planned mining production while providing operational flexibility and allowing scheduled maintenance without adversely affecting production targets.

16.8.2 Equipment Replacement and Rebuild Philosophy

The LOM equipment strategy combines the utilization of the existing Kiena fleet with the scheduled acquisition of additional mobile equipment required to support future production increases and mine expansion.

Major production equipment is replaced or rebuilt based primarily on accumulated operating hours and manufacturer recommendations, supplemented by the site's maintenance history and condition monitoring program. Planned rebuilds include major component replacements such as engines, transmissions, torque converters, axles, hydraulic systems, and structural refurbishments where economically justified.

This approach maximizes equipment availability while minimizing total ownership cost over the operating life of the mine. Scheduled rebuilds have been incorporated into the sustaining capital estimate, whereas new equipment purchases required to support production growth or replace units reaching the end of their economic life have been included in the capital cost estimate according to the LOM schedule.

Preventive maintenance is performed in accordance with manufacturer recommendations and site maintenance procedures. Equipment availability and utilization assumptions incorporated into the mine production schedule are consistent with historical operating performance at Kiena and industry practice for comparable underground hard-rock mining operations.

A summary of the mobile equipment fleet and the planned equipment purchases is presented in Table 16.22 and Table 16.23.

Table 16.22 Underground Mobile Equipment Fleet Summary

Equipment Category	Equipment Model	Power Source	Primary Function	Qty	Primary Mining Area
LHD	Epiroc ST1030	Diesel	Production loading	5	KD, PI, DUB
Haul Truck	Caterpillar AD30	Diesel	Ore and waste haulage	5	KD, PI
Haul Truck	Epiroc MT42 Battery Electric	Battery Electric	Deep haulage	6	KD, DUB
Haul Truck	Caterpillar AD45	Diesel	Production haulage	1	PI
Development Jumbo	Two-Boom Jumbo	Diesel	Development drilling	3	All areas
Bolter	MacLean Omni	Diesel	Ore development ground support	3	All areas
Bolter	MacLean SSB	Diesel	Rehabilitation and secondary support	1	All areas
Bolter	Epiroc Boltec S	Diesel	Rehabilitation and secondary support	1	All areas
Block holer	BH3 Block Holer	Diesel	Drill and blast oversized rock masses	1	All areas
Scissor Liift	Walden/MacLean	Diesel	UG Mines Services, Construction	7	All areas
Boom Truck	Walden	Diesel	UG services supply	3	All areas
Grader	Paus	Diesel	Road maintenance	2	All areas
Service Fleet	Various	Diesel	Mine services	14	All areas

Table 16.23 Mobile Equipment Purchases

Equipment	Initial Fleet	LOM Additions	Total Units Purchased
ST1030 LHD	5	1	1
AD30 Truck	5	0	0
MT42 Battery Truck	2	4	4
AD45 Truck	0	1	1
Jumbo	3	0	0
Bolter	5	0	0

16.9 Manpower

16.9.1 Work Schedule

The operation is planned as a continuous underground mining operation, with production and maintenance activities conducted throughout the year on a 365-day operating basis.

Hourly employees assigned to underground mining, processing, maintenance, and other operational functions will work on a continuous rotating schedule consisting of alternating day and night shifts. Operational crews are scheduled on a 7-days-on/7-days-off rotation using 11-hour shifts, providing continuous coverage while maintaining operational flexibility.

Supervisory personnel, technical services, administration, and management personnel are scheduled using standard weekday rotations, primarily consisting of 5-days-on / 2−days-off schedules or alternating 5-2/4-3 rotations, depending on departmental requirements.

The operation is based primarily on a local resident workforce. No fly-in/fly-out (FIFO) or camp accommodation strategy is contemplated in the mine plan.

16.9.2 Planned Workforce

Table 16.24 summarizes the planned average annual workforce by operating area over the LOM. Personnel have been allocated according to their organizational cost centres. Shared site services, including administration, management, and technical support functions, are primarily assigned to the Kiena operating area, whereas personnel dedicated to Presqu'île and Dubuisson have been allocated to their respective operating areas. The staffing plan remains consistent with the planned production profile and operating philosophy adopted for this FS.

Table 16.24 Planned Average Annual Workforce by Major Category

Personnel Category	2026	2027	2028	2029	2030	2031	2032	2033
Mining Operations	153	176	172	163	161	168	144	73
Maintenance	69	69	69	69	69	69	58	40
Technical Services (Engineering & Geology)	38	38	38	38	38	38	32	22
HSE & Environment	19	19	19	19	19	19	16	11
Administration & Management	35	35	35	35	35	35	28	20
Total Workforce	314	337	333	324	322	329	277	165

Values represent average annual full-time equivalent (FTE) personnel.
Note: Workforce allocation by operating area is based on organizational cost centres. Most site administration, management, and shared support personnel are assigned to the Kiena operating area, while personnel dedicated to the Presqu'île and Dubuisson mining areas are allocated to their respective operating areas. As a result, the Kiena workforce includes the majority of the site's shared services.

Table 16.25 Average Annual Workforce by Operating Area (FTE)

Mining Area	2026	2027	2028	2029	2030	2031	2032	2033
Kiena Deep	252	255	256	256	254	260	215	127
Presqu'île	63	64	59	49	49	4	–	–
Dubuisson	–	18	18	20	21	66	62	38
Total Workforce	314	337	333	324	322	329	277	165

FTE = average annual full-time equivalent personnel. Workforce includes permanent employees and contract personnel occupying planned operational positions.

16.9.3 Manpower Plan

The mine plan has been developed based on a workforce sized to support the planned mining production, underground development, processing, maintenance, technical services, and site support activities throughout the LOM. The staffing plan has been established to provide the personnel required to safely and efficiently execute the reserve-based mine plan while maintaining operational flexibility during the production ramp-up and subsequent mining sequence.

The workforce includes permanent Wesdome employees as well as contract personnel retained to fill positions that are not permanently staffed. Contractors are therefore used as a complement to the permanent workforce rather than to support temporary increases in production. The staffing levels presented in this study represent the total operating workforce required to execute the mine plan, regardless of employment status.

Personnel requirements increase during the initial years of the mine plan to support the production ramp-up of the Presqu'île mining area while maintaining production from Kiena Deep. Staffing levels remain generally stable through the middle years of the operation as production from the Dubuisson mining area progressively replaces production from Presqu'île, thereby maintaining the planned overall mine production rate. As mining activities decline near the end of the LOM, workforce requirements are gradually reduced in accordance with the production schedule.

The Kiena Mine benefits from its location within the established Val-d'Or mining camp, where a skilled mining workforce is readily available. Consequently, labour availability is not considered to represent a significant risk to the execution of the mine plan. Normal recruitment, training, and workforce development programs are expected to support the planned operations throughout the project life.

17. RECOVERY METHODS

The Kiena Mine processing plant began operation in September 1984. The plant used a conventional gold recovery process involving cyanidation and carbon-in-pulp (CIP). It was designed for a throughput of 1,250 tpd, increasing to up to 2,000 tpd once additional crushing capacity was installed. The planned operation is expected to process less than 1,000 tpd of mineralized material from the different zones using the existing Kiena concentrator. The following sections provide a detailed description of the Kiena processing plant.

17.1 Process Description and Simplified Flowsheets

The main process steps include grinding, cyanide leaching, gold adsorption and desorption using activated carbon, electrowinning, and cyanide destruction.

The crushing circuit includes a cone crusher and a screen. The objective of the crushing circuit was to increase throughput above the original nameplate capacity. As the planned throughput is below the original design capacity, crushing is not expected to be required. The grinding circuit consists of an open-circuit SAG mill followed by a ball mill operating in closed circuit with two stages of cyclones. The ground ore is then thickened and sent to the leaching circuit, which feeds the CIP circuit. A simplified process flowsheet of the crushing, grinding, leaching and CIP circuits is shown in Figure 17.1.

The loaded carbon is sent to the carbon stripping circuit, where desorption and electrowinning produce gold-rich sludge for melting and casting into doré bars. The circuit also includes carbon acid washing and regeneration. A simplified process flowsheet of the carbon stripping, washing, regeneration and refinery circuits is shown in Figure 17.2.

The CIP tails will undergo cyanide destruction before being thickened and sent to the tailings management facility (TMF) or paste backfill plant. Process water requirements will be met by fresh water from the lake, process water and mine water. Internal water recirculation will come from thickener overflow, and additional water will be reclaimed from the TMF. The simplified process flowsheet of the tailings and water management circuits is shown in Figure 17.3.

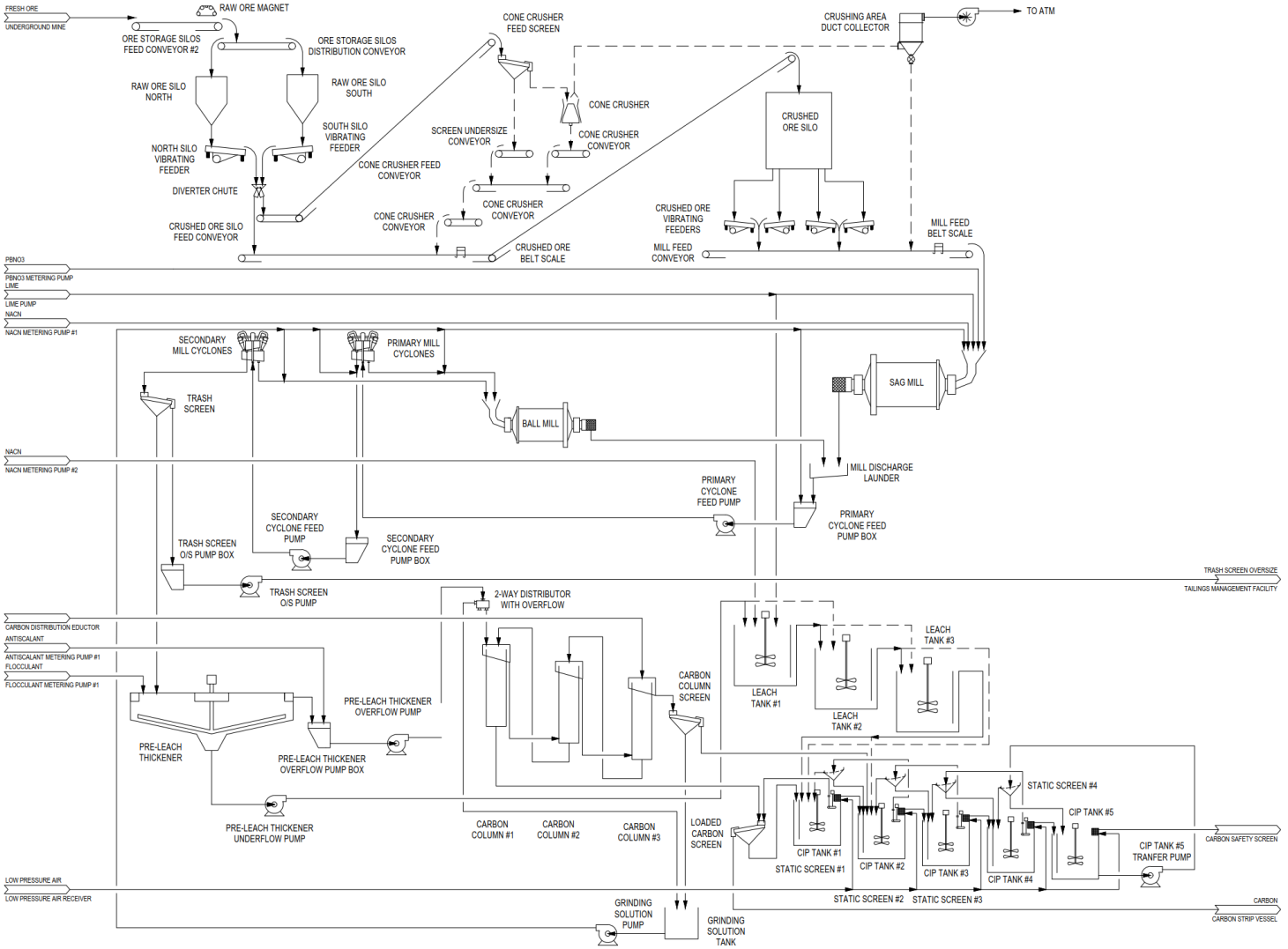


Figure 17.1 Crushing, grinding and leaching simplified process flow diagram

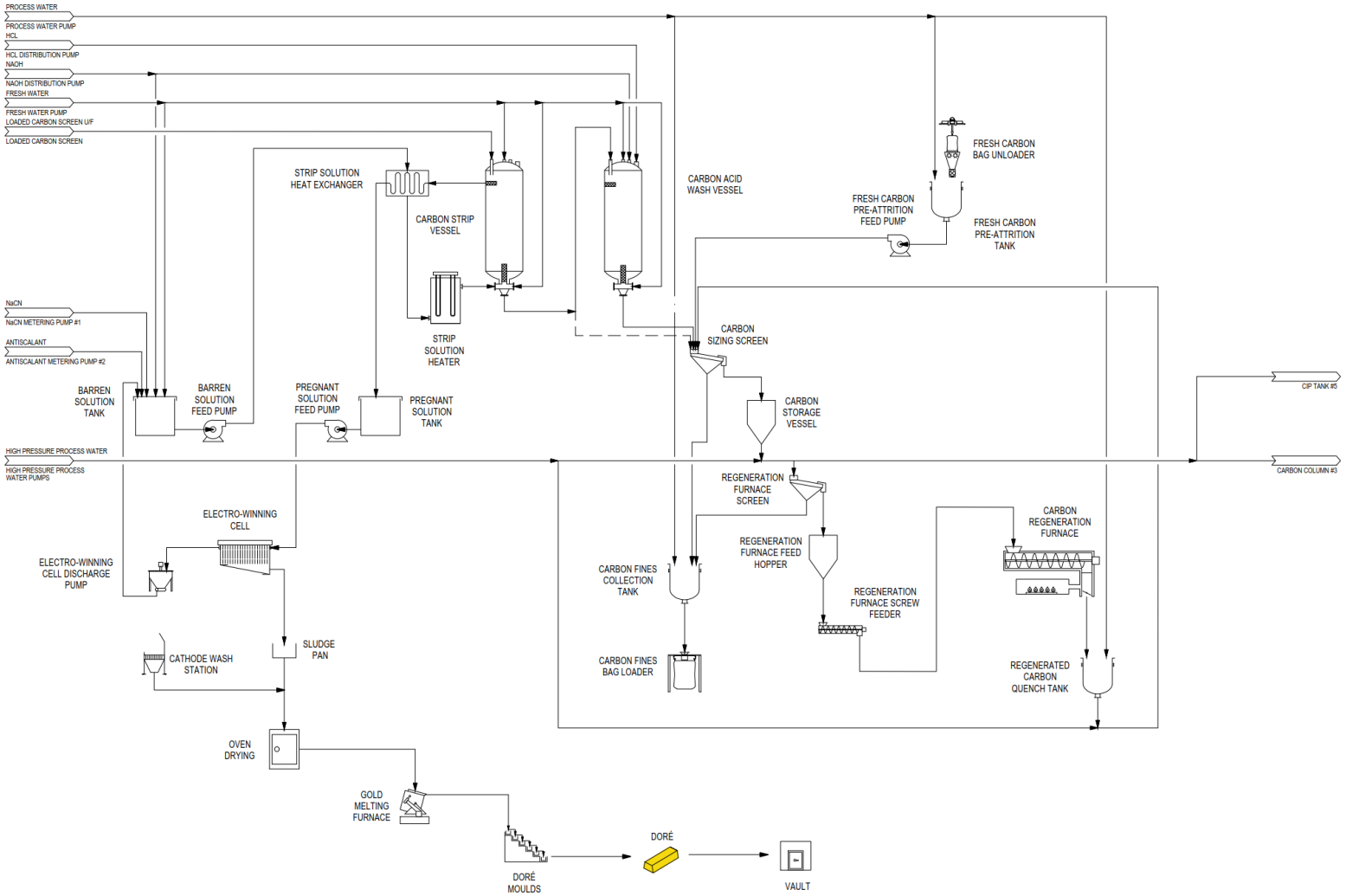


Figure 17.2 Carbon stripping and washing and refining simplified process flow diagram

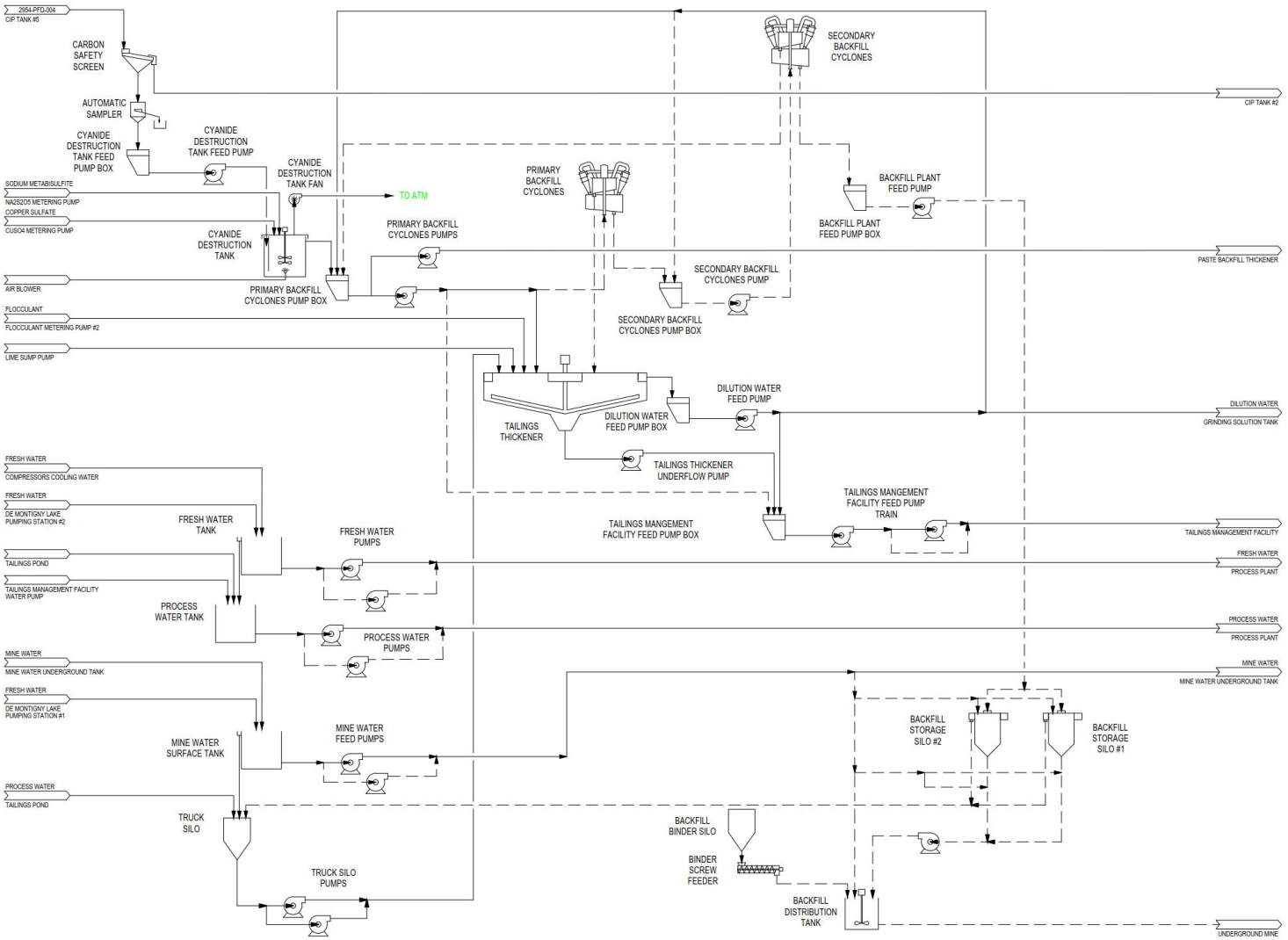


Figure 17.3 Tailings, water management simplified process flow diagram

17.2 Design Criteria

The design criteria were developed based on metallurgical data obtained from the metallurgical testwork program performed on Deep, Presqu'île and Dubuisson zones and from bulk sample processing data. The process design criteria, as well as the mass and water balance, were used to evaluate process performance. The Kiena Mine Complex was originally designed for a plant throughput of 1,250 tonnes per day and up to 2,000 tonnes per day with the secondary crushing circuit. The production target is less than 1,000 tonnes of dry ore per day to ensure adequate retention time in the leaching and cyanide destruction circuits and to align with the expected mine production rate. The production schedule will have a maximum of 984 tpd, it will then always be under 1000 tpd for the LOM plan and the mill performance is based on such daily tonnage.

The operating schedule is planned as a seven-day-per-week operation. The process tailings will be pumped to the tailings pond or sent underground as backfill, as required by mine operations. The main process design criteria are presented in Table 17.1.

Table 17.1 Main process design criteria

Parameter	Unit	Value
Plant - General		
Ore Moisture	% w/w	4.0
Ore Specific Gravity	t/m^3	2.80
Average Feed Au Grade	g/t	11.73
Targeted Au Recovery - Kiena Deep (A, A1, A2)	%	98.5
Targeted Au Recovery – Presqu'île	%	98.5
Targeted Au Recovery - Dubuisson	%	97.0
Processing Plant Nominal Feed Rate (Dry)	tph	41.7
Grinding		
Ball Mill Work Index - Kiena Deep (A, A1, A2)	kWh/t	10.7
Ball Mill Work Index – Presqu'île	kWh/t	16.1
A x b - Minimum – All zone	-	34.0
A x b - Maximum - All zone)	-	64.0
Abrasion Index (Ai) - Average - Kiena Deep (A, A1, A2)	g	0.196
Specific Power - All zone	kWh/t	24.7
SAG Mill Consumed Power	kW	550
Recirculating Load - Nominal	%	250
Ball Mill Consumed Power	kW	375
Grinding Circuit Product Size (P_{80}) - Maximum	µm	60
Leaching and Gold Recovery		
Leaching Circuit Retention Time	h	42.8
Carbon Concentration in CIP Tank	g/L	20
CIP Circuit Retention Time	h	5.5
Carbon Strip Vessel Capacity	t	3.0

Parameter	Unit	Value
Carbon Strip Vessel Bed Volume	m^3	6.0
Carbon Stripping Frequency	#/d	0.5
Carbon Stripping Solution Flowrate (bed volume)	BV/h	1.0
Cyanide Destruction		
Cyanide Destruction CN_{WAD} Target	mg/L	1
SO_2 Dosage	g SO_2/g CN_{WAD}	8.0
Copper Sulfate Dosage	g Cu/t Ore	50.0
Cyanide Destruction Tank Retention Time	h	0.86

Although grindability varies significantly between the different zones, the available power in the grinding circuit is sufficient to maintain the expected P80 of 60 µm. In addition, the mill feed will likely consist of a blend from different sources, resulting in a manageable average grindability.

17.3 Process Equipment Description

17.3.1 Ore Storage and Crushing Circuit

The crushing circuit is fed with 150 mm rock from the Birdsboro Buchanan jaw crusher located underground or from the new crusher dedicated to Presqu'île feed. The ore is hoisted to surface and stored in two raw ore silos, each with a capacity of 600 t. Vibrating feeders located beneath the silos reclaim the ore and feed a diverter chute, which directs the ore either to the secondary crushing circuit or to the crushed ore silo conveyor leading to the 1,800 t crushed ore silo. The secondary crushing circuit consists of a feed conveyor, screen, standard cone crusher and product conveyors. Based on the current production plan, the secondary crusher is not required and will be bypassed.

17.3.2 Grinding Circuit

The mineralized material is ground in a semi-autogenous grinding (SAG) mill operating in open circuit, followed by a ball mill operating in closed circuit with two stages of classification cyclones. Cyanide, lead nitrate and milk of lime are added to the SAG mill. The primary and secondary cyclone underflows are redirected to the ball mill for further grinding. The cyclone overflow is pumped to a vibrating trash screen. The screen undersize reports to the pre-leach thickener, while the oversize is pumped with water to the tailings pump box. The thickener underflow pulp is transferred to the leaching circuit, while a portion of the thickener overflow is pumped to a series of three carbon columns to adsorb gold in solution. The last carbon column in the series overflows onto a safety carbon screen, where any carbon oversize that may have escaped from the column is directed to the second CIP tank. Once every two days, the loaded carbon from the first column is sent to the loaded carbon screen; carbon from the downstream columns is transferred to the respective upstream column, and unloaded carbon is added to the last column. The third column discharge screen undersize reports to the grinding solution tank, together with the remainder of the thickener overflow. The grinding solution is recycled back to the grinding circuit.

The main characteristics of the major equipment in the grinding circuit are listed in Table 17.2

Table 17.2 Major equipment characteristics of the grinding circuit

Equipment	Qty	Characteristics
SAG Mill	1	3.35 m diameter x 5.48 m long, 1,000 hp motor
Ball Mill	1	3.20 m diameter x 3.66 m long, 900 hp motor
Primary Cyclones	5	380 mm diameter
Secondary Cyclones	2	508 mm diameter
Trash Screen	1	Vibrating, 2.4 m x 1.2 m 35 mesh opening
Pre-leach Thickener	1	19.8 m diameter
Carbon Columns	3	1.2 m diameter x 3.7 m high, 0.8 t carbon capacity
Mill Solution Tank	1	4.5 m diameter x 5 m high, 79.5 m^3 volume

Comminution testwork results (see Section 13.2.3) indicate that the ore grindability and power requirements to achieve the targeted P80 of 60 µm are within the capacity of the SAG mill.

Grinding media consumption for the SAG mill and ball mill was estimated using historical consumption data and bulk sample processing data. The average media consumption for both grinding applications is presented in Table 17.3.

Table 17.3 Grinding media consumption

Area	Size (mm)	Consumption (kg/t)
SAG Mill	127	0.45
Ball Mill	51	0.95

17.3.3 Leaching, CIP and Gold Recovery Circuits

Thickener underflow is pumped to a series of three leach tanks. Cyanide, milk of lime and lead nitrate are added to the leach feed. Air is also introduced through the agitator shafts. The leach tanks operate in series to promote further gold dissolution. Leach tank #1 overflow feeds leach tank #2, and leach tank #3 overflow feeds the first CIP tank.

The CIP circuit consists of five CIP tanks operating in series. The tanks are equipped with static screens that prevent carbon from exiting the tanks. Slurry is fed to CIP tank #1, while unloaded carbon is fed to CIP tank #5. The discharge from the CIP tanks is directed to a safety screen to recover any carbon particles escaping from the tanks.

The pulp from CIP tank #1 is sent daily to the loaded carbon screen to recover loaded carbon contained in the pulp. The loaded carbon screen oversize is transferred to the carbon strip vessel, while the undersize pulp is returned to CIP tank #1. Carbon from CIP tank #2 is then transferred to CIP tank #1 by pumping slurry onto a static screen, which directs the carbon to CIP tank #1 while the slurry returns to CIP tank #2. The same principle is applied to the remaining CIP tanks. When carbon from the first carbon column is sent to the screen, the carbon transfer water reports to the screen undersize and then to CIP tank #1.

The loaded carbon falls from the screen oversize into the carbon strip vessel, where gold desorption occurs using the Zadra process. Gold adsorbed onto the carbon in the carbon strip vessel is desorbed by strip solution from the barren solution tank, which then reports to the pregnant solution tank.

Once desorption is complete, the carbon is transferred to the carbon acid wash vessel, where it is washed with hydrochloric acid. After neutralization with caustic solution, the carbon is forwarded to the carbon sizing screen and partly fed to the regeneration furnace. The regenerated carbon then falls into the quench tank, is screened again on the carbon sizing screen, and is reused in the process. Carbon reporting to the screen undersize is too fine for reuse and is collected in a 1 m³ bag for shipment to a gold-recycling plant.

The electrowinning cell is fed with pregnant solution, and gold is recovered by plating onto stainless steel wool cathodes. The resulting gold-rich sludge is dried in the drying oven and, after being mixed with the appropriate flux, is sent to the gold melting furnace. The smelted product is poured into doré moulds, where metallic gold settles in the moulds and slag overflows. The doré bars obtained from casting are stored in the vault before being shipped to gold refiners. The slag is recovered and sent to a gold-recycling plant.

The main characteristics of the major equipment in the leaching, CIP and gold recovery circuits are listed in Table 17.4.

Table 17.4 Major equipment characteristics of the leaching, CIP and gold recovery circuits

Equipment	Qty	Characteristics
Leaching Tanks	3	10 m diameter x 10.6 high, 809 m^3 effective vol. per tank. 60 hp agitators
Low Pressure Compressor	2	150 hp motor, 2300 Nm^3/h at 275 kPa capacity each
CIP Tanks	5	4.3 m diameter x 4.6 m high, 62.4 m^3 volume, 7.5 hp agitators
Safety Screen	1	Vibrating, 2.4 m x 1.2 m, 28 mesh opening
Elution Vessel	1	3 t capacity, 6 m^3 volume
Barren Solution Tank	1	4.0 m diameter x 4.5 m high, 56.5 m^3 volume
Pregnant Solution Tank	1	4.0 m diameter x 4.5 m high, 56.5 m^3 volume
Strip Solution Heater	1	360 kW electric elements in tube
Acid Wash Vessel	1	1.4 m diameter x 1.4 m high, 2.2 m^3 volume
Carbon Regeneration Furnace	1	Vertical natural gas furnace
Loaded Carbon Screen	1	Vibrating, 2.4 m x 1.2 m, 28 mesh opening
Carbon Sizing Screen	2	Vibrating, 2.4 m x 1.2 m, 20 mesh opening
Electrowinning Cell	1	2.6 m x 0.95 m x 1.25 m, 600 mm x 600mm anodes and cathodes
Gold Melting Furnace	1	Induction type furnace 30 kg doré production per batch

17.3.4 Cyanide Destruction Circuit and Tailings Treatment

The existing cyanide destruction circuit has been refurbished and modified since the mill start-up in 2021. The cyanide destruction circuit is fed by the CIL tails, which are adjusted to 45% (w/w) solids through process water addition. Cyanide destruction occurs in one tank using a combination of SMBS, copper sulfate and air to achieve a target of less than 1 ppm CNWAD. Lime is used to control pH.

The tailings thickener increases the tailings pulp density with the addition of flocculant before the slurry is transferred to the TMF feed pump box by the tailings thickener underflow pump. The TMF feed pump train transfers the tailings to the TMF. Tailings thickener overflow is sent to the dilution water feed pump box. The water is pumped through a distribution system, with a portion directed to the grinding solution tank, a portion directed to the thickener feed pump box to reduce density, and the remainder sent to the TMF feed pump box. The backfill cyclones are not required and will not be used.

When the paste backfill plant is operating (see Chapter 16) or when its stock tank needs to be filled, the cyanide destruction tails are pumped from the primary backfill cyclone feed pump box to the paste backfill plant. The tailings thickener is then placed in recirculation mode, and reclaim water is added to the TMF feed pump box to keep the tailings line operating. When the paste backfill plant is down or does not require feed, all cyanide destruction tails are pumped directly to the tailings thickener.

The main characteristics of the major equipment in the cyanide destruction and tailings circuits are listed in Table 17.5.

Table 17.5 Major equipment characteristics of the cyanide destruction and tailings circuits

Equipment	Qty	Characteristics
Cyanide Destruction Tank	1	4.0 m diameter x 5.0 m high, 56.5 m^3 volume
Blower	1	200 hp motor, 3370 Nm^3/h capacity at 62 kPa
Tailings Thickener	1	19.8 m diameter

17.3.5 Water Management

The water management circuit consists of four tanks: the fresh water tank, process water tank, mine water surface tank and truck silo, which is used for water storage. The fresh water tank is supplied with fresh water from De Montigny Lake pumping station #2. Fresh water is pumped to the process, and excess tank overflow is pumped to the process water tank, which also receives reclaim water from the north tailings cell. The mine water surface tank is supplied by the underground mine water tank and De Montigny Lake pumping station #1. The mine water feed pumps supply the underground mine water tank. The mine water surface tank overflows into the truck silo, and truck silo water is pumped to the tailings thickener by the truck silo pumps.

To minimize fresh water consumption, process water will be used for most applications throughout the plant. The process water tank will be supplied primarily by reclaim water from the TMF, and fresh water overflow will be kept to a minimum. Fresh water will be used in the carbon stripping circuit, for the preparation of lead nitrate, flocculant, copper sulfate and SMBS, and for compressor cooling. Approximately 85 m^3/d of fresh water is expected to be used in the process.

17.3.6 Reagents Systems

Unless otherwise specified, expected reagent consumption is based on the metallurgical testwork results described in Chapter 13 and historical values. Sodium cyanide solution is delivered by tanker truck and transferred to the NaCN storage tank. From there, it is pumped by the cyanide transfer pump to the cyanide mixing tank. The cyanide mixing tank is used to dilute the solution before it is transferred, by opening a valve, to the cyanide distribution tank. Dosing pumps are used to feed cyanide to the SAG mill, leach tank #1 and barren solution tank.

Flocculant is wetted in the eductor and fed to the mixing tank. Once flocculant preparation is complete, the contents of the mixing tank are transferred to the distribution tank. Metering pumps are used to feed flocculant to the thickeners, with additional water added in the in-line mixers.

Lead nitrate is mixed with water in the mixing tank and then pumped to the distribution tank. Metering pumps are used to feed lead nitrate to the SAG mill and leach tank #1.

Quicklime is delivered by truck and transferred to the lime silo. From there, it is mixed with water in the lime slaker. A lime pump distributes the milk of lime through a recirculating loop that returns to the distribution tank.

Copper sulfate is mixed with water in the mixing tank and then pumped to the distribution tank. A metering pump is used to feed copper sulfate to the cyanide destruction tank. New equipment will be required for this system.

SMBS is mixed with water in the mixing tank and then pumped to the distribution tank. A metering pump is used to feed SMBS to the cyanide destruction tank. New equipment will be required for this system.

Hydrochloric acid is delivered by tanker truck and transferred to the HCl storage tank. From there, it is pumped to the dilution tank, where it is mixed with water. A pump transfers the diluted acid to the carbon acid wash vessel. Expected consumption is based on historical consumption data.

Caustic soda is delivered by tanker truck as a 50% NaOH solution and stored in a distribution tank. A pump transfers the caustic solution to the cyanide mixing tank, barren solution tank and carbon acid wash vessel. Expected consumption is based on historical consumption data.

Activated carbon will be fed to the fresh carbon pre-attrition tank. The existing system will be used, and expected consumption is based on historical consumption data.

The delivery form and expected reagent consumption are presented in Table 17.6.

Table 17.6 Reagent Delivery Form and Consumption

Reagent	Delivery Form	Consumption
		kg/t
Sodium Cyanide	Bulk – Liquid	0.62
Flocculent	800 kg bags	0.02
Lead Nitrate	1,000 kg bags	0.21
Quick Lime	Bulk – Solid	1.2
Copper Sulfate ($CuSO_4*5H_2O$)	1,000 kg bags	0.33
Sodium Metabisulfite	1,000 kg bags	2.6
Caustic	Bulk – Liquid 50%	0.085
Activated Carbon	500 kg bags	0.08
Anti Scale CC 7419	Drum	0.125
Anti Scale CC 7410	Drum	0.04

17.4 Energy Requirements

The average electrical energy requirements for the process plant were determined from Kiena's equipment list and bulk sample processing data. Utilization and load factors were assigned to each motorized piece of equipment to derive the data presented in Table 17.7. Because mine throughput will not be sufficient to maintain continuous operation at 1,000 tpd, regular process plant shutdowns will be scheduled. Critical equipment, such as the water and tailings systems, will remain in operation during these shutdowns.

Table 17.7 Process power consumption

Area	Installed Power (kW)	Daily Power Consumption (kWh/d)	
		In Operation	In Shutdown
Ore Storage and Grinding	1,860	27,600	0
Leaching, CIP and Recovery	817	7,400	3,500
Cyanide Destruction and Tailings	356	5,700	2,700
Reagents, Water and Compressed Air	757	13,100	7,500
Total	3,790	53,800	13,700

17.5 Conclusion

A complete equipment review was conducted to verify capacity and condition with respect to the expected mill throughput, reliability, operating schedule and metallurgical performance. The review confirmed that the existing equipment is capable of meeting the throughput and performance objectives. The following aspects must also be considered and were included in the cost and performance evaluation:

- Most water requirements will be met by recycling process water. Process plant fresh water requirements are estimated at approximately 85 m^3/d.

- The process plant operating schedule will need to vary over time to operate efficiently and align with the mine production schedule.
- Operation of the existing surface crushing circuit will not be required.
- The available power in the grinding circuit exceeds the calculated requirement. Although grinding efficiency is lower than expected from testwork, the circuit can achieve the targeted size reduction.

18. PROJECT INFRASTRUCTURE

18.1 General Site layout

The Kiena Mine is an established underground gold mining operation located approximately 10 km west of the City of Val-d'Or, Québec. The operation has been developed over several decades and includes the surface and underground infrastructure necessary to support underground mining, mineral processing, paste backfill production, water management, maintenance activities, and administrative functions.

The existing surface infrastructure has been progressively expanded and upgraded throughout the operating history of the mine to support ongoing operations. Since completion of the previous Prefeasibility Study, the most significant surface infrastructure additions include the construction and commissioning of a new paste backfill plant (see Figure 18.1), replacing the former hydraulic backfill facility on Parker Island; and the development of the Presqu'île portal providing direct underground access to the Presqu'île mining area and adding a ramp connection from surface to Kiena Mine.

The existing site infrastructure includes administrative and dry facilities, mine maintenance shops, warehouses, mine service buildings, fuel storage and distribution systems, electrical distribution facilities, process plant infrastructure, water treatment facilities, waste rock and mineralized material stockpiles, tailings management facilities, and the associated utilities required to support continuous mining operations.

With the exception of the infrastructure additions described above and the ongoing site improvements presented elsewhere in this chapter, the majority of the surface facilities remain unchanged from those described in the previous PFS and continue to provide adequate capacity to support the LOM plan developed for this FS. A general view of the site and a drawing of the infrastructure located on Parker Island are shown in Figure 18.2 and Figure 18.3.

Figure 18.1 New paste backfill plant

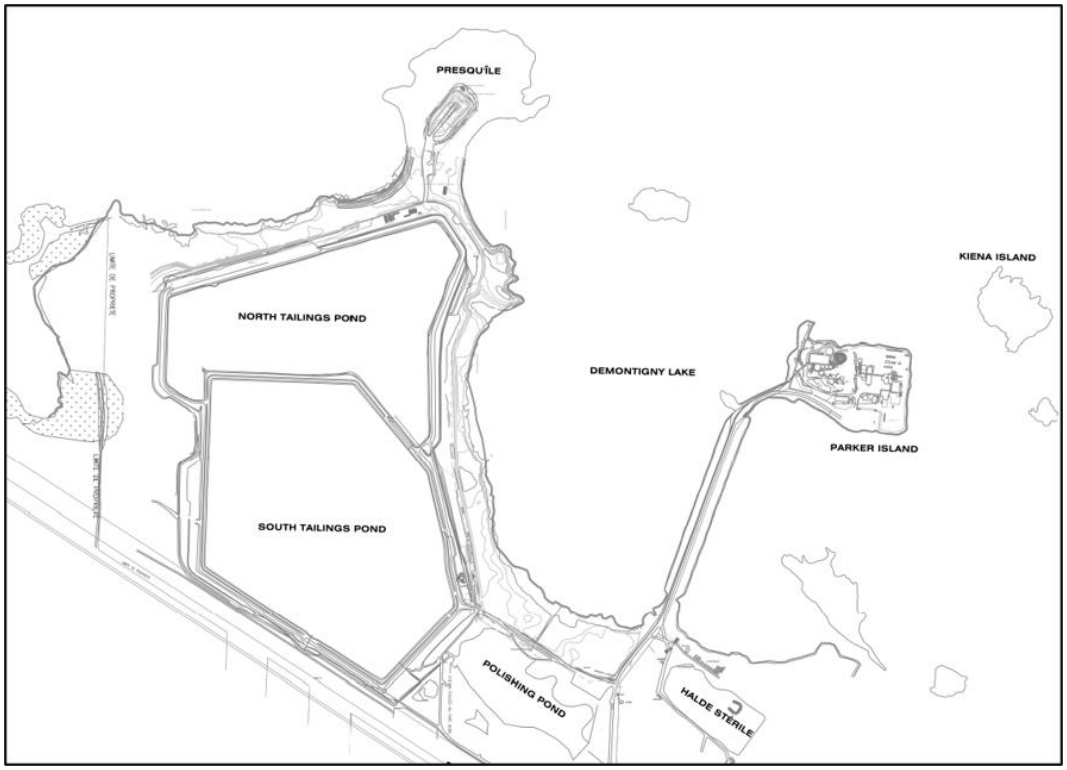


Figure 18.2 General view of site

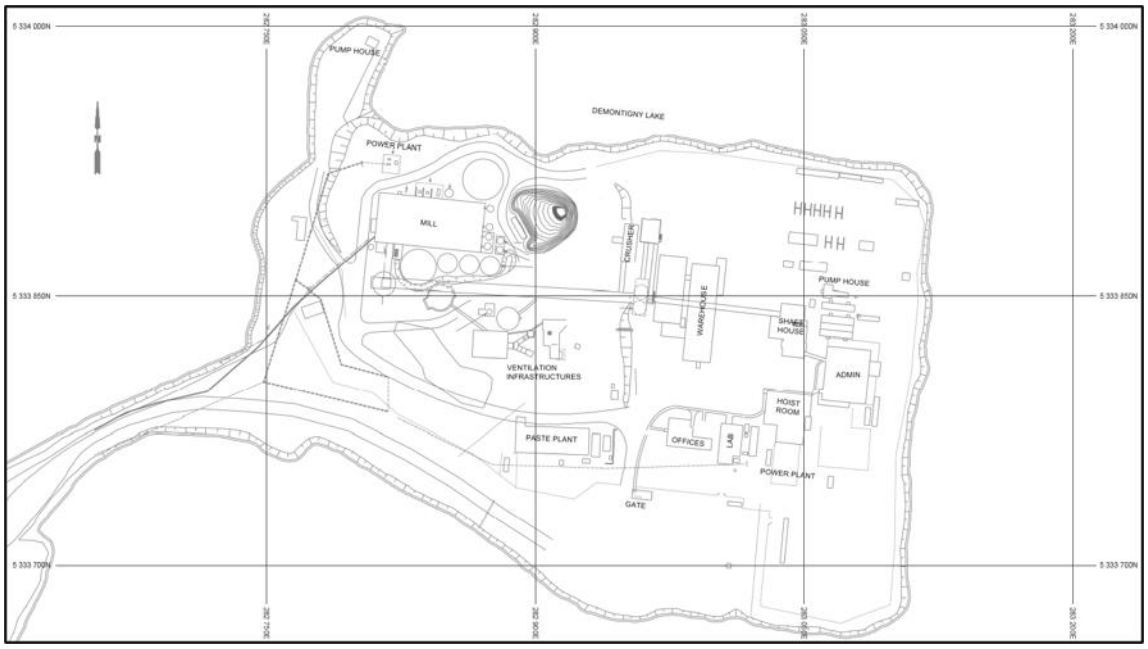


Figure 18.3 Parker Island site plan

18.2 Roads and Access

Access to the Kiena Mine is provided by an existing paved provincial highway followed by maintained mine access roads connecting the site facilities, process plant, maintenance buildings, waste rock storage facilities, tailings management facilities, and other operating infrastructure. The existing road network has been developed to support year-round operations and provides adequate access for employees, contractors, heavy equipment, fuel deliveries, reagents, explosives, and ore and waste transportation.

The principal underground access is provided through the shaft system. Since completion of the previous PFS, a new portal and access ramp have been developed to provide direct access to the Presqu'île mining area as shown in Figure 18.4 and Figure 18.5. The connection between the Presqu'île access ramp and the existing Kiena underground workings was recently completed, establishing a continuous underground connection between the two mining areas. In the near future, this new connection will allow personnel, mobile equipment, materials, and mine services to access the interconnected underground infrastructure from either surface portal, providing greater operational flexibility and improving access to the underground mine. The additional surface access is also expected to facilitate the movement of large mobile equipment and components, creating opportunities to perform major equipment rebuilds or maintenance activities at surface facilities or by specialized external contractors, where appropriate.

No significant modifications or expansions of the existing surface road network are required to support the LOM plan presented in this FS. Routine maintenance of the access roads will continue as part of normal site operating activities.

Figure 18.4 Aerial photo of the Presqu'île's access ramp

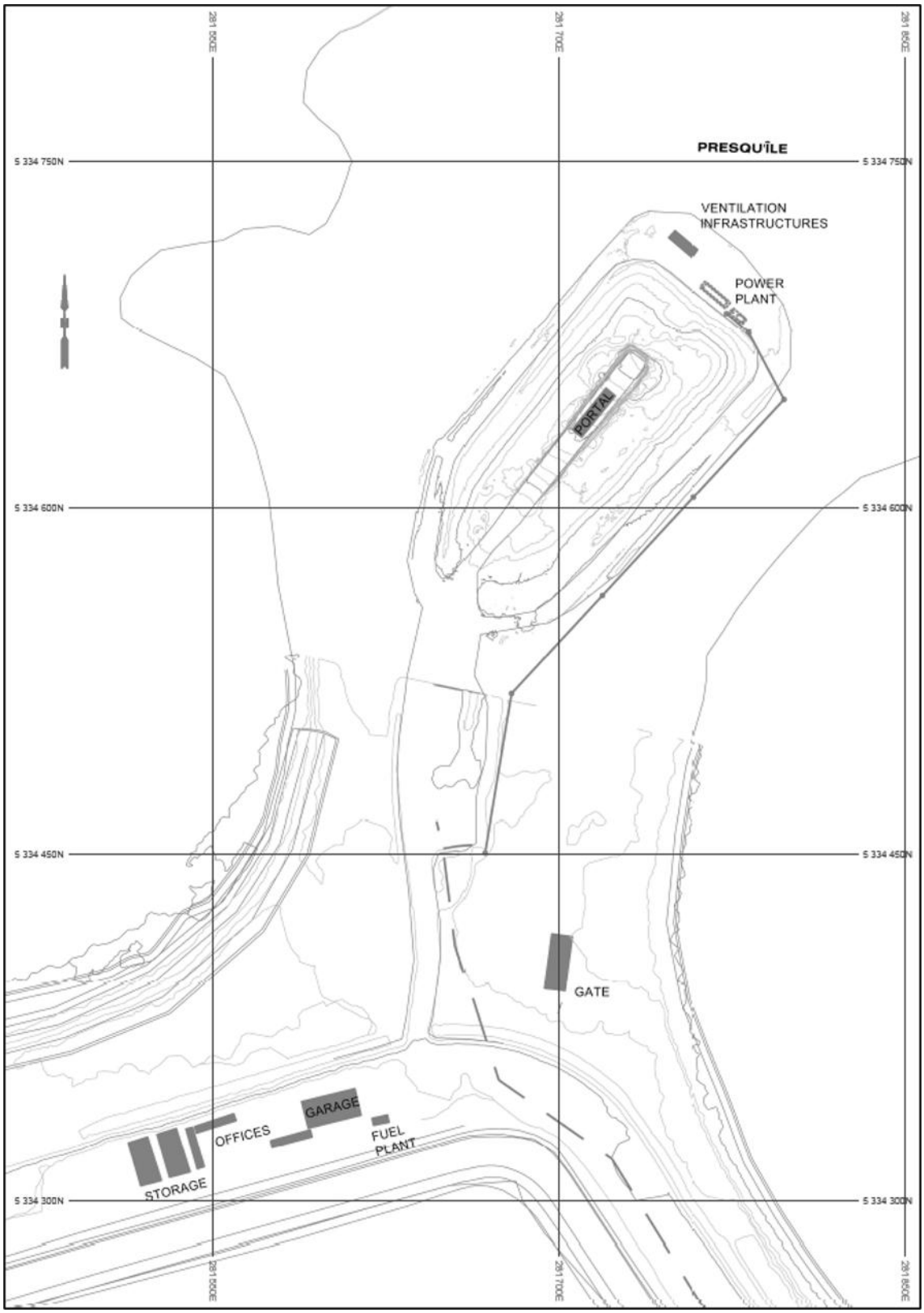


Figure 18.5 Presqu'île site plan

18.3 Electrical Infrastructure

The new development of the Kiena Mine Complex consists of three (3) areas known as Kiena Deep, Presqu'île and Dubuisson.

These three (3) areas are supplied with electrical power from the Kiena Mine's 120 kV electrical substation, which is in turn supplied by Hydro-Québec's 120 kV overhead transmission line. See Figure III.1 (Appendix III).

The vertical development of the KD area is supplied from a 13.8 kV junction box in the Kiena area. The horizontal developments use 13.8 kV/600 V step-down transformers at each active mining level. See Figure III.2 (Appendix III).

The PI area is supplied by a 25 kV power line from the Kiena 120 kV substation. On the surface of the Kiena site there is a substation supplied by a 25 kV Hydro-Québec overhead power line fed from the Kiena mine's 120 kV electrical substation. This substation provides all the electrical power required for the development and operation of the PI Zone.

The vertical development of the PI area is supplied at 4.16 kV from the surface electrical room at the PI area. The horizontal developments use 4.16 kV / 600 V step-down transformers at each active mining level. The electrical load for the PI area is estimated to be approximately 4 MVA at 600 V.

Ore from the PI area will be transported to Level 33 of the Kiena area through a horizontal drift. This horizontal development is supplied at 4.16 kV from the Kiena surface 120 kV substation. See Figure III.3 (Appendix III).

This substation provides all the electrical energy required for the development and operation of the Kiena Mine. However, the planned LOM development will push the site's peak electrical demand towards the existing supply capacity. As a result, the implementation of a power factor correction system and a VOD system is a key priority to secure an increased power allocation from Hydro-Québec and support future mining operations.

The DUB area is from a 4.16 kV junction box in the Kiena area through the horizontal access drift leading to the lower level of the DUB area. From there, the vertical development of the DUB area will progress upward, while the horizontal developments will use 4.16 kV/600 V step-down transformers at each active mining level. See Figure III.4 (Appendix III).

Figure 18.6 Electrical substation

18.3.1 Power Line to Site and Step-Down Substation

Hydro-Québec owns an existing 120 kV overhead power line located near the Kiena Mine Complex site, and Kiena mining complex's substation is connected to this overhead line.

The KD and DUB areas do not have dedicated electrical substations. Their respective electrical supplies are provided through junction boxes located in the Kiena area.

The Presqu'île site substation contains two dry-type electrical transformers. One of the transformers is a step-down transformer rated 25 kV/4.16 kV and is equipped with a neutral grounding resistor. The other transformer is a 4.16 kV/600 V step-down transformer dedicated to surface power distribution.

As mining operations shift to the DUB area, the company plans to strategically redeploy portions of this electrical infrastructure to optimize capital expenditures.

18.3.2 Surface Electrical Installation, Distribution and Consumption from Step-Down Substation

The KD and DUB areas do not have dedicated electrical substations. Instead, they receive their respective electrical supplies from junction boxes located in the Kiena area.

From PI's E-house located within the surface substation, electrical power is distributed at both 4.16 kV and 600 V voltage levels.

The 4.16 kV distribution system supplies power to junction boxes installed at the various levels of the mine's shaft. These junction boxes provide electrical power to the 4.16 kV/600 V transformers located throughout the underground drifts, enabling power distribution to the mine's horizontal development areas.

The 600 V distribution system supplies surface-installed electrical equipment, including pumps and ventilation fans that support underground operations. It also provides power to the explosive storage facility located within one of the underground drifts.

Power consumption, particularly for the processing plant and the 600 V ventilation system, represents a significant operational cost. To manage the projected increase in demand as development progresses, the company is planning to install a VOD and implement a power factor correction strategy to optimize energy use and ensure continued compliance with the site's power allocation from Hydro-Québec.

18.4 Maintenance Shop and Warehouse

The Kiena Mine includes existing surface maintenance shop and warehouse facilities that support the maintenance of surface vehicles, ancillary equipment, site infrastructure, and the storage of spare parts, consumables, lubricants, maintenance supplies, and warehouse inventory required for ongoing operations.

Historically, maintenance of the underground mobile equipment fleet has been performed within the underground maintenance garage. This arrangement was primarily driven by the mine configuration, where the shaft provided the only practical access between the underground workings and the surface, making the removal of large mobile equipment for surface maintenance impractical.

The recent completion of the underground connection between the Presqu'île portal and the existing Kiena Mine has established continuous ramp access between the surface and the underground workings. In the future, this additional access may provide opportunities to transport underground mobile equipment to surface for major rebuilds or specialized maintenance activities, either within the existing surface facilities or by specialized external contractors. Although this approach has not been incorporated into the current LOM plan, it represents an additional operational flexibility that was not previously available.

The existing surface maintenance shop and warehouse facilities are considered adequate to support the planned operation throughout the LOM. No major modifications or building expansions have been identified. Future expenditures associated with these facilities are expected to consist primarily of routine building maintenance, equipment replacement, and normal sustaining capital.

18.5 Administration Building and dry Complex

The Kiena Mine includes existing administration offices, employee dry facilities, change rooms, lunchrooms, security and access control facilities, and other support services required for day-to-day operations. These facilities accommodate mine administration, engineering, geology, mine planning, health and safety personnel, contractors, and the underground workforce.

The site entrance includes controlled access for employees, contractors, visitors, and deliveries, together with the associated parking areas and security infrastructure. The existing administrative and support facilities continue to provide sufficient capacity for the projected workforce associated with the LOM plan.

No significant modifications or expansions of the administration or dry facilities have been identified as necessary to support the planned operations. Future expenditures are expected to consist primarily of routine building maintenance and normal sustaining capital required to preserve the functionality and reliability of these facilities throughout the remaining mine's life.

18.6 Surface Communications and IT

The Kiena Mine utilizes an established communications and information technology network supporting administrative operations, mine planning, production activities, maintenance, health and safety, and emergency response. Surface communications include fibre optic and conventional communication systems linking the principal operating buildings and process facilities.

The communications infrastructure is integrated with the underground communications network described elsewhere in this chapter and provides adequate capacity to support the planned mining operations. Future expenditures are expected to consist primarily of routine maintenance, equipment replacement, and periodic technology upgrades undertaken as part of normal site operations.

18.7 Surface Fuel Storage and Distribution

Diesel fuel required for the mining operation is received and stored within the existing surface fuel storage and distribution facilities. The surface fuel storage system has a total storage capacity of 75,000 l (see Figure 18.7), providing sufficient inventory to support ongoing mining operations. Fuel deliveries are supplied by commercial fuel distributors serving the Val-d'Or region. Given the Kiena Mine's close proximity to the City of Val-d'Or and the availability of well-established transportation infrastructure, fuel deliveries can be completed efficiently and are not considered an operational constraint.

Fuel is distributed underground through an existing fuel pipeline installed within the Kiena shaft. The pipeline supplies the primary underground fueling station located at Level 64, which serves as the main distribution point for the underground fuel network.

The existing surface fuel storage facilities and shaft fuel distribution system have successfully supported the current mining operation and are considered adequate to supply the underground and surface mobile equipment fleets included in the LOM plan. As mining progresses to deeper levels, the underground fuel distribution network will continue to be expanded to maintain efficient access to fueling facilities. No significant modifications or expansions to the surface fuel storage or distribution facilities have been identified as necessary to support the planned mining activities. Future expenditures associated with the surface fuel facilities are expected to consist primarily of routine maintenance, inspection, and normal equipment replacement.

Figure 18.7 Diesel storage tank

18.8 Fire Water and System

Fire protection for the surface facilities is provided through the existing fire water distribution system serving the principal operating buildings and infrastructure.

The fire protection system has been developed to support the existing site infrastructure and is maintained in accordance with the mine's operational and emergency response requirements. Based on the current LOM plan, no significant modifications or expansion of the fire water system have been identified as necessary.

18.9 Potable Water Supply and Sewage Treatment

18.9.1 Potable Water

Potable water for the Kiena Mine is supplied through commercially delivered bottled water. Water dispensers equipped with replaceable water bottles are strategically located throughout the surface facilities and at designated underground locations to provide drinking water for employees and contractors.

The existing potable water supply system has successfully supported the current mining operation and is considered adequate for the workforce included in the LOM plan. Given the mine's close proximity to the City of Val-d'Or, bottled water deliveries can be readily supplied by local commercial providers. No modifications or expansions to the potable water supply system have been identified as necessary to support the planned mining activities.

18.9.2 Sewage Treatment

Domestic wastewater generated by the surface facilities is collected and treated using the existing site sewage treatment systems. Two (2) main systems service the administration building, the dry facilities, the maintenance buildings, the plant area and the other occupied site infrastructure.

The existing sewage treatment serving the plant area has sufficient capacity to support the projected workforce throughout the LOM. No significant upgrades have been identified as necessary for this system, and future expenditures are expected to be limited to routine operation and maintenance.

However, plans are underway to upgrade the wastewater treatment infrastructure for the administrative offices and dry facilities. Since the area is not connected to a municipal sewer collecting system and the existing wastewater treatment system is nearing the end of its lifespan, a new domestic wastewater treatment system must be constructed. This work will be completed in 2026.

18.10 Process and Collected Water Treatment

The Kiena Mine water management system has been designed to maximize process water reuse while ensuring compliance with environmental discharge requirements.

Mill tailings undergo cyanide destruction through the SO_2/Air process prior to discharge to the South TSF. The treated tailings slurry is subsequently deposited in the TSF, where solids are retained and process water is recovered.

While cyanide destruction is not specifically required by the site's Certificate of Authorization, Wesdome has incorporated this treatment stage to minimize the risk of residual cyanide release.

The North and South TSFs operate as an integrated water management system, providing storage capacity for process water, precipitation, runoff and seasonal variations while allowing reclaim water to circulate between the two impoundments. The majority of the water stored within the TSFs is reclaimed and returned to the process plant, significantly reducing freshwater demand.

The site water management strategy prioritizes the return of reclaim water from the TSFs to the process plant, while excess water is treated by the water treatment plant prior to discharge. This approach minimizes treatment requirements by maximizing process water recirculation within the operation.

Following treatment, the treated water is discharged to the polishing pond before being released to the receiving environment. The concentrate generated by the treatment process is returned to the TSF, maintaining dissolved constituents within the site water management circuit. This operating philosophy maximizes water reuse, minimizes freshwater withdrawal and limits the volume of water requiring treatment while maintaining compliance with environmental discharge requirements.

18.10.1 Treatment Strategy and Water Quality

The Project water treatment strategy is based on maximizing process water recirculation while treating only the excess water. Treatment requirements are therefore governed by the annual site water balance and vary according to operating conditions and climatic conditions. This approach minimizes freshwater consumption, reduces treatment requirements and optimizes operation of the overall water management system.

Excess water requiring discharge must be treated to comply with applicable environmental regulations and the requirements of Directive 019. Main contaminant of the water is ammonia, cyanate, residual cyanide species and dissolved metals.

The treatment process combines ultrafiltration (UF) and reverse osmosis (RO). UF removes suspended solids and protects the downstream RO membranes from fouling, while reverse osmosis removes dissolved constituents, including dissolved metals, ammonia, cyanate and other dissolved contaminants. Together, the UF and RO processes provide a robust and flexible treatment system capable of accommodating seasonal variations in water quality.

Since RO is a separation process rather than a destruction process, ammonia and cyanide species remain in the RO concentrate and are returned to the TSF. These constituents are subsequently attenuated through natural processes within the TSF or become associated with deposited tailings and paste backfill. Based on the current understanding of the site water balance and contaminant loading, significant contaminant accumulation is not anticipated during the early years of operation due to the relatively low throughput and reagent consumption rates.

The effluent quality objectives were established using historical monitoring data, regulatory requirements and operational experience at the Kiena Mine. Particular attention was given to constituents associated with cyanide destruction, including ammonia, cyanate, residual cyanide species and dissolved copper, as these parameters are expected to govern treatment performance and overall effluent quality. The treated effluent is designed to comply with the applicable requirements of DIR-019 prior to discharge.

The selected water treatment strategy relies on membrane separation rather than contaminant destruction. Consequently, ammonia and other dissolved nitrogen compounds are returned to the TSF in the RO concentrate stream. Although significant contaminant accumulation is not anticipated with the projected operating conditions, uncertainty remains regarding the long-term evolution of ammonia concentrations within the TSF.

There remains a potential for ammonia concentrations within the TSF to increase over time to levels that may affect the treatment plant’s capacity to consistently achieve applicable effluent discharge criteria. Mitigation measures have been identified and are presented in Chapter 25 to manage this risk.

The FS assumes that the UF/RO treatment strategy will remain in operation throughout the LOM. Although dissolved contaminants are returned to the TSF in the RO concentrate, significant accumulation is not anticipated during the early years of operation owing to the relatively low production rate, the high degree of process water recirculation and natural attenuation processes occurring within the TSF. An extensive monitoring program will continue throughout the LOM to confirm the long-term adequacy of the selected treatment strategy and improve the understanding of contaminant behaviour within the site water management system.

18.10.2 Treatment Facilities

A mobile water treatment plant based on UF followed by RO is currently in service at the Project and operates during the summer months. The treatment system consists of an UF unit followed by a RO system. The UF stage removes suspended solids prior to membrane treatment, while the RO system removes dissolved constituents, including dissolved metals, cyanate and other dissolved contaminants, to achieve the required effluent quality objectives. The treated permeate is discharged to the polishing pond, whereas the RO concentrate is returned to the TSF, thereby maintaining dissolved constituents within the site water management circuit. This treatment approach provides effective removal of suspended and dissolved contaminants while maintaining operational flexibility and limiting initial capital investment.

The existing treatment plant is currently housed within containerized facilities located outdoors. Although suitable for seasonal operation, these facilities present several operational limitations. The installations require annual winterization and seasonal recommissioning, resulting in recurring startup issues, increased maintenance requirements, and a risk of spills. Maintenance activities are also complicated by the limited space available within the containers, and inspections have identified premature deterioration of interior finishes attributable to the operating environment. Consequently, the current arrangement does not support year-round water treatment operations.

To address these limitations, the RO plant will be moved to a permanent heated and insulated building located near the polishing pond. The treatment process itself will remain unchanged and will continue to rely on filtration followed by reverse osmosis. The project consists primarily of relocating the existing equipment and optimizing the arrangement of process units to reduce the building footprint and minimize piping requirements.

Year-round operation will provide greater operational flexibility and eliminate the need for annual winterization. Under continuous operation, the two (2) RO treatment trains may be operated alternately rather than in parallel while maintaining the same annual treated water volume. Consequently, annual operating costs associated with chemical consumption and electrical power demand are expected to remain essentially unchanged.

The permanent facility is expected to improve operational reliability, reduce maintenance requirements, and provide greater flexibility for future process modifications should water quality conditions evolve over time.

18.11 First Aid /Emergency Services

The Kiena Mine maintains existing first aid and emergency response facilities to support the health and safety of employees, contractors, and visitors. These facilities include first aid stations, emergency medical equipment, emergency response vehicles, and dedicated areas for the treatment and stabilization of injured personnel prior to transport to external medical facilities, if required.

Emergency response procedures are supported by trained mine rescue personnel and are integrated with the site's emergency preparedness and response program. Given the close proximity of the Kiena Mine to the City of Val-d'Or, additional emergency medical services are readily available through the regional healthcare network.

The existing first aid and emergency response facilities are considered adequate to support the planned mining operation throughout the LOM. No significant modifications or expansions have been identified, and future expenditures are expected to consist primarily of routine maintenance, equipment replacement, and periodic renewal of emergency response equipment.

18.12 Explosives Supply

Explosives required for underground development and production activities are supplied by qualified commercial vendors and delivered to the Kiena Mine as required for ongoing operations. Upon arrival at the mine site, explosive products are transported directly underground and stored within the designated underground explosive magazines. No permanent explosives storage facilities are maintained on surface.

The existing explosives supply and handling practices have successfully supported the current mining operation and are considered adequate to meet the requirements of the LOM plan. The close proximity of the Kiena Mine to the City of Val-d'Or and the availability of established commercial suppliers ensure a reliable and timely supply of explosive products throughout the mine life.

Explosive handling, transportation, and storage are conducted in accordance with applicable federal and provincial regulations, as well as established site operating procedures. Based on the planned mining activities, no modifications to the existing surface explosive handling practices have been identified as necessary.

18.13 Hoisting Facilities

The Kiena Mine utilizes the existing No. 1 Shaft and associated surface hoisting facilities to support underground mining operations. The hoisting infrastructure has been in continuous operation for many years and remains the primary means of transporting ore, waste rock, personnel, materials, and mine services between the underground workings and the surface.

The surface hoisting facilities include the headframe, hoist house, ore and waste receiving bins, loading and unloading infrastructure, and the associated mechanical and electrical systems required for hoisting operations. The shaft also provides the primary route for the distribution of essential mine services to the underground operation, including electrical power, compressed air, communications, fuel, process water, and service piping.

Although the underground connection between the Presqu'île portal and the existing Kiena Mine was recently completed, the shaft will continue to play a critical role throughout the LOM. Hoisting operations will remain essential for ore production from the Kiena Deep mining areas and Dubuisson, the transportation of personnel and materials, and the delivery of mine services to the underground workings.

Ore hoisted to surface is discharged into the existing surface ore handling system before being conveyed to the process plant. Waste rock hoisted through the shaft is transferred to the existing waste handling facilities for transportation to the waste rock stockpile.

The existing hoisting facilities have successfully supported the current mining operation and are considered adequate to support the planned LOM. Routine inspections, preventive maintenance, and scheduled equipment overhauls will continue to ensure the long-term reliability of the hoisting system. No major modifications or replacement of the surface hoisting facilities have been identified as necessary to support the planned mining activities.

18.14 Waste Rock Stockpile

Due to the increase in production, the volume of mine waste that must be stored in the existing authorized waste rock stockpile will increase. Since its capacity is limited, it must be expanded to accommodate these additional volumes to be managed. Consequently, the Kiena Mine must proceed with enlarging the original footprint of the existing WS, as defined in the current authorization (See Figure 18.8).

Furthermore, the Kiena Mine also plans to implement a contact water management system (i.e., runoff and snowmelt) related to this expansion and to construct a topsoil stockpile near the WS. The topsoil will come from stripping the footprint of the waste rock expansion and will eventually be used for site rehabilitation purposes.

Figure 18.8 Waste Rock Stockpile Extension and associated assets

18.14.1 Waste Rock Stockpile Extension and Topsoil Stockpile

18.14.1.1 Regulatory Requirements and Best Practice Guidelines

The engineering of the WSE and TS complies with the environmental requirements of Quebec and Canada. The operation, monitoring, maintenance and reclamation of the piles must comply with the following laws, directives, industry best practices and guidelines (non-exhaustive list).

- Loi sur les mines (RLRQ, chapitre M-13.1)
- Loi sur la qualité de l'environnement (LQE) : (RLRQ, chapitre Q-2)
- Loi canadienne sur la protection de l'environnement : (L.C. 1999, chapitre 33)
- Directive 019 sur l'industrie minière, février 2025. (D019). Ministère du Développement durable, de l'Environnement et des Parcs.
- Guide de préparation du plan de réaménagement et de restauration des sites miniers au Québec. Ministère de l'Énergie et des Ressources naturelles (2022)
- Hawley, M. (2017). Guidelines for mine waste dump and stockpile design. Csiro Publishing.
- Comité de recherche sur les piles de stériles miniers de la Colombie-Britannique : Piles de roches et de mort terrains issus de l'exploitation minière, guides provisoires, mai 1991.
- Élaboration d'un manuel d'exploitation, d'entretien et de surveillance pour les installations de gestion des morts terrain et de l'eau. Association minière du Canada (AMC), 2011.

18.14.1.2 Context and background information

A comprehensive geotechnical investigation was carried out to inform the WSE and TS design (Figure 18.9). The geotechnical characterization was developed to complement the existing data base and consisted of performing cone penetration tests with pore pressure measurement (CPTu), and vane shear tests (VST), soil sampling through boreholes and laboratory testing on high-quality samples gathered using Shelby tubes. Interpretation of the complete dataset allowed defining the following stratigraphy beneath the stockpiles from surface to depth: i) a weathered brown clay crust, ii) a normally to slightly consolidated a grey varved clay (south sector) or stiffer stratified silty clay layer (east and north sectors), iii) a basal till followed by iv) the bedrock.

Considering the presence of soft clay within the blue sector identified in Figure 18.9, the construction of the WSE will be achieved in successive stages (raises) in this sector to limit pore water pressure increase and potential negative impact of the stockpile's geotechnical stability.

