National Instrument 43-101 Mineral Resource Estimate and Technical Report on the W4 Nickel Deposit, Langmuir Nickel Property

Timmins Area
Ontario, Canada

Report Prepared for:

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Effective Date: 12 June 2023
Issuing Date: 25 July 2023

Project Number: 616.21.00

DATE AND SIGNATURE

The Report, "National Instrument 43-101 Mineral Resource Estimate and Technical Report on the W4 Nickel Deposit, Langmuir Nickel Property, Timmins Area, Ontario, Canada", issued 25 July 2023 and with an Effective Date of 12 June 2023, was prepared for EV Nickel Inc. and authored by the following:

/s/ Scott Jobin-Bevans

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Scott Jobin-Bevans (P.Geo. PGO #0183, PhD, PMP)
Principal Author and Principal Geoscientist
Caracle Creek International Consulting Inc.

/s/ Simon Mortimer

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Simon Mortimer (FAIG #7795, MSc)
Co-Author and Professional Geologist
Atticus Geoscience Consulting S.A.C.

/s/ John Siriunas

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John M. Siriunas (P.Eng. Ontario #42706010, M.A.Sc)
Co-Author and Professional Engineer
Caracle Creek International Consulting Inc.

Dated: 25 July 2023

CERTIFICATE OF QUALIFIED PERSON

Scott Jobin-Bevans (P.Geo.)

I, Scott Jobin-Bevans, P.Geo., do hereby certify that:

1. I am an independent consultant and Principal Geoscientist with Caracle Creek International Consulting Inc., and have an address at Av. Americo Vespucio Sur 1096, Las Condes, Santiago, Chile.
2. I graduated from the University of Manitoba (Winnipeg, Manitoba), BSc. Geosciences (Hons) in 1995 and from the University of Western Ontario (London, Ontario), PhD. (Geology) in 2004.
3. I am a registered member, in good standing, of the Professional Geoscientists of Ontario (PGO), License Number 0183 (since June 2002).
4. I have practiced my profession continuously for more than 28 years, having worked mainly in mineral exploration but also having experience in mine site geology, mineral resource and reserve estimations, preliminary economic assessments, pre-feasibility studies, due diligence, valuation and evaluation reporting. I have authored, co-authored or contributed to numerous NI 43-101 and JORC Code reports on a multitude of commodities including nickel-copper-platinum group elements, base metals, gold, silver, vanadium, and lithium projects in Canada, the United States, China, Central and South America, Europe, Africa, and Australia.
5. I have read the definition of “Qualified Person” set out in National Instrument 43-101 Standards of Disclosure for Mineral Projects (“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.
6. I am responsible for sections 1.1, 1.1.1 to 1.1.4, 1.3 to 1.9, 1.11, 1.12, 2.0 to 2.4, 2.6 to 2.7, and 3.0 to 27.0 in the technical report titled, “National Instrument 43-101 Technical Report and Mineral Resource Estimate on the W4 Nickel Deposit, Langmuir Nickel Property, Timmins Area, Ontario, Canada” (the “Technical Report”), issued 25 July 2023 and with a Mineral Resource Estimate and Report Effective Date of 12 June 2023.
7. I have not visited the Langmuir Nickel Property or the W4 Nickel Deposit, the subject of the Report.
8. I am independent of EV Nickel Inc. applying all of the tests in Section 1.5 of NI 43-101 and Companion Policy 43-101CP. I am a Director and Vice President Exploration for International Prospect Ventures Ltd. who hold unpatented mining claims in the area of the Property that cover approximately 64 hectares.
9. In 2021, I co-authored an NI 43-101 technical report with respect to the Langmuir Nickel Property titled, “Independent NI 43-101 Technical Report on the Langmuir Nickel Project”, a report prepared for the Issuer. I have had no other prior involvement with the Langmuir Nickel Property that is the subject of the current Technical Report.
10. I have read NI 43-101, Form 43-101F1 and confirm the Technical Report has been prepared in compliance with that instrument and form.
11. As of the Effective Date of the Technical Report, to the best of my knowledge, information and belief, the Sections of the Technical Report for which I am responsible contain all scientific and technical information that is required to be disclosed to make the Technical Report not misleading.

Signed at Santiago, Chile this 25th day of July 2023.

/s/ Scott Jobin-Bevans

Scott Jobin-Bevans (P.Geo., PhD, PMP)

CERTIFICATE OF QUALIFIED PERSON

Simon Mortimer (FAIG)

I, Simon James Atticus Mortimer, FAIG, do hereby certify that:

1. I am a Professional Geologist with Atticus Geoscience Consulting S.A.C. with an address at Ave. Jose Larco 724, Miraflores, Lima, Peru.
2. I graduated from the University of St. Andrews, Scotland, with a B. Sc. in Geoscience in 1995 and from the Camborne School of Mines with a MSc. in Mining Geology in 1998.
3. I am a registered Professional Geoscientist, practicing as a member of the Australasian Institute of Mining and Metallurgy (#300947) and the Australian Institute of Geoscientists (FAIG #7795).
4. I have worked as a geoscientist in the minerals industry for over 20 years and I have been directly involved in the mining, exploration, and evaluation of mineral properties mainly in Peru, Chile, Argentina, Brazil, and Colombia for precious and base metals.
5. I have read the definition of "Qualified Person" set out in National Instrument 43-101 Standards of Disclosure for Mineral Projects ("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.
6. I am responsible for sections 1.1.4, 1.11, 1.13 to 1.15, 2.4 to 2.6, 3.0, 12.0, 14.0, 25.0, and 26.0 in the technical report titled, "National Instrument 43-101 Technical Report and Mineral Resource Estimate on the W4 Nickel Deposit, Langmuir Nickel Property, Timmins Area, Ontario, Canada" (the "Technical Report"), issued 25 July 2023 and with a Mineral Resource Estimate and Report Effective Date of 12 June 2023.
7. I have not visited the Langmuir Nickel Property or the W4 Nickel Deposit, the subject of the Report.
8. I am independent of EV Nickel Inc. applying all of the tests in Section 1.5 of NI 43-101 and Companion Policy 43-101CP.
9. I have had no prior involvement with the Langmuir Nickel Property that is the subject of the current Technical Report.
10. I have read NI 43-101, Form 43-101F1 and confirm the Technical Report has been prepared in compliance with that instrument and form.
11. As of the Effective Date of the Technical Report, to the best of my knowledge, information and belief, the Sections of the Technical Report for which I am responsible contain all scientific and technical information that is required to be disclosed to make the Technical Report not misleading.

Signed at Lima, Peru this 25th day of July 2023.

/s/ Simon Mortimer

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Simon Mortimer (FAIG, MSc)

CERTIFICATE OF QUALIFIED PERSON

John M. Siriunas (P.Eng., M.A.Sc)

I, John M. Siriunas, P.Eng., do hereby certify that:

1. I am an Associate Independent Consultant with Caracle Creek International Consulting Inc. (Caracle) and have an address at 25 3rd Side Road, Milton, Ontario, Canada, L9T 2W5.
2. I graduated from the University of Toronto (Toronto, Ontario) with a B.A.Sc. (Geological Engineering) in 1976 and from the University of Toronto (Toronto, Ontario) with an M.A.Sc. (Applied Geology and Geochemistry) in 1979.
3. I have been a member, in good standing, of the Association of Professional Engineers of Ontario since June 1980 (Licence Number 42706010) and possess a Certificate of Authorization to practice my profession.
4. I have practiced my profession continuously for 39 years and have been involved in mineral exploration, mine site geology, mineral resource and reserve estimations, preliminary economic assessments, pre-feasibility studies, due diligence, valuation and evaluation reporting, and have authored or co-authored numerous reports on a multitude of commodities including nickel-copper-platinum group element, base metals, precious metals, lithium, iron ore and coal projects in the Americas.
5. I have read the definition of “Qualified Person” set out in National Instrument 43-101 Standards of Disclosure for Mineral Projects (“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.
6. I am responsible for sections 1.1.4, 1.2, 1.10, 1.11, 1.13 to 1.15, 2.4 to 2.6, 3.0, 11.0, 12.0, 25.0, and 26.0 in the technical report titled, “National Instrument 43-101 Technical Report and Mineral Resource Estimate on the W4 Nickel Deposit, Langmuir Nickel Property, Timmins Area, Ontario, Canada” (the “Technical Report”), issued 25 July 2023 and with a Mineral Resource Estimate and Report Effective Date of 12 June 2023.
7. I visited the Langmuir Nickel Property for 1 day on 15 February 2023.
8. I am independent of EV Nickel Inc. applying all of the tests in Section 1.5 of NI 43-101 and Companion Policy 43-101CP.
9. I have had no prior involvement with the Langmuir Nickel Property that is the subject of the current Technical Report.
10. I have read NI 43-101, Form 43-101F1 and confirm the Technical Report has been prepared in compliance with that instrument and form.
11. As of the Effective Date of the Technical Report, to the best of my knowledge, information and belief, the Sections of the Technical Report for which I am responsible contain all scientific and technical information that is required to be disclosed to make the Technical Report not misleading.

Signed at Milton, Ontario this 25th day of July 2023.

/s/ John Siriunas

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John M. Siriunas (P.Eng., M.A.Sc)

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1.0 SUMMARY

1.1 Introduction

Caracle Creek International Consulting Inc. ("Caracle") was engaged by Canadian public company EV Nickel Inc. ("EVNi" or "EV Nickel" or the "Issuer"), to prepare an independent National Instrument 43-101 ("NI 43-101") Technical Report and Mineral Resource Estimate (the "Report") for the W4 Nickel Deposit (the "Deposit" or the "Langmuir Nickel Zone") situated on its Langmuir Nickel Property ("Langmuir" or the "Property"), located in the Timmins area, Ontario, Canada. The Report has been prepared in accordance with the disclosure and reporting requirements set forth in the Canadian Securities Administrators' National Instrument 43-101, Companion Policy 43-101CP, and Form 43-101F1 (June 30, 2011).

1.1.1 Purpose of the Technical Report

The Technical Report and Mineral Resource Estimate have been prepared for EV Nickel Inc., in order to provide a summary of scientific and technical information and data concerning the Property, inclusive of a Mineral Resource Estimate for the W4 Nickel Deposit, in support of the Standards of Disclosure for Mineral Projects according to Canadian National Instrument 43-101.

Specifically, the Report provides an independent review of EVNi's Langmuir Nickel Property located near Timmins, Ontario, verifies the data and information related to historical and current mineral exploration and mineral resources on the Property, and presents a report on data and information available in the public domain with respect to the Property.

1.1.2 Previous Technical Reports

This Report is the current Technical Report on the Langmuir Nickel Property, replacing the previous technical report titled, "Independent NI 43-101 Technical Report on the Langmuir Nickel Property, Timmins Area, Ontario, Canada", issued 5 August 2021 and with an effective date of 25 July 2021.

1.1.3 Effective Date

The Effective Date of this Report and the Mineral Resource Estimate is 12 June 2023 ("Effective Date").

1.1.4 Qualifications of Consultants

The Report has been completed by Dr. Scott Jobin-Bevans, Mr. Simon Mortimer, and Mr. John Siriunas (together the "Consultants" or the "Authors"). Dr. Jobin-Bevans ("Principal Author") is the Principal Geoscientist at Caracle Creek International Consulting Inc., Mr. Mortimer ("Co-Author") is a Professional Geologist with Atticus Geoscience S.A.C., and Mr. Siriunas ("Co-Author") is an Associate Independent Consultant with Caracle Creek International Consulting Inc.

Dr. Jobin-Bevans is a Professional Geoscientist (PGO #0183, P.Geo.) with experience in geology, mineral exploration, mineral resource and reserve estimation and classification, land tenure management, metallurgical testing, mineral processing, capital and operating cost estimation, and mineral economics. Mr. Mortimer is a Professional Geologist (FAIG #7795) with experience in geology, mineral exploration, geological modelling, mineral resource and reserve estimation and classification, and database management. Mr. Siriunas is a Professional Engineer (APEO #42706010) with experience in geology, mineral exploration, mine site geology, mineral resource and reserve estimations, preliminary economic assessments, pre-feasibility studies, due diligence, and valuation and evaluation reporting.

Dr. Scott Jobin-Bevans, Mr. Simon Mortimer, and Mr. John Siriunas, by virtue of their education, experience, and professional association, are each considered to be a Qualified Person ("QP"), as that term is defined in NI 43-101 and specifically sections 1.5 and 5.1 of NI 43-101CP (Companion Policy). A responsibility matrix is provided in Table 1-1, summarizing each of the Report sections for which the Authors are responsible.

Table 1-1. Responsibility matrix for the preparation of the Report sections by the Authors.

Author	Complete Section Responsibility	Sub-Section Responsibility
Scott Jobin-Bevans	3.0 to 27.0	1.1, 1.1.1 to 1.1.4, 1.3 to 1.9, 1.11, 1.12, 2.0 to 2.4, 2.6 to 2.7
Simon Mortimer	3.0, 12.0, 14.0, 25.0, 26.0	1.1.4, 1.11, 1.13 to 1.15, 2.4 to 2.6
John Siriunas	3.0, 11.0, 12.0, 25.0, 26.0	1.1.4, 1.2, 1.10, 1.11, 1.13 to 1.15, 2.4 to 2.6

1.2 Personal Inspection (Site Visit)

Co-Author John Siriunas (M.A.Sc., P.Eng.), visited the Project on 15 February 2023, accompanied by Mr. Philip Vicker, P.Geo., EV Nickel's Regional Exploration Geologist. Travel from the City of Timmins, Ontario, via South Porcupine to the site of the former McWaters Mine takes approximately 30 minutes on well-maintained gravel roads (see Section 5.1). From that point to the drilling locations visited (a distance of about 1.5 km) requires use of a 4x4 vehicle.

The site visit was made to observe the general property conditions and access, and to verify the locations of some of the drill hole collars. The planned drilling on the north side of the Forks River targeting the W4 Nickel Deposit was ongoing at the time of the field visit; the main part of the Property lies to the south of the Forks River and so requires a different access scenario. Mr. Siriunas did not visit that part of the Property.

During the visit, diamond drilling procedures were discussed and a review of the on-site logging and sampling facilities for processing the drill core were carried out. The secure storage and logging facility at the Redstone Mine/Mill site in Timmins rented by the Company was visited; this location is approximately 9 km west-northwest of the Project location (though it is a distance of 13 km by road).

The Property does not have extensive bedrock outcroppings and no exposure in and around the W4 Nickel Deposit. Any rock samples taken in the field would not be indicative of the mineralization being targeted and encountered in the drilling, and as such no field samples were collected. Mr. Siriunas was satisfied with the high quality of the procedures that had been undertaken by the Company.

1.3 Property Description and Location

The Langmuir Nickel Property, within National Topographic System ("NTS") map sheets 42 A/06 and 42 A/07, is situated in portions of Blackstock, Langmuir, Fallon, Douglas, Eldorado, Carman, and Thomas townships, Porcupine Mining Division, northeastern Ontario, Canada. The centre of the Property is approximately 30 km southeast of the City of Timmins.

The Property, covering the Night Hawk River and southern parts of Night Hawk Lake in Carman and Langmuir townships, is centred at approximately 502000mE, 5350000mN NAD83 UTM Z17N (48 18'N Latitude, 80 58'W Longitude). The Property is accessed from the City of Timmins/South Porcupine by a series of all-weather gravel roads (*see* Section 5.1).

The Langmuir Nickel Property is one of three contiguous properties that make up the Shaw Dome Project, the other two being the CarLang Nickel and the Adams-Eldorado Nickel properties.

All known nickel sulphide mineralization that is the focus of the Report is located within the boundary of the mining lands that comprise the Langmuir Nickel Property. The W4 Nickel Deposit, the focus of the mineral resource estimate, is located within unpatented mining claim 299485 and Legacy Mining Claim 4203498.

1.3.1 Mineral Disposition

The Langmuir Nickel Property comprises 156 unpatented mining claims consisting of 28 Multi-Cell Mining Claims ("MCMC"s), 22 Single Cell Mining Claims ("SCMC"s), and 106 Boundary Cell Mining Claims ("BCMCs"), covering approximately 10,496 ha, and owned 100% by EVNi; the mining claims are contiguous.

The Property has not been legally surveyed. In September 2022, EVNI filed an application to convert mining claims that overly the W4 Nickel Deposit into mining leases (Company news release dated 6 September 2022). Communication by the Company with the MINES, indicates that the process is nearing completion and that it is anticipated that the Company will be invited to complete a legal survey, which will be the final stage for the mining leases. According to the Company, this should be completed by the end of 2023.

1.3.2 Claim Status and Holding Costs

All mining claims that comprise the Property have an Active status. As of the Effective Date of the Report, all mining claims are valid with expiry dates ranging from 22 May 2024 to 18 July 2027.

Annual assessment work requirements total $171,600 and historically $1,033,000 has been applied to the Property. There is $3,888,304 in work assessment reserve which is enough to keep the mining claims current for at least 22 years.

The unpatented mining claims were independently verified by the Principal Author, online through the MLAS system of the MENDM.

1.3.3 Surface Rights and Legal Access

The surface rights associated with the Property are owned by the Government of Ontario (Crown Land) and access to the Property is unrestricted. Boundary Cell Mining Claims (BCMC), meaning that the claim is a partial cell and that the cell is shared with another claim holder. If, at any time, the other claim holder was to abandon or forfeit their portion of any of the BCMC, it would be converted to a SCMC and the balance of the map cell would become part of the Property.

1.3.4 Current Permits and Work Status

On 2 June 2021, the Company was granted an Exploration Permit, PR-21-000125, to conduct geophysical surveys (requiring generator), diamond drilling (mechanized drilling), ground geophysical surveys without a generator, trails, airborne geophysical survey, and land sample (<1 cubic metre). The Exploration Permit is valid for a period of three years and covers 22 unpatented mining claims: 110230, 122224, 149608, 186360, 197711, 214435, 244331, 252374, 253690, 264368, 280858, 290189, 299464, 299485, 302251, 339767, 535770, 535773, 535774, 535776, 535779, and 535780.

The Company has received four additional 3-year Exploration Permits to support its diamond drilling activities within the Langmuir Nickel Property, including: PR-21-000220 on 14 September 2021 (covering 8 unpatented mining claims: 126674, 138627, 171189, 240049, 285948, 323202, 535789, 535791); PR-22-00042 on 28 April 2022 (covering 6 unpatented mining claims: 149608, 214435, 252374, 264368, 299464, 299485); PR-22-000108 on 18 May 2022 (covering 3 unpatented mining claims: 128596, 242002, 284927); and PR-22-000346 on 31 January 2023 (covering 10 unpatented mining claims: 149608, 179483, 186924, 214435, 245666, 253739, 290223, 302295, 341088, 341089).

The current exploration work program by the Issuer began in June 2021 and this exploration work, including diamond drilling, is ongoing.

1.3.5 Royalties and Obligations

EVNi presently owns 100% of the mining claims that comprise the Property. However, some of the mining claims are subject to a 2% net smelter return ("NSR") royalty.

All claims forming the Langmuir Property were staked by contractors for Golden Chalice with the exception of Legacy Mining Claims 3017517 and 3017518 (15 claim units totalling 243 hectares) which were optioned from Mr. David Healey (45%), Mr. Todd Keast (45%), and Kirnova Corp. (10%) on 13 July 2004 ("Healey Option"). On 14 October 2004, Golden Chalice exercised the underlying option on the two claims after paying a total of C$5,000 in option payments and issuing 100,000 fully paid ordinary shares to the three vendors.

There is an area of interest clause within the Healey Option, which states that any claims, acquired after the effective date of the option, that are within a five kilometre radius of the boundaries of the two optioned mining claims are also subject to the same 2% NSR. Legacy Mining Claim 4203498, within which the W4 Nickel Deposit is located, lies within the 5 km area of interest and is thus subject to a 2% NSR. A half percent (0.5%) of the NSR which can be purchased from the Healey Option vendors at any time for C$500,000, thereby reducing the outstanding NSR to 1.5%.

1.4 Property Access and Operating Season

The Property is located within the boundaries of the city of Timmins, Ontario. It is accessed by motor vehicle south from the village of South Porcupine via a gravel road known as Stringers Road. This road cuts through the central western portion of the Property. Approximately 29 km southeast of Timmins on Stringers Road, a drill trail (ATV/snowmobile accessible) branches off northeastward. Approximately three km along this trail, the W4 Nickel Deposit location is reached.

Exploration work such as drilling and geophysical surveys can be completed year-round, with some surface work (*i.e.*, geological mapping, trenching and surface sampling) limited by snow cover during the winter months.

1.5 History

Langmuir Township area has received much exploration interest over the past 100 years with more recent initiatives focused on nickel exploration as the area is within a highly prospective komatiitic belt known for the formation of magmatic nickel sulphide mineralization. The 1970's discovery of such nickel deposits as the Langmuir No. 1, Langmuir No. 2, Redstone and McWatters, fuelled and sustained nickel exploration activity in the region. In 2007, additional nickel deposit discoveries were made such as Northern Sun Mining Corp.'s Hart deposit and Golden Chalice Resources Inc.'s Langmuir W4 Zone (W4 Nickel Deposit). With the exception of the W4 Nickel Deposit (Langmuir W4 Zone), none of the aforementioned deposits or mines occur within the boundaries of the Property.

Historical results from exploration work on or proximal to the Property have not been verified by the Principal Author or a Qualified Person associated with the Company and as such are not necessarily indicative of the results to be found on the Property.

1.5.1 Prior Ownership and Ownership Changes

EVNi purchased its original Shaw Dome Project property, the Langmuir Nickel Property, from Rogue Resources Inc. ("Rogue" or "Rogue Resources") in early 2021 (Company news release dated 4 March 2021). Golden Chalice Resources Inc. ("Golden Chalice"), previous operators on the Langmuir Nickel Property, changed its name to Rogue Resources in October 2010.

1.5.2 Historical Exploration Work

Industry-related exploration work within the area of the Property (*i.e.*, Langmuir Township) has taken place since 1964 and continued to 2014, with the most recent work completed by Golden Chalice/Rogue Resources Inc. (Table 1-2).

Table 1-2. Summary of historical exploration work conducted on the Property, 1964-2015.

Year	Company	Exploration Activity
1964-65	Min-Ore Mines Limited	Ground magnetic and electromagnetic survey
1965	G.E. Cooper	Diamond drilling (1 hole, 154 m)
1970	Yellowknife Base Metals Limited	Diamond drilling (3 holes, 803 m)
1980-81	Utah Mines Ltd.	Ground magnetic survey; geological survey; diamond drilling (2 holes, 147 m)
1987	Canadian Nickel Company	Airborne electromagnetic survey
2005	Golden Chalice Resources	Ground magnetic and HLEM surveys; diamond drilling (4 holes, 528 m); Heliborne VTEM-Mag survey (687 line-km)
2006	Golden Chalice Resources	Ground magnetometer surveys (8.15 line-km); Mag/VLF-EM (6.0 line-km)
2007	Golden Chalice Resources	Diamond drilling (8 holes, 2,374 m); diamond drilling (37 holes, 16,262 m); MMI orientation geochemical soil survey; MMI geochemical soil survey (West/East grids); heliborne VTEM-Mag survey (2,601 line-km)
2008	Golden Chalice Resources	Diamond drilling (20 holes, 6,938 m); diamond drilling (13 holes, 6,120 m); MMI geochemical soil survey
2009	Golden Chalice Resources	Diamond drilling (11 holes, 3,939 m); down-hole TEM geophysical survey (8 drill holes); drill hole core characterization
2010	Golden Chalice Resources	Diamond drilling (5 holes totalling 1,645 m); Phase 1 Baseline Environmental Studies initiated; Mineral Resource Estimate by SRK Consulting Canada; Mineralogical study
2011	Rogue Iron Ore Corp. (previously Golden Chalice)	Diamond drilling (13 holes, 2,282 m) - 6 HQ (642 m) for metallurgical tests, 7 NQ (1,640 m); Metallurgical testwork (scoping level)
2012	Rogue Resources	Metallurgical testwork review (Starkey)
2014	Rogue Resources	Compilation and re-interpretation of 2005 and 2007 Heliborne VTEM-Mag surveys; Phase 2 Baseline Environmental Studies proposed to begin
2015	Rogue Resources	Mineralogical study

1.5.3 Historical Drilling (2005-2011)

Between May 2005 and February 2011, Golden Chalice/Rogue Resources completed 130 drill holes (40,796 m) on the Property and all of the data and information associated with this drilling is available to the Authors and the Issuer. Information regarding the minor drilling conducted on the Property prior to 2005 is not available to the Authors.

All drill holes completed from 2005 to 2011 were collared at surface and were land based. A summary of the drilling programs that have taken place on the Property is provided in Table 1-3.

Table 1-3. Summary of historical diamond drilling on the Langmuir Nickel Property.

Year	Area of Drilling	No. Holes	Metres
2005	W6 South Central	4	545
2007	W2, W3 Central	8	2,695
2007-08	W4 Nickel Deposit	37	16,262
2007	W4 East	1	413
2008	Eastern area of property	20	6,938
2008	W6 South Central & Central West of W4	31	6,077
2009	W6 South Central & W2, W3 Central	11	3,939
2010	W2 Central	5	1,645
2011	W4 East & Langmuir W4 (metallurgical)	13	2,282
	Totals:	**130**	**40,796**

1.5.4 Historical Mineral Resource Estimates

In 2010, SRK Consulting Canada Inc. (“SRK”) completed an initial mineral resource estimate on the Langmuir W4 Zone (W4 Nickel Deposit) for Golden Chalice (Cole *et al.*, 2010). The effective date of this historical mineral resource estimate was 28 April 2010 and it was prepared by Sebastien Bernier (P.Geo., OGQ#1034) and Glen Cole (P.Geo., PGO #1416). Consolidated historical mineral resources are presented in Table 1-4. There are no recent estimates or data available to the Company.