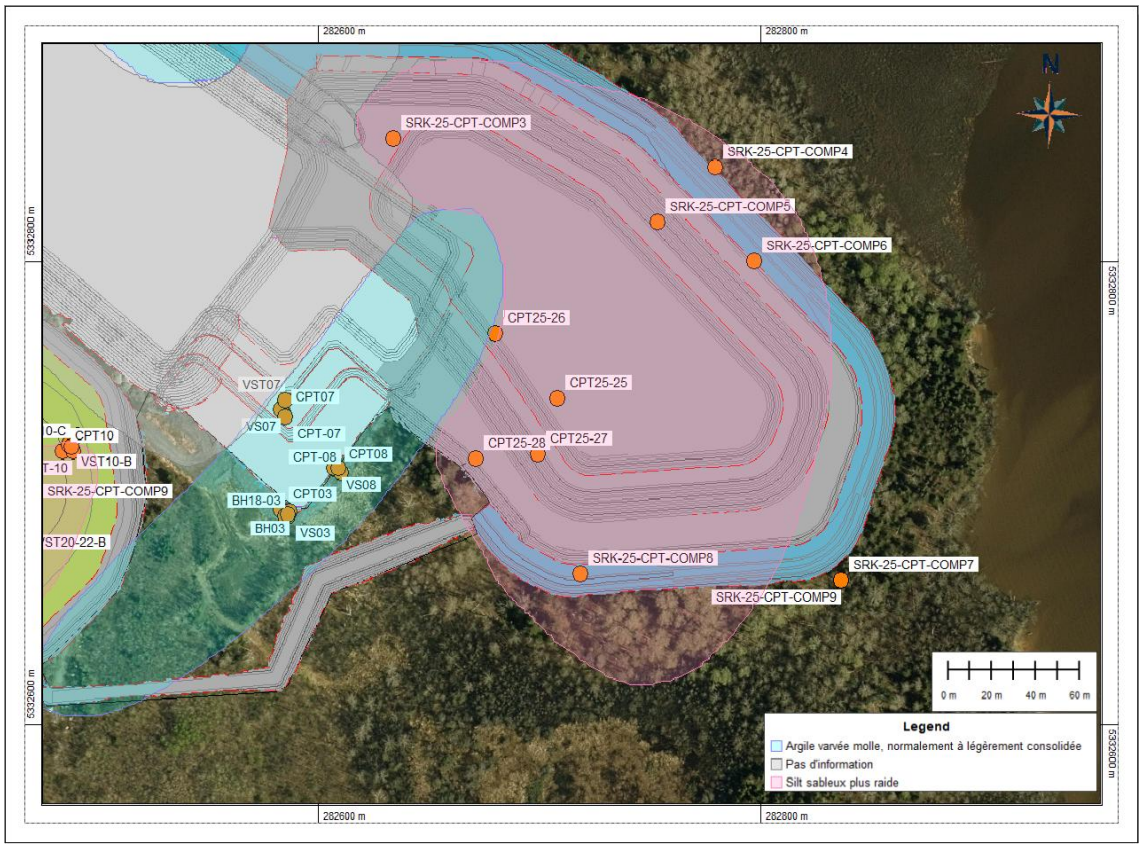


Figure 18.9 Foundation investigation layout

Slope stability analyses were performed using the Morgenstern–Price limit equilibrium method in Slope/W, with semi-circular slip surface search with a minimum slip depth of 5 m.

18.14.1.3 Design Criteria

To inform the selection of design criteria, the consequence classification of both stockpiles was established using the two (2) approaches recommended by DIR-019: the method developed by Hawley and Cunning (2017), specifically intended for waste rock stockpiles, and the methodology proposed by the Canadian Dam Association (CDA).

Based on the characteristics and location of the WSE, the Hawley and Cunning (2017) methodology yields a stability rating of 40.25, corresponding to a "Moderate" risk level, assessed with a moderate level of confidence.

Under the CDA (2013) guideline classification, the WSE is rated as "Significant", on the basis that, as with the TS, a temporary population and nearby lake could be affected in the event of a failure.

As dictated by DIR-019, the stockpile must comply with following:

- It must be located at least 60 m from the shoreline boundary of a lake or a watercourse with regular or intermittent flow. If the operator is unable to comply with this distance, they must justify their position by presenting the advantages and disadvantages of their proposal in terms of techno-economic, human (maintenance or loss of uses) and natural (flora and fauna) aspects. However, this distance must not be less than 30 m.
- All runoff and seepage water must be captured by a drainage network that conveys the wastewater to a pond or a treatment system or a monitoring station at the point of discharge of the final effluent.

In addition to the above, the footprint, slope inclination and maximum height of the stockpiles will be governed by:

- The property boundaries
- The strength and bearing capacity of the foundation soils

Furthermore, their design must allow the design of the contact water management system to comply with the criteria defined in Section 18.14.2.1.

The target factors of safety for both stockpiles are summarized in Table 18.1.

Table 18.1 Target factors of safety for the Waste Rock Pile

Loading Condition	Period	Target FOS – Local Stability	Target FOS – Global Stability
Static	Drained / Long term	1.2	1.5
Maximum undrained	During or at the end of construction	1.1	1.3
Residual undrained	Post-earthquake	1.0	1.1
Pseudo-static	Maximum undrained / Instantaneous	1.0	1.1

18.14.1.4 Geotechnical Stability

The available information was used to assess the liquefaction potential of the foundation materials. The piezocone soundings indicate that most of the material is dilative, based on the state parameter, and the seismic assessment returned factors of safety greater than 1.0 for the foundation materials.

The geotechnical stability of the WSE and the TS was analysed under static, post-seismic and pseudo-static conditions, along four (4) and two (2) cross-sections respectively. These sections were selected to assess both global stability (deep seated slip surface) and local stability (each individual bench). The results show that, under the loading conditions described above, the calculated factors of safety for both stockpiles exceed the target values summarized in Table 18.1.

18.14.1.5 Mass Balance

The LOM plan presents the mine waste rock that will need to be stored until the end of the mine life, scheduled for 2032 is 1,100,000 m^3. The Table 18.2 presents the estimated maximum storage volumes for the existing footprint of the waste rock dump as well as for the planned extension, at the design crest elevations.

Table 18.2 Waste Dump Capacity

Section of the Waste Rock Dump	Top Elevation (m)	Maximum Storage Volume (m^3)
Existing footprint	308.00	199,300
Planned extension	312.00	324,000

Thus, the waste rock dump, including the planned extension, provides a total storage capacity on the order of 523,300 m³ at the top elevations indicated above. Considering the soil description described above, the prescribed top elevation cannot be increased. The proposed configuration of the waste rock dump allows for the storage of mine waste rock until 2030. Beyond this period, the mine waste rock will have to be stored in a new location, which remains to be determined. For cost estimation purposes, an allowance based on the ratio relative to the cubic metres to be stored in the designed dump will be established.

18.14.2 Water Management around the Waste Rock Stockpile

18.14.2.1 Regulatory Requirements and Best Practice Guidelines

The following laws, directives, industry best practices and guidelines (non-exhaustive list) have been used to design the water management system around the waste rock stockpile:

- Lignes directrices sur la sécurité des barrages. Association canadienne des barrages (ACB), 2007 v. 2013.
- Bulletin technique : Application des lignes directrices sur la sécurité des barrages aux barrages miniers. Association canadienne des barrages (ACB), 2019.
- A Guide to Audit and Assessment of Tailings Facility Management. Association Minière du Canada (AMC), 2011.
- Guide de gestion des parcs à résidus miniers, troisième édition. Association minière du Canada V3.2 (AMC), 2021.
- Sécurité des barrages de miniers (Version pour examen par les comités nationaux). Commission internationale des grands barrages (CIBG), Bulletin Preprint No. 194.
- Norme mondiale de l'industrie sur la gestion des résidus miniers (2020).
- Rapport technique – Conception et évaluation des digues de résidus miniers, Agence de protection de l'environnement des États-Unis (US EPA), 1994.

18.14.2.2 Hydrological Design Criteria

The design criteria for contact surface water management is based on DIR-019. The surface water collection basin (BC) and the pumping station (Section 18.14.2.7) are designed to manage spring runoff, which is a combination of a 100-year snow accumulation melting over a 30-day period and a 100-year 24-hour rainfall event.

The precipitation data used for the design of the water management structures come from Wood in 2021 (Wood, 2021a) and extrapolated from the Val-d'Or weather station, while the water volume of the probable maximum precipitation (PMP) was taken from Wood, 2021b, and was estimated using the isohyet method by SNC-Lavalin in 2004 (SNC, 2004). No increase related to climate change is applied, considering the mine's lifespan is prior to 2041. Table 18.3 summarizes these values.

Table 18.3 Precipitation values

Event	Value (mm water equivalent)
1: 100-year 24-hour storm	74.7
1: 100-year snow accumulation	450.3
PMP	360

18.14.2.3 Collection Basin and Peripherical Dike

The surface water management strategy includes the collection of runoff and meltwater from the overall footprint of the waste rock and topsoil stockpiles. Thus, collection ditches for this water will be constructed around the perimeter of the waste rock and topsoil stockpiles. These ditches will direct contact water to the lined collection pond, which is strategically located based on the local topography and the groundwater level. From this pond, the water will be pumped to the existing polishing pond at the mine site (see Figure 18.8) and managed by the TSF operations.

SRK has classified the perimeter dike of the collection pond to be of "**Low Consequence**" per CDA (2013). The targeted safety factor for the peripheral dike is summarized in Table 18.1. The geotechnical parameters used to assess the geotechnical stability of the dike have been defined using the same data set as used for the stockpiles and the same stability assessment philosophy and methodology applied.

The resulting structure is a dike with a maximum height of 2.7 m, designed to contain the volume generated by the design flood. The results show that, under the loading conditions described above, the calculated factors of safety for the dike as designed exceed the target values summarized in Table 18.1. Figure 18.10 shows the typical cross section of the dike lined with a 2.0 mm LLDPE (Linear Low Density Polyethylene) geomembrane on the upstream face.

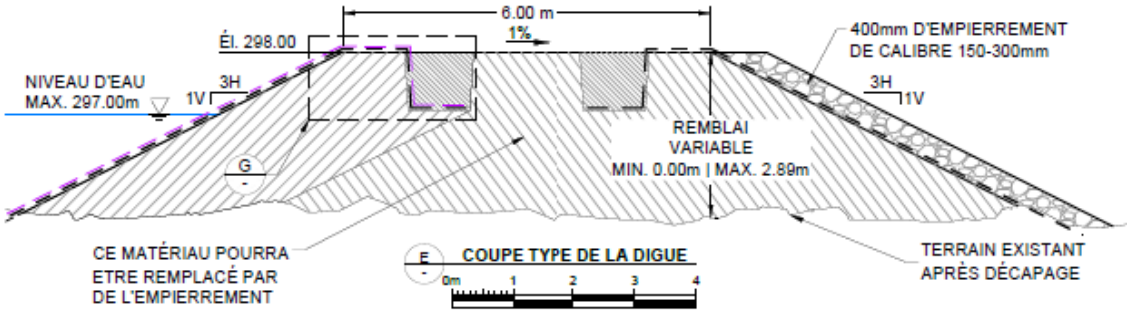


Figure 18.10 Typical Cross Section of the Collection Basin

The collection pond (CP), located upstream of the dike, will be partly excavated into native ground to provide sufficient storage capacity to manage the runoff generated by an environmental design flood characterized by a 24-hour, 1-in-100-year rainfall event combined with a 1-in-100-year snowmelt distributed uniformly over a 30-day period. The pond will be lined and fitted with an emergency spillway sized to pass the probable maximum flood. Water collected in the pond will be pumped and managed in accordance with the overall site water management strategy (Section 18.10), as shown in Figure 18.11. The storage capacity of the pond is summarized in Table 18.4. The CP is required from the beginning of the construction phase of the WRE and the TS and will be built in a single phase. The design included an allowance for up to 300 mm of sludge to accumulate across the bottom area of the CP.

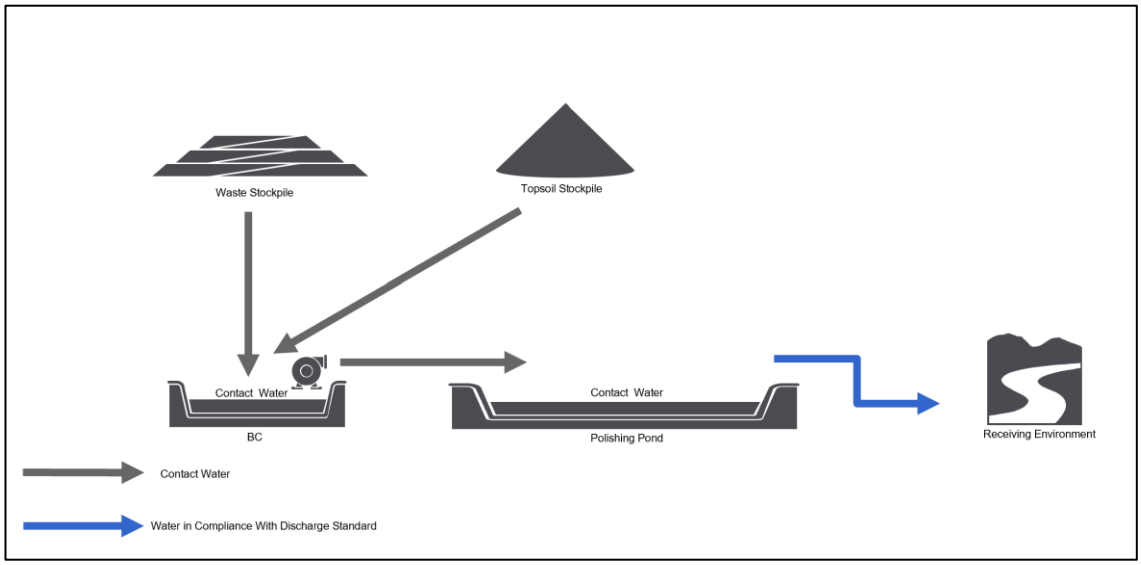


Figure 18.11 Simplified Flow Schematic

Table 18.4 Design parameters of the CP

Description	Value
Pond bottom elevation (masl)	295.0 to 295.7
Maximum water elevation (masl)	297.0
Water volume at maximum elevation (m^3)	9,800

18.14.2.4 Emergency Spillway

The hydraulic capacity of the collection pond's emergency spillway will allow for the evacuation of the Probable Maximum Flood (PMF) of 360 mm/24 h (Wood, 2021b) without overtopping. For the purposes of hydraulic modelling, it was assumed that the water level in the pond was at the emergency spillway crest at the start of the design storm.

In the event of a storm event exceeding the environmental design flood, the emergency spillway and discharge channel will be protected against erosion by a 400 mm thick layer of riprap (150-300 mm in diameter). The discharge channel will direct the water to Lake Montigny in order to limit potential impacts on the integrity of the works.

18.14.2.5 Collecting Ditches

The criteria below were retained for the design of the ditches surrounding the waste rock stockpile.

No diversion ditches (clean water diversions) have been included in the design since local topography does not require such assets.

- Contact water collection ditches surrounding the Waste Rock Stockpile will be lined using 2 mm linear low-density polyethylene geomembrane.
- Geomembrane from the contact water collection ditches surrounding the waste rock stockpile will be exposed.
- Ditches will have the following characteristics:
  - A trapezoidal section
  - A minimum base width of 1.5 m, as per flow requirements
  - A minimum effective depth of 1.0 m, as per flow requirements
  - A minimum slope of 0.5%
  - Minimum side slopes of 2H:1V in the ground and rock
  - A minimum freeboard of 0.50 m during the design flood

Runoff coefficients were estimated for each sub-catchment based on their land use (as summarized in Table 18.5) and used to estimate peak flow rates in the collection ditches (CD) during the design storm event.

Table 18.5 Runoff coefficient adopted according to soil types

Location	Runoff coefficient
Waste rock pile (WS)	0.7
Topsoil stockpile (TS)	0.5
Collection Pond	0.99
Increased coefficient	0.71

The ditches surrounding the waste rock and Topsoil Stockpiles were designed using the design flood described in Section 18.14.2.1, without including an additional factor to account for the effects of climate change due to the end of mine life estimated before 2041. The values of the parameters used, as well as the peak flow rates for each structure, are summarized in Table 18.6.

Table 18.6 Design parameters and flow rate of the collection ditches

Elements	Main Sub-Sector	Drained Area (m^2)	Runoff Coefficient	Time of Concentration (min)	Peak Flow Rate (m^3/s)
FC-1	WRP	53,710	0.70	12	0.96
FC-2	WRP & TSS	39,338	0.63	15	0.60

Trapezoidal geometry was selected for the design of the collection ditches. This type of ditch is commonly used in the industry because the method for calculating flow is proven and construction is relatively easy. The minimum dimensions for the water flow area of the CDs and the proposed riprap are presented in Table 18.7. It should be noted that the ditches around the WRP and TSS will not be lined with riprap and, consequently, the geomembrane will be exposed. The exact dimensions of the CDs were determined based on the results of the PC SWMM modelling.

Table 18.7 Sizing of the collecting ditches

Elements	Bottom width (m)	Depth of Flow Section (m)	Side Slope	Water Depth (m)	Max Average Velocity (m/s)
FC-1	1.5	1.0	2H: 1V	0.4	2.90
FC-2	1.5	1.0	2H: 1V	0.2	2.33

A typical cross section of FC-1 and FC-2 is shown in Figure 18.12.

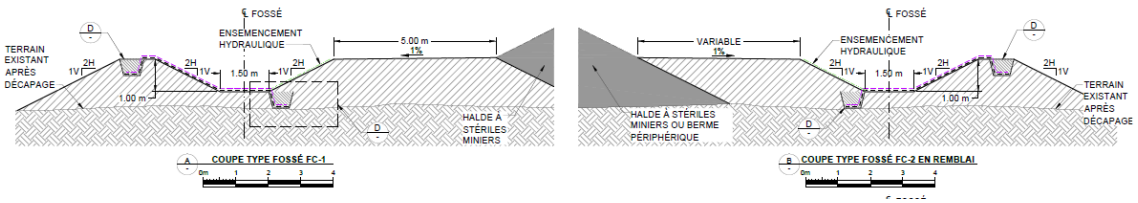


Figure 18.12 Collecting Ditches Cross Section

18.14.2.6 Culverts

Three (3) culverts will be required to cross the collection ditches and maintain access to the eastern portion of the waste stockpile, as well as beneath the access ramp to the existing part of the latter.

The following criteria were retained for the design of the culverts surrounding the waste and topsoil stockpiles:

- The culverts are designed to be consistent with the design criteria of the ditch in which they will be installed.
- The minimum slope is 1% to avoid sedimentation and to allow self-cleaning.
- HDPE pipes are considered to have a Manning coefficient of 0.018.
- The bedding thickness will be 300 mm while the cover will be at a minimum of 1,000 mm.

The three (3) culverts will be of identical dimensions, calculated to be 1,050 mm.

18.14.2.7 Pumping station

A pumping station installed in an insulated sea container located near the collection pond will be used to convey contact water either primarily to the polishing pond or to the tailings storage facility. The two (2) 60 HP pumps (one (1) already available in the Kiena site inventory and a second to be purchased for redundancy) will alternately supply the 625 m long, 200 mm Ø HDPE DR11 pipeline to the polishing pond. The pumping rate of 240 m³/h allows the pond to be emptied in 41 hours. This will need to be included in the current site-wide water balance.

18.15 Mineralized Material Stockpile

Mineralized material stockpiles are located at the exit of PI portal to receive ore material from development and production. The ore material is later transported to Kiena to an authorized surface mineralized material stockpile just East of the parking of directly to the surface crusher installation. The authorized capacity of mineralized material stockpile at Kiena is about 25,000 t.

18.16 Paste Backfill Plant

The surface paste backfill plant, commissioned in late 2022 following the previous PFS, replaced the former hydraulic backfill plant previously used at the Kiena Mine. The facility has a nominal production capacity of approximately 1,920 t/d of paste backfill (80 tph) and is designed to produce cemented paste backfill using mill tailings, binder, and process water.

The paste backfill plant supports underground mining operations by supplying engineered backfill to the Kiena Deep mining areas through the existing distribution system. The current distribution network is planned to be extended through tie-ins to the existing infrastructure to support the future Presqu'île and Dubuisson mining areas as development progresses. Upgrades to the existing paste pump are required in order to pump paste to these new zones.

Paste backfill constitutes an integral component of the underground mining method by supporting the planned mining sequence, maintaining geotechnical stability, and maximizing mineral reserve extraction through the timely placement of engineered backfill.

The existing paste backfill plant is considered adequate to support the LOM production schedule presented in this FS. No major expansion of the surface facility has been identified as necessary.

18.17 Process Plant

The process plant is located inside the process building erected in 1984. The building itself is the same as in the previous study with new equipment, like SO_2-Air process reagent addition, installed inside the building without any required expansion. The building includes all equipment required for the extraction process.

18.18 Tailings Transportation

The tailings transportation consists of a pipeline that run along the mine access road that allows to pump the tailings as a slurry to the tailings management facility. There is also a pipeline to send the slurry to the near located paste backfill plant.

18.19 Tailings Storage Facilities and Reclaim

As noted above, the existing TSF is contained by perimeter dykes and comprises of two (2) cells: North Cell and South Cell (see Figure 18.13). The starter perimeter dykes comprised zoned embankments with wide central low permeability silty clayey core and upstream and downstream rockfill shells. Geotextile was placed on the downstream side of the clayey core to act as a separator/filter between the core and the downstream rockfill shell. The first two (2) phases of the dyke raises were performed by downstream construction method. Some of the later dyke raise(s) were constructed by upstream method on the tailings beach and comprised of silty clay / tailings core and waste rock shells with geotextile fabric on the downstream side of the core.

Subsurface soil conditions at the TSF site are characterized by the presence of varved grey silty clay stratum underlain by a clayey silt stratum and then till. A brownish crust is typical in the upper portion of the varved grey silty clay. The combined thickness of varved silty clay and clayey silt strata generally ranges between 5 and 15 m at the TSF. The tailings have been deposited into the TSF by slurry spigotting. Therefore, the tailings within the TSF (which act as the foundation of some of the dyke raises) are expected to be in loose to very loose condition and potentially susceptible to both static and seismic liquefaction.

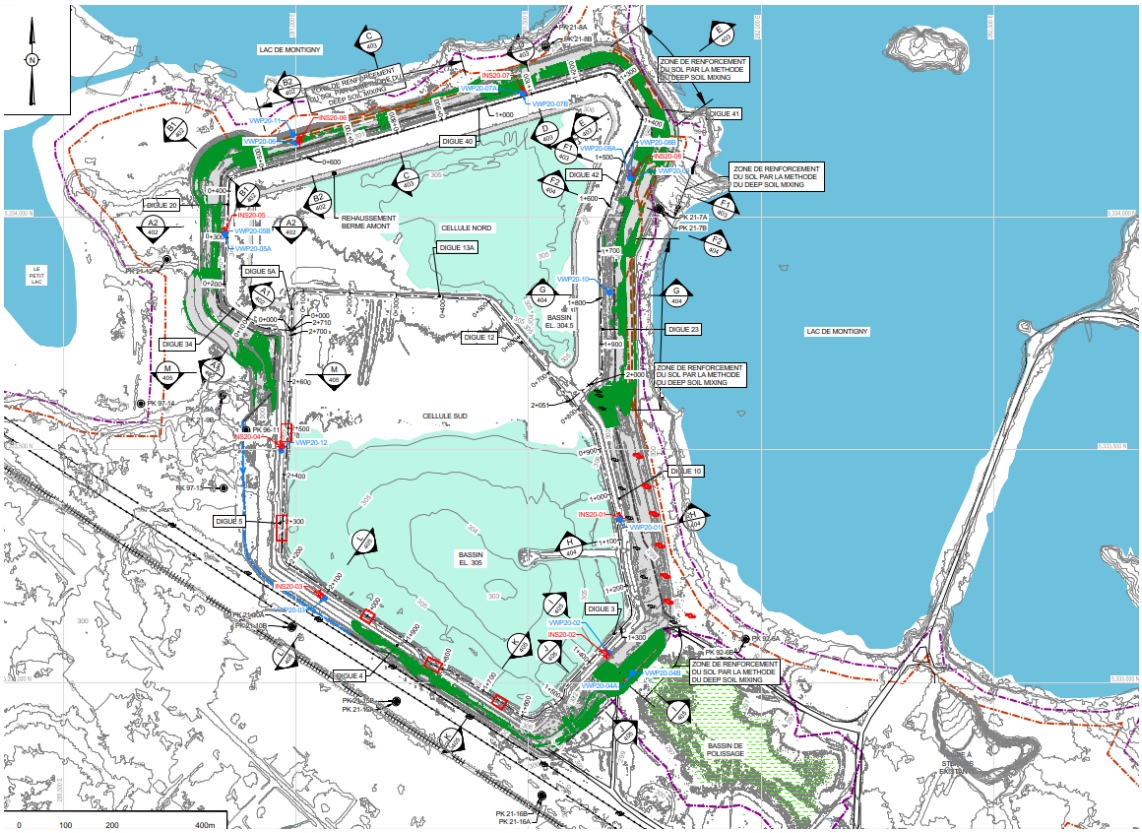


Figure 18.13 Existing Tailings Storage Facility

18.19.1 Geotechnical Studies

Several investigations have been carried out at the TSF starting from 1981. Some of the site investigations include:

- Études préliminaires. Projet d'usine Kiena (0661-1) (Géoroche, 1981).
- Geotechnical Investigation for Proposed Tailings Area (Geocon, June 1983).
- Étude pédologique et géotechnique. Parc à résidus de la Mine Kiena (site A) (2965-03) (Géoroche, 1984).
- Étude géotechnique additionnelle. (2965-4) (Géoroche, 1984).
- Étude géotechnique et recommandations Phase II et III (4867-01) (Géoroche, 1985).
- Étude géotechnique PAR Kiena (4092-00-01) (LEQ,1990).
- Étude géotechnique et recommandation – Agrandissement du PAR Kiena (4092-02-01) (LEQ, 1991).
- Geotechnical Study of the Kiena Complex, Val-d'Or, QC (Stantec, September 2018).
- Supplementary Geotechnical Investigation – Eastern Area of Kiena Complex (Stantec, November 2019).
- Geotechnical Investigation and Instrumentation (Wood, 2021b).
- Kiena Mine –Instrument Installation at Dyke 23 And Dyke 4 (WSP, 2025b).

18.19.2 Climate and Hydrology

The closest weather station to the project site is Environment and Climate Change Canada's station at Val-d'Or Airport, located 13.3 km southeast of the project site. Canadian Climate Normals data for this station from 1971 to 2000 indicate that the average annual precipitation is 935.6 mm, with approximately 644.5 mm (69%) falling as rain and the remainder falling as snow. Most of the rainfall occurs in the summer and fall months, with peak rainfall occurring during September (99.8 mm). Most of the snow falls from October to April, with peak snowfall in December (61 cm). For the hydrotechnical analysis, Val-d'Or Airport Station annual 24-hour precipitation maximums from 1961 to 2017 and snowfall data from 1951 to 2018 were used to determine storm depths for TSF design. The daily average temperature is -17.2°C in January and 17.2°C in July. Temperatures fall below freezing from November through March.

Val d'Or annual 24-hour precipitation maximums from 1961 to 2017, and snowfall data from 1951 to 2018, were used to determine storm depths for TSF design. Quebec's Ouranos Consortium on Regional Climatology and Adaptation to Climate Change (Ouranos) provides climate change projections for Quebec. Precipitation projections are available for total annual and seasonal (spring, summer, fall, winter) precipitation, as well as 5-day precipitation maximums, on a regional basis for the 2041 – 2070 period (beyond the Project LOM). Ouranos does not provide climate change projections for 30-day snowmelt or for 24-hour (1-day) rainfalls; however, the latter value is available through Climate Atlas of Canada (Climate Atlas). For a high carbon (RCP 8.5) climate change scenario, Climate Atlas' projected mean 1-day precipitation maximum for Val d'Or for 2021-2050 is 39 mm. This is lower than the mean 24-hour precipitation maximum used for TSF design (43.3 mm). As noted, data on the Environmental Design Flood (30 day, 1 in 100-year snowmelt plus 24-hour, 1 in 2,000-year rainfall) are not available from the climate change sources. However, based on the available data (mean annual maximum 1-day rainfall), the project climate data used for TSF design are relatively recent and yield a higher value than Climate Atlas projection. For this reason, the water management plan and infrastructure described in this study are expected to be adequate for managing the effects of climate change within the project design life (2021-2029). However, it should be noted that climate change impacts should be considered as part of closure design for future project work.

18.19.3 Seismic Hazard

The Kiena Mine Complex is located approximately 13.3 km northwest of Val-d'Or Airport and at approximately latitude 48°08' N and longitude 77°54' W within the seismic source zone IRB (Iapetan Rift Background source zone) incorporated in the National Building Code of Canada (Adams and Halchuk, 2003). The IRB is a source zone of relatively low to moderate seismicity, with maximum credible earthquakes of magnitude 7.0.

A site-specific seismic hazard assessment for the Kiena Mine Complex Project was performed to develop design ground motion parameters and time histories (Wood, 2021c). The publicly available software OpenQuake was used for this assessment.

The historical earthquake catalogue in the site region begins in 1814 and supports the conclusion that the site area is seismically quiet. The closest earthquake epicentre to the site is located 2.7 km away from it; 17 epicentres are located within 100 km of the site, and only nine earthquakes of moment magnitude (Mw) 4 and larger have occurred within 200 km of the site. However, one of the largest earthquakes in southeastern Canada occurred in 1935 at a location about 170 km southwest of the site.

Design ground motion parameters were developed for the Site Class B/C ($V_{s,30}$ = 760 m/sec) which represent soft rock to very dense soil condition. Ground motion was predicted in terms of peak acceleration (PGA) and spectral acceleration (Sa) at several values of spectral period (Ts). Ground motion was predicted for four hazard levels corresponding to average return periods ranging from about 500 years to 10,000 years (see Table 18.8). Probabilistic seismic hazard results disaggregated for earthquake magnitude and epicentral distance indicate that earthquake magnitudes between Mw 5.5 and 7.25 are most likely to generate ground motion of significance at the site for a 5,000−year average return period.

Table 18.8 Peak Ground Accelerations for Kiena Site (Wood, 2021)

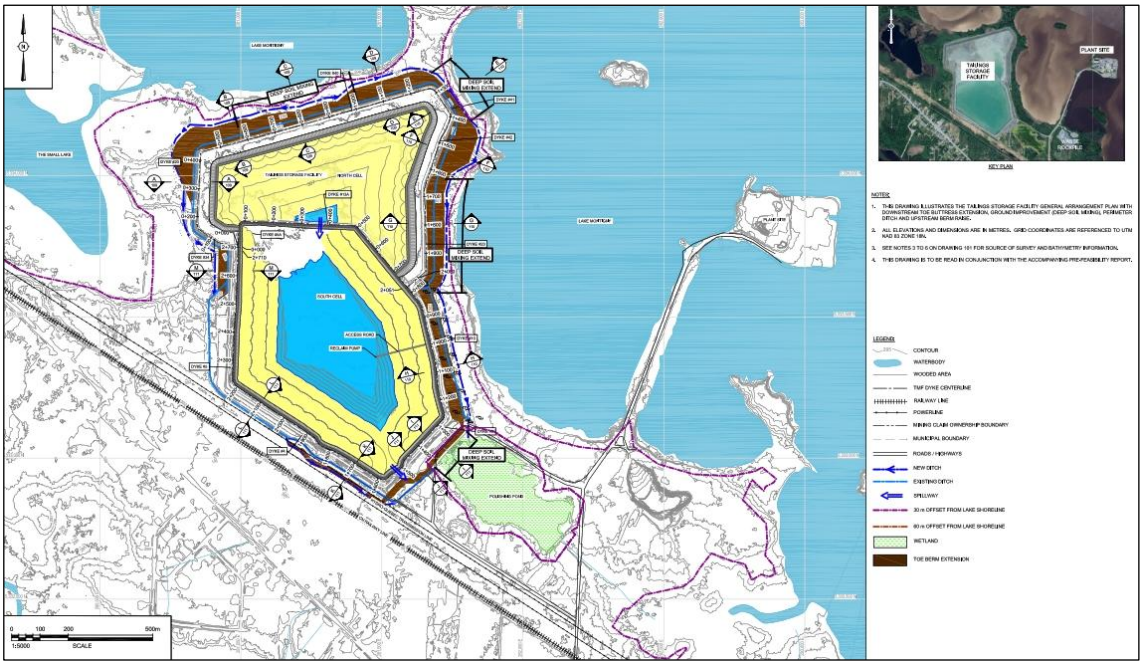
Period	Probabilistic Response Spectrum for 500-year Return Period	Probabilistic Response Spectrum for 2500-year Return Period	Probabilistic Response Spectrum for 5000-year Return Period	Probabilistic Response Spectrum for 10000-year Return Period
T (Sec)	SA (g)	SA (g)	SA (g)	SA (g)
0.01	0.0278	0.0794	0.1154	0.1624

18.19.4 Safety Status of Existing TSF and Upgrade History

Previous dam safety assessments (Wood, 2021) of the TSF identified that portions of the perimeter dykes required upgrading to meet current dam safety requirements. The assessments also identified opportunities to increase the storage capacity of the facility to support ongoing operations.

To address these requirements, a program of dyke upgrades was completed around the TSF between 2021-2023. The upgrades included strengthening of perimeter dykes and improvements to foundation conditions where required. The design considered site-specific constraints, including the proximity of Lac de Montigny and the setback requirements of Directive 019. Where practical, the upgraded works were located outside the 60 m setback from the lake high-water mark. In areas where the existing facility footprint already extended within this setback, the upgrades were designed within the constraints of the existing configuration while maintaining regulatory compliance. In addition to the safety upgrades, the North Cell perimeter dykes were raised by 1.5 m to Elev. 308.5 m in 2022 and another 1.5 m to Elev. 309.0 in 2025, providing additional storage capacity to support continued operations.

The completed upgrades and dykes raises have improved the overall safety of the facility and increased the available storage capacity within the existing TSF footprint. Based on current evaluations, a further increase in TSF capacity could be achieved through a future raise of the South Cell, subject to detailed engineering design and regulatory approvals.



Source: Wood, 2021a

Figure 18.14 TSF Upgrade and LOM Tailings Deposition Plan

18.19.5 Tailings and Water Management Plan

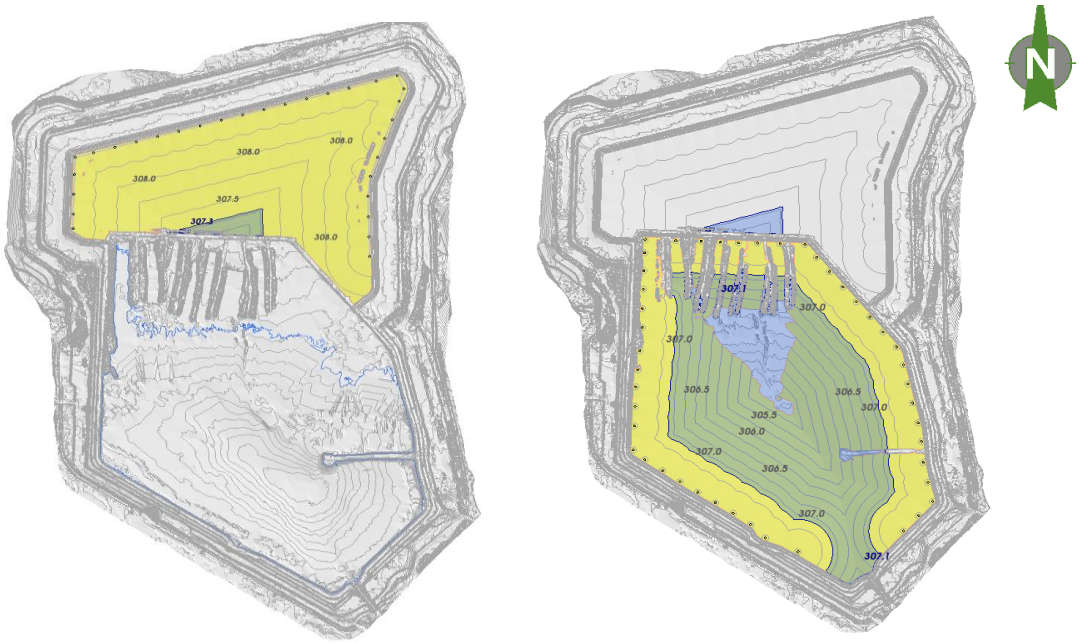
The current tailings and water management at TSF involve:

- Tailings deposition within the North Cell with maximum tailings discharge elevation of 308.5 m (0.5 m below crest).
- Excess water in the North Cell is currently being transferred to the South Cell via active pumping. An Internal Spillway is planned to be constructed on Dyke 13 to facilitate passive flow of excess water from the North to the South Cell.
- The South Cell is utilized for water management. Water collected within the South Cell is pumped to the Water Treatment Plant, located at the Dyke 10 toe buttress. The reclaim pump system is situated within the South Cell pond and is accessed via the road connected to Dyke 10. Following treatment, water is discharged to the Polishing Pond and subsequently released to the environment through the existing discharge outlet. Reclaim water for mill operations is also supplied from the South Cell using the same pump system.
- EDF is to be contained below the Emergency Spillway invert of 306.5 m which is 1.5 m below the South Cell crest as per Directive 019 requirement. The North Cell pond level is also managed to maintain minimum freeboard of 1.5 m to satisfy Directive 019.
- IDF is to be safely pass through the Emergency Spillway.

Based on the latest bathymetric survey, LOM tailings production, and tailings deposition plan, the North Cell has sufficient remaining capacity to accommodate tailings deposition until approximately September 2028. The remaining LOM tailings production can then be deposited within the South Cell with its perimeter dykes raised to elev. 309.0 m, providing a combined storage capacity of approximately 1.24 Mt, which is sufficient to contain the projected LOM tailings inventory.

Table 18.9 LOM Tailings Production – TSF Required Capacity

Year	Ore milled (Mt)	Tailings (Mt)	Tailings to TSF (Mt)	Cumulative Tailings to TSF (Mt)
2026	323,109	323,109	147,961	147,961
2027	360,010	360,010	195,615	343,576
2028	363,647	363,647	209,170	552,747
2029	301,346	301,346	136,589	689,336
2030	337,461	337,461	178,581	867,917
2031	335,273	335,273	176,017	1,043,935
2032	307,330	307,330	143,470	1,187,406
2033	150,203	150,203	50,728	1,238,134



North Cell Deposition Plan

South Cell Deposition Plan

Figure 18.15 TSF Upgrade and LOM Tailings Deposition Plan

At closure, the Dyke 3 Emergency Spillway is proposed to be breached, and the tailings surface in both cells will be graded and covered to provide erosion protection. The final landform will allow continuous passive drainage toward the Polishing Pond, consistent with the long-term closure and water management objectives for the TSF.

18.19.6 TSF Design Considerations and Criteria

As noted in the previous section, the TSF storage capacity was increased through a series of embankment raises completed between 2021 and 2025. The design of these raises was based on site-specific operational and closure requirements, as well as applicable regulatory and technical guidelines. The following section presents the principal design criteria used to develop the embankment raise configurations and evaluate their performance.

- The TSF dykes are classified as having a “Very High” hazard classification given the environmental and economic consequences of a potential failure under both Canadian Dam Association Guidelines (CDA, 2013 and 2019) and Global Industry Standard on Tailings Management (GISTM, 2020).
- The EDF is defined as the volume of runoff generated from the 1:2000-year 24-hour storm and 1:100-year 30-day snowmelt based on Directive 019 (2012).
- The TSF is to contain the EDF runoff above the maximum operating water level (MOWL) with no discharge to the environment.
- The Probable Maximum Flood (PMF) is adopted as the Inflow Design Flood (IDF). Emergency Spillway is sized to safely pass IDF.
- The runoff collection ditches are designed for 1 in 100 year 24-hour design storm event based on Directive 019 requirement.
- Directive 019 requires TSF dykes to be designed for a minimum 1 in 2,475 year seismic event. Considering CDA (2013, 2019) and GISTM (2020) requirements for Very High consequence classification, 1 in 5,000-year seismic event is adopted as the design earthquake.
- Tailings and waste rock are anticipated to be non-potentially acid generating with a generally low risk of neutral metal leaching. The TSF design has been developed to meet both Directive 019 (2012) and CDA (2013, 2019) requirements

18.19.7 Typical Dyke Sections

The plan layout of the TSF downstream toe buttress including the Deep Soil Mixing zone, and upstream berm raises is shown on Figure 18.13. Typical TSF dyke cross sections for North and South Cells are shown in Figure 18.16 and Figure 18.17, respectively.

The primary construction materials were rockfill (waste rock) and tailings. Ground improvement by DSM was required at dyke segments where space is limited between the dyke toe and lake shore. In order to support the upstream berm construction at North Cell over tailings beach, the tailings beach was compacted by means of track-packing compaction to achieve strength improvement.

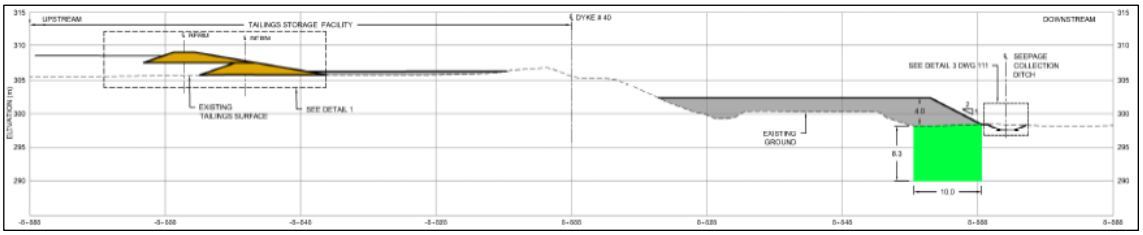


Figure 18.16 Typical TSF Dyke Section at North Cell

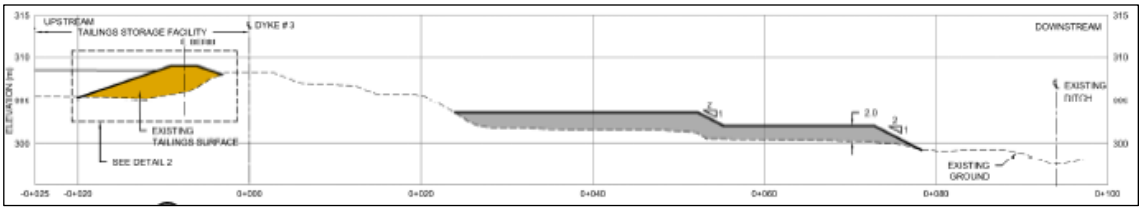


Figure 18.17 Typical TSF Dyke Section at South Cell

18.19.8 Stability Analyses

Limit equilibrium stability analyses were completed using Slope/W and the Morgenstern-Price method to support the design of the embankment upgrades, including sizing of the downstream toe buttress extension, determination of the extent of the DSM treatment zone, and configuration of the upstream berms. Analyses were performed for all applicable loading conditions using the material parameters and methodologies documented in Wood (2021a, b) and WSP (2025). The results indicate that the proposed embankment configurations satisfy the required stability criteria under both operating and long-term conditions for the North and South Cells.

18.19.9 Seepage Analyses

Steady-state seepage analyses were completed using Seep/W for representative sections of the North Cell and South Cell. The analyses were undertaken to evaluate phreatic surface conditions within the embankments and estimate seepage losses from the TSF under normal operating water levels and end-of-deposition conditions. Detailed input parameters, methodologies, and results are provided in the Wood (2021a, b) and WSP (2025).

18.19.10 Seepage and Runoff Collection System

Runoff from the TSF dykes and seepage are collected in perimeter ditches sized to handle 1 in 100-year 24-hour rainfall event. Water captured in the perimeter ditches is directed to the Polishing Pond. Layout of perimeter collection ditches is shown in Figure 18.14.

18.19.11 TSF Water Management and Operating Levels

The proposed TSF water management plan involves the following:

- Year 2026 – 2028:
  - North Cell Crest: 309.0 m, South Cell Crest: 308.0 m, Emergency Spillway Invert: 306.5 m, Internal Spillway Invert: 307.3 m
  - Tailings deposition in North Cell.
  - Operating pond and EDF managed at South Cell.
  - Passive flow from North Cell to South Cell via Internal Spillway.
  - Emergency Spillway at South Cell Dyke 3 with 1.5 m freeboard.
- Year 2028 - 2032:
  - North Cell Crest: 309.0 m, South Cell Crest: 309.0 m, Emergency Spillway Invert: 307.5 m, Internal Spillway Invert: 307.3 m.
  - Tailings deposition in South Cell.
  - Operating pond and EDF managed at South Cell.
  - Passive flow from North Cell to South Cell via Internal Spillway.
  - Emergency Spillway at South Cell Dyke 3 with 1.5 m freeboard.

South Cell water level is managed by treating and discharging to Polishing Pond. A Reclaim Pump System (located within the South Cell, upstream of Dyke 10) is used to convey water from South Cell to the WTP which is located at Dyke 10 downstream buttress. Based on the water balance and hydrotechnical analyses for TSF water management (Wesdome, 2026), maximum operating pond levels for Year 2026-2028 and Year 2028-2028 periods are 305.3 and 306.5 m, respectively.

18.19.12 Instrumentation plan and monitoring

A total of 31 Vibrating Wire Piezometers (VWPs) and 10 Shape Accel Array (SAA) Inclinometers (Figure 18.18) have been installed during various stages of the TSF upgrades and raises to monitor TSF Dykes performance.

Real-time data from all instruments are generally available through the QuickView digital monitoring platform. For the piezometers, hourly readings are downloaded as CSV files from QuickView and incorporated into the existing database to track changes in piezometric levels. For the inclinometers, cumulative displacement plots are captured from QuickView at selected dates to illustrate deformation trends over time.

Instrumentation data are reviewed on a monthly basis, and an Instrumentation Monitoring Report is prepared to assess TSF Dykes performance and compliance with the site-specific Trigger Action Response Plans (TARPs).

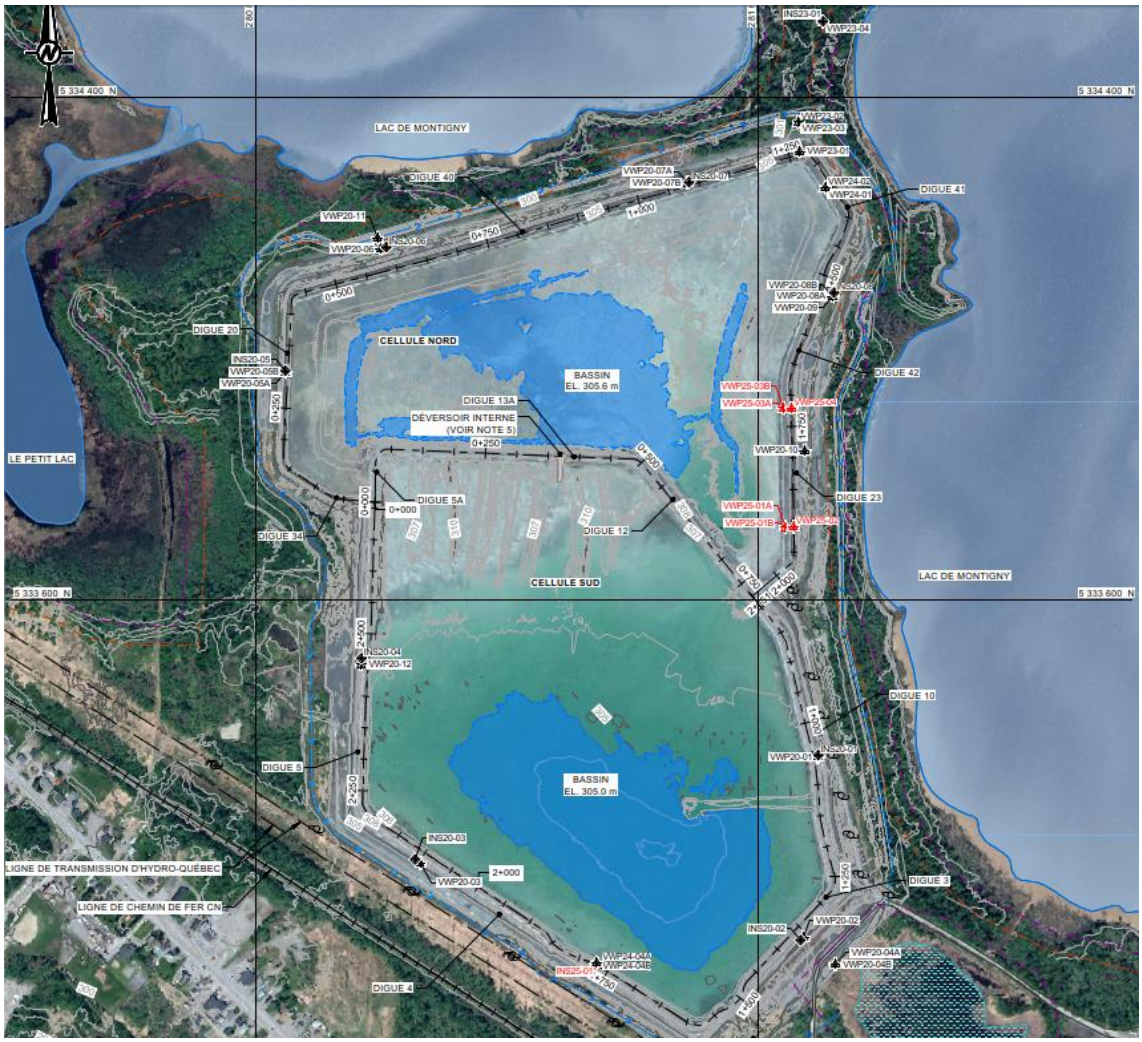


Figure 18.18 Instrumentation Plan

18.19.13 Upcoming TSF Construction Activities

Upcoming key construction activities at the TSF includes:

- Construction of the Internal Spillway. This is planned to be completed by fall 2026 and the construction contract has already been awarded.
- Construction of the upstream 1-m berm raise to crest elev. 309.0 m at South Cell perimeter dykes by September 2028.
- Tailings borrowed from the beach are typically used for berm construction. Upstream and downstream slopes of the compacted tailings berm are to be covered with non-woven geotextile and rockfill.
- Construction of Emergency Spillway. This is required to be completed by September 2028.

Above construction activities require borrowed tailings and waste rockfill for embankment construction, erosion protection, drainage features, and other supporting infrastructure. Waste rock generated from mining operations and existing stockpiles provide suitable sources of construction material, with any surplus material directed to other site uses, such as underground backfill, stockpiling for future needs, or closure-related earthworks.

Tailings transport and site water management are supported by a network of pipelines connecting the process plant, TSF, and water treatment facilities. These pipelines are generally routed within existing site infrastructure corridors to minimize disturbance and facilitate operation and maintenance. Water treatment infrastructure is incorporated into the overall site water management system to manage contact water and support compliance with environmental requirements.

18.20 Infrastructure Adequacy

The Kiena Mine is an established underground mining operation with the majority of the surface infrastructure already constructed and in service. Existing facilities have been progressively developed and upgraded over many years of operation to support underground mining, mineral processing, maintenance activities, water management, tailings disposal, and site services.

Since completion of the previous PFS, the principal surface infrastructure improvements include the construction and commissioning of the paste backfill plant and the development of the Presqu'île portal, providing an additional surface access to the underground mine. These improvements have enhanced operational flexibility while supporting the mining strategy adopted for the current LOM plan.

Based on the work completed for this FS, the QPs consider the existing surface infrastructure to be adequate to support the planned mining operation throughout the LOM. The existing facilities are expected to remain in service for the duration of the LOM and will require only routine operational maintenance and periodic repairs to maintain their functionality and reliability. No major rehabilitation, replacement, or expansion of the existing surface infrastructure has been identified as necessary to support the planned mining activities.

19. MARKET STUDIES AND CONTRACTS

19.1 Market

The Kiena Mine produces gold in doré form, which is a widely traded intermediate precious metal product. Doré bars are transported to an established Canadian refinery where final refining is completed to commercial specifications prior to sale.

Refining capacity is not considered a constraint to production or gold sales, as several established refining facilities are available in North America. Refined gold is sold to recognized Canadian financial institutions at prevailing market prices, less customary refining, transportation, and transaction charges.

Gold is traded globally on well-established and highly liquid markets with transparent pricing. Accordingly, no project-specific market studies were deemed necessary to support the economic analysis. Historical gold prices and CAD/USD exchange rate trends over the five-year period from May 2021 to May 2026 are presented in Figure 19.1. Pricing assumptions adopted for this Technical Report are based on historical market performance, observable market data, and prevailing industry practice.

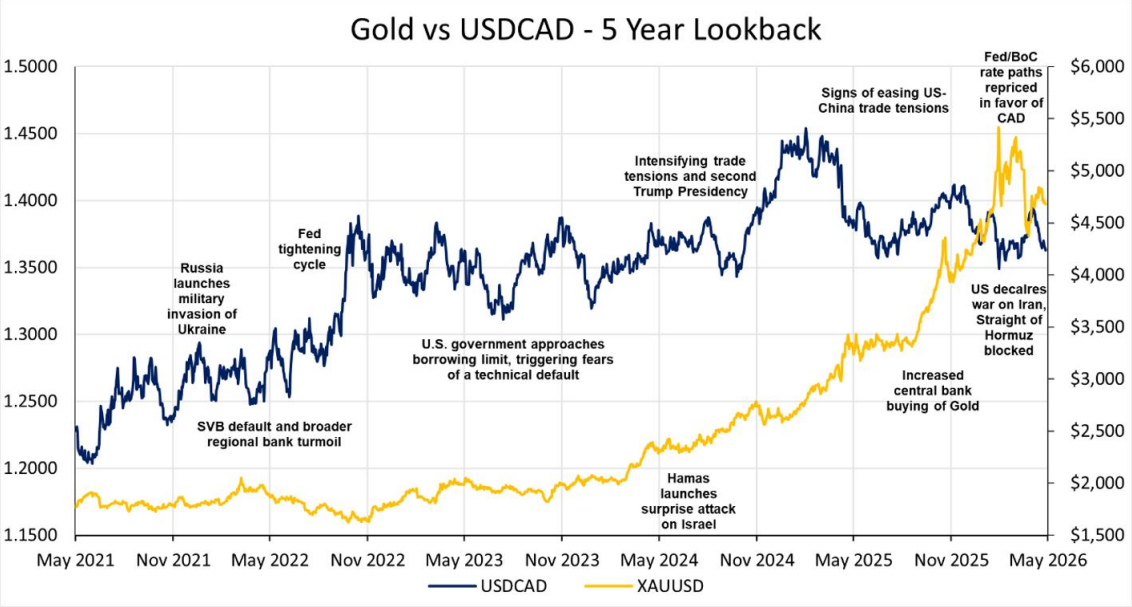


Chart by NBC, data sourced from Bloomberg

Figure 19.1 Historical gold prices and the US dollar to the Canadian dollar exchange rates for the 5-year period from May 2021 to May 2026

Project economics have been evaluated using the following long-term metal price and exchange rate assumptions:

- Gold: US$1,800/oz
- CAD/USD: CAD$1.35/US$1.00

These assumptions were selected for use in the economic evaluation and are considered reasonable based on historical market performance and prevailing industry practice.

Based on its review of the available market information and long-term historical pricing trends, Norda Stelo considers the selected long-term metal price and exchange rate assumptions to be reasonable for use in the economic evaluation.

19.2 Material Contracts

Wesdome Gold Mines Ltd. has entered into various agreements and commercial arrangements that materially support operations at the Kiena Mine. These include both formal contracts and recurring purchase order–based engagements with key service providers. Contracts and supply arrangements with a total annual value exceeding $2 million are summarized in Table 19.1.

Table 19.1 Material Commercial Agreements with an Annual Value Exceeding CAD 2 Million

Supplier / Counterparty	Service / Contract	Status	Comments
Procon Est du Canada Ltée	Underground mine development	Existing Contract	Provides underground development services in support of ongoing mining operations.
Machines Roger International	Underground drilling services	Existing Contract	Provides underground production drilling services.
Epiroc	Underground mobile equipment and technical services	Existing Contract	Supplies underground mining equipment, parts, maintenance, and technical support.
Orica Canada Inc.	Explosives supply	Existing Contract	Supplies explosives and blasting accessories required for underground mining.
Amrize Canada Inc.	Paste backfill plant operations	Existing Contract	Provides operation and support services for the paste backfill plant.
A.C. Nord	Surface haulage	Existing Contract	Provides surface transportation and haulage services.
Orbit Garant Drilling Services Inc.	Surface diamond drilling	Existing Contract	Provides exploration and technical drilling services.
Construction Pro-Mine	Mine maintenance services	Existing Contract	Provides maintenance and construction support services.
Ace Services Mécaniques Inc.	Mechanical maintenance services	Existing Contract	Provides mechanical maintenance and repair services for site infrastructure and equipment.
Hydro-Québec	Electrical power supply	Existing Utility Agreement	Supplies electrical power to the Kiena operation.
Canada Clean Fuels Inc.	Diesel fuel supply	Existing Supply Agreement	Supplies diesel fuel required for mobile mining equipment and site operations.
PSL Patrick Sprack Limited	Propane supply	Existing Supply Agreement	Supplies propane gas for site facilities and operational requirements.

All material arrangements listed in Table 19.1 are currently in place and support ongoing operations at the Kiena Mine. The agreements primarily relate to underground mine development, drilling services, mobile equipment maintenance, energy supply, fuel procurement, and site infrastructure support. These services are essential to the operation of the Kiena Mine and are typical of those required for underground gold mining operations in Quebec and across Canada.

Certain services are not governed by long-term formal contracts and are instead executed through individual purchase orders. Where the aggregate annual value of these purchase orders exceeds $2 million, these services are considered material to ongoing operations. These contracts and associated supply and service arrangements are expected to be renewed or renegotiated in the normal course of operations.

The information presented in this section is based on commercial information provided by Wesdome, including the principal suppliers supporting the operation and current procurement information used in the preparation of this Technical Report.

19.3 Royalties

Certain of the mining titles comprising the Kiena Mine Complex are subject to underlying agreements and royalty interests. These royalties are typical for mining projects in Québec and include NSR type arrangements associated with specific claims.

The applicable royalty obligations have been incorporated into the economic analysis of the Kiena Mine including the NSR parameters used in the evaluation of project cash flows.

Based on the current mine plan, the royalty obligations are not expected to materially affect the economic viability of the operation.

20.1 Physical setting

The Kiena Mine is an active underground gold mine located about 10 km west of Val-D'Or, Québec. The Kiena Mine tailing storage facility is flanked by Lake De Montigny to the north and east, Petit Lac to the west, and CN railway tracks to the south. The current project setting, along with infrastructure and development areas are shown on Figure 20.1.

Source: BBA, 2021

Figure 20.1 Project setting

Access to the underground mine is currently, and will continue, to be from Parker Island located in Lac De Montigny, which is connected to the mainland via a 900-m long causeway. Since May 2026, another access to underground is available with the ramp giving access to underground operations will also be available from the ramp giving access to the Presqu'île deposit and located 1.2 km northwest of Parker Island. Since the start of mining operations, Parker Island has been expanded by approximately one third of its area, mostly to the west, presumably using waste rock. The island contains the access to the underground mine, the processing plant, and associated infrastructure and buildings.

20.1.1 Geology

The main glacial deposits encountered are clay, but reworked till on the surface and glaciofluvial sediments are also present in some places. Till is the result of deposition resulting from glacial retreat during the Quaternary period. It contains heterogeneous materials of all sizes, but the sandy fraction dominates in the upper part of glacial deposits. The reworked till is associated with small plateaus controlled by the underlying rock. The compaction of this deposit increases with depth. The bottom till itself does not outcrop on the surface, but is found between 15 and 25 cm deep under the clay-silty deposits on the surface. A north-south oriented composite esker found west of Lake De Montigny is mainly composed of well-sorted sands and gravels. Impermeable glacial deposits are made up of silt and lacustrine clays. They are the result of sedimentation in Barlow-Ojibway Lake caused by the obstruction of the Harricana River during the passage of glaciers. The lake deposits are made up of silt and varved clay and are found in good thicknesses in the lowlands located along Lake De Montigny and the Piché River.

In the Kiena Mine area, geotechnical investigations and analysis of existing soil layers indicate that a backfill layer of sand and gravel or topsoil covers the soils for approximately 1 to 2 metres. The main stratigraphic units are characterized by a thin layer (1.0 to 1.8 m) of so-called steep clay located near the surface, followed by a thick layer of varved clay (Table 20.1). A silt unit is the only one (1) continuously observed at the mine site and is underlain by a thin layer of soil and till. Silt is permeable and is hydraulically connected with Lake De Montigny, thus constituting a privileged groundwater flow pathway (Richelieu Hydrogéologie, 2025). The bedrock is about 8 to 9 metres below the surface of the natural soil (Stantec Consulting Ltd., 2019) and consists of volcanic and sedimentary rock assemblages of Archean age (Desrochers et al., 1996).

Table 20.1 Stratigraphic Sequence of the Overburden – Kiena site

Stratigraphic unit	Thickness (m)	Observation
Hard clay	1.0 – 1.8	Discontinued
Varved clay	2.5 – 11.7	Discontinued
Silt	3.6 – 6.7	Continued
Soil	0.1 – 0.2	Discontinued
Till	≤ 3.0	Discontinued

Data from Richelieu Hydrogéologie, 2025

20.1.2 Topography

Information from the ecoforestry map (MFFP, 2015 in Stantec 2021) indicates that the topography in the Kiena mine area is characterized by flat topography with a few isolated hills and an elevation difference of less than 50 m relative to Lake De Montigny. These hills correspond to rocky knobs with steep slopes.

Soil and drainage data from the ecoforest map (MFFP, 2019a in Stantec 2021) indicate that the Study area is characterized by imperfect drainage with some areas of flooding or very poor drainage corresponding to wetlands. These hydromorphic zones are found in the basins of the clay lowlands where water accumulates permanently and include peat accumulations and marshy areas. A portion of Parker Island can be described as a hydromorphic zone, as well as the shore of Lake De Montigny east of the access road leading to the mine site.

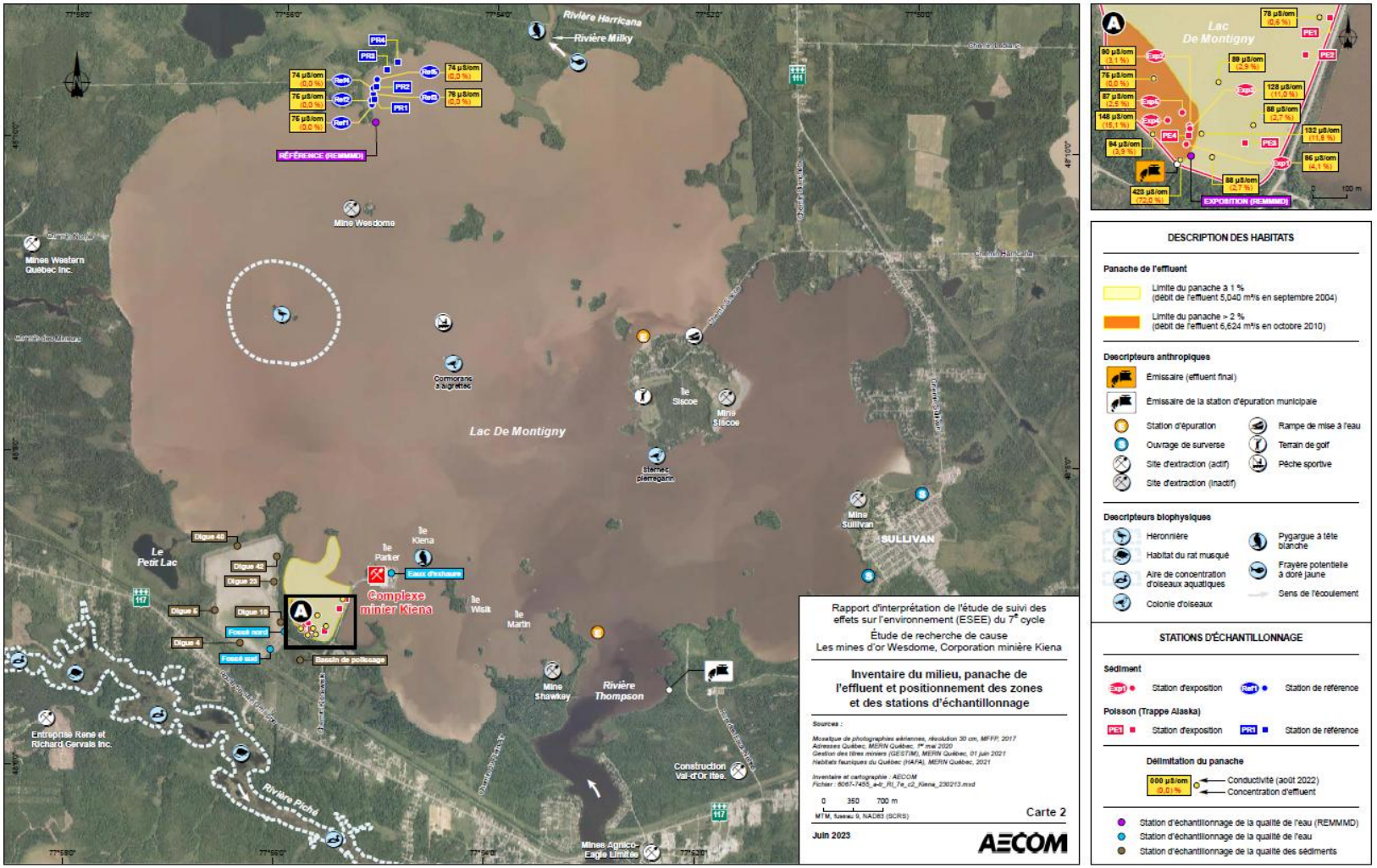
20.1.3 Climate and Meteorology

Climatological data are available from 1954 to the present and are from the Val-d'Or weather stations (48° 3'N; 77° 47'W), located approximately 12 km from the Kiena Mine site (ECCC 2026, in BGC Engineering 2026). Average data over this period show average daily temperatures ranging from -16.4°C in January to 17.5°C in July, for an annual average of 1.7°C. The average annual precipitation over the same period was 912 mm, including 630 mm of rain and 282 mm of snowfall. The heaviest monthly average rainfall was in September (100.5 mm). The heaviest monthly average snowfall was in December (61.5 mm). The maximum annual snow cover reaches, on average, 83 cm at the beginning of March.

The prevailing winds are particularly from the north and south. However, winds from the northwest, west and southwest are also very common. In the spring, the prevailing winds blow from the north and northwest, towards Provincial Road 117. In summer, the prevailing winds generally blow from the southwest, towards Lake De Montigny. A peculiarity should be noted that in June, the southwest and north winds have almost similar frequencies. Therefore, depending on the mine site, these winds blow either towards Lake De Montigny or towards Provincial Road 117. In autumn, winds are usually from the south, while in winter they are from the northwest and south.

20.1.4 Hydrology

Each hydrographic unit is subject to planning to ensure the conservation of the water resource and the environments associated with it (Stantec 2021). The Kiena Mine area is intersected by two (2) subwatersheds: Lake De Montigny, which occupies the northeastern sector, and the Piché River (Figure 20.2), which drains the southwestern part.



Source: AECOM, 2023

Figure 20.2 Physical Environment of the Kiena Mine. Location of the final effluent plume, surface water sampling areas and stations

Lake De Montigny has an area of 50 km² and is part of the Harricana River watershed which covers an area of 16,340 km² (OBVAJ, 2014). This lake drains into the Harricana River via the Milky River located north. The Harricana River originates in the north, in Lake De Montigny, and flows northwest to James Bay. In addition, the southern area of Lake De Montigny drains southeast into the Thompson River. The Piché River flows into the southeastern sector of Lake De Montigny via the Thompson River (Figure 20.2); Stantec, 2021). The Abitibi Jamésie Watershed Committee is responsible for the water master plan for these watershed(s).

The other watercourses present on the Kiena Mine site are the Petit Lac and the Ruisseau Lanoix-Morissette as well as three (3) intermittent watercourses (CE1, CE2 and CE3). Only CE1 watercourse is represented in Figure 20.3. The Lanoix-Morissette Creek is located upstream of Kienawisik Road and flows from west to east. The water in this stream is rather stagnant, and its depth varies from 0.30 to 0.80 cm with its bed mainly composed of organic matter, silt and clay. Three (3) intermittent watercourses have also been identified, namely CE1, CE2 and CE3. The width of these streams varies from 0.5 m to 2.0 m and their depths are less than 0.30 m. The small lake is located about 250 m west of the tailings pond.

20.1.5 Surface Water

An annual sampling program via a network of nine (9) stations (S1 to S9) located around the TSF, the polishing pond and the waste rock pile makes it possible to monitor surface water quality annually (Figure 20.3; BBA 2021). In addition, regular monitoring of the final effluent is also carried out in accordance with the requirements of the MELCC's Directive 019 on the Mining Industry (MDDEP, 2012 and MELCCFP, 2025). The purpose of this monitoring is to document and evaluate the evolutionary concentrations of chemical components (e.g. metals, nitrates, pH, etc.) likely to be present in surface waters.

Surface water samples were collected in 2020 on the mine site, particularly near the waste rock stockpile (S8) and watercourse CE-1 (S9; Figure 20.3). The results from analysis indicate that only iron (Fe) concentrations exceeded, on several occasions (15 occurrences), the monthly average concentrations and maximum allowable concentrations set by Mining Industry Directive 019 (MDDEP, 2012; Stantec, 2021a, eastern sector). In the western sector of the TSF, surface and groundwater analyses show several exceedances of the monthly average acceptable concentration or the maximum acceptable concentration of the requirements of Directive 019 on the mining industry (MDDEP, 2012) for total iron and cyanides, as well as a few rare exceedances for nickel, lead, zinc and copper. (Stantec, 2021a).

As for the presence of iron, it is not known whether it comes from a natural occurrence (e.g. iron sulphide occurrences in rock) or if it is due to mining. With respect to the presence of total cyanides, all exceedances were observed prior to 1998 and since that time, no critical changes in concentrations have occurred. In both cases, the analytical results do not indicate a critical evolution of concentrations, but rather a stable situation currently being monitored by the mining company. According to BBA (2021), the parameters monitored according to Directive 019 on the mining industry (MDDEP, 2012) and the analytical results obtained to date have established a baseline for groundwater and surface water monitoring in the eastern and western sectors of the tailings facility.

Source: BBA, 2021 (S1 to S9: Surface water sampling stations; PK: Groundwater sampling wells)

Figure 20.3 Surface and groundwater sampling stations

20.1.5.1 Lake De Montigny and Piché Rivers

The water in Lake De Montigny (Figure 20.3) is coloured and highly turbid and the suspended solids concentrations are high and near the upper limit of the acceptability criteria for maintaining the quality of aquatic life. These physical and chemical characteristics are due to the nature of the clay bottoms and the deep mixing of the lake, which leads to the recirculation of fine sediments during strong winds. The alkalinity of the lake water is very low, and the results of the pH measurements show slightly acidic water. Total inorganic phosphorus is abundant. However, total nitrogen and nitrates, which are essential nutrients in the aquatic environment, are present at low concentrations.

Surface water quality surveys conducted in 1981 and 1983 indicated that some contaminants in the water of Lake De Montigny exceeded the criteria for acceptability to aquatic life, namely copper (Cu), cyanide (CN^-), Fe, mercury (Hg) and zinc (Zn) (Malo, 1977). As the surveys were conducted prior to the start of operations at the Kiena Mine in 1984, the presence of these contaminants is not related to the mining operation of the Kiena Mine.

The Piché River is characterized by a low flow rate of 0.979 m³/s during low-water periods and 2.4 m³/s during flood periods. Suspended solids, turbidity and colour are high, but to a lesser degree than in Lake De Montigny. Alkalinity is low, but overall, the water appears to be less acidic than in the lake and just like in the lake, nitrates are present in very low concentrations. Finally, excessive concentrations of Fe, Hg and Zn are present (Malo 1977).

20.1.5.2 Exposure and Reference Areas

Under section 7 of Schedule 5 of the Canada's Metal and Diamond Mining Effluent Regulations (MDMER), mining companies are required to monitor the quality of the water body receiving the final effluent, which is defined by an area of exposure to the discharge of that effluent. Water quality evaluation is made by comparing the concentrations of metals and other regulated chemical in the exposure area with those present in the reference area located approximately seven (7) km north of the exposure area (Figure 20.3, Aecom, 2023).

The average depth of water in the exposure area and reference area is approximately 1 m and the substrate is mainly composed of fine particles such as silt and clay. For the analysis of the water quality results, the annual averages of the values obtained for the various geochemical components and parameters were compared with the criteria for the protection of aquatic life (CPVA, chronic toxicity) of the Ministère de l'Environnement, de la Lutte contre les changements climatiques, de la Faune et des Parcs (MELCCFP, 2023) and the recommendations of the Canadian Council of Ministers of the Environment (CCME, 1999). The CPVA is the maximum concentration of a substance in water that must not be exceeded in order to protect aquatic organisms and their vital functions from sublethal and harmful effects resulting from long-term exposure.

For the years 2020, 2021 and 2022, the results indicate exceedances of water quality criteria/guidelines in the exposure area and the reference area for aluminum (Al), Cu, and Fe. However, it is difficult to make comparisons between these two (2) areas solely on the basis of CPVA criteria (Aecom, 2023). Surveys carried out in 2021 and 2022 indicate that the average concentrations of total suspended solids (TSS), Al, cadmium (Cd), chromium (Cr), cobalt (Co), Cu, Fe, manganese (Mn), nickel (Ni), lead (Pb), Zn were higher, on the order of two (2) times or more in the exposure area, than those measured in the reference area. The average exposure concentration of almost all the parameters and metals mentioned above are influenced by higher concentrations obtained from two (2) specific sampling periods: one in 2021 and the other in 2022 (Aecom, 2023). The results of the surveys also indicate that the average concentrations of total phosphorus (P) are two-fold or higher in the exposure area than those measured in the reference area. These higher mean values would, however, be influenced by a higher episodic value that was obtained for each of the three (3) years.

A total of nine (9) sampling surveys were conducted between 2023 and 2025 at the Kiena Mine. Concentrations were averaged over the three (3) years for each metal and each geochemical parameter analyzed in a commercial laboratory. For most of the metals analyzed, the results indicate concentrations below the chronic aquatic life effect criteria for the exposure and reference area. However, the majority (78%) of the samples analyzed to determine iron levels in the exposure and reference areas showed concentrations above the CPVA. With regard to aluminum, a few samples showed occasional concentrations above the CPVA.

20.1.6 Lake De Montigny Sediments

The sediments from Lake De Montigny consist mainly of silt and clay and are largely covered by mine tailings from former mining operations (e.g. Siscoe Mine). In addition, the organic matter content of these sediments is low and uniform for the entire lake. The concentration in Hg in the sediments is above the quality criteria for the entire lake and the Piché River, while the concentration of other metals is below these criteria, except for Pb and Zn, in the northern sector of the lake. There are low concentration of cyanides in the sediments

20.1.7 Hydrogeology and Groundwater Quality

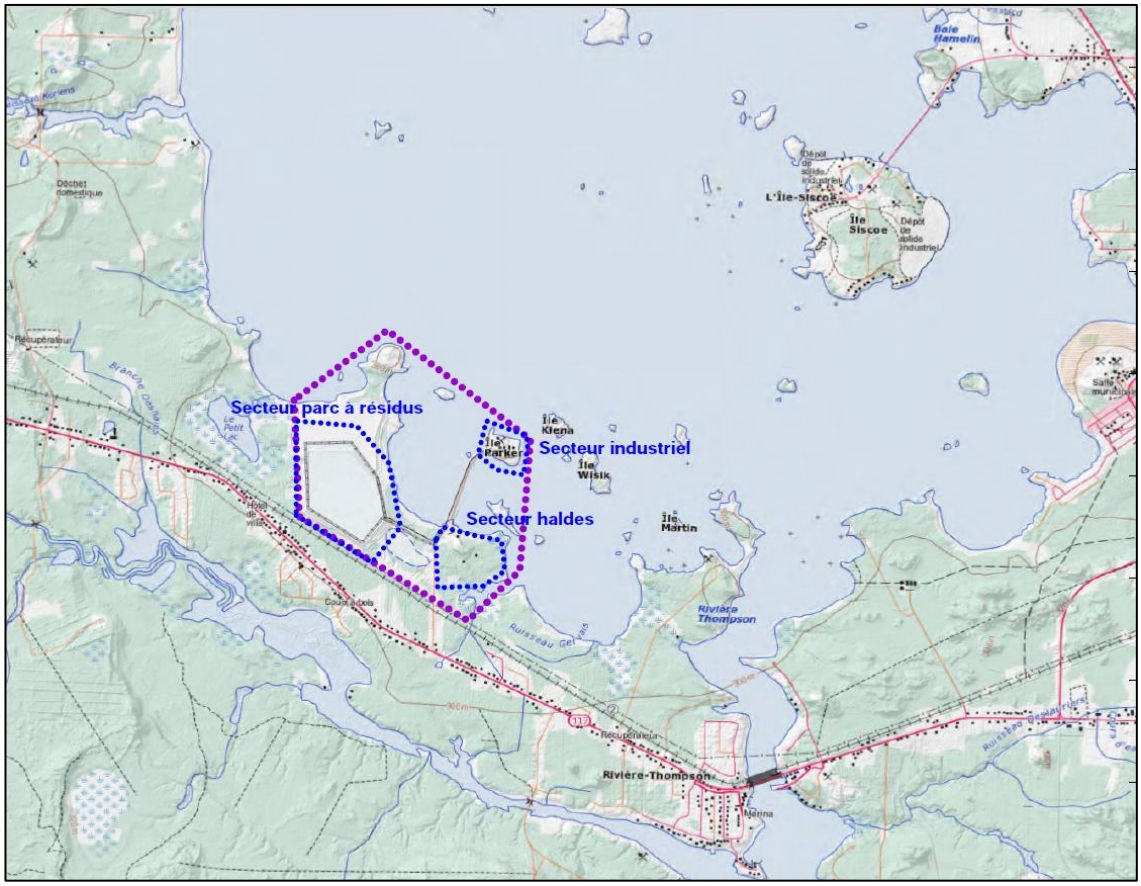
A silt layer is the only unit continuously observed at the mine site. It is underlain by a thin layer of soil and till. Silt is permeable and is hydraulically connected with Lake De Montigny, thus constituting a privileged groundwater flow pathway (Richelieu Hydrogéologie, 2026).

The hydraulic conductivity of the soil stratigraphic units can range from 1.0×10^{-7} to 1.0×10^{-6} m/s. Table 20.2 presents the hydraulic conductivity of each soil type measured at the Kiena Mine site.

Table 20.2 Hydraulic conductivity associated with each soil type at the Kiena Mine sit

Stratigraphic unit	Hydraulic conductivity (m/s)
Clay	1×10^{-6} to 2×10^{-6}
Clay and silt	5×10^{-7}
Clay, silt and till	3×10^{-6}
Clay and till	2×10^{-7}
Bedrock	1×10^{-7} to 6×10^{-7}

Source: Leonof, 1993



Source: Richelieu Hydrogéologie, 2026

Figure 20.4 Location of the areas covered by the 2025 hydrogeological study

Groundwater flow generally follows the local topography. The tailings management area is characterized by generally flat terrain, at an elevation of 5.0 to 6.0 metres (locally 10 m) above the level of Lake De Montigny. The tailings management facility reaches between 2.0 and 6.0 metres above lake level. According to all the surveys carried out, the water table level in the park sector is generally between 0.5 and 3.0 metres deep, with an average of 1.0 m (Richelieu Hydrogéologie, 2026). The industrial sector (Parker Island) and the waste rock stockpile are also characterized by a slight rise of a few metres above the water level of Lake De Montigny (Figure 20.4).

Groundwater quality monitoring has been carried out at the Kiena Mine site since 1993, in some of the wells installed in the tailings management and waste rock pile sectors (Figure 20.5). Groundwater sampling surveys were generally conducted during periods of high water after snowmelt, and during periods of low water at the end of summer. For the Parker Island sector, groundwater quality monitoring began in November 2024 with the installation of eight (8) wells. The sampling results are presented by sector and are compared to the groundwater criteria in Appendix 7 of the Intervention Guide - Soil Protection and Contaminated Land Rehabilitation Policy (MELCCFP, 2021). The criteria used are those applicable to groundwater used as a source of drinking water and to groundwater resurging into surface waters. These criteria are used as guidelines for the interpretation of groundwater quality results at sampled wells.

Source: Richelieu hydrogéologie, 2026

Figure 20.5 Location of groundwater sampling wells

For wells with a sufficiently long series of measurements, the results were also interpreted using the Mann-Kendall statistical method (Kendall, 1955) presented in the Technical Guide for Groundwater Quality Monitoring (STGGQM; MELCCFP, 2017). This statistical method aims to detect increasing or decreasing trends in contaminant (metals, chemical components) concentrations.

Table 20.3 Geochemical characterization of groundwater. Metals, chemical compounds, and physicochemical parameters exceeding reference criteria-TSF, WD, EC

Area	Drinking water criteria	Resurgence criteria	Anthropogenic source	Increasing with year
Industrial (île Parker) (survey 2025)	Mn, Sulfur ± Ni, Na	Hg, Sulfur	Mn, Na, Sulfur	Non-Applicable.
TSF (surveys before 2022)	Al, Ba, Ni, Pb, As, Cr, Hg, U, Se, NO_2-NO_3	Ba, Ni, Pb, Mn, Hg, Zn, Cu, Cd, Ag, CN^-	Al, CN^-, As, Hg NO_2-NO_3,	Al, Ni, Pb, Cu, As, Cr, SO_4, Se, V, NH_3, Si, Ti phenols
TSF (survey 2025)	Mn, Sulfur	Cu, Hg, Sulfur	Sulfur	As, CN^-, SO4, EC
WD (surveys before 2022)	As, Cl, Na			
WD (survey 2025)	Mn, Se, Na, Sulfur NO_2-NO_3,	Hg, Sulfur	NO_2-NO_3, Na, Sulfur	As, CN^-, SO4, EC

20.1.7.1 Industrial Sector (Parker Island)

Groundwater flow in the industrial zone follows the topography and flows radially toward the lake from the highest point on Parker Island. Eight (8) wells are present in the industrial zone area to measure the quality of groundwater in the rock and in the overburden. Since monitoring began only recently, it is not possible to compare the results obtained in 2025 with those from previous surveys.

The results indicate that Mn, Hg and sulphides are the components with the highest number of exceedances when compared to the main environmental criteria (Table 20.3). The concentrations in Mn and sulphides could be associated with anthropogenic activities or natural microbial activity (e.g. for sulphides). Mercury concentrations are similar to those observed in several areas of Abitibi-Témiscamingue. Only one (1) exceedance of the drinking water criteria was observed for Ni and sodium (Na). For Na, sodium cyanide (NaCN) could be the cause for this exceedance (Richelieu Hydrogéologie, 2026). No trend analysis was conducted for industrial water.

20.1.7.2 Tailings Facility Area

The TSF includes perimeter dykes, settling areas and a water management system to recover, treat and return water to the process plant or the environment in accordance with current standards. Between 1992 and 2021, twenty wells were installed at depths ranging from 6.96 to 25.72 m. Measurements of the rise in the water table indicate that groundwater flow in this area follows a radial path, conforming to the topography, from the tailings pond toward the watercourses and Lake De Montigny (Richelieu Hydrogéologie, 2026).

Hydrogeological studies conducted in 2022 indicate that the groundwater in the TSF area had relatively high metal concentrations and a pH ranging from slightly acidic to alkaline. (Richelieu Hydrogéologie, 2022). Concentrations of metals such as Ba, Ni, Pb, As, Cr, Hg, U, Se, Al, and nitrites and nitrates (NO_2-NO_3) exceeded the drinking water criterion. During the same surveys, it was also observed that the concentrations of Ba, Ni, Pb, Zn, Cu, Mn, Cd, Hg, Ag, cyanide (CN^-) also exceeded their respective resurgence criterion (Table 20.3).

Exceedances of cyanide (CN^-), NO_2-NO_3, As, Al, Hg are most likely to be of anthropogenic origin (e.g. explosives, cyanidation). Based on an analysis of groundwater sampling data collected through 2022, water quality in certain wells appeared to show an upward trend in concentrations of Cu, Ni, sulfate (SO_4), As, Cr, Pb, Se, vanadium (V), Al, ammonia nitrogen (NH_3), phenols, silica (Si), and titanium (Ti). Water inflows from the tailings pond, which lead to increased concentrations of some geochemical components in groundwater, may also be responsible for the trends detected in these waters (Richelieu Hydrogéologie, 2025).

The results of the 2025 hydrogeological survey indicate numerous exceedances of the groundwater consumption criterion for Mn concentrations and the resurgence water criteriom for sulphide concentrations. Some exceedances of the resurgence water quality criteria were also observed for Cu, Hg and sulphides (Table 20.3). The possible causes of the latter exceedances could be of anthropogenic origin. The samples from all the wells are of the calcium bicarbonate water type, representative of water in the recharge zone. Some wells also indicate the presence of chloride and sulphate, calcium and magnesium waters, representing water that has been affected by anthropogenic activities (Richelieu Hydrogéologie, 2026).

Since 1993, the monitoring of the evolution of the concentrations of four (4) indicators, namely As, cyanide, sulphates and electrical conductivity, has made it possible to detect a possible influence of the TSF on groundwater. The results obtained indicate suspected or confirmed upward trends for the four selected indicators. It can therefore be concluded that the TSF site is affecting the quality of groundwater in its surrounding area (Richelieu Hydrogéologie, 2026).

20.1.7.3 Waste Rock Stockpile Area

Groundwater monitoring in the waste rock stockpile area (Figure 20.3) has been carried out in three (3) wells since 2017. In September 2025, 12 new wells were installed in this sector, allowing for better monitoring of groundwater quality. The depth of these new wells ranges between 8.76 and 18.57 meters below surface. They are installed either in a silt and/or sand deposit underlying a clayey silt horizon.

In the waste rock stockpile area, groundwater flows along the topography of the surface and drains toward Lake De Montigny. Previous surveys indicate that groundwater in this area is characterized by a slightly alkaline pH, high concentrations of chlorides (Cl), Na and As (Table 20.3). The results from the 2025 sampling surveys indicate that concentrations of Mn, Se, Na, sulfides, and nitrite-nitrate exceed drinking water criteria, while concentrations of Hg and sulfides exceed criteria for resurgences of waters (Table 20.3). Elevated nitrite-nitrate concentrations could be associated with explosive residues, while chloride and Na concentrations could be associated with the storage of dirty snow. The presence of sulphides and Se could be associated with the presence of sulphide minerals in the waste rock, or from microbial or anthropogenic sources.

As in several areas of the mine site, the groundwater is of the calcium bicarbonate type, representative of water in the recharge zone. However, the water tested in a well has a chloride and potassium profile possibly associated with the storage of dirty snow. Graphical analyses since 2017 of electrical conductivity, cyanide, arsenic and sulphates seem to show a change in groundwater concentrations with suspected or confirmed upward or downward trends (Richelieu Hydrogéologie, 2026).

20.1.8 Air Quality

Operational mining activities such as blasting and transportation, as well as the general use of diesel, propane and natural gas at the Kiena Mine site, release contaminants into the atmosphere, which can impact air quality. While emissions are generally low and do not require ongoing monitoring, non-GHG emissions are measured and reported in accordance with the regulatory requirements of the National Pollutant Release Inventory, Canada's federal mechanism for reporting releases to air, water and land.

Dust from haul roads, stockpiles, and crushing is also managed with water and approved suppressants are used as needed. At the Kiena Mine site, environmental teams conduct regular inspections to monitor the effectiveness of dust suppression processes. Given Kiena's proximity to Val-d'Or, air quality is especially important to local residents, and it's one of the main topics regularly discussed with the Kiena Community Watch Committee.

From 2022 to 2024, the emission of suspended particles (< 10 µm) decreased from 28 to 23 t while that of fine particles (< 2.5 µm) remained stable at 1.61 t. Emissions of carbon monoxides, nitrogen oxides, sulphur oxides and volatile organic compounds (VOCs) have decreased significantly by 75% to 80% each. Although mercury (Hg) emissions are zero, lead emissions have increased from 0.023 to 4.2 kg (Table 20.4). In 2024, all air quality results remained within NPRI reporting thresholds, with no major incidents, non-compliances or complaints related to air quality management at the Kiena mine site (Wesdome, 2024).

Table 20.4 Air emissions from Kiena Mine site between 2022 and 2024

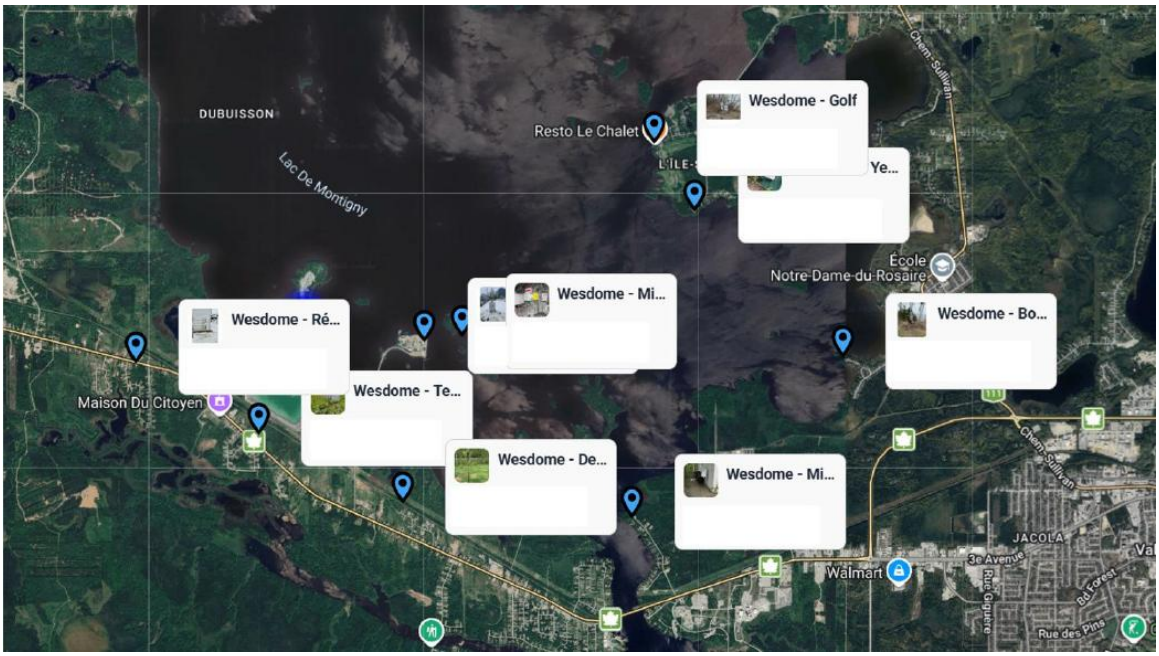
Air emissions	2022	2023	2024
Suspended particles (< 10 µm) (t)	28.00	21.85	22.88
Fines particules (< 2,5 µm) (t)	1.60	1.47	1.77
Carbon monoxide (t)	82.58	17.89	20.80
Nitrogen oxide (t)	85.96	16.41	21.83
Sulfur oxide (t)	6.45	1.14	1.56
Mercury (kg)	0	0	0
Lead (kg)	0.023	0.001	4.201
Volatile organic compounds (t)	5.66	0.99	1.14

Source: Wesdome, 2024

20.1.9 Sound Environment

At Kiena, noise from drilling, blasting and underground ventilation is managed in a way that minimizes impacts on the environment and human health. Since the mine is surrounded by water, some exploration drilling is carried out from barges anchored on Lake De Montigny. In order to minimize noise during drilling operations, noise blankets are installed on the drilling equipment. In 2024, following a dialogue with local residents, the Kiena Mine implemented a proactive noise monitoring and management program that requires acoustic recording and modeling for each project, as well as additional noise monitoring in the event of unusual or multiple activities. A total of seven (7) permanent stations and one temporary sound monitoring station have also been installed in different sectors of the residential community adjacent to the mine site (Figure 20.6; SoftDB 2025).

To reduce the noise generated by mining and exploration activities, the Kiena Mine has installed sound insulation on the underground fan located above ground and has equipped all exploration drills in operation on the Lake De Montigny with sound-dampening covers. As additional underground ventilation requirements are required, new fans will be installed underground with a focus on low-noise equipment to minimize impacts. In order to respect the citizens who live in the neighbourhood, night activities have also been limited (Wesdome, 2024).



Source: Soft DB 2025

Figure 20.6 Location of sound level monitoring stations

20.1.10 Vibrations Management

Blasting and heavy machinery can generate ground vibrations that disrupt nearby communities and impact structures and ecosystems. Vibration is a growing concern for local residents, especially with the development of the ramp located between the Presqu'île Zone and the Kiena mine. This ramp is located next to the site's tailings pond, near the Dubuisson district of Val-d'Or.

External noise and vibration experts were also engaged to identify appropriate and effective mitigation measures. A total of eight (8) permanent stations were installed along dykes 40, 41 and 42 of the tailings facility to record vibrations caused by blasting (SoftDB, 2025). Additional stations have also been installed in the community surrounding the Kiena Mine. Explosion schedules were adjusted and the use of explosives was reduced to minimize impacts. We continued these measurements until our monitoring program indicated that the construction of the ramp had reached such a depth that vibration and noise could no longer reach the surface.

20.2 Biological Environment

In 2021, Wood produced a memo regarding the effects on the natural environment of the Kiena Mine reopening (Wood, 2021). Since then, ecological characterization studies and technical expert notes have been emitted as part of the restart of operations at the Kiena Mine Complex, including those of Stantec (2021a and 2021b) and GCM Consultants (GCM (2021a, 2021b and 2021c)). These were aimed at areas around and near the existing tailings facility. In September 2022, GCM Consultants carried out the characterization of wetlands and waterbodies, as well as an opportunistic wildlife inventory, in the Presqu'île area (GCM Consultants, 2023). In 2023 and 2026, the interpretation reports of the 7th and 8th cycle of the Environmental Effects Monitoring (EEM), required under the Metal and Diamond Mining Effluent Regulations and the Fisheries Act, were produced by AECOM (AECOM, 2023; 2026). In addition, in September 2024, GCM Enviro-synergies completed the characterization of fish habitat in the Presqu'île area (GCM, 2025). The following sections present the compilation of the biological data collected through these different studies. It should be noted that some areas included in the scope of the past studies have been subject to modifications due to the mine development, subsequent the obtention of the necessary permits and ministerial authorizations.

20.2.1 Vegetation, Wetlands and Water Environments

The Kiena Mine Complex site is located in the Balsam Fir-paper Birch bioclimatic domain in the closed boreal forest subzone (MNRF, 2022). Mixed forest stands are dominant in this subarea and are mainly represented by Balsam Fir (*Abies balsamea*), Paper Birch (*Betula papyrifera*), and Trembling Aspen (*Populus tremuloides*) (GCM 2023).

The mine site is located in the Harricana River watershed, and the infrastructures take place on the shores of Lake De Montigny and Parker Island. The ecological characterization studies carried out since 2020 have focused on the vicinity of the Kiena Mine Complex, on the southwest shore of the lake, as well as on the Presqu'île area.

20.2.1.1 Southwest Shore of Lake De Montigny

On the southwest shore of the Lake De Montigny, Stantec (2021a and 2021b) conducted inventories in the vicinity of existing infrastructures, around the waste rock pile, west of the tailing's facility and south of the polishing pond. These three (3) areas inventoried as well as the results are illustrated in Figure 20.7 to Figure 20.9. In these three (3) zones, there are waterbodies, wetlands and terrestrial environments.

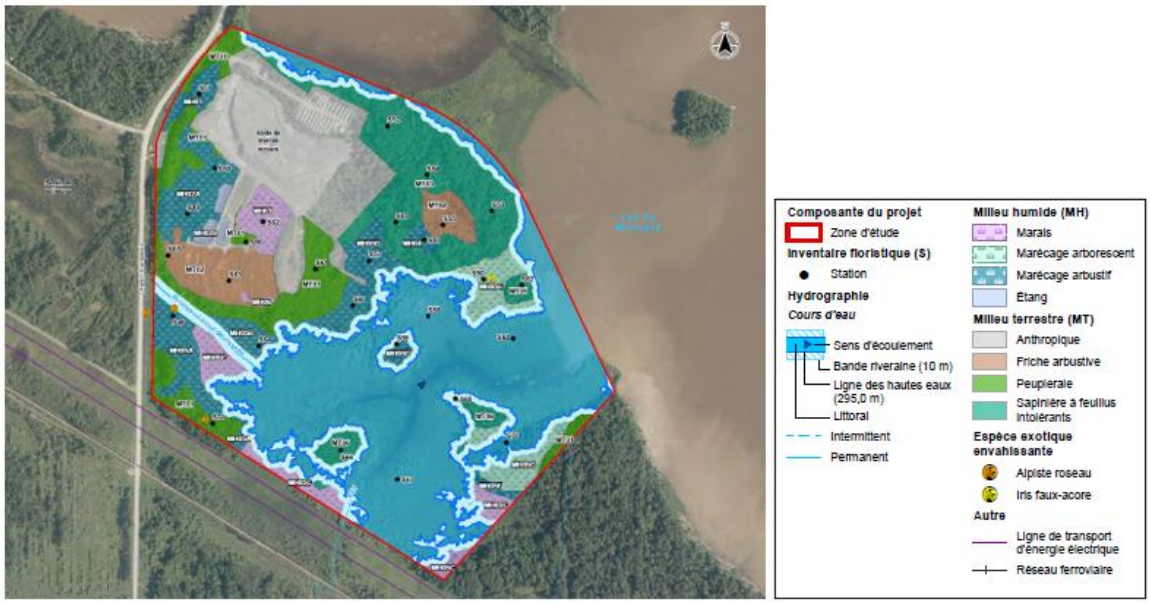
Regarding water environments, we note the presence of the Lanoix-Morissette stream which flows from west to east, from Kienawisik Road to Lake De Montigny. Its rectilinear layout suggests that it has been straightened/modified over the years. In its upstream portion, the littoral area is colonized by typha (Typha sp.) and shorelines dominated by the alien invasive species Reed Canary Grass (Phalaris arundinacea). The stream then flows through two (2) wetlands (an alder and a marsh dominated by the Sweet Flag (Acorus calamus)), before reaching the littoral of the lake.

Four (4) watercourses are also present in inventoried areas, namely three (3) intermittent watercourses to the west of the tailing's facility and one permanent watercourse to the south of the waste rock pile. The watercourses west of the tailing's facility area are dependent on a wetland (treed swamp) and are hydro connected with a marsh and a shrubby swamp so that during periods of high water, the accumulated overflow in these two (2) wetlands flows via preferential paths to the treed swamp downstream. As for the permanent watercourse to the southeast of the waste rock pile (named CE1), it originates south of the Saint-Philippe Road and flows north before joining Lake DeMontigny.

In addition, in the area south of the waste rock pile, the portion of the littoral that is part of Lake De Montigny occupies, with its shores, 43% of the area inventoried in 2020 The lake's littoral area at this point is bordered almost entirely by various wetlands. The herbaceous vegetation is dense (Sweet Flag (*Acorus calamus*) is the dominant species, accompanied by Black-girdled Woolsedge (*Scirpus atrocintus*), European Bur-reed (*Sparganium emersum*) and Creeping Spike Rush (*Eleocharis palustris*)) and the littoral area is similar to a marsh. There are open water basins frequently bordered by Bulrush (*Typha latifolia*), and a few areas colonized by shrub species that are obligatory to wetlands ((Bog-myrtle (*Myrica gale*), Leatherleaf (*Chamaedaphne calyculata*) and Bog-rosemary (*Andromeda polifolia* var. *latifolia*)). There are also a few land islets. It should be noted that as part of the characterization study, the high-water mark of the lake was designated at elevation 295.0 m. Also, since Lake De Montigny is bordered by numerous wetlands creating a continuum of vegetation typical of wetlands and bodies of water, the height and slope of the embankments can hardly be assessed, as the environment is very gently and continuously sloping and consists of riparian wetlands (Stantec, 2021a).

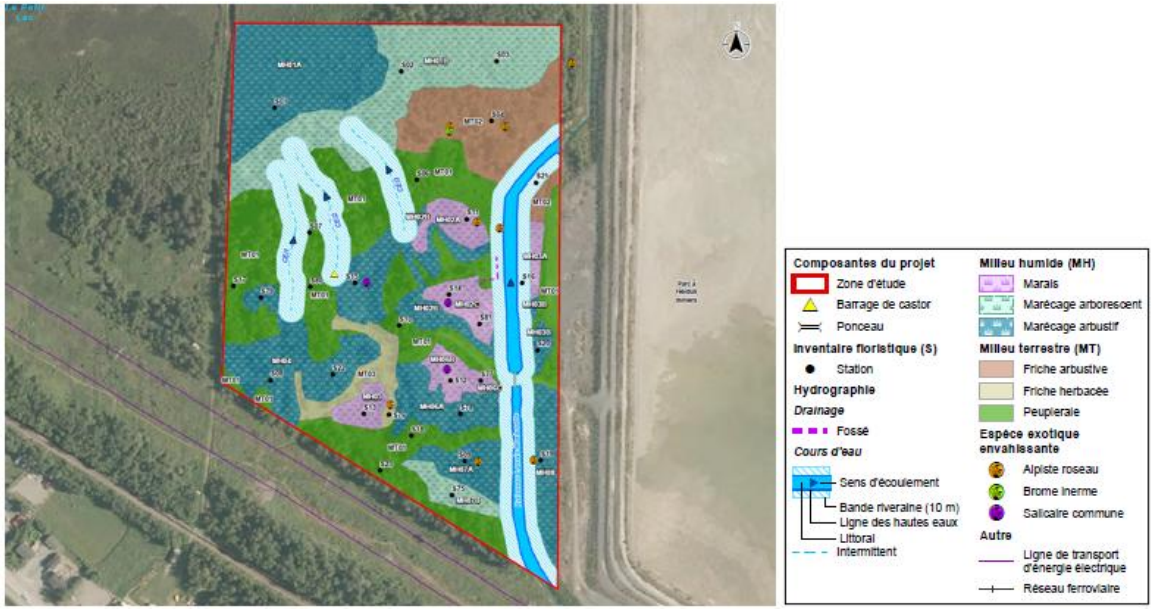
Regarding the wetlands present in these three (3) inventory areas, they are numerous and varied and consist of ponds, treed swamps, swamps and shrub swamps. These wetlands extend beyond the boundaries of the areas that have been inventoried. In addition, GCM (2021a) had also characterized the wetlands around the tailing's facility in preparation for the planned dam reinforcement works. Thus, these wetlands have been impacted by these works previously authorized by the MELCCFP.

Finally, as far as terrestrial environments are concerned, they are composed of poplar groves, shrub and herbaceous wasteland, intolerant fir-deciduous forests, in addition to the portions occupied by anthropogenic mining infrastructure.



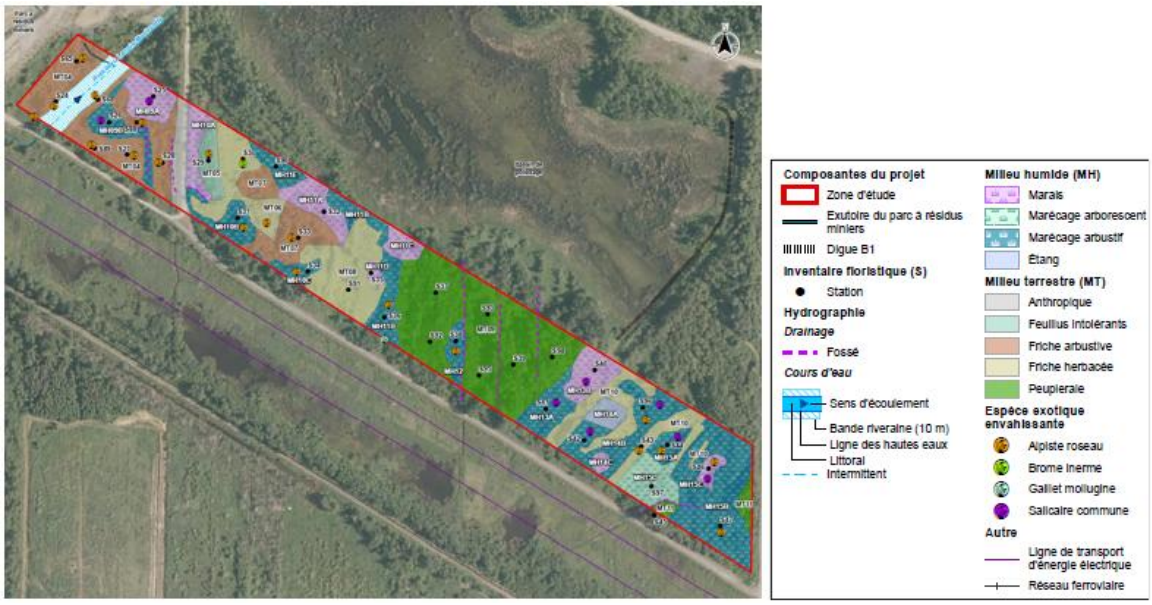
Source: Stantec (2021a)

Figure 20.7 Location of the water, wetland and terrestrial environments of the study area around the existing waste rock pile



Source: Stantec (2021b)

Figure 20.8 Location of the water, wetland and terrestrial environments of the study area west of the tailing's facility

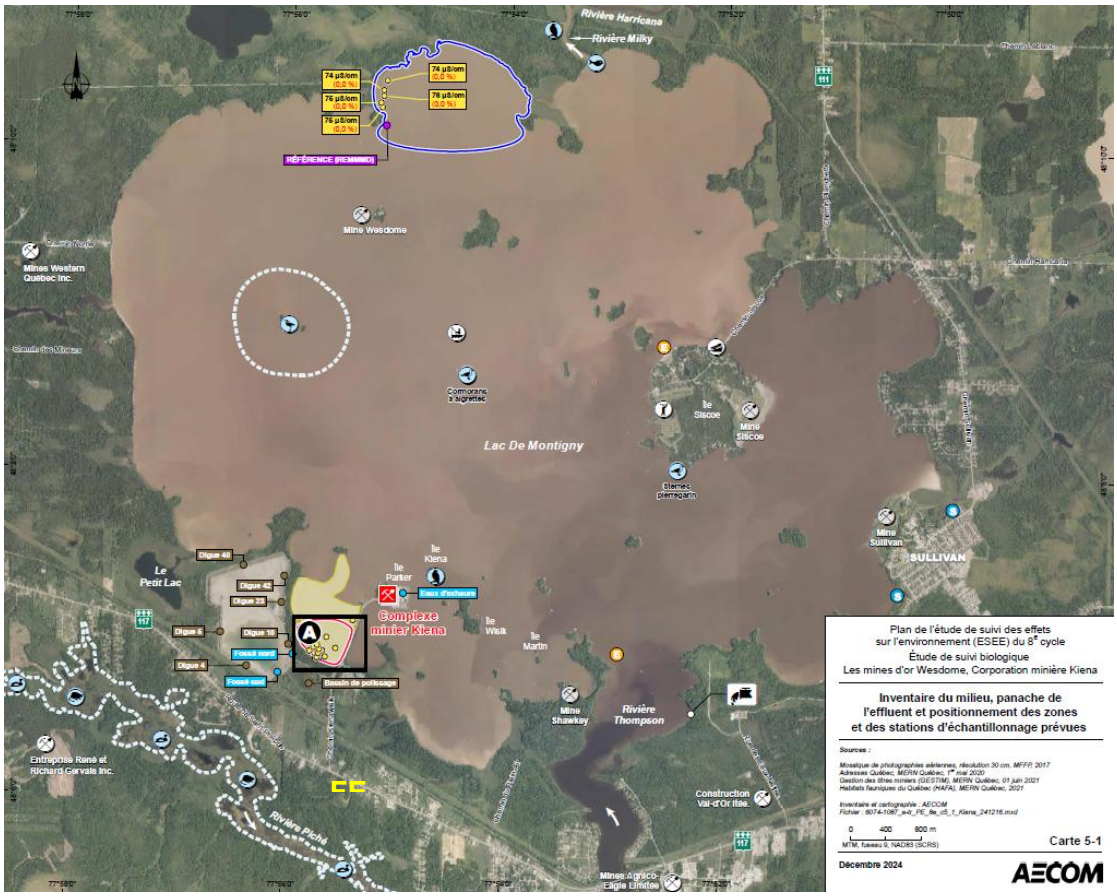


Source: Stantec (2021b)

Figure 20.9 Location of the water, wetland and terrestrial environments of the study area south of the polishing pond

20.2.1.2 Presqu'île Area

The ecological characterization carried out on the Presqu'île area (GCM, 2023) identified terrestrial environments and a single wetland. In fact, almost all the area was initially covered by terrestrial environments, i.e. 99.1 % of the 13.2 ha area surveyed in September 2022 (GCM, 2023). It should be noted that since then, an exploration ramp and related mining infrastructure have been developed in this sector, so that some of the natural environments present have been replaced by these infrastructures. As these infrastructures occupy only a portion of the Presqu'île, vegetation is still in place around the mining facilities and on the shores of the lake. The remaining forest environment consists of mixed stands, where the tree layer is dominated by the Balsam Fir, Paper Birch and Trembling Aspen. An area north of the Presqu'île is dominated by Northern White-Cedar (*Thuja occidentalis*) in association with the above-mentioned species. Northern White-Cedar is also found on the periphery and on the shores of the lake. The shrub layer is dominated by the regeneration of Balsam Fir, Mountain Maple (*Acer spicatum*) and Beaked Hazel (*Corylus cornuta*). For the herbaceous stratum, it is limited by the shade cover which restricts the development of species. When an overlap greater than 10 % is present, the most frequently observed herbaceous species are Wild Sarsaparilla (*Aralia nudicaulis*), the Canadian Dwarf Cornel (*Cornus canadensis*), Common Wood Sorrel (*Oxalis montana*) and the Dwarf Red Blackberry (*Rubus pubescens*). Finally, the small wetland that had been identified (0.12 ha), i.e. an anthropogenic treed swamp, was replaced by the construction of the mining exploration ramp, following the issuance of the necessary authorization from the MELCCFP.



Source: modified from AECOM (2024)

Figure 20.10 Location of the exposure zone (red polygon) and reference zone (blue polygon), Lake De Montigny. FE: Final effluent.

Source: modified from AECOM (2024)

Figure 20.11 Location of the exposure zone (red polygon), Lake De Montigny. FE: Final effluent.

20.2.1.3 Riparian and Aquatic Vegetation in the Exposure and Reference Zones

A summary description of the riparian and aquatic vegetation in the final effluent exposure zone and in the reference zone is provided by AECOM (2023 and 2024). These zones are shown in Figure 20.10 and Figure 20.11. In the area exposed to the final effluent, the shores are primarily covered by deciduous stands, dominated by Paper Birch and Trembling Aspen. The dominant shrub species in this area is Bog Myrtle. Reed Canarygrass is frequently observed in the herbaceous layer. Aquatic species present in the area are mainly Rushes (Juncus sp.), Pondweeds (Potomogeton sp.), Bur-reeds (Sparganium sp.), and Bulrush.

In the reference zone, north of the lake, the shores are covered by mixed forest stands. These include Balsam Fir, Black Spruce (Picea mariana), Trembling Aspen, and Paper Birch. Shrub species in the riparian marsh include Grey Alder (Alnus incana subsp. rugosa) and Bog-myrtle. The aquatic vegetation in the reference area is dominated by Rushes, Bur-reeds, and Pondweeds.

20.2.1.4 Invasive Alien Plant Species

Among the areas inventoried since 2020 on the Wesdome Property, the invasive alien plant species that have been confirmed are:

- Reed Canary Grass (Phalaris arundinacea), near the waste rock pile, the tailing's facility and the polishing pond, as well as in the Presqu'île area (Stantec (2021a and 2021b), GCM (2021b and 2023).
- Smooth Brome (Bromus inermis), south of the polishing pond (Stantec, 2021b).
- Yellow Flag (Iris pseudacorus), near the waste rock stockpile (Stantec, 2021a).
- Purple-loosestrife (Lythrum salicaria), in the Presqu'île area (GCM, 2023).

However, it should be noted that none of these IAPS are found on the *Liste des espèces floristiques exotiques envahissantes prioritaires*[1] of the MELCCFP.

20.2.2 Protected Areas, Special-Status Species and Wildlife Habitats

The mining facilities are located approximately 3 km north of the *Réserve de biodiversité de la Moraine-d'Harricana*. This category II biodiversity reserve (category "National Park" including Quebec's national parks and many biodiversity reserves) was established in March 2019 and has an area of 36,500 ha (Gouvernement du Québec, 2022). This reserve protects a complex of dunes and bogs, a low-lying hillside complex, a recreational forest accessible to the population, and a significant portion of the Harricana Moraine. This protected area has a diversity of forest stands of interest, including old Yellow Fir Betula stands, at their northern limit of distribution, which could be classified as exceptional forest ecosystems of the rare forest type (Gouvernement du Québec, 2022).

In areas that have been characterized, the interactive map of special-status species of the *Centre de données sur le patrimoine naturel du Québec* does not report any recorded occurrences of plant species. Nevertheless, based on the habitats present, GCM (2023) had identified fourteen vascular plants on the provincial list of threatened or vulnerable species under the Act respecting threatened or vulnerable species that could potentially be present on the Wesdome property (Table 20.5). However, these species were not observed during the inventories (GCM, 2023).

[1] Reference : https://www.environnement.gouv.qc.ca/biodiversite/especes-exotiques-envahissantes/liste-EFEE-prioritaires.pdf

Table 20.5 Special-status flora species with a probability of occurrence in or near the Study area

Common name	Scientific name	Provincial Status (Act Respecting Threatened or Vulnerable Species)
Calypso	Calypso bulbosa var. americana	Likely to be designated as Threatened or Vulnerable
False Mountain Willow	Salix pseudomonticola C.R. Ball	Likely to be designated as Threatened or Vulnerable
Geyer's Yellow Monkeyflower	Erythranthe geyeri	Threatened
Great Northern Aster	Canadanthus modestus	Likely to be designated as Threatened or Vulnerable
Little-tree Willow	Salix arbusculoides Andersson	Likely to be designated as Threatened or Vulnerable
Mccalla's Willow	Salix maccalliana Rowlee	Likely to be designated as Threatened or Vulnerable
Ojibway Waterwort	Elatine ojibwayensis	Likely to be designated as Threatened or Vulnerable
Pale Manna Grass	Torreyochloa pallida var. pallida	Likely to be designated as Threatened or Vulnerable
Purple Meadowrue	Thalictrum dasycarpum	Likely to be designated as Threatened or Vulnerable
Ram's Head Lady's Slipper	Cypripedium arietinum	Vulnerable
Seneca Snakeroot	Polygala senega Linnaeus	Likely to be designated as Threatened or Vulnerable
Showy Lady's Slipper	Cypripedium reginae	Likely to be designated as Threatened or Vulnerable
Striped Coralroot	Corallorhiza striata var. striata	Likely to be designated as Threatened or Vulnerable
Woodland Pinedrops	Pterospora andromedea	Threatened

About wildlife species and at the time of writing, the map of special-status species occurrences in the CDPNQ reports, within 2 km of the mine site, the presence of two (2) wildlife occurrences, namely the Bald Eagle (*Haliaeetus leucocephalus*) with a historic breeding site on an island in the lake, as well as the Woodland Cariboo (*Rangifer tarandus caribou*). Under the *Act Respecting Threatened or Vulnerable Species* these two (2) species are listed as Vulnerable. The Woodland Cariboo also has the status of Threatened under the *Species at Risk Act* (SARA).

In addition, Table 20.6 presents the wildlife special-status species that are present or likely to be present in the vicinity of the Kiena Mine Complex, based on habitats and ranges.

Table 20.6 Special-status wildlife species detected or with a probability of occurrence close to the Kiena Mine Complex

Common name	*Scientific name*	Presence	Provincial Status (*Act Respecting Threatened or Vulnerable Species*)	Federal Status (*Species at Risk*)
Avian Fauna				
Bald Eagle	*Haliaeetus leucocephalus*	Potentially	Vulnerable	Not listed
Bank Swallow	*Riparia riparia*	Potentially	Not listed	Threatened
Barn Swallow	*Hirundo rustica*	Potentially	Not listed	Threatened
Canada Warbler	*Cardellina canadensis*	Potentially	Likely to be designated as Threatened or Vulnerable	Threatened
Common Nighthawk	*Chordeiles minor*	Potentially	Likely to be designated as Threatened or Vulnerable	Special Concern
Eastern Whip-poor-will	*Antrostomus vociferus*	Potentially	Vulnerable	Threatened
Evening Grosbeak	*Coccothraustes vespertinus*	Potentially	Not listed	Special Concern
Olive-sided Flycatcher	*Contopus cooperi*	Potentially	Not listed	Special Concern
Rusty Blackbird	*Euphagus carolinus*	Potentially	Not listed	Special concern
Short-eared Owl	*Asio flammeus*	Potentially	Likely to be designated as Threatened or Vulnerable	Special Concern
Yellow Rail	*Coturnicops noveboracensis*	Potentially	Threatened	Special concern
Herpetofauna				
Common Snapping Turtle	*Chelydra serpentina*	Potentially	Not listed	Special concern
Midland Painted Turtle	*Chrysemys picta*	Potentially	Not listed	Special concern
Smooth Greensnake	*Opheodrys vernalis*	Potentially	Likely to be designated Threatened or Vulnerable	Not listed
Wood Turtle	*Glyptemys insculpta*	Potentially	Vulnerable	Threatened
Mammals				
Chiroptera				
Eastern Red Bat	*Lasiurus borealis*	Confirmed	Vulnerable	Not listed
Eastern Small-footed Bat	*Myotis leibii*	Potentially	Likely to be designated threatened or vulnerable	Not Listed
Hoary Bat	*Lasiurus cinereus*	Confirmed	Likely to be designated threatened or vulnerable	Not Listed
Little Brown Myotis	*Myotis lucifugus*	Confirmed	Threatened	Endangered
Northern Myotis	*Myotis septentrionalis*	Confirmed	Threatened	Endangered
Silver-haired Bat	*Lasionycteris noctivagans*	Confirmed	Likely to be designated threatened or vulnerable	Not Listed
Micromammals				
Rock Vole	*Microtus chrotorrhinus*	Potentially	Likely to be designated threatened or vulnerable	Not listed
Southern bog lemming	*Synaptomys cooperi*	Potentially	Likely to be designated threatened or vulnerable	Not listed
Other mammals				
Least Weasel	*Mustela nivalis*	Confirmed	Likely to be designated threatened or vulnerable	Not listed
Woodland Caribou, boreal Population	*Rangifer tarandus caribou*	Potentially	Vulnerable	Threatened

Sources: Stantec 2021a et 2021b; GCM, 2023

Finally, wildlife habitats protected under the Act respecting the conservation and development of wildlife and the Regulation respecting wildlife habitats are located in the vicinity of the Wesdome Property, which is a heronry about 2 km north on an island in Lake De Montigny, as well as a water fowl gathering area and a muskrat habitat about 1 km to the south on the Piché River. Also, a walleye spawning ground would be present in the northern sector of Lake De Montigny, near the Milky River (AECOM, 2024).

20.2.3 Aquatic Environment

20.2.3.1 Fish Species

Table 20.7 presents a summary of the results of the fishing surveys conducted in Lake De Montigny as part of the environmental impact assessment (EIA) studies of the mining site carried out since 2004 (Stantec (2021a and 2021b)). The various fish species recorded in the surrounding waterways and in Lake De Montigny (AECOM (2023); GCM (2025)) are presented in Table 20.7. Among these species, some are of significant value for sport fishing, including Walleye, Northern Pike, Lake Whitefish and Yellow Perch. The Lake Whitefish is of significant value to local Indigenous communities (GCM, 2025).

Table 20.7 Fish species recorded in streams in the Kiena Mine area and in Lake De Montigny

Family	Common name	*Scientific name*
Catostomidae	Longnose Sucker	*Catostomus catostomus*
	White Sucker	*Catostomus commersonii*
Cottidae	Mottled Sculpin	*Cottus bairdi*
	Sculpin sp.	*Cottus sp.*
Cyprinidae	Cyprinids	*Notropis sp.*
	Emerald Shiner	*Notropis atherinoides*
	Spottail Shiner	*Notropis hudsonius*
Esocidae	Northern Pike	*Esox lucius*
Gasterosteidae	Brook Stickleback	*Culaea inconstans*
Hiodontidae	Goldeye	*Hiodon alosoides*
	Mooneye	*Hiodon tergisus*
Ictaluridae	Brown Bullhead	*Ameirus nebulosus*
Lottidae	Burbot	*Lota lota*
Percopsidae	Trout-Perch	*Percopsis omiscomaycus*
Percidae	Logperch	*Percina caprodes*
	Sand Pickerel	*Sander canadensis*
	Yellow Perch	*Perca flavescens*
	Walleye	*Sander vitreus*
Salmonidae	Lake Whitefish	*Coregonus clupeaformis*
	Lake Herring	*Coregonus artedi*

Sources: Wood (2021), Stantec (2021a), AECOM (2023) et GCM (2025)

20.2.3.2 Benthic Invertebrates

The benthic invertebrate taxa found in the final effluent exposure zone and in the reference zone in Lake De Montigny (Figure 20.10) are presented in Table 20.8 (AECOM, 2023). These are the dominant taxa observed during cycles 5 and 6 of EEM.

Table 20.8 Dominant taxa of benthic invertebrates in cycles 5 and 6 of EEM in exposure and reference zones in Lake De Montigny

Taxon Name	Taxon Name
Dicrotendipes	*Pisidium*
Hexagenia	*Pseudochironomus*
Microtendipes	*Probythinella*
Nématodes	*Procladius*
Oecetis	*Valvata*

Source : AECOM, 2023

20.2.3.3 Environmental Effects Monitoring – Fish Species and Benthic Invertebrates

Biological monitoring studies of fish species and benthic invertebrates have been conducted at the Wesdome site since Cycle 1 (2004). The most recent study (Cycle 8) was completed in May 2026 (AECOM, 2023; 2024; 2026). These EEM studies are required under the MDMER and the *Fisheries Act*.

Cycles 4 and 7 consisted of studies aimed at determining the causes. During Cycle 4, the study showed that the environment had higher concentrations of nitrites in the exposed area. During Cycle 7, nitrogen was identified as the cause of the confirmed effects on benthos and fish, with copper playing a secondary role.

In Cycle 3, the study of mercury in tissues was conducted on Brown Bullheads. The results of the statistical analyses showed that the average mercury concentrations in the flesh of bullheads were significantly lower in the exposure area than in the reference area. For all the samples analysed, no exceedances of the guideline of 0.5 mg/kg for the consumption of fish flesh were observed.

Confirmed effects on fish in cycles 3, 5, 6 and 8 are noted on relative liver weights, which are higher in the exposure area (and above the critical effect level in cycles 3 and 8). Still in exposed area, the condition (body weight versus length) is lower in cycles 3, 5, 6 and 8. Growth is lower for cycles 3 and 6, and higher for cycle 5, in exposed area. The survival rate appears to have been higher among specimens from the exposed area during cycles 5 and 6, but lower during cycle 8.

For benthic invertebrates, the effects confirmed during cycles 5 and 6 are noted on the total density and the Bray-Curtis coefficient (an index that quantifies the difference between two samples according to the abundance of the species present), i.e. they are significantly higher in the exposed area, and even exceed the critical effect level. The taxonomic richness is also higher in exposed areas during the 2 cycles. In Cycle 8, density and taxonomic richness were significantly lower and exceeding the critical effect level in the exposed area.

20.2.3.4 Avian Fauna

Surveys conducted on Parker Island (Wood 2021), on the lakeshore near existing mining infrastructures (Stantec 2021a and 2021b), and in the Presqu'île area (GCM 2023) identified the avian species presented in Table 20.9.

Table 20.9 Avian species confirmed during inventories

Family	Common name	*Scientific Name*
Alcedinidae	Belted Kingfisher	*Megaceryle alcyon*
Anatidea	Common Merganser	*Mergus merganser*
Ardeidae	American Bittern	*Botaurus lentiginosus*
	Great Blue Heron	*Ardea herodias*
Corvidae	American Crow	*Corvus brachyrhynchos*
	Common Raven	*Corvus corax*
Fringillidae	American Goldfinch	*Spinus tristis*
	Common Redpoll	*Acanthis flammea*
	Pine Grosbeak	*Pinicola enucleator*
Icteridae	Common Grackle	*Quiscalus quiscula*
	Red-winged Blachbird	*Agelaius phoeniceus*
Laniidae	Northern Shrike	*Lanius borealis*
Laridea	American Herring Gull	*Larus smithsonianus*
	European Herring Gull	*Larus argentatus*
Paridae	Black-capped Chickadee	*Poecile atricapillus*
Parulidae	American Redstart	*Setophaga ruticilla*
	Black-and-white Warbler	*Mniotilta varia*
	Cape May Warbler	*Setophaga tigrina*
	Chestnut-sided Warbler	*Setophaga pensylvanica*
	Common Yellowthroat	*Geothlypis trichas*
	Magnolia Warbler	*Setophaga magnolia*
	Mourning Warbler	*Geothlypis philadelphia*
	Northern Parula	*Setophaga americana*
	Northern Waterthrush	*Parkesia noveboracensis*
	Yellow Warbler	*Setophaga petechia*
Passerellidae	Chipping Sparrow	*Spizella passerina*
	Song Sparrow	*Melospiza melodia*
	White-throated Sparrow	*Zonotrichia albicollis*
Phasianidae	Ruffed Grouse	*Bonasa umbellus*
	Downy Woodpecker	*Dryobates pubescens*
	Hairy Woodpecker	*Leuconotopicus villosus*
Picidae	Northern Flicker	*Colaptes auratus*
	Pileated Woodpecker	*Dryocopus pileatus*
	Yellow-bellied Sapsucker	*Sphyrapicus varius*
Regulidae	Ruby-crowned Kinglet	*Corthylio calendula*

Family	Common name	*Scientific Name*
Scolopacidae	American Woodcock	*Scolopax minor*
	Spotted Sandpiper	*Actitis macularius*
	Wilson's Snipe	*Gallinago delicata*
Sturnidae	Common Starling	*Sturnus vulgaris*
Troglodytidae	Winter Wren	*Troglodytes hiemalis*
	American Robin	*Turdus migratorius*
Turdidae	Hermit Thrush	*Catharus guttatus*
	Veery	*Catharus fuscescens*
Tyrannidae	Least Flycatcher	*Empidonax minimus*
Vireonidae	Red-eyed Vireo	*Vireo olivaceus*

20.2.3.5 Herpetofauna

Incidental observations (Stantec 2021a) and surveys (Stantec (2021a and 2021b); GCM (2023)) have identified the herpetofauna species presented in Table 20.10.

Table 20.10 Herpetofauna species confirmed during inventories

Order	Common name	Scientific name
Anurans	Eastern American Toad	*Anaxyrus americanus*
	Northern Leopard Frog	*Lithobates pipiens*
	Spring Peeper	*Pseudacris crucifer*
	Wood Frog	*Lithobates sylvaticus*
Squamates	Common Garter Snake	*Thamnophis sirtalis*

20.2.3.6 Chiroptera

Stantec (2021a) confirmed five (5) species of bats present on the south shore of the Lake De Montigny, in the waste rock stockpile area. These species all have a special protection status and are listed in Table 20.6. In addition, the Eastern Small-footed bat may be present near the Wesdome Property. Of these species, three (3) are migratory: the eastern red bat, the ash bat, and the silver-haired bat, while the other three (3) species, namely, the northern myotis, the little brown myotis, and the eastern short-legged bat are sedentary.

20.2.3.7 Other Mammals

Opportunistic inventories as well as incidental data collected (Wood, 2021; Stantec, 2021a; GCM 2023) were used to identify the mammalian species presented in Table 20.11. For some, signs of their presence have been observed. Of those, only Least Weasel is likely to be designated threatened or vulnerable under the *Act Respecting Threatened or Vulnerable Species.*

Table 20.11 Small game and other mammals confirmed during surveys

Family	Common name	*Scientific name*
Canidae	Red Fox	*Vulpes vulpes*
Castoridae	American Beaver	*Castor canadensis*
Cervidea	Moose	Alces alces
Cricetidae	Muskrat	*Ondatra zibethicus*
Mustelidea	Least Weasel	*Mustela nivalis*
Sciuridae	American Red Squirrel	*Tamiasciurus hudsonicus*

20.3 Ore, Waste Rock, Tailings Geochemical Characterisation and Water Management

Several geochemical studies have been conducted since 1990 for the characterization of tailings and waste rock on the Kiena Mine Complex. The list of the studies available are presented in Table 20.12 and results are summarized in the next sections.

Over a period of more than 30 years, acid-base assessments were performed according to three (3) different protocols: a) Acid-base accounting (ABA): Standard protocol by Sobek *et al.* (1978) or EPA 600/2-78-054 procedure, b) Acid-base accounting (BCRM): Protocol using B.C. Research Method (Bruynesteyn and Duncan, 1979), c) Acid-base accounting (BCRM): Protocol using B.C. Research Method (Bruynesteyn and Duncan, 1979) and d) Modified acid-base accounting (MABA): Modified protocol by Lawrence (MEND, 1991).

Whole rocks concentrations for major oxide components were analysed by X-Ray fluorescence while total sulphur and carbon concentrations were determined by using infrared induction furnace (LECO). Four-acid digestion was used to determine trace metals concentrations in samples while aqua regia digestion was used to determine extractable metal concentrations.

Metal leaching tests such as TCLP, SPLP and CTEU-9 were also performed following the Protocol MA.100 Lix.com1.1 (CEAEQ, 2023) or by shake flask extraction using Protocol described in MEND (2009). Kinetic humidity cell tests have generally been used to assess the quality of drainage water. When data are available, Mineralogy by Rietveld X-ray diffraction (XRD) or by numeric petrography/SEM-EDS (ARTsection).

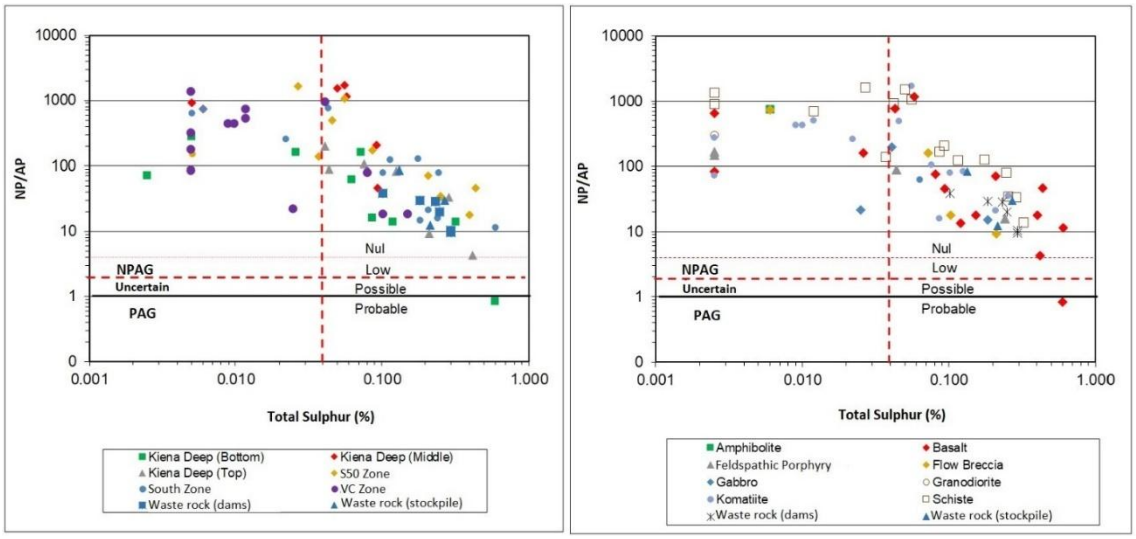
Table 20.12 Environmental Geochemistry Studies

Reference	Type of material *(number in parentheses indicates the number of samples)*	Sector	Acid-base accounting (ABA)	Acid-base accounting (BCRM)	Modified acid-base accounting (MABA)	Total sulphur	Total carbon	Metals (MA.200 Met1.2)	Metals (aqua regia)	Metals (four acids)	Whole rock analysis (XRF)	TCLP (leaching test)	SPLP (leaching test)	CTEU-9 (leaching test)	SFE (leaching test)	Humidity cell (kinetic test)	Mineralogy (XRD)	Mineralogy (ARTsection)
Ferguson (1993)	Tailings (22), waste rock (4) and mineralized rock (1)	Kiena		●														
Unknown (1995)	Tailings (27)	Kiena	●															
Unknown (2002)	Tailings (13) and waste rock (1)	Kiena	●															
Stavibel (2012a)	Tailings (6) and sediments from the polishing pond (2)	Kiena				●		●				●	●	●				
Stavibel (2012b)	Waste rock (5)	Kiena				●		●				●	●	●				
Stavibel (2013)	Tailings (10)	Kiena				●		●				●	●	●				
Stantec (2020)	Waste rock (39) and tailings (7)	Kiena	●					●				●	●	●				
Wood (2021)	Waste rock (68)	South, S50, VC, Kiena Deep			●			●					● 23)	● 23)	● (23)			
	Tailings (33)				●			●					● (11)	● (11)	● (11)			
	Process water (1)							●										
WSP (2022)	Waste rock (4) and tailings (3)	South, S50, Kiena Deep			●											●	●	
Labtem (2023)	Review and summary of Stantec (2020) and Wood (2021) static test results																	
Wesdome (2023)	Waste rock (32)	Presqu'île				●	●		●	●	●							
Soutex (2023)	Waste rock (20)	Presqu'île			●							●	●	●				

Reference	Type of material *(number in parentheses indicates the number of samples)*	Sector	Acid-base accounting (ABA)	Acid-base accounting (BCRM)	Modified acid-base accounting (MABA)	Total sulphur	Total carbon	Metals (MA.200 Met1.2)	Metals (aqua regia)	Metals (four acids)	Whole rock analysis (XRF)	TCLP (leaching test)	SPLP (leaching test)	CTEU-9 (leaching test)	SFE (leaching test)	Humidity cell (kinetic test)	Mineralogy (XRD)	Mineralogy (ART section)
IOS (2023)	Mineralized rock and waste rock (19)	Presqu'île																●
Labtem (2024)	Mineralized rock (121) and composite (14)	Presqu'île			● (14)	● (121)	● (121)	● (135)				● (14)	● (14)	● (14)				
Labtem (2025)	Waste rock (82) and composite (16)	Presqu'île			● (16)	● (82)	● (82)	● (98)				● (16)	● (16)	● (16)				
Exploration 2025 (*data analysis ongoing*)	Waste rock and mineralized rock	Dubuisson (1865) and Presqu'île (253)				● (2118)	● (2118)		● (1109)	● (1109)								
Wesdome 2026 (*tests and data analysis ongoing*)	Waste rock (1) and mineralized rock (3)	Presqu'île														●		

20.3.1 Kiena Area

Most of the recent geochemical studies were completed on the zone Kiena, Kiena Deep, South, S50 and VC: Labtem (2023), Wood (2021), WSP (2022), and Stantec (2020). Static and kinetic testing were conducted on grab samples of tailings and selected, compositionally representative samples of waste rock. Labtem (2023) presented a review of these and other available data. Based on the modified Sobek static test results illustrated in Figure 20.12, 98% of the waste rock samples are non-potentially acid generating. Only one (1) sample of basalt from the Kiena Deep (bottom) Zone is classified as potentially acid generating. From these samples, kinetic weathering tests were carried out using the ASTM humidity cell procedure on four (4) samples of compositionally representative waste rock, including one sample from each of the main underground waste rock lithologies (S50 Zone basalt, South Zone schist, Kiena Deep komatiite), and the one (1) PAG sample of Kiena Deep basalt (WSP, 2022). All waste rock humidity cell leachates had stable, circumneutral pH (between 6.8 and 7.5) throughout the duration of the test, including the PAG cell (pH range between 6.8 and 7.4) which was run for 41 weeks. Calculations of total sulphur and carbonates neutralization potential (Carb NP) depletion times based on the kinetic tests confirmed the classification of the PAG cell sample as PAG, with time of 101 years for total sulphur depletion but 16 years for Carb NP depletion. Based on the information in hand, the waste rock from the Kiena zone is expected to be NPAG overall, having an excess of available neutralisation potential. Possible localized spots of PAG rock may occur but are expected to be neutralized by the bulk of the rock surrounding it.



Modified from Labtem (2023)

Figure 20.12 Acid Generation Potential Results of Kiena Waste Rock Samples

Static tests (modified Sobek protocol) and kinetic tests were also conducted on tailings samples. Grab samples were taken from the tailing storage facility at different depths and three (3) samples were produced by metallurgical testing. All results demonstrated that the tailings are NPAG, with a neutralization potential high enough to control acidity produced by the sulphides oxidation.

Metal leaching potential was also evaluated following the *Guide de caractérisation des résidus miniers et du minerai* (MELCC, 2020) procedure. This procedure involves the analysis of chemical composition to identify enrichment of certain metals in the mining material, then referred to as elements of interest. Mobility of the EOI is evaluated using static leaching testing (TCLP, SPLP, CTEU-9 and SFE protocols) and kinetic humidity cell testing. EOI in the waste rock samples include Ag, As, Co, Cr, Cu, Mn and Ni. Tailings contained values above the Quebec soil criteria for Ag, As, Co, Cr, Cu, Mn, Ni and Pb. The potential mobility of EOIs is evaluated by comparing leaching test concentration of a given EOI to the groundwater quality criteria for this element (Beaulieu, 2021). Slight exceedances of drinking water criteria in test leachates were identified for Al and As for both waste rock and tailings samples. Based on the review prepared by Labtem (2023), waste rock and tailings samples are classified as potentially leachable, but the risk of actual exceedances to groundwater criteria in-situ is qualified as low because of the marginal exceedances observed in testing. Overall, metal release rates for all waste rock and tailings cells were low with rates based on concentrations that were mostly at or below the analytical detection limit. Monitoring of contact water quality and groundwater quality is being conducted to document water quality in the area surrounding the mine infrastructures. The environmental geochemistry analysis program is anticipated to be pursued for the Kiena Deep Zone.

20.3.2 Presqu'île Area

Presqu'île area geochemical characterization of waste rock and mineralized rock began in 2023. Static test programs were conducted to evaluate acid generation potential and metal leaching potential following the *Guide de caractérisation des résidus miniers et du minerai* (MELCC, 2020) procedure. These programs were composed of two (2) phases: the first phase (Phase 1) involved analyses of sulphur, carbon and metals content. Results were used to select samples and prepare composites for the next phase of evaluation. This second phase (Phase 2) used additional tests to evaluate the geoenvironmental properties of the materials, including the modified Sobek static test and three (3) leaching tests.

Total sulphur content ranged from 0.01 to 2.40%S for mineralized rock, and from 0.01 to 0.38%S for waste rock. Total carbon concentrations ranged from 0.25 to 1.90%C for mineralized rock, and from 0.25 to 2.10%C for waste rock.

Based on total C and S concentrations for 121 individual mineralized samples, we have calculated that 97% of these samples are non-PAG. Furthermore, results from analyses using modified Sobek-type static test and performed on 14 composite mineralized samples indicate that all these samples are NPAG. Results from eighty-one out of eighty two individual waste rock samples that were analyzed are classified as NPAG, while only one waste rock sample from the PR-2 zone is considered uncertain at PAG based on the classification criterion considered. All composite waste rock samples are considered NPAG.

Additionally, the materials are considered at low-risk because the metals with concentrations exceeding the Provincial soil criteria are not leachable (SPLP and CTEU-9) according to surface water resurgence criteria (leaching test concentrations of parameters are below groundwater quality criteria for that parameter). Although, some exceedances to groundwater criteria are observed for the TCLP leach test (leaching under acid conditions) as the samples are NPAG, this test is not applicable for the designation of leaching potential. Kinetic testing by the ASTM humidity cell protocol is currently ongoing with samples of waste rock and mineralized rock to verify the weathering behaviour and leaching characteristics of these materials.