The historical mineral resource estimate used categories that conformed to CIM Definition Standards on Mineral Resources and Mineral Reserves (CIM, 2005) at the time of completion of the estimate, as outlined in NI 43-101, Standards of Disclosure for Mineral Projects. However, neither the Principal Author nor a qualified person have done sufficient work to classify any of the historical estimates as current mineral resources and as such, the Principal Author and the Issuer are treating the tonnages and grades reported as historical mineral resources. Investors are cautioned that the historical mineral resource estimates do not mean or imply that economic deposits exist on the Property.

Table 1-4. Consolidated historical mineral resources*, SRK Consulting, 27 April 2010 (Cole *et al.*, 2010).

Category	Quantity Tonnes	Grade Ni %	Grade Cu %	Metal Ni lbs 000's	Metal Cu lbs 000's
Open Pit**					
Indicated	590,000	0.99	0.06	12,816	840
Inferred	125,000	0.88	0.06	2,437	157
Underground **					
Indicated	87,000	1.04	0.08	1,997	149
Inferred	46,000	0.91	0.05	923	53
Combined					
Indicated	677,000	1.00	0.06	14,813	989
Inferred	171,000	0.89	0.06	3,360	210

* Mineral resources are reported in relation to optimized pit shells. Mineral resources are not mineral reserves and do not have demonstrated economic viability. All figures are rounded to reflect the relative accuracy of the estimate. All assays have been capped where appropriate.

** Open pit mineral resources are reported at a cut-off of 0.40 percent nickel inside a conceptual pit shell. Underground mineral resources are reported at 0.70 percent nickel and include resource blocks above cut-off outside the conceptual pit shell. Cut-off grades are based on a nickel price of US$8 per pound and a metallurgical recovery of eighty-seven percent, without considering revenues from other metals..

1.5.5 Historical Mineralogical and Metallurgical Studies

In 2011, Rogue Resources contracted the Metallurgical Division of Inspectorate Exploration and Mining Services Ltd. ("Inspectorate") of Richmond, B.C. (A Bureau Veritas Group Company) to conduct a scoping study level of metallurgical tests on the recovery of base and precious metals using flotation methods (Shi and Redfearn, 2011). This work was overseen by Mr. John Starkey of Starkey & Associates Inc.

A total of 127 drill core samples were submitted to Inspectorate and composited into average grade (RA), low-grade (RB), and high-grade (RC) samples. Preliminary and scoping flotation tests were performed on the average grade (RA) composite, with confirmatory tests subsequently performed on each of the low (RB) and high (RC) grade composites.

The scoping study metallurgical testing program produced mixed results across the three composites which will require further testing in order to optimize metallurgy. Nickel recovery for the RA composite in the roughers is reasonable at 81.6%, which can probably be increased with further optimization. However, performance in the cleaner circuit is significantly lower and will require additional testing. Cobalt recovery appears to mirror the recovery trends of the nickel very closely. Whereas, copper recovery appears to be relatively independent of the Ni-Co trends. Nickel recovery for the low-grade composite, RB, is slightly lower than that of the mid-grade composite, RA, which is expected, considering the feed grade is less than half that of RA. High-grade composite, RC, appears to have quite different mineralogical and metallurgical characteristics compared to composites RA and RB. At a significantly higher feed grade (2.5 times RA) and a finer grind, recovery is much lower.

Shi and Redfearn (2011), determined that there were a number of unknowns with respect to the mineralogy, particle sizing, and mineral associations that must be clarified prior to further testing. They recommended a full QEMSCAN mineralogical study be completed to assist the metallurgical testing. This should be performed on all three composites, including the rougher concentrates.

1.6 Geological Setting and Mineralization

The Langmuir Nickel Property lies within the southwestern part of the Abitibi Subprovince of the Archean Superior Province, proximal to the Shaw Dome. The Abitibi Subprovince or "greenstone belt" is the world's largest and best preserved example of an Archean supracrustal sequence. The Abitibi Greenstone Belt ("AGB") is an assemblage of volcanic, sedimentary, and intrusive rocks deformed into a roughly east-trending, 200 km wide belt exposed from the Kapuskasing Structure in Ontario to the Grenville Orogen in Quebec, a distance of 400 kilometres (Ayer *et al.*, 1999).

The Shaw Dome is a major northwest trending anticline centred approximately 20 km southeast of Timmins (Muir, 1979; Green and Naldrett, 1981). Six Ni-Cu-(PGE) deposits have been documented in the Shaw Dome and numerous showings have been identified.

1.6.1 Property Geology

The Langmuir Property is predominantly underlain by the middle and lower formations of the Tisdale Group which consist of linear sequences of mafic volcanic units or ultramafic units. These linear sequences trend east-west in the southern portion of Eldorado and Langmuir Township and then swing north-south along the eastern halves of Langmuir and Carman Townships.

1.6.2 Property Mineralization

There are seven (7) primary target areas, W1 to W7, defined mainly from heliborne VTEM Mag-EM surveys (2005 and 2007). These airborne EM anomalies were interpreted to be the result of sulphide mineralization (Orta, 2005 and 2007).

1.6.3 Geology of the W4 Nickel Deposit

The W4 Nickel Deposit (Langmuir W4 Zone) was interpreted to consist of three sub-parallel nickel zones hosted by komatiitic peridotite flows (Cole *et al.*, 2010). These east-west trending peridotite flows have good spinifex flow tops and associated thin graphitic argillite interflow units. The peridotite flows are typically black, fine-grained, soft, weak to moderately serpentinized and typically have adcumulate to mesocumulate textures. Detailed examinations of the spinifex flow top sequences and flow morphologies indicate the flows have a southward younging direction.

This initial interpretation of three separate sub parallel nickel zones at the base of individual peridotite flows was based on the drill data from the Golden Chalice exploration campaigns, through holes that were drilled obliquely to the dip and strike of the mineralization. EV Nickel, in their 2021, 2022 and 2023 drilling campaigns were able to drill holes that were oriented more perpendicular to the mineralization and these holes helped to better define the geometry of mineralization. The drilling from EV Nickel holes did not intercept three separate sub-parallel nickel zones but rather, defined a continuous but faulted unit. Detailed revision of the downhole locations of the mineralized contacts, and the lithological contacts within the volcanic flows indicated that the previous concept of three flows, could actually be one unit that has been faulted with repeated throws. The mineralized flow is now interpreted to be split by five faults, creating six blocks with a measurable strike-slip displacement.

Immediately south of the peridotite flows in the Langmuir W4 Zone, a pink medium-grained hornblende-rich (5-10%) granodiorite intrusive is present. It is thought that this intrusive may represent an east-west dike. The peridotite flows in the vicinity of this granodiorite are strongly brecciated and often contain graphite. Smaller felsic to intermediate, feldspar porphyry, mafic, and gabbro dikes or sills intrude the peridotite flows locally (Cole *et al.*, 2010).

The mineralization is now considered to be one flow dipping at 70-75 degrees to the north, split by 5 faults and limited at the eastern end by another north-south oriented subvertical fault. The east-west strike extent of the zones has been defined for at least 200 metres. The zones may be open below the granodiorite dike and/or at a vertical depth of 400 metres. The nickel zones have an average true thickness of 8 to 19 metres.

1.6.4 Mineralization in the W4 Nickel Deposit

The sulphide assemblage in the W4 Nickel Deposit consists primarily of pentlandite, millerite, pyrrhotite, and minor pyrite and chalcopyrite within the nickel zones. The pentlandite occurs intergrown with pyrrhotite as irregular grains that are generally relatively coarse-grained.

The region nearest the surface, the principal and discovery zone, consists of a basal lower horizon of stringer/fracture filling sulphides to semi-massive-massive sulphides and a stratigraphically overlying upper disseminated to blebby sulphide horizon. Locally, massive sulphide veinlets occur mainly in the lower region.

1.7 Deposit Types

The W4 Nickel Deposit consists of nickel sulphide minerals (*i.e.*, pentlandite, millerite, pyrrhotite, chalcopyrite) hosted by komatiitic rocks (magnesium-rich and high-temperature volcanic rocks). Sulphide mineralization discovered to date on the Langmuir Nickel Property and at the W4 Nickel Deposit can be characterized as ultramafic extrusive komatiite-hosted Ni-Cu-Co-(PGE).

Two sub-types or styles of this deposit are recognized by Lesher and Keays (2002) with those types being: Type I, Kambalda-style, komatiite-hosted, channelized flow type which is dominated by net-textured and massive sulphides situated at or near the basal ultramafic/footwall contact; and, Type II, Mt. Keith-style, thick olivine adcumulate-hosted, sheet flow type which is dominated by disseminated and bleb sulphides, hosted primarily in a central core of a thick, differentiated, dunite-peridotite ultramafic body.

At the Langmuir Nickel Property and W4 Nickel Deposit, nickel sulphide mineralization identified to date is interpreted as being more closely associated with Type I Kambalda-style.

1.8 Exploration

Other than geophysical surveys, EV Nickel has focused on diamond drilling programs (*see* Section 10) and metallurgical test work (*see* Section 13) within the Langmuir Nickel Property and specifically on and in the area of the W4 Nickel Deposit (Langmuir W4 Zone).

1.8.1 Processing and Analysis of Multiple Geophysical Surveys

EVNi commissioned Condor North Consulting ULC (“Condor”) to process and analyze the airborne, ground and borehole time-domain electromagnetic (TEM) geophysical data in the Langmuir area in April of 2021. The purpose of the data review was to aid in the identification of komatiitic-hosted nickel deposits, which are expected to be characterized by high conductivity and magnetic association.

The result of the processing and analysis was the identification of 21 Target Zones (TZs), seven of which are deemed a high priority for follow-up exploration. Of the remaining TZs, 10 have a low priority and 4 have a moderate priority. The high priority TZs lie near known mineralization or have nearby diamond drilling that has indicated favourable geology.

1.9 Diamond Drilling

To date, EV Nickel has completed 13,295 m of diamond drilling in 68 diamond drill holes on the Langmuir Nickel Property (Table 1-5). A total of 9,168 m in 32 holes were completed at the W4 Nickel Deposit and 4,127 m in 18 holes were completed within the remainder of the Property referred to as reconnaissance drill holes. The drilling programs were completed under the supervision of Philip Vicker (P.Geo.). The information and data from these drill holes was used in the calculation of the current mineral resource estimate (*see* Section 14).

Table 1-5. Summary of all drilling programs completed by EV Nickel on the Langmuir Nickel Property.

Year	Target Area	No. Holes	Length (m)	Logged (m)	Primary Core Samples	Check Samples	Standards	Blanks
2021	W4	10	1,833	1,833	183	0	11	8
2022	W4	13	4,830	4,830	642	0	32	29
2023	W4	9	2,505	2,431	486	0	17	17
	Totals:	**32**	**9,168**	**9,094**	**1,311**	**0**	**60**	**54**
2021	Recon	10	2,360	2,360	599	0	26	25
2022	Recon	8	1,767	1,617	572	0	26	27
2023	Recon	0	0	0	0	0	0	0
	Totals:	**18**	**4,127**	**3,977**	**1,171**	**0**	**52**	**52**
	G-Totals:	**50**	**13,295**	**13,071**	**2,482**	**0**	**112**	**106**

1.10 Sample Preparation, Analyses and Security

This section reviews all known sample preparation, analysis and security as it relates to exploration work and drilling (*i.e.*, 2021, 2022, 2023 diamond drilling campaigns) completed on the Langmuir Nickel Property by EV Nickel Inc. To the extent that it is known, data and information related to historical exploration programs and drilling on the Property is provided in Section 6.

Mr. Philip Vicker, P.Geo., a Qualified Person as defined by NI 43-101, is responsible on-site for the on-going drilling and sampling program, including quality assurance (QA) and quality control (QC), together QA/QC.

It is the Authors' opinion that the procedures, policies and protocols for drilling verification are sufficient and appropriate and that the core sampling, core handling and core assaying methods used are consistent with good exploration and operational practices such that the data is reliable for the purpose of mineral resource estimation. In the opinion of the Authors, the assay data is adequate for the purpose of verifying drill core assays, estimating mineral resources, and for the purposes of the Report.

1.11 Data Verification

The Authors have reviewed the data and information regarding past and current exploration work on the Property, as provided by the Issuer and available in the public domain. The Authors have no reason to doubt the adequacy of current and historical sample preparation, security and analytical procedures for the exploration work completed by the Issuer and by past operator Golden Chalice, and the Authors maintain a high level of confidence in the current and historical data and information.

Having reviewed and verified the database and information provided by the Issuer, it is the Authors' opinion that this data and information is suitable to be used for the purposes of the Report as outlined in Section 2.1.

1.11.1 Internal-External Data Verification

The Authors have reviewed historical and current data and information regarding past and current exploration work on the property. No verification of the data related to metallurgical test work, as discussed in Section 13 of the Report, was completed by the Authors.

The Authors have no reason to doubt the adequacy of the historical sample preparation, security and analytical procedures and have complete confidence in all historical information and data that was reviewed.

1.11.2 Personal Inspection of the Property

Mr. John Siriunas (M.A.Sc., P.Eng.) visited the Project on 15 February 2023 (*see* Section 2.5). During the site visit, diamond drilling procedures were discussed and a review of the on-site logging and sampling facilities for processing the drill core were carried out.

Random verification of several drill site locations was carried out during field visits to the Langmuir Nickel Property (W4 Nickel Deposit) location north of the Forks River. Locations and orientation of drill holes was found to be consistent with those reported in the drill hole database.

1.11.3 Comments on Data Verification

It is the Authors' opinion that the procedures, policies and protocols for drilling verification are sufficient and appropriate and that the core sampling, core handling and core assaying methods used are consistent with good exploration and operational practices such that the data is reliable for the purpose of mineral resource estimation.

In the opinion of the Authors, the assay data is adequate for the purpose of verifying drill core assays, estimating mineral resources, and for a preliminary economic assessment and for the purposes of the Report (see Section 2.1).

1.12 Mineral Processing and Metallurgical Testing

1.12.1 Flotation Test Work

In June 2022, the Issuer submitted two diamond drill holes (EVMET22-01 and EVMET22-02) from the Langmuir W4 Zone which had intersected high-grade nickel mineralization (Company news release dated 9 June 2022). The core was submitted to SGS Canada Inc. (Lakefield, Ontario) for metallurgical analysis (scoping level test program), providing a suitable quantity and quality of mineralized material for their test work (Le and Imeson, 2023).

The metallurgical test program completed by SGS Canada Inc. had the specific goals of characterizing the samples for mineralogy and grindability and the application to existing processing mill flowsheets to determine the flotation characteristics for potential recoveries and concentrate quality. Three composite samples, a master, a low-grade, and a high-grade composite, representative of the W4 mineralization, were generated from drill core collected from holes EVMET22-01 and EVMET22-02.

The following was reported from the test work completed by SGS Canada Inc. (Le and Imeson, 2023):

- Comminution:

- Based on SMC and abrasivity testing, the Lang Master Composite was categorized as “Hard” in JK Tech Database, but “Very Low” in abrasivity.
- Bond ball mill work indices of the three composites were between 24 and 27 kWh/t, which categorized them as “Very Hard” relative to the SGS database.

- Mineralogy:
  - Pentlandite and millerite were the main nickel sulphide minerals species.
  - Serpentine was the main mineral in the composites, representing 83% of the sample. It contained solid-solution nickel which is not recoverable through flotation.
  - F9’s rougher concentrate recovered most of the free and liberated pentlandite as well as the pentlandite associated with silicates. The pentlandite recovered in F9’s rougher scavenger was mostly associated with silicates.
  - The pentlandite in the rougher/scavenger tailings was mostly associated with silicates or in solid-solution in the silicates (serpentine).
- Flotation scoping testing was performed on all three composites but mostly on the master composite sample. The following results summarizes the Lang MC testwork:
  - Rougher nickel recovery from the composites at a primary grind P80 of 104 microns was mostly between 75% to 80%, using a combination of 3477 and PAX collectors.
  - In the best open-circuit test (F5), a cleaner concentrate grade of 20.3% Ni was achieved, at an overall nickel recovery of 51.1% and with regrind particle size of P80 of 20 microns. The use of CMC helped supress gangue and allowed better metallurgy. If a lower concentrate grade of 12% Ni was acceptable, nickel recovery would be approximately 65%. These recoveries are based on open-circuit test results. With recirculation of middling streams in a plant environment, nickel recovery would be higher.
  - A small amount of additional nickel could be recovered by regrinding and scavenging the rougher tailings. Economical analysis is needed to determine whether the additional nickel recovery justifies the additional processing cost.
  - A split flowsheet generating high-grade and low-grade nickel concentrate did not appear to provide noticeable benefits compared to the conventional flotation circuit.
  - Differences in flotation performance between the three composites appeared to be related solely to difference in head grade.
  - Gravity and magnetic separation were tested on the master composite but did not appear to provide any overall benefit.

1.12.2 Bioleaching Test Work

In 2022, EV Nickel initiated a scoping study at the Research and Productivity Council Science & Engineering (“RPC”) of Fredericton, New Brunswick, to investigate the potential of treating nickel ore from the W4 Nickel Deposit. The nickel mineralized material provided to RPC was being investigated by EV Nickel in conjunction with RPC to look at ways of recovering nickel and cobalt as well as utilizing magnesium biproducts for carbon dioxide sequestration (Cheung and Botha, 2022).

An initial assessment was conducted by RPC and reported on in August 2022 (Cheung and Botha, 2022) involving raising indigenous bacteria collected from the Redstone Mill tailings pond and conducting a literature search to identify conceptual process options in moving the project forwards. Two conceptual flowsheets were designed to process the materials and the test program findings and recommendations for the way forward were as follows (August 2022):

- The nickel-mineralized material provided to RPC is amenable to bioleaching under the conditions tested. The material tested contains 0.786% Ni, 0.015% Co, 20.2% Mg and 0.69% total S. Ni, Co, Cu and Mg extractions of 86.0%, 85.2%, 55.5% and 10.6% were achieved within 12 days in a batch bioleach, respectively.
- Acid consumption of the nickel-mineralized material as tested was high in a whole-ore-heap bioleach scenario due to the rich presence of magnesium minerals as well as the low sulphide content in the material.
- A tank bioleach process recovering Ni and Co from flotation concentrate is recommended in moving the project forward. The acid consumption is expected to be considerably lower than that of the heap leach option.
- No magnesium-carbon dioxide capture testing was conducted in the current program. However, it is expected that the extracted Mg can be converted to MgO or $Mg(OH)_2$ which is capable of capturing and mineralizing CO_2. The residual Mg minerals in the bioleach residue or flotation tails could also be used for CO_2 sequestration purposes. Optimization and validation testing will be required to confirm the CO_2 sequestration opportunities and efficiencies.
- EV Nickel is looking to develop a flotation process for producing Ni/Co concentrates. It is recommended that the concentrates produced be tested to confirm the amenability in tank bioleaching. Unit operation requirement and optimization of metals recoveries, as well as process requirement for CO_2 sequestration utilizing the magnesium biproducts should be included in future test program.

1.13 Mineral Resource Estimates

EV Nickel Inc. engaged Caracle Creek International Consulting Inc. to prepare a Mineral Resource Estimate for the W4 Nickel Deposit (MRE) which was publicly announced on 12 June 2023. The Effective Date of the MRE is 12 June 2023.

The MRE was prepared under the direction of Simon Mortimer (Co-Author and QP) with assistance from Luis Huapaya (geologist). The Co-Author developed the geological interpretation and the construction of the lithology model and the mineralized domain models, Mr. Huapaya completed the work on the statistics, geo-statistics and the grade interpolation.

The MRE that is contained in the Report was completed in accordance with NI 43-101 and following the CIM Definition Standards for Mineral resources & Mineral Reserves (CIM, 2018) and CIM Estimation of Mineral Resources & Mineral Reserves Best Practice Guidelines (CIM, 2019).

1.13.1 Mineral Resource Statement

The Mineral Resource Statement of the MRE, using a cut-off of 0.30% Ni for open pit resources and 0.50% Ni underground resources, is provided in Table 1-6. NiEq (%) values are also provided in Table 1-6, used in the pit optimization process and calculated using the elements nickel, cobalt, copper, palladium and platinum (*see* Section 14.12.3).

Table 1-6. Mineral Resource Statement for the W4 Nickel Deposit, Langmuir Nickel Property.

Resource Category	Tonnage	Grade						Contained Metals				
		Ni (%)	Cu (%)	Co (%)	Pt (g/t)	Pd (g/t)	NiEq (%)	Ni (Klbs)	Cu (Klbs)	Co (Mlbs)	Pt (Koz)	Pd (Koz)
Open Pit (0.3% Ni COG)												
Measured	479,487	1.06	0.07	0.02	0.26	0.59	1.10	11,249	778	175	3.98	9.10
Indicated	115,733	0.88	0.06	0.02	0.33	0.75	0.93	2,251	158	43	1.21	2.79
Measured + Indicated	595,220	1.03	0.07	0.02	0.27	0.62	1.07	13,500	937	218	5.20	11.89
Inferred	52,429	0.54	0.03	0.01	0.30	0.60	0.58	626	38	15	0.51	1.02
Under Ground (0.5% Ni COG)												
Measured	7,831	1.58	0.09	0.02	0.16	0.32	1.60	272	15	3	0.04	0.08
Indicated	849,091	0.93	0.07	0.02	0.57	1.37	1.01	17,487	1,347	317	15.68	37.37
Measured + Indicated	856,922	0.94	0.07	0.02	0.57	1.36	1.02	17,759	1,362	320	15.72	37.45
Inferred	506,785	1.02	0.08	0.02	0.53	1.26	1.09	11,438	894	187	8.67	20.52
Total Open Pit and Under Ground												
Measured	487,319	1.07	0.07	0.02	0.26	0.59	1.11	11,521	793	178	4.02	9.18
Indicated	964,824	0.93	0.07	0.02	0.54	1.29	1.00	19,738	1,505	361	16.89	40.15
Measured + Indicated	1,452,142	0.98	0.07	0.02	0.45	1.06	1.04	31,260	2,298	538	20.92	49.33
Inferred	559,214	0.98	0.08	0.02	0.51	1.20	1.05	12,064	932	202	9.18	21.53

Highlights of the current Mineral Resource Estimate on the W4 Nickel Deposit include (*see* also Company news release dated 9 June 2023):

- Measured Resources of 487,319 tonnes at an average grade of 1.11 % Ni, containing 11,521 K lbs of nickel.
- Indicated Resources of 964,824 tonnes at an average grade of 1.00 % Ni, containing 19,738 K lbs of nickel.
- Inferred Resources of 559,214 tonnes at an average grade of 1.05 % Ni, containing 12,064 K lbs of nickel.

Nickel equivalent (NiEq%) used to determine economic cut-off values for open pit optimization, is calculated using metal values for nickel, cobalt, copper, platinum and palladium, and applying recovery factors and prices (*see* Section 14.12.3), and using the following formula:

$$NiEq\ (\%) = Ni\ (\%) + Co\ (\%) * 0.02 + Cu\ (\%) * 0.03 + Pd\ (g/t) * 0.05 + Pt\ (g/t) * 0.01$$

1.14 Interpretation and Conclusions

The objective of the Report was to prepare an independent NI 43-101 Technical Report, inclusive of a current Mineral Resource Estimate on the W4 Nickel Deposit, capturing historical information and data available about the current Property that comprises the Langmuir Nickel Property, and making recommendations for future work.

Based on the Property's favourable location within a prolific Kambalda-style nickel belt, the high quality historical systematic exploration work completed from 2005 to 2014, the availability of all of this historical data and information and that from public (government) sources, the diamond drilling (2021, 2022, 2023) completed by EV Nickel, and the requirement for dedicated and systematic exploration programs which are required to be successful in making discoveries for this particular deposit type, the Property presents excellent potential for the discovery of additional nickel sulphide deposits, and is worthy of further evaluation.

The characteristics of the W4 Nickel Deposit are of sufficient merit to justify the undertaking of preliminary engineering, environmental, and metallurgical studies aimed at completing the characterization of the nickel sulphide mineralization and offering economic guidelines for future exploration strategies, including a Preliminary Economic Assessment (PEA) level study.

In addition, the close proximity of the W4 Nickel Deposit to the nickel processing facility at Northern Sun Mining's Redstone Mill Facility, located approximately 10 km west-northwest of the W4 Nickel Deposit, could favourably impact future economic studies related to the potential mining of the deposit.

1.15 Recommendations

It is the opinion of the Authors that the geological setting and character of the nickel sulphide mineralization delineated to date within the Langmuir Nickel Property and specifically the W4 Nickel Deposit is of sufficient merit to justify additional exploration and development expenditures. A recommended work program, arising through the preparation of the Report and consultation with the Company, is provided below.

The W4 Nickel Deposit is at a stage of exploration where it should be advanced to a Preliminary Economic Assessment ("PEA") study level. It is expected that this work can be accomplished within a time frame of 18 months from initiation, considering geotechnical diamond drilling, environmental studies, and metallurgy, and taking into account all of the studies to date including the current MRE (Table 1-7). The expected cost of the recommended PEA is estimated at C$1,694,000.

Table 1-7. Budget estimate, recommended two-phase exploration program, Langmuir Nickel Property.