The environmental geochemistry analysis program has continued in 2025 and is ongoing in 2026; it was integrated into the ongoing exploration program where samples are periodically selected for the analysis of total sulphur, total carbon and on approximately half of those samples, additional analysis of metal content. In 2025, a total of 253 drill hole core samples were analysed. Data analysis and evaluation is ongoing. To date, of the 2025 data, total sulphur results range from <0.01 to 2.7%S, with an average value of 0.15%S. Total carbon results range from 0.05 to 9.6%C, with an average value of 1.2%C.

20.3.3 Dubuisson Area

Geochemical characterization of the Dubuisson area was initiated in 2025 and is ongoing. This environmental analytical program was integrated into exploration activities. More than 900 drill hole core samples were submitted for analysis of metal content and more than 1800 samples were submitted for the analysis of total sulphur (to represent acid potential) and total carbon (to represent carbonate buffering capacity). The evaluation of results from these data is on-going and will be used to select samples for further environmental geochemical characterization. Based on 2025 data, total sulfur results range from <0.01 to 3.5% S, with a mean value of 0.17% S. Total carbon results vary from 0.06 to 10.6% C, with a mean value of 2.1% C.

20.3.4 Kiena Mine Surface Water Quality

20.3.4.1 Tailing Storage Facility

According to Directive 019 (MDDEP 2012, MELCCFP, 2025), although there is no specific recommendation or criterion requirement to be met, the waters of the south basin of the tailings management facility have been collected and sampled almost every week since 2021. The metals and chemical components that were analyzed are as follows:

- As, Cu, Fe, Ni, Pb and Zn
- Ammoniacal nitrogen (N-NH_4^+ N-NH_3), Ammonia
- Cyanides (total, available and free)
- Suspended solids (TSS)
- Petroleum hydrocarbons (C10C50)
- pH and temperature

The results obtained indicate that the pH of the park's waters varies from neutral (pH 7.1) to low alkaline (pH 9.4) and that the concentrations of Cu, Ni, Fe and total cyanides are higher than those of other metals and chemical components. Since 2023, total cyanide concentrations have been higher during the winter months (January to early April) than in other months of the year. This is an anticipated occurrence resulting from ice cover and lower temperatures that hinder cyanide degradation relative to frost-free periods.

20.3.4.2 Polishing Pond

Water sampling from the north and south ditches of the polishing tank began in May 2026. For the same period, the results obtained so far indicate that the average pH of the water in the ditches is 7.7. The concentrations of As, Fe in the ditches of the polishing pond are equivalent to lower than those in the south pond of the tailings pond. They are also much lower in Cu, Ni, Pb, total cyanide, non-ionized nitrogen and ammonia.

20.3.4.3 Mine Water

Mine water refers to groundwater and seepage water that accumulates in the Kiena Mine drifts and will be pumped to the surface. The mine water at the Kiena Mine is characterized by high conductivity and hardness, high chloride concentrations, and is also charged with ions. It contains dissolved metals and different forms of nitrogen and high levels of ammonia, Kjeldahl nitrogen and nitrates/nitrites.

20.3.4.4 Ditch

The water that is drained in the north and southeast ditches of the tailings pond is characterized by high levels of TSS and contains total nitrogen, chlorides and sulphates. This ditch water is also ion-loaded and has high alkalinity, conductivity and hardness. Metal concentrations are generally less abundant than in mine water (Aecom, 2023).

20.3.4.5 Final effluent

The final effluent from the Kiena Mine is located approximately 300 m northwest of Kienawisik Road and north of the polishing pond (Figure 20.3). The effluent quality objectives were established using historical monitoring data, regulatory requirements and operational experience at the Kiena Mine. Attention was given to constituents associated with cyanide destruction, including ammonia, cyanate, residual cyanide species and dissolved copper, as these parameters are expected to govern treatment performance and overall effluent quality. The treated effluent is designed to comply with the applicable requirements of DIR-019 prior to discharge.

The annual concentrations measured in the final effluent are often lower than those measured in the exposure area for P, Fe, Al, Cd, Cr, Pb, Tl, U, and Zn. However, they are higher for NO_2-NO_3, SO_4, Cl, Mn, Cu, Co, Hg, Mo and Se (Aecom, 2023).

Some trends indicate that the final effluent could periodically contribute to the chemical load in the receiving environment. While Mn, Ni, and, to a lesser extent, P are the elements most frequently found in the final effluent, Cu, Mn, Ni, Zn, and SO_4 tend to accumulate in the exposure zone. Nitrogen compounds are common factors in most studies conducted up to 2022 and nitrate (NO_3) concentrations in the final effluent appear to follow the consumption of explosives used in mining operations. (Aecom, 2023). Although there is no recommended reference concentration in Quebec, the results obtained from the weekly sampling phases for years 2025 and 2026 indicate the presence of total ammoniacal nitrogen (NH_3+NH_4) in the final effluent waters. There are no recommended reference concentrations in Quebec. However, un-ionized ammonia nitrogen (NH_3) concentrations are regulated by the Metal and Diamond Mining Effluent Regulations (Departement of Justice, Canada, 2026). The maximum un-ionized ammonia (Nitrogen) concentration allowed for a grab sample collected in an effluent is 1.00 mg/L. Analyses of samples taken since 2024 by the Kiena Mine indicate that un-ionized ammonia nitrogen concentrations are generally < 0.01 mg/L.

Even though the criterion relating to the quantity of suspended matter in the water has been absent from exceedances since 2024, this criterion has been exceeded five (5) times between December 2025 and May 2026.

The Lake De Montigny is characterized by the absence of a pronounced flow rate that would favour an accumulation of chemical compounds and metals in the sediments rather than their dispersion in the lake. This low water flow in Lake De Montigny could limit the extent of the dispersion plume of metals from the Kiena Mine effluent. It is currently estimated that metal concentrations associated with the Kiena Mine effluent are 12% at 100 m north of the exposure zone, decreasing to 3% at 250 m. To the west and east, at 100 m from the effluent, the concentration is close to 3% and is reduced to zero (0) at 250 m west of the exposure zone (Aecom, 2023).

In the coming years, the metal and chemical composition of the final effluent as well as the waters and sediments of the exposure area could be influenced by mining developments from Presqu'île and Dubuisson Zones. Measures should be developed by Kiena Mine to avoid environmental impacts.

20.3.5 Tailings and Sediments

A characterization of sediments collected in the polishing pond and in dams # 4, 5, 10, 23, 40 and 42 was carried out by Kiena Mine staff (Aecom, 2023). The results obtained could indicate the presence of metals and chemical compounds that may be present in wastewater and that could accumulate in the exposure area of the final effluent. The reference criteria for sediment characterization are those used for the assessment of freshwater sediment quality (Environment Canada and MDDEP 2007). These criteria are only used as an indication (Aecom, 2023). For samples collected near dams, we assume they are likely tailings. Metals content and other chemical compounds were compared to the MELCCFP criteria recommended for mining material, such as tailings, in the *Guide de caractérisation des résidus miniers et du minerai* (MELCC, 2020). The criteria used correspond to background levels in soils of the Superior geological province (criteria A) (Appendices 1 & 2; Beaulieu, 2021).

20.3.5.1 Tailings Storage Facility Dams

Six (6) sediment samples were collected near dams 4, 5, 10, 23, 40 and 42 (Table 20.2; Aecom, 2023). These sediments are considered to be tailings that have settled on the dams. The sediments of the dams contain concentrations higher than criteria A in As, Co, Cr, Cu, Mn, Ni, Se and petroleum hydrocarbons (C10-C50), for at least one (1) sample. The results of the analyses indicate that the sediments of dam 10 is the sampling station where metal concentrations are highest and therefore where metals have accumulated the most on the TSF pond (Aecom, 2023). C10-C50 content is the highest in the sediments of dam 5.

The results for the sediments in the polishing pond have been compared with the freshwater quality criteria, which are in ascending order concentrations: REL, TEL, OEL, PEL and FEL (Environment Canada and MDDEP 2007). The sediments have higher concentrations in As (>TEL), Cd (>REL), Cr (>FEL), Cu (>PEL), Ni (>OEL), Zn (>TEL) and C10-C50 (>PEL).

Analyses conducted in the exposure zone indicate that As and C10-C50 are not observed at elevated concentrations in the final effluent and the exposure area of the receiving environment. These results indicate the effectiveness of the polishing pond for these constituents. However, the presence of Cr and Cu in the exposure area at higher concentrations than those analyzed in 2022 in the reference area indicates that the sediments in the polishing pond are not fully efficient at absorbing these metals (Aecom, 2023).

20.3.6 Water Management

20.3.6.1 TSF Area

The current tailings and water management at the TSF involves tailings deposition within the North Cell. The North and South TSFs operate as an integrated water management system, providing temporary storage capacity for process water, precipitation, runoff and seasonal variations. Water does not circulate freely between the cells but is generally transferred from the north cell to the south cell only by pumping. Since the Kiena Mine water management system has been designed to maximize process water reuse, most of the water stored within the TSFs is reclaimed and returned to the process plant, significantly reducing freshwater demand. Only a portion of the collected water requires treatment, with the remainder being continuously recycled within the process water circuit. Site water management is supported by a network of pipelines connecting the process plant, TSF, and water treatment facilities.

South Cell is utilized for water management. Excess water in the North Cell is currently being transferred to the South Cell via active pumping. An Internal Spillway is planned to be constructed on dyke 13 to facilitate passive flow of excess water from the North to the South Cell. Water used for mill operations is collected within the South Cell and pumped to the Water Treatment Plant by using a Reclaim Pump System. After treatment, excess water not recycled for operations will be directed to the polishing pond and then discharged into Lake De Montigny via the final effluent. The quality of the excess water to be discharged into Lake De Montigny must comply with applicable environmental regulations and the requirements of Directive 019 and certificate of authorisation. The concentrate generated by the treatment process is returned to the TSF, maintaining dissolved constituents within the site water management circuit. This

operating philosophy maximizes water reuse, minimizes freshwater withdrawal and limits the volume of water requiring treatment while maintaining compliance with environmental discharge requirements.

The treatment process combines ultrafiltration and reverse osmosis. The UF stage removes suspended solids prior to membrane treatment, while the RO system removes dissolved constituents, including dissolved metals, cyanate and other dissolved contaminants, to achieve the required effluent quality objectives. Main contaminant of the water is ammonia, cyanate, residual cyanide species and dissolved metals.

An extensive monitoring program will continue throughout the LOM to confirm the long-term adequacy of the selected treatment strategy and improve the understanding of contaminant behaviour within the site water management system. Furthermore, the Kiena Mine also plans to implement a contact water management system (i.e., runoff and snowmelt) related to the expansion of the waste stockpile.

Runoff from the TSF dykes and seepage are collected in perimeter ditches sized to handle 1 in 100-year 24-hour rainfall event. Water captured in the perimeter ditches is directed to the Polishing Pond.

20.3.6.2 Waste Rock and Topsoil Stockpiles Area

Due to the increase in production, the volume of mine waste that must be stored in the existing authorized waste stockpile will increase. Since its capacity is limited, it must be expanded to accommodate these additional volumes to be managed. Consequently, the Kiena Mine must proceed with enlarging the original footprint of the existing WS, as defined in the current authorization.

For the waste stockpile extension project, the regulatory limitations to be followed are those set out in Directive 019 (2025). All runoff and seepage water from WS, WSE must be captured by a drainage network that conveys the wastewater to a pond or a treatment system or a monitoring station at the point of discharge of the final effluent. The engineering design of this WSE must allow for contact water management in accordance with the criteria defined in Section 18.16.2.1.

The surface water management strategy includes the collection of runoff and meltwater from the overall footprint of the waste and topsoil stockpiles. Collection ditches for this water will be constructed around the perimeter of the waste and topsoil stockpiles. These ditches will direct contact water to the lined collection pond. No diversion ditch (clean water) has been included in the design since the local topography does not require such asset. From the collection pond, the water will be pumped to the existing polishing pond at the mine site. A pumping station installed in an insulated sea container located near the collection pond will be used to convey contact water either primarily to the polishing pond or to the TSF. In the case of flood exceeding 360 mm/24h, an emergency spillway will discharge exceeding water to the Lake De Montigny to limit potential impacts on the integrity of the works.

20.3.7 Tailings, Waste Rocks and Topsoil Management

Waste rock generated from mining operations and existing stockpiles provide suitable sources of construction material, with any surplus material directed to other site uses, such as underground backfill, stockpiling for future needs, or closure-related earthworks. As tailings and waste rock are anticipated to be non-potentially acid generating with a generally low risk of neutral metal leaching, these materials could be used for construction works. Ongoing geoenvironmental sampling and testing of waste rock during mining will serve to verify and document the suitability of the waste rock for use in construction.

Construction activities require borrowed tailings and waste rockfill for embankment construction, erosion protection, drainage features, and other supporting infrastructure. These activities will include, among other things, increasing the capacity of the TSF by constructing a one-meter upstream berm raise on the perimeter embankments of the south cell by September 2028. Tailings borrowed from the beach are to be used for the berm construction. Upstream and downstream slopes of the compacted tailings berm are to be covered with non-woven geotextile and rockfill. Tailings transport is supported by a network of pipelines connecting the process plant, TSF, and water treatment facilities.

Due to the increase in production, the volume of mine waste that must be stored in the existing authorized waste stockpile will increase. Since its capacity is limited, it must be expanded to accommodate these additional volumes to be managed. Furthermore, the Kiena Mine also plans to implement a contact water management system (i.e., runoff and snowmelt) related to this expansion and to construct a topsoil stockpile near the WS. The topsoil will come from stripping the footprint of the WRP expansion and will eventually be used for site rehabilitation purposes.

20.4 Legal Framework – Environment

20.4.1 Federal Environmental Laws and Regulations

In August 2019, the new Impact Assessment Act came into force, along with a new set of regulations. The IAA replaces the Canadian Environmental Assessment Act, 2012. The IAA continues the approach taken under the 2012 CEAA to designate projects by type and thresholds prescribed by regulation.

Under the IAA 2019, only projects designated by the Regulations Designating Physical Activities (DORS/2019-285) are subjected to the environmental assessment procedure. Thus, an environmental assessment under the IAA 2019 is required for a project that involves the construction, operation, decommissioning and abandonment of a new copper/gold mine, other than a placer mine, with an ore production capacity of 5,000 t/d or more.

The main laws and regulations applicable to the various projects located on the Kiena Mine site are presented in Table 20.13.

20.4.2 Provincial Environmental Laws and Regulations

In the Province of Quebec, the Environment Quality Act has its objective the protection of the environment and the living species that inhabit it, to the extent provided for by law. Under the EQA, most projects likely to have an impact on the quality of the environment must be duly authorized by the MELCCFP prior to their implementation. This Act results in several regulations applicable to the Project, the main ones of which are described in the following sections.

The main laws and regulations applicable to the various projects located on the Kiena Mine site are presented in Table 20.14.

20.4.3 Permitting

In anticipation of the resumption of mining operations in 2021 for the Kiena Mine, and since then, several authorizations and permits have been obtained by Wesdome Gold Mines Ltd.from the ministries concerned, in particular from the MELCCFP under the Environment Quality Act, as well as from the MRNF under the Mining Act. The statutory acts issued by these ministries aim, among other things: tailings storage facility, tailings backfill plant, Presqu'île site, crusher at the ore process plant, waste rock pile additional capacity, closure plan and diamond drilling exploration. Table 20.16 lists the permits/authorizations obtained since March 2021.

Table 20.13 Laws and regulations under Federal jurisdiction – Kiena Mine

Regulations	Hyperlink
Canadian Environmental Protection Act, 1999 (CEPA) - (L.C. 1999, ch.33)	https://laws-lois.justice.gc.ca/fra/lois/C-15.31/index.html
Environmental Impact Assessment Act (L.C. 2019, ch.28, art. 1)	https://laws-lois.justice.gc.ca/fra/lois/I-2.75/index.html
Migratory Birds Convention Act, 1994 (L.C. 1994, ch.22)	https://laws-lois.justice.gc.ca/fra/lois/m-7.01/
Migratory Birds Regulations, 2022 (DORS/2022-105)	https://laws-lois.justice.gc.ca/fra/reglements/DORS-2022-105/TexteComplet.html
Species at Risk Act (L.C. 2002, ch.29)	https://laws.justice.gc.ca/fra/lois/s-15.3/
Fisheries Act (L.R.C. (1985), ch. F-14)	https://laws-lois.justice.gc.ca/fra/lois/F-14/
Environmental Emergency Regulations, 2019 (DORS/2019-51)	https://laws-lois.justice.gc.ca/fra/reglements/DORS-2019-51/index.html
Regulations on Release and Environmental Emergency Notifications (DORS/2011-90)	https://laws-lois.justice.gc.ca/fra/reglements/DORS-2011-90/TexteComplet.html
National Pollutant Release Inventory (NPRI) Notice – Waste and Tailings Management Component	https://www.canada.ca/fr/environnement-changement-climatique/services/inventaire-national-rejets-polluants/declaration/exigences-reglementaires-avis-gazette.html
Regulations Respecting Ozone-Depleting Substances and Halocarbon Alternatives (DORS/2016-137)	https://laws-lois.justice.gc.ca/fra/reglements/DORS-2016-137/index.html

Regulations	Hyperlink
Annual Notices — NPRI	https://www.canada.ca/fr/environnement-changement-climatique/services/inventaire-national-rejets-polluants/declaration/exigences-reglementaires-avis-gazette.html
Annual Greenhouse Gas (GHG) Reporting Notices	https://www.canada.ca/fr/environnement-changement-climatique/services/changements-climatiques/emissions-gaz-effet-serre/declaration-installations/a-propos.html
Regulations on Gasoline and Gasoline Blend Dispensing Flow Rates (DORS/2000-43)	https://laws-lois.justice.gc.ca/fra/reglements/DORS-2000-43/index.html
Transportation of Dangerous Goods Act, 1992 (L.C. 1992, ch.34)	https://laws-lois.justice.gc.ca/fra/lois/t-19.01/
Transportation of Dangerous Goods Regulations (DORS/2001-286)	https://laws-lois.justice.gc.ca/fra/reglements/DORS-2001-286/index.html
Explosives Act (federal) - (L.R.C. (1985), ch. E-17)	https://laws-lois.justice.gc.ca/fra/Lois/E-17/TexteComplet.html
Explosives Regulations, 2013 (DORS/2013-211)	https://laws-lois.justice.gc.ca/fra/reglements/DORS-2013-211/index.html
Domestic Substances List and New Activities Requirements	https://www.canada.ca/fr/environnement-changement-climatique/services/registre-environnemental-loi-canadienne-protection/listes-substances/interieure.html
Toxic Substances (Pollution Prevention Plans as defined by CEPA	https://www.canada.ca/fr/environnement-changement-climatique/services/registre-environnemental-loi-canadienne-protection/plans-politiques/prevention-pollution.html
Regulations Respecting Certain Prohibited Toxic Substances (2012) (DORS/2012-285)	https://laws-lois.justice.gc.ca/fra/reglements/DORS-2012-285/index.html
PCBs Regulations (DORS/2008-273)	https://laws-lois.justice.gc.ca/fra/reglements/DORS-2008-273/
Regulations Respecting Effluents from Metal and Diamond Mines (DORS/2002-222)	https://laws-lois.justice.gc.ca/fra/reglements/DORS-2002-222/TexteComplet.html
Regulations on Notifications of Unauthorized Releases or Disposal at Sea (DORS/2011-91)	https://laws-lois.justice.gc.ca/fra/reglements/DORS-2011-91/TexteComplet.html

Table 20.14 Laws and regulations under Quebec jurisdiction – Kiena Mine

Regulations	Hyperlink
Environment Quality Act (Q-2)	http://legisquebec.gouv.qc.ca/fr/ShowDoc/cs/Q-2
Regulation on the regulation of activities based on their environmental impact (Q-2, r. 17.1)	https://www.legisquebec.gouv.qc.ca/fr/document/rc/Q-2,%20r.%2017.1%20/
Regulation on the assessment and review of the environmental impacts of certain projects (Q-2, r. 23.1)	https://www.legisquebec.gouv.qc.ca/fr/document/rc/Q-2,%20r.%2023.1
Regulation on the operation of industrial establishments (Q-2, r. 26.1)	https://www.legisquebec.gouv.qc.ca/fr/document/rc/Q-2,%20r.%2026.1%20/
Regulation respecting quarries and sand pits (Q-2, r. 7.1)	https://www.legisquebec.gouv.qc.ca/fr/document/rc/Q-2,%20r.%207.1

Regulations	Hyperlink
Regulation respecting activities in wetlands, bodies of water, and sensitive areas (Q-2, r. 0.1)	https://www.legisquebec.gouv.qc.ca/fr/tdm/rc/Q-2,%20r.%200.1%20?mode=simple
Regulations on the Management of Snow, Road Salt, and Abrasives (Q-2, r. 28.2)	https://www.legisquebec.gouv.qc.ca/fr/document/rc/Q-2,%20r.%2028.2
Regulations on the Disposal and Treatment of Wastewater from Off-Grid Residences (Q-2, r. 22)	http://legisquebec.gouv.qc.ca/fr/ShowDoc/cr/Q-2,%20r.%2022
Regulations on the Reporting of Water Withdrawals (Q-2, r. 14)	http://legisquebec.gouv.qc.ca/fr/ShowDoc/cr/Q-2,%20r.%2014
Regulations Governing Water Usage Fees (Q-2, r. 42.1)	http://legisquebec.gouv.qc.ca/fr/ShowDoc/cr/Q-2,%20r.%2042.1
Regulations on Water Withdrawal and Protection (Q-2, r. 35.2)	http://legisquebec.gouv.qc.ca/fr/ShowDoc/cr/Q-2,%20r.%2035.2
Regulations on Drinking Water Quality (Q-2, r. 40)	http://legisquebec.gouv.qc.ca/fr/ShowDoc/cr/Q-2,%20r.%2040
Regulations on Hazardous Materials (Q-2, r. 32)	http://legisquebec.gouv.qc.ca/fr/ShowDoc/cr/Q-2,%20r.%2032
Regulations on the Landfilling and Incineration of Waste Materials (Q-2, r. 19)	http://legisquebec.gouv.qc.ca/fr/ShowDoc/cr/Q-2,%20r.%2019/
Regulations on the Recovery and Recycling of Products by Businesses (Q-2, r. 40.1)	https://www.legisquebec.gouv.qc.ca/fr/tdm/rc/Q-2,%20r.%2040.1%20
Regulations on Biomedical Waste (Q-2, r. 12)	http://legisquebec.gouv.qc.ca/fr/ShowDoc/cr/Q-2,%20r.%2012
Regulations on Halocarbons (Q-2, r. 29)	http://legisquebec.gouv.qc.ca/fr/ShowDoc/cr/Q-2,%20r.%2029
Clean Air Regulations (Q-2, r. 4.1)	http://legisquebec.gouv.qc.ca/fr/ShowDoc/cr/Q-2,%20r.%204.1
Regulations on the Mandatory Reporting of Certain Atmospheric Contaminant Emissions (Q-2, r. 15)	http://legisquebec.gouv.qc.ca/fr/ShowDoc/cr/Q-2,%20r.%2015
Atmospheric Quality Regulations (Q-2, r. 38)	https://www.legisquebec.gouv.qc.ca/fr/document/rc/Q-2,%20r.%2038%20/
Regulations on Land Protection and Rehabilitation (Q-2, r. 37)	http://legisquebec.gouv.qc.ca/fr/ShowDoc/cr/Q-2,%20r.%2037
Regulations on the Storage and Transfer Facilities for Contaminated Soils (Q-2, r. 46)	http://legisquebec.gouv.qc.ca/fr/ShowDoc/cr/Q-2,%20r.%2046
Regulations on the Traceability of Excavated Contaminated Soils (Q-2, r. 47.01)	https://www.legisquebec.gouv.qc.ca/fr/tdm/rc/Q-2,%20r.%2047.01%20
Regulations on Fees Related to the Traceability of Excavated Contaminated Soils (Q-2, r. 28.01)	https://www.legisquebec.gouv.qc.ca/fr/document/rc/Q-2,%20r.%2028.01
Regulations on Levies Supporting the Treatment and Beneficial Reuse of Excavated Contaminated Soils non disponible	Unavailable
Regulations on the Landfilling of Contaminated Soils (Q-2, r. 18)	http://legisquebec.gouv.qc.ca/fr/ShowDoc/cr/Q-2,%20r.%2018
Regulations on State Water Resources (R-13, r. 1)	https://www.legisquebec.gouv.qc.ca/fr/document/rc/r-13,%20r.%201

Regulations	Hyperlink
Explosives Act (E-22)	https://www.legisquebec.gouv.qc.ca/fr/document/lc/E-22
Regulations under the Explosives Act (E-22, r.1)	https://www.legisquebec.gouv.qc.ca/fr/document/rc/E-22,%20r.%201%20/
Pesticides Act (P-9.3)	http://legisquebec.gouv.qc.ca/fr/ShowDoc/cs/P-9.3
Building Act (B-1.1)	http://legisquebec.gouv.qc.ca/fr/ShowDoc/cs/B-1.1
Safety Code (B-1.1, r. 3)	http://legisquebec.gouv.qc.ca/fr/showdoc/cr/B-1.1,%20r.%203
Construction Code (B-1.1, r. 2)	http://legisquebec.gouv.qc.ca/fr/showdoc/cr/B-1.1,%20r.%202
Regulations on the Transportation of Hazardous Materials (C-24.2, r. 43)	http://legisquebec.gouv.qc.ca/fr/ShowDoc/cr/C-24.2,%20r.%2043
Surface Water Quality Standards (CQES)	https://www.environnement.gouv.qc.ca/eau/criteres_eau/index.asp
Wildlife Conservation and Enhancement Act (C-61.1)	https://www.legisquebec.gouv.qc.ca/fr/tdm/lc/c-61.1
Regulations on Wildlife Habitats (C-61.1, r.18)	https://www.legisquebec.gouv.qc.ca/fr/tdm/rc/c-61.1,%20r.%2018

Table 20.15 Laws and regulations under Municipal jurisdiction – Kiena Mine

Regulations	Hyperlink
Canadian Water Quality Guidelines for the Protection of Aquatic Life (CCME)	https://ccme.ca/fr/priorites-actuelles/recommandations-canadiennes-pour-la-qualit-de-lenvironnement
Regulation No. 2015-26 Concerning Discharges into Sewer Systems (2015-26)	https://www.ville.valdor.qc.ca/services-au-citoyen/permis-et-reglements/repertoire-des-reglements
Regulation No. 2012-22 Respecting the Periodic Emptying of Septic Tanks, Holding Tanks and Sumps Pits (2012-22)	https://www.ville.valdor.qc.ca/services-au-citoyen/permis-et-reglements/repertoire-des-reglements
Regulation No. 2002-49 Prohibiting the Accumulation of Nuisances on Streets, Lanes and Other Public Rights-of-Way (2002-49)	https://www.ville.valdor.qc.ca/services-au-citoyen/permis-et-reglements/repertoire-des-reglements
Regulation No. 2021-10 Regarding Water and Sewer Connections (2021-10)	https://www.ville.valdor.qc.ca/services-au-citoyen/permis-et-reglements/repertoire-des-reglements
Regulation No.2007-50 Respecting Property Cleanliness and Sanitation, and the Removal of Garbage and Waste of All Kinds (2007-50)	https://www.ville.valdor.qc.ca/services-au-citoyen/permis-et-reglements/repertoire-des-reglements
Bylaw No. 2003-40 Respecting Nuisances, Peace, Good Order and Public Places (2003-40)	https://www.ville.valdor.qc.ca/services-au-citoyen/permis-et-reglements/repertoire-des-reglements
Bylaw No. 2002-58 Respecting Nuisances Caused by Road Vehicle Noise (2002-58)	https://www.ville.valdor.qc.ca/services-au-citoyen/permis-et-reglements/repertoire-des-reglements

Regulations	Hyperlink
Bylaw No. 2021-20 Respecting the Management of Risks Associated with Hazardous Materials within the Territory of the City of Val-d'Or (2021-20)	https://www.ville.valdor.qc.ca/services-au-citoyen/permis-et-reglements/repertoire-des-reglements

Table 20.16 Permits/authorizations obtained by Wesdome since the restart of the mining activites

Authorization/Permit number	Date of issuance	Ministry	Subject
7610-08-01-70065-28 401999755	2021-03-02	MELCCFP	Improvement of the stability of dike 10 and construction of a new berm downstream.
7610-08-01-70065-28 402044766	2021-07-19	MELCCFP	Raising the dikes of the northern cell of the tailing's facility. Construction of an operational spillway at dike 13 and an emergency spillway at dike 3.
7610-08-01-70065-28 402048491	2021-07-27	MELCCFP	Improvement of the stability of the peripheral dikes of the tailing's facility and relocation of the peripheral collector ditch.
7610-08-01-70065-24 402067757	2021-09-20	MELCCFP	Installation and operation of a cyanide destruction system.
7610-08-01-70065-36 402111954	2022-02-17	MELCCFP	Installation and operation of a temporary reverse osmosis water treatment system for the tailings facility.
7610-08-01-70065-23 402126697	2022-04-04	MELCCFP	Construction and operation of a tailings backfill plant. Installation and operation of two dust collectors at the backfill plant.
7610-08-01-70065-38 402233948	2023-05-02	MELCCFP	Operation of water withdrawal sites: One groundwater withdrawal site for drinking water supply Two surface water withdrawal sites in Lake De Montigny for process water supply. One groundwater withdrawal site to keep underground mining facilities dry.
7610-08-01-70065-23 402233975	2023-05-02	MELCCFP	Installation and operation of a new drinking water treatment system.
7610-08-01-70065-23 402283400	2023-09-19	MELCCFP	Site development and development of the Presqu'île exploration ramp.
ATI-92	2024-07-03	MRNF	Diamond drilling operations for the 2024-2026 exploration campains.
8341-183	2024-11-08	MRNF	Approval of the closure plan for the Kiena mining site.
7610-08-01-70065-23 402441462	2025-02-13	MELCCFP	Bulk sampling of the Presqu'île area.
ATI-400	2025-05-06	MRNF	Bulk sampling of the Presqu'île area.
7610-08-01-70065-23 402472048	2025-05-22	MELCCFP	Installation of a temporary crusher at the ore processing plant.
7610-08-01-70065-40	2025-08-20	MELCCFP	Installation of a domestic wastewater treatment system with a design flow rate of 40 m^3/day.

Authorization/Permit number	Date of issuance	Ministry	Subject
7610-08-01-70065-23	2025-10-15	MELCCFP	Operation of a permanent crusher at the ore processing plant.
7610-08-01-70065-23	2025-10-15	MELCCFP	Installation and operation of 2 fans for underground operations including a burner with a capacity of 7.972 MW at each fan.
ATI-662	2026-01-20	MRNF	Diamond drilling operations for the 2026-2027 exploration campaigns.
7610-08-01-70065-23	2026-01-28	MELCCFP	Exploitation of the surface ramp and the Presqu'île mineralized zone.
7610-08-01-70065-38	2026-01-28	MELCCFP	Operation of a water withdrawal site at the Kiena mine.
BM 1063	2026-02-02	MRNF	Mining Lease Presqu'île for ore extraction.
7610-08-01-70065-23	2026-03-11	MELCCFP	Development and exploitation of an underground backfill network at Presqu'île.
7610-08-01-70065-23	2026-04-08	MELCCFP	Raising of the waste rock pile to elevation 308 m.

20.5 Mine Closure Requirements

Mine closure in Quebec is governed by the Mining Act (*Loi sur les mines*) and the Environmental Quality Act (*Loi sur la qualité de l'environnement*). These requirements apply to both mineral exploration and mining operations. In accordance with the provisions of section 232.1 of the Mining Act (R.S.Q., c. M-13.1), any entity carrying out mineral exploration activities must submit a rehabilitation plan for its mining site (subsequently referred to as "closure plan") and provide financial guarantee. This financial guarantee covers the entire cost necessary to secure the area and restore it to a state deemed compatible with its surroundings and meeting the expectations of the community and the relevant ministries. The closure plan must be approved by the MRNF before a mining lease is issued. This approval is conditional upon receipt of a favorable decision from the MELCCFP.

To help companies, the MRNF, working with the MELCCFP, has produced a Guidelines for preparing mine closure plans in Quebec (hereinafter the "Guide"), which sets out the regulations and requirements that must be met when reclaiming mining sites, the content of the plan, and the steps to be completed to obtain approval. The Guide was updated in 2024 takes into consideration recent legislative amendments governing mining activity in Québec. It contains links to the legislation, regulations, directives and guides that must be considered when preparing a closure plan. The closure plans that are filed and approved are made public. They are available in the Mining Title Management System (GESTIM) under the Mine Site tab. The closure plan must be revised every five years.

The fourth revision of the closure plan for the Kiena mining complex was submitted to the MERN by Wesdome Gold Mines in April 2021. Following the presentation of this restoration plan, four (4) sets of questions were sent to Wesdome Gold Mines by the MERN in.

20.5.1 Financial Commitment for Mine Closure

As part of the approvals for the revision of the Kiena Mine Complex reclamation plan, MNRF provided Wesdome Gold Mines with a timeline for the provision of the financial guarantees, i.e., the closure guarantee, required to cover the closure costs. In 2021, reclamation costs were estimated at $8,697,000 (Wesdome, 2021). As of MNRF's approval of the fourth revision of the reclamation plan on November 8, 2024, these costs have been increased to $14,346,564. Of this total amount, the financial guarantee held by MNRF is $7,173, 282 and the balance to be paid was $7,173,282 according to the following payment terms (Table 20.17).

Table 20.17 Terms of payment in 2024 for the financial guarantee related to the rehabilitation of the Kiena Mine Complex

Year	Percentage	Payments ($)
90 days	50 %	3,586,641
November 6, 2025	25 %	1,793,321
November 6, 2026	25 %	1,793,320
Total		**7,173,282**

According to an internal document from Wesdome's Kiena Mine, estimated reclamation costs as of March 31, 2026, total $15,213,744, and costs related to the financial guarantee total $12,516,673. These costs are calculated based for a LOM ending in 2034.

The following sections provide a summary of the measures proposed and accepted by MNRF for the restoration of the Kiena Mine Complex. MNRF's questions and comments as well as Wesdome Gold Mines' responses are also presented in certain situations.

20.5.2 Safety of Work Areas, Openings and Crown Pillars

20.5.2.1 Surface Openings

The rehabilitation will comply with the conditions set out in sections 99 to 106 of the Regulation respecting mineral substances other than petroleum, natural gas and brine under the Mining Act. The surface openings on Parker Island, namely an extraction shaft and three (3) rises, will be dismantled and a layer of overburden and/or topsoil will be placed on a concrete slab. One (1) audit every three (3) months in the first year, two (2) visits in the second year and one (1) annual visit for the following three (3) years.

20.5.2.2 Crown Pillars

A crown pillar (~ 100 m thick), left in place in the underground mine under Lake De Montigny (deposit S50), was the subject of a stability study in 2010 which resulted in the installation of monitoring instruments (extensometers), backfilling work and a visual inspection program as long as there are mining operations in progress. To ensure the long-term stability of this pillar, hydrostatic barricades and a backfill network have been set up to begin paste backfilling of the underlying excavations in 2024. A stability study in accordance with section 4.5.4 of the Guide will be prepared and attached to the next revision of the restoration plan (Wesdome, 2023; MRNF-3.1.3-2a).

20.5.3 Dismantling of buildings and surface infrastructure

The Hazardous Materials Regulation and the Regulation respecting the landfilling and incineration of residual materials under the Environment Quality Act, as well as the *document La gestion des matériaux de démantèlement – Guide de bonnes pratiques* produced by the MELCC, document entitled - *La gestion des matériaux de démantèlement – Guide de bonnes pratiques* produced by the MELCC will be applied for the dismantling of buildings and surface infrastructure.

- Equipment inside buildings will be decontaminated or shipped off-site to an authorized location, with attention to metal recovery.
- The concrete slabs making up the uncontaminated foundations will be crushed and covered with overburden and/or topsoil and vegetated. The slabs affected by contaminants will be decontaminated beforehand by washing or sandblasting.
- Recoverable and reusable materials (steel and remelting) as well as some equipment inside the buildings will be set aside for sale or recycling.
- Uncontaminated debris and dry materials from the dismantling work will be sent to the landfill while those contaminated with petroleum, chemical, hazardous or toxic products will be analyzed and directed off-site to an authorized place suitable for decontamination and/or disposal.

20.5.3.1 Buildings and Infrastructure Required for Ore Extraction

- The main shaft will not be dismantled until it is sold or recycled and the extraction pit will be blocked according to the requirements associated with a surface opening.
- The winch room and its equipment will be dismantled and available for sale or recycling.
- The winch pit and compressor room floor will be decontaminated if affected by lubricants or contaminants.

20.5.3.2 Ore Processing Plant and Related Buildings

This surface infrastructure includes the ore processing plant and its offices as well as the paste backfill plant and its warehouse.

- For these buildings with a steel structure and sheet metal covering, reusable parts will be sold or recycled. Unsold or recycled parts will be sent for disposal.
- All recoverable equipment such as ore silos and conveyors will be dismantled and available for sale or recycling as requested.
- The crushed concrete foundations at ground level will remain in place. The reinforced concrete bases will be destroyed and buried to be integrated into the natural profile of the site.
- Contaminated concrete surfaces will be decontaminated by washing or sandblasting. The wash water will be directed to an oil separator. Other cleaning products (non-aqueous) will be sent with the hazardous waste.

- Uncontaminated debris and dry materials (from dismantling) as well as debris and dry materials with no available market that will be transported off-site to an authorized location.

20.5.4 Dismantling of Electricity, Transport and Support Infrastructure

20.5.4.1 Access Road to the Mine Site

- The access road leading to the mine site will be preserved in order to carry out the various monitoring during the post-operation and post-reclamation periods.
- The road foundation was constructed of non-acid-generating mine waste. Environmental characterizations will have to be carried out to confirm the physicochemical attributes of the waste rock.

Secondary Access Roads

- Secondary access roads (including crossing areas) constructed during mining operations and classified as potentially contaminated during environmental assessments and characterizations will be excavated and disposed of off-site in an authorized location.
- Roads not used during the post-mining and post-reclamation periods will be reprofiled and scarified to facilitate the resumption of vegetation and permanently blocked by a pile of non-acid-generating mine waste;
- In accordance with the conditions set out in section 104 of the Regulation respecting mineral substances other than petroleum, natural gas and brine under the Mining Act, a hazard sign will be placed on the natural barriers.

A transfer of responsibility for roads to a regional entity (such as a municipality, a mining company or the private sector) is possible if the latter expresses interest.

20.5.4.2 Road Infrastructure

- Culverts and drainage ditches that will no longer be used will be dismantled, backfilled and revegetated to restore natural water flow. The surfaces will be landscaped to prevent any erosion problems.
- The culverts and drainage ditches used will be preserved or replaced as necessary as well as stabilized by riprap to avoid erosion problems.

20.5.4.3 Railway

The railway line that crosses the property and is located south of the tailings management area and the waste rock pile will remain intact as it is owned by Canadian National.

These areas will be rehabilited in accordance with regulatory requirements following environmental assessments and characterization.

20.5.4.4 Powerline and Communication Line

- The electrical transmission line, the electrical substations and the communication line (telephone, internet, etc.) will be dismantled, recovered and sold or discarded, unless they are essential for the environmental monitoring of the mining site.
- Buried pipelines will be left in place (sealed and decontaminated if necessary).

20.5.4.5 Underground and Near-Surface Buried Pipes

- Underground pipes will remain in place after being inspected. If contamination is present, they will be decontaminated and cleaned.
- All pipes buried near the surface will be removed and/or concreted after being inspected for possible contamination. If the pipes are contaminated, they will be cleaned and/or decontaminated.

20.5.4.6 Mine and Process Water Pipes

- All mine and process water pipes will be dismantled, salvaged and sold or discarded, depending on the market available.

20.5.4.7 Tailings Transfer Lines

- All pipes used for the transfer of tailings will be dismantled, recovered and sold or scrapped, depending on the available market.

20.5.5 Disposal of Equipment and Heavy Machinery

20.5.5.1 Surface Equipment

All equipment and heavy machinery (extraction equipment, ore processing equipment, heavy machinery) will be recovered, decontaminated and emptied of their petroleum products in accordance with the regulations, then sold or discarded depending on the available market.

20.5.5.2 Underground

Equipment, underground infrastructure and heavy machinery deemed uneconomical to recover, resell or discard (extraction equipment, operating equipment, underground infrastructure, heavy machinery) will be decontaminated and emptied of their petroleum products in accordance with the regulations, then left underground. Some or all of the mine waste rock may be used for construction purposes.

20.5.6 Reclamation of Storage Areas

20.5.6.1 Benchmarking and Possible Reclamation Scenarios

Table 20.18 presents a comparative analysis of the different reclamation scenarios for each of the accumulation areas.

Table 20.18 Possible reclamation scenarios for each accumulation area

Accumulation area	Benchmarking	Reclamation scenario Possible Benchmarking (to date)
Tailings Storage Facility	Required [1]	Dry stack tailings
Polishing pound	Not required	Wetland concept
Ore stockpile	Not required	Will not be stored on the mine site
Waste rock stockpile	Required [2]	Dry stack and/or will not be stored on the site
Overburden pile	Not required	Will not be stored on the mine site
Topsoil pile	Not required	Will not be stored on the mine site

[1] The concept will not change, but the method of revegetation will be determined.
[2] This benchmarking analysis is required as geotechnical, and feasibility studies are currently underway to find solutions for a new tailing's storage area given that the residual capacity cannot sustain the anticipated mine life of approximately eight years.

20.5.6.2 Ore Stockpile

- When operations cease, no ore piles will remain as all the ore will be processed at the mill.
- The bedrock under the ore pile will be subject to environmental assessments and characterizations. The exposed surfaces will be reprofiled, scarified and vegetated to restore the natural flow of water and prevent erosion, as the area is rehabilitated in accordance with regulatory requirements.

20.5.6.3 Waste Rock Stockpile

- Upon cessation of operations, the waste rock pile will likely not remain on the mine site, as it is intended that this NPAG material will be gradually used for construction or rehabilitation purposes prior to final abandonment.
- The bedrock under the waste rock stockpile will be subject to environmental assessments and characterizations, and the exposed surfaces will be reprofiled, scarified and vegetated to restore natural water flow and prevent erosion, as the area is rehabilitated in accordance with regulatory requirements.

20.5.6.4 Tailings Storage Facility

Following several questions from the MNRF, the following work was carried out for the TSF.

- The reclamation will include the evacuation of water from the north and south cells of the tailings pond, followed by the revegetation of the entire area, including the exterior slopes of the dikes and access roads. Additional geotechnical studies have been conducted since the 2015 version of the restoration plan (Wood, 2021), which have highlighted insufficient safety factors for several perimeter dykes (see section 4.6.3.3). Stabilization and elevation work, the scope and cost of which will be specified in the next revision of the restoration plan, are required to ensure the long-term stability of the structures.

- Geochemical characterization work indicates that tailings can be considered NPAG but could be leachable for some metals (e.g. As) based on the most recent characterization studies (Labtem 2023) (GCM 2023; MERN-2.5.6b).
- The results of the kinetic tests recommended by Labtem (2021) (Wesdome, 2023; MRNF-2.5.6-2a), as well as the complementary geochemical characterization program for tailings and waste rock (Wesdome 2024: MRNF 4), will be presented at the next revision of the reclamation plan, in accordance with the Mine Tailings and Ore Characterization Guide (MELCCFP, 2020) and the recommendations of the Richelieu Hydrogéologie report (2023).
- The construction activities planned in Wood's report (2021) for the reclamation of the tailing's storage facility have largely been completed for the first phase of the work. The construction of the berms continues gradually until the final elevation indicated in the said report, depending on the availability of waste rock (Wesdome 2023; MRNF-A8-1).
- A "Deep soil mixing" method was used for soil improvement under the foundation was used for the reinforcement of certain sectors of the tailings pond. The Traceability, Quality, Control plans, the quality assurance and control program (QA/QC) and the laboratory analysis report for this method were presented in Appendix 7 of the second set of questions to MNRF (Wesdome 2023; MRNF-A8-10).
- The deep soil mixing columns are located below the surface of the soil and/or protected by a riprap cover, which protects them from the effects of freeze-thaw cycles. According to WSP (formerly Wood), frost is not expected to penetrate deep into the critical segment located in the soft clay zone, and groundwater flow through and/or around the columns is not expected to result in long-term degradation (Wesdome 2023; MRNF).

20.5.6.5 Water Drainage

Water drainage management is based on a hydraulic study carried out by Richelieu Hydrogéologie Inc. in 1993 (Appendix 6A and 6B attached in the answers to the first series of questions) determined the quantities of water to be evacuated and the optimal means (number of openings in the dikes, materials of the canals), on the basis of: 1) hourly precipitation of recurrence 100 years (40.1 mm/h), 2) impermeable residues assimilated to a grazing area (runoff coefficient ~0.34, slopes of 0.5-1.0%), 3) without retention factor and 4) with concentration times calculated for poor vegetation.

20.5.6.6 Emergency Spillway

The construction of the emergency spillway has been completed, and the corresponding plans and specifications have been presented in Appendix 5 (Wesdome, 2023; attached to the responses to the second round of questions to MNRF). The internal spillway was completed in 2024, and plans and specifications will be provided at the next revision. The design criterion for the passive phase is the Probable Maximum Flood, as set out in Wood's (2021) report. In the event of an update to the hydraulic data, the upgrades required for the spillway will be assessed and the associated costs added to the financial guarantee, as required (Wesdome, 2023; MRNF-A8-3).

20.5.6.7 Dikes Physical Stability (Wesdome 2023)

The TSF is circumscribed by peripheral dykes and consists of two cells: the north cell and the south cell. The north cell includes six (6) peripheral dykes, namely dykes 34, 20, 40, 41, 42 and 23. The southern cell is bounded by dykes 10, 3, 4, 4A, 5 and 5A. The two cells are separated by three internal dykes, namely dykes 12, 13 and 13A. The design report on the rehabilitation of tailings pond dams conducted by Wood (2021) indicates that currently, most tailings pond external dams do not meet the stability criteria defined in industry standards. In addition, Wood classified the dykes at the Kiena Mine Complex as "very high" risk (according to the CBA (2013, 2019) and GISTM (2020)), primarily due to the environmental risk that the failure of the dykes would pose to aquatic life on Lake De Montigny (Wood, 2021).

Long-term stability analyses of the perimeter dykes (Wood, 2021) show that dykes 10, 20, 40 and 41 have insufficient safety factors (SFs), that dykes 4 and 5 meet the minimum required, and that the other perimeter dykes remain below the threshold. The seismic stability requirements are also not met for most of the dykes.

20.5.6.8 Vegetation

Vegetation aims to transform inert residues into substrate to support a healthy and sustainable plant cover (a method already proven on neutral waste management areas). Preliminary tests will have to be carried out on sample plots to establish the appropriate revegetation recipe. An area of 1,025,000 m² will be seeded (North and South cells, peripheral roads, dykes, stabilizing berms). The tailings are considered not potentially acid generating, but likely leachable for certain metals according to several characterization studies, including the most recent one in May 2020 (Characterization of mine tailings as part of a study for a new storage cell, Stantec, 2020).

According to recent surveys of topsoil and overburden piles, approximately 31,000 m³ of the required total of approximately 104,000 m³ are already being used for site restoration. While Wesdome expects to have sufficient vegetative material by the end of the mine's life, the costs of importing organic material have been added to the reclamation cost table, in accordance with the requirements of the Guide. The applied unit cost (29 $/m³) is the one already presented by Wesdome in its March 2, 2023 responses to the first set of comments (Wesdome, 2024; MRNF 1).

20.5.6.9 Overburden Pile

No overburden accumulation area will remain when mining activities cease for good, as all the material will be used for various works (construction, closure and rehabilitation).

20.5.6.10 Topsoil Pile

No topsoil accumulation area will remain when mining activities cease for good, as all the material will be used for various works (construction, closure and rehabilitation).

20.5.6.11 Polishing Pond

The polishing pond collects water from the two (2) cells (North and South). Two (2) scenarios are envisaged:

- First scenario: conventional restoration with water drainage, slope levelling, seeding and channelling of runoff water to a depression located in the centre of the retention structure.
- Second scenario : development as a wetland (or marsh) (ecological value, water quality impreovement, recreational and aesthetic purpose).

Analytical results of the chemical composition of the final effluent seem to be quite appropriate to support the development of a wetland. A band of emergent aquatic plants are present to date around the perimeter of the polishing tank, suggesting favourable physicochemical attributes.

Upon completion of the tailings pond restoration, an opening will be created in the polishing pond closure dam to slightly lower the water level and allow for flow without a settling tower. A follow-up of the vegetation cover three years later will determine whether corrective work (reprofiling of the banks, planting of aquatic plants) is necessary to accelerate the transformation into a wetland.

- A geochemical characterization of the bottom mud of the polishing pond will be carried out during the environmental assessments and characterizations in order to verify their physico-chemical properties.

20.5.6.12 Volumes of Granular and Waste Rock Materials to be Moved

For the various infrastructures located on the Kiena Mine site, the estimated volume of granular material to be moved during the site reclamation as well as the storage sites for this material is presented in Table 20.19. This table also shows the types of contaminants that can be found in these materials.

Table 20.19 Volumes of granular and waste rock materials to be moved

Infrastructure	Volume (m^3)	Possible Contamination	Storage Locations
Mine Site (Parker Island)	4 500	Hydrocarbons (surface)	Off-site at an authorized location
Access road to the mine site	1 000	Hydrocarbons (surface)	Off-site at an authorized location
Secondary roads	1 000	Hydrocarbons (surface)	Off-site at an authorized location
Tailings storage Facility	0	No tailing will be moved elsewhere	
Polishing pond	1 000	Sludge (settled metals)	Tailings Storage Facility
Ore stockpile	0	Will not remain on the mine site	
Waste rock stockpile	0	Will not remain on the mine site	

20.5.6.13 Stability of the Shores of Lake De Montigny

The shores of Lake De Montigny are currently affected by erosion effects. A significant rate of shoreline retreat could compromise the long-term stability of the North Cell of the tailings pond. The initial restoration plan (1996 version) anticipated progressive corrective work to stabilize the banks until the definitive cessation of activities, covering an area of approximately 10,000 m² (length of approximately 1.0 km, average width of 10 m).

- Proposed restoration method: technique combining vegetation (plant engineering) with mechanical techniques (basal riprap).

- Riparian embankment stabilized using riprap structures (dyke) combined with plant techniques using branch mats, bundles and plantings. A typical cross-section of this restoration method is included in Appendix 11 (Kiena Restoration Plan, 2021).

As confirmed by the MELCC and the MERN and renewed in the 2008 and 2015 versions, the stability of the shores of Lake De Montigny is no longer part of the restoration plan. Continuous visual monitoring of erosion is nevertheless maintained, and any possible intervention would require a request for a prior authorization certificate from the MELCC.

The stability of the North Cell and the integrity of the tailings pond dams, which depend on the stability of the shoreline of Lake De Montigny, cannot be overlooked (Wesdome, 2023; MRNF-4.6.8-2). A more comprehensive evaluation will be conducted to determine the costs associated with the stabilization method proposed in 1996 (based on the 1983 and 1992 studies). At the next revision of the restoration plan, an update on the situation (effects of shoreline erosion), the area to be restored and the associated stabilization costs will be presented, if applicable. Annual visual monitoring of shoreline erosion is maintained, the costs of which are estimated at $5,000/year ($25,000 for the monitoring period), in addition to the $25,000 already planned for the monitoring and maintenance of the integrity of the structures. Any possible intervention will require a request for a prior authorization certificate from the MELCCFP (Wesdome, 2023: MRNF-4.6.8-2).

20.5.7 Water Management Infrastructure

20.5.7.1 Industrial Water

The pumping equipment (pumps, tanks) used from pumping station from Lake De Montigny and dewatering the underground mine will be dismantled, recovered, and then sold or scrapped depending on the available market.

20.5.7.2 Mine Water

Once the equipment is removed, the underground mine will be flooded naturally, without any special management required for water from underground operations or for the natural infiltration of bedrock.

20.5.7.3 Final Effluent

The final effluent from the polishing pond will be monitored according to the frequency and duration requirements of Directive 019 during the restoration work and the post-restoration follow-up program. Once water quality is compliant and the entire site is rehabilitated, Wesdome Mine will proceed with the release of the site to the crown, following the screening assessment process with the MRNF.

20.5.7.4 Sanitary Water

The sanitary facilities will be restored in accordance with the Regulation respecting the disposal and treatment of wastewater from isolated dwellings (Environment Quality Act). The septic tank will either be recovered and sent to an authorized recovery site, or emptied and backfilled (gravel, sand, soil or inert material), then covered with organic material before vegetation. The leaching field will remain on site.

20.5.8 Land Reclamation (Contaminated Land)

20.5.8.1 Environmental Assessments and Characterizations

All contaminated land located outside the tailing's accumulation areas will be assessed, characterized and rehabilitated in accordance with Division IV (sections 31.42 to 31.69) of the EQA, upon the definitive cessation of mining activities (Table 20.20).

Table 20.20 Main activities planned for each sector concerned by the reclamation work during the closure of the Kiena mine site.

Planned studies	Environmental Site Assessment (Phase I); Environmental Site Characterization - Preliminary and Comprehensive (Phases II and III); Geomorphological and geochemical characterization of the mine waste rock in place as well as an evaluation of the acidogenic and leachable potential of the mine waste rock; Geomorphological and geochemical characterization of the sludge at the bottom of the polishing pond; Notice of contamination and a rehabilitation plan (submitted to the MELCC for approval); Environmental site remediation (Phase IV).
Sectors concerned	Bedrocks of the various piles (of ore and mine waste); Secondary access roads (as well as crossing areas); Drainage ditch bottoms and polishing pond; Perimeters around the headframe; Around garages and warehouses (hazardous materials); Around petrol and diesel tanks; All transshipment locations for petroleum products, chemicals and ore.

The soil contamination will be determined according to the grid of generic criteria for soils present in Table 1 of Schedule 2 of the Soil Protection and Contaminated Land Rehabilitation Policy and the Regulation respecting the protection and rehabilitation of land under the Environment Quality Act. The following management methods will be put in place:

- Soil contaminated by hydrocarbons above the specified generic criterion will be disposed by a specialized contractor.
- Soil contaminated by hydrocarbons below the specified generic criterion will be excavated and disposed of off-site in an authorized site.
- Metal-contaminated soil and sludge will be excavated and disposed of in the underground mine (if possible) or disposed of off-site in an authorized site.

The generic criterion specified (applicable limit values of parameters) during the rehabilitation work will be determined by the applicable municipal zoning for the future use of the mine site once rehabilitated.

20.5.8.2 Backfilling and Leveling

The reclamation of the site will consist of backfilling and levelling the surfaces with non-potentially acid-generating waste rock and/or organic soils (overburden, topsoil), with a view to vegetation and the removal of traces of structures, infrastructures and buildings, for safety, aesthetic, drainage and stabilization purposes.

20.5.8.3 Vegetalization

In order to return the site to a natural state, organic soils will be added, if necessary, to the bare surfaces (concrete slabs left in place, crushed stone, paths), and then a specific seed mixture (grasses, legumes, fertilizers) will be spread hydraulically at a predetermined seeding rate.

20.5.9 Management and Disposal of Petroleum Products, Chemicals and Hazardous and Non-Hazardous Waste

Chemicals, Petroleum and Explosives

Upon final cessation of mining operations, all remaining chemicals, petroleum and explosives will be returned to suppliers and/or disposed of by licensed contractors.

Hazardous Waste

Their management will comply with applicable laws, regulations, policies and guides, including the Québec Residual Materials Management Policy and the Regulation respecting hazardous materials under the Environment Quality Act.

- All hazardous residual materials and any contaminated material resulting from the dismantling and restoration work will be recovered by a specialized contractor and sent off-site to an authorized site.
- The propane tanks (required to heat the ventilation air) will be recovered by the supplier concerned.

Non-Hazardous Waste

Their management will comply with applicable laws, regulations, policies and guides, including the Québec Residual Materials Management Policy and the Regulation respecting hazardous materials under the Environment Quality Act.

- All non-hazardous waste will be sorted according to the type of material: metals and iron will be stored in a container and recovered by a scrap metal dealer.
- Solid waste (such as dry materials and household waste) will be stored off-site at a licensed location.

20.5.10 Climate Change

The restoration plan must now consider infrastructure that is vulnerable to climate change. This plan includes few vulnerable infrastructures: tailings pond (dry design) and polishing pond (wetland). Studies are underway on the waste rock stockpile.

Given the lifespan of the operations (eight years starting in 2021), the studies necessary to release the site to the Crown (process with the MERN) and to obtain the MELCC's certificates of authorization will be carried out by engineering firms before the work is carried out.

Design events that depend on this climate and water data will be updated at the next revision of the restoration plan, considering more recent climate data and anticipated climate change. Post-restoration accommodations, if required, will be assessed and associated costs will be added to the financial guarantee, if required (Wesdome, 2023; MRNF-A8-2).

20.5.11 Post-Operation and Reclamation Monitoring and Maintenance Programs

20.5.11.1 Monitoring and Maintenance of the Integrity of the Structures

A monitoring and maintenance program, based on visual inspections, will be carried out during and during the reclamation work to verify the integrity of the structures. The monitoring programs are summarized in Table 20.21.

Table 20.21 Areas covered by the monitoring program and the selected method used for monitoring.

Sectors		Method
Sealing of work to obstruct surface openings	Extraction shafts Exhaust, fresh air and emergency air rises	Visual inspections
Tailings Storage Facility	Surface and dykes Polishing pond (wetland environment)	Visual inspections
Mining site	Site drainage (efficiency, flow and direction of runoff) Intrusion indices, erosion problems	Visual inspections

Following the reclamation work, only runoff water will flow into the park, at a lower level compared to the operations. Regular monitoring will consist of visual inspections of dykes and drainage ditches (particular attention to water outlets and erosion), supplemented by spot inspections after any event that may affect stability (exceptional rainfall, earthquake).

In addition to visual inspections, data from piezometers and inclinometers installed at the various tailings pond dams will continue to be verified during the mine site closure period. In the post-reclamation period, the verification of the instruments and the frequency of monitoring will be specified at the next revision of the restoration plan, and the associated costs will be adjusted accordingly. Statutory Dam Safety Inspections are also maintained in the post-restoration monitoring and maintenance program for years 1 to 5 (Wesdome, 2023; MRNF-5.1.1).

Long-term monitoring of the integrity of the deep soil mixing columns is planned and representative samples can be collected by coring. Onne collected, these samples could be visually inspected and tested to confirm their resistance. These tests could be carried out at the time of the reclamation of the tailings pond. The tailings pond dykes are also equipped with piezometers and inclinometers for continuous monitoring of their performance (Wesdome, 2023: MRNF).

The costs associated with these verification tests are estimated at $75,000, based on the average of the estimates provided by the contractor Ménard, responsible for the construction of these structures (Wesdome, 2024; MRNF 2).

20.5.11.2 Methodology and Timeline

The number of inspections per year that will be conducted for the post-closure environmental monitoring program is presented in Table 20.22. Photographs will be taken and any discrepancies in relation to the plans and specifications will be noted. The frequency of inspections may be increased in the event of problematic signs, and corrective measures will be applied without delay if the safety of passers-by, wildlife or the environment is at risk. Visual inspections will be performed by the person responsible for the site environment (or a qualified engineering firm). Each inspection will be documented, and an annual technical report will be sent to the MELCCFP and the MERN.

Table 20.22 Number of inspections conducted per year for the Kiena post-closure monitoring program.

Years of Inspection	Inspection frequency/year
Year 1	4
Year 2	2
Year 3 and subsequent years until the site is released to the Crown	1

20.5.12 Environmental Monitoring

20.5.12.1 Objectives and Control Points

An environmental monitoring program will be carried out during and after the reclamation work to verify the quality of groundwater and surface water. The environmental monitoring program will include several sampling campaigns and will cover:

- Final effluent from the tailings pond (via the polishing pond)
- Natural exfiltration water from the tailings pond
- Groundwater (network of observation wells, prioritizing the stations already in place)
- Surface water in strategic locations (existing priority stations, plus any sector at risk or with abnormal accumulation)

The final number of stations that will serve as control points has yet to be determined, but a complete plan will be submitted to the MELCC and the MERN for approval. Water quality parameters, sampling frequencies and monitoring criteria will follow the requirements of Directive 019 in the post-operation and post-restoration periods, and all results will be compiled and interpreted continuously to identify any issues.

20.5.12.2 Methodology and Timeline

Sampling will continue for a minimum period of five years, until the land is returned to the Crown, in accordance with the abandonment procedure set out in Directive 019, this minimum period being justified by the presence of accumulation areas that are likely to be leachable (waste rock pile) and cyanide (tailings pond). The program will be adjusted as necessary in the event of an unforeseen event (e.g. non-compliance of the water), with notification to the authorities concerned (MELCC and MERN) for any corrective action. Table 20.23 present the methodology and schedule for the environmental monitoring program for the reclamation (post-operation) period.

Table 20.23 Environmental monitoring program during the reclamation (post-operation) period

Element	Description
Requirements	Will comply with the requirements set out in Section 2.10 of the *MELCC Mining Directive 019* (2012) or Section 3.10 for the 2025 version.
Frequency (minimum)	Comply with the information set out in Table 2.8 or Table 3.6. for the 2025 version of the MELCC's Directive 019 on the mining industry and by the fact that the mine site manages cyanide tailings, the frequency will be bi-monthly for the first six months after the end of mining operations and monthly for all subsequent months. Since 2025, groundwater must now be sampled twice a year.
Duration (minimum)	Until reclamation work has been completed.
Settings	Comply with the information noted in section 2.10.2 (or section 3.10.2. for the 2025 version) of the MELCC's Mining Industry Directive 019. If contamination is found in the field during a sampling campaign, other parameters (related to contaminants) and/or changes to the environmental monitoring program (frequency and location of control points) may be applied.

Once the restoration work has been completed on the entire mine site, the operator must implement a monitoring program for mine wastewater and groundwater. The requirements for post-restoration monitoring are presented in Table 20.24.

Table 20.24 Environmental monitoring program for the post-reclamation period

Element	Description
Requirements	Will comply with the requirements set out in Section 2.11.2 of the MELCC's Mining Directive 019. See the new measures added in Section 3.11.2 the 2025 version of Directive 019.
Frequency (minimum)	Will comply with the information set out in Table 2.9 of the MELCC*'s Directive 019 on the mining industry* and by the fact that the mine site manages cyanide tailings, the frequency will be six times a year for 5 years. (Also, see Table 3.7 in the 2025 version of Directive 019).
Duration (minimum)	Once the reclamation work has been carried out according to the specification plans, the minimum duration will be five years.
Settings	Will comply with the information noted in section 2.10.2 (or section 3.10.2. in the 2025 version) of the MELCC's Mining Industry Directive 019. If contamination is found in the field during a sampling campaign, other parameters (related to contaminants) and/or changes to the environmental monitoring program (frequency and location of control points) may be applied.

20.5.12.3 Responsability and Documentation

Sampling programs during post-remediation monitoring will be conducted by the person responsible for the site environment (or a qualified engineering firm. The documentation sent to the MELCC and the MERN will comply with the requirements of Section 2.12.2 (or Section 3.12.2. in the 2025 version) of Directive 019 and will include a compilation and evaluation of the results of the characterizations and sampling campaigns.

20.5.13 Agronomic Monitoring and Maintenance

20.5.13.1 Objectives and Control Points

All land affected by mining operations will be revegetated to control erosion and restore a natural appearance to the site, aiming for a satisfactory and viable long-term condition, with no amendments or maintenance required (self-sufficient siting). The vegetation will use native species (herbaceous plants, shrubs) from the surrounding environment, allowing a natural evolution towards the boreal forest once the pioneer species are established. Scarification and fertilization work, if required, before vegetation.

A technical report from an agronomist who is a member of a professional order will confirm the optimal seeding recipe, the adequacy of the conditions for the sustainability of the species and the establishment of self-sufficient vegetation. At the polishing tank, the natural colonization of the wetland by aquatic plants will be evaluated to determine whether work to promote or accelerate this colonization is necessary.

20.5.13.2 Methodology and Timeline

Visual agronomic inspections will follow the same decreasing frequency: quarterly for year 1, twice a year for year 2, then annually until the site is released to the Crown.

In case of lack of vegetation in the first two years, additional seeds or amendments will be applied; a photo album will document progress, and any anomalies (including invasive alien species) will be noted in the register, with rapid corrective measures (reseeding, fertilizing materials) and notification to authorities (MELCC, MERN) if necessary.

The use of fertilizing residual materials and soils will comply with the Intervention Guide, the Guide on FRMs for the restoration of vegetation covers and the Guide on the recycling of FRMs, under the EQA.

20.5.13.3 Responsability and Documentation

Visual inspections will be performed by the person responsible for the site environment (or a qualified engineering firm). An agronomist's report will confirm the sustainability of the plants for all restored areas, while visual inspections will document the evolution of overall effectiveness. Each inspection will be recorded, and an annual technical report will be sent to the MELCC and the MERN.

20.5.13.4 Borrowing Benches

The mineral substances (sand, gravel, crushed rock) used for the construction, repair, maintenance of access roads and any other sector currently come from the mining lease. The site does not hold a certificate of authorization for the operation of a quarry or sand pit. All extraction will comply with the Regulation respecting quarries and sand pits (EQA); if off-site substances are required for the remediation, an application for a certificate of authorization must be approved in advance by the MELCC, in accordance with the same regulations.

20.6 Social and Communities Issues

The Kiena Mine is located in the Val-d'Or gold camp in Quebec. Its operations were halted in 2013, but the discovery of a new deposit under the mine's current shaft in 2016 allowed commercial production to resume in December 2022.

20.6.1 Social Components

The Kiena Mine is located within the limits of the City of Val-d'Or, in the administrative region of Abitibi-Témiscamingue in the regional county municipality (RCM) of La Vallée-de-l'Or (Griffiths, 2021). The Abitibi-Témiscamingue region is located in the Northwestern Quebec province, along the Québec-Ontario border (BBA, 2021). According to the land use planning and development plan of the La Vallée-de-l'Or (MRCVO, revised 2019), the project is included an important rural portion (Dubuisson and Sullivan districts).

Val-d'Or is the regional center of the RCM La Vallée-de-l'Or. It constitutes the regional development and services center and thus brings together the main commercial, institutional, industrial, and administrative activities of the RCM. The population of Val-d'Or was estimated at 33,047 people in 2021, while in 2016, it numbered 32,664 (ISQ, 2022), an increase of 1.2%. (ISQ, 2022). Val-d'Or has local and regional recreational tourism facilities (BBA). The population of Val-d'Or increased by 8%. The median age of residents of Val-d'Or was 42.5 in the 2016 Census, which is higher than in 2011, meaning that the population appears to be ageing (BBA, 2021).

Val-d'Or has a small Indigenous population. In the 2016 census, less than 5% of the population self-identified as Arboriginal and most of these identify as First Nations. From Val-d'Or, The Kiena Mine is located on the ancestral territory of the Algonquin Anishinabeg Nation (Anicinabek). the nearest Indigenous communities are:

- Nation Anishnabe du Lac Simon is located 32 km southeast
- Conseil de la Première Nation Abitibiwinni (Pikogan) is located at 75 km north
- Long Point First Nation (Winneway) is located at 76 km southwest
- Community of Anicinape de Kitcisakik locate at 84 km south

The economy of the area is based on mining, logging and agriculture. The region has a strong history in mining, and the local population is anticipated to have appropriate training and education (BBA, 2021). In Val-d'Or, mining (including quarrying) accounted for 13.9% of employment in 2016. On the other hand, jobs in the secondary and tertiary sectors were less strongly represented than in the province of Québec (Ausenco). In Val-d'Or, Jobs related to the health care and retail sectors accounted for 13.2% each (Statistics Canada, 2017, updated in 2019).

20.6.2 Social Related Engagements

Since the resumptions of operations in 2020, Wesdome Gold Mines (Wesdome) has been engaged with several stakeholders including First Nations from Pikogan and Lac Simon, the city of Val-d'Or and several citizens communities e.g. Dubuisson, Sullivan, etc. Wesdome (Kiena Mine) is advocating for open dialogue with concerned parties to enable the inclusion of comments and suggestions in the development of several projects included in the Kiena mine property. Wesdome commitments include keeping stakeholders informed on the Kiena Mine projects advancement, transparency and respect for the voicing of opinions; and listening and being receptive to questions and concerns from interested parties. Wesdome set up few mechanisms to inform stakeholders of the Kiena Mine development projects including:

- A quarterly newsletter that is sent to several stakeholders on project advancements and used for community engagement.
- Consultation meetings with citizens and First Nations communities (Open House day) concerned by the Kiena Mine operations. These meetings allow various stakeholders to voice their comments and requests.
- Meetings with a monitoring committee that acts as a liaison agent with the communities concerned by the Kiena Mine operations.
- The creation of a French-language website in 2021 for the company, makes it easier for citizens to access information.
- Creation of a Facebook page to better reach the community.

20.6.3 Monitoring Committee

A monitoring committee made up of local and regional representatives, as well as representatives from Wesdome Gold Mines, was set up in 2020 at the mine's initiative. The committee's main job is to act as a link between the community and the company. Among other things, the committee keeps the community informed about construction, mining, and site restoration, expected impacts, mitigation measures, and the environmental monitoring program. It also collects and relays questions and concerns from the community, interest groups, and other stakeholders to the company.