ITEM	DESCRIPTION	AMOUNT (C$)
Metallurgical Test Work	Closed cycle flotation	$60,000
	Mineralogical	$20,000
	Bioleach	$500,000
	Bulk sample diamond drilling (350 m)	$100,000
Geotechnical	Drilling (1,000 m)	$250,000
	Analysis and report	$80,000
Environmental	Ground Water study	$30,000
	Waste rock geochem analysis (ABA and Humidity cell testing); Note: drilling combined with geotechnical	$50,000
	Aquatic and Terrestrial wildlife studies	$145,000
	Archeological Studies	$45,000
	Surface water quality	$25,000
Remote Sensing	High Resolution Drone-Mag and LiDAR Survey	$50,000
Engineering		$85,000
Reporting	Preliminary Economic Assessment (PEA)	$100,000
Contingency	10%	$154,000
	Total:	**$1,694,000**

2.0 INTRODUCTION

Caracle Creek International Consulting Inc. ("Caracle") was engaged by Canadian public company EV Nickel Inc. ("EVNi" or "EV Nickel" or the "Issuer"), to prepare an independent National Instrument 43-101 ("NI 43-101") Technical Report and Mineral Resource Estimate (the "Report") for the W4 Nickel Deposit (the "Deposit" or the "Langmuir Nickel Zone") situated on its Langmuir Nickel Property ("Langmuir" or the "Property"), located in the Timmins area, Ontario, Canada (Figure 2-1). The Report has been prepared in accordance with the disclosure and reporting requirements set forth in the Canadian Securities Administrators' National Instrument 43-101, Companion Policy 43-101CP, and Form 43-101F1 (June 30, 2011).

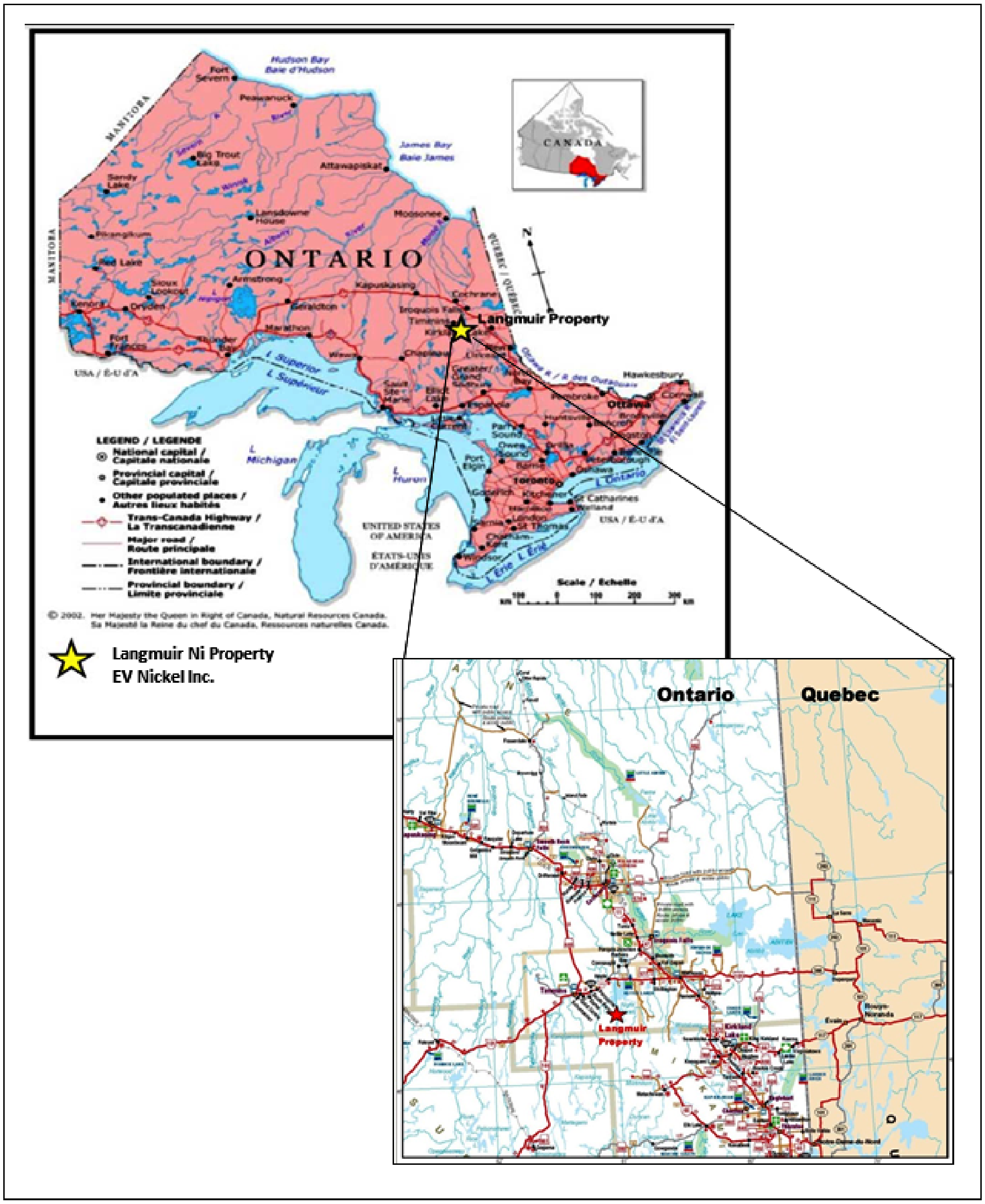

Figure 2-1. Provincial-scale location of the Shaw Dome Project and the Langmuir Nickel Property (yellow star in upper map and red star in lower inset), Timmins area, Ontario, Canada (after Cole *et al.*, 2010).

2.1 Purpose of the Technical Report

The Technical Report and Mineral Resource Estimate have been prepared for EV Nickel Inc., in order to provide a summary of scientific and technical information and data concerning the Property, inclusive of a Mineral Resource Estimate for the W4 Nickel Deposit, in support of the Standards of Disclosure for Mineral Projects according to Canadian National Instrument 43-101.

Specifically, the Report provides an independent review of EVNi's Langmuir Nickel Property located near Timmins, Ontario, verifies the data and information related to historical and current mineral exploration and mineral resources on the Property, and presents a report on data and information available in the public domain with respect to the Property.

The quality of information, conclusions, and recommendations contained herein have been determined using information available at the time of Report preparation and data supplied by outside sources as outlined in Section 2.3 and Section 27.

2.2 Previous Technical Reports

This Report is the current Technical Report on the Langmuir Nickel Property, replacing the previous technical report titled, "Independent NI 43-101 Technical Report on the Langmuir Nickel Property, Timmins Area, Ontario, Canada", issued 5 August 2021 and with an effective date of 25 July 2021.

2.3 Effective Date

The Effective Date of this Report and the Mineral Resource Estimate is 12 June 2023 ("Effective Date").

2.4 Qualifications of Consultants

The Report has been completed by Dr. Scott Jobin-Bevans, Mr. Simon Mortimer, and Mr. John Siriunas (together the "Consultants" or the "Authors"). Dr. Jobin-Bevans ("Principal Author") is the Principal Geoscientist at Caracle Creek International Consulting Inc., Mr. Mortimer ("Co-Author") is a Professional Geologist with Atticus Geoscience S.A.C., and Mr. Siriunas ("Co-Author") is an Associate Independent Consultant with Caracle Creek International Consulting Inc.

Dr. Jobin-Bevans is a Professional Geoscientist (PGO #0183, P.Geo.) with experience in geology, mineral exploration, mineral resource and reserve estimation and classification, land tenure management, metallurgical testing, mineral processing, capital and operating cost estimation, and mineral economics. Mr. Mortimer is a Professional Geologist (FAIG #7795) with experience in geology, mineral exploration, geological modelling, mineral resource and reserve estimation and classification, and database management. Mr. Siriunas is a Professional Engineer (APEO #42706010) with experience in geology, mineral exploration, mine site geology, mineral resource and reserve estimations, preliminary economic assessments, pre-feasibility studies, due diligence, and valuation and evaluation reporting.

Dr. Scott Jobin-Bevans, Mr. Simon Mortimer, and Mr. John Siriunas, by virtue of their education, experience, and professional association, are each considered to be a Qualified Person ("QP"), as that term is defined in NI 43-101 and specifically sections 1.5 and 5.1 of NI 43-101CP (Companion Policy). A responsibility matrix is provided in Table 2-1, summarizing each of the Report sections for which the Authors are responsible.

Table 2-1. Responsibility matrix for the preparation of the Report sections by the Authors.

Author	Complete Section Responsibility	Sub-Section Responsibility
Scott Jobin-Bevans	3.0 to 27.0	1.1, 1.1.1 to 1.1.4, 1.3 to 1.9, 1.11, 1.12, 2.0 to 2.4, 2.6 to 2.7
Simon Mortimer	3.0, 12.0, 14.0, 25.0, 26.0	1.1.4, 1.11, 1.13 to 1.15, 2.4 to 2.6
John Siriunas	3.0, 11.0, 12.0, 25.0, 26.0	1.1.4, 1.2, 1.10, 1.11, 1.13 to 1.15, 2.4 to 2.6

The Consultants employed in the preparation of the Report have no beneficial interest in EVNi and are not insiders, associates, or affiliates of EVNi. The results of the Report are not dependent upon any prior agreements concerning the conclusions to be reached, nor are there any undisclosed understandings concerning any future business dealings between EVNi and the Consultants. The Consultants are being paid a fee for their work in accordance with normal professional consulting practices.

2.5 Personal Inspection (Site Visit)

Co-Author John Siriunas (M.A.Sc., P.Eng.), visited the Project on 15 February 2023, accompanied by Mr. Philip Vicker, P.Geo., EV Nickel's Regional Exploration Geologist. Travel from the City of Timmins, Ontario, via South Porcupine to the site of the former McWaters Mine takes approximately 30 minutes on well-maintained gravel roads (see Section 5.1). From that point to the drilling locations visited (a distance of about 1.5 km) requires use of a 4x4 vehicle.

The site visit was made to observe the general property conditions and access, and to verify the locations of some of the drill hole collars. The planned drilling on the north side of the Forks River targeting the W4 Nickel Deposit was ongoing at the time of the field visit; the main part of the Property lies to the south of the Forks River and so requires a different access scenario. Mr. Siriunas did not visit that part of the Property.

During the visit, diamond drilling procedures were discussed and a review of the on-site logging and sampling facilities for processing the drill core were carried out. The secure storage and logging facility at the Redstone Mine/Mill site in Timmins rented by the Company was visited; this location is approximately 9 km west-northwest of the Project location (though it is a distance of 13 km by road).

The Property does not have extensive bedrock outcroppings and no exposure in and around the W4 Nickel Deposit. Any rock samples taken in the field would not be indicative of the mineralization being targeted and encountered in the drilling, and as such no field samples were collected. Mr. Siriunas was satisfied with the high quality of the procedures that had been undertaken by the Company.

A selection of photographs taken during the Personal Inspection are provided in Figure 2-2. There is currently no exploration work or drilling being performed on the Property.

Figure 2-2. Selection of photos taking during the Personal Inspection of the Property by Co-Author John Siriunas. (A) Diamond drilling at the site of EV23-03; (B) Core and core barrel ready for the extraction of drill core from the most recent "run" in hole EV23-03; (C) Casing at holes EV23-01 and EV-23-02 prior to capping and flagging; (D) Drill core laid out for logging and marked for sampling; (E) Drill core with massive sulphide sections in the vicinity of 425 m, EV23-02; (F) Core cutting saw and samples prepped for transport to ALS laboratory.

2.6 Sources of Information and Data

The information, conclusions, opinions, and estimates contained herein are based on:

- Information available to the Authors at the time of preparation of the Report;
- Assumptions, conditions, and qualifications as set forth in the Report; and
- Data, reports, and other information supplied by EVNi and other third party sources.

For the purposes of the Report, the Authors have relied on ownership information provided by EVNi.

The Principal Author has not researched legal Property title or mineral rights for the Langmuir Nickel Property and expresses no opinion as to the ownership status of the Property.

The mining lands system for Ontario was accessed online through the Mining Lands Administration System (“MLAS”) online platform. Digital data and historical work reports (assessment reports) were accessed online through the Ontario Ministry of Mines (“MINES” or “MOM”), which is under the umbrella of the Ministry of Northern Development and Mines Natural Resources and Forests (“MNDMNRF”), previously referred to as the MNDM and MENDM.

Standard professional review procedures were used by the Authors in the preparation of the Report. The Authors consulted and utilized various sources of information and data, including historical files provided by the Issuer and government publications. In addition, Co-Author and QP John Siriunas (P.Eng.) completed a site visit to confirm features within the Property and area, including infrastructure, mineralization, and historical data and information as presented.

Company personnel and associates were actively consulted before and during the Report preparation and during the Property site visit, including Paul Davis (VP Exploration, EV Nickel, P.Geo.) and Philip Vicker (Regional Exploration Geologist, EV Nickel, P.Geo.).

The Report is based on, but not limited to, internal Company emails and memoranda, historical reports, maps, data, and publicly available information and data (*e.g.*, government and internet), as cited throughout the Report and listed in Section 27.

Additional information was reviewed and acquired through public online sources including EV Nickel’s website, through SEDAR (System for Electronic Document Analysis and Retrieval), and various corporate websites.

Except for the purposes legislated under Canadian provincial securities laws, any use of the Report by any third party is at that party’s sole risk.

2.7 Commonly Used Terms and Units of Measure

All units in the Report are based on the International System of Units ("SI Units"), except for units that are industry standards, such as troy ounces for the mass of precious metals. Table 2-2 provides a list of some of the terms and abbreviations used in the Report.

Unless specified otherwise, the currency used is Canadian Dollars (CAD$ or CAD) and coordinates are given in North American Datum of 1983 (“NAD83”), Universal Transverse Mercator (“UTM”) Zone 17 North (EPSG:26917 – North America between 84°W and 78°W).

Table 2-2. Commonly used units of measure, abbreviations, initialisms and technical terms in the Report.

Units of Measure/ Abbreviations		Initialisms/ Abbreviations		Initialisms/ Abbreviations	
above mean sea level	AMSL	AA	Atomic Absorption	NP	Neutralizing Potential
annum (year)	a	AP	Acidifying Potential	NSR	Net Smelter Return Royalty
billion years ago	Ga	AGB	Abitibi Greenstone Belt	OES	Optical Emission Spectroscopy
centimetre	cm	AR	Aqua Regia	OGS	Ontario Geological Survey
degree	°	PGO	Professional Geoscientists of Ontario	PAG	Potentially Acid Generating
degrees Celsius	°C	ATV	All-Terrain Vehicle	PEA	Preliminary Economic Assessment
dollar (Canadian)	C$	BCMC	Boundary Claim Mining Claim	PEO	Professional Engineers Ontario
foot	ft	CRM	Certified Reference Material	P.Geo.	Professional Geoscientist or Professional Geologist
gram	g	CSF	Compound Sheet Flows	QA/QC	Quality Assurance / Quality Control
grams per tonne	g/t	DCSF	Dunitic Compound Sheet Flows	QP	Qualified Person
greater than	>	DDH	Diamond Drill Hole	RPEEE	Reasonable Prospects for Eventual Economic Extraction
hectares	ha	DFO	Department of Fisheries and Oceans Canada	SCMC	Single Cell Mining Claim
hour	hr	EDA	Exploratory Data Analysis	SEM	Scanning Electron Microscope/Scanning Electron Microscopy
inch	in	EDS	Energy Dispersive Spectroscopy	SG	Specific Gravity
kilo (thousand)	K	EM	Electromagnetic	SI	International System of Units
kilogram	kg	EOH	End of Hole	SRO	Surface Rights Only
kilometre	km	EPSG	European Petroleum Survey Group	TDF	Thin Differentiated Flows
less than	<	FA	Fire Assay	TEM	Transient Electromagnetic
litre	L	ICP	Inductively Coupled Plasma	UTM	Universal Transverse Mercator
megawatt	Mw	LLD	Lower Limit of Detection	**Elements**	
metre	m	LLLS	Layered Lava Lakes or Sills	cobalt	Co
millimetre	mm	LUP	Land Use Permit	copper	Cu
million	M	MAG	Magnetics or Magnetometer	gold	Au
million years ago	Ma	MENDM	Ministry of Energy Northern Development and Mines	iridium	Ir
nanotesla	nT	MINES	Ministry of Mines (Ontario)	lead	Pb
not analyzed	na	ML/ARD	Metal Leaching/Acid Rock Drainage	magnesium	Mg
ounce	oz	MLO	Mining Licences of Occupation	nickel	Ni
parts per million	ppm	MMI	Mobile Metal Ions	osmium	Os
parts per billion	ppb	MOM	Ministry of Mines (Ontario)	platinum group elements	PGE
percent	%	MNDM	Ministry of Northern Development and Mines	silver	Ag
pound(s)	lb	MNDMNRF	Ministry of Northern Development and Mines Natural Resources and Forests	sulphur	S
short ton (2,000 lb)	st	MNR	Ministry of Natural Resources	zinc	Zn
specific gravity	SG	MRO	Mining Rights Only		
square kilometre	km2	MS	Mass Spectrometry		
square metre	m2	MSR	Mining and Surface Rights		
three-dimensional	3D	NAD83	North American Datum 83		
tonne (1,000 kg) (metric tonne)	t	NI 43-101	National Instrument 43-101		

3.0 RELIANCE ON OTHER EXPERTS

The Report has been prepared by Caracle Creek International Consulting Inc. for the Issuer, EV Nickel Inc. The Authors have not relied on any other report, opinion or statement of another expert who is not a qualified person, or on information provided by the Issuer concerning legal, political, environmental or tax matters relevant to the Report.

4.0 PROPERTY DESCRIPTION AND LOCATION

The Langmuir Nickel Property, within National Topographic System ("NTS") map sheets 42 A/06 and 42 A/07, is situated in portions of Blackstock, Langmuir, Fallon, Douglas, Eldorado, Carman, and Thomas townships, Porcupine Mining Division, northeastern Ontario, Canada. The centre of the Property is approximately 30 km southeast of the City of Timmins (*see* Figure 2-1; Figure 4-1).

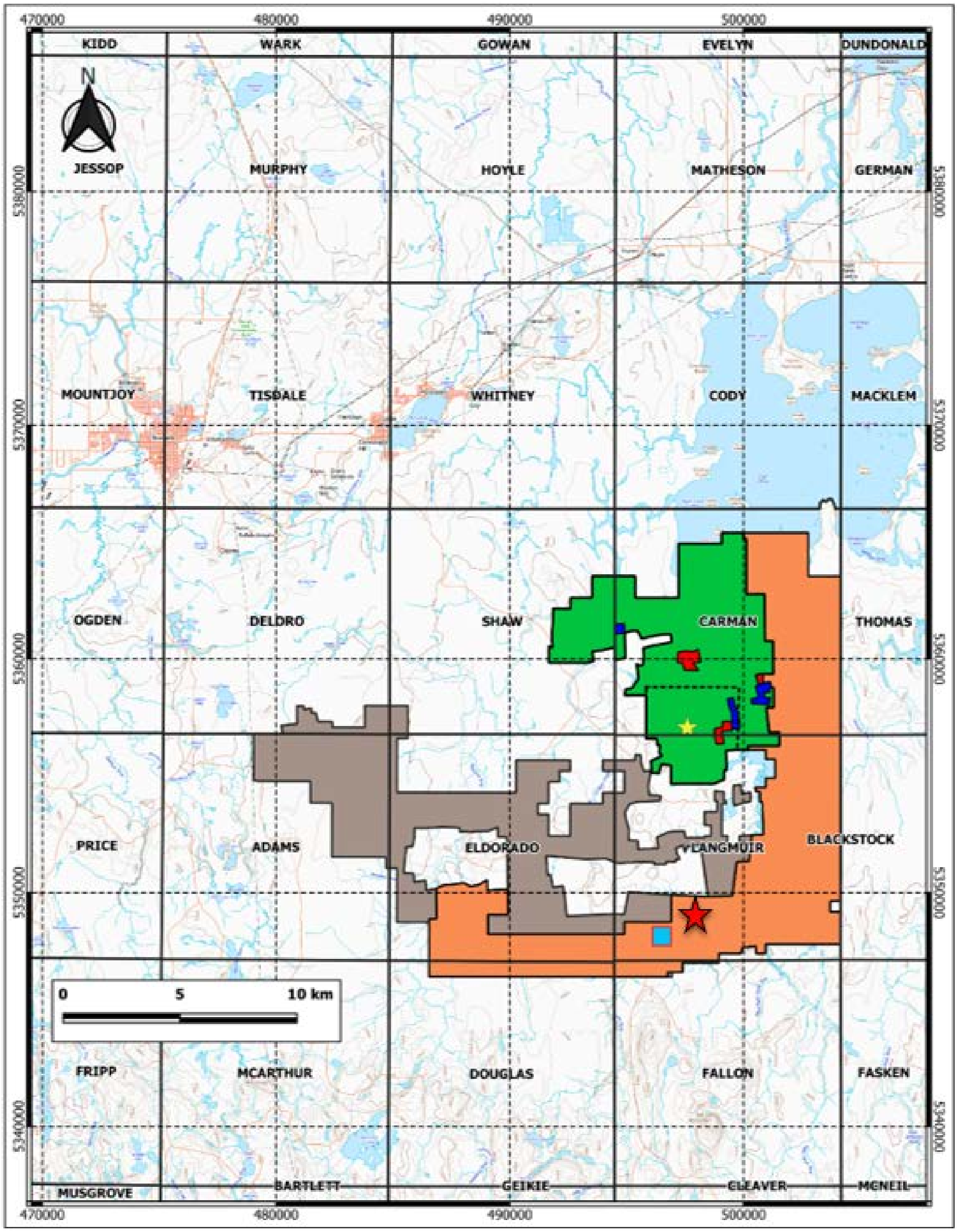

Figure 4-1. Township-scale location of the Langmuir Nickel Property (orange) and the W4 Nickel Deposit (red star), the CarLang Nickel Property (green) and the CarLang A Zone Nickel Deposit (yellow star), and the Adams-Eldorado Nickel Property (brown), near Timmins, Ontario, Canada. Blue areas on the CarLang Nickel Property are Surface Rights Only and red areas are Mining and Surface Rights, both held by third parties. The light blue square within the Langmuir Nickel Property is held by a third party.

The Property, covering the Night Hawk River and southern parts of Night Hawk Lake in Carman and Langmuir townships, is centred at approximately 502000mE, 5350000mN NAD83 UTM Z17N (48 18’N Latitude, 80 58’W Longitude). The Property is accessed from the City of Timmins/South Porcupine by a series of all-weather gravel roads (*see* Section 5.1).

The Langmuir Nickel Property is one of three contiguous properties that make up the Shaw Dome Project, the other two being the CarLang Nickel and the Adams-Eldorado Nickel properties (*see* Figure 4-1).

All known nickel sulphide mineralization that is the focus of the Report is located within the boundary of the mining lands that comprise the Langmuir Nickel Property. The W4 Nickel Deposit, the focus of the mineral resource estimate, is located within unpatented mining claim 299485 and Legacy Mining Claim 4203498.

4.1 Mineral Disposition

The Langmuir Nickel Property comprises 156 unpatented mining claims consisting of 28 Multi-Cell Mining Claims (“MCMC”s), 22 Single Cell Mining Claims (“SCMC”s), and 106 Boundary Cell Mining Claims (“BCMCs”), covering approximately 10,496 ha, and owned 100% by EVNi; the mining claims are contiguous. A summary of the mining claims is provided in Table 4-1 and the distribution of the mining claims is shown in Figure 4-2.

The Property has not been legally surveyed. In September 2022, EVNI filed an application to convert mining claims that overly the W4 Nickel Deposit into mining leases (Company news release dated 6 September 2022). Communication by the Company with the MINES, indicates that the process is nearing completion and that it is anticipated that the Company will be invited to complete a legal survey, which will be the final stage for the mining leases. According to the Company, this should be completed by the end of 2023.

Table 4-1. Summary of mining claims that comprise the Langmuir Nickel Property.

Legacy Claim	Township/ Area	Tenure	Type	Anniversary	Annual Work Required	Total Work Applied	Total Available Reserve	Cells	*Area (ha)
4203567	LANGMUIR BLACKSTOCK	103893	BCMC	08-Feb-2025	$200	$1,200	$0	1	21.42
4203568	LANGMUIR	106744	SCMC	08-Feb-2025	$400	$2,400	$0	1	21.42
4201279 4203563	LANGMUIR FALLON	109292	SCMC	01-Nov-2025	$400	$2,400	$0	1	21.42
3018143	LANGMUIR	110230	BCMC	18-Jul-2025	$200	$1,200	$0	1	21.42
3015576	LANGMUIR	110455	BCMC	18-Jul-2026	$200	$1,400	$0	1	21.42
4203564	LANGMUIR FALLON	111353	BCMC	08-Feb-2025	$200	$1,200	$0	1	21.42
4220201 4220205	CARMAN	115598	BCMC	22-May-2025	$200	$1,200	$0	1	21.42
4203567	LANGMUIR BLACKSTOCK	120525	BCMC	08-Feb-2025	$200	$1,200	$0	1	21.42
4201277 4201278	LANGMUIR	120972	BCMC	01-Nov-2026	$200	$1,400	$0	1	21.42
3018143	LANGMUIR	122224	BCMC	18-Jul-2025	$200	$1,200	$0	1	21.42
4201278	LANGMUIR	122970	BCMC	01-Nov-2026	$200	$1,400	$0	1	21.42
4201278	LANGMUIR	122971	BCMC	01-Nov-2026	$200	$1,400	$0	1	21.42
4220206	CARMAN	125667	BCMC	22-May-2025	$200	$1,200	$0	1	21.42
4201271	ELDORADO	126674	BCMC	15-Feb-2025	$200	$1,200	$0	1	21.42

Legacy Claim	Township/ Area	Tenure	Type	Anniversary	Annual Work Required	Total Work Applied	Total Available Reserve	Cells	*Area (ha)
4220198	CARMAN	132299	BCMC	12-Jun-2025	$200	$1,200	$0	1	21.42
4201281	LANGMUIR	133039	BCMC	01-Nov-2025	$200	$1,200	$0	1	21.42
4220201	CARMAN	133643	BCMC	22-May-2025	$200	$1,200	$0	1	21.42
4220201	CARMAN	133644	BCMC	22-May-2025	$200	$1,200	$0	1	21.42
4201278	LANGMUIR	133721	BCMC	01-Nov-2026	$200	$1,400	$0	1	21.42
4220197	LANGMUIR	134044	BCMC	22-May-2026	$200	$1,400	$0	1	21.42
3018143	LANGMUIR	135020	BCMC	18-Jul-2025	$200	$1,200	$0	1	21.42
4201267	ELDORADO	135066	BCMC	15-Feb-2025	$200	$1,200	$0	1	21.42
4201275	ELDORADO	135742	BCMC	01-Nov-2025	$200	$1,200	$0	1	21.42
3015576	LANGMUIR	135745	BCMC	18-Jul-2025	$200	$1,200	$0	1	21.42
4201271	ELDORADO	138627	BCMC	15-Feb-2025	$200	$1,200	$0	1	21.42
4220215	THOMAS CARMAN	141448	SCMC	22-May-2025	$400	$1,600	$0	1	21.42
4220206 4220207	CARMAN	142686	BCMC	22-May-2025	$200	$1,200	$0	1	21.42
4202816 4203568	LANGMUIR BLACKSTOCK	146777	BCMC	06-Jun-2025	$200	$1,200	$0	1	21.42
4202816	LANGMUIR BLACKSTOCK	146778	BCMC	06-Jun-2025	$200	$1,200	$0	1	21.42
3013180 3013181	LANGMUIR	149016	BCMC	18-Jul-2025	$200	$1,200	$0	1	21.42
4220208 4220209	LANGMUIR CARMAN	149581	BCMC	22-May-2025	$200	$1,200	$0	1	21.42
4203498	LANGMUIR	149608	BCMC	18-Jul-2027	$200	$1,400	$290,748	1	21.42
4203564	LANGMUIR	149823	SCMC	08-Feb-2025	$400	$2,400	$0	1	21.42
4201279	FALLON	157965	BCMC	01-Nov-2025	$200	$1,200	$0	1	21.42
4201270 4201271	ELDORADO	171189	BCMC	15-Feb-2025	$200	$1,200	$13,095	1	21.42
4220201	CARMAN	178857	BCMC	22-May-2025	$200	$1,200	$0	1	21.42
4201278 4201279	LANGMUIR	178942	BCMC	01-Nov-2026	$200	$1,400	$0	1	21.42
4220207	CARMAN	180281	BCMC	22-May-2025	$200	$1,200	$0	1	21.42
4220208	CARMAN	185546	BCMC	22-May-2025	$200	$1,200	$0	1	21.42
3018143 4202748	LANGMUIR	186360	BCMC	18-Jul-2026	$200	$1,200	$0	1	21.42
4220204	CARMAN	188351	SCMC	22-May-2025	$400	$1,600	$0	1	21.42
4201269 4201270	ELDORADO	197132	BCMC	15-Feb-2025	$200	$1,200	$0	1	21.42
4201278 4203498 4203563	LANGMUIR	197711	BCMC	18-Jul-2027	$200	$1,400	$105,494	1	21.42
4202815 4203569	LANGMUIR	199799	BCMC	06-Jun-2025	$200	$1,200	$0	1	21.42
4220214	THOMAS CARMAN	202098	SCMC	22-May-2025	$400	$1,600	$0	1	21.42
4220201	CARMAN	205780	BCMC	22-May-2025	$200	$1,200	$0	1	21.42

Legacy Claim	Township/ Area	Tenure	Type	Anniversary	Annual Work Required	Total Work Applied	Total Available Reserve	Cells	*Area (ha)
3015576 3018143	LANGMUIR	207164	BCMC	18-Jul-2025	$200	$1,200	$0	1	21.42
4220205 4220206	CARMAN	207557	BCMC	22-May-2025	$200	$1,200	$0	1	21.42
4201277	LANGMUIR	214371	BCMC	01-Nov-2026	$200	$1,400	$0	1	21.42
4203498	LANGMUIR	214435	BCMC	18-Jul-2027	$200	$1,400	$110,629	1	21.42
4220215	THOMAS CARMAN	219679	SCMC	22-May-2025	$400	$1,600	$0	1	21.42
4201279	LANGMUIR	222171	BCMC	01-Nov-2026	$200	$1,400	$0	1	21.42
4220215	THOMAS CARMAN	226958	SCMC	22-May-2025	$400	$1,600	$0	1	21.42
4220206	CARMAN	227667	BCMC	22-May-2025	$200	$1,200	$0	1	21.42
4220206	CARMAN	227668	BCMC	22-May-2025	$200	$1,200	$0	1	21.42
4220214	THOMAS CARMAN	228986	SCMC	22-May-2025	$400	$1,600	$0	1	21.42
4220197	LANGMUIR	234847	BCMC	22-May-2026	$200	$1,400	$0	1	21.42
4220209	LANGMUIR	235549	BCMC	22-May-2026	$200	$1,400	$0	1	21.42
4201274	ELDORADO	236384	BCMC	15-Feb-2025	$200	$1,200	$0	1	21.42
4201271	ELDORADO	240049	BCMC	15-Feb-2025	$200	$1,200	$0	1	21.42
4202744 4203564	LANGMUIR	241369	BCMC	06-Jun-2025	$200	$1,200	$0	1	21.42
4202816	LANGMUIR	242757	BCMC	06-Jun-2025	$200	$1,200	$0	1	21.42
4220198	CARMAN	244209	BCMC	12-Jun-2025	$200	$1,200	$0	1	21.42
4201277	LANGMUIR	244245	BCMC	01-Nov-2026	$200	$1,400	$0	1	21.42
4201276	ELDORADO	244320	BCMC	01-Nov-2025	$200	$1,200	$0	1	21.42
4203498 4203563	LANGMUIR	244331	SCMC	18-Jul-2027	$400	$2,800	$103,040	1	21.42
4201281	LANGMUIR	244957	BCMC	01-Nov-2025	$200	$1,200	$0	1	21.42
4220201	CARMAN	245539	BCMC	22-May-2025	$200	$1,200	$0	1	21.42
4201278	LANGMUIR	245617	BCMC	01-Nov-2026	$200	$1,400	$0	1	21.42
4201281 4202744	LANGMUIR	248169	BCMC	01-Nov-2025	$200	$1,200	$0	1	21.42
4201279 4203563	LANGMUIR FALLON	252364	BCMC	01-Nov-2025	$200	$1,200	$0	1	21.42
4202748 4203498	LANGMUIR	252374	SCMC	18-Jul-2027	$400	$2,800	$120,536	1	21.42
4201281 4202814 4202815 4203569	LANGMUIR	252999	BCMC	01-Nov-2025	$200	$1,200	$0	1	21.42
3018143 4202748 4207038	LANGMUIR	253690	BCMC	18-Jul-2026	$200	$1,200	$0	1	21.42
4201267	ELDORADO	255018	BCMC	15-Feb-2025	$200	$1,200	$0	1	21.42
4201275	ELDORADO	255679	BCMC	01-Nov-2025	$200	$1,200	$0	1	21.42

Legacy Claim	Township/ Area	Tenure	Type	Anniversary	Annual Work Required	Total Work Applied	Total Available Reserve	Cells	*Area (ha)
4220198 4220207 4220208	CARMAN	263756	BCMC	12-Jun-2025	$200	$1,200	$0	1	21.42
4201276 4201277	LANGMUIR ELDORADO	263791	BCMC	01-Nov-2025	$200	$1,200	$0	1	21.42
4220197	LANGMUIR	264141	BCMC	22-May-2026	$200	$1,400	$0	1	21.42
4220208	CARMAN	264338	BCMC	22-May-2025	$200	$1,200	$0	1	21.42
4201275 4201276	ELDORADO	264364	BCMC	01-Nov-2025	$200	$1,200	$0	1	21.42
4203498	LANGMUIR	264368	SCMC	18-Jul-2027	$200	$1,400	$510,483	1	21.42
4220210	LANGMUIR	264670	SCMC	22-May-2025	$200	$1,200	$0	1	21.42
4201269	ELDORADO	265744	BCMC	15-Feb-2025	$200	$1,200	$0	1	21.42
3015576	LANGMUIR	267159	BCMC	18-Jul-2025	$200	$1,200	$0	1	21.42
4201277	LANGMUIR	280773	BCMC	01-Nov-2026	$200	$1,400	$0	1	21.42
4201278 4203563	LANGMUIR	280858	BCMC	01-Nov-2026	$200	$1,400	$0	1	21.42
4220201 4220204	CARMAN	282787	SCMC	22-May-2025	$400	$1,600	$0	1	21.42
3013180	LANGMUIR	285460	BCMC	18-Jul-2025	$200	$1,200	$0	1	21.42
4201271	ELDORADO	285948	SCMC	15-Feb-2025	$400	$1,600	$0	1	21.42
4202748	LANGMUIR	290189	BCMC	18-Jul-2026	$200	$1,200	$0	1	21.42
4201274 4201275	ELDORADO	292226	BCMC	01-Nov-2025	$200	$1,200	$0	1	21.42
4201274	ELDORADO	292227	BCMC	15-Feb-2025	$200	$1,200	$0	1	21.42
4202744	LANGMUIR	295906	BCMC	06-Jun-2025	$200	$1,200	$0	1	21.42
4202815 4202816 4203569	LANGMUIR	297320	BCMC	06-Jun-2025	$200	$1,200	$0	1	21.42
4202748 4203498	LANGMUIR	299464	SCMC	18-Jul-2027	$200	$1,400	$195,555	1	21.42
4201279 4203563	LANGMUIR	299470	BCMC	01-Nov-2026	$200	$1,400	$0	1	21.42
4203498	LANGMUIR	299485	SCMC	18-Jul-2027	$400	$2,800	$1,678,500	1	21.42
4201270	ELDORADO	300335	BCMC	15-Feb-2025	$200	$1,200	$0	1	21.42
4220208 4220209	LANGMUIR CARMAN	300894	BCMC	22-May-2025	$200	$1,200	$0	1	21.42
4203563	LANGMUIR	300910	BCMC	08-Feb-2026	$200	$1,400	$0	1	21.42
4203568	LANGMUIR BLACKSTOCK	301506	BCMC	08-Feb-2025	$200	$1,200	$0	1	21.42
4220201	CARMAN	301666	BCMC	22-May-2025	$200	$1,200	$0	1	21.42
4202748	LANGMUIR	302251	BCMC	18-Jul-2027	$200	$1,400	$0	1	21.42
4201267	ELDORADO	303588	BCMC	15-Feb-2025	$200	$1,200	$0	1	21.42
4220205	CARMAN	304060	BCMC	22-May-2025	$200	$1,200	$0	1	21.42
4201267	ELDORADO	310430	BCMC	15-Feb-2025	$200	$1,200	$0	1	21.42

Legacy Claim	Township/ Area	Tenure	Type	Anniversary	Annual Work Required	Total Work Applied	Total Available Reserve	Cells	*Area (ha)
3013181 3013182 3015576	LANGMUIR	318319	BCMC	18-Jul-2025	$200	$1,200	$0	1	21.42
4220208	CARMAN	318362	BCMC	22-May-2025	$200	$1,200	$0	1	21.42
4203563 4203564	LANGMUIR FALLON	318889	BCMC	08-Feb-2025	$200	$1,200	$0	1	21.42
4201281	LANGMUIR	319001	BCMC	01-Nov-2025	$200	$1,200	$0	1	21.42
4201269 4201274	ELDORADO	320238	BCMC	15-Feb-2025	$200	$1,200	$0	1	21.42
4220214 4220215	THOMAS CARMAN	320665	SCMC	22-May-2025	$400	$1,600	$0	1	21.42
4220197 4220209	LANGMUIR	320823	BCMC	22-May-2026	$200	$1,400	$0	1	21.42
3013180 4220210	LANGMUIR	320848	BCMC	18-Jul-2025	$200	$1,200	$0	1	21.42
4203564	LANGMUIR FALLON	321292	BCMC	08-Feb-2025	$200	$1,200	$0	1	21.42
4201271	ELDORADO	323202	SCMC	15-Feb-2025	$400	$2,400	$0	1	21.42
4220206	CARMAN	323521	BCMC	22-May-2025	$200	$1,200	$0	1	21.42
4201279	FALLON	325934	BCMC	01-Nov-2025	$200	$1,200	$0	1	21.42
4201279	LANGMUIR	331465	BCMC	01-Nov-2026	$200	$1,400	$0	1	21.42
4220197	LANGMUIR	333474	SCMC	22-May-2026	$200	$1,400	$0	1	21.42
4202816 4203568	LANGMUIR	337561	SCMC	06-Jun-2025	$400	$2,400	$0	1	21.42
4202816	LANGMUIR	337562	BCMC	06-Jun-2025	$200	$1,200	$0	1	21.42
4220198 4220207	CARMAN	339161	BCMC	12-Jun-2025	$200	$1,200	$0	1	21.42
4201276	ELDORADO	339761	BCMC	01-Nov-2025	$200	$1,200	$0	1	21.42
4202748 4203498 4203563 4203564	LANGMUIR	339767	SCMC	18-Jul-2027	$400	$2,800	$153,394	1	21.42
4202815 4203569	LANGMUIR	341771	BCMC	06-Jun-2025	$200	$1,200	$0	1	21.42
4201275	ELDORADO	342543	BCMC	01-Nov-2025	$200	$1,200	$0	1	21.42
	CARMAN	535758	MCMC	22-May-2025	$1,200	$7,200	$0	3	64.26
	CARMAN	535759	MCMC	22-May-2026	$8,000	$56,000	$0	20	428.4
	CARMAN	535760	MCMC	22-May-2025	$2,400	$14,400	$0	6	128.5
	CARMAN	535761	MCMC	22-May-2025	$3,200	$19,200	$0	8	171.4
	CARMAN	535762	MCMC	22-May-2025	$7,200	$43,200	$0	18	385.6
	THOMAS CARMAN	535763	MCMC	22-May-2024	$7,200	$36,000	$0	18	385.6
	THOMAS CARMAN	535764	MCMC	22-May-2024	$10,000	$50,000	$0	25	535.5
	CARMAN	535765	MCMC	22-May-2025	$2,000	$12,000	$0	5	107.1

Legacy Claim	Township/ Area	Tenure	Type	Anniversary	Annual Work Required	Total Work Applied	Total Available Reserve	Cells	*Area (ha)
	THOMAS LANGMUIR CARMAN BLACKSTOCK	535766	MCMC	22-May-2024	$10,000	$50,000	$0	25	535.5
	LANGMUIR	535767	MCMC	22-May-2025	$1,800	$10,800	$0	6	128.5
	LANGMUIR	535768	MCMC	22-May-2025	$9,800	$58,800	$0	25	535.5
	LANGMUIR BLACKSTOCK	535769	MCMC	18-Jul-2024	$4,000	$21,200	$0	10	214.2
	LANGMUIR	535770	MCMC	08-Feb-2025	$10,000	$60,000	$0	25	535.5
	LANGMUIR BLACKSTOCK	535771	MCMC	18-Jul-2024	$4,800	$24,000	$0	12	257
	LANGMUIR	535772	MCMC	08-Feb-2025	$800	$4,800	$0	2	42.84
	LANGMUIR	535773	MCMC	18-Jul-2025	$800	$4,800	$0	2	42.84
	LANGMUIR	535774	MCMC	08-Feb-2025	$8,000	$48,000	$0	20	428.4
	LANGMUIR	535775	MCMC	08-Feb-2025	$800	$4,800	$0	2	42.84
	LANGMUIR	535776	MCMC	03-May-2025	$4,000	$25,600	$0	10	214.2
	LANGMUIR	535779	MCMC	08-Feb-2025	$6,400	$43,200	$297,030	16	342.7
	LANGMUIR	535780	MCMC	08-Feb-2026	$2,400	$18,000	$0	6	128.5
	LANGMUIR FALLON	535783	MCMC	01-Nov-2025	$1,600	$9,600	$0	4	85.68
	LANGMUIR	535785	MCMC	01-Nov-2026	$800	$5,600	$0	2	42.84
	LANGMUIR FALLON ELDORADO DOUGLAS	535786	MCMC	01-Nov-2025	$8,400	$50,400	$0	21	449.8
	ELDORADO DOUGLAS	535787	MCMC	15-Feb-2026	$9,600	$67,200	$0	24	514.1
	ELDORADO DOUGLAS	535788	MCMC	15-Feb-2026	$10,000	$70,000	$0	25	535.5
	ELDORADO	535789	MCMC	15-Feb-2025	$5,600	$33,600	$46,774	16	342.7
	ELDORADO	535791	MCMC	15-Feb-2025	$1,600	$9,600	$263,026	6	128.5
				Totals:	**$171,600**	**$1,033,000**	**$3,888,304**	**490**	**10,496**

*1 claim unit = 21.42 ha (approximately)

4.2 Claim Status and Holding Costs

All mining claims that comprise the Property have an Active status. As of the Effective Date of the Report, all mining claims are valid with expiry dates ranging from 22 May 2024 to 18 July 2027.

Annual assessment work requirements total $171,600 and historically $1,033,000 has been applied to the Property. There is $3,888,304 in work assessment reserve which is enough to keep the mining claims current for at least 22 years.

The unpatented mining claims were independently verified by the Principal Author, online through the MLAS system of the MENDM.

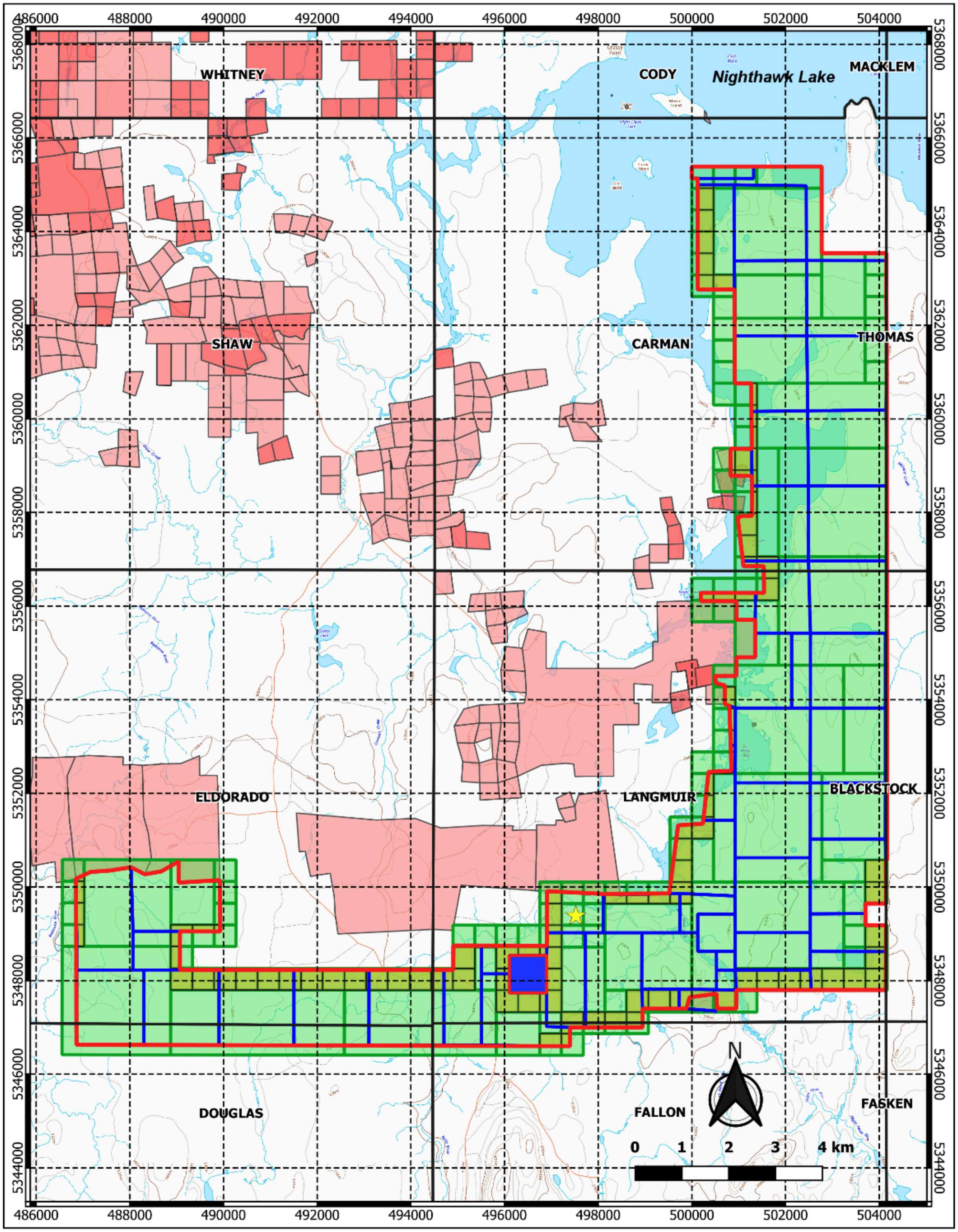

Figure 4-2. Mining claims (property outline in red) that comprise the Langmuir Nickel Property with the approximate location of the W4 Nickel Deposit (yellow star). Patents = 2 shades of pink; Legacy Claims = blue outlines; BCMC = Dark Green; SCMC = Light Green; Dark Blue = third party mining claims.

4.3 Mining Lands Tenure System in Ontario

Traditional field-based claim staking (physical staking) in Ontario came to an end on 8 January 2018 and on 10 April 2018 the Ontario Government converted all existing claims (referred to as Legacy Mining Claims) into one or more "cell" claims or "boundary" claims as part of their new provincial grid system. The provincial grid is latitude- and longitude-based and is made up of more than 5.2 million cells ranging in size from 17.7 ha in the north to 24 ha in the south. Dispositions such as leases, patents and licenses of occupation were not affected by the new system. Mining claims are registered and administrated through the Ontario Mining Lands Administration System (MLAS), which is the online electronic system established by the Ontario Government for this purpose.

Mining claims can only be obtained by an entity (person or company referred to as a "prospector") that is a registered MLAS User, has completed the Mining Act Awareness Program, and holds a valid Prospector's License granted by the MENDM. A licensed prospector is permitted to register open lands for exploration on the MLAS system onto provincial Crown and private lands that are open for registration. Once the mining claim has been registered, the prospector is permitted to conduct exploratory and assessment work on the subject lands. To maintain the mining claim and keep it properly staked, the prospector must adhere to relevant staking regulations and conduct all prescribed work thereon. The prescribed work is currently set at $400 per annum per single cell mining claim and $200 per annum per boundary cell mining claim. The prescribed work must be completed or payments in lieu of work can be made to maintain the claim. No minerals may be extracted from lands that are subject to a mining claim – the prospector must possess either a mining lease or a freehold interest to mine the land, subject to all provisions of the Ontario Mining Act.

A mining claim can be transferred, charged or mortgaged by the prospector without obtaining any consents. Notice of the change of owner of the mining claim or charge thereof should be recorded in the mining registry maintained by the MENDM.

4.3.1 Mining Lease

If a prospector wants to extract minerals, the prospector may apply to the MINES for a mining lease. A mining lease, which is usually granted for a term of 21 years, grants an exclusive right to the lessee to enter upon and search for, and extract, minerals from the land, subject to the prospector obtaining other required permits and adhering to applicable regulations.

Pursuant to the provisions of the Ontario Mining Act (the "Act"), the holder of a mining claim is entitled to a lease if it has complied with the provisions of the Act in respect of those lands. An application for a mining lease may be submitted to the MINES at any time after the first prescribed unit of work in respect of the mining claim is performed and approved. The application for a mining lease must specify whether it requests a lease of mining and surface rights or mining rights only and requires the payment of fees.

A mining lease can be renewed by the lessee upon submission of an application to the MINES within 90 days before the expiry date of the lease, provided that the lessee provides the documentation and satisfies the criteria set forth in the Act in respect of a lease renewal.

A mining lease cannot be transferred or mortgaged by the lessee without the prior written consent of the MINES. The consent process generally takes between two and six weeks and requires the lessee to submit various documentations and pay a fee.

4.3.2 Freehold Mining Lands

A prospector interested in removing minerals from the ground may, instead of obtaining a mining lease, make an application to the Ontario Ministry of Natural Resources (“MNR”) to acquire the freehold interest in the subject lands. If the application is approved, the freehold interest is conveyed to the applicant by way of the issuance of a mining patent. A mining patent can include surface and mining rights or mining rights only.

The issuance of mining patents is much less common today than in the past, and most prospectors will obtain a mining lease in order to extract minerals. If a prospector is issued a mining patent, the mining patent vests in the patentee all of the provincial Crown’s title to the subject lands and to all mines and minerals relating to such lands, unless something to the contrary is stated in the patent.

As the holder of a mining patent enjoys the freehold interest in the lands that are the subject of such patent, no consents are required for the patentee to transfer or mortgage those lands.

4.3.3 Licence of Occupation

Prior to 1964, Mining Licences of Occupation (“MLO”) were issued, in perpetuity, by the MINES to permit the mining of minerals under the beds of bodies of water. MLOs were associated with portions of mining claims overlying adjacent land. As an MLO is held separate and apart from the related mining claim, it must be transferred separately from the transfer of the related mining claim. The transfer of an MLO requires the prior written consent of the MINES. As an MLO is a licence, it does not create an interest in the land.