The committee's first meeting took place on January 26, 2021. These meetings continued at a rate of four (4) meetings per year starting in 2022, and minutes were taken on each occasion by a company representative. This section presents a table of the main issues discussed and concerns raised during these meetings.

Since the most recent meetings largely focus on managing the impacts of mining activities and the measures taken to prevent or mitigate them, the topics chosen for summarizing partially overlap with the environmental, social, and governance issues identified in the company's 2024 report.

The main discussion points for each topic are presented with reference to the follow-up committee meetings (R1, R2, R3, etc., Table 20.25). The summary also includes the themes covered during the citizen meetings (RA) that took place on October 14, 15, and 16, 2025.

Table 20.25 List of meetings between the monitoring committee and Kiena Mine representatives from 2021 to 2025

Meeting Reference	Date	Meeting Reference	Date
R1	01/26/2021	R11	12/04/2023
R2		R12	03/12/2024
R3	10/14/2021	R13	06/11/2024
R4	01/25/2022	R14	09/10/2024
R5	05/03/2022	R15	02/10/2024
R6	10/06/2022	R16	03/11/2025
R7	12/06/2022	R17	06/16/2026
R8	03/20/2023	R18	09/16/2025
R9	06/12/2023	R19	12/09/2025
R10	09/11/2023		

20.6.3.1 Risk Management

A significant part of the discussions during meeting was dedicated to managing the risks related to various mining activities, including:

- The handling and use of various products, including hazardous materials
- Water quality management
- Management of the tailing's storage facility

Regarding the handling and use of various products, including hazardous materials, the discussions focused on the measures that are already in place or that should be considered to prevent spills, the detection methods deployed in this regard, and, in the event that such an incident occurs, the procedures of the response plan aimed at minimizing environmental impacts (Table 20.26). During the meetings held in 2023 and 2024, the main questions raised by the monitoring committee and the comments given by the Kiena Mine management team are presented below:

- Do the measures in the vigilance plan allow us to measure the impact of hydrocarbon spills like those that happened twice recently? (R10 (2023/11/09))
  - The provincial and federal environmental monitoring programs that Wesdome participates in involve setting up sampling stations located at varying distances from the sites of operation, conducting water quality analyses several times a year, and publishing an annual report.
- Does Wesdome maintain and update a spill register? R11 ((2023/04/12))
  - All spills are recorded in a register.
  - The number of spills during the year 2022 has decreased compared to year 2021. They were fourteen in category 1 and three (3) in category 2. Most of these spills were associated to hydraulic oil.

- Is there monitoring of the condition of the equipment used on the site that could be potential sources of hydrocarbon or other contaminant spills? R11 (2023/4/12)
  - The company's employees and its subcontractors are aware of the importance of ensuring the equipment used is in good condition and, in case of breakage, to have it repaired immediately, under threat of being expelled from the site.
  - Spills can happen anywhere on the site, including the access road, and must be reported.
- Who is responsible for spills (mine employees or subcontractors)? R12 (2024/12/03)
  - Mostly, subcontractors are responsible to inform Wesdome and clean the spill.

For Wesdome, it is important that the equipment used at mining sites be in good condition. The main ESG measures put in place by the Kiena Mine for managing hazardous materials and other products are shown in Table 20.26.

Table 20.26 Activity related to hazardous materials management and ESG measures

Activity *(Source of impact)*	ESG Measures
Handling liquid chemicals	Intervention plan; Incident classification standards; Software to improve reporting, investigations, and management of corrective and preventive actions; Management and monitoring plan (procedures, responsibilities, training); Closure plan.
Handling and use: oils, fats, chemicals, solvents, solutions, batteries	Management plan and procedures for safe handling; Physical measures: storage in secure surface shipping containers; Management plan (training, equipment inspections, prevention protocols, reporting requirements); Spill investigation and reporting to regulatory authorities; Annual audits as part of on-site environmental compliance programs.
Handling and use: cyanide *(Spill)*	Standard operating procedure for handling and storage; Training for involved personnel; Investigation of spills and reporting to regulatory authorities; Implementation of a cyanide disposal process put into service in 2022; Annual audits as part of the site's environmental compliance programs.

Water Quality Management

The monitoring committee also focused on the management and monitoring of water quality, particularly concerning the wells that supply drinking water to residents in areas near the main activity site (the treatment plant), including the waste storage area. During various meetings held between 2021 and 2025, several questions were raised about water treatment processes, water quality monitoring, and the operator's legal obligations in this regard. These questions received the following answers from Kiena Mine management:

- How can we explain the variation in the volumes of water discharged from the mine between 2019 and 2020? (R3 (2021/14/10))

- This variation is explained by the increase in underground water consumption as well as an increase in the quantity of precipitations (rainfall).

- What is the risk of acid mine drainage from the waste rock pile? (R4 (2022/11/25))

Water Quality Management

The monitoring committee also focused on the management and monitoring of water quality, particularly concerning the wells that supply drinking water to residents in areas near the main activity site (the treatment plant), including the waste storage area. During various meetings held between 2021 and 2025, several questions were raised about water treatment processes, water quality monitoring, and the operator's legal obligations in this regard. These questions received the following answers from Kiena Mine management:

- How can we explain the variation in the volumes of water discharged from the mine between 2019 and 2020? (R3 (2021/14/10))
  - This variation is explained by the increase in underground water consumption as well as an increase in the quantity of precipitations (rainfall).
- What is the risk of acid mine drainage from the waste rock pile? (R4 (2022/11/25))
  - Currently, the waste rock generated during mining operations does not produce acid water and waste rock has been classified as NPAG. Analyses are underway regarding waste rock from deeper levels that will be mined. Should acid water be generated or PAG waste rock identified, control measures would be taken as necessary.
- As part of the water quality monitoring program, what types of contaminants might be found in well water in the Dubuisson area in 2021? (R4 (2022/11/25))
  - These could mainly be metals, cyanide, and nitrogen compounds.
- In 2021, water quality monitoring was done for wells at three residences. The water quality monitoring program for residences along Road 117 will be restarted in 2022.
  - This water quality monitoring program will cover a 1.7 km radius along Road 117.
  - The results will be shared, including any exceedances of drinking water quality criteria for metals and chemical compounds. (R7 (2022/6/12))
  - Long-term monitoring of the water quality from drinking water wells at residences near the site will be maintained as much as possible, but this is a voluntary participation program. In 2022, 10 residences were monitored.
- What are the goals for water recycling? (R7 (2022/6/12))
  - About 95% of the water needed to operate the ore processing plant will be collected from the tailing's storage facility.
- What is the capacity of the facilities to handle higher annual rainfall and absorb excess water in the context of more frequent extreme weather events due to climate change? (R11 (2023/11/09)).
  - For the short term, the south tailings basin is at its lowest level and could absorb water from heavy rainfall.

- The "Towards Sustainable Mining Development" protocol, which Wesdome is in the process of joining, requires the operator to be able to deal with these situations.

- In accordance with the requirements of the TSMD protocol, what does the water management system consist of? (R18 (2025/9/16)
  - The TSMD protocol on water management was presented to the monitoring committee in 2025.

Regarding wastewater management, the committee also looked into how wastewater is handled by Kiena Mine. Table 20.27 shows the ESG measures considered by Kiena Mine when it comes to managing wastewater at the mining site.

Table 20.27 Activities related to water quality management and ESG measures

ACTIVITY *Source of impact*	ESG MEASURES
Water from underground construction sites Ore processing water *(Wastewater production)*	Water management policy describing: Monitoring and tracking of surface and groundwater (sampling frequencies / safety measures to maintain the quantity and quality of effluents (flow meter upgrades in 2024). Water balance assessments for the implementation of plans and infrastructure (Kiena watershed analysis in 2024).
Underground construction site water *(Wastewater production)*	Underground recirculation for operations.
Ore treatment water *(Wastewater production)*	Discharge into the mining waste park in the form of conventional sludge; Recirculation of water from the mining waste park for reuse in processing; Treatment of water from the mining waste park and delivery to a polishing basin.

Tailings Facility and Underground Tunnels Management

There was discussion about monitoring the condition of the tailings dam, the reliability of detection equipment, and the measures to take into consideration to avoid an environmental disaster in case of a dam breach and spill. During meetings held between 2023 and 2025, questions were also raised regarding the management of the tailings facility. These questions received the following answers from the Kiena Mine management team:

- What is the estimated lifespan of the tailings storage facility? RA (October 2025)
  - Under current conditions, the tailings storage facility is built to receive tailings until 2030.
  - However, using mine tailings mixed with a paste produced on-site for backfilling the underground workings after ore extraction reduces the amount of tailings sent to the storage facility.

- Is there a modernization project aimed at bringing the tailings pond dykes—ome of which were built in the 1960s—up to code? RA (October 2025)

- Yes, the sites and equipment must meet the actual standards. If the standards are not met, operation is prohibited.

- What procedures are in place to monitor the condition of the mine tailings storage facility? (R11 (2023/12/04))
  - All dams are monitored using piezometers, observation wells, and inclinometers. Readings from these instruments are taken once a week. There are plans to implement a connected system that will enable continuous monitoring.

Table 20.28 Activities related to tailing facilities and tunnels management of the Mine Waste Park and ESG measures.

Activity Source of impact	ESG Measures
Storage of waste rock and mining residues	Reducing the need for surface storage Backfilling depleted underground areas with paste residues. Upgrading facilities (resuming operations in 2021) Raising the upstream part of the north cell of the facilities. Improving the foundations. Upgrading peripheral ditches. Design in line with the Canadian Dam Association (CDA) guidelines. Upgrade to raise the north cell and build an internal spillway for passive drainage to the south cell (2025). Governance and risk management Governance structure within the company, including an independent committee for reviewing mine tailings. Mine tailings management policy. Creation and maintenance of a governance structure for mine tailings. Definition of roles and responsibilities related to mine tailings management. Implementation of mine tailings management standards based on the guidelines of the ICMM and the Global Industry Standard on Tailings Management (GISTM), which complies with the TSM protocol. In Kiena, study on floods and dam failure to understand the risks, develop emergency response plans on the sites, finalize an updated assessment of dam failure risks in 2025 (Kiena), and update the site emergency preparedness plan. Collaboration with emergency services (upcoming). Operation, maintenance, and monitoring manuals outlining procedures and training. Monitoring (daily and monthly inspections). Instrumentation that receives real-time data on facility performance. Annually: inspection by designated engineers. Five-year review: independent assessments of dam safety. Annual site visits and performance review by the independent tailings review committee. Semi-quantitative, multidisciplinary risk assessment by a third-party expert. Identify and characterize facility risks, as well as design and operational controls. Support the development of risk management plans (including workshops with site and corporate teams).

- What measures are in place to prevent an ecological disaster in case of spills from the tailings facility? (RA (October 2025))
  - Wesdome will follow the standards of the TSMD protocol for disaster prevention.
  - Hire external experts responsible for designing, monitoring, and overseeing the tailings facility.
  - Every year, a risk analysis related to the mine's activities is carried out and the management framework is updated.
  - Measurement instruments should be deployed to detect any abnormal situation or change in the integrity of the dams.
  - Geotextile membranes are used during dam raising operations.
- Is the restoration of the site planned after activities cease? (RA (October 2025))
  - The mine site is scheduled to be restored after operations cease. As requested in the 2021 restoration plan, funds have been secured to ensure the site's rehabilitation.

The monitoring committee also asked to know what ESG criteria are applied to the management of the tailings facility. Table 20.28 shows the ESG measures implemented by the Kiena mine regarding tailings management, as well as the governance measures considered for risk management.

20.6.4 Health of Residents Living Near the Kiena Mining Site

Besides the question of the quality of the water consumed by residents in areas near the Kiena Mine site, another potential health impacts mentioned during the committee meetings is the noise and the emission of air contaminants from equipment using fossil fuels. The reduction of fossil fuel use was mentioned several times, especially in the specific context of fighting climate change. The following questions were addressed to the leaders of the Kiena Mine.

20.6.5 Noise and Sound Levels

The impact of noise on the quality of life for residents living near the activity sites has been a major topic of discussion within the monitoring committee. Since 2021, several questions have been raised by citizens and the monitoring committee to the leadership of Wesdome Gold Mines regarding the noise levels from production and exploration activities at the Kiena Mine.

- Background noise caused by the mine's ventilation systems is still being heard by residents. What measures will Kiena Mine take regarding this? (R1 (2021/26/01))
  - Surveys were conducted as part of a study done when the plant was operating in December 2021.
  - Sound monitoring will be implemented.
  - It will be possible to report (exceedances) on the company's website.
- Depending on certain weather conditions, particularly during windy conditions, some background noise persists and is thought to be caused by the drills operating on Lake De Montigny, as well as possibly some drills working on the surface. What measures will be taken regarding this? (R3 (2021/14/10))

  - The drilling sites will be spaced apart from one another, and noise mitigation measures will be implemented.
  - In September 2021, noise levels remained within the limits set by regulations during 99.4% of operations (with two instances where levels exceeded the limit by 1 to 2 dB over a 4-hour period).
- Some complaints were received concerning the noise from drilling activities in summer 2022. What measures will be taken about this? (R7 (2022/6/12))
  - Kiena representatives reiterated the measures the mine has taken to reduce noise.
  - Kiena mentioned that all the mine's ventilation systems will be replaced.
- The noise from drilling rigs operating on Lake De Montigny continues: what measures are being taken about this? R9 (2023/12/06)
  - Four permanent stations have been installed to monitor in continue the noise related to drilling activities on Lake De Montigny.
- What are the results of the noise monitoring program? Have they been presented to the citizens? (R10 (2023/09/11))
  - The results of the monitoring program will be presented during a meeting with citizens meeting in September.
- What was the impact of the mine's underground ventilation system on the quality of the acoustic environment? (R11 (2023/04/12)).
  - Two brief exceedances were recorded by sensors located near residences during the summer of 2023.
  - The noise from the fans will be inaudible once the access ramp under construction will be completed.
- Some complaints were reported regarding vibrations linked to blasting activities, most cases around 5 p.m. (R16 (2025/11/03))
  - Kiena Mine performed blasting activities at 5:30 p.m. Goldex Mine, neighboring Kiena, blasts around 5 p.m.

The installation of acoustic covers around the drills and modifications to the gas exhausts have significantly reduced the noise from the drills in operation since summer 2024. Several other ESG measures to reduce noise at the source have been put in place to limit the intensity of noise from mining and drilling operations. These measures are presented in Table 20.29.

Table 20.29 Activity related to noise emissions management and ESG measures.

Activity Source of impact	ESG Measures
Barge drilling (*Noise*)	Installing soundproof covers on drilling equipment Acoustic treatment on surface exploration drills
How underground ventilation equipment works (*Noise*)	Installation of mufflers on underground and above-ground fans
Other activities: Work (waste park) Processing plant (*Noise*)	Purchase and addition of equipment Buying new fans on the peninsula Updating mine ventilation – all fans will be replaced at the mine site Proactive noise monitoring and management program Monitoring Monitoring and presenting the results Limiting activities at night
Dynamitage Machinerie lourde Aménagement rampe d'accès de la Presqu'île (*Vibrations*)	Identifying mitigation measures in consultation with the community and experts Installing monitoring equipment in the community and along the tailings dam (Access ramp): Adjusting the blasting schedule to avoid nighttime activities and using explosives only up to vibration levels that are not felt on the surface

Air Quality

Air quality is an important factor for the health of residents living near the Kiena Mine's mining infrastructure. The following questions were raised during several discussion meetings with Wesdome.

Table 20.30 Activities relate to air quality management and ESG measures

Activity *(Source of impact)*	ESG Measures
Handling and transporting materials to activity sites *(Emission of contaminants from equipment using fossil fuels as an energy source)*	<u>General measures</u> Monitoring emissions in accordance with regulatory requirements Annual reporting to the national pollutant release inventory (INRP) <u>Transport-specific measures</u> Managing dust from transport roads through storage and crushing by using suppressant agents (checking the effectiveness of the measures) Road maintenance Speed control (dust)

- What measures are being taken to reduce dependence on fossil fuels? (R7 (2022/6/12))
  - Wesdome is trying to reduce its dependence on fossil fuels. In 2022, 68 % of mobile equipment ran on electric power and 81 % of the energy consumed was renewable.
- What energy source do subcontractors use to transport waste rock? (R5 (2022/20/03))
  - Diesel is the main source of energy.
- Does the evaporation of water from tailings ponds cause contaminants to become airborne? (R15 (2024/10/02))
  - Wesdome mentioned that the water does not contain contaminants.

For air quality management, Kiena Mine has implemented the ESG measures presented in Table 20.30.

20.6.6 Biophysical Environment

Protection of fish and their habitat

Some questions concerning the biological environment were raised by the monitoring committee in 2022 and are presented below:

- Are any compensation measures planned for the loss of fish habitat due to the addition of materials to reinforce the tailings pond dyke over an area of 135 m^2? (R5 (2022/3/05))
  - Yes. The compensation project has been approved by public authorities.
  - It is also planned to revegetate a portion of the Parker Island shoreline over an area of 317.3 m^2.
  - The dyke reinforcement method using "Deep Soil Mixing" helped limit the impact on fish habitat.
  - The restoration of 317 m² of shoreline south of Parker Island will help reduce sediment suspension caused by erosion at this spot and water warming caused by sun-exposed rocks. (R7 (2022/6/12)).
  - A study on the serpentine turtle (a species with special status) is planned. (R5 (2022/3/05))

Table 20.31 Activity related to protection of fish and their habitat and ESG measures

Activity Source of impact	ESG Measures
Waterworks or work on the banks (not specified)	Monitoring program for effects on biological and physical environment according to Environment Canada's Metal and Diamond Mine Effluent Regulations for assessing effects on fish habitat Operational sediment control plan

The ESG measures shown in Table 20.31 were put in place by the Kiena Mine to protect fish and their habitat, and the measures for biodiversity protection are shown in Table 20.32.

Table 20.32 Activities related to protection of biodiversity and wildlife and ESG measures.

Activity Source of impact	ESG Measures
Undisturbed environment	Basic studies on intervention sites
Undisturbed environment (wildlife)	Applying waste management policies (no littering, storing food waste to prevent wildlife access) Wildlife management plan supported by training for employees and subcontractors Wildlife interaction procedure (no feeding wild animals)
Wetland protection	Implementation of management policies for wetland protection
Biodiversity protection	Biodiversity and conservation management plan in line with the level A requirements of theTSM program's biodiversity conservation management protocol (2024)

20.6.7 Corporate Governance

Maximizing local economic benefits is a concern that has been expressed on certain occasions within the monitoring committee, but also during citizen meetings held in October 2025. The requests specifically focus on the involvement of local and regional businesses in mine activities and the hiring of workers from the area. Additionally, questions were raised about Wesdome's economic health and its ability to develop the Kiena Project. The main themes identified in the governance criteria are as follows:

Supply chain: maximizing local impact

The main question asked to Wesdome is:

- Does the company have a program to train local workers to avoid relying on people from outside the area? (RA (October 2025))
  - Only a small percentage of the mine's employees come from outside the region[2]
  - One participant suggests offering better salaries to workers living in the area and asks that concrete measures be taken by the relevant authorities to further support the local economy.

The main ESG measures concerning the supply chain and considered by the Kiena Mine are as follows (Table 20.33).

[2] According to the 2024 ESG report, 95% of employees live in the Abitibi-Témiscamingue region. This percentage doesn't include on-site contractors.

Table 20.33 Activity related to supply chain and ESG measure

Activity *(Source of impact)*	ESG Measures
Construction and operations *(Purchasing goods and services, creating jobs)*	As much as possible, the company tries to source goods and services locally, favoring local businesses

Company's Economic Vitality

The main questions asked between 2022 and 2025 regarding the company's economic vitality are as follow:

- What will be the Project's profitability and the coverage of operating costs with a production of 100,000 oz of gold per year? (R4 (2022/01/25))
  - The project is currently debt-free and financed by the Eagle River Mine operated by Wesdome Gold Mines.
  - The operating costs of the Kiena Mine are low, and the infrastructure is already in place.
- The budget for Kiena operations and the second-quarter production results (R10 (2023/11/09))
  - The budget is not made public.
  - 2023 production is ahead by 1,500 oz compared to estimates.
- A member of the monitoring committee suggests that since the COVID-19 pandemic, people are more hesitant with their investments, which could negatively affect junior mining companies due to the difficulty in securing funding to support their activities. (R17 (2025/06/16))

Meeting Labor Needs

Recruiting qualified personnel can have a significant impact on operational performance, particularly in the current context marked by numerous retirements and a labor shortage in the mining sector.

The main issues mentioned by Kiena Mine between 2023 and 2025 were as follows:

- Can the company meet its labor needs across the region? (R8 (2020/03/23))
  - Wesdome employs 200 people at the Kiena Mine. This number is expected to increase to 250 in 2024. Some positions are difficult to fill, just like anywhere else. Many tasks are outsourced to external contractors.
  - The labor shortage poses a significant challenge for Wesdome. The regional labor supply does not meet the company's needs.
- Does Wesdome offer a training program to address the shortage of workers in the region? (RA (October 2025))
  - For mechanics only. The company is in talks with the Val-d'Or Vocational Training Center and hopes to be able to offer training to miners in the future.

Relations with communities and First Nations

The role of citizens in how the committee works, their representativeness, and their engagement were mentioned several times during meetings. The same goes for the ways used to keep citizens informed. Several of the company's initiatives were well received by the committee members.

The following steps were taken by the company at the request of citizens and/or the monitoring committee:

- The creation of a French-language website in 2021 for the company, makes it easier for citizens to access information. (R1 (2021/26/01))
- A participant repeats their suggestion to add a seat on the oversight committee for residents of the Dubuisson area and a seat for an Indigenous representative from one of the three (3) communities (Lac Simon, Kitcisakik, Long Pointe)
- Request for access to the water analysis results for citizens in the Dubuisson area, subject to obtaining the consent of the citizens concerned. (R5 (2022/3/05))
- Creation of a Facebook page to better reach the community. ((R9 2023/6/12))
- Improvement of communication channels (mine – citizens). (R16 (2025/3/11))
    - A follow-up form will be available on the mine's website
    - Creation of a database with citizens' contact information to make communication easier (text messages, emails)
- A proposal has been made to expand the role of the follow-up committee. (R16 (2025/3/11))
    - It is proposed to broaden the committee's role to include consultation, involvement, collaboration, delegation.
    - There is openness within the committee to add new members (municipal organizations, environmental groups, the business world, community organizations, etc.).
- Proposal to amend the bylaws and operating procedures of the committee by the company. (R18 (2025/9/16)).

The company implemented the following ESG measures regarding relationships with communities and Indigenous peoples. They are shown in Table 20.34.

Table 20.34 Relationships with communities and First Nations and ESG measures

Activity *(Source of impact)*	ESG Measures
Ore mining and processing *(Impact of activities on environmental quality and the quality of life of residents living near the activity sites)*	Goal: Build a climate of trust with communities and Indigenous groups and foster positive relationships through respectful engagement, transparent grievance management, and responsible social investments Means: Formal consultations with Indigenous peoples on activities that may affect the exercise of their rights Creation of positions dedicated to community and Indigenous relations within the site's environmental and sustainable development services Mapping of stakeholders as part of the 2024 update of the community and Indigenous engagement plan Maintaining a local community oversight committee since 2020 Sending out a newsletter and organizing open house days to keep local residents informed about activities Consulting and making agreements with Indigenous peoples for any action that could affect their rights Negotiating benefits and impact agreements (ERA) with the Lac Simon, Kitcisakik, and Abitibiwinni First Nations. Setting up grievance resolution mechanisms to receive and process formal grievances in a transparent, predictable, and timely manner, and updating them in 2024 to meet the requirements of the TSM program

20.6.8 Other Social Considerations

20.6.8.1 Road Safety in the Kiena Mine Area

Other social considerations were discussed in 2025 during the monitoring committee meetings. These factors included the safety of road users on Trans-Canada Highway 117, the availability of housing, and community support.

The Kienawisik Road, which leads to the Kiena Mine, begins at Trans-Canada Highway 117, which connects the cities of Val-d'Or and Rouyn-Noranda in Abitibi-Témiscamingue. Since many active mines and mining projects are located along this road, Trans-Canada Highway 117 is characterized by very heavy traffic, including cars and trucks. Road safety is therefore a major issue, particularly in the Kiena Mine area. One of the main concerns raised by local residents and the monitoring committee is the following:

- What role could the company play regarding the road safety issues on Highway 117 of the Trans-Canada Highway? (RA (October 2025))
  - The requirement to come to a complete stop at the intersection with Highway 117 and the reduction in the speed limit are measures Wesdome is considering to significantly reduce the risk of accidents.

- Raising awareness among employees and subcontractors about road safety.
- The installation of speed cameras on the access road to the facilities.
- Checking the responsibility with the Department of Transportation.

20.6.8.2 Availability of Housing for Non-Resident Workers

In Abitibi-Témiscamingue, the Val-d'Or area is home to several companies that hire workers from outside the region. A question recently came up about the impact of the non-resident 'Fly in Fly out' worker phenomenon on the housing situation. For the Kiena Mine, the responses given were as follows:

- Only a few employees come from outside the region. The company does not reimburse employees' airfare.
- The company is participating in a study conducted by the MRC of Vallée-de-l'Or on the impacts of 'Fly in Fly out'.

20.6.8.3 Community Support

Support for community organizations and projects is highly valued by the Kiena Mine and has been mentioned several times as a positive aspect of the company's contribution to the community.

21. CAPITAL AND OPERATING COSTS

21.1 Overview

The capital and operating cost estimates presented in this Feasibility Study are based on the development, construction and operation of an operating underground mine. The Kiena mine is located within an established industrial area of Val d'Or, Québec, and benefits from access to existing regional infrastructure, utilities and transportation networks.

The CAPEX and OPEX costs estimates are based on the FS design. These estimates reflect current market conditions, for equipment, materials, labor, consumables, energy, and contractor services, as well as indirect costs and owner's costs, as applicable. The estimate was done using current Kiena contracts and workforce rates, while larger items are priced on received recent quotes from qualified contractors or supplier. Some budgetary estimates have been incorporated into the calculations. Workforce productivity is derived from actual Kiena numbers and benchmarked against industry standards.

The estimate was done using a bottoms-up methodology which is computing individual quantities for the construction of the estimate. All costs are in Canadian dollars.

Unless otherwise stated, all capital and operating cost estimates presented in this Report are expressed in Q2-2026 Canadian dollars (C$) and no inflation escalation is applied. Exchange rate for US/CAD dollar is 1.35.

The totality of the ore mined is processed. Then all unit cost stating $/t milled are the same as $/t mined overall the LOM. The difference may come for specific period during the LOM. Therefore, all unit cost will be presented as $/t milled.

21.2 Capital and Sustaining Costs

21.2.1 Summary

The total CAPEX for the Project is estimated to be $353.4M. That amount can be split between growth CAPEX and SUSEX. The SUSEX is estimated to be $247M. The growth CAPEX is estimated to be $106.4M. These estimates include the addition of certain contingencies and indirect costs. The cumulative LOM CAPEX is summarized in Table 21.1.

The main CAPEX items are the following:

- The development and construction of the extension to the underground mine;
- Updates to the mine's water and tailings management infrastructure;
- Capital for the purchase and sustainment of the UG mine equipment fleet.

Growth CAPEX corresponds to capital invested to allow Kiena to raise the mining rate, principally by enabling the mining of the Presqu'île Zone. There is no initial CAPEX since the Kiena mine is already in operation. Repartition of expenses through time is displayed in Figure 21.1.

Table 21.1 Project capital cost summary

AREA or WBS	CAPEX and SUSEX cost description	Growth CAPEX M$	SUSEX M$	Total M$
1000	Site access, roads & earthworks	0.0	1.9	1.9
2000	Power & Electrical systems	12.0	47.7	59.7
3000	Waste and Water Management	0.0	8.0	8.0
4000	UG Development	56.6	124.2	180.7
4000	Mobile Equipment	11.3	27.0	38.3
5000	Mine Systems (fixed infrastructure)	25.0	24.0	49.0
6000	Process Plant	0.0	2.3	2.3
7000	Surface Infrastructures	0.0	0.0	0.0
8000	Indirect Costs	0.8	6.9	7.7
9000	Owner's Costs	0.8	5.1	5.9
	Total CAPEX:	**106.4**	**247**	**353.4**

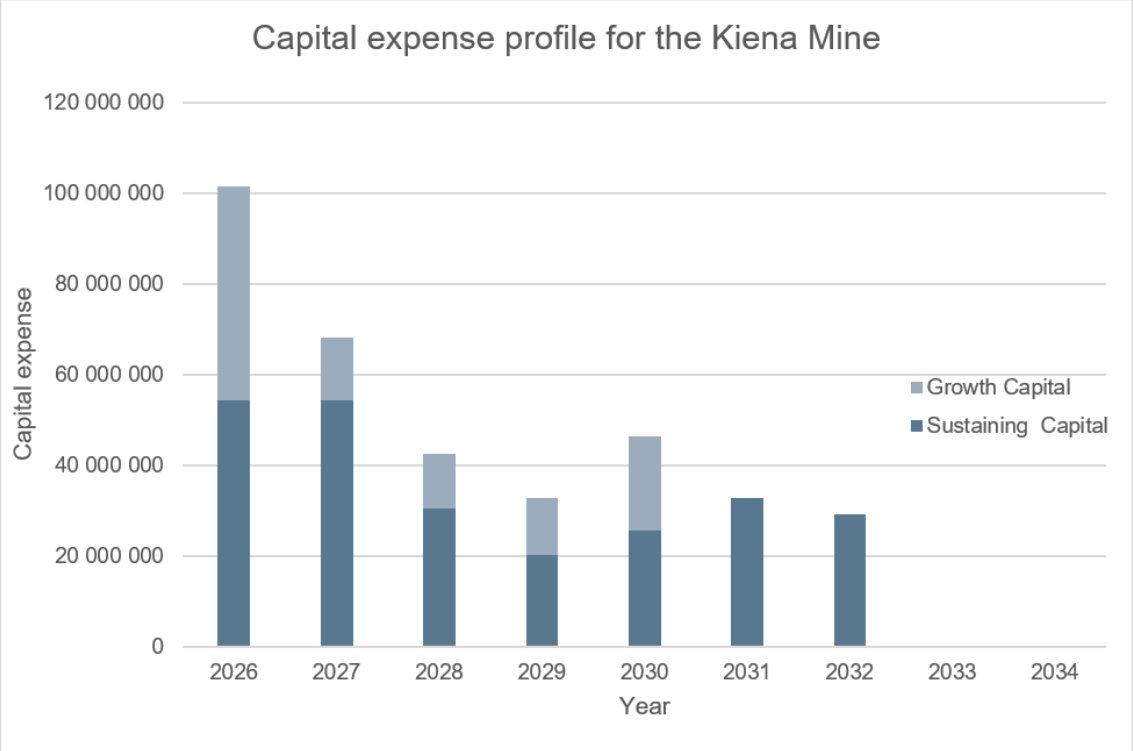


Figure 21.1 Capital Expense Profile

21.2.2 Work Breakdown Structure (WBS) and Estimate Responsibilities

The CAPEX and SUSEX estimate was developed in accordance with Norda Stelo's work breakdown structure ("WBS") with the estimate responsibilities summarized in Table 21.2.

Table 21.2 Estimate responsibilities by Area

Code	Code Description	Responsible Entity
1000	Site access, roads & earthworks	SRK 1320 – Waste Rock Pad
2000	Power and Electrical systems	Norda Stelo
3000	Waste and Water Management	1823 Water: 3120 - Permanent MWTP WSP: 3520 - TSF Embankment and facilities SRK: 3630 - Waste Rock Stockpile and Drainage ditches
4000	UG Development and Mobile Equipment	Norda Stelo
5000	Mine Systems (fixed infrastructure)	Norda Stelo SLR Consulting: 5430 & 5440 – Paste Boreholes and Underground Paste Distribution
6000	Process Plant	Soutex
7000	Surface Infrastructures	Norda Stelo
8000	Indirect Costs	Norda Stelo
9000	Owner's Costs	Norda Stelo

21.2.3 Basis of CAPEX Estimate

The following items were excluded from the cost estimate:

- Land acquisition costs incurred prior to the effective date of this estimate;
- Project preparation costs incurred to date, including studies, work programs, and early works;
- Sunk costs or Project expenditures incurred prior to the effective date of this estimate, including previous engineering studies, work programs and other early works;
- Environmental studies, permitting, licensing and project financing costs;
- Escalation costs;
- Fluctuation of currency exchange rates;
- Applicable taxes, including carbon taxes, which are incorporated separately in the financial model;
- Changes to the project scope or design criteria;
- Costs resulting from schedule acceleration, work stoppages or labour disruptions;
- Costs associated with unforeseen hydrological conditions, environmental liabilities or hazardous materials not identified during the study;
- Costs associated with unforeseen geotechnical conditions or other subsurface anomalies beyond those assumed in the project design;
- Costs associated to force majeure events;
- Project-related expenditures planned for the pre-production period that are outside the scope of the Project capital estimate (refer to Chapter 25 for a list of the recommended activities and costs).

21.2.4 Contingency applied to CAPEX and SUSEX

Contingency is an allowance included in the CAPEX and SUSEX estimate to account for known but undefined items within the Project scope. It addresses uncertainties associated with quantities, labour productivity, equipment pricing, material costs and other estimating assumptions appropriate for a feasibility-level study. Contingency does not include changes in Project scope, excluded items or management reserves for project execution. The CAPEX and SUSEX cost contingency was fixed to 15% for all area except for UG mining.

AREA or WBS	Description	%
1000	Site Development & early works	15%
2000	Power & Electrical systems	15%
3000	Water Management	15%
4000	Mine Development and Operations	0%
5000	Mine Systems (fixed infrastructure)	15%
6000	Process Plant	15%
7000	Surface Infrastructure	15%

21.2.5 Site Access, Roads and Earthworks (1000)

The SUSEX in this area is related to the waste rock pad extension. This cost estimate is provided by SRK. There are only SUSEX with a total of 1.9M$ over LOM.

Costs estimation includes a 15% contingency.

21.2.6 Power and Electrical Systems (2000)

The CAPEX and SUSEX summing up in this area are mainly the electrical material related to the underground mining infrastructures. These costs are evaluated by Norda Stelo. Growth CAPEX is 12.0M$ and SUSEX is 47.7M$ for a LOM total expenditure of 59.7M$.

Costs estimation includes a 15% contingency.

21.2.7 Waste and Water Management (3000)

The SUSEX in this area are related to the water treatment plant relocation, the expansion of the tailing's storage facility and the water management at the waste pile. These costs were estimated and provided as shown in Table 21.3.

Table 21.3 Waste and water management costs

Waste and water management cost description (3000)	AREA or WBS	Estimating Firm	SUSEX M$
Permanent MWTP	3120	1823 Water	2.6
TSF Embankment and facilities	3520	WSP	3.6
Waste Rock Stockpile and Drainage ditches	3630	SRK	1.8
Total:	3000	ALL	8.0

There are only SUSEX summing up to a total of 8.0M$ over LOM.

Costs estimation includes a 15% contingency.

21.2.8 UG Mining (4000)

The CAPEX and SUSEX summing up in this area are related to the mining operation and includes the UG Development and the mobile equipment fleet update either by purchase or rebuilds. These costs are evaluated by Norda Stelo. Growth CAPEX is 67.9M$ and SUSEX is 151.1M$ for a LOM total expenditure of 219M$. Details are presented in Table 21.4.

Table 21.4 UG mining costs – Development and Mobile equipment

UG mining cost description (4000)	AREA or WBS	Growth CAPEX M$	SUSEX M$	Total M$
Lateral Development	4120	50.0	98.2	148.2
Vertical Development	4130	2.7	21.6	24.3
Other Sunk development		3.9	4.4	8.2
Total development:		**56.6**	**124.2**	**180.7**
Equipment purchase	4310	7.9	10.7	18.7
Equipment rebuild	4330	3.4	16.2	19.6
Total mobile equipment:		**11.3**	**27.0**	**38.3**
Total:	**4000**	**67.9**	**151.1**	**219.0**

Costs estimation does not include any contingency for this area.

21.2.9 Mine Systems or Fixed UG Infrastructure (5000)

The capital linked to the area is all invested in the underground part of the mine.

The CAPEX and SUSEX summing up in this area are mainly related to the underground mining infrastructures. This includes the underground construction of infrastructures such as:

- ventilation infrastructure such as wall, doors and booster fans
- underground facilities
- refuges

- battery bay and electrical substation without electric material
- maintenance and fuel bays
- storage ares
- etc.

These costs are evaluated by Norda Stelo. Growth CAPEX is 25.0M$ and SUSEX is 24.0M$ for a LOM total expenditure of 49.4M$.

Costs estimation includes a 15% contingency.

21.2.10 Process Plant (6000)

The SUSEX linked to the process plant is minimal. It is mainly related to a paste pump upgrade to allow pumping to PI and BUB zones and the upgrade or replacement of some production equipment. This cost estimate is provided by Soutex. There are only SUSEX with a total of 2.3M$ over LOM.

Costs estimation includes a 15% contingency.

21.2.11 Surface Infrastructure (7000)

There was no cost estimated for the surface infrastructure related to the FS. See Chapiter 18 for more information.

21.2.12 Indirect Costs (8000)

WBS area 8000 includes all the costs needed to carry out the engineering, procurement, and construction management services for the development of the Project. The main costs in this category normally includes cost such as for exemple:

- EPCM
- Construction temporary facilities erection and operation
- Land and ocean freight for process and major electrical equipment
- Pre-operational verifications
- Commissioning support
- Vendor representatives
- Capital spares
- One-year operating spares
- Commissioning spares
- First fills
- Construction waste disposal
- Sanitary blocks
- Construction temporary power

The construction contractors' indirect costs are normally included in the construction direct costs.

Indirect Costs have been calculated by Norda Stelo based on a percentage of the direct costs. For each area a percentage value was determined depending on the ratio of anticipated indirect costs. Then a 15% contingency was applied to that estimation. Table 21.5 presents the ratio for calculation of the indirect cost and the calculation details. Growth CAPEX for the indirect cost is estimated to 0.8M$ and SUSEX to 6.9M$ for a LOM total expenditure of 7.7M$.

Table 21.5 Indirect costs CAPEX and SUSEX over LOM

Indirect cost Description (8000)	% for Indirect	Without contingency			With 15% contingency		
		Growth CAPEX	SUSEX	Total	Growth CAPEX	SUSEX	Total
		M$	M$	M$	M$	M$	M$
Site access, roads & earthworks	20%	0.0	0.3	0.3	0.0	0.4	0.4
Power & Electrical systems	5%	0.3	2.1	2.4	0.3	2.4	2.7
Waste and Water Management	20%	0.0	2.5	2.5	0.0	2.8	2.8
UG Development	0%	0.0	0.0	0.0	0.0	0.0	0.0
Mobile Equipment	5%	0.4	1.0	1.4	0.4	1.2	1.6
Mine Systems (fixed infrastructure)	5%	0.0	0.1	0.1	0.0	0.1	0.1
Process Plant	20%	0.0	0.0	0.0	0.0	0.0	0.0
Surface Infrastructures	0%	0.0	0.0	0.0	0.0	0.0	0.0
Total:		**0.7**	**6.0**	**6.7**	**0.8**	**6.9**	**7.7**

21.2.13 Owner's Cost (9000)

Owner's Cost consist of mainly of the General Administration area. They represent the costs that the owners need to pay internally to follow the development of the project. The following items may represent the type of expenses that will enter the owner's costs:

- Employee salaries to develop the Project
- Energy, consumables and maintenance costs during mine development
- Insurance during construction or project preparation (pre-production)
- Surface mobile equipment for the site and the warehouse
- Environmental management and mitigation
- Security
- Pre-investment costs
- Personnel training for the project
- Administration, financial and human resources costs regarding the development of the project
- Community relations regarding the project

Owner's Costs have been calculated by Norda Stelo based on a percentage of the direct and indirect costs including 15% contingency. For each area a percentage value was determined depending on the ratio of anticipated owner's costs. Table 21.6 presents the ratios for calculation of the owner's cost and the calculation details. Growth CAPEX for the owner's cost is estimated to 0.8M$ and SUSEX to 5.1M$ for a LOM total expenditure of 5.9M$.

Table 21.6 Owner's costs CAPEX and SUSEX over LOM

Owner's cost description	% for owner's cost	Growth CAPEX	SUSEX	Total
9000		M$	M$	M$
Site access, roads & earthworks	5%	0.0	0.1	0.1
Power & Electrical systems	5%	0.4	2.5	2.9
Waste and Water Management	10%	0.0	1.1	1.1
UG Mining	0%	0.0	0.0	0.0
Mine Systems (fixed infrastructure)	5%	0.5	1.3	1.7
Process Plant	5%	0.0	0.1	0.1
Surface Infrastructures	10%	0.0	0.0	0.0
Total:		**0.8**	**5.1**	**5.9**

21.3 Operating Costs

21.3.1 Summary

The average operating cost over the LOM is estimated to be 389.6$/t milled. Breakdown of the projected operating costs for the Project includes the following activities:

- Definition drilling
- Development
- Production mining, which includes the production activities:
  - Stope preparation
  - Drilling
  - Blasting
  - Mucking
  - Hauling
  - Ore rehandling (surface)
  - Backfilling
- Mine UG services
- Maintenance
- Technical services
- Processing
- General and Admininistation

The total OPEX for the Project is estimated at 994.8M$. The cumulative LOM OPEX is summary is presented in Table 21.7.

Table 21.7 Project OPEX cost summary

OPEX Activity	LOM OPEX M$	Cost rate $/t milled
Definition drilling	26.3	10.3
Development	68.1	26.7
Production mining	168.1	65.8
Mining services	130.0	50.9
Maintenance	240.2	94.1
Technical services	45.9	18.0
Processing	129.1	50.5
G&A	187.1	73.3
Total OPEX:	**994.8**	**389.6**

21.3.2 Estimate Responsibilities

The OPEX estimate was developed by different engineering firms depending on speciality. Table 21.8 below presents the estimate responsibilities summary.

Table 21.8 Estimate responsibilities for OPEX estimation

OPEX item	Responsible Entity
Definition drilling	Norda Stelo
Development	Norda Stelo
Production mining	Norda Stelo: for all mining OPEX except backfill SLR Consulting: for Backfill OPEX
Mining services	Norda Stelo
Maintenance	Norda Stelo
Processing	Soutex
G&A	Norda Stelo

21.3.3 Basis of OPEX Estimate

The OPEX estimate is based on first quarter (Q2) 2026 pricing and is expressed in constant Canadian dollars (C$) and no inflation escalation is applied. Exchange rate for US/CAD dollar is 1.35. The estimate is considered appropriate for a FS and is expected to have an accuracy of approximately ±10%.

The Kiena underground mine expansion estimate is done using a bottoms-up methodology, computing individual quantities of consumable for each activity of the operation. The pricing basis is done using current Kiena cost database for actual operation with operation workforce rates. Workforce and equipment productivity is derived from actual Kiena numbers and benchmarked against industry standards.

The OPEX estimate is based on the LOM production schedule and annual mining rates developed by Norda Stelo. It includes all site operating costs from the commencement of commercial production through final Project closure, including processing, tailings management, water treatment and environmental management.

Mining, process plant and tailings management operating costs were developed from detailed equipment, labour and consumable estimates and from Kiena mine operation historical data.

21.3.4 Definition Drilling

Definition drilling is the OPEX DDH prior to mining of stopes. All DDH drilling at Kiena is performed by a contractor. Cost estimation was based on Kiena actuals cost and confirm by Kiena personnel. Average cost for definition drilling is estimated at 10.32$/t milled or 153.21$/m drilled. This cost includes the contractor cost, mobile equipment and lab analysis of the assays. Overall OPEX for definition drilling is 26.3M$ over the LOM and 10.3$/t milled on average.

See Table 21.7 for OPEX total cost for this activity.

21.3.5 Development

Development Cost were based on annual mining rates developed by Norda Stelo. Costs were developed from detailed equipment, labour for all development activities and from Kiena mine operation historical data by zone, which includes:

- Labour
- Drilling
- Mucking
- Hauling
- Material and consumables
- Maintenance cost, including:
  - Labour
  - Material and consumables
  - Fuel

The development cost are average cost by zone for all types of excavations. The lateral development is comprised of ore drifts and draw points for OPEX. All OPEX development are mine operated and the is no vertical development in OPEX.

Overall OPEX for lateral development is 68.1M$ overall the LOM and 26.7$/t milled on average. See Table 21.7 for OPEX values.

21.3.6 Production Mining

Production mining area includes the following:

- Stope Preparation
- Drilling

- Blasting
- Mucking
- Hauling
- Ore Rehandling

Each sub-area is described in the following sub-sections. Table 21.9 below presents the OPEX for each activity related to production mining.

Table 21.9 Production mining activity OPEX – Cost summary by zone

Mining Production – Activity	LOM OPEX	Cost rate
	M$	$/t milled
Stope preparation	30.5	11.9
Drilling	22.4	8.8
Blasting	23.0	9.0
Mucking	16.6	6.5
Hauling	31.1	12.2
Ore rehandling (surface)	4.1	1.6
Backfilling	40.7	15.9
Total UG mining production OPEX:	**168.4**	**65.9**

21.3.6.1 Stope Preparation

Stope preparations were based on annual mining rates developed by Norda Stelo. Costs estimation comprise the cable-bolting planned prior to mining of the stopes and an allocation for drift rehabilitation needed to put the stope into production. It also includes the maintenance related to the utilization of some mobile equipment adding maintenance workforce, materials and equipment fuel. Costs were developed from detailed equipment, labour for all activities and from Kiena mine operation historical data by zone.

Table 21.10 presents the detail cost by zone for the stope preparation activity.

Table 21.10 Stope preparation OPEX – Detailed cost by zone

Stope preparation by zone	LOM OPEX	Cost rate
	M$	$/t milled
KD ZONE	26.8	13.9
PI ZONE	1.5	4.5
DUB ZONE	2.2	7.6
Total OPEX:	**30.5**	**11.9**

Overall OPEX for stope preparation is 30.5M$ overall the LOM and $11.9/t milled on average. See Table 21.9 for OPEX values.

21.3.6.2 Drilling

All production drilling at Kiena is performed by a contractor. Production drilling also includes the V30 slot raising into the stopes. Cost estimation was based on annual mining rates developed by Norda Stelo. It includes contractor labour, material, maintenance and fuel. Production drilling cost also includes the contractor. These costs include labour, equipment, material and maintenance for the V30 slot raising.

Quantities were derived via a drilling factor from a typical stope in each of the mined zones.

Table 21.11 presents the detail cost by zone for stope drilling activity.

Table 21.11 Stope drilling OPEX – Detailed cost by zone

OPEX - Production drilling by zone	LOM OPEX	Cost rate	Cost rate	Cost rate
	M$	$/m drilled	$/t ore stopes	$/t milled
KD ZONE	16.7	56.2	11.0	8.6
PI ZONE	3.5	72.8	14.4	10.3
DUB ZONE	2.2	73.3	11.5	7.7
Total OPEX:	**22.4**	**59.6**	**11.5**	**8.8**

Overall OPEX for production drilling is 22.4M$ overall the LOM and 8.8$/t milled on average. See Table 21.9 for OPEX values.

21.3.6.3 Blasting

Stope blasting OPEX estimation was based on annual mining rates developed by Norda Stelo. Costs estimation comprises the mine labor and the material to load and blast production stopes. It also includes the maintenance related to the utilization of some mobile equipment adding maintenance labor, materials and consumables and equipment fuel. Costs were developed from detailed equipment, labour for all activities and from Kiena mine operation historical data by zone

Table 21.12 presents the detailed cost by zone for stope blasting activity.

Table 21.12 Stope blasting OPEX – Detailed cost by zone

OPEX - Production blasting by zone	LOM OPEX	Cost rate	Cost rate	Cost rate
	M$	$/m drilled	$/t ore stopes	$/t milled
KD ZONE	18.1	60.7	11.9	9.4
PI ZONE	3.1	64.5	12.8	9.1
DUB ZONE	1.8	61.4	9.6	6.4
Total OPEX drilling:	**23.0**	**61.2**	**11.8**	**9.0**

Overall OPEX for production blasting is 23.0M$ overall the LOM and 9.0$/t milled on average. See Table 21.9 for OPEX values.

21.3.6.4 Mucking

Mucking OPEX estimation was based on annual mining rates developed by Norda Stelo. Costs estimation comprises the mine labor for the scoop fleet and sampling cost associated with mineralized material. It also includes the maintenance related to the utilization of the production scoops adding maintenance labor, materials and consumables and equipment fuel. Costs were developed from detailed equipment, labour for all activities and from Kiena mine operation historical data by zone.

Table 21.13 presents the detailed cost by zone for stope mucking activity.

Table 21.13 Stope mucking OPEX – Detailed cost by zone

OPEX - Production mucking by zone	LOM OPEX	Cost rate	Cost rate
	M$	$/t mined (zone stopes)	$/t milled
KD ZONE	12.4	8.2	4.9
PI ZONE	2.4	9.8	0.9
DUB ZONE	1.8	9.4	0.7
Total OPEX mucking:	**16.6**	**27.5**	**6.5**

Overall OPEX for production mucking is 16.6M$ overall the LOM and 6.5$/t milled on average. See Table 21.9 for OPEX values.

21.3.6.5 Hauling

Ore hauling OPEX estimation was based on annual mining rates developed by Norda Stelo. Costs estimation comprises the mine labor for the production truck fleet. It also includes the maintenance related to the utilization of the production trucks adding maintenance labor, materials and consumables and equipment fuel. Costs were developed from detailed equipment, labour for all activities and from Kiena mine operation historical data by zone.

The number of trucks required over time was estimated according to the cycle times of the specific tasks and the production that needed to be met during the month.

Table 21.14 presents the detailed cost by zone for stope hauling activity.

Table 21.14 Stope hauling OPEX – Detailed cost by zone

OPEX - Production hauling by zone	LOM OPEX	Cost rate	Cost rate
	M$	$/t mined (zone stopes)	$/t milled
KD ZONE	26.8	17.6	10.5
PI ZONE	2.2	9.2	0.9
DUB ZONE	2.1	11.0	0.8
Total OPEX hauling:	**31.1**	**37.8**	**12.2**

Overall OPEX for production hauling is 31.1M$ overall the LOM and 12.2$/t milled on average. See Table 21.9 for OPEX values.

21.3.6.6 Ore Rehandling (Surface)

Ore rehandling OPEX estimation was based on annual mining rates developed by Norda Stelo. Costs estimation consists of the cost to rehandle the ore from the PI zone that is trucked to surface, not hoisted.

Table 21.15 presents the detailed cost by zone for waste rehandling activity at surface.

Table 21.15 Ore rehandling at surface OPEX – Detailed cost by zone

OPEX - Ore rehandling at surface by zone	LOM OPEX	Cost rate	Cost rate
	M$	$/t mined (zone stopes)	$/t milled
KD ZONE	0.0	0.0	0.0
PI ZONE	4.1	16.9	1.6
DUB ZONE	0.0	0.0	0.0
Total OPEX ore rehandling:	**4.1**	**16.9**	**1.6**

Overall OPEX for ore rehandling on surface 4.1M$ overall the LOM and 1.6$/t milled on average. See Table 21.9 for OPEX values.

21.3.6.7 Backfilling

Backfilling costs include underground labour for pipe and barricade installation, plant consumables (binder, flocculant, etc.), materials for extension of the pipe distribution network. Binder was estimated based on the performed laboratory testing and the available strength database. Labour and maintenance costs for the surface backfill plant are covered under processing. These were based on the existing staffing and consumable costs.

Overall OPEX for backfilling of production stope is 40.7M$ overall the LOM and 15.9$/t milled on average. See Table 21.9 for OPEX values.

21.3.7 Mining Services

Mine UG services includes all support to operation activities, which include:

- Mine UG services, auxiliary equipment and maintenance
- UG construction
- Sump maintenance
- UG ventilation maintenance
- UG roads maintenance
- Levels maintenance
- Waste stockpile
- UG operation supervision
- UG modification
- Hoist operation

- Hoist cage service shaft
- Production shaft (skip)
- Shaft maintenance
- Mine surface services

A maintenance labor, material and fuel allowance for the mining service's fleet of mobile equipment is included.

Mine UG services OPEX cost were based on annual mining rates developed by Norda Stelo. Costs were developed from detailed equipment, labour for all development activities and from Kiena mine operation historical data by zone, which includes:

Table 21.16 Mine services OPEX – Detailed cost by zone and activity

Mine services - OPEX activity description	KD ZONE	PI ZONE	DUB ZONE	ALL ZONES
	LOM Cost	LOM Cost	LOM Cost	LOM Cost
	M$	M$	M$	M$
Mine UG services, mobile maintenance and contractors	16.9	5.0	3.3	25.2
UG construction	6.3	4.0	2.5	12.8
Sump maintenance	0.3	0.1	0.1	0.4
UG ventilation maintenance	0.5	0.1	0.2	0.8
UG roads maintenance	3.0	0.6	0.8	4.5
Levels maintenance	14.8	2.4	2.8	20.1
Waste stockpile	8.8	2.1	0.0	11.0
UG operation supervision	27.6	6.0	1.2	34.8
UG modification	0.7	0.1	0.2	1.0
Hoist operation	5.2	0.0	0.0	5.2
Hoist cage service shaft	10.0	0.0	0.0	10.0
Production shaft (skip)	0.1	0.0	0.0	0.1
Shaft maintenance	0.9	0.0	0.0	0.9
Mine surface services	3.2	0.0	0.0	3.2
Total LOM - M$	**98.3**	**20.6**	**11.1**	**130.0**
Total LOM - $/t mined by zone	**50.9**	**60.7**	**39.0**	**-**
Total LOM - $/t milled	**38.5**	**8.0**	**4.4**	**50.9**

Overall OPEX for mine services is 130M$ overall the LOM and 50.9$/t milled on average. See Table 21.7 for OPEX values.

21.3.8 Maintenance

Maintenance cost center includes general maintenance labor, fixed maintenance labor, electric maintenance labor and surface maintenance labor. It also includes labor, material and fuel allowance for the maintenance support fleet. Electrical energy and natural gas for the mine are also part of this center cost, while fuel is dispatched to other cost sectors.

The mobile maintenance is dispatched in the many areas through a labor, materials and fuel allowance.

Overall OPEX for mine services is 240.2M$ overall the LOM and 94.1$/t milled on average. See Table 21.7 for OPEX values.

21.3.9 Technical Services

Technical services OPEX cost estimation includes the technical services labour, material to support the mining engineering and geology activities related to the operations, transportation and consultants or contractors. Cost were developed based on the annual mining schedule developed by Norda Stelo. Therefore cost has been split between the different zones of the mine.

Overall OPEX for technical services 45.9M$ overall the LOM and 18$/t milled on average. See Table 21.9 for OPEX values.

21.3.10 Processing

Processing costs were provided by Soutex and based on annual mining schedule developed by Norda Stelo. Costs were developed using labors rates and operation historical data from Kiena mine, which include the following details:

- Labor:
  - Operation
  - Maintenance
  - Assay Lab
- Electricity:
  - Processing Plant - In Operation
  - Processing Plant – Standby
- Services: Natural Gas
- Reagents:
  - Sodium Cyanide
  - Lead Nitrate
  - Flocculant
  - Hydrochloric Acid
  - Caustic
  - SMBS
  - Copper Sulfate
  - Quicklime
  - Activated Carbon

- Grinding Media and Liners:
  - SAG Mill 5" Balls
  - Ball Mill 2" Balls
  - Mill Liners
- Maintenance supplies for electrical and mechanical (supplies + lube)
- Operation supplies (Laboratory supplies, office suplies, PPE, etc.)
- WTP:
  - Mobile Equipment
  - Reagents
  - Power Consumption
  - Operators
- Other Costs:
  - Service Contracts
  - Consultants

Overall OPEX for processing is 129.1M$ over the LOM and 50.5$/t milled on average. See Table 21.7 for OPEX values.

21.3.11 G&A

G&A costs are items not included in the mining, processing, water and waste management, transportation and refining aspects of the operation.

Included in G&A costs are:

- Site management. Which also includes:
  - Insurance and legal
  - Municipal taxes
  - Offices furnitures
  - Transportation and travel for employees
- Interco Corp administration
- Department administration
- Procurment, purchasing and warehouse
- Health and Safey, which includes:
  - Safety service
  - Mine rescue
  - First aid and infirmary
  - Personna Protective Equipments (PPE)
- Training
- HR department
- HR recruitment
- Public Relations
- IT services
- Environmental General

Each of these activities cost estimation includes labor, material, consultants or contractors and transportation.

Overall OPEX for G&A is 187.1M$ over the LOM and 73.3$/t milled on average. See Table 21.7 for OPEX values.

21.4 Other Cost

21.4.1 Reclamation and Closure Cost

As other cost to the project, Kiena has provided the cost for the mine reclamation and closure plan. These are estimated to 17M$ and are applicable at the end of the LOM.

21.4.2 Salvage Value

A salvage value for mobile equipment has been calculated based on 15% recovery of the initial value of the mobile equipment fleet. Therefore, the total cost of the salvage value applied to the project is 5.4M$. This money will be recovered at the end of the LOM only.

22. ECONOMIC ANALYSIS

22.1 Introduction

The Kiena Mine is an operating underground gold mine currently in commercial production. This Technical Report has been prepared to support an updated Mineral Reserve estimate based on the current LOM, incorporating the Kiena Deep, Presqu'île, and Dubuisson mining areas.

The Mineral Reserve estimate presented in this report has been established using appropriate modifying factors, including mining, processing, general and administrative costs, sustaining capital requirements, metallurgical recoveries, dilution, mining recovery, royalties, commodity price assumptions, and other technical and economic considerations. These assumptions support the determination that the reported Mineral Reserves are economically mineable under the conditions and assumptions described throughout this Technical Report.

As this Technical Report relates to an operating mine and does not contemplate a material expansion of the existing operation, Wesdome Gold Mines Ltd., as a producing issuer, has elected to rely on the exemption provided under Form 43-101F1 with respect to the disclosure of a detailed economic analysis.

22.2 Economic Basis of the Mineral Reserve Estimate

The Mineral Reserve estimate has been prepared using a reserve-based mine plan developed from the current Mineral Resource model and appropriate modifying factors. The mine plan includes only Proven and Probable Mineral Reserves and reflects the planned mining sequence, production schedule, mining methods, processing recoveries, operating costs, sustaining capital requirements, and applicable royalties.

The economic assumptions used to support the Mineral Reserve estimate were developed by Wesdome Gold Mines Ltd. with input from the Qualified Persons responsible for the relevant technical disciplines. These assumptions are considered reasonable and appropriate for an operating mine and reflect the current understanding of anticipated operating conditions over the life of the operation.

The principal economic assumptions supporting the Mineral Reserve estimate, including commodity prices, exchange rates, operating costs, metallurgical recoveries, dilution, mining recovery, and capital requirements, are presented and discussed within the applicable sections of this Technical Report, including:

- Chapter 15 – Mineral Reserve Estimates;
- Chapter 16 – Mining Methods;
- Chapter 17 – Recovery Methods;
- Chapter 18 – Project Infrastructure; and
- Chapter 21 – Capital and Operating Costs.

Collectively, these modifying factors demonstrate that the reported Mineral Reserves are economically mineable under the assumptions adopted for the reserve estimate.

22.3 Producing Issuer Exemption

Form 43-101F1 provides an exemption from the detailed disclosure requirements of Item 22 (Economic Analysis) for technical reports prepared by producing issuers on properties currently in production, provided that the technical report does not include a material expansion of current production.

Kiena is an operating mine in commercial production, and this Technical Report supports an updated Mineral Reserve estimate based on the current operation and planned mining sequence. The report does not include a standalone economic analysis, such as annual revenues, cash flows, NPV, IRR, or payback period.

Accordingly, in accordance with the exemption provided under Form 43-101F1 for producing issuers, a detailed economic analysis has not been included in this Technical Report.

23. ADJACENT PROPERTIES

As of the effective date of this Technical Report, the GESTIM database shows several claim blocks under different ownership around the Property (Figure 23.1). The QPs have not verified the publicly available information for these adjacent properties. Nearby mineralized occurrences do not necessarily indicate that the Property hosts similar types of mineralization. The QPs are not aware of any active exploration activities in the immediate area of the Property that would be relevant to the 2025 MRE.

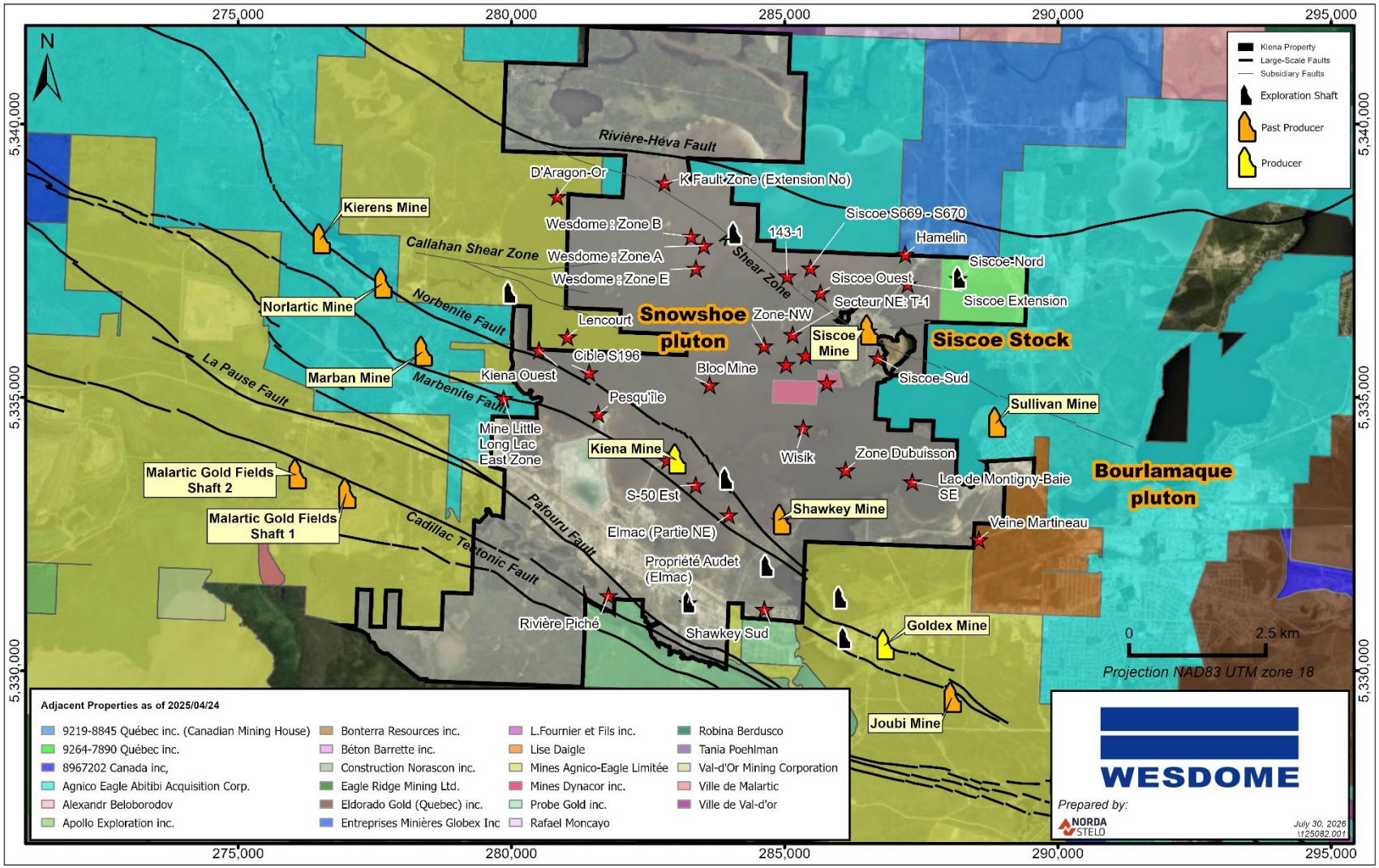


Figure 23.1 Adjacent Properties

24. OTHER RELEVANT DATA AND INFORMATION

There are no other relevant data or information applicable to this Technical Report.

25. INTERPRETATION AND CONCLUSIONS

25.1 Overall Conclusions

This Technical Report summarizes the results of the FS completed for the Kiena Mine on behalf of Wesdome Gold Mines Ltd. The study integrates updated geological models, Mineral Resource estimates, Mineral Reserve estimates, mine design, production scheduling, geotechnical assessments, metallurgical performance, infrastructure requirements, environmental considerations, and capital and operating cost estimates prepared by the Qualified Persons responsible for their respective disciplines.

The FS represents a significant advancement over the previous 2021 PFS. The updated study incorporates current operating experience gained since the restart of the Kiena Mine together with refined geological interpretations, updated geotechnical design criteria, revised mining methods, detailed infrastructure engineering, and bottom-up capital and operating costs estimate developed specifically for the current operation.

The Qualified Persons conclude that the modifying factors applied throughout the study are appropriate for a FS level evaluation and adequately support the declaration of Mineral Reserve.

The updated mine plan establishes an eight-year reserve-based mine life extending to 2033 and provides a technically achievable production plan based on the Kiena Deep, Presqu'île and Dubuisson mining zones. The inclusion of the Presqu'île and Dubuisson zones increases operational flexibility by diversifying production sources while utilizing the existing Kiena processing plant and underground infrastructure.

Overall, the Qualified Persons consider that the technical work completed provides an appropriate basis for continued operation of the Kiena Mine in accordance with the reserve-based LOM plan presented in this Technical Report.

25.2 Geology and Mineral Resources

The 2025 MRE was prepared by Christopher Grondin P.Eng. and Serge Gonthier, P.Geo. from Wesdome.

The resource database for the Project, as of December 30, 2025, consisted of 788 surface-collared and 7,709 underground-collared DDH, totaling 1,344,536.8 m of drilling. The average DDH length was 151.6 m. Within this database, a subset of 2,357 drillholes intersected 4,370 mineralized lens intercepts, representing a cumulative mineralized interval of 26,195 m.

The QP is of the opinion that while the addition of these new diamond drillholes would increase knowledge and confidence on the Project and have a positive impact on the resource estimate, it does not have a material impact on the current study presented in this Technical Report.

The QP is also of the opinion that the database is appropriate for the purpose of the 2025 MRE and that the sample density allows for a reliable estimate to be made of the size, tonnage and grade of the mineralization in accordance with the level of confidence established by the Mineral Resource categories in the CIM Standards.

After completing the 2025 MRE and a detailed review of all pertinent information, Serge Gonthier, P.Geo., concluded the following:

- The 2025 MRE is constrained within 3D wireframes of 94 mineralized lenses;
- Using a resource reporting with different Cut-off Grade;
  - 2.42 g/t CoG for Martin, Shawkey_22 and Wish
  - 2.6 g/t for Presqu'île
  - 2.7 g/t for Dubuisson
  - 2.97 g/t for K109
  - 3.15 g/t for Kiena Deep, S50 and B Zone
  - 3.2 g/t for VC, South Zone, Z134, Wesdome and Northwest

The Inferred Resources amount to 4,151 kt grading 5.3 g/t Au containing approximately 707,000 ounces of gold and the Indicated/Measured Resources (inclusive of mineral reserves) amount to 2,888 kt grading 11.3 g/t Au containing approximately 1,049,000 ounces of gold:

- It is likely that further diamond drilling at depth would upgrade most of the Inferred Mineral Resources to Indicated Mineral Resources.

25.3 Mineral Reserves

The Mineral Reserve estimate has been prepared in accordance with the CIM Definition Standards (2014) and the CIM Estimation of Mineral Resources and Mineral Reserves Best Practice Guidelines (2019). The Mineral Reserve estimate incorporates the modifying factors appropriate for a feasibility-level study, including updated mine designs, production schedules, mining dilution and recovery factors, geotechnical constraints, metallurgical recoveries, infrastructure requirements, operating costs, capital expenditures, and environmental and permitting considerations.

As of December 31, 2025, the Kiena Mine Proven and Probable Mineral Reserves total 2.553 Mt grading 8.7 g/t Au, containing approximately 711,000 ounces of gold. The Mineral Reserves are exclusive of Mineral Resources and represent the economically mineable portion of the Mineral Resources based on the assumptions and modifying factors adopted for this FS.

Compared with the previous 2021 PFS, the Mineral Reserve estimate has been developed using a significantly refined technical basis. The updated Mineral Reserve estimate incorporates revised geological interpretations, detailed geotechnical analyses, updated mining methods and design criteria, revised operating assumptions, and a bottom-up operating and capital cost estimate representative of current operating conditions. These improvements provide a higher level of confidence in the reserve-based LOM plan and its expected execution.

Particular emphasis was placed on incorporating updated geotechnical design criteria into the mine design process, resulting in revised stope geometries, mining sequences, and access strategies, particularly within the Kiena Deep mining areas. These modifications significantly improve confidence in the practical execution of the reserve-based mine plan while maintaining a conservative approach to Mineral Reserve estimation.

The updated reserve-based mine plan integrates production from the Kiena Deep, Presqu'île, and Dubuisson mining zones. The inclusion of the Presqu'île and Dubuisson zones enhances operational flexibility by diversifying production sources while making effective use of the existing underground and surface infrastructure. The resulting production schedule supports a stable reserve-based mine life extending through 2033.

The QP considers that the modifying factors applied in converting Mineral Resources to Mineral Reserves are appropriate for the level of study completed and that the resulting Mineral Reserve estimate provides a reasonable and technically supportable basis for the reserve-based mine plan presented in this Technical Report.