4.3.4 Land Use Permit

Prospectors may also apply for and obtain a Land Use Permit (“LUP”) from the MNR. An LUP is considered to be the weakest form of mining tenure. It is issued for a period of 10 years or less and is generally used where there is no intention to erect extensive or valuable improvements on the subject lands. LUPs are often obtained when the land is to be used for the purposes of an exploration camp. When an LUP is issued, the MNR retains future options for the subject lands and controls its use. LUPs are personal to the holder and cannot be transferred or used as security.

4.4 Mining Law - Province of Ontario

In the Province of Ontario, The Mining Act (the “Act”) is the provincial legislation that governs and regulates prospecting, mineral exploration, mine development and rehabilitation. The purpose of the Act is to encourage prospecting, online mining claim registration and exploration for the development of mineral resources, in a manner consistent with the recognition and affirmation of existing Aboriginal and treaty rights in Section 35 of the Constitution Act, 1982, including the duty to consult, and to minimize the impact of these activities on public health and safety and the environment.

4.4.1 Required Plans and Permits

There are two types of applications that must be considered prior to starting an exploration programs. An Exploration Plan is a document provided to the MINES by an Early Exploration Proponent indicating the location and dates for prescribed early exploration activities. An Exploration Permit is an instrument which allows an Early Exploration Proponent to carry out prescribed early exploration activities at specific times and in specific locations. An Exploration Plan or Exploration Permit must be submitted prior to undertaking any of the prescribed work listed by the Ministry but neither of these permits are necessary on Crown Patents (patented lands).

Exploration plans, exploration permits and closure plans obtained prior to the conversion are not affected by the conversion of the mining claims or the MLAS registration system. A plan or permit will continue to apply only to the area to which it is applied.

4.4.1.1 Exploration Plans

Exploration Plans are used to inform Aboriginal Communities, Government and Surface Rights Owners and other stakeholders about these activities. In order to undertake certain prescribed exploration activities, an Exploration Plan application must be submitted, and any surface rights owners must be notified. Aboriginal communities potentially affected by the Exploration Plan activities will be notified by the MINES and have an opportunity to provide feedback before the proposed activities can be carried out.

Early Exploration Proponents who wish to undertake prescribed exploration activities on claims, leases or licenses of occupation must submit an Exploration Plan. The early exploration activities that require an Exploration Plan are as follows:

- Line cutting that is a width of 1.5 m or less.
- Geophysical surveys on the ground requiring the use of a generator.
- Mechanized stripping a total surface area of less than 100 square metres within a 200 m radius.
- Excavation of bedrock that removes one cubic metre and up to three cubic metres of material within a 200 m radius.
- Use of a drill that weighs less than 150 kilograms.

Exploration Plan applications should be submitted directly to the MINES at least 35 days prior to the expected commencement of activities. Submission of an Exploration Plan is mandatory.

4.4.1.2 Exploration Permits

Exploration Permits include terms and conditions that may be used to mitigate potential impacts identified through the consultation process. Some prescribed early exploration activities will require an Exploration Permit. Those activities will only be allowed to take place once the permit has been approved by the MINES.

Surface rights owners must be notified when applying for an Exploration Permit. Aboriginal communities potentially affected by the Exploration Permit activities will be consulted by the MINES and have an opportunity to provide comments and feedback before a decision is made on the Exploration Permit. Permit proposals will be posted for comment on the Ontario Ministry of the Environment Environmental Registry for 30 days.

Early Exploration Proponents who wish to undertake prescribed exploration activities on claims, leases or licenses of occupation should submit an Exploration Permit application. The early exploration activities that require an Exploration Permit are as follows:

- Line cutting that is a width greater than 1.5 metres.
- Mechanized stripping of a total surface area of greater than 100 square metres within a 200-m radius (and below advanced exploration thresholds).
- Excavation of bedrock that removes more than three cubic metres of material within a 200 m radius.
- Use of a drill that weighs more than 150 kilograms.

Exploration Permit applications should be submitted directly to the MINES at least 55 days prior to the expected commencement of activities. Submission of an Exploration Permit is mandatory.

4.5 Surface Rights and Legal Access

The surface rights associated with the Property are owned by the Government of Ontario (Crown Land) and access to the Property is unrestricted. Boundary Cell Mining Claims (BCMC), meaning that the claim is a partial cell and that the cell is shared with another claim holder. If, at any time, the other claim holder was to abandon or forfeit their portion of any of the BCMC, it would be converted to a SCMC and the balance of the map cell would become part of the Property.

4.6 Current Permits and Work Status

On 2 June 2021, the Company was granted an Exploration Permit, PR-21-000125, to conduct geophysical surveys (requiring generator), diamond drilling (mechanized drilling), ground geophysical surveys without a generator, trails, airborne geophysical survey, and land sample (<1 cubic metre). The Exploration Permit is valid for a period of three years and covers 22 unpatented mining claims: 110230, 122224, 149608, 186360, 197711, 214435, 244331, 252374, 253690, 264368, 280858, 290189, 299464, 299485, 302251, 339767, 535770, 535773, 535774, 535776, 535779, and 535780.

The Company has received four additional 3-year Exploration Permits to support its diamond drilling activities within the Langmuir Nickel Property, including: PR-21-000220 on 14 September 2021 (covering 8 unpatented mining claims: 126674, 138627, 171189, 240049, 285948, 323202, 535789, 535791); PR-22-00042 on 28 April 2022 (covering 6 unpatented mining claims: 149608, 214435, 252374, 264368, 299464, 299485); PR-22-000108 on 18 May 2022 (covering 3 unpatented mining claims: 128596, 242002, 284927); and PR-22-000346 on 31 January 2023 (covering 10 unpatented mining claims: 149608, 179483, 186924, 214435, 245666, 253739, 290223, 302295, 341088, 341089).

The current exploration work program by the Issuer began in June 2021 and this exploration work, including diamond drilling, is ongoing.

The Principal Author is not aware of any other permits or authorizations required to complete the recommended exploration program (*see* Section 26), however some other regulatory permits and notable requirements for early exploration activities outside of the MINES could apply in future. For example, permits would be required from the Ministry of Natural Resources and Forestry ("MNRF") for road construction, cutting timber, fire permits (burning), and water crossing should they be required. Projects in close proximity to water may require provisions to protect fish habitats under the jurisdiction of the Department of Fisheries and Oceans Canada ("DFO").

4.7 Community Consultation

The Company will maintain an open dialogue with all stakeholders associated with the Property, including private landowners, government officials and representatives of the First Nations and Metis Nation of Ontario Identified by the MINES during the permitting process.

4.8 Environmental Liabilities and Studies

At this early stage of the Property's development there are no requirements for environmental studies and the Company will implement best practices in terms of preserving and minimizing its impact on the environment.

Previous owners of the Property conducted various components of early stage environmental baseline studies (*see* Section 6.9).

In July 2022, EVNi announced the start of a surface water baseline monitoring study in the area of the W4 Nickel Deposit (Company news release dated 26 July 2023). EVNi recently completed this seasonal surface water sampling program with environmental work on the surface waters continuing through consulting group Blue Heron Environmental. No other environmental work has been completed by EVNi to date.

The Authors are unable to comment on any remediation which may have been undertaken by previous companies. The Principal Author is not aware of any environmental liabilities associated with the Property.

4.9 Royalties and Obligations

EVNi presently owns 100% of the mining claims that comprise the Property. However, some of the mining claims are subject to a 2% net smelter return ("NSR") royalty.

All claims forming the Langmuir Property were staked by contractors for Golden Chalice with the exception of Legacy Mining Claims 3017517 and 3017518 (15 claim units totalling 243 hectares) which were optioned from Mr. David Healey (45%), Mr. Todd Keast (45%), and Kirnova Corp. (10%) on 13 July 2004 ("Healey Option"). On 14 October 2004, Golden Chalice exercised the underlying option on the two claims after paying a total of C$5,000 in option payments and issuing 100,000 fully paid ordinary shares to the three vendors.

There is an area of interest clause within the Healey Option, which states that any claims, acquired after the effective date of the option, that are within a five kilometre radius of the boundaries of the two optioned mining claims are also subject to the same 2% NSR. Legacy Mining Claim 4203498, within which the W4 Nickel Deposit is located, lies within the 5 km area of interest and is thus subject to a 2% NSR. A half percent (0.5%) of the NSR which can be purchased from the Healey Option vendors at any time for C$500,000, thereby reducing the outstanding NSR to 1.5%. A complete list of the 35 Legacy Mining Claims that are subject to the 5 km area of interest is provided in Table 4-2.

The Principal Author is unaware of any other royalties or obligations associated with the Property.

Table 4-2. Legacy Mining Claims that are subject to a 2% NSR as per the 2004 Healey Option.

Legacy Claim No.	Date Recorded (dd/mm/yyyy)	Legacy Claim No.	Date Recorded (dd/mm/yyyy)
3013180	18/07/2005	4202815	06/06/2005
3013181	18/07/2005	4202816	06/06/2005
3013182	18/07/2005	4203498	18/07/2005
3013183	18/07/2005	4203563	08/02/2005
3013184	18/07/2005	4203564	08/02/2005
3013185	18/07/2005	4203567	08/02/2005
3015576	18/07/2005	4203568	08/02/2005
3018143	18/07/2005	4203569	08/02/2005
4201276	01/11/2005	4203570	08/02/2005
4201277	01/11/2005	4203571	08/02/2005
4201278	01/11/2005	4207038	18/07/2005
4201279	01/11/2005	4220210	22/05/2007

Legacy Claim No.	Date Recorded (dd/mm/yyyy)	Legacy Claim No.	Date Recorded (dd/mm/yyyy)
4201281	01/11/2005	4278675	06/09/2016
4201289	01/11/2005	4278676	06/09/2016
4201290	01/11/2005	4280621	13/12/2016
4202744	06/06/2005	4280637	13/12/2016
4202748	18/07/2005	4280638	13/12/2016
4202814	06/06/2005		

4.10 Other Significant Factors and Risks

The Company will maintain an open dialogue with all stakeholders associated with the Property, including private landowners, government officials and representatives of the First Nations and Metis Nation of Ontario Identified by the MENDM:

- Matachewan First Nation, Wabun Tribal Council.
- Mattagami First Nation, Wabun Tribal Council.
- Taykwa Tagamou First Nation, Mushkegowuk Tribal Council.
- Wahgoshig First Nation.
- Métis Nation of Ontario, Timmins Métis Council.
- Métis Nation of Ontario, Northern Lights Métis Council.
- Métis Nation of Ontario - Temiskaming Métis Council.

As of the Effective Date of the Report, the Principal Author is not aware of any significant factors that may affect access, title, or the right or ability to perform the proposed work program on the Property.

5.0 ACCESSIBILITY, CLIMATE, LOCAL RESOURCES, INFRASTRUCTURE AND PHYSIOGRAPHY

5.1 Accessibility

The Property is located within the boundaries of the city of Timmins, Ontario. It is accessed by motor vehicle south from the village of South Porcupine via a gravel road known as Stringers Road. This road cuts through the central western portion of the Property. Approximately 29 km southeast of Timmins on Stringers Road, a drill trail (ATV/snowmobile accessible) branches off northeastward. Approximately three km along this trail, the W4 Nickel Deposit location is reached.

5.2 Climate and Operating Season

The climate in the Property area is warm and generally dry during the summer months from May through to September and cold and snowy from November to March. Temperature extremes range from summer highs of +30 Celsius to winter lows of -30 Celsius. Average winter temperatures are in the range of -10 Celsius to -20 Celsius and average summer temperatures are in the range of 10 Celsius to 20 Celsius. Annual precipitation is approximately 83 centimetres (32.6 inches) with 60 centimetres of rain and 310 centimetres of snow annually. Average winter mean daily snow depths in the region are about 60 to 65 centimetres.

Exploration work such as drilling and geophysical surveys can be completed year-round, with some surface work (*i.e.*, geological mapping, trenching and surface sampling) limited by snow cover during the winter months.

5.3 Local Resources and Infrastructure

The full range of equipment, supplies and services required for any mining development is available in Timmins (2021 census: 41,145). The general Timmins area also possesses a skilled mining work force from which personnel could be sourced for any new mine development on the Property.

There would appear to be ample room on or about the Property to build a mine and mill should this eventuality arise. Likewise, any number of locations would appear to offer potential to construct environmentally sound tailings disposal area(s). Regional power lines extend south of Timmins in close proximity to the Property.

A nickel processing capability is currently present at Northern Sun Mining’s Redstone Mill Facility, located south of Timmins, about 10 km west-northwest of the W4 Nickel Deposit. The Redstone nickel concentrator plant, designed to process up to 2,000 tonnes per day of high MgO Ni-Cu-PGE mineralization, was commissioned in July 2007.

The plant was on care and maintenance from November 2008 until June 2009, at which time nickel prices rebounded and the mill continued to process nickel ore from the Redstone and McWatters mines. The Redstone Mill is currently processing gold ore from Gowest Gold Ltd.’s Bradshaw Gold Mine, located about 30 km northeast of Timmins (Gowest Gold news release dated 9 December 2020).

This facility is very close to the W4 Nickel Deposit and the haulage distance would be approximately 13 kilometres. This facility might be available to custom mill any potential nickel ore from the Property, thereby obviating the need to build a mill.

5.4 Physiography

The topography of the Langmuir Property is comprised of flat to gently rolling relief with little outcrop exposure. Elevation ranges from 280 to 330 metres above mean sea level ("AMSL"). The Property lies entirely within the Night Hawk Lake sub-watershed.

The W4 Nickel Deposit is located in an area that is generally low-lying with a few local rock outcrops and ranges in elevation from 290 to 300 m AMSL. It is relatively flat with poor drainage. The deposit location site naturally drains to the north into the Forks River. The Forks River drains north-easterly into the Night Hawk River which flows north-easterly into Night Hawk Lake. Night Hawk Lake in turn drains to the Frederick House River. The Frederick House River drains to the Abitibi River (north of Cochrane) then to Moose River, which ultimately discharges into James Bay.

5.4.1 Water Availability

Abundant water resources are present in the lakes, rivers, creeks, and beaver ponds throughout the Property area.

5.4.2 Flora and Fauna

Vegetation is a boreal forest combination of black spruce, jack pine, alders, white birch, and cedar in lowland areas and poplar, white birch and jack pine on slightly higher ground. Wildlife found in the area of the W4 Langmuir nickel deposit is typical of other poorly drained northern boreal forest areas. The majority of the several species present are small mammals and songbirds that are common and widely distributed. Moose populations in the area are low to moderate. Furbearers in the vicinity include beaver, marten, mink, muskrat, fox, lynx and black bear. Other animal types include the snowshoe hare, fisher and wolf.

6.0 HISTORY

Langmuir Township area has received much exploration interest over the past 100 years with more recent initiatives focused on nickel exploration as the area is within a highly prospective komatiitic belt known for the formation of magmatic nickel sulphide mineralization. The 1970's discovery of such nickel deposits as the Langmuir No. 1, Langmuir No. 2, Redstone and McWatters, fuelled and sustained nickel exploration activity in the region. In 2007, additional nickel deposit discoveries were made such as Northern Sun Mining Corp.'s Hart deposit and Golden Chalice Resources Inc.'s Langmuir W4 Zone (W4 Nickel Deposit). With the exception of the W4 Nickel Deposit (Langmuir W4 Zone), none of the aforementioned deposits or mines occur within the boundaries of the Property.

Historical results from exploration work on or proximal to the Property have not been verified by the Principal Author or a Qualified Person associated with the Company and as such are not necessarily indicative of the results to be found on the Property.

6.1 Prior Ownership and Ownership Changes

EVNi purchased its original Shaw Dome Project property, the Langmuir Nickel Property, from Rogue Resources Inc. ("Rogue" or "Rogue Resources") in early 2021 (Company news release dated 4 March 2021). Golden Chalice Resources Inc. ("Golden Chalice"), previous operators on the Langmuir Nickel Property, changed its name to Rogue Resources in October 2010.

6.2 Government of Ontario Publications

Government of Ontario published reports and data that cover the area of the Property include a 1967 mapping program covering Langmuir and Blackstock townships by the Ontario Department of Mines (Pyke, 1970a), a 1988 airborne electromagnetic EM and magnetic survey over the Timmins Area, which included Langmuir Township by the Ontario Geological Survey ("OGS"), geological mapping of Carman and Langmuir townships in 2004 (Houlé and Guilmette, 2005), a 2007 Bartlett Dome MEGATEM II survey which encompassed the area of the W4 Nickel Deposit, and geological compilation of the Bartlett and Halliday Domes in 2019 (Préfontaine *et al.*, 2019) which covers part of the Property in Eldorado Township.

6.3 Historical Exploration Work

Industry-related exploration work within the area of the Property (*i.e.*, Langmuir Township) has taken place since 1964 and continued to 2015, with the most recent work completed by Golden Chalice/Rogue Resources Inc. (Table 6-1).

Table 6-1. Summary of historical exploration work conducted on the Property, 1964-2015.

Year	Company	Exploration Activity
1964-65	Min-Ore Mines Limited	Ground magnetic and electromagnetic survey
1965	G.E. Cooper	Diamond drilling (1 hole, 154 m)
1970	Yellowknife Base Metals Limited	Diamond drilling (3 holes, 803 m)
1980-81	Utah Mines Ltd.	Ground magnetic survey; geological survey; diamond drilling (2 holes, 147 m)
1987	Canadian Nickel Company	Airborne electromagnetic survey
2005	Golden Chalice Resources	Ground magnetic and HLEM surveys; diamond drilling (4 holes, 528 m); Heliborne VTEM-Mag survey (687 line-km)

Year	Company	Exploration Activity
2006	Golden Chalice Resources	Ground magnetometer surveys (8.15 line-km); Mag/VLF-EM (6.0 line-km)
2007	Golden Chalice Resources	Diamond drilling (8 holes, 2,374 m); diamond drilling (37 holes, 16,262 m); MMI orientation geochemical soil survey; MMI geochemical soil survey (West/East grids); heliborne VTEM-Mag survey (2,601 line-km)
2008	Golden Chalice Resources	Diamond drilling (20 holes, 6,938 m); diamond drilling (13 holes, 6,120 m); MMI geochemical soil survey
2009	Golden Chalice Resources	Diamond drilling (11 holes, 3,939 m); down-hole TEM geophysical survey (8 drill holes); drill hole core characterization
2010	Golden Chalice Resources	Diamond drilling (5 holes totalling 1,645 m); Phase 1 Baseline Environmental Studies initiated; Mineral Resource Estimate by SRK Consulting Canada; Mineralogical study
2011	Rogue Iron Ore Corp. (previously Golden Chalice)	Diamond drilling (13 holes, 2,282 m) - 6 HQ (642 m) for metallurgical tests, 7 NQ (1,640 m); Metallurgical testwork (scoping level)
2012	Rogue Resources	Metallurgical testwork review (Starkey)
2014	Rogue Resources	Compilation and re-interpretation of 2005 and 2007 Heliborne VTEM-Mag surveys; Phase 2 Baseline Environmental Studies proposed to begin
2015	Rogue Resources	Mineralogical study

6.4 Historical Geophysics

6.4.1 Horizontal Loop Electromagnetic Survey (2005)

In March 2005, Golden Chalice Resources Inc. commenced exploration on the property with a ground magnetometer and horizontal loop electromagnetic ("HLEM") survey, contracted to Exploration Services Reg. (Chartre, 2005). The surveys were carried out on a cut grid with a 1.1 km long east-west baseline and 100 m spaced cross lines that extend 400 m north and south of the baseline. The HLEM survey covered 9.6 line-km and the magnetometer survey 10.7 line-kilometres.

The intensity of the magnetic readings increase from north to south and from west to east. Most of the readings over the surveyed area are in the range of 1 000 to 3 000 gammas indicating the presence of an ultramafic body. The 1000 gamma contour line defines a very irregular contact in the northern part of the grid. The readings varying between 3000 gammas to 6 000 gammas are randomly distributed and do not convey the presence of structural or lithological bedding, however, there is a certain symmetry to the magnetic high profile along most of the length of the outlined conductor (Chartre, 2005).

The HLEM survey outlined a good conductor in the central part of the grid which appears to continue eastwards beyond the surveyed area. The main conductor identified is coincident with a definite magnetic anomaly. The EM anomaly was interpreted to be caused by a sulfide body containing pyrrhotite (Chartre, 2005).

6.4.2 Heliborne VTEM-Magnetic Survey (2005)

In 2005, a 75 m flight line spacing VTEM airborne survey, totalling 687 line-km (47.9 square km), was flown by Geotech Limited over the southeastern part of the property (Figure 6-1) (Orta, 2005). Processing of the EM data identified 18 separate airborne EM anomaly clusters which were interpreted as potential sulphide targets (*see* Figure 7-5). The clusters were defined by two or more flight line EM anomalies and are largely covered by overburden or swamp.

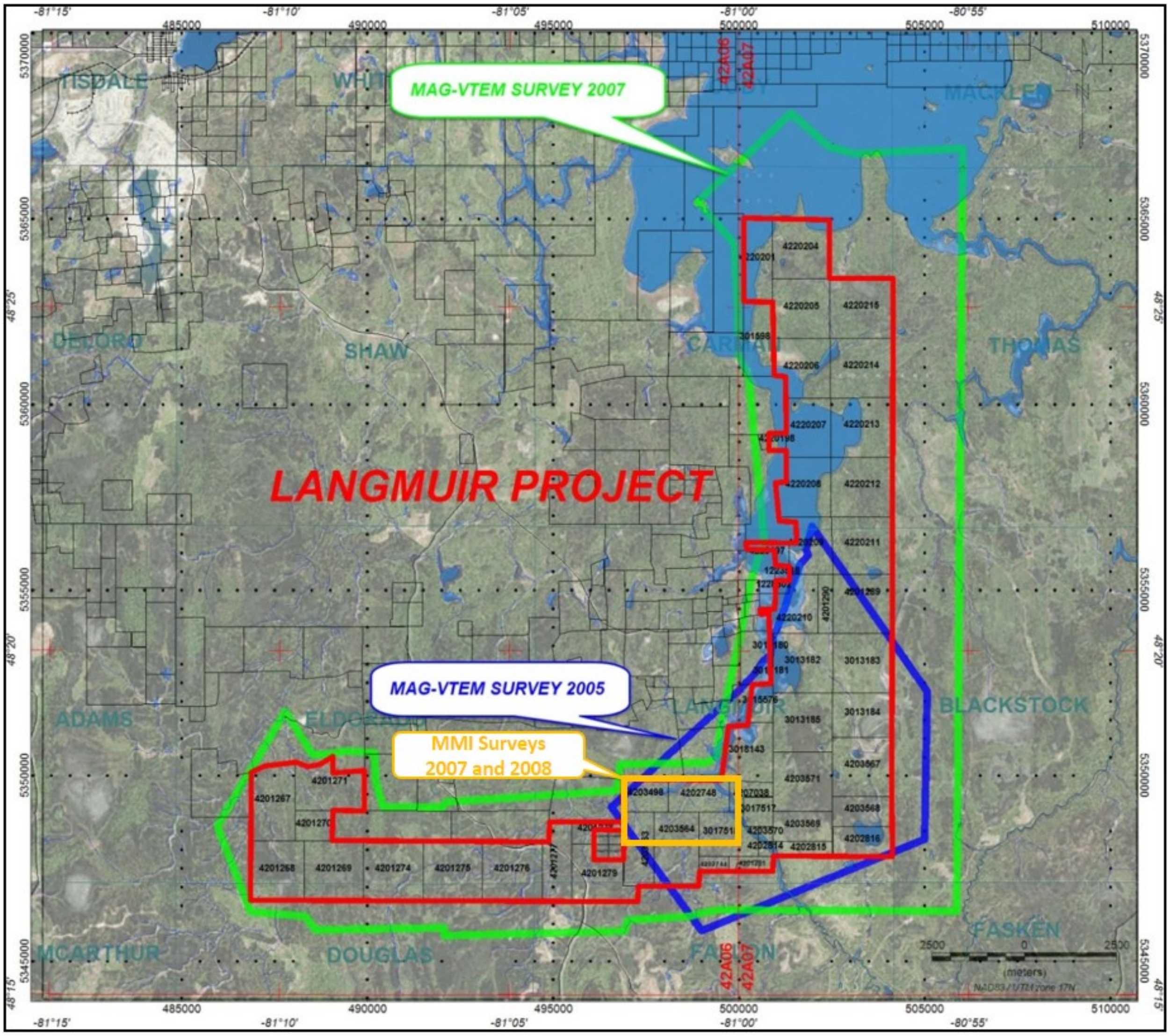

Figure 6-1. Location of the 2005 and 2007 GeoTech heliborne VTEM and magnetometer surveys (Simard, 2014) ; 2007 and 2008 Mobile Metal Ions ("MMI") Soil Survey sampling area (Orta, 2005).

6.4.3 Ground Magnetic Surveys (2006)

In October and November 2006, Larder Geophysics Ltd. completed ground magnetometer surveys over five airborne magnetic targets, as well as VLF-EM surveys over two of the five targets (Ploeger, 2006). A total of 8.15 line-km of magnetometer and 6.0 line-km of Mag/VLF-EM survey was read, totalling 326 magnetometer stations and 240 simultaneous Mag/VLF-EM stations. A total of five main Mag/VLF-EM anomalies were identified (Ploeger, 2006).

6.4.4 Heliborne VTEM-Magnetic Survey (2007)

In 2007, a 75 m flight line spacing VTEM airborne survey, totalling 2,601 line-km (175.5 square km), was flown by Geotech Limited over the entire property (*see* Figure 6-1) (Orta, 2007). Processing of the EM data identified several EM anomalies, interpreted as potential sulphide targets (*see* Figure 7-5). Deliverables included a survey report electromagnetic and magnetic survey maps, gridded data in Geosoft GRD format, maps in Geosoft MAP format, Google Earth flight path file, and all raw survey data in digital format.

6.4.5 Borehole TEM Surveys (2009)

From February to May 2009, Quantec Geoscience Ltd. completed borehole transient electromagnetic ("TEM") surveys on eight (8) drill holes within the Langmuir property (Coulson, 2009). The objective of the borehole TEM surveys was to determine the extent of sulphide mineralization intersected in drill holes and the potential for other conductive mineralization within up to 50 m radius of the drill holes. A total of 2,596 m of borehole were surveyed and survey coordinates are in NAD83 Zone 17N (Table 6-2).

Table 6-2. Details for the 8 drill holes surveyed by TEM in 2009 (Coulson, 2009).

Hole #	Collar – UTM Nad83 (Local)	Az/Dip	Start (m)	End (m)	Total (m)
GCL09-01	499100E, 5349185N	325°/-70°	60	383	323
GCL09-03	499563E, 5348153N	325°/-55°	10	400	390
GCL09-04	499522E,5348216N	360°/-45°	10	240	230
GCL09-05	498847E,5349348N	360°/-70°	20	390	370
GCL09-07	499030E,5349230N	360°/-53°	60	338	278
GCL09-09	498845E,5348990N	360°/-50°	30	245	215
GCL09-10	499010E,5349250N	360°/-55°	40	370	330
GCL09-11	497971E,5349428N	360°/-65°	30	495	465

Each drill hole was located within a 200 x 200 m loop an in-hole readings were taken at 5 and 20 metres (Coulson, 2009). As no report with respect to an interpretation of the results is available, the Principal Author has provided some comments with respect to the results of the borehole TEM surveys (Table 6-3).

Table 6-3. Summary of results from 2009 Quantec Geoscience borehole TEM surveys (Caracle ,2021).

Drill Hole	Comments
GCL09-01	in-hole response in early time transitioning to an off-hole in late time; elevated amplitudes in late time suggest good conductance; intersection in core around 325 m
GCL09-03	mostly off-hole response at 180 m and may have intersected edge of mineralized zone; late off-time still anomalous suggesting good conductance
GCL09-04	off-hole anomaly at 110 m with high amplitude due to the shallow depth of the source and its proximity to the surface transmitter loop; "y" component shows late time reversal suggesting there is more conductive material in one direction; hole is close to the source and may have intersected an edge of the zone
GCL09-05	combination in-hole and off-hole with the off-hole located below the intersection; likely intersection at 185 m; late time response is almost zero, suggesting lower conductance (or smaller size)
GCL09-07	complex response from three closely spaced zones between 200 and 300 m
GCL09-09	no response
GCL09-10	weak in-hole response at 260 m; off-hole response at 200 m
GCL09-11	off-hole response at 100 m; edge response at 400 m with an off-hole developing below the 400 m intersection; another small intersection at 450 m

Montgomery (2011), noted that the borehole TEM survey outlined an EM anomaly off hole from hole GCL09-01, detected to the east and along strike.

6.4.6 Drill Core Characterization (2009)

In June 2009, JVX Ltd. (Geophysical Surveys and Consulting) reported on a series of physical property measurements (density, susceptibility, EM conductivity, DC resistivity and chargeability) for 15 drill core samples provided by Golden

Chalice. The study was aimed at providing useful information to assist in the design and interpretation of future geophysical surveys (Webster, 2009).

The results of density measurements indicate that the average density of the samples is around 2.85 g/cm3. The highest densities measured correspond to samples from the A Zone containing visible mineralization at 3.14 g/cm3 and 2.96 g/cm3.

Conductivity results indicate that the conductivity of some of the samples from the A Zone could be high enough to be detected by EM surveys. The high conductivity (and therefore low resistivity) contrast could allow the detection of possible mineralized zones associated to this host rock. The EM-resistivity values calculated with the induction coils are much higher than the ones found with the DC measurements (Webster, 2009).

Magnetic susceptibility results indicate that the susceptibility of the samples from Zone A are relatively high. The rest of the samples show low values of the susceptibility. The different values of the susceptibility in these samples may be used to delineate areas of different rock types that contain different contents of magnetite.

Resistivity/IP measurements results showed that samples associated with Zone A have low resistivity and high chargeability, which seems to be related to a high content of mineralization. The remaining samples have a medium resistivity and, in general, a high chargeability.

6.5 Historical Surface Sampling

Golden Chalice Resources completed two Mobile Metal Ions ("MMI") soil surveys over two areas of the Property, proximal to the Langmuir W4 Nickel Deposit.

The intellectual property that comprises the MMI technology, developed by WAMTECH Pty Ltd. (Perth, Australia), was purchased by SGS Mineral Services and as such was the only licensed analytical services company that could perform the MMI analyses (Fedikow, 2008).

6.5.1 Mobile Metal Ions Geochemical Survey – Orientation (2007)

In mid-2007, a Mobile Metal Ions ("MMI") soil orientation survey was completed by Golden Chalice personnel over three lines oriented at 325Az and located near drill hole GCL07-06 and the A Zone (within Legacy Mining Claim 4203498). The objective of this 2007 orientation survey was to investigate the effectiveness of MMI surveys for targeting nickel sulphides on the property.

A total of 36 samples were collected on these lines at 25 m spaced stations and submitted to SGS Mineral Services in Toronto, Ontario for analysis using their proprietary MMI analytical techniques. Results from the MMI orientation survey proved positive, identifying the A Zone in a MMI soil profile, which led to larger surveys in 2007 and 2008.

6.5.2 Mobile Metal Ions Geochemical Survey – West/East Grid (2007)

In fall 2007, a Mobile Metal Ions ("MMI") soil survey was completed by Golden Chalice personnel over the A Zone area of the Langmuir property. This survey incorporated the 36 samples from the earlier 2007 MMI orientation survey. The objective of this 2007 survey was to investigate the effectiveness of MMI surveys for targeting nickel sulphides on the property and specifically to the west and east and over the known A Zone sulphide mineralization.

Soil sampling was controlled using two grids referred to as the West Grid and the East Grid. Golden Chalice personnel collected a total of 304 soil samples.

The interpreted results of the MMI survey documented the presence of a northwest-trending multi-sample Ni anomaly on the west grid that comprises two moderate-contrast and one low-contrast focused anomalies. In addition, there is a northwest verging feature defined by the element suite Nb-Li-Fe-Cr-Co+/-As and is interpreted to be a folded mafic/ultramafic lithology. The east grid is marked by a single sample Ni anomaly and like all single sample geochemical anomalies should be viewed with caution until further information, such as geophysics, can be reviewed (Fedikow, 2008).

6.5.3 Mobile Metal Ions Geochemical Survey (2008)

From September to November 2008, an MMI geochemical soil survey, consisting of a total of 938 MMI soil samples (861 samples and 77 duplicate samples) was conducted east of the Langmuir W4 and bounded to the north by Forks River and to the east by Night Hawk River (Montgomery, 2010a). The objective of the survey was to investigate several VTEM conductors within ultramafic volcanic stratigraphy east of the Langmuir W4.

The results of the fall 2008 MMI soil geochemical survey outlined significant lithologically-related responses and associated base and precious metal anomalies. Based on the association of the element suite Cr-Ti-Nb-V-Fe-Al the southern grid area is marked by an ultramafic lithology whereas the northern portion of the grid is underlain by lithologies that are either mafic or intermediate, with the possibility of felsic intrusions marked by localized high-contrast Ce anomalies. The contact between these two sequences might be indicated by a linear, generally east to west-trending Cu and Zn-Cd anomaly representative of a possible zone of sulphide mineralization that might be found in a sulphide facies iron formation at a break in volcanism (Fedikow, 2009).

In addition to the Cr-Ti-Nb-V-Fe-Al assemblage, the presence of associated Co within this anomaly is suggestive of dispersed pyrite in an ultramafic lithology suggesting an available sulphur source has been acquired by the ultramafic lithology and hence the likelihood of Ni-Cu-PGE mineralization in these rocks is enhanced (Fedikow, 2009; Montgomery, 2010).

The form of the ultramafic response is somewhat variable, with a “tongue” of high Cr-Ti-Nb-V-Fe-Al extending from the southwest corner of the grid to the east but changing from a more massive anomaly to a more linear feature. This linear tongue also hosts the Pd and Ni responses and is somewhat coincident with Cu and Zn-Cd responses. This may be indicative of an ultramafic flow associated with iron formation in the eastern grid area. The contact area between the more ultramafic lithologies from the south and southwest portions of the grid and the mafic to intermediate lithologies in the north are almost certain to be variable (Fedikow, 2009; Montgomery, 2010).

The MMI soil results of the survey clearly indicate a strong nickel anomaly (498854mE, 5349491mN) with a coincident weak Co, Cu, Cd, Cr response slightly north of the W2 anomaly (*see* Figure 7-4) where Golden Chalice historically intersected nickel sulphide mineralization in drilling.

6.6 Historical Drilling (2005 to 2011)

Between May 2005 and February 2011, Golden Chalice/Rogue Resources completed 130 drill holes (40,796 m) on the Property and all of the data and information associated with this drilling is available to the Authors and the Issuer. Information regarding the minor drilling conducted on the Property prior to 2005 is not available to the Authors.

All drill core assay intercepts described in the following sections represent core intervals or core lengths and are not representative of true widths unless otherwise stated. Procedures relating to what is known about the sample preparation, analyses and security used in the generation of historical drill core data and information is reviewed in Section 11.

All drill holes completed from 2005 to 2011 were collared at surface and were land based. A summary of the drilling programs that have taken place on the Property is provided in Table 6-4 with drill hole collar locations shown in Figure 6-2.

Table 6-4. Summary of historical diamond drilling on the Langmuir Nickel Property.

Year	Area of Drilling	No. Holes	Metres
2005	W6 South Central	4	545
2007	W2, W3 Central	8	2,695
2007-08	W4 Nickel Deposit	37	16,262
2007	W4 East	1	413
2008	Eastern area of property	20	6,938
2008	W6 South Central & Central West of W4	31	6,077
2009	W6 South Central & W2, W3 Central	11	3,939
2010	W2 Central	5	1,645
2011	W4 East & Langmuir W4 (metallurgical)	13	2,282
	Totals:	**130**	**40,796**

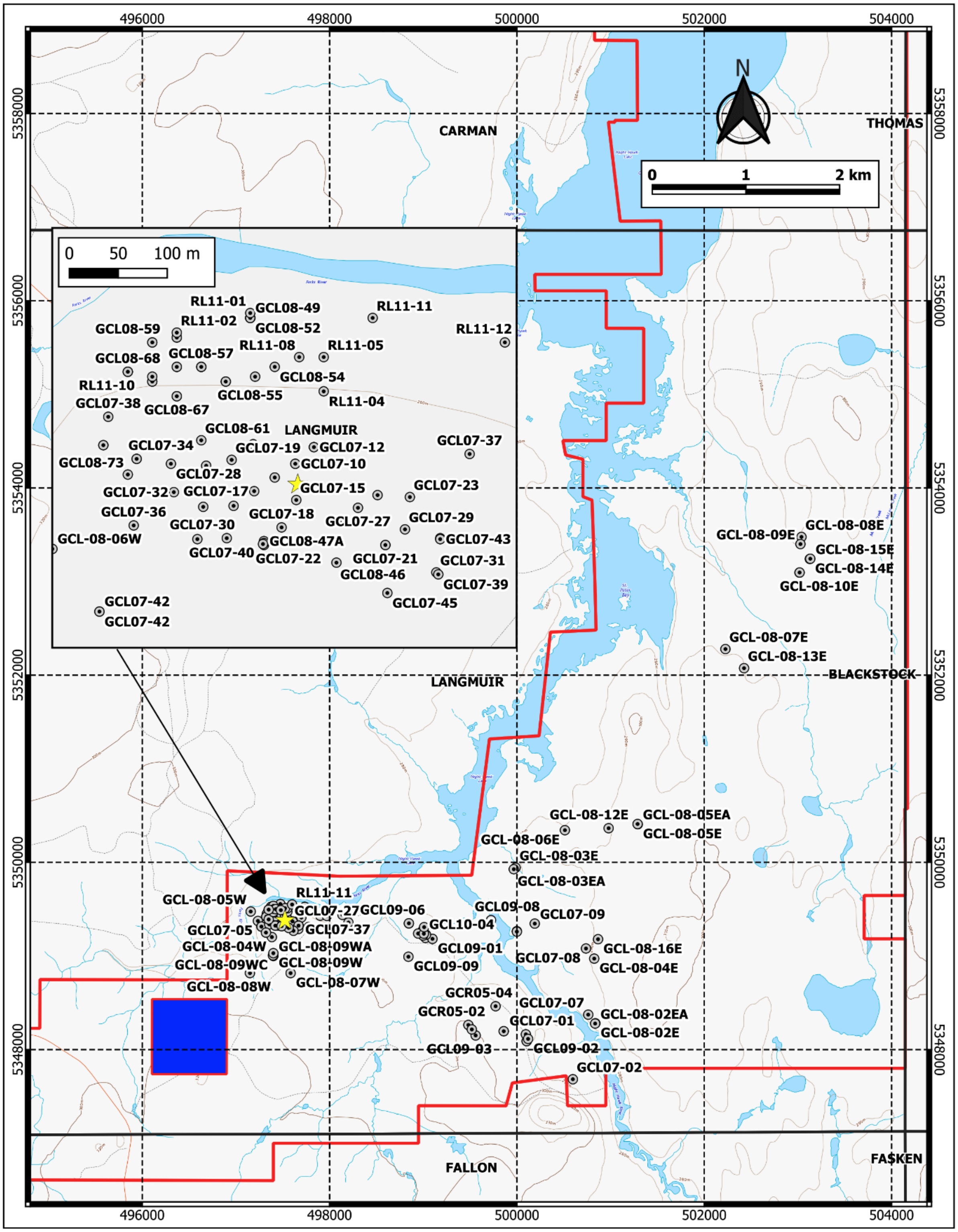

Figure 6-2. Locations of historical drill hole collars on the Langmuir Nickel Property (red outline). The location of the W4 Nickel Deposit is also shown (yellow star). The dark blue square is held by a third party.

6.6.1 Golden Chalice (2005)

In 2005, an initial helicopter supported drilling program comprising four drill holes (545 m) tested HLEM conductors outlined on Legacy Mining Claim 3017518 (Caldbick, 2007). The intent of the program was the targeting of a Kambalda-style komatiite associated nickel sulphide mineralization based on the HLEM geophysical survey. A summary of the parameters for the four drill holes is provided in Table 6-5. A total of 205 core samples were collected at intervals ranging from 0.30 to 1.0 metres.

Table 6-5. Summary of drill hole parameters for 2005 drilling program.

Drill Hole	UTMX	UTMY	Elev (m)	Length (m)	Az	Dip
GCR05-01	499860.00	5348196.00	295.00	120.00	0.0	-45
GCR05-02	499482.00	5348263.00	295.00	122.00	0.0	-45
GCR05-03	499860.00	5348196.00	295.00	155.00	0.0	-70
GCR05-04	499773.00	5348463.00	295.00	148.00	0.0	-45

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Drilling targeted and appeared top intersect an HLEM conductor which proved to be a graphitic argillite, thought to be the source of sulphur for the peridotites. The peridotitic komatiites encountered in the four drill hole program encountered nickel concentrations from background to 1842 ppm (Table 6-6) (Caldbick, 2007).

Table 6-6. Drill hole assays (entire hole lengths and ranges) from 2005 drilling program.

Drill Hole	From (m)	To (m)	Int (m)	Ni (ppm)	Ni-Low (ppm)	Ni-High (ppm)
GCR05-01	35	101	66	575	261	1785
GCR05-02	20	114	94	210	56	1333
GCR05-03	13	146	133	507	316	1718
GCR05-04	12	139	127	217	22	1842

Note: drill hole intersections are core lengths and do not represent true widths.

In general, the drilling was found to be encouraging with elevated sulphide mineralization occurring locally and elevated within proximity to the graphitic argillites which could act as sources of sulphur.

6.6.2 Golden Chalice (2007)

In 2007, a first phase of diamond drilling designed to test the airborne VTEM anomaly clusters was completed. A summary of the drill hole parameters for the 2007 drilling is provided in Table 6-7.

Table 6-7. Summary of drill hole parameters for the March-May 2007 drilling program.

Drill Hole	UTMX	UTMY	Elev (m)	Length (m)	Az	Dip
GCL07-01	500096.00	5348163.00	295.00	251.00	325.0	-55
GCL07-02	500598.00	5347683.00	295.00	305.00	145.0	-55
GCL07-03	499025.00	5349193.00	295.00	326.00	325.0	-55
GCL07-04	498137.50	5349438.96	292.17	623.00	322.7	-56
GCL07-05	497235.37	5349374.10	294.53	260.00	340.0	-50
GCL07-07	500762.00	5348373.00	295.00	302.00	325.0	-55
GCL07-08	500738.00	5349080.00	295.00	326.00	325.0	-55
GCL07-09	500191.00	5349346.00	295.00	302.00	325.0	-55

NAD83 Z17N

This first phase consisted of nine drill holes totalling 2,921 m. The drilling program tested eight of the 18 outlined 2005 airborne VTEM anomaly clusters (Montgomery, 2008a). Holes 1 to 5 were drilled west of the Night Hawk River while holes 7 to 9 were drilled east of the Night Hawk River, in southern Langmuir Township (Montgomery, 2008a).

The eight hole diamond drilling program did not intersect significant metallic mineralization (Au, Pt, Pd, Ag, Cu, Ni, Zn and Pb). Hole GCL07-01 did however cut a weakly sulphidic adcumulate peridotite flow that returned an anomalous nickel zone of 0.19% Ni over 6 metres. In addition, this hole intersected 5% brown pyrrhotite disseminations to local blebs and local massive pyrrhotite-pyrite bands in peridotite flows from 125.4 m to 131 m down hole. The massive sulphide bands were anomalous in zinc, copper and gold.

Drilling results showed that four of the VTEM conductors were the result of graphitic sediments and the fifth was likely due to a fault zone containing conductive fault gouge. The geological cause of the other three VTEM conductors could not be adequately resolved by the diamond drilling.

6.6.3 Golden Chalice (2007-2008)

From 24 to 27 April 2007 and 29 May 2007 to 30 January 2008, Golden Chalice completed 37 diamond drill holes totalling 16,262 m on Legacy Mining Claim 4203498 (Table 6-8).

The drilling program was designed to trace the nickel zones found in discovery drill hole GCL07-06 along strike and at depth (Montgomery, 2008b). Drill holes were situated west of the Night Hawk River and south of the Forks River.

Table 6-8. Summary of drill hole parameters for April 2007 and May 2007 to January 2008 drilling program.

Drill Hole	UTMX	UTMY	Elev (m)	Length (m)	Az	Dip
GCL07-06	497521.32	5349400.85	294.91	226.00	319.8	-52
GCL07-10	497521.08	5349401.14	294.68	413.00	318.7	-45
GCL07-11	497567.07	5349340.84	294.77	401.00	323.7	-45
GCL07-12	497539.84	5349418.36	294.45	314.00	324.7	-46
GCL07-13	497540.12	5349417.98	294.48	485.00	323.0	-58
GCL07-14	497500.15	5349386.77	295.04	401.00	315.3	-45
GCL07-15	497522.04	5349363.76	294.90	500.00	318.5	-45
GCL07-16	497478.24	5349421.08	294.65	302.00	328.5	-46
GCL07-17	497479.26	5349373.02	295.24	401.00	322.3	-47
GCL07-18	497507.39	5349335.55	294.94	500.00	323.1	-47
GCL07-19	497455.85	5349404.77	295.17	356.00	323.4	-41
GCL07-20	497457.83	5349358.17	295.10	507.00	325.0	-46
GCL07-21	497612.83	5349317.97	294.66	350.00	322.7	-44
GCL07-22	497489.43	5349317.52	294.89	425.00	322.3	-45
GCL07-23	497637.90	5349367.49	294.28	410.00	328.6	-45
GCL07-24	497429.65	5349398.51	295.39	401.00	321.9	-44
GCL07-25	497613.01	5349317.80	294.60	509.00	326.0	-46
GCL07-26	497427.13	5349356.77	297.53	452.00	324.0	-45
GCL07-27	497585.20	5349355.68	294.92	350.00	322.1	-44
GCL07-28	497394.40	5349400.68	298.41	401.00	322.4	-51
GCL07-29	497633.05	5349333.62	294.68	399.00	323.4	-50
GCL07-30	497451.05	5349325.41	294.99	384.00	322.3	-46
GCL07-31	497664.68	5349290.34	294.52	446.00	321.3	-45
GCL07-32	497397.18	5349372.34	298.80	449.00	323.9	-44
GCL07-33	497605.02	5349369.36	294.57	393.00	324.1	-46

Drill Hole	UTMX	UTMY	Elev (m)	Length (m)	Az	Dip
GCL07-34A	497359.42	5349405.95	294.67	392.00	324.9	-45
GCL07-34	497359.42	5349405.95	294.67	63.00	324.9	-45
GCL07-35	497669.17	5349324.33	294.38	500.00	328.1	-56
GCL07-36	497355.68	5349338.46	294.92	464.00	327.2	-45
GCL07-37	497698.84	5349411.19	291.11	500.00	318.7	-44
GCL07-38	497329.57	5349449.18	290.93	350.00	324.1	-48
GCL07-39	497666.63	5349287.66	294.53	542.00	319.4	-55
GCL07-40	497421.28	5349324.25	296.68	503.00	324.2	-50
GCL07-41	497668.63	5349324.65	294.50	551.00	328.4	-50
GCL07-43	497668.68	5349324.42	294.47	551.00	328.4	-62
GCL07-44	497777.50	5349309.52	294.23	497.00	319.9	-47
GCL07-45	497615.34	5349269.30	294.69	575.00	315.1	-49

NAD83 Z17N

The drill holes were aligned at a general direction of 320 degrees in order to target the airborne VTEM anomaly conductor axis. All the drill hole casings of the program were left in the ground with GPS surveying of all the drill hole collar locations. In addition, the casings were surveyed to determine accurately the initial dips and direction of the holes.

On 6 May 2007, Golden Chalice Resources Inc. announced a new nickel discovery on their Langmuir Property. Drill hole GCL07-06, the “discovery hole”, returned 1.14% Ni over 72.50 metres (core length), including two separate heavily mineralized intervals of 2.23% Ni, 0.22% Cu, 0.20 g/t Pt, and 0.50 g/t Pd over 17.50 metres, and 1.74 % Ni, 0.12% Cu, 0.20 g/t Pt, and 0.47 g/t Pd over 13.10 metres. The zone occurs within an altered peridotitic komatiitic flow. Nickel mineralization is associated with disseminated, fracture filling, and blebs of sulphides throughout the 72.50 metre core length. Higher values of up to 5.7% Ni occur when sulphide concentrations increase to 30 or 35% (Montgomery, 2008b).

Table 6-9. Core assay results from selected drill holes, 2007-2008 diamond drilling program.