25.4 Mining

The mine plan developed for the FS provides a technically achievable and operationally practical basis for the extraction of the Proven and Probable Mineral Reserves. The reserve-based LOM plan integrates the Kiena Deep, Presqu'île, and Dubuisson mining zones into a coordinated production schedule extending through 2033. The production schedule was developed using detailed mine designs, realistic development and production productivity assumptions, backfill sequencing requirements, ventilation constraints, equipment availability, and operational interactions between the three (3) mining areas.

Longitudinal longhole stoping with cemented paste backfill remains the primary mining method for the Kiena Deep and Dubuisson zones, while the Presqu'île Zone will initially utilize cemented rockfill before transitioning to cemented paste backfill following completion of the planned paste distribution system. The selected mining methods remain appropriate for the geometry, continuity, and geotechnical characteristics of the mineralized zones and are consistent with current mining practices at the Kiena Mine.

One of the principal outcomes of this FS is the incorporation of a substantially more comprehensive geotechnical design basis than was available for the 2021 PFS. The updated design incorporates additional geotechnical investigations, operational experience gained since the restart of the Kiena Mine, detailed crown pillar assessments, hydrogeological evaluations, and revised design criteria that have been directly integrated into the mine layout, stope geometry, mining sequence, and dilution assumptions.

The mine has progressive experience in the Kiena main orebody, up-dip from Kiena Deep, which provides an opportunity to develop knowledge and risk mitigation measures incrementally. Mining at depth is also not unique among other mines in the region. As such, this risk can be mitigated through site-specific and regional knowledge, experience, and resources, including well-developed support systems for deep mining, established monitoring systems such as micro seismic monitoring (planned in 2026), and access to experienced personnel and consultants.

The mine schedule has also been developed to improve operational flexibility through the progressive integration of multiple production areas. The addition of the Presqu'île and Dubuisson zones diversifies production sources, increases the number of available mining fronts, and reduces reliance on a single mining area while making effective use of the existing shaft, processing plant, and underground infrastructure. This multi-zone operating strategy provides greater flexibility for production sequencing and supports a more resilient reserve-based LOM plan.

Mining dilution and recovery assumptions were established using updated operational experience, detailed stope optimization, ELOS analyses, and site-specific geotechnical recommendations. The modifying factors incorporated into the reserve estimate are considered appropriate for a feasibility-level study and reflect current operating knowledge and expected mining performance.

Overall, the QP considers that the mine design, production schedule, mining methods, equipment selection, infrastructure integration, and operating assumptions collectively provide a practical and technically supportable basis for the extraction of the declared Mineral Reserves. The reserve-based mine plan appropriately balances production continuity, development requirements, geotechnical constraints, and operational flexibility while providing opportunities for future optimization that are not included in the current Mineral Reserve estimate.

25.5 Metallurgy and Processing

Previous metallurgical testwork on Kiena Deep, together with testwork on the Presqu'île and Dubuisson zones, supports the expected gold recovery when ore from these zones is processed through the Kiena mill. Grindability results indicate significant variability among ore sources; however, the mill is expected to process all zones at the planned throughput, which remains below the mill design capacity. The existing equipment is expected to achieve the predicted metallurgical performance without modifications or additional equipment.

25.6 Infrastructure

25.6.1 Pastefill Network

The existing paste backfill system will be utilized to service all mining zones. Kiena Deep will simply require extension of the existing underground distribution system and continue with existing practices and recipes. Dubuisson and Presqu'île will require changing the paste recipes to be more dilute due to the transport distances. Minor upgrades to the existing paste pump in the surface paste plant, which is currently only used for underground tailings disposal in the historical North Zone voids, will be required due to the higher pumping pressures than current pressures to get to the North Zone. Testing was conducted to support cement content for the new paste recipes. New pipelines will be installed along the access drifts to the zones on Level 33 which will tie into the existing backfill station on this level.

25.6.2 Waste Rock Storage Facility

The Waste Stockpile Extension and associated Topsoil Stockpile have been designed in accordance with applicable provincial and federal regulatory requirements and recognized industry guidelines, including Directive 019, and are sited and configured to respect environmental and property constraints. Geotechnical analyses demonstrate that the WSE and TS can be constructed to their full design heights while meeting or exceeding the targeted factors of safety under static, post-seismic and pseudo-static loading conditions, provided that staged construction and instrumented monitoring are implemented in the soft clay foundation zone, with no practical rate constraints in the stratified silty clay zone. The combined storage capacity is sufficient to accommodate planned waste rock production until about 2030, after which additional waste rock

storage will be required at a new location and has been provisionally accounted for in the cost estimates. The contact water management system – comprising perimeter collection ditches, culverts, a lined collection pond and dike with emergency spillway, and a pumping station discharging to the existing polishing pond – has been sized to manage the inflow design that maintain compliance with Directive 019 hydrological criteria. Based on this work, the Qualified Persons are of the opinion that the proposed Waste Stockpile, its extension, and associated water management infrastructure are technically sound and adequate to support the waste management requirements of the FS mine plan within the identified capacity limits.

25.6.3 Water Management Infrastructure

The proposed water management infrastructure is considered technically appropriate to support the Project throughout the LOM. The water management system maximizes process water recirculation, thereby reducing freshwater demand and minimizing the volume of water requiring treatment. The existing UF/RO treatment plant has demonstrated the ability to maintain compliance with applicable discharge criteria (Directive 019). The planned upgrade from a seasonal UF/RO treatment plant to a permanent year-round UF/RO treatment plant is expected to enhance operational reliability, improve system robustness, and provide additional operational flexibility. Continued monitoring of water quality and treatment performance will be conducted to confirm the long-term adequacy of the selected water management strategy.

25.6.4 Tailings Management Facility

Dam safety assessment of the existing Tailings Storage Facility in 2020 indicated that most of the perimeter dykes requires upgrade to meet dam safety guidelines and standards. The TSF did not have an emergency spillway, which was required to satisfy the dam safety guidelines and standards at that time. The TSF upgrade in 2020 to 2022 involved construction of downstream toe buttress where possible and ground improvement combined with toe buttress where toe area is limited due to the proximity of the lake shore. Deep Soil Mixing was chosen as the preferred ground improvement method. The perimeter ditch were realigned to allow for the TSF upgrade construction. Subsequently the North Cell has been raised by 1.5 m in 2022 and then in 2025 to continue providing tailing storage capacity.

The current TSF operation uses the North Cell for tailings deposition and the South Cell for water management. Tailings are deposited in the North Cell up to a maximum elevation of 308.5 m (0.5 m below crest elev. 309.0), while excess water is transferred to the South Cell via pumping. An Internal Spillway on Dyke 13 is planned to provide passive water transfer between the two cells.

The South Cell serves as the primary water management area. Water collected in the South Cell is pumped to the Water Treatment Plant, treated, discharged to the Polishing Pond, and then released through the existing discharge outlet. The same pump system also supplies reclaim water for mill operations.

To comply with Directive 019, the Emergency Design Flood must remain below the Emergency Spillway invert elevation of 306.5 m, maintaining 1.5 m of freeboard below the South Cell crest. The North Cell pond is similarly managed to maintain a minimum freeboard of 1.5 m. The Inflow Design Flood is designed to safely pass through the Emergency Spillway.

Based on the latest bathymetric survey, projected tailings production, and deposition strategy, the North Cell has sufficient capacity to receive tailings until approximately September 2028. Thereafter, tailings will be deposited in the South Cell, following raising of its perimeter dykes to elevation 309.0 m. This approach provides a combined storage capacity of approximately 1.24 Mt, which is sufficient to contain the projected LOM tailings inventory.

According to the LOM production forecast, approximately 1.24 Mt of tailings are expected to be deposited in the TSF between 2026 and 2033. TSF capacity expansion strategy is adequate to accommodate all remaining tailings production through mine closure.

25.7 Environment, Permitting and Closure

25.7.1 Concerns

25.7.1.1 Physical Settings

Surface Water Protection

Surface water in the Kiena Mine area needs to be protected from metal and chemical compounds contaminations related to mining operations. The presence of past and recent mining activities in the vicinity of Lake DeMontigny could affect the water quality of the lake itself, as well as that of downstream waters within the Harricana River watershed. Surface water quality surveys conducted prior to the start of mining operations at the Kiena mine in 1983 revealed that concentrations of certain metals and cyanide exceeded criteria for the protection of aquatic life. The physicochemical characteristics measured indicate a very low level of alkalinity, a slightly acidic pH and a high concentration of inorganic phosphorus. However, nitrate and nitrite concentrations are low. Other surveys indicate that these waters have a significant amount of total solid suspended at the limit of the preservation of aquatic life.

Surveys carried out in 2021 and 2022 indicate that concentrations for TSS and several metals were higher in the exposure zone located downstream of the final effluent of the Kiena mine, than concentrations measured in the reference zone located 7 km to the north. For most of these metals, the results indicate concentrations below the CPVA for the exposure and reference area. Other surveys carried out in 2023 and 2025 indicated that most of the samples collected in the exposure and reference areas returned iron concentrations above the CPVA. Regarding aluminum, a few samples showed occasional concentrations above the CPVA.

The Piché River is characterized by high TSS contents, turbidity and colour, but to a lesser degree than in Lake DeMontigny. Alkalinity is low and the water appears to be less acidic than in the lake. Nitrates are present in very low concentrations. Finally, excessive concentrations of some metals such iron, mercury and zinc are present.

Groundwater protection

The Parker Island as well as the TSF and the waste rock stockpile areas are all characterized by a slight elevation of a few metres above the water level of DeMontigny Lake. This elevation allows groundwater to flow according to the topography towards Lake DeMontigny.

Hydrogeological studies indicate that groundwater in the TSF area had relatively high metal concentrations in Ba, Ni, Pb, As, Cr, Hg, U, Se, Al, and nitrites and nitrates in groundwater which exceeded the drinking water criterion and pH ranging from slightly acidic to alkaline. Concentrations of metals such as Ba, Ni, Pb, As, Cr, Hg, U, Se, Al, Zn, Cu, Mn, Cd, Ag, cyanide, nitrites and nitrates in groundwater exceeded the drinking water and resurgence groundwater criteria. Another survey in the waste rock stockpile area indicates that concentrations of Mn, Se, Na, sulfides, and nitrite-nitrate exceed drinking water criteria, while concentrations of Hg and sulfides exceed criteria for resurgences waters.

Since 1993, results from the monitoring of the evolution of the concentrations for some indicators suspected or confirmed upward trends in their respective concentrations. It can therefore be concluded that the TSF site is affecting the quality of groundwater in its surrounding area. All these metals, present in groundwater at concentrations exceeding reference criteria, could lead to additional inputs of metals and chemical compounds into the surface waters of Lake DeMontigny, which is in places less than 100 m from the eastern boundary of the tailings facility.

25.7.1.2 Biological Settings

The most recent results of the Environmental Effects Monitoring studies indicate an effect of the Kiena mine effluent on benthos and fish populations of Lake DeMontigny.

25.7.1.3 Ore and waste rocks

For the Kiena Mine, most of the waste rock and all tailings samples analyzed are classified as NPAG, but potentially leachable for the following EOI Ag, As, Co, Cr, Cu, Mn, Pb and Ni. Only seven (7) kinetic tests have been conducted since 1993 on four (4) waste rock samples and three (3) tailings samples collected from the South, S50, and Kiena Deep zones. Given its estimated tonnage and possibly higher sulphide content in Kiena Deep zone waste rock, few environmental analyses and tests have been conducted to date on the waste rock from this zone.

The unavailability of core from previous drilling significantly limits the ability to select representative samples of waste rock and ore from the Kiena Deep zone for environmental geochemical characterization analyses, as well as for static and kinetic tests.

25.7.1.4 Permitting

Besides, given that Lake Demontigny, water bodies, wetlands, special-status fauna species, protected wildlife habitats as well as the Réserve de biodiversité de la Moraine-d'Harricana are present across and/or in the vicinity of the Wesdome mining property, future developments will have to be carried out in consultation with the ministries to get authorizations and permitting and for integrating avoidance, prevention, mitigation and/or compensation measures.

25.7.1.5 Social

The 'Wesdome Gold Mines' monitoring committee has allowed the establishment of collaborative reports between company representatives and members of the community, interest groups, or other stakeholders. However, certain concerns are presented below:

- No information appears to be available regarding how the committee's composition was determined, or on how the people representing the selected organizations were chosen. What criteria were used to determine their representativeness (political or societal)?
- The committee's operating procedures don't specify the nature of its members' obligation to inform and consult. There's no specific mention of activities carried out in this regard in the documentation reviewed, which raises questions about how representative the views expressed by the committee members are.
- Looking over the meeting notes from the committee shows just how many different topics are covered related to mining operations and their impacts. Updates on discussion points are made at each meeting, but not every topic is systematically revisited. Information on each issue is scattered across multiple notes, and without a structured analysis grid by topic, it becomes hard to keep track of everything.
- A review of the monitoring committee meeting minutes provides no precise information regarding the number of complaints received or the number of instances where standards and/or criteria required by Quebec regulatory authorities were exceeded. These minutes detail neither the causes of such complaints and/or exceedances nor the effectiveness of the mitigation measures implemented by the operator.

25.7.2 Opportunities

25.7.2.1 Physical Settings

It is therefore essential that companies conducting mining activities near Lake DeMontigny regularly monitor groundwater and surface water quality in order to detect any worsening of the degradation of the lake's water.

- Kiena Mine collects water samples from the final effluent as well as the south bassin of the TSFat the frequency recommended by Directive 019 to monitor water quality. This monitoring makes it possible to control the quality of the water that flows into the dilution plume located near the south shore of Lake DeMontigny. Currently, the concentrations of metals and chemical compounds measured in the final effluent meet the criteria of the DIR019 (2025).
- Since the water dilution plume of the final effluent from the Kiena Mine has a small area, the additional input of contaminants into Lake DeMontigny would be quite limited at this time.
- Sampling surveys conducted between 2023 and 2025 at the Kiena Mine show metal concentrations below the CPVA for the exposure area. This represents a significant improvement compared to the results obtained during the 2021 and 2022 surveys where concentrations of TSS, Al, Cd, Cr, Co, Cu, Fe, Mn, Ni, Pb, Zn were higher in the exposure area than those measured in the reference area.

- Kiena Mine has recently installed several piezometers on Parker Island and in the waste rock stockpile area to optimize groundwater quality monitoring. Since May 2026, the water from the ditches in the polishing pond has been sampled monthly. The results will make it possible to evaluate the performance of this pond in capturing certain metals and chemical compounds prior they reach the final effluent.
- Noise emissions are among the concerns raised by the local community near the Kiena Mine. A total of seven (7) permanent stations and one temporary sound monitoring station have been installed in different sectors of the residential community adjacent to the mine site
- The management of the Kiena Mine also decided to add or modify equipment on the surface drill rigs to reduce noise during drilling operations. In addition, the Kiena Mine has agreed to modify its surface drilling schedules during certain periods on Lake DeMontigny to limit nighttime noise emissions. These modifications have improved the social acceptability of citizens affected by noise, particularly the residents of Siscoe Island and Sullivan.
- Kiena Mine has installed sound insulation on the underground fan located above ground. As additional underground ventilation requirements are required, new fans will be installed underground with a focus on low-noise equipment to minimize impacts. No complaints regarding noise associated with Kiena Mine operations were filed in 2025.
- Since vibration is a growing concern for residents, Kiena Mine has installed eight (8) permanent stations were installed along dikes 40, 41 and 42 of the tailings facility to monitor vibrations caused by blasting. Additional stations have also been installed in the community surrounding the Kiena Mine. Moreover, blastingschedules were adjusted to avoid overnight activity, and the use of explosives was reduced to minimize impacts.
- In 2024, all air quality results remained within NPRI reporting thresholds, with no major incidents, non-compliances or complaints related to air quality management at the Kiena Mine site. Since 2026, Kiena Mine has installed an air quality measurement device located near the waste rock stockpile. This device will provide more accurate measurements of key atmospheric components and improve air quality in the Kiena Mine area.

25.7.2.2 Ore and Waste Rocks

Kiena Mine

The numerous environmental analyses and tests collected since 1993 on the Kiena deposit make it possible to anticipate the quality of the drainage water associated with the exploitation of the ore and waste rock extracted from the Kiena Deep zone. However, analyses and tests will have to be carried out to confirm the trend observed to date. The increased drilling at the Kiena Deep zone will allow for the collection of representative ore and waste rock samples for environmental geochemical testing.

Presqu'île

- Results from the geo-environmental characterization carried out during the initial phases of the exploration program in the Presqu'Île and Dubuisson zones enabled a preliminary assessment of environmental risks for both sectors. Based on these results, static and kinetic testing was proposed for both zones.
- The environmental geochemical analysis program on the Presqu'Île continued in 2025 and 2026. This sampling program was integrated into the ongoing surface exploration program, under which samples are periodically selected for analysis.
- The results obtained make it possible to rapidly generate a geo-environmental model for the Presqu'île area, which will improve the management of these mining materials during surface storage and/or potential reuse.

Dubuisson

- Geochemical characterization of the Dubuisson area was initiated in 2025 and is ongoing. This environmental analytical program was integrated into exploration activities.

25.7.2.3 Social

In addition, the meetings held over the past five years have given Wesdome the chance to share with the committee members information about the mine's activities, their impacts on the physical and human environment, as well as the measures planned to mitigate them. They also allowed the representatives of the committee member organizations to ask questions and relay concerns expressed by people in their communities. The questions submitted by the monitoring committee allowed Wesdome to find solutions to solve some of the constraints mentioned by citizens and concerning Kiena Mine operations.

The stakeholder consultation approach has proven effective, as it is transparent and helps Kiena Mine develop a shared understanding of the environmental, social, and economic issues associated with the project's activities, thereby reducing the risk of conflict at this stage of the process.

25.8 Capital and Operating Costs

The capital and operating cost estimates have been prepared at a FS level and are considered appropriate to support the Mineral Reserve estimate and the reserve-based LOM plan. The estimates were developed using a bottom-up methodology based on detailed engineering, current operating experience at the Kiena Mine, vendor quotations where available, contractor pricing, historical operating data, and discipline-specific cost estimates prepared by the QP responsible for each area of the study.

The estimated LOM operating cost averages approximately 389.6$/t milled of ore processed with underground mining representing the largest cost component, followed by site general and administrative and processing costs. Unlike previous studies, the operating cost estimates were developed using a comprehensive bottom-up cost build across mining, processing, and site general and administrative functions. Historical benchmark assumptions were replaced with estimates representative of current operating practices, updated engineering designs, planned production rates, equipment utilization, labour requirements, and site-specific operating conditions. This approach provides a more representative and higher-confidence operating cost basis for the reserve-based LOM plan.

The LOM capital estimate includes approximately 106.4M$ of growth capital and 247M$ of sustaining capital, for a total capital requirement of 353.4M$. Capital expenditures are concentrated during the early years of the mine plan to support the development of the Presqu'île and Dubuisson mining areas, underground development, electrical and mine service infrastructure, and mobile equipment acquisitions required to establish and sustain planned production. Sustaining capital has been scheduled throughout the mine life to maintain production capacity and replace mobile equipment while supporting the ongoing development required by the reserve-based mining sequence.

The Qualified Persons consider that the capital and operating cost estimates appropriately reflect the scope, complexity, and maturity of the proposed mining operation. The estimates are consistent with the level of engineering completed for a FS and provide an appropriate basis for the modifying factors applied in the Mineral Reserve estimate and the execution of the reserve-based LOM plan.

25.9 Opportunities and Remaining Risks

The FS has been prepared using assumptions and modifying factors considered appropriate for a feasibility-level evaluation. The reserve-based LOM plan has been developed using conservative engineering criteria and reflects only those opportunities and production sources considered sufficiently supported for inclusion in the Mineral Reserve estimate.

Although the Qualified Persons consider the proposed mine plan to be technically achievable, opportunities remain to further improve the Project through continued optimization and operational improvements. Similarly, certain technical and operational risks remain inherent to underground mining operations but are considered manageable through the mitigation measures incorporated into the mine design, operating strategy, and ongoing mine management practices. The principal opportunities and remaining risks identified by the Qualified Persons are summarized in the following tables.

Overall, the Qualified Persons consider that the remaining technical and operational risks identified for the Project are consistent with those generally associated with underground hard rock mining operations of similar scale and complexity. The mitigation measures incorporated into the mine design, operating strategy, and project execution plan are considered appropriate for a feasibility-level study.

Table 25.1 Principal Opportunities

Discipline	Opportunity	Potential Value	Comments
Geology / Mineral Resources			
	Continued resource conversion	Mine life extension	Not included in Mineral Reserves
	Near-mine exploration targets	Additional reserve potential	Future exploration
Geotechnical	Continued refinement of geotechnical design criteria using operational performance data.	Potential optimization of stope geometries, ground support requirements, and mining sequence while maintaining acceptable stability.	Ongoing as additional operating experience is gained.
	Progressive calibration of geotechnical models through monitoring and back-analysis.	Improved confidence in future excavation designs and potential reduction of geotechnical conservatism in suitable areas.	Not incorporated into the current Mineral Reserve estimate.
	Continue geotechnical characterization of deeper mining areas.	Improved understanding of rock mass behaviour to support future mine planning and resource conversion at depth.	Ongoing with future development.
Mining			
	Increased mining productivity	Higher annual production	Not included in reserve plan
	Additional mining fronts	Improved scheduling flexibility	Partially incorporated
	Available hoisting and mill capacity	Potential production increase	Future optimization
	Alternative mining scenarios for Dubuisson	Improved project economics	Future evaluation
Infrastructure			
Tailings Storage Facility	Evaluate alternative tailings management technologies, including filtered tailings storage.	May provide flexibility if additional storage capacity or alternative deposition methods are required in the future.	These technologies have been previously evaluated and could be reconsidered if site conditions, capacity requirements, or operational constraints change.
	Consider future raises of the South and North Cell embankments.	Could increase available tailings and/or water storage capacity within the existing TSF footprint.	Subject to detailed engineering evaluations, confirmation of geotechnical performance, stability assessments, and regulatory approvals.
	Optimise tailings deposition and water management strategies within the existing TSF.	May improve storage efficiency and extend available capacity without immediate major infrastructure expansion.	Opportunities may include improved beach development, pond location management, staged deposition planning, and water transfer optimisation.

Table 25.2 Principal Remaining Risks

Discipline	Remaining Risk	Potential Impact	Mitigation Strategy
Geology / Mineral Resources			
	Geological variability	Local dilution/recovery impacts	Ongoing infill drilling and grade control
Mining			
	Development performance	Schedule delays	Conservative development assumptions and multiple headings
	Equipment availability	Reduced production	Fleet replacement strategy and preventive maintenance
	Power Peak site electrical demand approaching the existing power supply capacity as underground development and ventilation requirements increase.	Temporary constraints on power availability or operational flexibility if planned electrical upgrades are not completed as scheduled.	Installation of power factor correction capacitor banks and underground Ventilation-on-Demand (VOD) system has been incorporated into the 2026 capital program. These upgrades are expected to reduce peak electrical demand and satisfy Hydro-Québec requirements while supporting the planned increase in mine power demand.
Geotechnical	Ground conditions may vary locally from those assumed in the geotechnical models, particularly in deeper portions of the mine.	Local increases ground squeezing as well as seismic events which result in ground support requirements, excavation rehabilitation, dilution, or reduced development and mining productivity.	Strategic mitigation plans include: adjusting mining sequence to eliminate diminishing pillars, optimizing mining rates, implementing just-in-time development, optimizing excavation geometry, and the distance between the mining front and permanent infrastructure. Tactical mitigation plans include: designing adequate ground support depending on the expected failure mechanism (convergence vs. burst prone), use of appropriate equipment, instrumentation such as seismic monitoring systems, and also training and communication plans with the workforce.
	Mining-induced stress redistribution associated with continued mining at depth.	Localized squeezing, stress damage, or reduced excavation stability requiring modifications to mining sequence or support systems.	Revised stope geometries, mining sequence, yielding ground support, stress management practices, and routine geotechnical monitoring.
	Performance of crown pillars and critical excavations over the life of mine.	Local restrictions on mining sequence or additional support requirements if field conditions differ from design assumptions.	Conservative analytical design, periodic inspections, monitoring, and reassessment as mining progresses.

Discipline	Remaining Risk	Potential Impact	Mitigation Strategy
Hydrogeology – underground mining	Geological variability	Higher than expected groundwater inflows and pumping Underground operational impacts Potential settlement of surface infrastructure Rock stability Inaccurate contaminant transport modeling	Continual update of hydrogeological conceptual and numerical models Continual review of resource drilling core photos and records Adding instrumentation with Improved pumping and sump/collection pond storage records Include logging of drilling water recirculation losses during resource drilling Confirm true infiltration rates at Kiena mine and run contaminant transport model with updated pumping rates
	Groundwater inflows	Local operational impacts	Existing dewatering system and monitoring
Processing			
	Plant performance variability	Recovery fluctuations	Operating controls and metallurgical monitoring
	Major equipment failure due to aging	Loss of production	Equipment regular inspection to confirm the integrity
Environment & Permitting			
	Dubuisson permitting	Delay to mining sequence	Advance permitting strategy
Infrastructure			
Tailings Storage Facility	Seasonal ice accumulation and freeze–thaw conditions affecting TSF operations.	Reduced tailings deposition efficiency, loss of available storage capacity, challenges in water management, and disruption of tailings distribution infrastructure.	Continue seasonal operational planning, monitoring, and maintenance of deposition and water management systems; adapt deposition strategies during winter conditions.
	Uncertainty in the seismic response of tailings and foundation soils under extreme earthquake loading.	Potential requirement for additional reinforcement, upgrades, or mitigation measures to maintain long-term stability and safety.	Conduct future investigations and updated seismic analyses; implement reinforcement or mitigation measures as required.
	Future revisions to national seismic hazard models.	Updated design earthquake criteria may require reassessment of TSF performance and potential design modifications.	Periodically review updated seismic hazard information and reassess TSF performance against current regulatory and engineering requirements.
	Long-term environmental performance dependent on tailings and waste rock geochemistry.	Potential acid generation and/or metal leaching could affect water quality and closure performance.	Continue geochemical monitoring and verification programs; refine management measures based on monitoring results.

Discipline	Remaining Risk	Potential Impact	Mitigation Strategy
	Variability in climatic conditions, including high precipitation and prolonged wet periods.	Increased water management demand, construction delays, and potential impacts on closure implementation.	Maintain adaptive water management planning, monitor climatic trends, and provide operational flexibility to manage changing conditions.
	Potentially inadequate water management capacity in the South Cell towards the end of operations (2032).	Reduced operational flexibility and increased risk of water storage constraints.	Consider a combination of upgrading and utilizing the Polishing Pond for water management, increasing WTP capacity, and further drawdown of TSF pond levels during the final treatment and discharge period.
	Long-term consolidation and settlement of deposited tailings.	May influence closure design, reclamation performance, and long-term maintenance requirements.	Continue monitoring tailings performance and incorporate consolidation and settlement predictions into closure and reclamation planning.
	Critical infrastructure reliability	Critical infrastructure reliability	Critical infrastructure reliability
Water Management			
	Ammonia/cyanide contaminant accumulation in the tailing water	Treatment plant not able to reach effluent discharge quality	-Water Balance Optimization: Furthermore, the site water balance could also be optimized to increase ammonia containment within the tailings and paste backfill streams. For example, the permeate could be returned to the backfill plant or to the mill process water circuit, thereby reducing the quantity of ammonia in the tailing pond. -Enhanced Ammonia Volatilization: During summer periods, the pH of the TSF may be increased to enhance ammonia volatilization and promote natural ammonia removal. -Biological Treatment (MBBR) Additional ammonia/cyanide/cyanate/SCN treatment capacity could also be provided through the installation of a temporary or permanent biological MBBR system, either in recirculation or inline upstream of the RO system, to treat ammonia and other cyanide species.

26. RECOMMENDATIONS

26.1 Overview

The Kiena FS confirms the technical viability of the Mineral Reserve estimate and demonstrates that the proposed LOM plan provides a practical and executable framework for the continued operation and development of the Kiena Mine through 2033. The Study integrates updated geological models, mine design, geotechnical assessments, hydrogeological evaluations, processing assumptions, infrastructure requirements, capital and operating cost estimates, and production scheduling to establish a reserve-based operating plan consistent with the level of confidence expected for a FS.

As Kiena is an existing operating mine, the recommendations presented in this chapter are not intended to define additional phases of project evaluation prior to implementation. Instead, they are directed toward supporting the successful execution of the reserve-based LOM plan, reducing technical and operational uncertainties, and identifying opportunities for continuous improvement throughout the remaining mine life.

The Qualified Persons recommend that Wesdome continue implementing the reserve-based LOM plan while advancing the detailed engineering, permitting, procurement, and operational activities required to support the development of the Presqu'île and Dubuisson mining areas. In parallel, continued geological exploration, operational reconciliation, geotechnical monitoring, infrastructure optimization, and productivity improvement initiatives should be pursued to support future Mineral Reserve updates and maximize the long-term value of the Kiena operation.

The recommendations presented in the following sections reflect the respective areas of responsibility of the Qualified Persons and are intended to support safe, reliable, and efficient operations while maintaining the technical confidence associated with the current FS.

26.2 Geology and Mineral Resources

Based on a better comprehension and new design, extension of different projects from new Geological evidence, geophysical data on property and drilling data, there was a replacement of Reserves as well as an increased in resource for the MRE 2025. The QP concludes that the property has sufficient exploration targets and potential combine to a good plan in 2026 for Surface and Underground Exploration drilling to hope for an increase of further Inferred and Indicated Resources in the near future.

26.3 Mining

The FS demonstrates that the proposed underground mine plan provides a technically robust and executable basis for the extraction of the Mineral Reserves within the Kiena Deep, Presqu'île and Dubuisson mining areas. The mine design incorporates updated geological interpretations, detailed geotechnical design criteria, revised operating assumptions, current cost estimates, and production scheduling developed specifically for this FS.

Although the mine plan has been developed at a feasibility level of confidence, underground mining operations should continue to evolve through operational experience, reconciliation, and continuous improvement. As mining progresses, additional information obtained from underground development, production stopes, operational performance, and ongoing drilling should be incorporated into future LOM updates.

The following recommendations are intended to support successful implementation of the mine plan while reducing technical uncertainty and identifying opportunities for future optimization.

26.3.1 Mine Planning and Production Optimization

The following activities are recommended during implementation of the LOM plan:

- Continue updating the LOM schedule as additional Mineral Resources are converted to Mineral Reserves through ongoing infill drilling programs.
- Regularly review mining sequences to optimize production flexibility between the Kiena Deep, Presqu'île and Dubuisson mining areas while maintaining geotechnical constraints and operational flexibility.
- Reconcile planned versus actual mining dilution, recovery, development advance, productivity and operating costs to continuously calibrate planning assumptions.
- Continue evaluating opportunities to optimize the mine development strategy in order to maximize the number of active development headings and production fronts while maintaining appropriate geotechnical and operational constraints.
- The current reserve-based mine plan does not fully utilize the available hoisting and processing capacities. As additional geological information becomes available and operational experience is gained, Wesdome should periodically re-evaluate the mining sequence and development strategy with the objective of maximizing the number of active development headings and available production fronts. Increasing the amount of development completed ahead of production and maintaining a greater inventory of mine-ready stopes may improve operational flexibility, reduce production constraints, and create opportunities to sustainably increase mining rates while maintaining appropriate geotechnical, operational, and infrastructure constraints. Any future increase in planned production should be supported by appropriate engineering evaluations confirming that the mine infrastructure, hoisting system, processing plant, ventilation network, and supporting services remain capable of sustaining the proposed production rates.

Strategic Planning for the Dubuisson Mining Area

As the Dubuisson mining area represents the final major mining area incorporated within the current LOM plan, Wesdome should continue to refine its long-term development and extraction strategy as additional geological, geotechnical, hydrogeological, and operational information becomes available through ongoing development and exploration activities.

Particular emphasis should be placed on further improving the understanding of the mineralized envelope, continuity of the mineralization, and expansion potential, as these factors may influence the optimal mine access strategy, mining sequence, and degree of mechanization adopted during future project implementation.

Given the relatively limited transition period between the completion of mining activities at Presqu'île and the planned production ramp-up at Dubuisson, these evaluations should be completed sufficiently in advance to support timely decision-making and minimize potential impacts on future production continuity.

As part of this optimization process, alternative implementation strategies may be evaluated, including staged development scenarios that make use of existing underground infrastructure, such as the rail drift, to progressively validate geological continuity, operating assumptions, and project economics prior to full deployment of the highly mechanized mining approach adopted in the current FS. Any alternative implementation strategy should be supported by appropriate engineering, technical, operational, and economic evaluations before implementation.

26.3.2 Mine Development

As underground development progresses, it is recommended that:

- Development performance continue to be monitored and benchmarked against the productivity assumptions adopted in the FS.
- Underground infrastructure installations, including electrical distribution, ventilation, pumping systems and paste distribution, continue to be coordinated with mine development to support future production requirements.
- Detailed engineering be completed for future underground infrastructure associated with the planned development of the Dubuisson mining area.

26.3.3 Mine Ventilation and Refrigeration

As mining progresses to greater depths within the Kiena Deep mining area, the QP recommends that Wesdome continue monitoring underground thermal conditions and periodically reassess future cooling requirements as additional operational data become available. Ongoing evaluation of heat generation, ventilation performance, and workforce exposure should continue throughout the development of the deeper mining levels.

The use of battery-electric haul trucks within Kiena Deep is expected to contribute to reducing underground heat generation compared with an equivalent diesel fleet and should continue to be considered as an integral component of the mine heat management strategy. Nevertheless, should future monitoring indicate that ventilation alone cannot maintain acceptable working conditions during periods of elevated ambient temperatures, additional engineering studies should be completed to evaluate the technical and economic feasibility of implementing an underground air refrigeration system.

Any future decision regarding the installation of an underground refrigeration system should be supported by updated ventilation modelling, underground heat load assessments, and confirmation that sufficient electrical capacity is available to support the additional cooling demand.

26.3.4 Productivity Improvements

The reserve-based mine plan has been developed using operating assumptions considered appropriate and sufficiently conservative for a FS. As mining progresses, Wesdome should continue to evaluate opportunities to improve productivity, operational flexibility, and overall mining efficiency through targeted operational improvements and engineering trade-off studies.

Several opportunities identified during the FS may further improve equipment productivity, operational efficiency, and mining cycle performance as operational experience is gained.

- Evaluating the use of larger-capacity Load-Haul-Dump units in selected production and development areas where excavation geometries and operating conditions are suitable, with the objective of increasing mucking productivity, reducing equipment operating hours, and improving overall fleet efficiency.
- Assessing opportunities to implement increased equipment automation and tele-remote operation during non-productive periods, including between shift changes. Particular consideration should be given to remote mucking of development rounds along the Kiena Deep ramp during crew change periods to improve equipment utilization and increase effective productive time.
- Continuing to optimize production scheduling, fleet dispatching, and equipment utilization to maximize productivity while maintaining operational flexibility.
- Continuing to assess opportunities for the expanded application of battery-electric equipment where operationally and economically justified, recognizing the potential benefits associated with reduced diesel emissions, lower underground heat generation, and improved ventilation efficiency.

Future productivity enhancement initiatives should be supported by appropriate engineering evaluations and operational trials to confirm their technical feasibility, economic benefits, and compatibility with the existing underground infrastructure. Where demonstrated to be beneficial, the results of these evaluations should be incorporated into future LOM planning and future Mineral Reserve updates.

26.3.5 Operational Monitoring

Operational monitoring should continue throughout the mine life to validate the assumptions adopted in this FS. Particular attention should be given to:

- mining dilution and mining recovery reconciliation
- ground conditions and their influence on stope performance
- underground development productivity
- equipment availability and utilization
- ventilation performance
- operating cost reconciliation
- production sequencing and scheduling

The results of these monitoring programs should be incorporated into future updates of the Mineral Reserve estimate and LOM planning.

26.4 Geotechnical Engineering

As mining progresses to greater depths within the Kiena Deep mining area, the QP recommends that Wesdome:

- Implement the mitigation plan to address geotechnical challenges in relation to increased ground squeezing as well as potential increase of seismic activity. The mitigation plan includes adjusting the mining sequence to avoid the creation of unfavourable geometry. The mitigation plan should also include systematic bolting in new headings, the use of adequate ground support, and ensure ongoing ground support QAQC, and the installation of a seismic system to monitor seismic activity to allow educated decision in relation to potential increase of seismic activities in the future.
- Continue development of a formal ground control management plan that summarizes different mine design guidelines (stope and pillar) and ground control requirements for different geotechnical domains. The document needs to include formal geotechnical guidelines that will be updated as more performance information becomes available. It will be important to continue a progressive calibration of geotechnical models through monitoring and back-analysis as mining activity continues.
- Continue improving geotechnical data recording, including mapping of underground rock mass conditions and drill core logging, validation of ground support performance, stope and pillar sizes, rock mass characterization, definition of regional stress field characteristics to support reliable stress modelling, and development of a 3D geomechanical domain model.
- Continue training geotechnical personnel in geotechnical mapping, identifying poor rock conditions, and executing remedial ground control work where required.

26.5 Hydrogeology

It is recommended prior to detailed engineering to install a series of strategically located flow meters and water level instrumentation to reliably measure and define the groundwater infiltration and recirculation water components. This can partially be done by a desktop water balance, as was done in the current FS, using improved permeability data with depth and inverse parameter techniques to re-estimate realistic pumping data from Kiena. However, this water balance and pumping estimates need to be confirmed with actual flow meter data, pumping state, and storage curve data for increased confidence.

Further study is required, but it is suggested to include flow meters to measure flow rates and quantities for the following:

- Flow rates and quantities that are pumped to the tailings facility
- Flow rates and quantities that may be pumped for other surface water needs
- Flow rates and quantities that are recirculated to the underground for operations and other needs
- Flow rates and quantities pumped from the underground for potable water needs
- Storage curves for sumps, reservoirs, and collection ponds

- Pump capacities and records of pump on/off conditions

The above information could be used to build a GoldSim water balance model that would aid in the calibration of future groundwater model updates and future pump planning.

Following confirmation of inflow and pumping rates at the existing Kiena Mine, it is recommended to recalibrate existing models and reassess the results, update the water balance and dewatering estimates, and re-evaluate the environmental contaminant transport models if impacted by the Kiena Mine pumping rates and underground dewatering.

Following review of pumping data from the site, it is apparent gaps exist in how water is managed in the current operations. A detailed GoldSim water balance is recommended for the underground pumping network. This would include information about various sump storage capacities, pump on/off triggering conditions, etc. Combined with flow meter data, data to enable continual calibration and modeling updates of the infiltration conditions can be achieved to reasonable accuracy.

26.6 Mine Water Management and Water Treatment

It is recommended to proceed with the next phases of engineering/construction for the permanent water treatment plant to further improve the robustness of the site water management strategy and facilitate long-term operation and maintenance.

Increase water quality monitoring to be able to have regular water and contaminant balance evaluations to track constituent loading and prevent excessive contaminant accumulation upstream of the treatment facility. These measures will help ensure that the water treatment plant remains capable of consistently treating site water and meeting applicable effluent quality requirements throughout the life of the operation.

26.7 Infrastructure

Considering that the Kiena Mine's operations have been developed over several decades and that the existing surface infrastructure has been progressively expanded, upgraded, and maintained throughout the mine's operating history, there are no particular recommendations to be made at this level.

With the infrastructure additions and the ongoing site improvements made since the Prefeasibility Study, the surface facilities are able to continue to provide adequate capacity to support the LOM plan developed for this FS.

26.8 Electrical Power Supply

The QP recommends that Wesdome continue advancing the electrical capacity management program in collaboration with Hydro-Québec and the Company's electrical engineering consultants. Forecast electrical demand associated with the planned LOM development should continue to be regularly updated and reconciled against the available site power allocation to ensure that future electrical requirements remain aligned with mine development schedules.

Particular attention should be given to the timely implementation of the planned power factor correction system (capacitor banks) and the underground VOD system, both of which form part of Wesdome's 2026 capital program and represent key prerequisites identified by Hydro-Québec in support of the requested increase in the site's electrical allocation. Progress on these initiatives should continue to be monitored to minimize the risk of future power supply constraints affecting mine development or production.

Given the planned production sequence, which progressively transitions mining activities from Presqu'île and the upper Kiena Deep mining areas toward Dubuisson, Wesdome should periodically assess opportunities to redeploy existing electrical infrastructure to support future underground development. The planned redeployment and reuse of suitable electrical equipment should be incorporated into future detailed engineering, where practical, to optimize capital expenditures while maintaining operational reliability.

26.9 Paste Backfill

It is recommended that Wesdome make the suggested plant pump upgrades and implement the distribution automation included in this study due to increase the reliability of the system with the increased risk of downtime with the long-distance pumping.

If desired, additional operating data and a more robust dataset on high slump paste could be acquired by conducting trial runs to the historical North Zone void to allow for a better understanding on pressure losses as well as binder requirements for Dubuisson and Presqu'île Zones

In addition, the concept of conducting continuous pours with appropriate controls and monitoring should be considered where possible as the short stope heights are leading to a high proportion of the stope (~50%) being poured at a higher binder content as a plug. This would lead to significant reduction in binder consumption in addition to improved cycle times.

26.10 Waste Rock Management

Considering that the waste rock pile allows accumulation until 2030, it is recommended to begin engineering for a new pile by 2028 at the latest.

Implementation of a TARP approach based on vibrating wire piezometer monitoring in the clay foundation zone to define pore pressure thresholds and guide construction pacing in real time. This will ensure that actual foundation response remains consistent with the design assumptions and that the required safety factors are maintained throughout construction.

A mine waste monitoring (sampling) program must be developed for all future mining zones and analyses implemented into routine exploration activities to ensure ongoing and continued documentation of mine waste geochemical properties, allowing appropriate mine waste management actions.

Waste rock pile water balance must be integrated to the site global water balance must be updated to consider the new accumulation pond and pumping strategy.

26.11 Tailings Management

The following recommendations are provided to support ongoing operation, long-term performance assessment, and closure planning of the TSF:

- Continue geotechnical characterization of tailings and foundation materials to supplement and refine the understanding of long-term strength, deformation, and seismic response characteristics.
- Review existing instrumentation considering additional site investigation data and installed additional instrument as required. Consider installing survey monuments to supplement all inclinometer monitoring data.
- Confirm the liquefaction resistance and post-liquefaction behavior of tailings and foundation soils through additional laboratory testing, as required to support future design updates and closure planning.
- Update site-specific seismic hazard parameters as new regional seismic hazard information becomes available and assess implications for the long-term performance of the facility.
- Undertake advanced seismic deformation analyses, where warranted, to confirm the performance of critical embankment sections under applicable design earthquake events.
- Continue geochemical characterization and monitoring of tailings, waste rock, seepage, and contact water to support environmental management and closure design.
- Periodically review embankment performance, monitoring data, and operational practices to confirm that the facility continues to satisfy applicable dam safety and regulatory requirements.
- Periodically update the water balance, assess WTP requirement and upgrade WTP capacity as required.
- Assess potential for reducing the TSF pond volume and utilize Polishing Pond for water management.
- Review TSF Dykes hazard classification and upgrade TSF Dykes design as required.

26.12 Environment and Permitting

26.12.1 Physical Settings

Control, limit, and mitigate the suspected increase in concentrations of certain metals and chemical compounds in groundwater sampled near the TSF. Recent interpretations suggest that the location of the TSF could be affecting groundwater quality.

Concentrations of certain metals and chemical compounds in groundwater near the tailings management area and waste rock storage areas must be rigorously monitored to ensure that applicable surface water quality criteria and sediment criteria are not exceeded for Lake DeMontigny.

26.12.2 Biological Settings

Minimize the effects of effluent from the Kiena Mine on the benthos and fish populations of Lake DeMontigny, particularly regarding concentrations in metals and chemical compounds.

For future work and development, please consult the relevant ministries beforehand to incorporate specific environmental requirements, as well as avoidance, prevention, and/or mitigation measures, into the projects. Such consultations will be important given the presence of wetlands, wildlife species with special status, protected wildlife habitats, and the Harricana Moraine Biodiversity Reserve on or near the Wesdome mining property.

26.12.3 Ore and Waste Rocks

26.12.3.1 Kiena Deep

Initiate a geo-environmental characterization program for the Kiena Deep zone, including leaching tests as well as static and kinetic tests. Samples must be collected to ensure spatial representativeness across the various stopes scheduled in the mine plan. Based on the results obtained, develop a 3D geo-environmental model of the Kiena Deep zone illustrating the various risks (leachable metals, potentially acid-generating [PAG] or non-acid-generating [N-PAG] materials) associated with the different stopes to be mined.

26.12.3.2 Presqu'île

Develop a 3D geoenvironmental model for the Presqu'île area that will present the different risks (leached metals) according to the stopes to be mined.

26.12.3.3 Dubuisson

Initiate a geo-environmental characterization program in accordance with the recommendations from the Guide de caractérisation des résidus miniers et du minerai (MELCC, 2020). Develop a 3D geoenvironmental model for the Dubuisson area that will present the different risks (leached metals) according to the stopes to be mined.

26.12.4 Permitting

In the project schedule, allow sufficient time to obtain permits and authorizations from the various ministries.

26.12.5 Social

Looking ahead to expanding the committee to include new members, these questions should get special attention to avoid any misunderstandings. The makeup of the monitoring committees has often sparked controversy, which has hurt its legitimacy with the public.

Also, the work of the monitoring committee should be supported by developing a theme-based analysis grid that its members could refer to track the environmental and social impacts of the mine's activities. An environmental assessment expert could join the monitoring committee meetings to help create this theme-based analysis grid and keep track of it.

The proposed approach involves identifying the activities of a project that could be a source of impact, measuring the changes those activities bring about in the components of the environment and society, and analyzing them in relation to specific issues framed in terms of stakes to determine their impacts. Also, impact assessment doesn’t only concern the extent of the change to the affected component of the environment and society, but its significance regarding given stakes.

26.13 Overall Conclusions

The Qualified Persons consider the recommendations presented in this chapter to be appropriate and consistent with the current stage of development of the Kiena Mine. Collectively, these recommendations are intended to support the successful implementation of the reserve-based mine plan, maintain operational reliability, reduce technical uncertainty where appropriate, and provide a framework for continuous improvement during the remaining mine life.

As Kiena Mine is an established operation with existing infrastructure and a current reserve-based production plan, most of the recommended activities represent ongoing engineering, operational, monitoring, optimization, permitting, and exploration initiatives that are considered part of normal mine management practices. Many of these activities are already incorporated within Wesdome's planned operating and capital programs and therefore do not require separate staged work programs or decision points.

Continued geological exploration, Mineral Resource conversion, operational reconciliation, geotechnical monitoring, infrastructure optimization, and productivity improvement initiatives are expected to further strengthen future LOM planning while supporting the long-term sustainability of the operation. In particular, ongoing evaluation of opportunities identified during this FS including operational efficiencies, productivity improvements, and the continued advancement of mineralized zones not currently included in the Mineral Reserve estimate may provide additional flexibility and value beyond the current reserve-based mine plan.

Overall, the Qualified Persons conclude that the Kiena Mine is well positioned to proceed with implementation of the FS mine plan. The Qualified Persons consider that the recommendations presented herein provide an appropriate framework to support the continued safe, efficient, and sustainable development of the Kiena Mine while maintaining the technical confidence associated with the current FS.

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Appendix I

List of Mining Titles

NTS	Type of Title	Title ID	Registry Date	Expiry Date	Area (Ha)	Total Credits	Owner
32C04	CM	494	1962-11-30		184.44	$ -	Wesdome Gold Mines Ltd
32C04	BM	1058	2021-12-09	2041-12-08	24.16	$ -	Wesdome Gold Mines Ltd
32C04	BM	1063	2026-02-02	2046-02-01	96.46	$ -	Wesdome Gold Mines Ltd
32C04	CDC	2411674	2014-10-06	2027-12-03	2.78	$ 4,430.18	Wesdome Gold Mines Ltd
32C04	CDC	2411675	2014-10-06	2027-12-03	36.83	$ 484,951.75	Wesdome Gold Mines Ltd
32C04	CDC	2411676	2014-10-06	2027-12-03	20.65	$ 54,120.24	Wesdome Gold Mines Ltd
32C04	CDC	2411677	2014-10-06	2027-12-03	4.76	$ 9,935.85	Wesdome Gold Mines Ltd
32C04	CDC	2411678	2014-10-06	2027-12-03	4.62	$ 9,546.56	Wesdome Gold Mines Ltd
32C04	CDC	2411679	2014-10-06	2027-12-03	24.49	$ 64,797.89	Wesdome Gold Mines Ltd
32C04	CDC	2411926	2014-10-14	2026-06-15	1.98	$ 3,320.05	Mines Dynacor inc. 50 % Wesdome Gold Mines Ltd 50 %
32C04	CDC	2411927	2014-10-14	2026-06-15	16.28	$ 46,060.60	Mines Dynacor inc. 50 % Wesdome Gold Mines Ltd 50 %
32C04	CDC	2411928	2014-10-14	2026-06-15	3.02	$ 6,428.46	Mines Dynacor inc. 50 % Wesdome Gold Mines Ltd 50 %
32C04	CDC	2411929	2014-10-14	2026-06-15	1.09	$ 659.98	Mines Dynacor inc. 50 % Wesdome Gold Mines Ltd 50 %
32C04	CDC	2411930	2014-10-14	2026-06-15	9.6	$ 26,095.08	Mines Dynacor inc. 50 % Wesdome Gold Mines Ltd 50 %
32C04	CDC	2411931	2014-10-14	2026-06-15	12.9	$ 35,958.28	Mines Dynacor inc. 50 % Wesdome Gold Mines Ltd 50 %
32C04	CDC	2415481	2014-11-26	2026-06-22	11.06	$ -	Wesdome Gold Mines Ltd
32C04	CDC	2415482	2014-11-26	2026-06-22	36.43	$ -	Wesdome Gold Mines Ltd
32C04	CDC	2421972	2015-03-13	2028-04-24	32.63	$ 296,033.20	Wesdome Gold Mines Ltd 75 % 9264-7890 Québec inc. 25 %
32C04	CDC	2421973	2015-03-13	2028-04-24	41.29	$ 347,537.38	Wesdome Gold Mines Ltd 75 % 9264-7890 Québec inc. 25 %
32C04	CDC	2421974	2015-03-13	2028-04-24	7.95	$ 71,230.05	Wesdome Gold Mines Ltd 75 % 9264-7890 Québec inc. 25 %
32C04	CDC	2421975	2015-03-13	2028-04-24	9.55	$ 86,158.94	Wesdome Gold Mines Ltd 75 % 9264-7890 Québec inc. 25 %

NTS	Type of Title	Title ID	Registry Date	Expiry Date	Area (Ha)	Total Credits	Owner
32C04	CDC	2421976	2015-03-13	2028-04-24	32.84	$ 296,992.61	Wesdome Gold Mines Ltd 75 % 9264-7890 Québec inc. 25 %
32C04	CDC	2421977	2015-03-13	2028-04-24	11.93	$ 108,365.67	Wesdome Gold Mines Ltd 75 % 9264-7890 Québec inc. 25 %
32C04	CDC	2421978	2015-03-13	2028-04-24	9.99	$ 90,264.39	Wesdome Gold Mines Ltd 75 % 9264-7890 Québec inc. 25 %
32C04	CDC	2421979	2015-03-13	2028-04-24	41.38	$ 347,192.10	Wesdome Gold Mines Ltd 75 % 9264-7890 Québec inc. 25 %
32C04	CDC	2428771	2015-07-16	2028-03-05	57.51	$ 62,821.93	Wesdome Gold Mines Ltd
32C04	CDC	2428772	2015-07-16	2028-03-05	57.51	$ 62,821.93	Wesdome Gold Mines Ltd
32C04	CDC	2428774	2015-07-16	2028-03-05	57.51	$ 573,140.43	Wesdome Gold Mines Ltd
32C04	CDC	2428775	2015-07-16	2028-03-05	57.51	$ 62,821.92	Wesdome Gold Mines Ltd
32C04	CDC	2428776	2015-07-16	2028-03-05	57.51	$ 62,821.92	Wesdome Gold Mines Ltd
32C04	CDC	2428777	2015-07-16	2028-03-05	56.35	$ 1,437,003.13	Wesdome Gold Mines Ltd
32C04	CDC	2428778	2015-07-16	2028-03-05	45.97	$ 1,120,575.48	Wesdome Gold Mines Ltd
32C04	CDC	2428779	2015-07-16	2028-03-05	57.45	$ 62,747.59	Wesdome Gold Mines Ltd
32C04	CDC	2428780	2015-07-16	2028-03-05	57.5	$ 2,457,527.49	Wesdome Gold Mines Ltd
32C04	CDC	2428781	2015-07-16	2028-03-05	57.5	$ 1,688,614.56	Wesdome Gold Mines Ltd
32C04	CDC	2428782	2015-07-16	2028-03-05	57.5	$ 573,128.03	Wesdome Gold Mines Ltd
32C04	CDC	2428783	2015-07-16	2028-03-05	57.49	$ 62,797.15	Wesdome Gold Mines Ltd
32C04	CDC	2428784	2015-07-16	2028-03-05	57.48	$ 62,784.76	Wesdome Gold Mines Ltd
32C04	CDC	2428785	2015-07-16	2028-03-05	57.48	$ 62,784.76	Wesdome Gold Mines Ltd
32C04	CDC	2428786	2015-07-16	2028-03-05	57.48	$ 62,784.76	Wesdome Gold Mines Ltd
32C04	CDC	2428787	2015-07-16	2028-03-05	57.47	$ 62,772.37	Wesdome Gold Mines Ltd
32C04	CDC	2428788	2015-07-16	2028-03-05	57.47	$ 62,772.37	Wesdome Gold Mines Ltd
32C04	CDC	2428789	2015-07-16	2028-03-05	57.47	$ 62,772.37	Wesdome Gold Mines Ltd
32C04	CDC	2428790	2015-07-16	2028-03-05	57.47	$ 62,772.37	Wesdome Gold Mines Ltd
32C04	CDC	2428791	2015-07-16	2028-03-05	57.47	$ 62,772.37	Wesdome Gold Mines Ltd
32C04	CDC	2428792	2015-07-16	2028-03-05	57.46	$ 62,759.98	Wesdome Gold Mines Ltd

NTS	Type of Title	Title ID	Registry Date	Expiry Date	Area (Ha)	Total Credits	Owner
32C04	CDC	2428793	2015-07-16	2028-03-05	57.46	$ 62,759.98	Wesdome Gold Mines Ltd
32C04	CDC	2428794	2015-07-16	2028-03-05	57.52	$ 62,834.30	Wesdome Gold Mines Ltd
32C04	CDC	2428795	2015-07-16	2028-03-05	2.26	$ -	Wesdome Gold Mines Ltd
32C04	CDC	2428796	2015-07-16	2028-03-05	4.81	$ 3,010.87	Wesdome Gold Mines Ltd
32C04	CDC	2428797	2015-07-16	2028-03-05	52.91	$ 570,249.15	Wesdome Gold Mines Ltd
32C04	CDC	2428799	2015-07-16	2028-03-05	57.53	$ 60,296.69	Wesdome Gold Mines Ltd
32C04	CDC	2428802	2015-07-16	2028-03-05	3.54	$ 1,437.57	Wesdome Gold Mines Ltd
32C04	CDC	2428803	2015-07-16	2028-03-05	57.43	$ 62,722.81	Wesdome Gold Mines Ltd
32C04	CDC	2428804	2015-07-16	2028-03-05	45.47	$ 47,906.47	Wesdome Gold Mines Ltd
32C04	CDC	2428805	2015-07-16	2028-03-05	49.58	$ 52,998.04	Wesdome Gold Mines Ltd
32C04	CDC	2428806	2015-07-16	2028-03-05	56.84	$ 62,289.22	Wesdome Gold Mines Ltd
32C04	CDC	2428807	2015-07-16	2028-03-05	40.82	$ 42,145.94	Wesdome Gold Mines Ltd
32C04	CDC	2428808	2015-07-16	2028-03-05	57.51	$ 62,821.92	Wesdome Gold Mines Ltd
32C04	CDC	2428809	2015-07-16	2028-03-05	57.45	$ 62,747.59	Wesdome Gold Mines Ltd
32C04	CDC	2428810	2015-07-16	2028-03-05	13.5	$ 13,776.25	Wesdome Gold Mines Ltd
32C04	CDC	2428811	2015-07-16	2028-03-05	1.58	$ -	Wesdome Gold Mines Ltd
32C04	CDC	2428813	2015-07-16	2028-03-05	53.96	$ 58,424.09	Wesdome Gold Mines Ltd
32C04	CDC	2428814	2015-07-16	2028-03-05	57.52	$ 62,834.30	Wesdome Gold Mines Ltd
32C04	CDC	2428815	2015-07-16	2028-03-05	29.94	$ 28,667.53	Wesdome Gold Mines Ltd
32C04	CDC	2428816	2015-07-16	2028-03-05	18.37	$ 19,809.33	Wesdome Gold Mines Ltd
32C04	CDC	2428817	2015-07-16	2028-03-05	57.22	$ 62,462.65	Wesdome Gold Mines Ltd
32C04	CDC	2428818	2015-07-16	2028-03-05	13.96	$ 14,346.12	Wesdome Gold Mines Ltd
32C04	CDC	2428819	2015-07-16	2028-03-05	57.44	$ 62,735.20	Wesdome Gold Mines Ltd
32C04	CDC	2428820	2015-07-16	2028-03-05	28.11	$ 26,400.48	Wesdome Gold Mines Ltd
32C04	CDC	2428821	2015-07-16	2028-03-05	57.53	$ 62,475.58	Wesdome Gold Mines Ltd
32C04	CDC	2428822	2015-07-16	2028-03-05	57.52	$ 62,084.30	Wesdome Gold Mines Ltd
32C04	CDC	2428823	2015-07-16	2028-03-05	57.53	$ 573,165.18	Wesdome Gold Mines Ltd
32C04	CDC	2428824	2015-07-16	2028-03-05	2.23	$ -	Wesdome Gold Mines Ltd

NTS	Type of Title	Title ID	Registry Date	Expiry Date	Area (Ha)	Total Credits	Owner
32C04	CDC	2428825	2015-07-16	2028-03-05	54.7	$ 59,340.82	Wesdome Gold Mines Ltd
32C04	CDC	2428826	2015-07-16	2028-03-05	57.52	$ 61,002.29	Wesdome Gold Mines Ltd
32C04	CDC	2428827	2015-07-16	2028-03-05	29.97	$ 28,704.69	Wesdome Gold Mines Ltd
32C04	CDC	2428828	2015-07-16	2028-03-05	0.14	$ -	Wesdome Gold Mines Ltd
32C04	CDC	2428829	2015-07-16	2028-03-05	15.78	$ 16,929.75	Wesdome Gold Mines Ltd
32C04	CDC	2428830	2015-07-16	2028-03-05	38.02	$ 38,677.23	Wesdome Gold Mines Ltd
32C04	CDC	2428831	2015-07-16	2028-03-05	47.62	$ 561,099.03	Wesdome Gold Mines Ltd
32C04	CDC	2428833	2015-07-16	2028-03-05	57.43	$ 62,722.81	Wesdome Gold Mines Ltd
32C04	CDC	2428834	2015-07-16	2028-03-05	19.17	$ 20,800.39	Wesdome Gold Mines Ltd
32C04	CDC	2428835	2015-07-16	2028-03-05	54.6	$ 59,216.93	Wesdome Gold Mines Ltd
32C04	CDC	2428836	2015-07-16	2028-03-05	6.78	$ 5,451.36	Wesdome Gold Mines Ltd
32C04	CDC	2428837	2015-07-16	2028-03-05	57.54	$ 62,859.08	Wesdome Gold Mines Ltd
32C04	CDC	2428838	2015-07-16	2028-03-05	57.52	$ 62,834.30	Wesdome Gold Mines Ltd
32C04	CDC	2428839	2015-07-16	2028-03-05	50.83	$ 54,546.57	Wesdome Gold Mines Ltd
32C04	CDC	2428840	2015-07-16	2028-03-05	41.68	$ 13,640.59	Wesdome Gold Mines Ltd
32C04	CDC	2428841	2015-07-16	2028-03-05	35.74	$ 35,852.71	Wesdome Gold Mines Ltd
32C04	CDC	2428842	2015-07-16	2028-03-05	12.49	$ 12,785.45	Wesdome Gold Mines Ltd
32C04	CDC	2428844	2015-07-16	2028-03-05	57.53	$ 60,984.91	Wesdome Gold Mines Ltd
32C04	CDC	2428845	2015-07-16	2028-03-05	2.12	$ -	Wesdome Gold Mines Ltd
32C04	CDC	2428846	2015-07-16	2028-03-05	33.25	$ 32,768.04	Wesdome Gold Mines Ltd
32C04	CDC	2428847	2015-07-16	2028-03-05	40.48	$ 42,567.57	Wesdome Gold Mines Ltd
32C04	CDC	2428848	2015-07-16	2028-03-05	57.53	$ 62,846.69	Wesdome Gold Mines Ltd
32C04	CDC	2428849	2015-07-16	2028-03-05	38.58	$ 579,237.93	Wesdome Gold Mines Ltd
32C04	CDC	2428852	2015-07-16	2028-03-05	19.78	$ 21,556.07	Wesdome Gold Mines Ltd
32C04	CDC	2428853	2015-07-16	2028-03-05	1.05	$ -	Wesdome Gold Mines Ltd
32C04	CDC	2428854	2015-07-16	2028-03-05	52.89	$ 58,882.45	Wesdome Gold Mines Ltd
32C04	CDC	2428855	2015-07-16	2028-03-05	50.87	$ 565,509.26	Wesdome Gold Mines Ltd
32C04	CDC	2428856	2015-07-16	2028-03-05	32.68	$ 32,061.91	Wesdome Gold Mines Ltd

NTS	Type of Title	Title ID	Registry Date	Expiry Date	Area (Ha)	Total Credits	Owner
32C04	CDC	2428857	2015-07-16	2028-03-05	57.44	$ 62,735.20	Wesdome Gold Mines Ltd
32C04	CDC	2428858	2015-07-16	2028-03-05	57.53	$ 62,846.69	Wesdome Gold Mines Ltd
32C04	CDC	2428859	2015-07-16	2028-03-05	50.94	$ 54,682.84	Wesdome Gold Mines Ltd
32C04	CDC	2428860	2015-07-16	2028-03-05	57.45	$ 62,747.59	Wesdome Gold Mines Ltd
32C04	CDC	2428862	2015-07-16	2028-03-05	15.86	$ 16,699.89	Wesdome Gold Mines Ltd
32C04	CDC	2428863	2015-07-16	2028-03-05	6.38	$ 58,707.31	Wesdome Gold Mines Ltd
32C04	CDC	2428864	2015-07-16	2028-03-05	23.96	$ 26,734.37	Wesdome Gold Mines Ltd
32C04	CDC	2428865	2015-07-16	2028-03-05	56.76	$ -	Wesdome Gold Mines Ltd
32C04	CDC	2428866	2015-07-16	2028-03-05	57.45	$ 62,747.59	Wesdome Gold Mines Ltd
32C04	CDC	2428867	2015-07-16	2028-03-05	57.53	$ 61,461.68	Wesdome Gold Mines Ltd
32C04	CDC	2428868	2015-07-16	2028-03-05	28.72	$ 27,156.17	Wesdome Gold Mines Ltd
32C04	CDC	2428870	2015-07-16	2028-03-05	8.79	$ 7,941.40	Wesdome Gold Mines Ltd
32C04	CDC	2428871	2015-07-16	2028-03-05	22.64	$ 25,099.12	Wesdome Gold Mines Ltd
32C04	CDC	2428872	2015-07-16	2028-03-05	4.81	$ 3,111.26	Wesdome Gold Mines Ltd
32C04	CDC	2428874	2015-07-16	2028-03-05	44.62	$ 46,853.47	Wesdome Gold Mines Ltd
32C04	CDC	2428877	2015-07-16	2028-03-05	14.98	$ 15,609.72	Wesdome Gold Mines Ltd
32C04	CDC	2428879	2015-07-16	2028-03-05	57.55	$ 59,860.92	Wesdome Gold Mines Ltd
32C04	CDC	2428880	2015-07-16	2028-03-05	57.45	$ 62,747.59	Wesdome Gold Mines Ltd
32C04	CDC	2428882	2015-07-16	2028-03-05	57.44	$ 62,735.20	Wesdome Gold Mines Ltd
32C04	CDC	2428883	2015-07-16	2028-03-05	25.48	$ 23,142.38	Wesdome Gold Mines Ltd
32C04	CDC	2428884	2015-07-16	2028-03-05	14.89	$ 15,808.32	Wesdome Gold Mines Ltd
32C04	CDC	2428885	2015-07-16	2028-03-05	57.51	$ 62,524.57	Wesdome Gold Mines Ltd
32C04	CDC	2428886	2015-07-16	2028-03-05	50.43	$ 54,051.05	Wesdome Gold Mines Ltd
32C04	CDC	2428887	2015-07-16	2028-03-05	29.97	$ 28,704.69	Wesdome Gold Mines Ltd
32C04	CDC	2428888	2015-07-16	2028-03-05	8.1	$ 516,575.08	Wesdome Gold Mines Ltd
32C04	CDC	2428889	2015-07-16	2028-03-05	33.96	$ 33,647.61	Wesdome Gold Mines Ltd
32C04	CDC	2428890	2015-07-16	2028-03-05	33.99	$ 544,003.26	Wesdome Gold Mines Ltd
32C04	CDC	2428891	2015-07-16	2028-03-05	57.53	$ 62,090.74	Wesdome Gold Mines Ltd

NTS	Type of Title	Title ID	Registry Date	Expiry Date	Area (Ha)	Total Credits	Owner
32C04	CDC	2428892	2015-07-16	2028-03-05	12.12	$ 533,274.44	Wesdome Gold Mines Ltd
32C04	CDC	2428893	2015-07-16	2028-03-05	29.99	$ 28,729.47	Wesdome Gold Mines Ltd
32C04	CDC	2428894	2015-07-16	2028-03-05	33.94	$ 33,622.84	Wesdome Gold Mines Ltd
32C04	CDC	2428897	2015-07-16	2028-03-05	57.45	$ 62,747.59	Wesdome Gold Mines Ltd
32C04	CDC	2428898	2015-07-16	2028-03-05	57.52	$ 62,834.31	Wesdome Gold Mines Ltd
32C04	CDC	2428899	2015-07-16	2028-03-05	34.56	$ 34,390.91	Wesdome Gold Mines Ltd
32C04	CDC	2428901	2015-07-16	2028-03-05	52.9	$ 284,825.89	Wesdome Gold Mines Ltd
32C04	CDC	2428902	2015-07-16	2028-03-05	10.55	$ 10,121.73	Wesdome Gold Mines Ltd
32C04	CDC	2428904	2015-07-16	2028-03-05	55.6	$ 60,344.27	Wesdome Gold Mines Ltd
32C04	CDC	2428905	2015-07-16	2028-03-05	0.22	$ -	Wesdome Gold Mines Ltd
32C04	CDC	2428906	2015-07-16	2028-03-05	43.02	$ 44,871.36	Wesdome Gold Mines Ltd
32C04	CDC	2428907	2015-07-16	2028-03-05	57.44	$ 62,735.20	Wesdome Gold Mines Ltd
32C04	CDC	2428908	2015-07-16	2028-03-05	57.44	$ 62,735.20	Wesdome Gold Mines Ltd
32C04	CDC	2428910	2015-07-16	2028-03-05	19.55	$ 21,271.15	Wesdome Gold Mines Ltd
32C04	CDC	2428911	2015-07-16	2028-03-05	37.4	$ 37,909.17	Wesdome Gold Mines Ltd
32C04	CDC	2428912	2015-07-16	2028-03-05	41.22	$ 42,641.47	Wesdome Gold Mines Ltd
32C04	CDC	2428913	2015-07-16	2028-03-05	11.53	$ 11,335.78	Wesdome Gold Mines Ltd
32C04	CDC	2428915	2015-07-16	2028-03-05	49.74	$ 53,196.26	Wesdome Gold Mines Ltd
32C04	CDC	2428916	2015-07-16	2028-03-05	1.98	$ -	Wesdome Gold Mines Ltd
32C04	CDC	2428917	2015-07-16	2028-03-05	56.54	$ 61,620.26	Wesdome Gold Mines Ltd
32C04	CDC	2428918	2015-07-16	2028-03-05	31.08	$ 30,079.79	Wesdome Gold Mines Ltd
32C04	CDC	2428920	2015-07-16	2028-03-05	57.55	$ 61,766.48	Wesdome Gold Mines Ltd
32C04	CDC	2428921	2015-07-16	2028-03-05	52.79	$ 56,974.68	Wesdome Gold Mines Ltd
32C04	CDC	2428922	2015-07-16	2028-03-05	32.74	$ 32,136.24	Wesdome Gold Mines Ltd
32C04	CDC	2428923	2015-07-16	2028-03-05	57.52	$ 62,834.31	Wesdome Gold Mines Ltd
32C04	CDC	2428924	2015-07-16	2028-03-05	57.55	$ 61,536.60	Wesdome Gold Mines Ltd
32C04	CDC	2428925	2015-07-16	2028-03-05	13.47	$ 13,739.10	Wesdome Gold Mines Ltd
32C04	CDC	2428926	2015-07-16	2028-03-05	20.41	$ 22,336.54	Wesdome Gold Mines Ltd