Drill Hole	Zone	From (m)	To (m)	Int (m)	Ni (%)	Cu (%)	Pt (g/t)	Pd (g/t)	Estimated True Width (m)
GCL07-06	Other	44	50	6	0.59	0.02	0.05	0.07	2.72
	A &B	99.5	172	72.5	1.14	0.08	0.11	0.26	10.5
	A	107.8	130	22.2	1.31	0.08	0.15	0.36	
	B	149.5	167	17.5	2.23	0.22	0.2	0.49	
GCL07-10	A	81	95.9	14.9	2.36	0.26	0.22	0.52	7.67
	Incl.	81	84.7	3.7	2.95	0.14	0.42	0.94	
	Incl.	90	95.9	5.9	3.52	0.48	0.23	0.58	
GCL07-11	A	213	220.8	7.8	0.89	0.06	0.18	0.21	5.61
	B	264.3	270.3	6	1.52	0.21	0.13	0.29	3
	C	314.4	326	11.6	1.11	0.23	0.11	0.23	4.53
GCL07-14	A	149	179.5	30.5	1.26	0.09	0.12	0.3	9.93
	incl.	153	167	14	1.79	0.15	0.14	0.34	
	B	226	253.9	27.9	1.08	0.06	0.16	0.29	11.79
	incl.	226	233.4	7.4	2.06	0.12	0.38	0.67	
	incl.	240.5	243.7	3.2	2.4	0.18	0.18	0.34	
	other	260	261.7	1.7	2.1	0.17	0.02	0.73	1.14
	C	277.5	288	10.5	1.76	0.12	0.09	0.22	7.42

Drill Hole	Zone	From (m)	To (m)	Int (m)	Ni (%)	Cu (%)	Pt (g/t)	Pd (g/t)	Estimated True Width (m)
GCL07-15	B	235.7	257.3	21.6	1.34	0.12	0.1	0.22	8.79
	incl.	235.7	247	11.3	2.05	0.17	0.14	0.27	
	C	277	279.2	2.2	0.84	0.02	0.09	0.16	0.86
GCL07-16	A	38.8	49.5	10.7	0.93	0.08	0.08	0.2	5.98
	incl.	38.8	44.1	5.3	1.2	0.08	0.1	0.27	
GCL07-17	A	167.5	186.7	19.2	1.33	0.1	0.12	0.25	11.01
	incl.	171.2	184.8	13.6	1.69	0.13	0.15	0.3	
	C	284.9	297.5	12.6	0.88	0.09	0.06	0.12	8.96
	incl.	284.9	291	6.1	1.23	0.12	0.05	0.1	
GCL07-18	C	325.6	332.3	6.7	1.42	0.1	0.11	0.25	2.83
GCL07-19	A	74	82.7	8.7	0.88	0.1	0.07	0.15	6.18
	incl.	74	78.7	4.7	1.27	0.12	0.09	0.23	
GCL07-20	Other	174.4	175.7	1.3	0.71	0.21	0.06	0.11	0.76
	A	202.8	213.5	10.7	2.37	0.1	0.2	0.38	7.3
	C	290	304.85	14.85	0.45	0.05	0.03	0.06	10.86
GCL07-21	A	245	253.3	8.3	1.2	0.12	0.43	0.17	5.97
	incl.	249	250.3	1.3	2.42	0.14	0.66	0.26	
	B	308.5	325.7	17.2	0.62	0.07	0.06	0.16	10.11
	incl.	308.5	311.7	3.2	0.89	0.13	0.35	0.14	
	incl.	314.7	325.7	11	0.64	0.06	0.06	0.14	
GCL07-22	C	336	339.5	3.5	0.75	0.12	0.06	0.12	2.56
GCL07-24	Other	96	100	4	0.58	0.02	0.03	0.07	2.46
	A	136	144	8	0.82	0.05	0.06	0.13	5.66
	incl.	141.5	144	2.5	1.76	0.09	0.13	0.26	
GCL07-25	Other	226.6	227.6	1	1.91	0	0.06	0.05	0.63
	C	466.2	478.7	12.5	0.56	0.03	0.04	0.07	4.07
	incl.	476.7	478.7	2	1.16	0.04	0.08	0.15	
GCL07-27	A	203.1	208	4.9	1.62	0.14	0.13	0.3	3.21
	incl.	203.1	205.45	2.35	2.65	0.21	0.21	0.47	
	B	263.4	269	5.6	1.02	0.07	0.14	0.29	2.8
	C	326.75	337	10.25	1.19	0.11	0.11	0.25	3.51
GCL07-28	A	112.3	117.5	5.2	0.33	0.01	0.02	0.04	2.83
GCL07-29	A	217.8	223	5.2	1.99	0.16	0.11	0.23	3.22
	incl.	221.5	222.35	0.85	6.73	0.67	0.26	0.53	
GCL07-31	A	279.9	281.6	1.7	0.86	0.02	0.15	0.08	1.26
	C	411.8	415.8	4	0.95	0.09	0.06	0.12	2.06
GCL07-33	A	121	124.6	3.6	1.4	0.09	0.01	0.02	1.29
GCL07-34A	Other	236	237	1	0.67	0.06	0.02	0.1	
GCL07-35	Other	409.4	410.4	1	1.04	0.02	0.09	0.18	
	Other	438.5	441.8	3.3	0.63	0.04	0.01	0.01	1.24
	C	449.7	456.7	7	0.6	0.02	0.01	0.01	2.62
GCL07-41	B	302	304.8	2.8	1.08	0.06	0.02	0.03	1.61
GCL08-45	A	367.8	372.1	4.3	0.32	0.03	0.07	0.34	2.28

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The 2007 drilling program encountered east-west trending peridotite flows with good spinifex flow tops and associated thin graphitic argillite interflow units. The peridotite flows are typically black, fine-grained, soft, weak to moderately serpentinized and typically have adcumulate to mesocumulate textures. Detailed examinations of the spinifex flow top sequences and flow morphologies indicate a southward younging direction. The peridotite flows range from 5 to 50 m thick and are near vertical to steeply dipping 80 degrees to the north. Along the southern margin of the drilling area, a pink medium-grained hornblende rich (5-10%) granodiorite intrusive was encountered. It is thought that this intrusive may represent an east-west dike. The peridotite flows in the vicinity of the granodiorite are strongly brecciated and often contain graphite. These brecciated flows were labelled "komatiitic peridotite breccias" in the logs. Smaller felsic to intermediate, feldspar porphyry, mafic, and gabbro dikes or sills intrude the peridotite flows locally (Montgomery, 2008b).

The nickel zones of the Langmuir W4 Zone nickel discovery occur within specific peridotitic komatiitic flow units (Figure 6-3). Nickel mineralization consists of disseminated, fracture filling, and blebs of pentlandite with lesser pyrrhotite. Higher values of up to 5.7% Ni occur when sulphide concentrations increase to 30 or 35%.

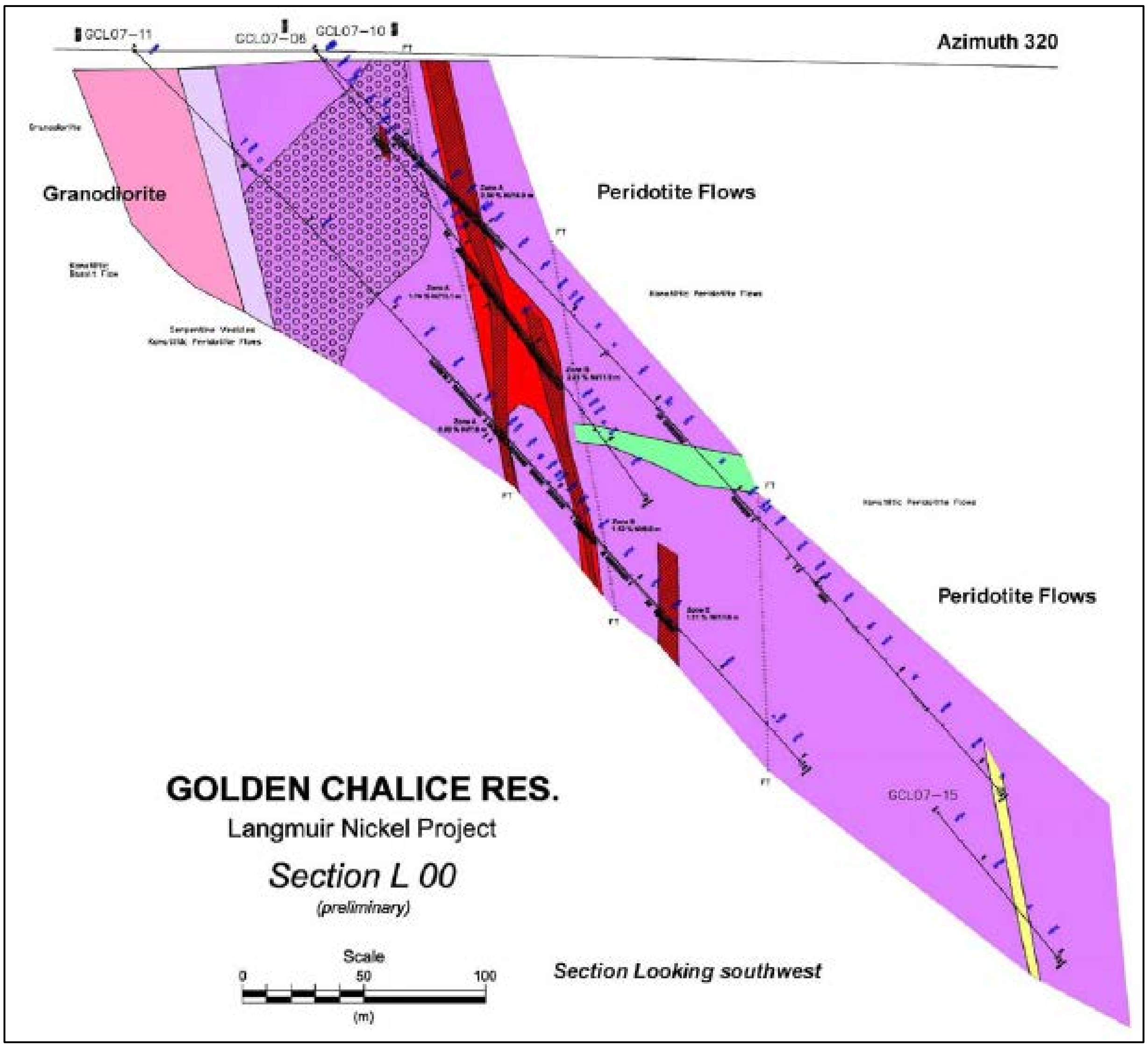

Figure 6-3. Interpreted section from the discovery hole (GCL07-06) area looking northwest (Montgomery, 2008b).

The 2007 drilling program was successful in tracing the nickel zones from hole GCL07-06 for a strike extent of approximately 200 metres. It also defined the nickel zones to a depth of at least 250 m below surface. In addition, nickel mineralization has been intersected at approximately 375 m vertically below surface on the eastern down plunge extent (Montgomery, 2008b).

6.6.4 Golden Chalice (2007)

A single drill hole, GCL07-42, was completed on the property from 22 November to 4 December 2007 and had a total length of 412.5 metres (Montgomery, 2008c). The hole was drilled to investigate the western extension of the nickel zones at the Langmuir W4 Zone discovery (GCL07-06).

Sulphide mineralization was encountered in the peridotite flows and locally within the intrusives. It consisted of 1-3% brassy pyrite disseminations to local blebs. The three longest sections of pyrite mineralization were from 168 to 178 m, 188.3 to 193 m, and 224 to 229 m down hole.

Analytical results from drill core sampling of hole GCL07-42 returned for the most part background metal values (Au, Pt, Pd, Ag, Cu, Ni, Zn and Pb). Hole GCL07-42 did however cut peridotite flows that are similar to the flows hosting the Langmuir nickel discovery (hole GCL07-06).

6.6.5 Golden Chalice (2008)

From 10 January to 15 April 2008, Golden Chalice completed a winter diamond drilling program, consisting of 20 drill holes totalling 6,938 m and completed on the eastern part of the property (Table 6-10).

The purpose of the drilling program was to test 10 airborne VTEM conductors to determine whether the conductors where caused by sulphide mineralization (Montgomery, 2009a).

Table 6-10. Summary of drill hole parameters for the January-April 2008 drilling program.

Drill Hole	UTMX	UTMY	Elev (m)	Length (m)	Az	Dip
GCL-08-01E	500000.00	5349265.00	295.00	95.00	310.0	-45
GCL-08-01EA	500000.00	5349260.00	295.00	452.00	310.0	-45
GCL-08-02E	500838.00	5348281.00	295.00	102.00	145.0	-55
GCL-08-02EA	500836.00	5348278.00	295.00	600.00	145.0	-55
GCL-08-03E	499987.00	5349944.00	295.00	338.00	325.0	-55
GCL-08-03EA	499967.00	5349927.00	295.00	550.00	325.0	-55
GCL-08-04E	500826.00	5348972.00	295.00	501.00	325.0	-55
GCL-08-05E	501291.00	5350407.00	295.00	147.00	145.0	-55
GCL-08-05EA	501289.00	5350410.00	295.00	402.00	325.0	-55
GCL-08-06E	500513.00	5350344.00	295.00	426.00	325.0	-55
GCL-08-07E	502227.00	5352279.00	295.00	351.00	85.0	-55
GCL-08-08E	503039.00	5353477.00	295.00	276.00	270.0	-55
GCL-08-09E	503028.00	5353401.00	295.00	252.00	270.0	-55
GCL-08-10E	503018.00	5353096.00	295.00	327.00	273.0	-55
GCL-08-11E	503019.00	5353097.00	295.00	276.00	270.0	-45
GCL-08-12E	500980.00	5350365.00	295.00	476.00	360.0	-55
GCL-08-13E	502426.00	5352075.00	295.00	377.00	325.0	-50
GCL-08-14E	503128.00	5353242.00	295.00	402.00	270.0	-50
GCL-08-15E	503133.00	5353244.00	295.00	261.00	90.0	-50
GCL-08-16E	500867.00	5349179.00	295.00	327.00	325.0	-55

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The January-April 2008 winter diamond drilling program tested 10 of the 18 outlined airborne VTEM anomaly clusters, on the Langmuir Property. Eight of the VTEM conductors were interpreted to be the result of graphitic argillite units within peridotite flows and a semi-massive pyrite zone in andesite volcanic rocks. The geological cause of two of the 10 selected VTEM conductors was not explained by the diamond drilling. The diamond drilling program did not intersect significant metallic mineralization (Au, Pt, Pd, Ag, Cu, Ni, Zn and Pb).

6.6.6 Golden Chalice (2008)

From 27 January to 30 July 2008, Golden Chalice completed a summer-winter drilling program consisting of a further 31 drill holes totalling 6,077 m within Legacy Mining Claim 4203498 (Table 6-11). Drilling occurred west of the Night Hawk River and south of the Forks River. The objective of this drilling program was to better define the continuity of the main A Zone at the W4 Nickel Deposit (around hole CGL07-06) with tighter spaced infill drilling (Montgomery, 2009b).

Table 6-11. Summary of drill hole parameters for the January-July 2008 drilling program.

Drill Hole	UTMX	UTMY	Elev (m)	Length (m)	Az	Dip
GCL08-46	497563.06	5349300.05	295.09	599.00	319.2	-53
GCL08-47A	497489.43	5349321.52	295.00	77.00	334.0	-55
GCL08-47B	497489.43	5349319.50	295.00	38.00	330.0	-55
GCL08-47	497487.57	5349319.32	295.17	602.00	321.3	-55
GCL08-48	497475.00	5349550.00	284.25	212.00	196.0	-45
GCL08-49	497475.00	5349550.00	284.25	242.00	196.0	-58
GCL08-50	497475.00	5349550.00	284.25	218.00	180.0	-45
GCL08-51	497475.00	5349550.00	284.25	218.00	180.0	-54
GCL08-52	497475.00	5349550.00	284.25	239.00	180.0	-61
GCL08-53	497475.00	5349550.00	284.25	244.00	162.0	-63
GCL08-54	497500.00	5349500.00	293.94	197.00	180.0	-62
GCL08-55	497450.00	5349485.00	293.57	134.00	180.0	-45
GCL08-56	497450.00	5349485.00	293.57	188.00	180.0	-70
GCL08-57	497400.00	5349500.00	293.62	134.00	180.0	-45
GCL08-58	497400.00	5349500.00	293.62	185.00	180.0	-69
GCL08-59	497375.00	5349525.00	293.95	176.00	180.0	-48
GCL08-60	497375.00	5349525.00	293.95	251.00	180.0	-66
GCL08-61	497425.00	5349425.00	295.00	152.00	360.0	-45
GCL08-62	497425.00	5349500.00	293.62	158.00	183.0	-52
GCL08-63	497425.00	5349500.00	293.60	191.00	183.0	-69
GCL08-64A	497400.00	5349530.00	293.90	24.00	180.0	-69
GCL08-64	497400.00	5349530.00	293.95	203.00	180.0	-69
GCL08-65	497375.00	5349485.00	293.60	110.00	180.0	-45
GCL08-66	497375.00	5349485.00	293.60	161.00	180.0	-68
GCL08-67	497400.00	5349470.00	293.60	134.00	180.0	-60
GCL08-68	497350.00	5349495.00	293.90	110.00	180.0	-45
GCL08-69	497350.00	5349495.00	293.90	161.00	180.0	-67
GCL08-70	497400.00	5349470.00	293.60	104.00	180.0	-45
GCL08-71	497325.00	5349420.00	294.70	221.00	360.0	-45
GCL08-72	497325.00	5349420.00	294.70	194.00	360.0	-60
GCL08-73	497350.00	5349390.00	294.70	200.00	360.0	-50

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The drill holes were aligned in a general direction of 180 and 360 degrees in order to better target the east-west strike of the nickel zones and their host peridotite flows and in general were spaced about 25 metres apart on section. The drill hole casings of holes GCL08-46 and 47 were left in the ground. The drill hole collar locations were GPS surveyed and the angle and direction of the collars measured to confirm initial dips and direction of the holes. The drill hole casings of the remaining holes were removed.

The January-July 2008 drilling program encountered east-west trending peridotite flows with good spinifex flow tops and associated thin graphitic argillite interflow units. The peridotite flows are typically black, fine-grained, soft, weak to moderately serpentinized and typically have adcumulate to mesocumulate textures. Detailed examinations of the spinifex flow top sequences and flow morphologies indicate a southward younging direction. The peridotite flows range from 5 to 50 metres thick and are near vertical to steeply dipping 80 degrees to the north. Along the southern margin of the drilling area, a pink medium-grained hornblende rich (5-10%) granodiorite intrusive was encountered. It is thought that this intrusive may represent an east-west dike; however more drilling is required for confirmation. The peridotite flows in the vicinity of the granodiorite are strongly brecciated and often contain graphite. These brecciated flows were labelled “komatiitic peridotite breccias” in the logs. Smaller felsic to intermediate, feldspar porphyry, mafic, and gabbro dikes or sills locally intrude the peridotite flows (Montgomery, 2009b).

The W4 Nickel Deposit is interpreted to comprise three sub-parallel nickel zones (A, B, and C) which occur within specific komatiitic peridotite flow units (Table 6-12). The zones are vertical to steeply north dipping at 70-75 degrees. The C Zone, which is the deepest occurring zone, is locally steeply south dipping. The east-west strike extent of the zones has been defined for at least 200 m. the zones are open below the granodiorite dike and/or a vertical depth of 400 metres. The nickel sulphide mineralization consists primarily of pentlandite-pyrrhotite occurring as fine disseminations, fracture fillings, and blebs. Nickel concentrations as high as 5-7% Ni occur where sulphide concentrations increase to 30 or 35% (semi-massive). Locally, massive sulphide sections are present grading up to 17.9% Ni.

Table 6-12. Core assay results from selected drill holes, 2007-2008 diamond drilling program.

Drill Hole	Zone	From (m)	To (m)	Int (m)	Ni (%)	Cu (%)	Pt (g/t)	Pd (g/t)	Estimated True Width (m)
GCL08-48	A	126.00	140.00	14.00	1.70	0.11	0.12	0.29	11.52
	Incl.	126.00	135.90	9.90	2.12	0.14	0.15	0.38	
GCL08-49	A	164.40	185.80	21.40	0.99	0.09	0.10	0.23	11.34
GCL08-50	A	123.10	134.00	10.90	1.13	0.04	0.07	0.17	10.02
GCL08-50	Incl.	123.10	124.10	1.00	9.28	0.27	0.35	0.99	
GCL08-51	A	130.40	141.00	10.60	3.14	0.28	0.34	0.68	7.13
GCL08-52									
GCL08-53	A	190.00	197.00	7.00	1.09	0.09	0.09	0.23	3.39
GCL08-54									
GCL08-55	A	53.00	59.20	6.20	1.14	0.09	0.07	0.17	4.95
GCL08-55	Other	85.00	87.00	2.00	0.88	0.02	0.07	0.10	1.51
GCL08-56	A	91.00	98.20	7.20	1.53	0.09	0.15	0.43	4.51
GCL08-57	A	58.70	66.50	7.80	1.69	0.18	0.09	0.22	5.80
GCL08-59									5.35
GCL08-59	Incl.	84.00	88.00	4.00	0.81	0.04	0.08	0.19	
GCL08-60	A	101.00	105.00	4.00	0.81	0.01	0.11	0.23	3.02
GCL08-61	A	33.40	39.20	5.80	1.24	0.14	0.10	0.24	3.65

Drill Hole	Zone	From (m)	To (m)	Int (m)	Ni (%)	Cu (%)	Pt (g/t)	Pd (g/t)	Estimated True Width (m)
GCL08-62	A	74.50	85.00	10.50	1.40	0.13	0.10	0.25	7.21
GCL08-63	A	103.30	119.50	16.20	1.63	0.13	0.12	0.28	9.52
GCL08-64	A	130.00	151.90	21.90	1.48	0.07	0.11	0.28	13.78
	Incl.	145.00	151.90	6.90	2.16	0.19	0.14	0.36	
	Incl.	130.00	139.00	9.00	1.64	0.03	0.15	0.35	
GCL08-65	A	20.00	34.00	14.00	1.18	0.07	0.11	0.22	10.24
	Incl.	20.00	22.90	2.90	1.73	0.07	0.27	0.46	
	Incl.	28.50	34.00	5.50	1.56	0.09	0.10	0.23	
GCL08-66	A	55.00	68.00	13.00	0.36	0.01	0.02	0.03	
	Incl.	55.00	60.00	5.00	0.52	0.02	0.02	0.06	2.65
GCL08-67	A	25.75	35.50	9.75	1.51	0.11	0.15	0.38	5.52
	Incl.	26.50	32.50	6.00	1.94	0.15	0.15	0.38	
GCL08-68	Au	33.60	36.40	2.80	2.90	0.10	0.04	0.14	2.69
	Al	43.40	52.40	9.00	0.84	0.05	0.08	0.19	8.53
GCL08-69	A	34.60	59.00	24.40	2.75	0.16	0.18	0.51	16.03
	Incl.	41.00	55.00	14.00	3.79	0.21	0.24	0.68	
GCL08-70	A	22.20	28.00	5.80	1.51	0.09	0.06	0.12	4.63
GCL08-73	A	129.30	149.00	19.70	0.65	0.05	0.05	0.10	11.58
	Incl.	129.30	132.10	2.80	1.05	0.02	0.13	0.28	
	Incl.	145.00	149.00	4.00	0.96	0.02	0.05	0.11	

This drilling program validated the continuity of the nickel mineralization in the A Zone and the presence of the A Zone extending to surface. It confirmed that a nickel deposit “Langmuir W4” and consisting of three sub-parallel nickel zones (A, B, C) occurs on Legacy Mining Claim 4203498.

Drill intercepts of 3.14% Ni over 10.6 m (hole GCL08-51), 1.70% Ni over 14 m (hole GCL08-48) and 1.63% Ni over 16.2 m (hole GCL08-63) demonstrated the continuity of the nickel mineralization in the A Zone. Near surface (overburden/bedrock) nickel intersections where also encountered that included 2.75 % Ni over 24.4 m (hole GCL08-69), 1.69 % Ni over 7.8 m (hole GCL08-57) and 1.51% Ni over 5.8 m (hole GCL08-70).

6.6.7 Golden Chalice (2009)

From 1 February to 15 May 2009, Golden Chalice completed a further 11 diamond drill holes totalling 3,939 m (Table 6-13), focusing on the eastern side of the W4 Nickel Deposit, testing several VTEM conductors and a strong MMI nickel anomaly (Montgomery, 2011). The drilling program was located in the area west of the Night Hawk River, in southern Langmuir Township.

The objective of the drilling program was to test a VTEM conductors and a strong MMI nickel anomaly in order to discover new nickel mineralization to validate the theory of a Kambalda camp setting on the property.

Table 6-13. Summary of drill hole parameters for 2009 drilling program.

Drill Hole	UTMX	UTMY	Elev (m)	Length (m)	Az	Dip
GCL09-01	499099.03	5349182.93	284.15	434.00	323.9	-55
GCL09-02	500119.69	5348113.78	285.58	351.00	327.3	-54
GCL09-03	499559.82	5348151.29	298.48	402.00	333.3	-55
GCL09-04	499519.37	5348215.42	295.27	252.00	13.6	-44

Drill Hole	UTMX	UTMY	Elev (m)	Length (m)	Az	Dip
GCL09-05	498846.82	5349347.69	285.74	399.00	1.7	-70
GCL09-06	498846.84	5349348.65	285.75	285.00	2.0	-44
GCL09-07	499029.89	5349226.59	284.41	342.00	3.5	-55
GCL09-08	499724.00	5349383.00	285.00	352.00	325.0	-65
GCL09-09	498842.29	5348991.86	285.28	251.00	3.9	-52
GCL09-10	499007.75	5349247.41	284.32	377.00	356.3	-65
GCL09-11	497971.00	5349428.00	285.00	494.00	325.0	-68

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A total of three drill holes (GCL09-01, 07 and 10) were drilled in the W2 VTEM anomaly cluster 1.5 km east of the Langmuir W4 Zone. This amounted to 1,153 m of the program. Two holes (GCL09-05 and 06) tested a strong nickel MMI soil anomaly, 150 m northwest of the W2 VTEM anomaly. One hole GCL09-09 tested a moderate nickel MMI anomaly approximately 300m southwest of the collar of GCL09-01.

Three holes (GCL09-02, 03, and 04) were drilled in the W6 VTEM target area that is situated 1 km southeast of the W2 VTEM target on a separate sequence of peridotite flows. Hole GCL09-08 tested the western portion of the W1 VTEM conductor cluster (700 m east of W2) and intersected graphitic argillite within peridotite flows. The final hole GCL09-11 of the drilling program tested the western edge of the W3 VTEM conductor cluster, approximately 500 m east of the W4 Nickel Deposit.

6.6.8 Golden Chalice (2010)

From 1 March to 30 April 2010, Golden Chalice completed a five drill hole program totalling 1,645 metres in the Langmuir W2 target area (Table 6-14). The drilling program was located in the area west of the Night Hawk River, in southern Langmuir Township.

This drilling program was designed to test for an extension of the nickel mineralization discovered in the 2009 drilling program.

Table 6-14. Summary of drill hole parameters for 2010 drilling program.

Drill Hole	UTMX	UTMY	Elev (m)	Length (m)	Az	Dip
GCL10-01W	498996.53	5349276.03	282.34	351.00	0.0	-64
GCL10-02W	498998.13	5349217.52	283.68	308.00	0.0	-65
GCL10-03	498945.51	5349239.70	284.17	350.00	1.0	-64
GCL10-04	499007.40	5349237.68	284.48	361.00	2.7	-67
GCL10-05	499009.61	5349307.57	283.38	275.00	354.0	-59

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The 2010 winter diamond drilling program was not entirely successful as it did not extend the W2 nickel zone significantly along strike and up dip. It however intersected the nickel zone in holes GCL10-03, returning 0.64 % Ni over 2 m and in hole GCL10-02W, returning 0.66% Ni over 0.6 metres. The other 2010 holes intersected the host stratigraphy but did not return significant nickel values. The W2 nickel zone remains open with depth below the 325 m vertical depth (Montgomery, 2011).