NTS	Type of Title	Title ID	Registry Date	Expiry Date	Area (Ha)	Total Credits	Owner
32C04	CDC	2428927	2015-07-16	2028-03-05	57.54	$ 62,109.09	Wesdome Gold Mines Ltd
32C04	CDC	2428929	2015-07-16	2028-03-05	32.99	$ 9,056.94	Wesdome Gold Mines Ltd
32C04	CDC	2428930	2015-07-16	2028-03-05	57.55	$ 61,687.61	Wesdome Gold Mines Ltd
32C04	CDC	2428931	2015-07-16	2028-03-05	55.52	$ 60,356.66	Wesdome Gold Mines Ltd
32C04	CDC	2428933	2015-07-16	2028-03-05	56.77	$ 62,086.94	Wesdome Gold Mines Ltd
32C04	CDC	2428935	2015-07-16	2028-03-05	57.44	$ 62,735.20	Wesdome Gold Mines Ltd
32C04	CDC	2428936	2015-07-16	2028-03-05	57.54	$ 62,109.09	Wesdome Gold Mines Ltd
32C04	CDC	2428937	2015-07-16	2028-03-05	2.08	$ -	Wesdome Gold Mines Ltd
32C04	CDC	2428939	2015-07-16	2028-03-05	21.87	$ 24,145.22	Wesdome Gold Mines Ltd
32C04	CDC	2428940	2015-07-16	2028-03-05	57.44	$ 62,735.20	Wesdome Gold Mines Ltd
32C04	CDC	2428941	2015-07-16	2028-03-05	11.86	$ 11,991.08	Wesdome Gold Mines Ltd
32C04	CDC	2428942	2015-07-16	2028-03-05	54.48	$ 59,006.35	Wesdome Gold Mines Ltd
32C04	CDC	2428943	2015-07-16	2028-03-05	1.85	$ -	Wesdome Gold Mines Ltd
32C04	CDC	2428944	2015-07-16	2028-03-05	57.53	$ 62,846.71	Wesdome Gold Mines Ltd
32C04	CDC	2428945	2015-07-16	2028-03-05	33.98	$ 33,672.39	Wesdome Gold Mines Ltd
32C04	CDC	2428946	2015-07-16	2028-03-05	30.07	$ 28,828.59	Wesdome Gold Mines Ltd
32C04	CDC	2428947	2015-07-16	2028-03-05	10.6	$ 10,183.68	Wesdome Gold Mines Ltd
32C04	CDC	2459317	2016-09-20	2027-06-22	12.19	$ -	Wesdome Gold Mines Ltd
32C04	CDC	2459318	2016-09-20	2027-06-22	48.76	$ -	Wesdome Gold Mines Ltd
32C04	CDC	2459319	2016-09-20	2027-06-22	21.6	$ -	Wesdome Gold Mines Ltd
32C04	CDC	2459320	2016-09-20	2027-06-22	11.86	$ -	Wesdome Gold Mines Ltd
32C04	CDC	2459321	2016-09-20	2027-06-22	5.29	$ -	Wesdome Gold Mines Ltd
32C04	CDC	2459322	2016-09-20	2027-06-22	1.61	$ -	Wesdome Gold Mines Ltd
32C04	CDC	2459323	2016-09-20	2027-06-22	5.6	$ -	Wesdome Gold Mines Ltd
32C04	CDC	2471205	2016-12-22	2027-12-21	18.92	$ -	Wesdome Gold Mines Ltd
32C04	CDC	2471206	2016-12-22	2027-12-21	12.21	$ -	Wesdome Gold Mines Ltd
32C04	CDC	2471207	2016-12-22	2027-12-21	50.29	$ -	Wesdome Gold Mines Ltd
32C04	CDC	2471208	2016-12-22	2027-12-21	56.42	$ -	Wesdome Gold Mines Ltd

NTS	Type of Title	Title ID	Registry Date	Expiry Date	Area (Ha)	Total Credits	Owner
32C04	CDC	2471209	2016-12-22	2027-12-21	50.93	$ -	Wesdome Gold Mines Ltd
32C04	CDC	2471210	2016-12-22	2027-12-21	31.43	$ -	Wesdome Gold Mines Ltd
32C04	CDC	2471211	2016-12-22	2027-12-21	41.65	$ -	Wesdome Gold Mines Ltd
32C04	CDC	2471212	2016-12-22	2027-12-21	41.29	$ -	Wesdome Gold Mines Ltd
32C04	CDC	2471213	2016-12-22	2027-12-21	41.49	$ -	Wesdome Gold Mines Ltd
32C04	CDC	2471214	2016-12-22	2027-12-21	29.53	$ -	Wesdome Gold Mines Ltd

Appendix II

Capping Threshold Decisions (DDH and Channels) Graphs

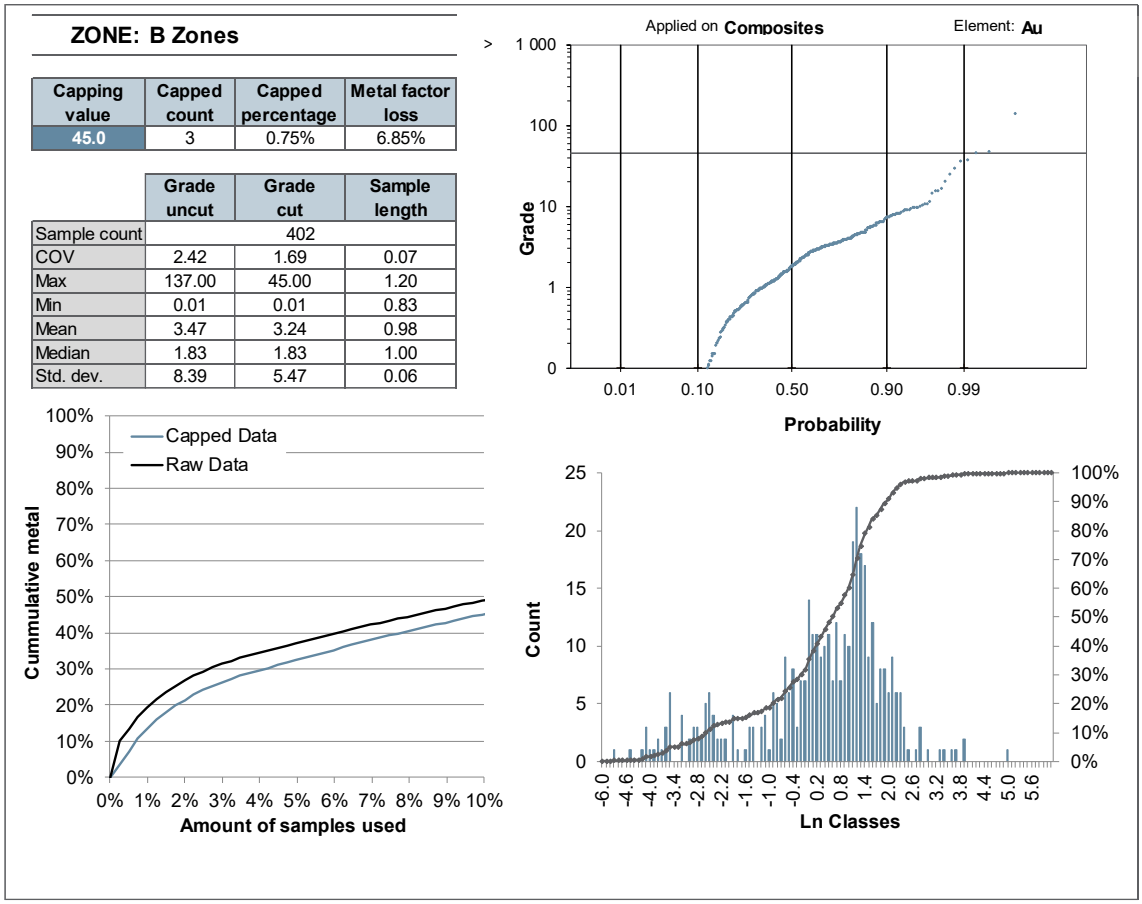
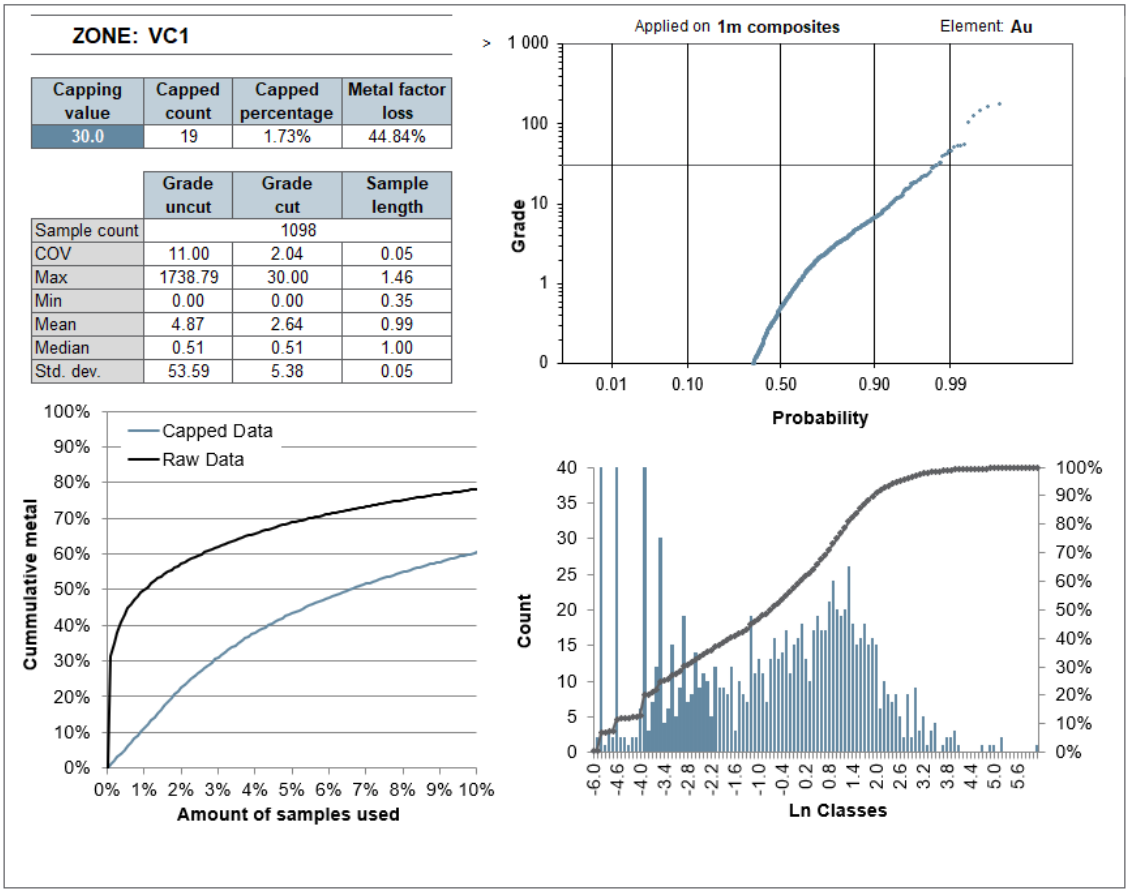
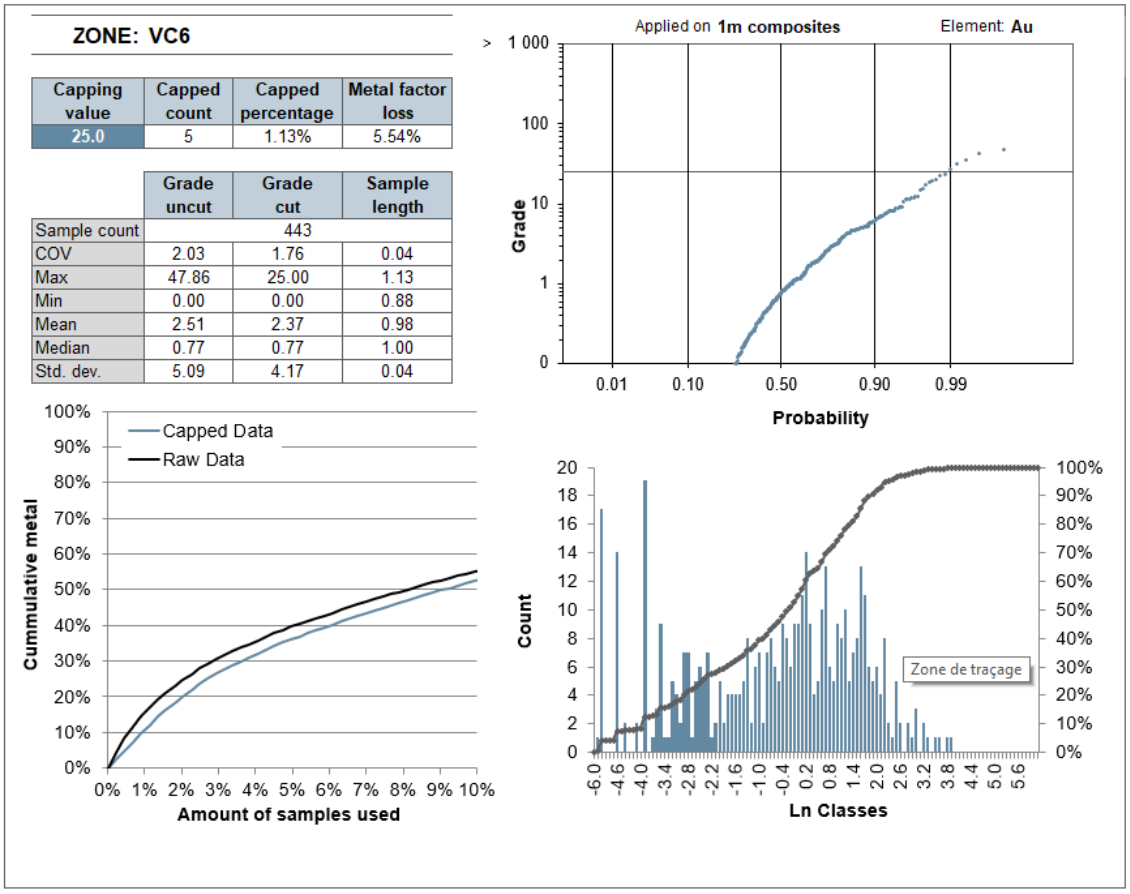


Figure II.1 Graphs supporting (DDH) capping threshold decisions on composites for the B Zone(blockcodes 142 to 145



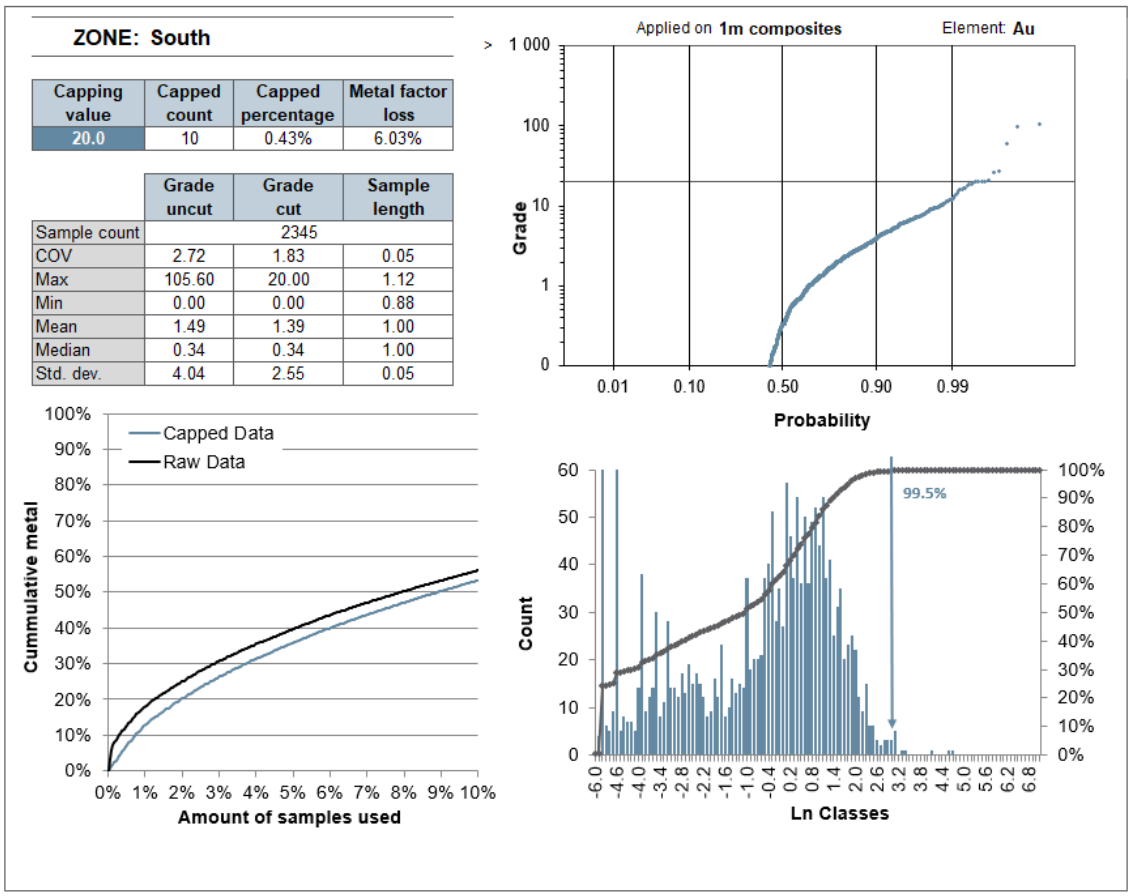
*Resources updated in 2022

Figure II.2 Graphs supporting (DDH) capping threshold decisions on composites for the VC1 Zone(blockcodes 111 to 114)



*Resources updated in 2022

Figure II.3 Graphs supporting (DDH) capping threshold decisions on composites for the VC6 Zone(blockcodes 123-124)



*Resources updated in 2022

Figure II.4 Graphs supporting (DDH) capping threshold decisions on composites for the South Zone(blockcodes 130 to 133 and 135)

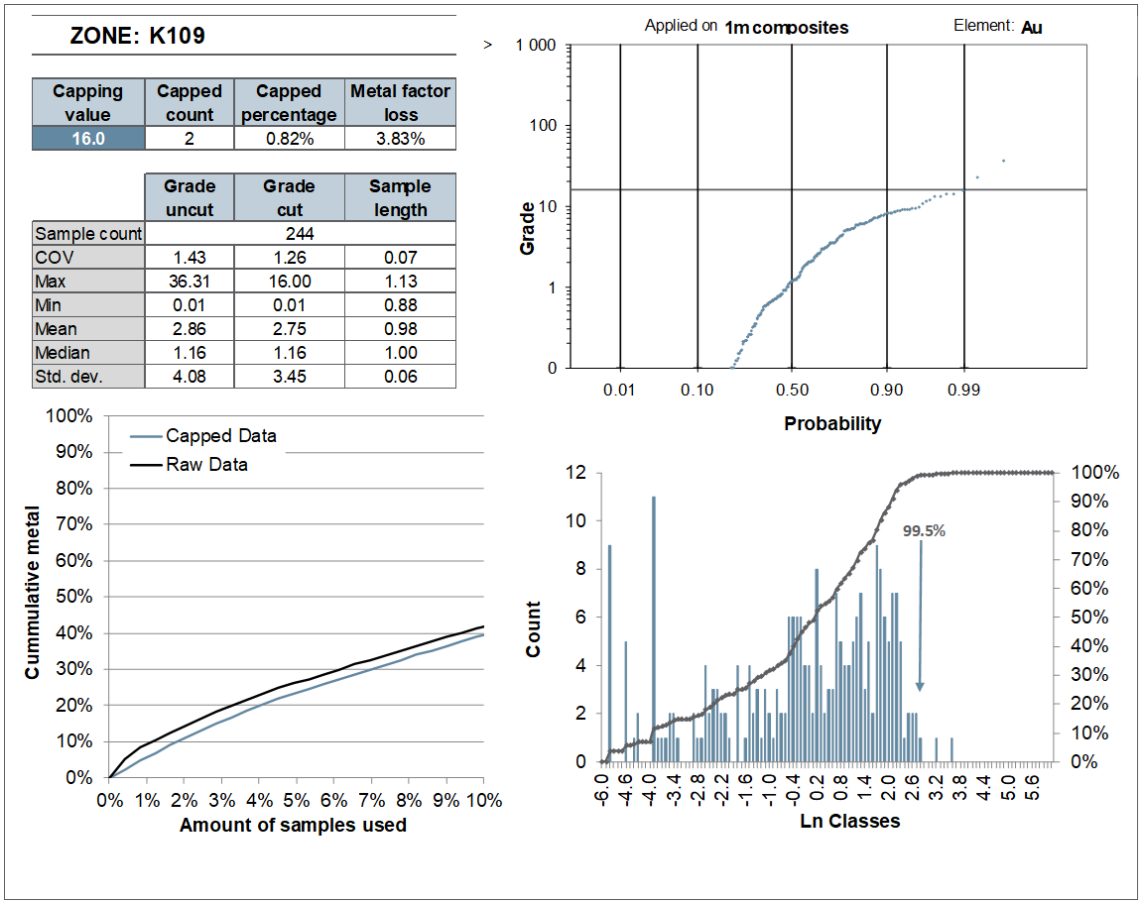


Figure II.5 Graphs supporting (DDH) capping threshold decisions on composites for the K109, K109-1, K109-2, K109-3 and K109-4 Zones (blockcodes 181, 182, 183 and 184)

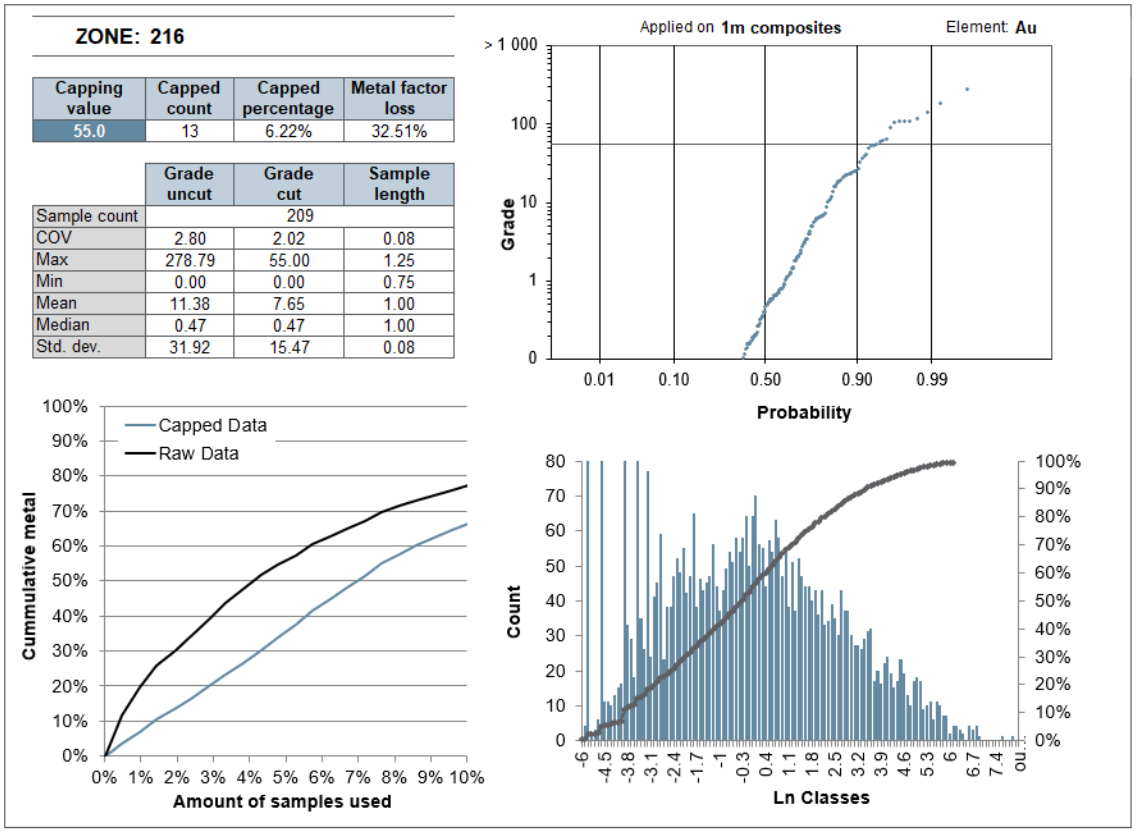


Figure II.6 Graphs supporting (DDH) capping threshold decisions on composites for the Kiena Deep A1 Zone 216 (blockcode 216)

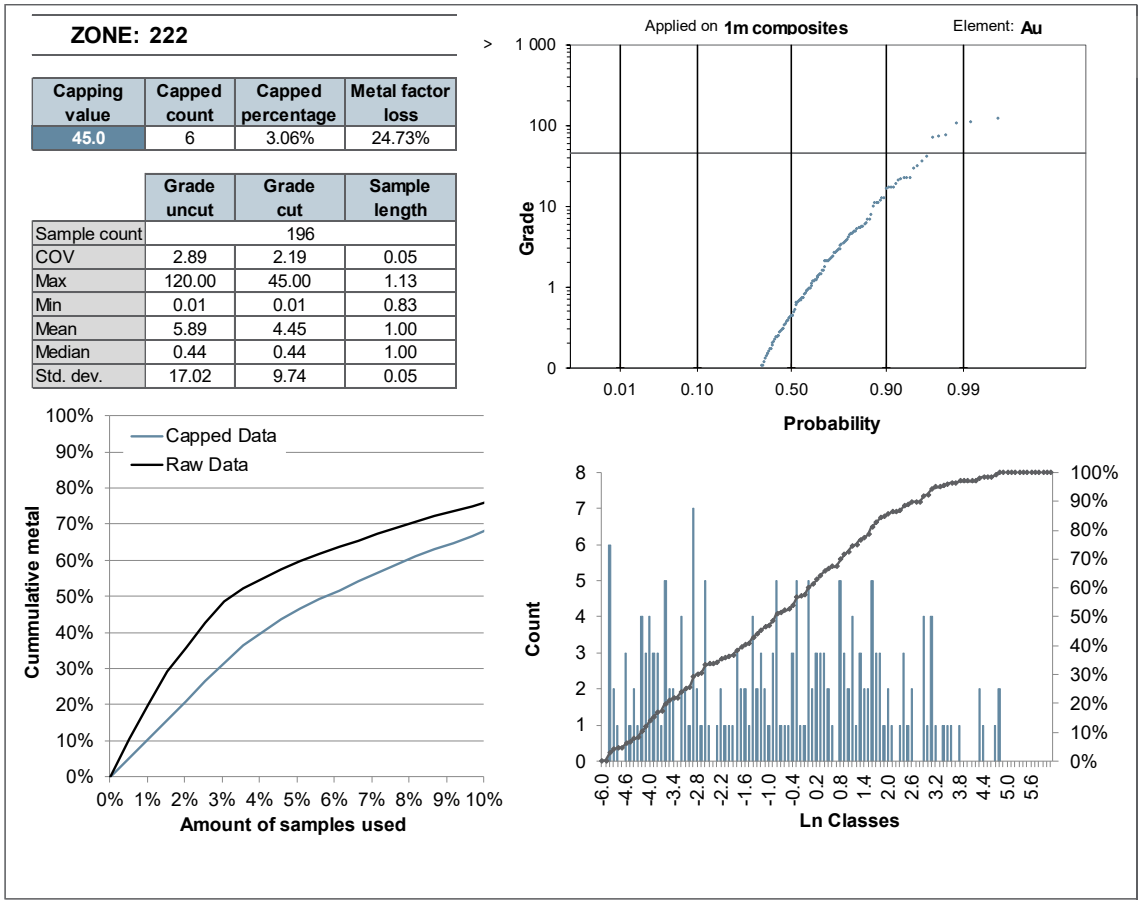


Figure II.7 Graphs supporting (DDH) capping threshold decisions on composites for the Kiena Deep A2 Zone 222 (blockcode 222)

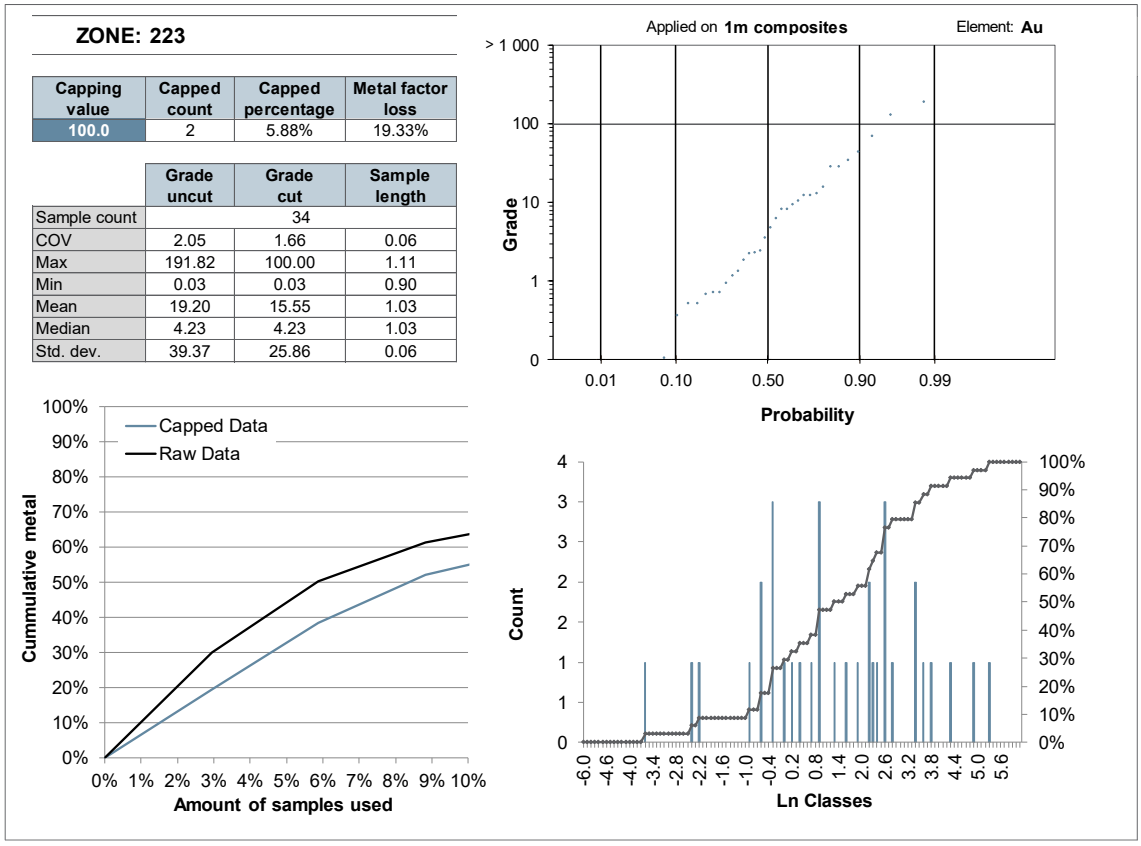


Figure II.8 Graphs supporting (DDH) capping threshold decisions on composites for the Kiena Deep A2 Zone 223 (blockcode 223)

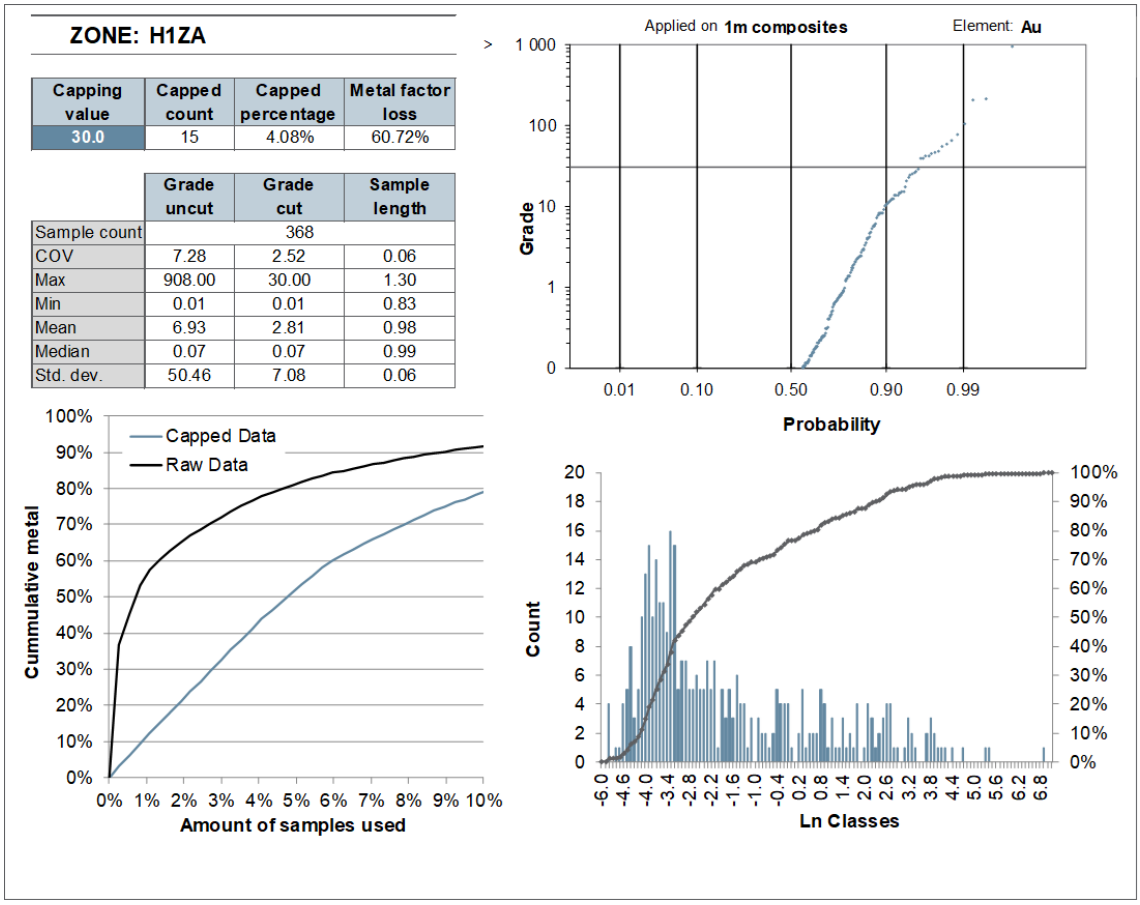


Figure II.9 Graphs supporting (DDH) capping threshold decisions on composites for the Kiena Deep H1ZA Zone, (blockcode 310)

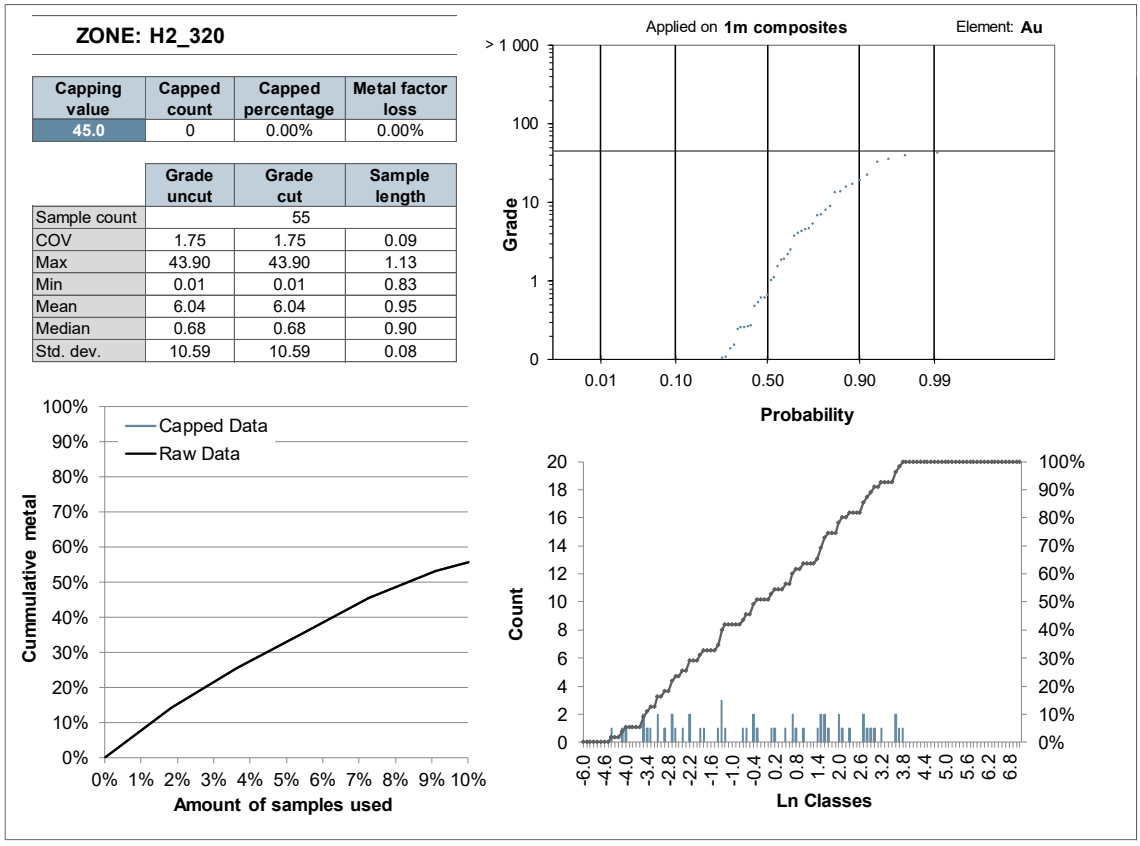


Figure II.10 Graphs supporting the absence of capping threshold decisions on composites for the Kiena Deep, H2 Zone, (blockcode 320)

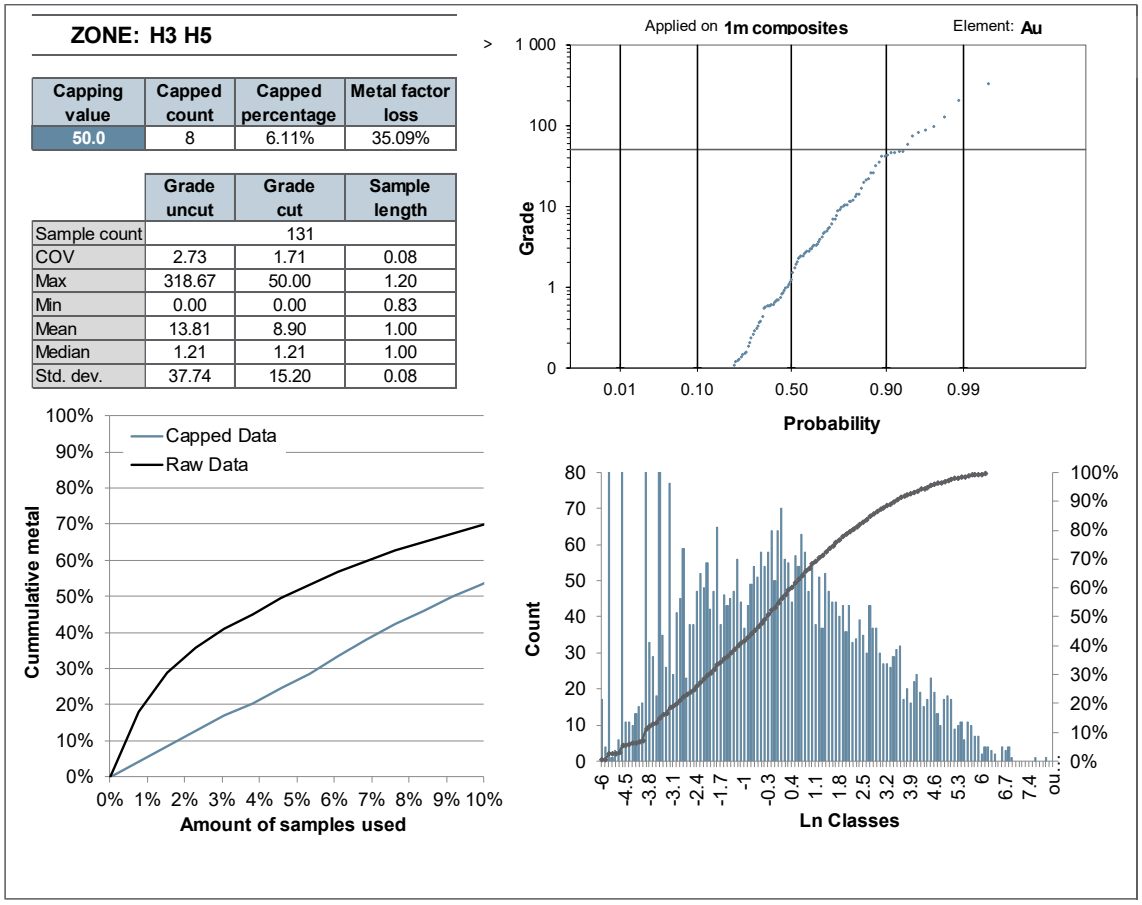


Figure II.11 Graphs supporting (DDH) capping threshold decisions on composites for the Kiena Deep, H3 and H5 Zones, (blockcodes 330, 350)

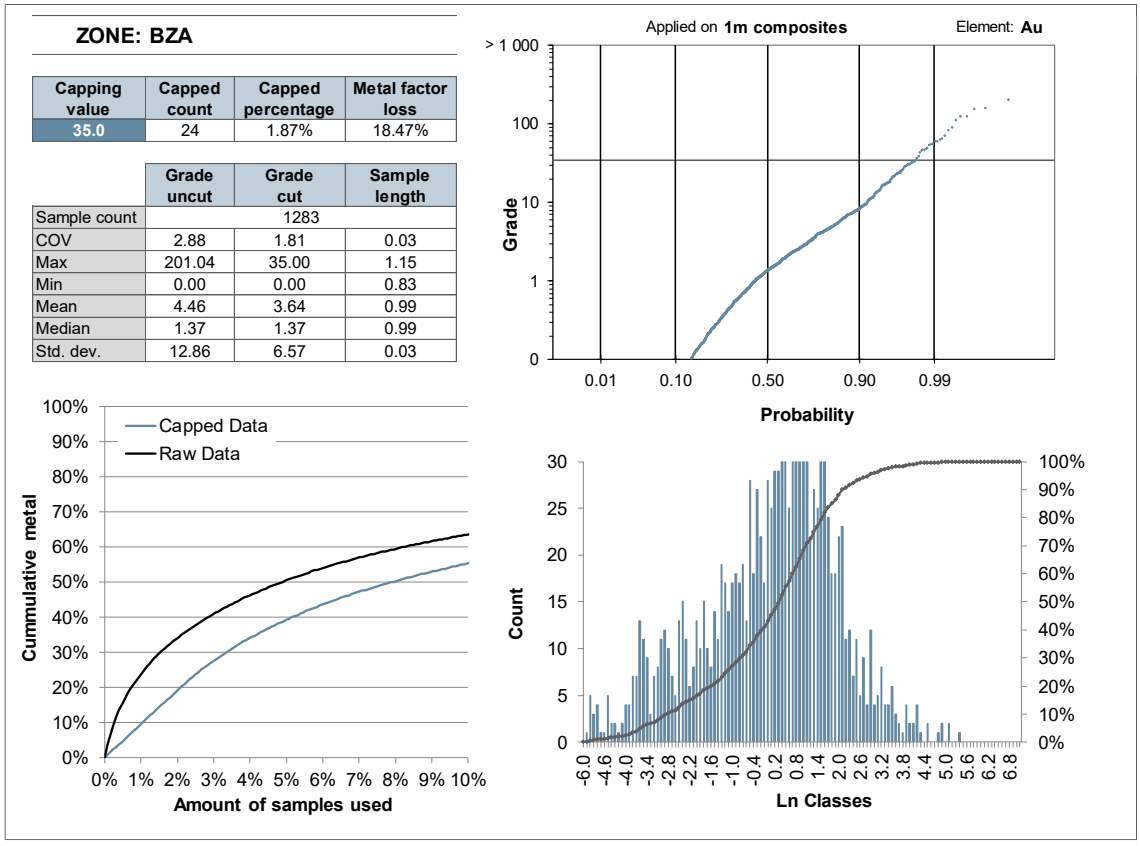


Figure II.12 Graphs supporting (DDH) capping threshold decisions on composites for the Kiena Deep, BZA1, BZA2 and BZA5 Zones, (blockcodes 410, 420 and 450)

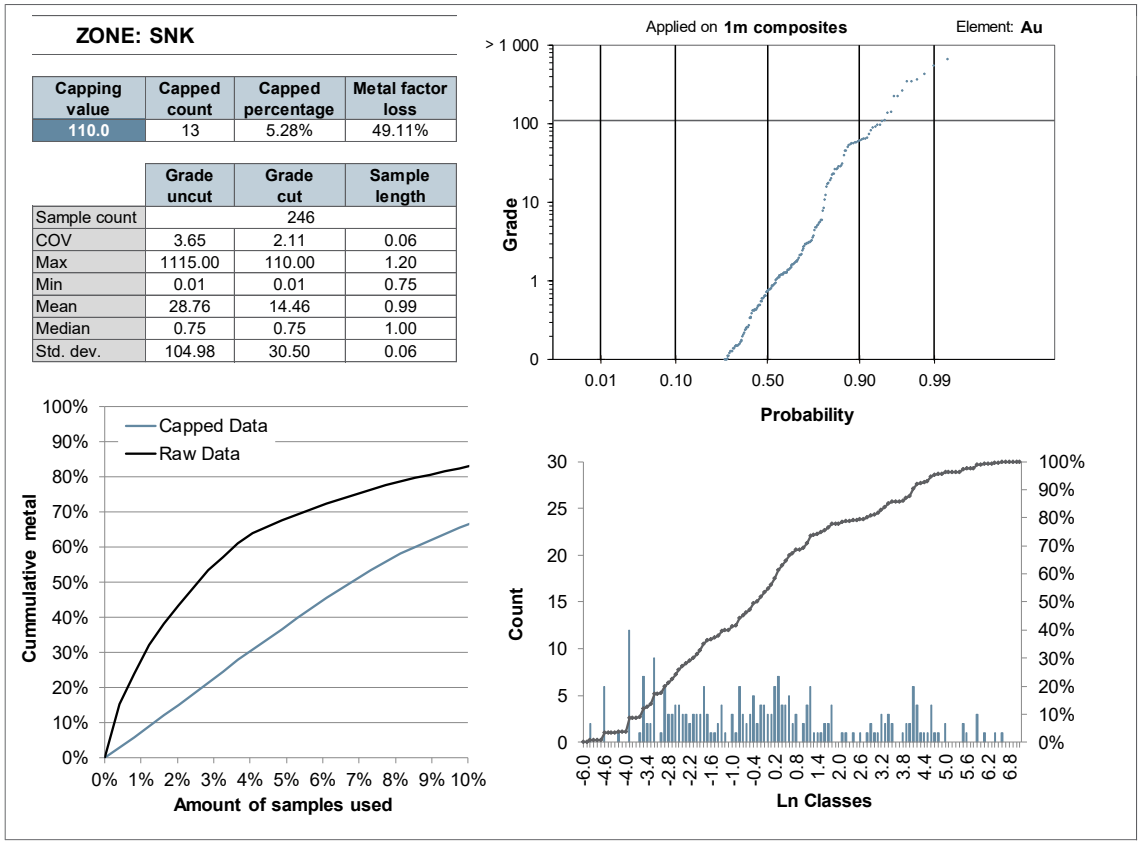


Figure II.13 Graphs supporting (DDH) capping threshold decisions on composites for the Kiena Deep, SNK (Sneak) Zone, (blockcode 510)

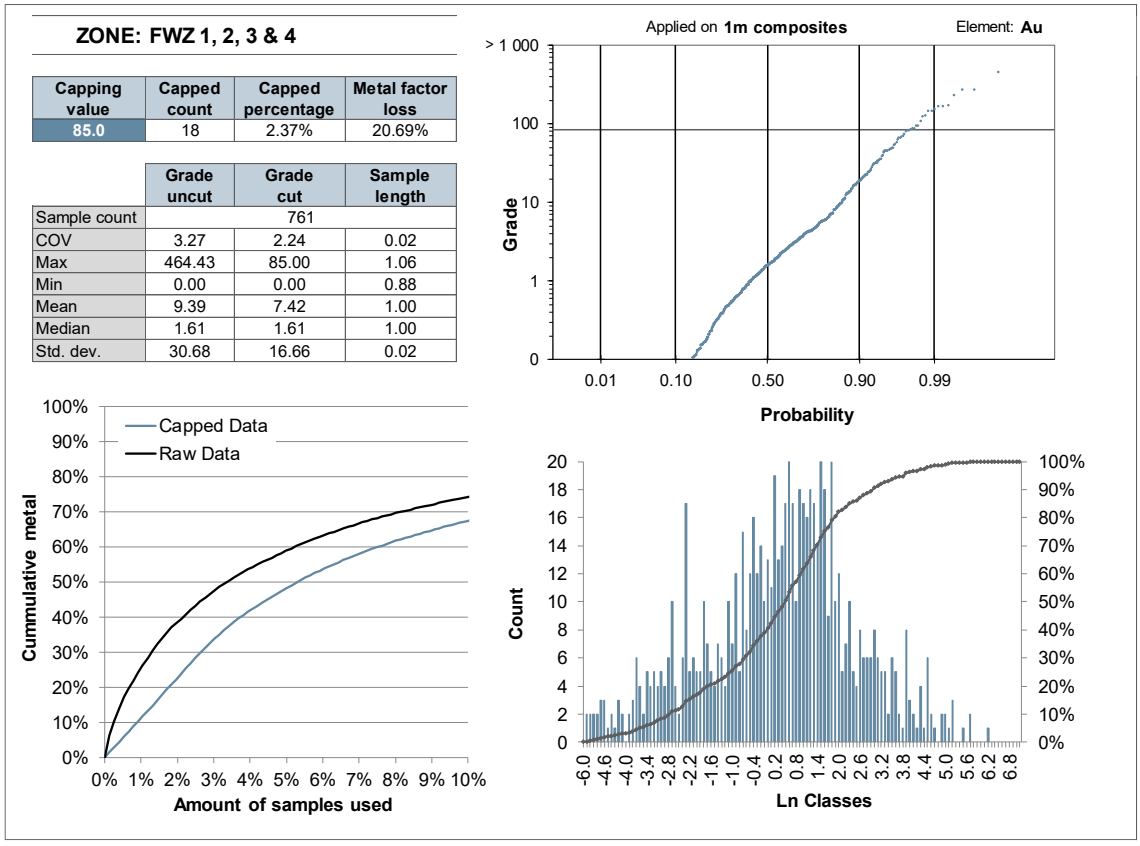


Figure II.14 Graphs supporting (DDH) capping threshold decisions on composites for the Kiena Deep, FWZ1, FWZ2, FWZ3 and FWZ4 Zones, (blockcodes 610, 620, 630 and 640)

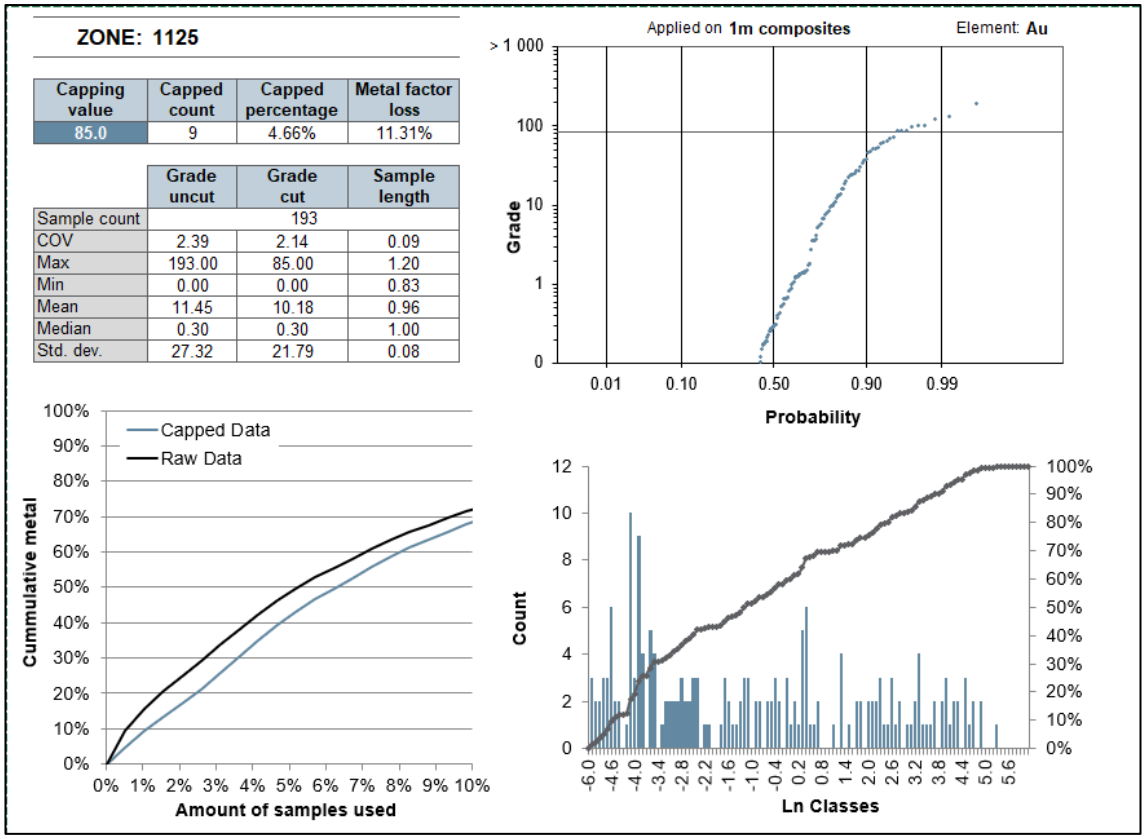


Figure II.15 Graphs supporting (DDH) capping threshold decisions on composites for the Presqu'île, PR2A Zone, (blockcode 1125)

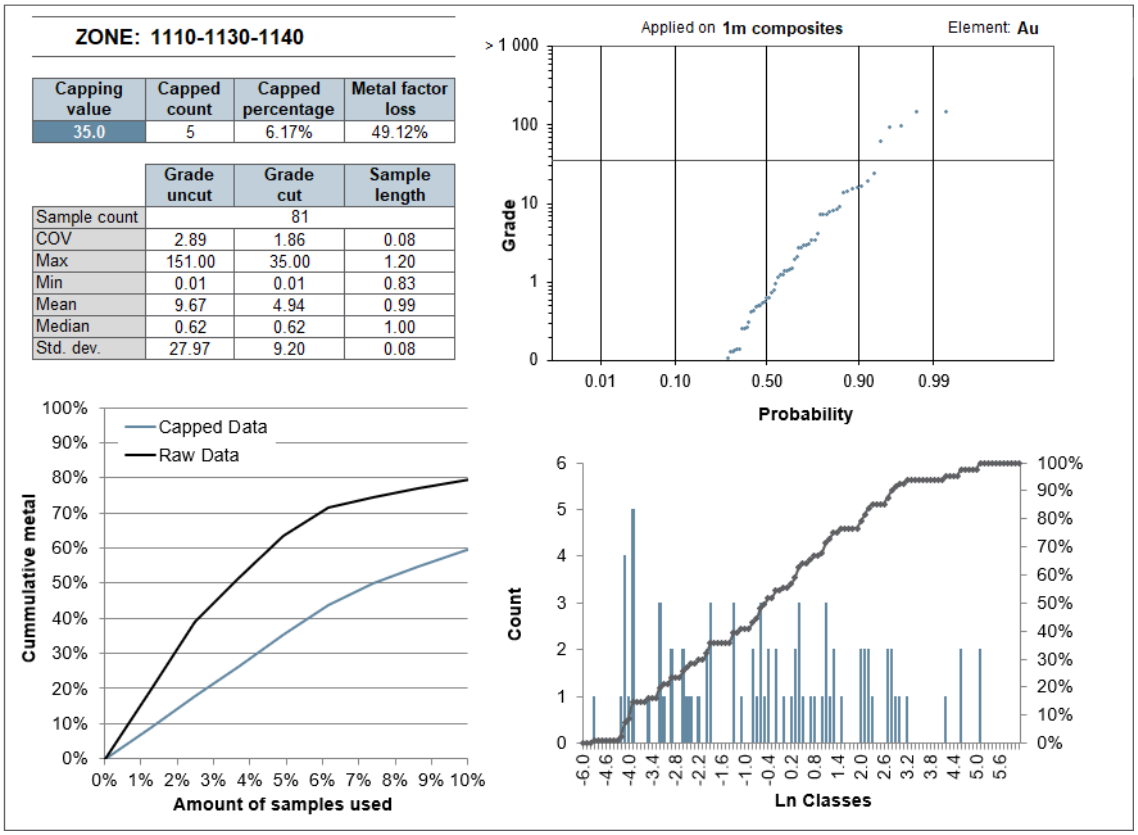


Figure II.16 Graphs supporting (DDH) capping threshold decisions on composites for the Presqu'île, PR1, PR3 AND PR4 Zones, (blockcodes 1110, 1130 ans 1140)

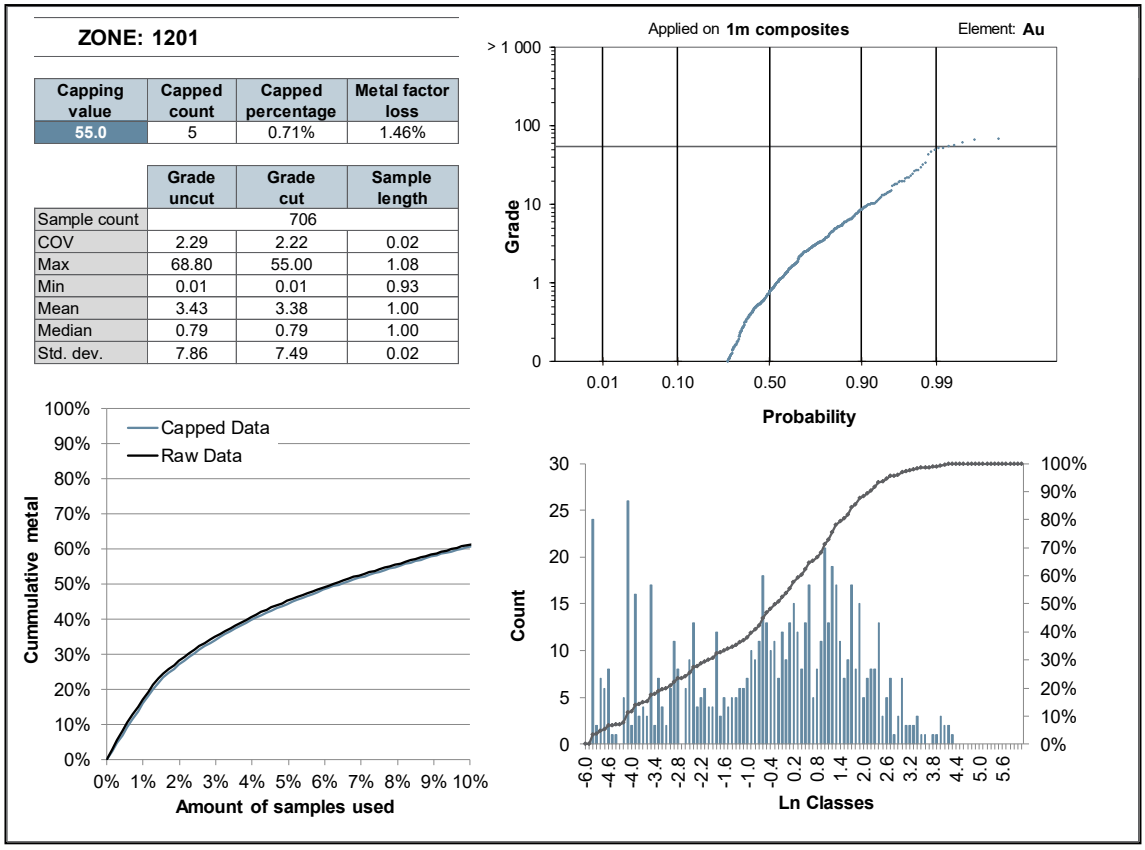


Figure II.17 Graphs supporting (DDH) capping threshold decisions on composites for the Dubuisson, Dub_S1 (South1) Zone, (blockcode 1201)

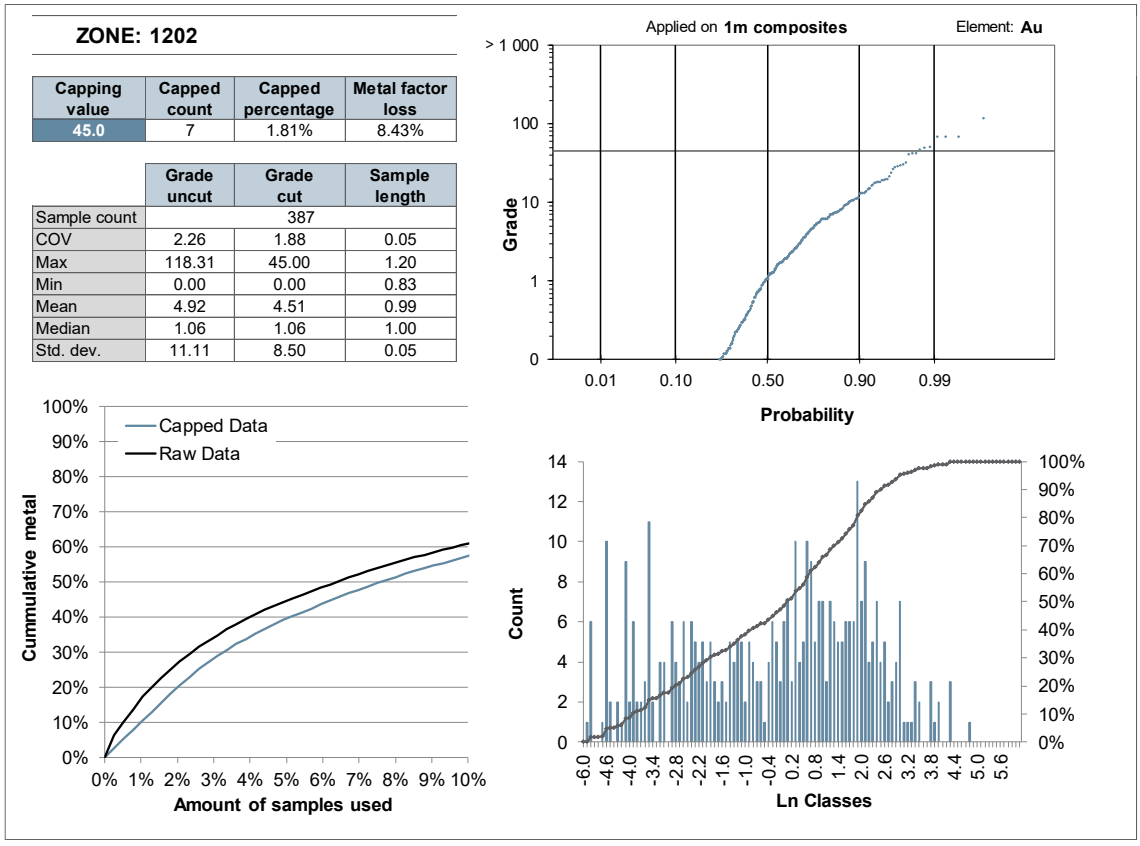


Figure II.18 Graphs supporting (DDH) capping threshold decisions on composites for the Dubuisson, Dub_S2 (South2) Zone, (blockcode 1202)

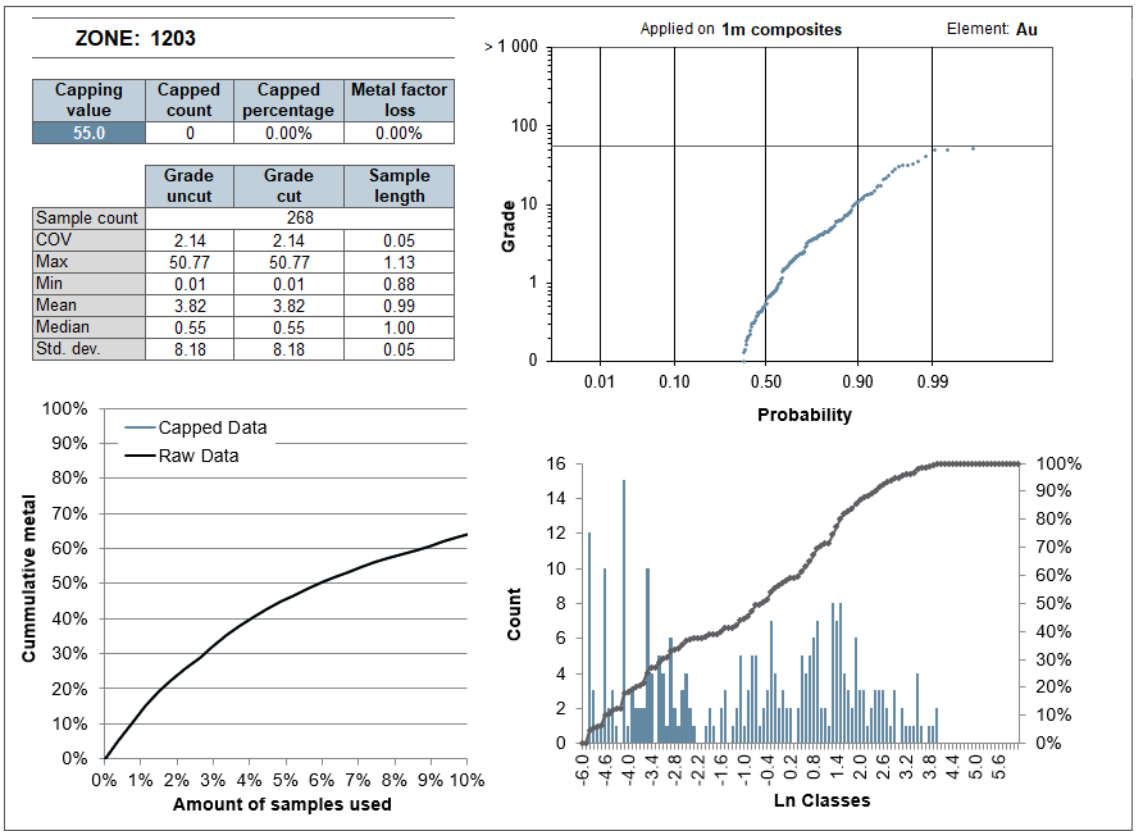


Figure II.19 Graphs supporting the absence of capping threshold decisions on composites for the Dubuisson, Dub_S3 (South3) Zone, (blockcode 1203)

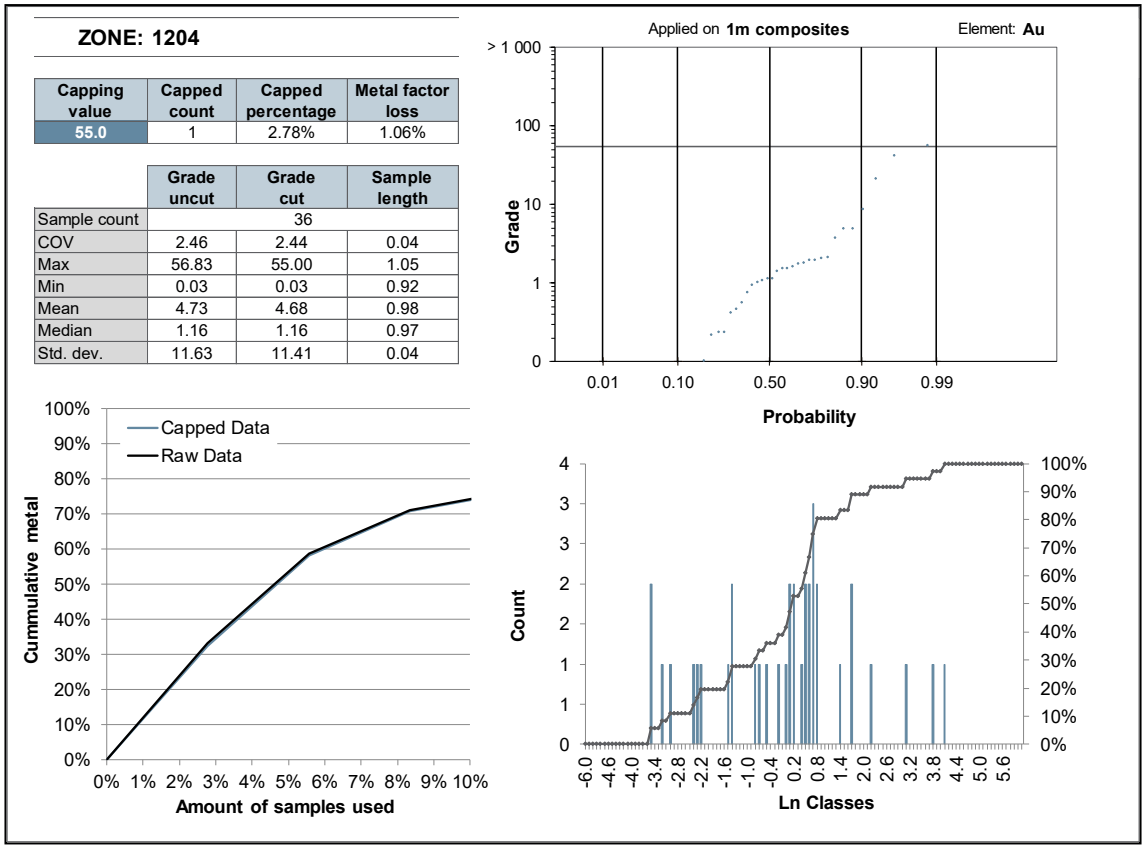


Figure II.20 Graphs supporting (DDH) capping threshold decisions on composites for the Dubuisson, Dub_S4 (South4) Zone, (blockcode 1204)

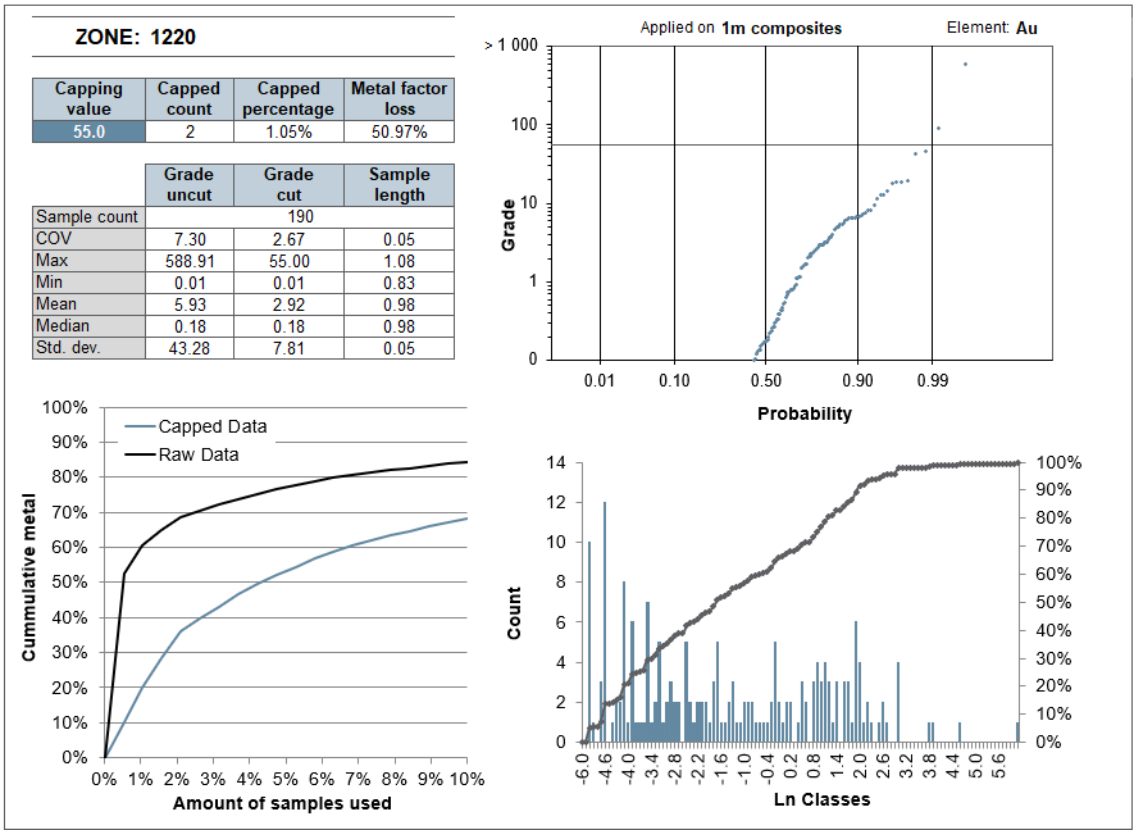


Figure II.21 Graphs supporting (DDH) capping threshold decisions on composites for the Dubuisson, Dub_N1 (North1) Zone, (blockcode 1220)

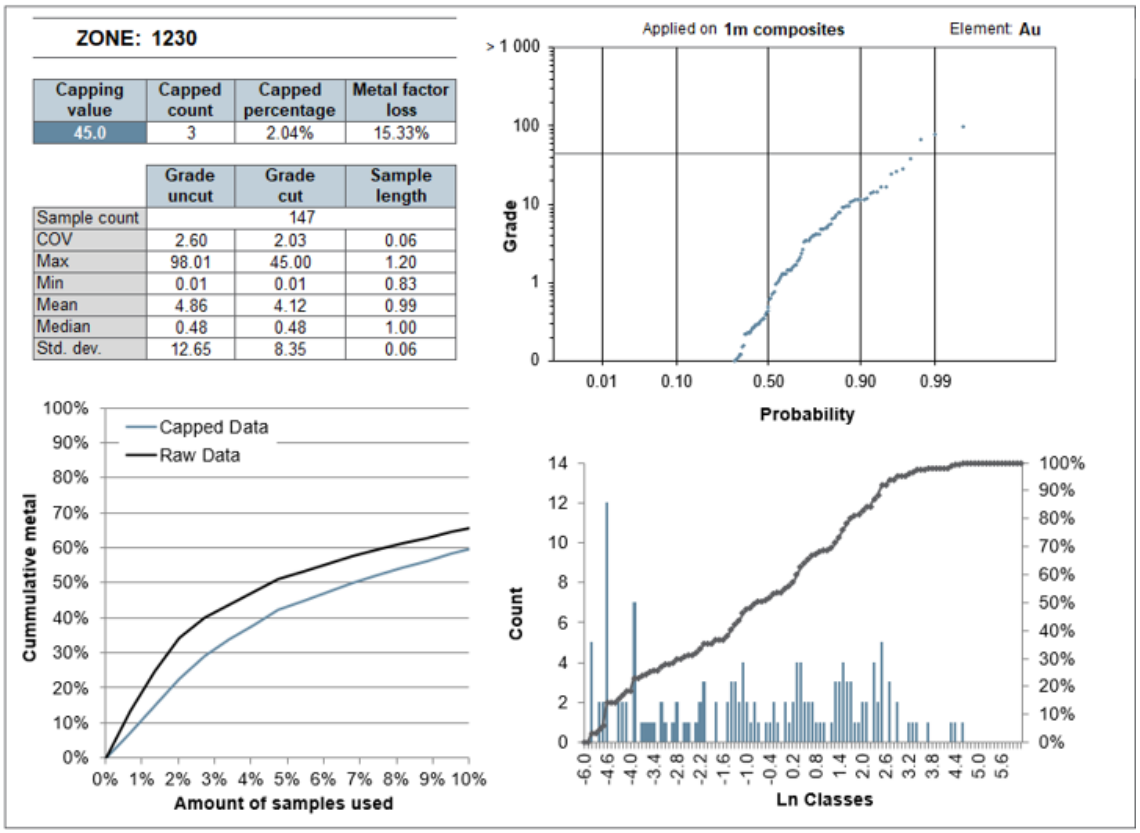


Figure II.22 Graphs supporting (DDH) capping threshold decisions on composites for the Dubuisson, Dub_N2 (North2) Zone, (blockcode 1230)

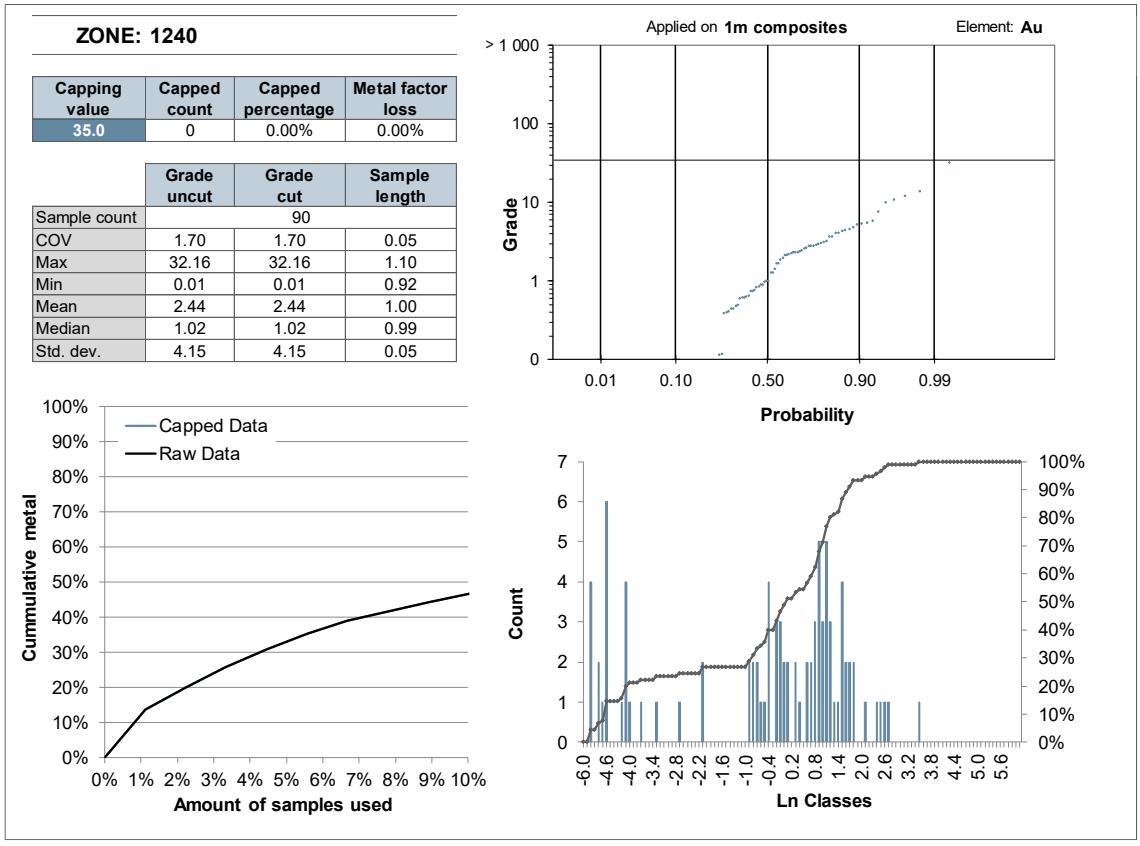


Figure II.23 Graphs supporting the absence of capping threshold decisions on composites for the Dubuisson, Dub_N4 (North4) Zone (blockcode 1240)

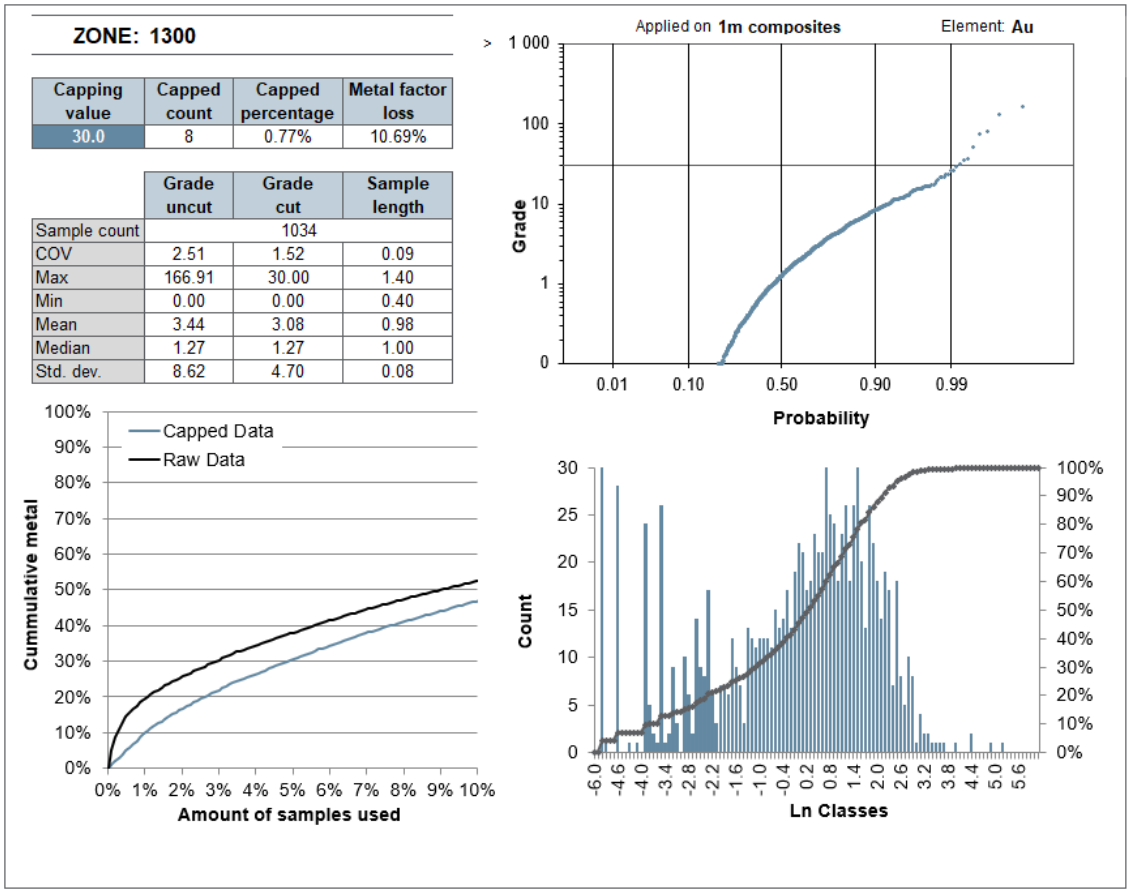


Figure II.24 Graphs supporting (DDH) capping threshold decisions on composites for Martin, Mart1310, Mart1320 and Mart1330 Zones, (blockcodes 1310, 1320 and 1330)

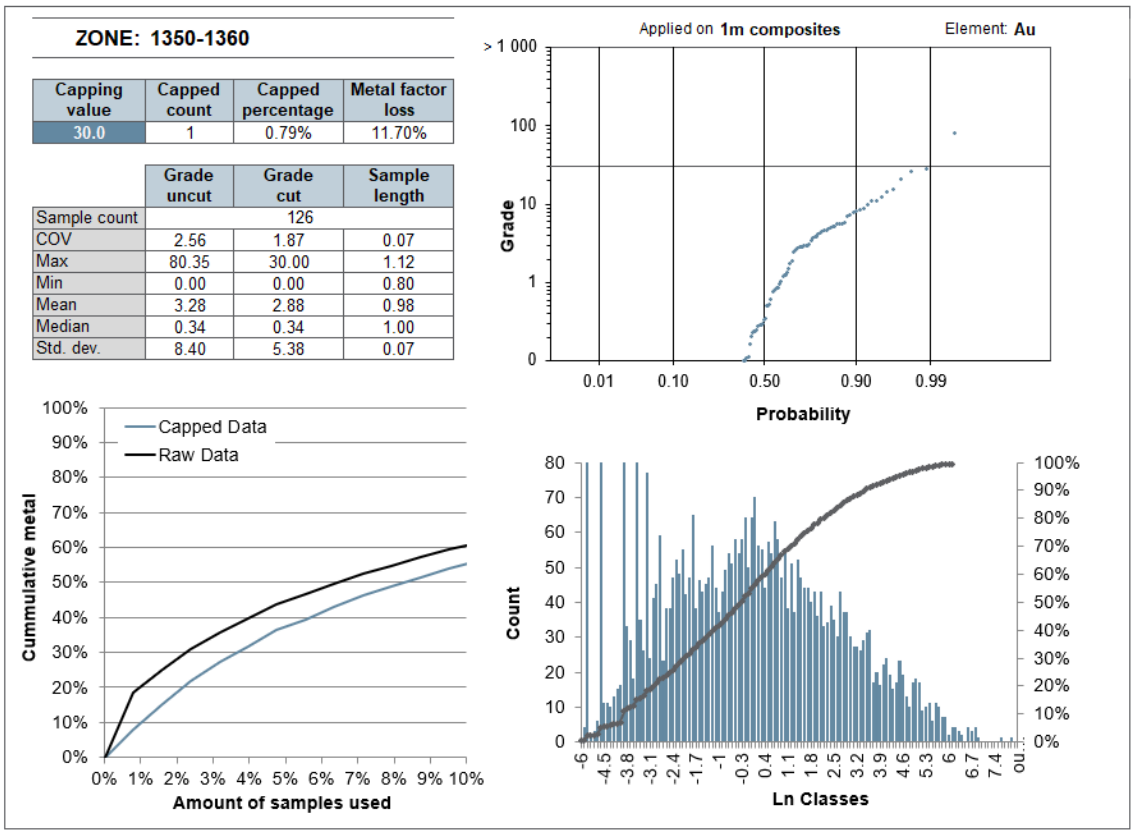


Figure II.25 Graphs supporting (DDH) capping threshold decisions on composites for the Wish Zones(blockcodes 1350 to 1360)

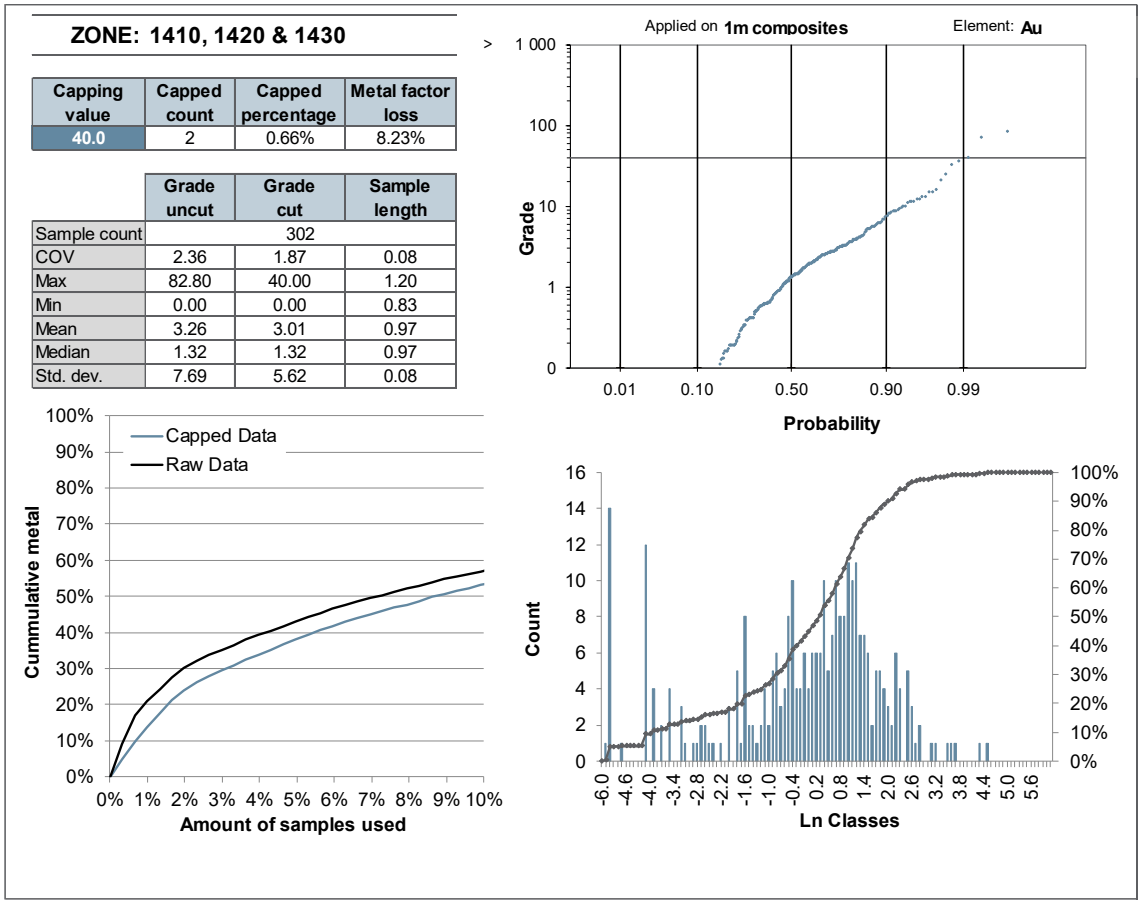


Figure II.26 Graphs supporting the absence of capping threshold on composites for the NorthWest, R1, R2 and R3 Zones, (blockcodes 1410, 1420)

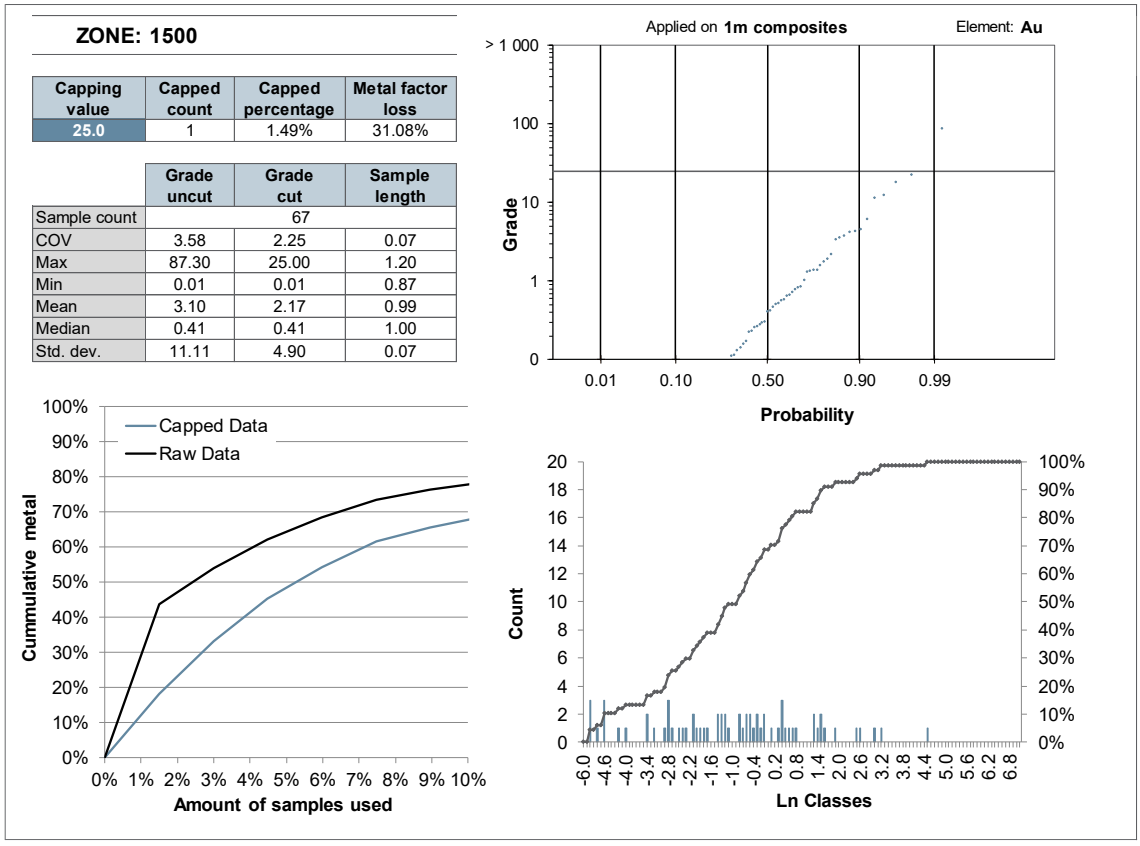


Figure II.27 Graphs supporting capping threshold decisions on composites for the New Zone 134, Z134_1 and Z134_2 Zones, (blockcodes 1501, 1502)

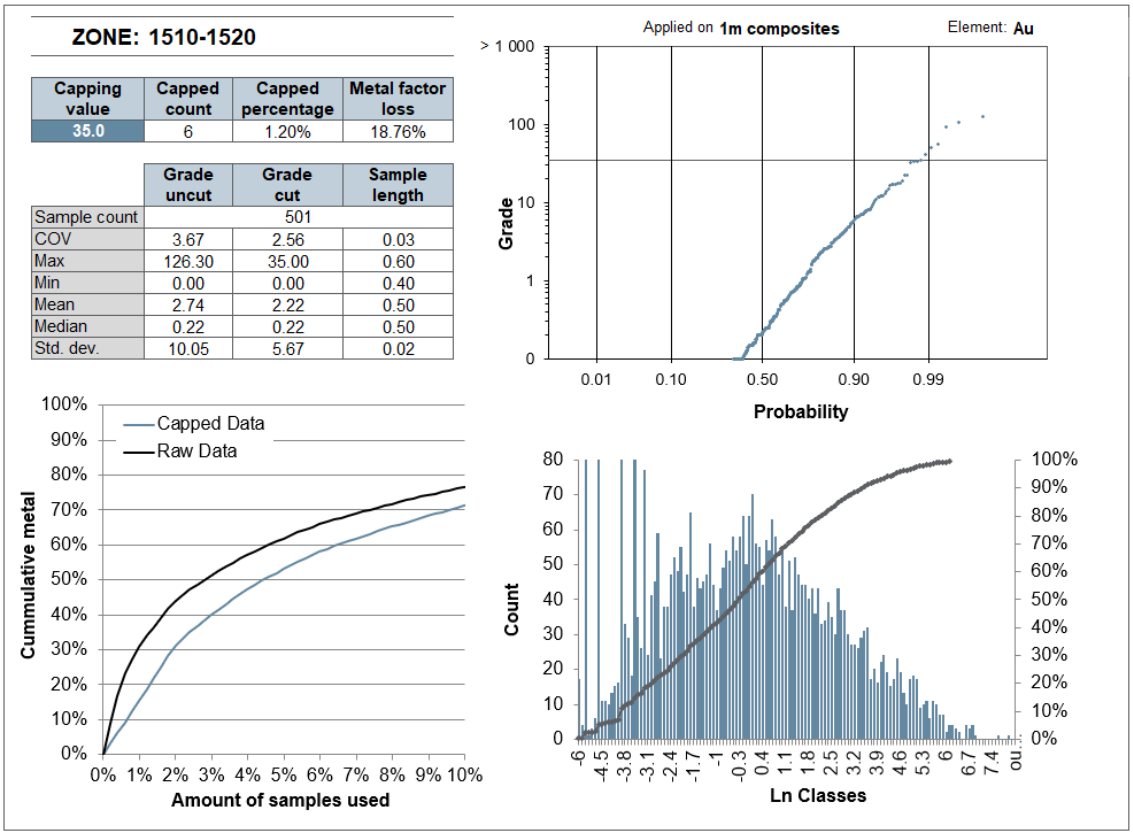


Figure II.28 Graphs supporting capping threshold decisions on composites for the New Shawkey_22, S22_1 and S22_2 Zones (Only Zones with 0.5 meters compositing), (blockcodes 1510, 1520)

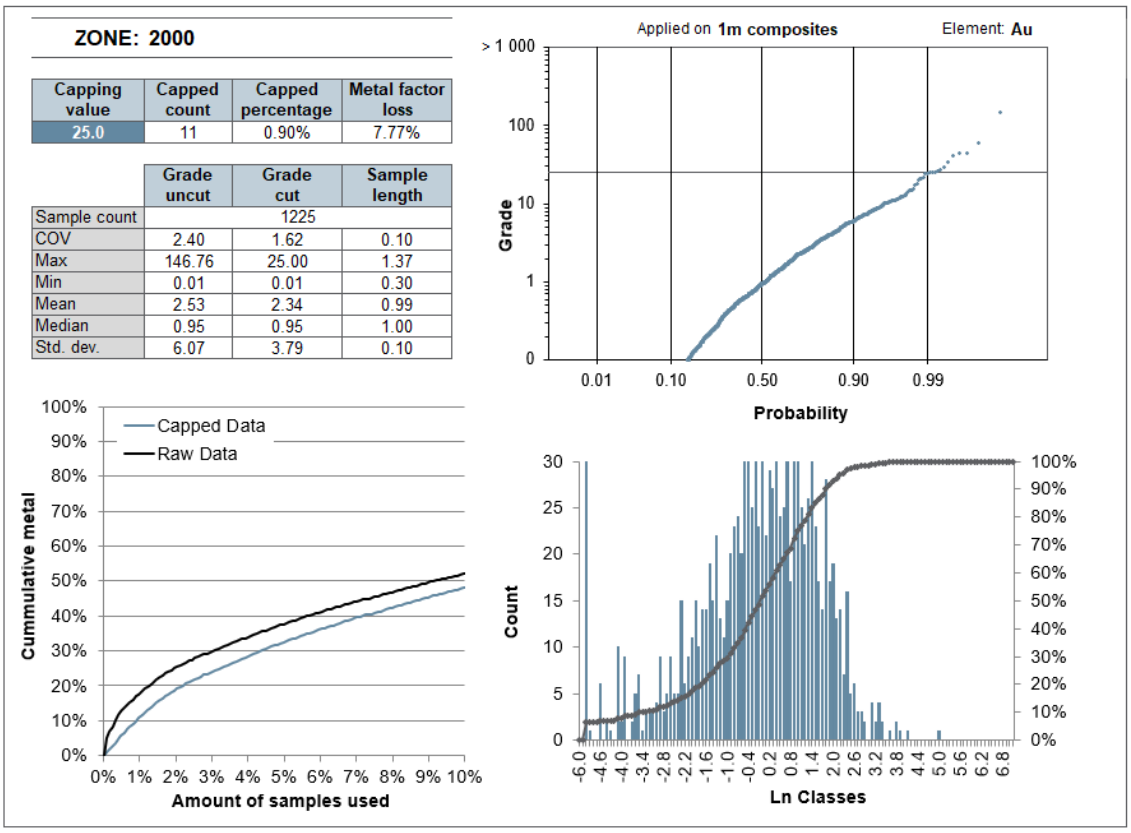


Figure II.29 Graphs supporting (DDH) capping threshold decisions on composites for the Wesdome Zone (blockcodes 2010 to 2070) (Revised for YE_2025)

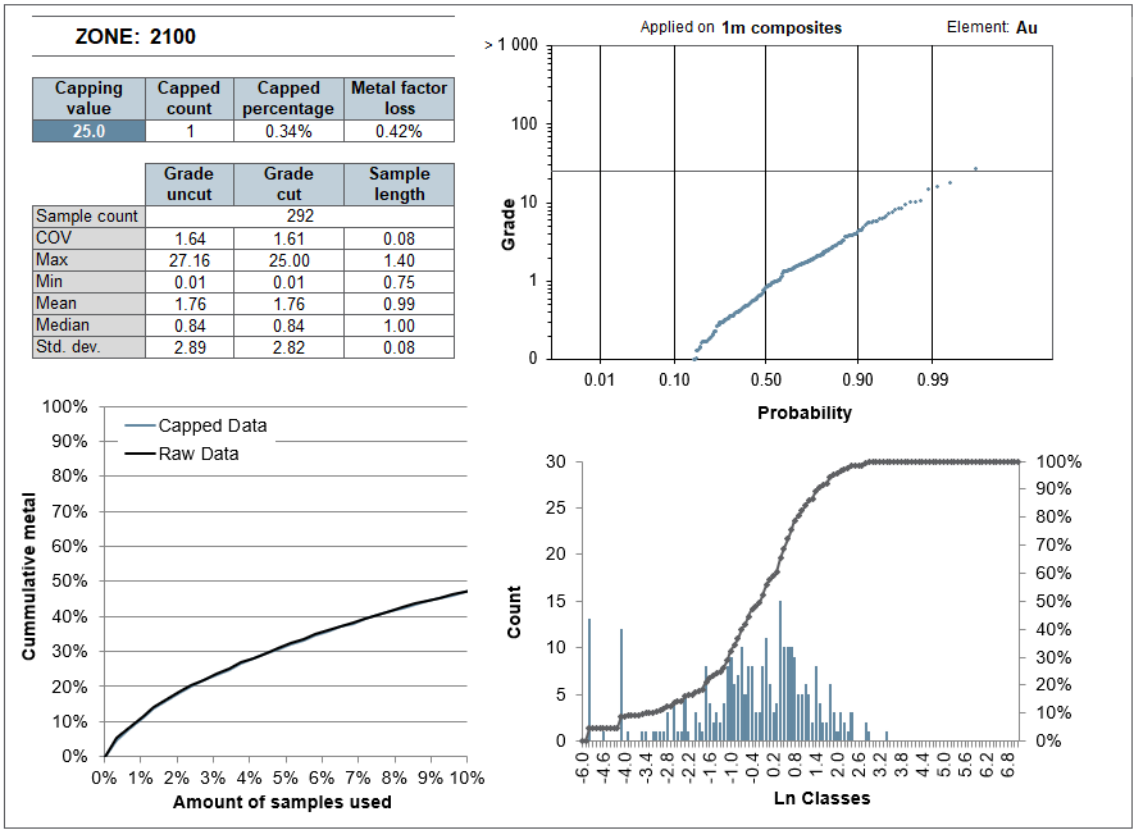


Figure II.30 Graphs supporting (DDH) capping threshold decisions on composites for the Wesdome Zone (blockcodes 2110 to 2130) (Revised for YE_2025)

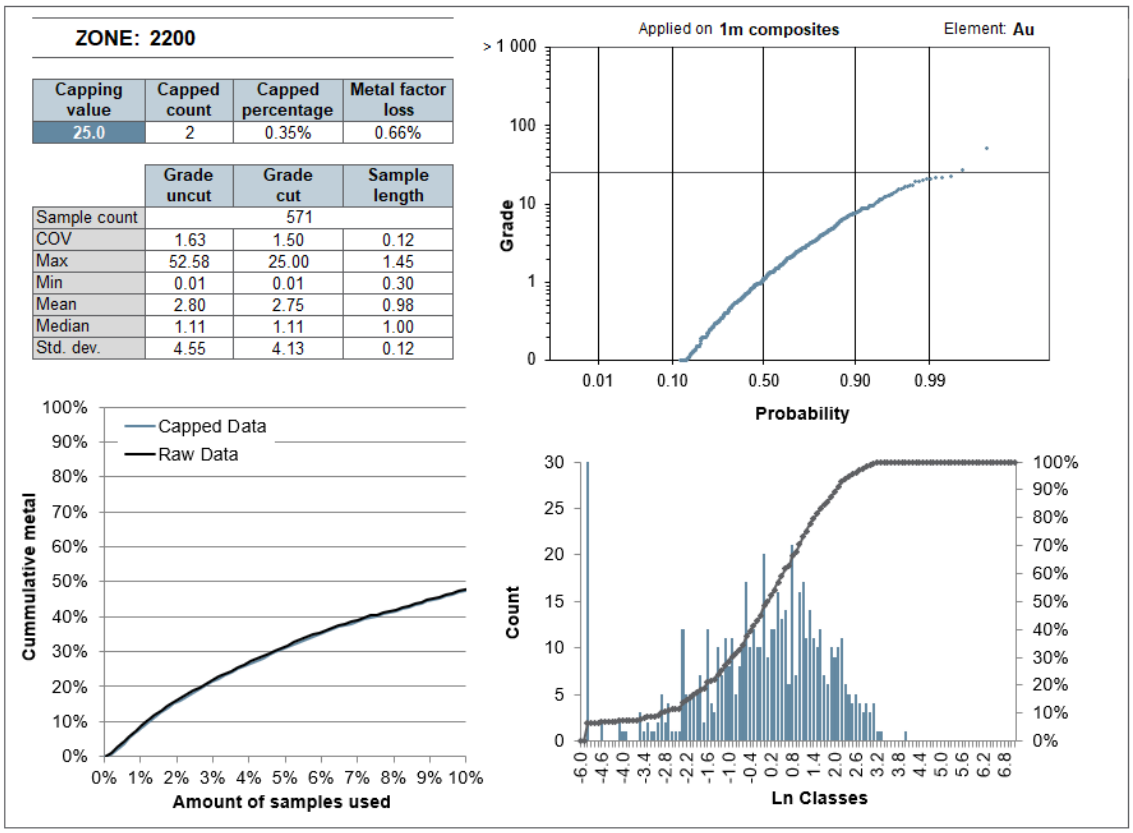


Figure II.31 Graphs supporting (DDH) capping threshold decisions on composites for the Wesdome Zone (blockcodes 2210 to 2280) (Revised for YE_2025)

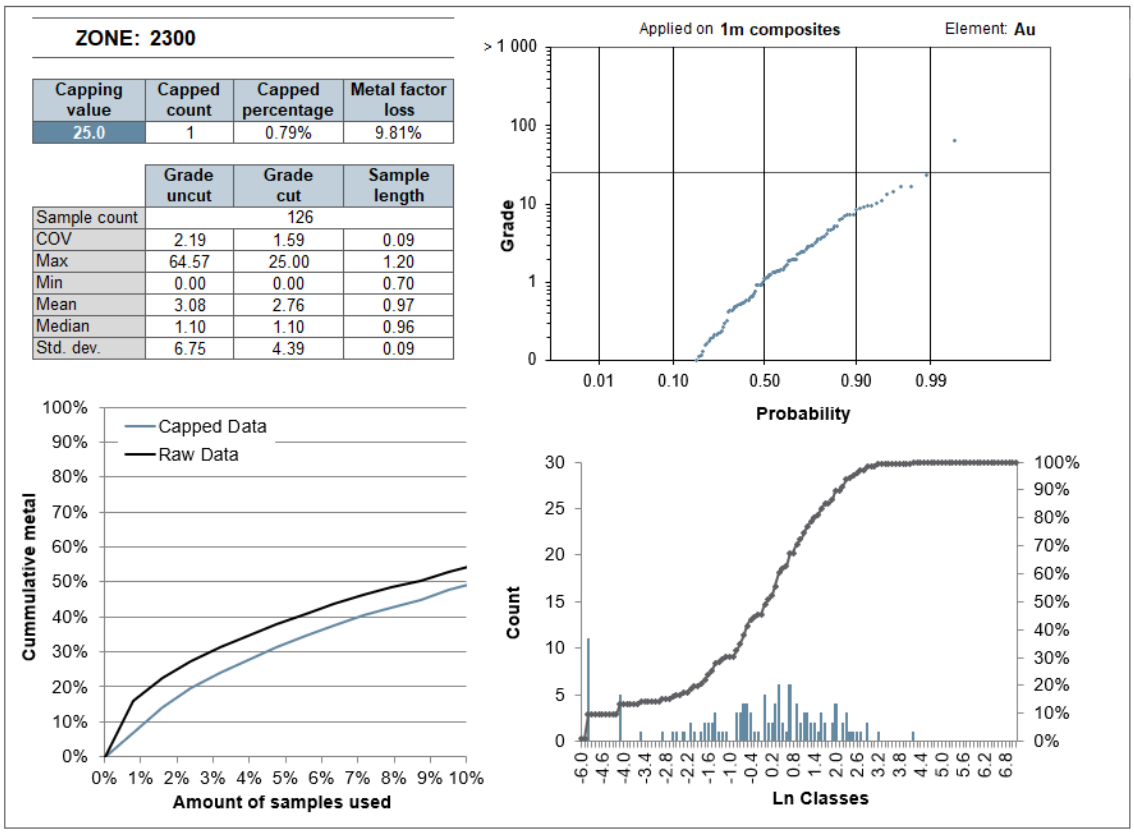


Figure II.32 Graphs supporting (DDH) capping threshold decisions on composites for the Wesdome Zone(blockcodes 2310 to 2330)

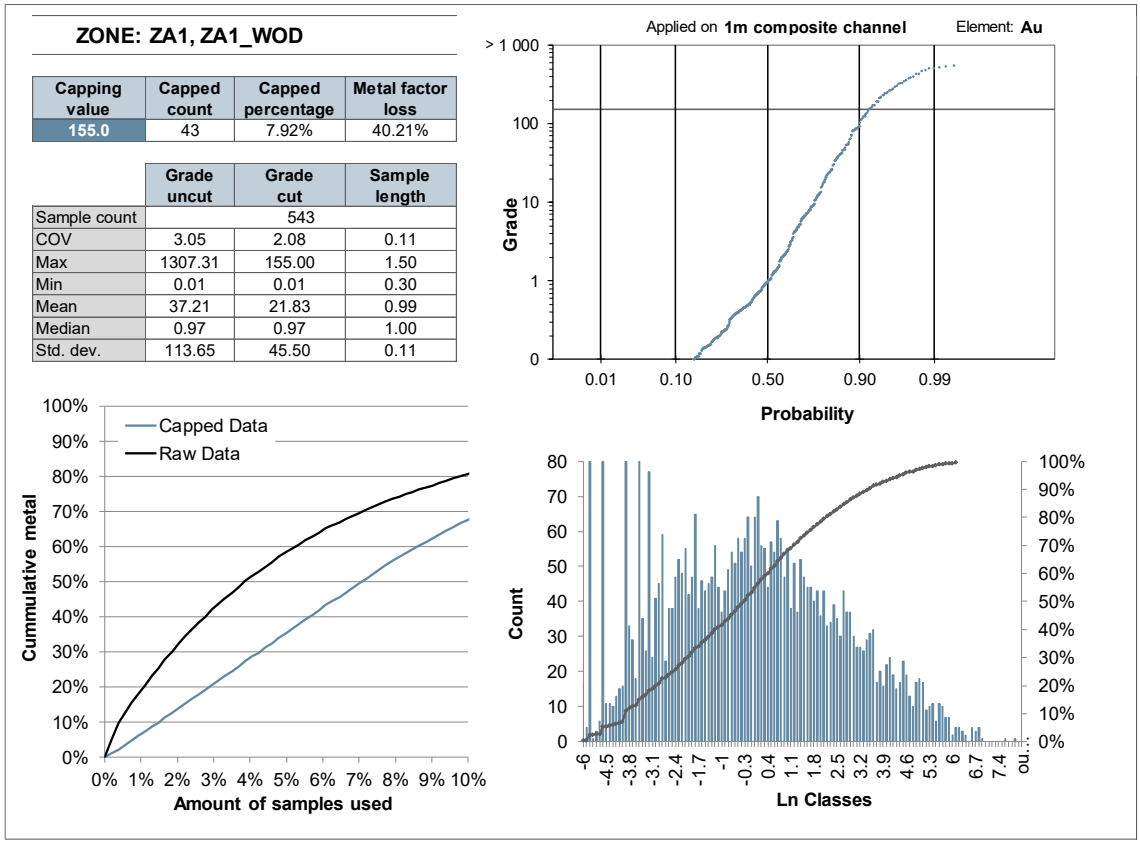


Figure II.33 Graphs supporting (Channels) capping threshold decisions on composites for the Kiena Deep A1 Zone, (blockcodes 210, 211)

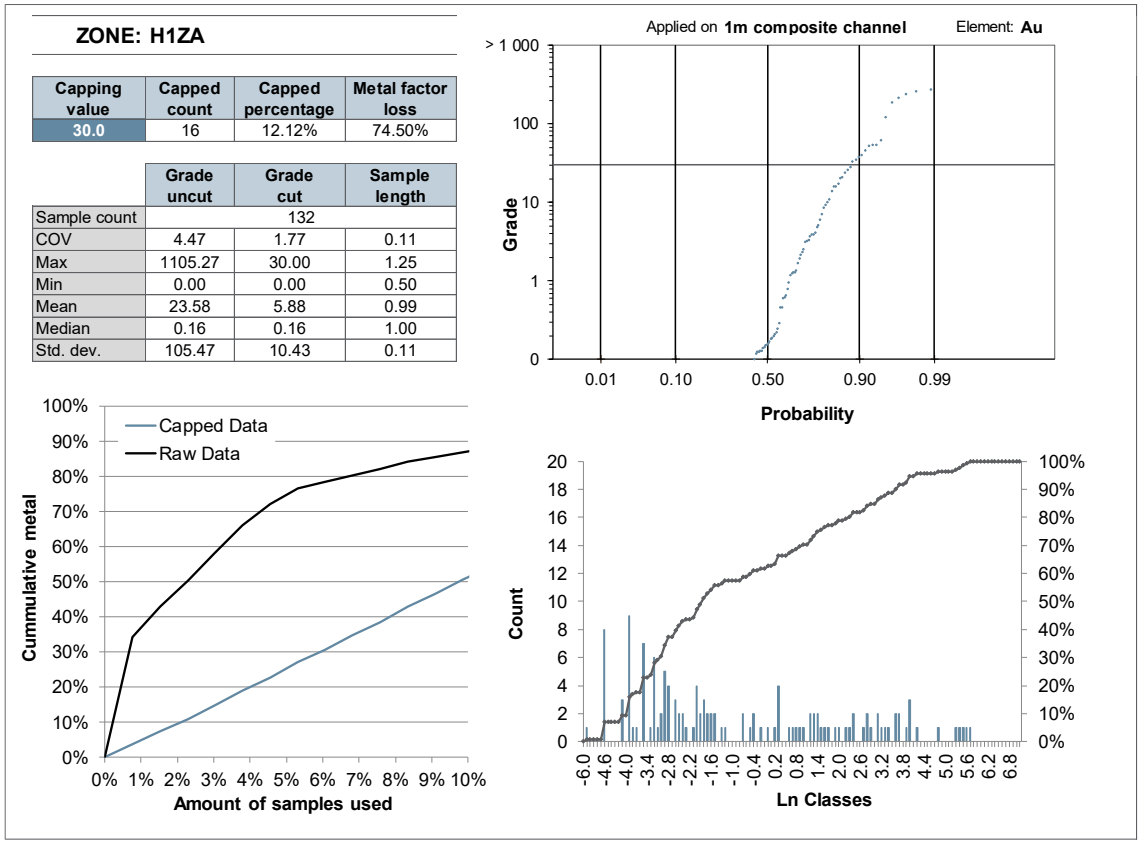


Figure II.34 Graphs supporting (Channels) capping threshold decisions on composites for the Kiena Deep H1ZA Zone, (blockcode 310)

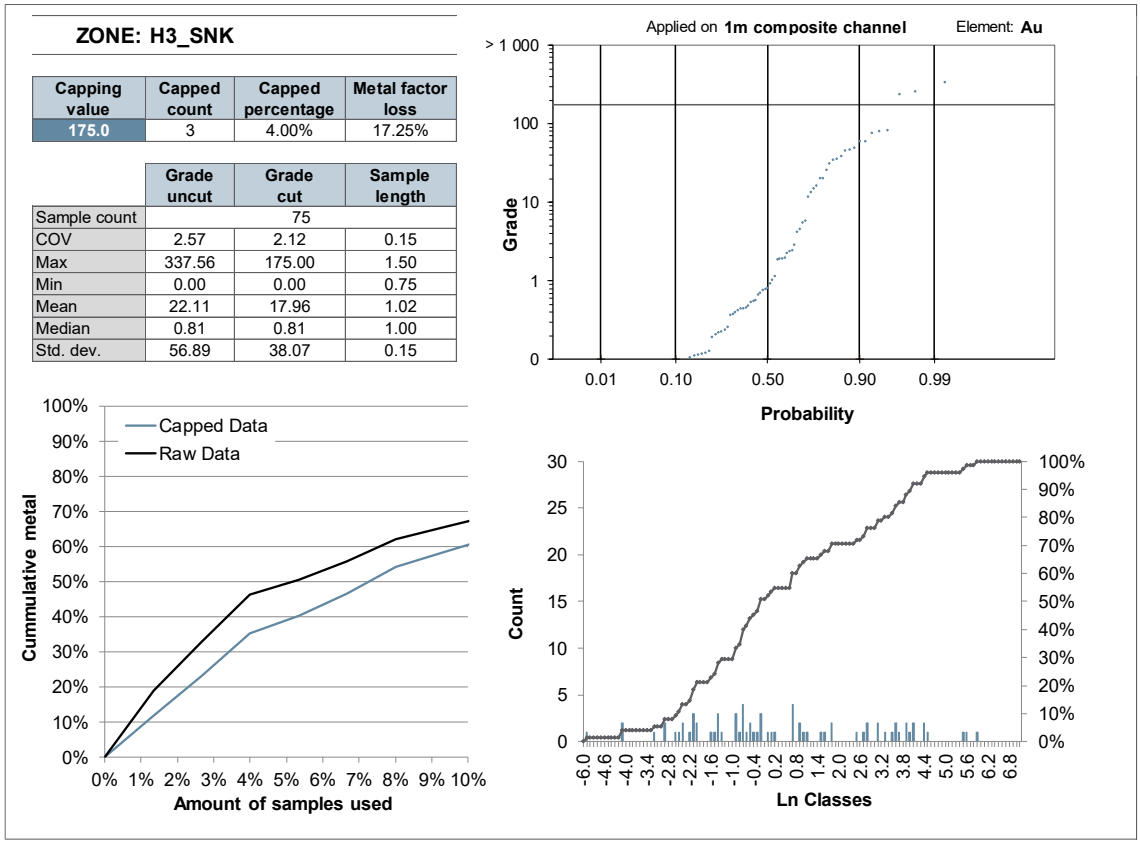


Figure II.35 Graphs supporting (Channels) capping threshold decisions on composites for the Kiena Deep H3_330 and Snk_510 Zone, (blockcodes 330, 510)

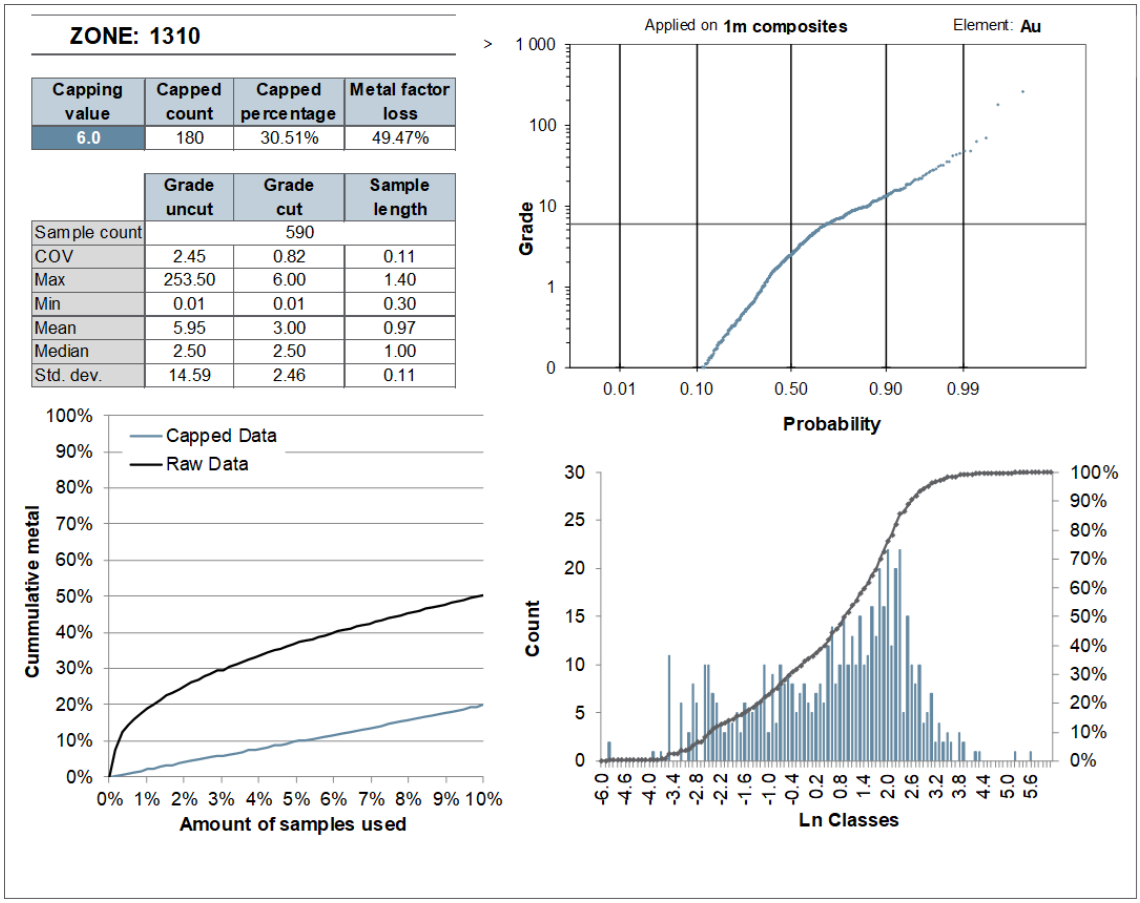


Figure II.36 Graphs supporting (Channels) capping threshold decisions on composites for the Martin Zone, Mat_1310 to Mart_1330, (blockcodes 1310, 1320, 1330)

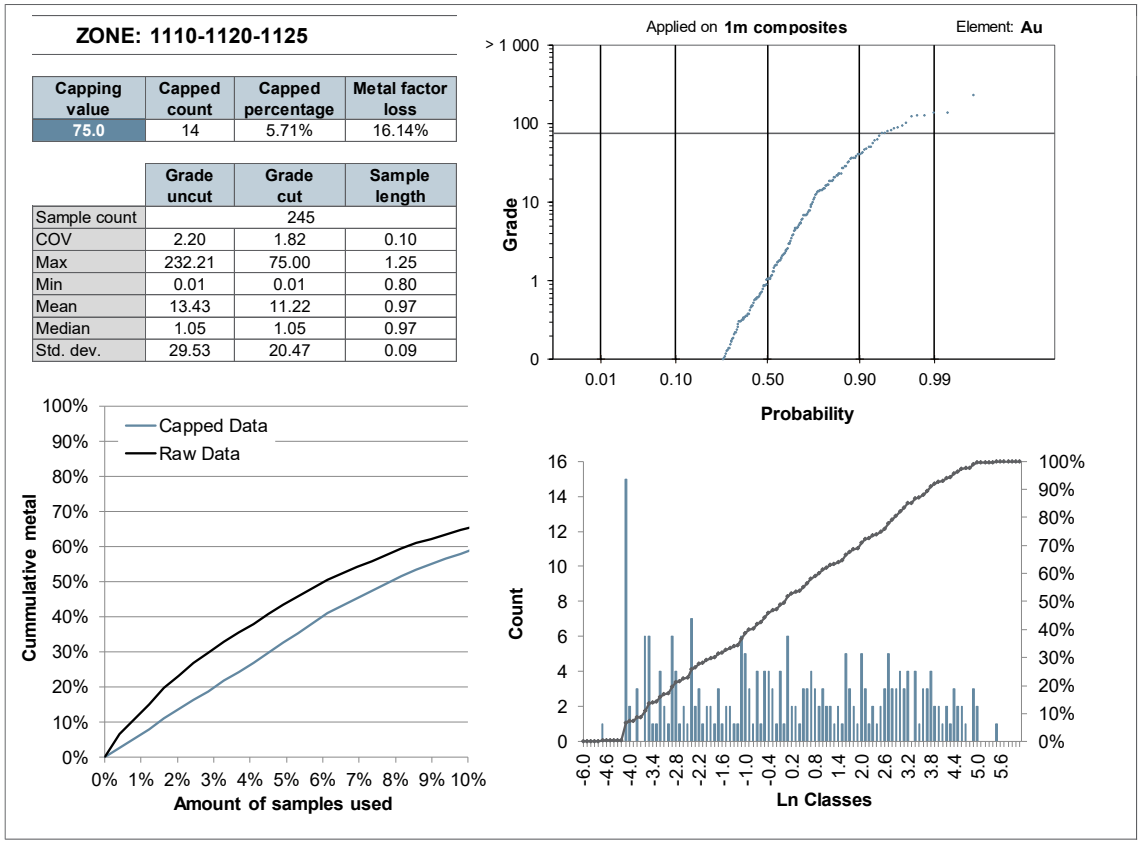
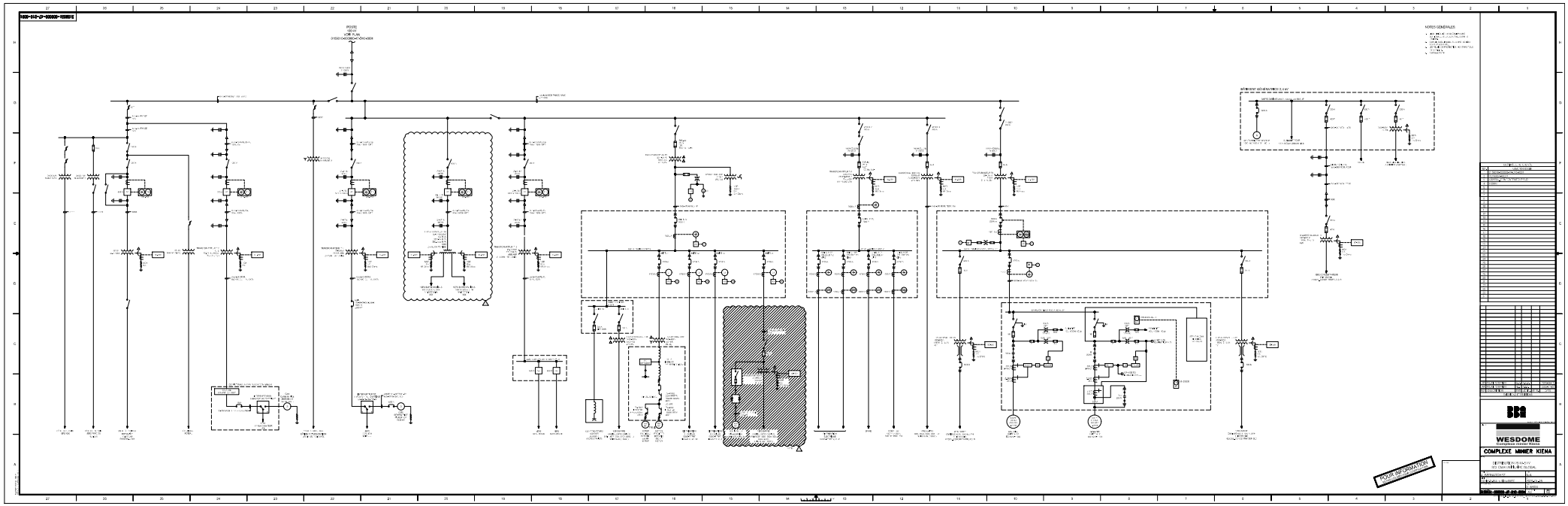


Figure II.37 Graphs supporting (Channels) capping threshold decisions on composites for the Presqu'île Zone, PR_1, PR_2 and PR_2A, (blockcodes 1110, 1120, 1125)

Appendix III

Kiena Mine Complex and Typical Horizontal Development Level Single Line Diagrams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POUR INFORMATION
WESDOME
COMPLEXE MINIER KIENA

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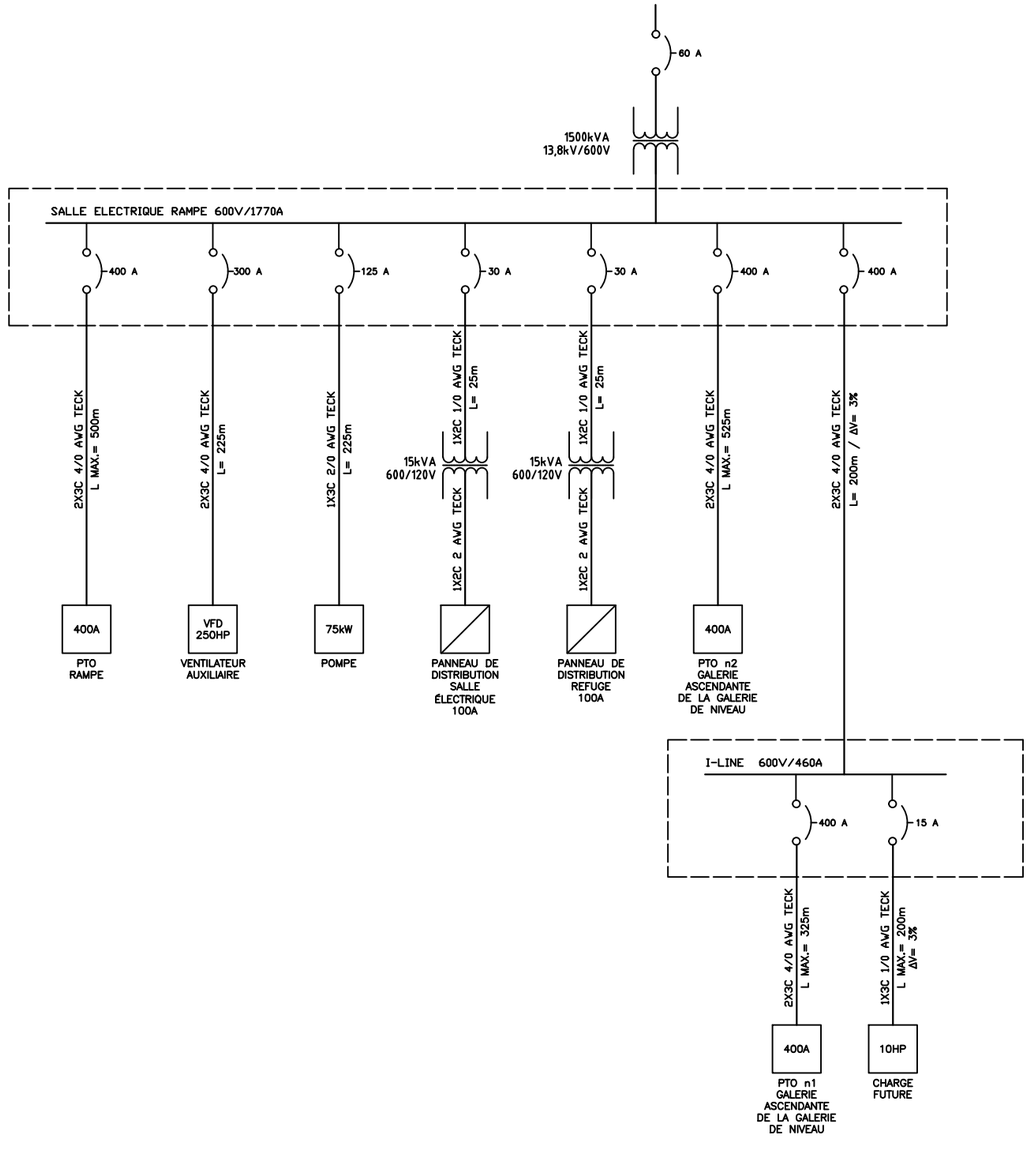

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REVISIONS

WESDOME

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DATE	06–01–2026
VÉRIFIÉ PAR / CHECKED BY	
APPROUVÉ PAR / APPROVED BY	
No. PROJET / PROJECT NO.	
DATE	

TITRE / TITLE

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Kiena deep
Électrique
Unifilaire 600v
Salle électrique rampe

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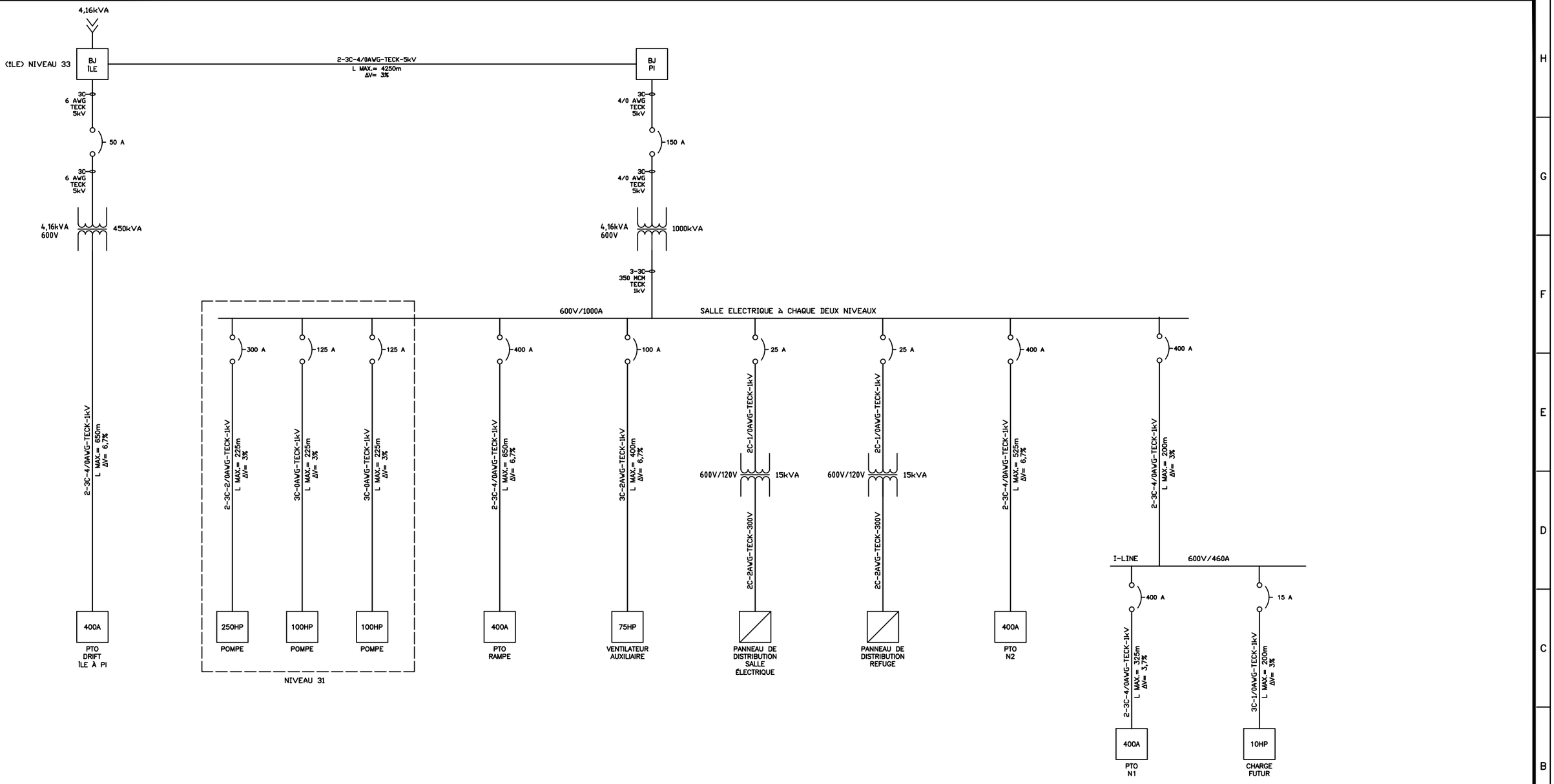

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REVISIONS

WESDOME

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VÉRIFIÉ PAR / CHECKED BY:
APPROUVÉ PAR / APPROVED BY:
No. PROJET / PROJECT NO.:
DATE:

TITRE / TITLE
WESDOME – KIENA
Kiena deep
Électrique
Unifilaire 600V
PRESQU'ÎLE – NIVEAU 33

ÉCHELLE / SCALE: Aucune
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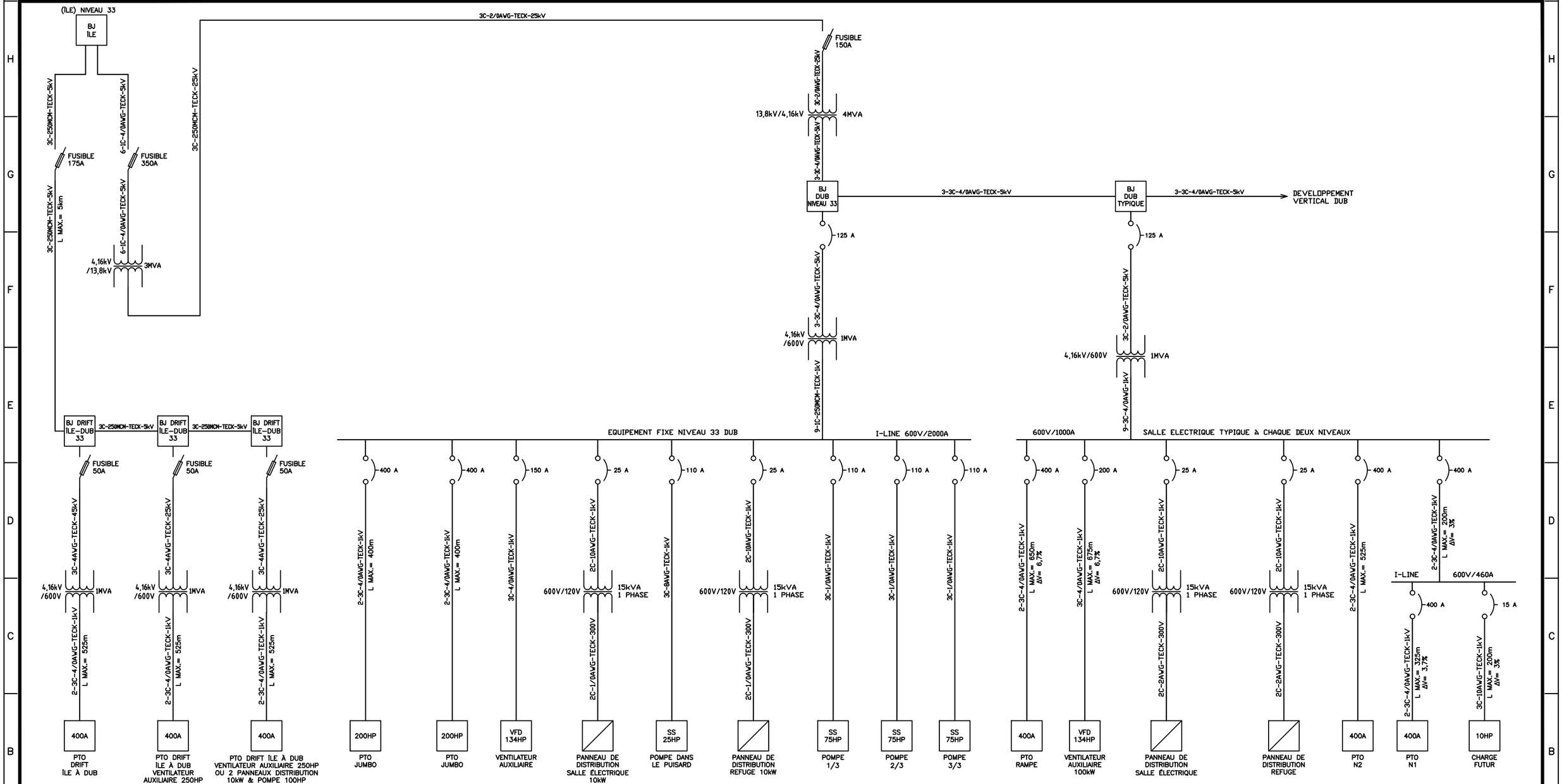

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REVISIONS

WESDOME

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No. PROJET / PROJECT NO.	
DATE	

TITRE / TITLE

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Kiena deep
Électrique
Unifilaire typique 600V
DUBUISSON

ÉCHELLE / SCALE	Aucune
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