6.6.9 Rogue Iron Ore Corp (2011)

From 10 January to 8 February 2011, Rogue Iron Ore Corp. (previously Golden Chalice) completed 13 drill holes totalling 2,282 m (Table 6-15) of which six holes (642 m) were drilled for metallurgical testing of the A Zone at the W4 Nickel Deposit, and seven holes (1,640 m) were drilled east of the nickel deposit (Montgomery, 2012).

Table 6-15. Summary of drill hole parameters for 2011 metallurgical and exploration diamond drilling.

Drill Hole	UTMX	UTMY	Elev (m)	Length (m)	Az	Dip	Core Size
RL11-01	497475.00	5349555.00	284.25	155.00	198.0	-45	HQ
RL11-02	497400.00	5349535.00	293.95	176.00	180.0	-68	HQ
RL11-03	497375.00	5349490.00	293.60	50.00	180.0	-45	HQ
RL11-04	497550.00	5349475.00	293.00	173.00	185.0	-45	NQ
RL11-05	497550.00	5349510.00	290.50	215.00	185.0	-62	NQ
RL11-06	497400.00	5349470.00	293.60	50.00	180.0	-60	HQ
RL11-07	497425.00	5349500.00	293.60	140.00	183.0	-70	HQ
RL11-08	497525.00	5349510.00	294.50	278.00	180.0	-63	NQ
RL11-09	497480.00	5349490.00	292.00	152.00	185.0	-45	NQ
RL11-10	497350.00	5349495.00	293.90	71.00	180.0	-63	HQ
RL11-11	497600.00	5349550.00	284.00	221.00	180.0	-50	NQ
RL11-12	497735.00	5349525.00	284.00	275.00	170.0	-65	NQ
RL11-13	497900.00	5349430.00	294.50	326.00	360.0	-50	NQ

NAD83 Z17N

The six holes of the program that were drilled for metallurgical testing of the W4 Nickel Deposit confirmed the nickel grades (Table 6-16). Highlights included 1.73% Ni over 15.5 m (RL11-10), 1.68% Ni over 17.3m (RL11-07), and 1.35% Ni over 7.5 m (RL11-06). The drilling yielded three bulk metallurgical samples: a high-grade (>1.4% Ni), a medium-grade (0.6-1.4% Ni), and a low-grade (>0.3-0.6% Ni).

The seven exploration holes of the 2011 drilling program achieved favourable nickel results. Four holes intersected the eastern margin of the W4 Nickel Deposit with hole RL11-09 returning 1.54% Ni over 9.4 m near surface. Hole RL11-11 was drilled 50 m east of the deposit and encountered anomalous nickel mineralization in the host ultramafic flow of the A Zone. Hole RL11-12 150 m east of the deposit unfortunately encountered a diabase dike and only minor ultramafic. Hole RL11-13 intersected ultramafic rocks, the same type of volcanic flow at the Langmuir W4. However, no significant nickel sulphides were encountered in these ultramafic rocks (Montgomery, 2012).

Table 6-16. Selected intercepts from the 2011 diamond drilling program.

Drill Hole	From (m)	To (m)	Int (m)	Ni (%)	Hole Type	Area
RL11-01	124.00	127.00	3.00	0.96	HQ Met	W4 Deposit
RL11-02	135.00	167.50	32.50	0.87	HQ Met	W4 Deposit
incl.	135.00	144.50	9.50	0.68	HQ Met	W4 Deposit
incl.	162.00	167.50	5.50	1.84	HQ Met	W4 Deposit
RL11-03	24.50	37.00	12.50	0.88	HQ Met	W4 Deposit
RL11-06	18.00	25.50	7.50	1.35	HQ Met	W4 Deposit
RL11-07	16.00	123.30	107.30	1.68	HQ Met	W4 Deposit
incl.	114.50	122.50	8.00	2.03	HQ Met	W4 Deposit
RL11-10	36.50	65.50	29.00	1.21	HQ Met	W4 Deposit
incl.	36.50	43.50	7.00	0.85	HQ Met	W4 Deposit

Drill Hole	From (m)	To (m)	Int (m)	Ni (%)	Hole Type	Area
incl.	50.00	65.50	15.50	1.73	HQ Met	W4 Deposit
RL11-04	82.50	86.00	3.50	0.64	NQ	East W4 Deposit
RL11-05	129.70	131.30	1.60	0.53	NQ	East W4 Deposit
RL11-08	NSV				NQ	East W4 Deposit
RL11-09	54.20	63.60	9.40	1.54	NQ	East W4 Deposit
RL11-11	188.00	189.00	1.00	0.30	NQ	East W4
RL11-12	NSV				NQ	East W4
RL11-13	NSV				NQ	West W3

Note: drill hole intersections are core lengths and do not represent true widths; NSV = no significant values.

6.7 Historical Drilling Procedures (2005-2011)

6.7.1 Drill Hole Surveying

After the 2007 drill holes were completed, the top of the collar casing location ((NAD83 datum, Zone 17N), was surveyed using a Differential GPS ("DGPS") unit to sub-centimetre accuracy. The elevation, azimuth, and dip of all the drill collar casings were also surveyed.

All 2008 drill holes were spotted with the DGPS. After drill hole GCL08-47, the holes were not resurveyed as the casings were pulled after the top 15 m of bedrock penetration were cemented.

During drilling operations, the down hole orientations of all drill holes were surveyed using a Reflex EZ-Shot instrument which is an electronic, solid-state, single-shot drill hole orientation tool.

6.7.2 Drilling Pattern and Density

The drill holes outside of the Langmuir W4 area were not systematic designed and were directly targeting specific airborne VTEM conductors.

After the discovery hole GCL07-06, step out drill holes were drilled in the W4 area were conducted on a tight pattern of approximately 25 m spacing with one, two, or three drill holes per setup. Drilling thus achieved a drill spacing of approximately 25 m for the upper part of the Langmuir W4 (above 200 m below surface), and 50 m or more, below 200 metres.

6.7.3 Field Procedures

At all surface drill locations in the Langmuir W4 area, collar pickets were installed. Each collar picket was planted at each drill hole casing and marked with a clear aluminum tag that was inscribed with the borehole name, azimuth, dip and length of the hole.

All the Golden Chalice Langmuir Property drill holes were routinely logged by geologists directly onto laptop computers using a standardized Microsoft Excel template. This template recorded the collection of lithological, structural, sulphide mineralization, alteration, core recovery, and Rock Quality Determination ("RQD") data observed by the geologist. The template "diamond drill log record" also included drill hole location details, the downhole Reflex EZ-Shot instrument readings and core sampling details (*see* Section 11). The Excel-based drill logs were imported into a geological software computer program LOG II and paper drill logs produced. The following information from the Excel-based drill logs; collar location and elevation, down-hole azimuth and dips, geology, sampled intervals and assays were merged into an Excel database. This Excel database which formed the basis of the Langmuir W4 Zone historical mineral resource estimation was imported into Oasis Montaj Geosoft to produce sections and plan maps during the drilling programs.

Overall the RQD was good for all holes with some local blocky ground particularly in the graphitic argillite units. Core recovery was excellent with rare core loss recorded.

6.8 Historical Sample Preparation, Analyses and Security

Core sampling protocols used by Golden Chalice and Rogue Resources on all drill holes completed from 2005 to 2011 were reviewed by the Authors and their work is considered to have been done to “industry standards”. These protocols are well documented in hard copy Golden Chalice and Rogue Resources sampling procedures, which are described in this section. The database held by the Issuer and made available to the Authors contains all of the assay certificates reported from the laboratories from 2005 to 2011.

On the basis of information and data available to the Authors, it is the opinion of the Authors that Golden Chalice and Rogue Resources applied industry best practices in the collection, handling, and management of drill core assay samples. There is no evidence that the sampling approach and methodology used by Golden Chalice and Rogue Resources introduced any sampling bias or contamination.

6.9 Historical Diamond Drilling (2005-2008)

The following description addresses the core sample preparation, analyses and security for diamond drilling programs completed from 2005 to 2008. These diamond drilling programs were competed by Golden Chalice under the supervision of Kevin Montgomery.

6.9.1 Sample Preparation and Analysis

At the drill site, the drilling contractor places drill core into wooden tray boxes along with ‘marker blocks” to indicate measured distances down the drill hole from the collar. During drilling programs, drill core is collected by exploration technicians at the drill sites or the drill access trail every drilling day and moved to a secure logging facility. Initially, the secure logging facility was Moneta Porcupine Mine’s logging facility on Highway 655 in Timmins, whereas after August 2007 it was moved to the Hastings Management office/core facility in Timmins, Ontario.

At the logging facility, the length of drill core recovered was compared to the position of depth markers in the core boxes by a senior technician in order to check for misplaced markers and to calculate the amount of core loss, if any. The core was logged and sampled by qualified geologists. Geological descriptions of the core and sampling intervals with corresponding identifier numbers were entered onto a “diamond drill log record” captured on a laptop computer. Sampling of the core was based on visual observations of sulphide mineralization and samples were collected within lithologically homogeneous intervals with due regard for varying mineralogy and textures. Sample intervals did not cross geological boundaries. Generally, the sample length within mineralized zones was on the order of 0.5 to 1.0 metres or less.

The NQ or HQ core selected for sampling was sawn in half and a half bagged with the first part of a three-part assay tag bearing a unique identifier number. The other half of the core was stored at the logging facility with the second part of the three part assay tag bearing an identical unique identifier number placed in the core box at the beginning of the sample interval. Records of the sampled intervals and sample numbers are recorded in the computerized drill logs, and the third part of the assay tag is filed.

During 2007 and 2008 all samples were sent to the Laboratoire Expert Inc. of Rouyn-Noranda, Quebec. This laboratory is not accredited according to ISO/IEC Guideline 17025 by the Standards Council of Canada ("SCC"). Laboratoire Experts Inc. participated in round robin proficiency tests. Golden Chalice used an umpire laboratory to verify the analytical results delivered by Laboratoire Expert Inc.

Upon receipt of samples at the Laboratoire Expert Inc., a bar code label is attached to the original sample bag. This label was then scanned into the laboratory database and the weight of the sample recorded together with information such as date, time, equipment used, and operator name. The scanning process was repeated for each subsequent activity performed on the sample from sample preparation to analysis through to the storage or disposal of the pulp and reject material. This system provided a complete chain of custody records for every stage in the sample preparation and analytical process from the moment that a sample arrived at the laboratory.

Sample preparation involved drying, crushing, splitting, and pulverizing. Samples were dried prior to crushing the entire sample to 90% passing a -10 mesh screen. From the crushed coarse fraction, a sub-sample of approximately 300 grams was collected using a Jones riffle splitter. This 300 gram portion was completely pulverized to 90% passing a -200 mesh screen in a ring and puck pulverizer. A 0.5 gram aliquot was collected, from each pulp.

All drill core samples from the property were analyzed for nickel, copper, cobalt, lead, and zinc by aqua regia digestion followed by Atomic Absorption analyses. The detection limit was two ppm for each element. If the nickel, copper or cobalt result exceeded 5,000 ppm then the pulp was re-analyzed by total digestion followed by Atomic Absorption analyses. The concentrations are reported as a percent and the detection limit is 0.01% for nickel and copper with the total digestion method. All the drill core samples were also analyzed for gold, platinum and palladium by lead fire assay with an Atomic Absorption finish on a 30 gram sample pulp. The detection limit for the Lead Fire Assay Atomic Absorption method is two parts per billion ("ppb") for gold, five ppb for platinum and four ppb for palladium. If the sample result exceeded 1,000 ppb for any precious metal, then the sample pulp was re-analyzed by using a lead fire assay collector and a gravimetric finish. The precious metal concentrations were reported as grams per tonne.

6.9.2 Quality Assurance/Quality Control Programs

Quality control measures are typically set in place to ensure the reliability and trustworthiness of exploration data. This includes written field procedures and independent verifications of aspects such as drilling, surveying, sampling and assaying, data management and database integrity. Appropriate documentation of quality control measures and regular analysis of quality control data are important as a safeguard for project data and form the basis for the quality assurance program implemented during exploration.

Golden Chalice implemented formal analytical quality control measures since 2007, by inserting a single Matachewan diabase drill core sample blank or a single standard reference sample into the sample stream for every 25 samples. A standard pulp was inserted for every drill core sample ending in "-25 and -75" sent to the laboratory, whereas a blank sample was inserted drill core sample ending in "-00 and -50". During mid 2008 the blank was changed to crushed marble, when the supply of Matachewan diabase drill core was exhausted.

Five nickel standards ranging from a high nickel standard of 1.900 percent nickel to a low nickel standard of 0.265 percent nickel obtained from WCM Minerals of Vancouver were inserted into the sample stream (Table 6-17). These standards adequately represent the range of nickel grades found at the W4 Nickel Deposit.

Table 6-17. Assaying specifications for QA/QC control samples.

		Nickel Assays				Copper Assays			
Standard	Source	Mean	Stdv	+2 Stdv	-2 Stdv	Mean	Stdv	+2 Stdv	-2 Stdv
Ni111	WCM Minerals	0.420	0.013	0.446	0.394	0.240	0.009	0.258	0.222
Ni112	WCM Minerals	0.610	0.026	0.661	0.559	0.300	0.014	0.329	0.271
Ni113	WCM Minerals	1.240	0.038	1.315	1.165	0.250	0.120	0.274	0.226
Ni115	WCM Minerals	1.900	0.062	2.025	1.775	0.170	0.008	0.186	0.154
Ni117	WCM Minerals	0.265	0.011	0.287	0.243	0.345	0.009	0.364	0.326

* Expected values and standard deviation values for nickel and copper can be found in Appendix C alongside the analytical quality control assay results.

Laboratoire Expert Inc. implemented a stringent internal check assay analysis procedure, which included a repeat pulp analysis every 12th sample for every element analyzed. Each sample shipment batch (certificate of analysis) included a standard for the nickel, copper, and cobalt analysis. Each furnace batch of 28 samples analyzed for gold, platinum and palladium included a reagent blank and a standard sample (Cole *et al.*, 2010).

6.9.3 Specific Gravity Database

A specific gravity database includes 75 measurements conducted by SGS Laboratory by pycnometry in 2010 on pulverized core samples selected as representative of each grade domain. This database also includes 15 measurements on split core acquired by JVX Ltd. using a water immersion technique. Based on this database of 90 records, SRK assigned an average specific gravity value of 2.82 to the domains, as illustrated in Figure 6-4.

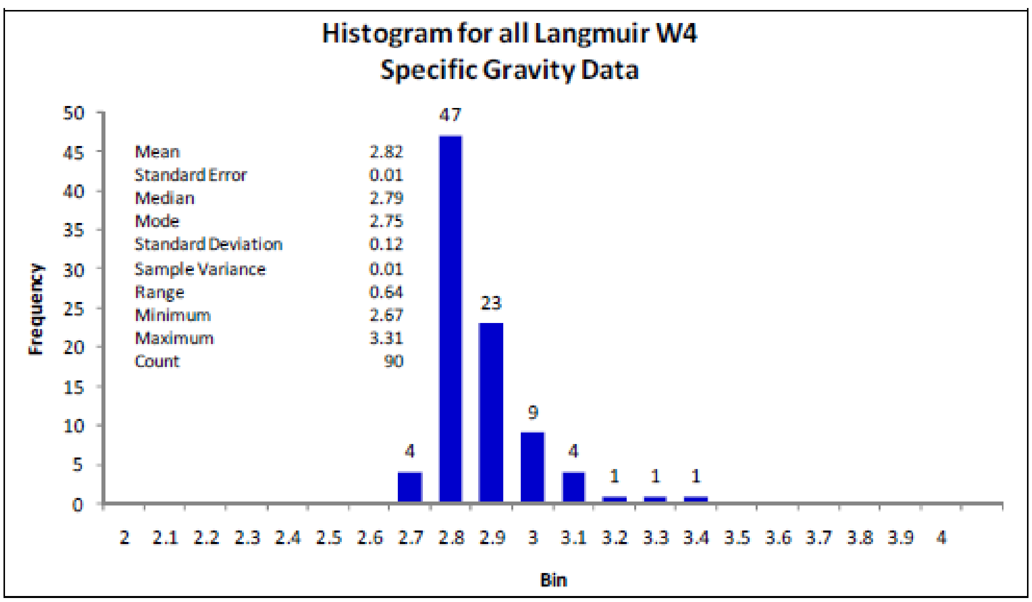


Figure 6-4. Histogram and basic statistics of the combined (2007-2010) specific gravity dataset for Langmuir Nickel Property (Cole *et al.*, 2010).

6.9.4 Sample Security

Drill core was logged at Golden Chalice's secure core logging and sampling facility in Timmins by Golden Chalice geologists. Core was transported to the Timmins core logging and sampling facility by Golden Chalice personnel using a company vehicle. Security of samples prior to dispatch to the analytical laboratory was maintained by limiting access of un-authorized persons to the secure core handling facility. Detailed records of sample numbers and sample descriptions provide integrity to the sampling process. Labelled samples were packed in sealed bags robust enough to survive transport to the assay laboratory and also to provide sample integrity. All drilling assay samples were collected by Manitoulin Transport at the company's secure Timmins core sampling facility and transported securely to Laboratoire Expert Inc. in Rouyn-Noranda, Quebec. Laboratoire Expert Inc. returned the majority of the drill core sample pulps and rejects to Golden Chalice. The returned pulps and rejects are currently securely stored at the core storage facility in Timmins.

6.10 Historical Diamond Drilling (2009-2011)

The following description is taken from Montgomery (2011) and addresses the core sample preparation, analyses and security for work completed in the 2009 and 2010 diamond drilling programs. The 2009 to 2011 diamond drilling programs were competed by Golden Chalice/Rogue Resources under the supervision of Kevin Montgomery (Montgomery, 2011).

At the drill site, core was placed in wooden tray boxes along with "marker blocks" indicating measured distances down the drill hole from the collar by the drill contractor's personnel. During the drilling programs, the core was collected by exploration technicians at the drill sites or the drill access trail every drilling day and moved to a secure logging facility. The secure logging facility was the Hastings Management office/core facility at 571 Moneta Avenue, Timmins Ontario (Montgomery, 2011).

At the facility, the length of drill core recovered was compared to the position of depth markers in the core boxes by a geological technician in order to check for misplaced markers and to calculate the amount of core loss, if any. Geological descriptions of the core and sampling intervals with corresponding identifier numbers were entered onto a "diamond drill log record" installed on a laptop computer. Sampling of the core was based on visual observations of sulphide mineralization and samples were collected within lithologically homogeneous intervals with due regard for varying mineralogy and textures. Sample intervals did not cross geological boundaries. In general, the sample length within mineralized zones was on the order of 0.5 to 1.0 metres or less (Montgomery, 2011).

The NQ or HQ core selected for sampling was sawn in half and a half bagged with the first part of a three-part assay tag bearing a unique identifier number. The other half of the core was stored at the logging facility with the second part of the three part assay tag bearing an identical unique identifier number placed in the core box at the beginning of the sample interval. Records of the sampled intervals and sample numbers were recorded in the computerized drill logs, and on the third part of a three part assay tag bearing an identical identifier number as the other two parts of the assay tag. The third part of the assay tag was kept with the geologist's records (Montgomery, 2011).

Security of samples prior to dispatch to the analytical laboratory was maintained by limiting access of un-authorized persons to the secure core handling facility. The drill core sampler completed an assay requisition sheet describing the sample numbers and requested assay and preparation procedures for inclusion with each batch of samples shipped to the laboratory. Labeled samples packed in sealed bags robust enough to survive the journey to the assay laboratory also provide sample integrity. Core samples were shipped directly by Manitoulin transport truck to the assay laboratory (Montgomery, 2011).

The NQ Sample preparation and assaying was contracted to Laboratoire Expert Inc. of Rouyn-Noranda, Quebec. Each sample was logged in at Laboratoire Expert Inc using "bar codes". Samples were dried prior to crushing the entire sample to 90% passing a -10 mesh screen. From the crushed coarse reject a sub-sample of approximately 300 grams was collected using a Jones riffle splitter. This 300 gram portion was completely pulverized to 90% passing a -200 mesh screen in a ring and puck pulverizer. A 0.5 g aliquot was collected, from each pulp (Montgomery, 2011).

All 2009-2010 NQ drill core samples from the Langmuir Property were analyzed for nickel, copper, cobalt, lead, and zinc by aqua regia digestion followed by Atomic Absorption analyses. The detection limit was 2 ppm for each element. If the nickel, copper or cobalt result was over 5,000 ppm then the pulp was re-analyzed by total digestion followed by Atomic Absorption analyses. The concentrations are reported as a percent and the detection limit is 0.01% for Ni and Cu with the total digestion method. All the drill core samples were also analyzed for gold, platinum and palladium by lead fire assay Atomic Absorption finish on a 30 gram sample pulp. The detection limit for the Lead Fire Assay Atomic Absorption method is 2 ppb for Au, 5 ppb for Pt and 4 ppb for Pd. If the sample result was greater than 1,000 ppb for any element then the sample pulp was re-analyzed by using a lead fire assay collector and a gravimetric finish. The concentrations were reported as grams per tonne (Montgomery, 2011).

All 2011 HQ drill core samples from the historical Langmuir W4 Zone nickel deposit were analyzed for multiple elements by Aqua Regia Digestion ("AR") followed by Inductively Coupled Plasma Mass Spectrometry analysis (ICPMS). A 0.5 g sample is digested in aqua regia at 90°C in a microprocessor controlled digestion block for 2 hours. The solution is diluted and analyzed by ICPMS using a Perkin Elmer SCIEX ELAN 6000, 6100 or 9000 ICP/MS. One blank is run for every 68 samples. An in-house control is run every 33 samples. Digested standards are run every 68 samples. After every 15 samples, a digestion duplicate is analyzed. Instrument is recalibrated every 68 samples. Nickel and certain elements (Ti, P and S) are analyzed by Inductively Coupled Plasma/Optical Emission Spectroscopy (ICP/OES) using a Varian 735 ES. This extends the dynamic range for a number of elements as well.

The company employed a rigorous external QA/QC program for the Langmuir Property drilling programs. Five nickel standards were inserted as checks on the accuracy of the assaying conducted by Laboratoire Expert Inc. (Table 6-18). A standard pulp was inserted every 50th drill core sample (sample numbers ending in "-25 and -75") sent to the laboratory. The five nickel standards range from a high nickel standard of 1.9 % Ni to a low standard of 2650 ppm Ni and were obtained from WCM Minerals of Vancouver, Canada. They represent well the range of nickel grades found on the Langmuir Property.

Table 6-18. Langmuir W4 drilling program sample standards (Cole *et al.*, 2010).

Standard No.	Ni (%)	Cu (%)	Co (%)
Nickel 111	0.42	0.24	0.018
Nickel 112	0.61	0.30	0.040
Nickel 113	1.24	0.25	0.030
Nickel 115	1.90	0.17	0.059
Nickel 117	0.26	0.34	0.009

The external quality assurance program also consisted of inserting blank samples to detect any possible laboratory contamination. A sterile crushed marble sample was inserted every 50th drill core sample (sample numbers ending in

"-00 and -50") sent to the laboratory Laboratoire Expert Inc. has an internal check analysis procedure which includes a repeat pulp analysis every 12th sample for every element analyzed. Each sample shipment batch (certificate of analysis) included a standard for the nickel, copper, and cobalt analysis.

Each furnace batch of 28 samples analyzed for gold, platinum and palladium included a reagent blank and a standard sample. Laboratoire Expert Inc. returned the drill core sample pulps and rejects to the company. The returned pulps and rejects were securely stored at the Hastings Management core storage facility in Timmins, Ontario (Montgomery, 2011).

6.11 Historical Mineral Resource Estimates

In 2009, Golden Chalice commissioned two internal mineral resource estimates for the W4 Nickel Deposit (Langmuir W4 Zone). Using a polygonal methodology on vertical sections, Montgomery (2009c) estimated that the zone contained 785,300 tonnes grading 1.27% Ni (0.5% Ni cut-off grade).

Burt (2009), produced kriged and inverse distance squared block model resource estimates. Using a 0.5% Ni cut-off grade, Burt (2009) kriged estimation was reported as 539,990 tonnes grading 1.03% Ni and the inverse distance squared estimation was 57,201 tonnes grading 1.03% Ni. Montgomery (2009c) and Burt (2009) both used a specific gravity of 2.87 g/cc in their tonnage calculations.

These mineral resource estimates were calculated for internal use only, do not conform to NI 43-101 Standards of Disclosure for Mineral Projects and should not be relied upon. Neither the Principal Author nor a Qualified Person have done sufficient work to classify any of the historical estimates as current mineral resources and as such the Principal Author and the Issuer are treating the tonnages and grades reported as historical mineral resources. Investors are cautioned that the historical mineral resource estimates do not mean or imply that economic deposits exist on the Property.

6.11.1 Historical Mineral Resource Estimate (2010)

In January 2010, SRK was engaged by Golden Chalice to prepare an initial mineral resource estimate for the Langmuir W4 Zone (Cole *et al.*, 2010). The historical mineral resource estimation work was completed by Sebastien Bernier, P.Geo (OGQ#1034) and Glen Cole, P.Geo (PGO #1416), both independent qualified persons as defined in National Instrument 43-101. The historical resource estimation and accompanying technical report were reviewed by Dr Jean-Francois Couture, P.Geo of SRK. The effective date of the historical mineral resource estimate was 28 April 2010 and the technical report was finalized in June 2010 (*see* Golden Chalice news release dated 19 May 2010).

Cole *et al.* (2010), considered that major portions of the Langmuir W4 Zone nickel mineralization were amenable to open pit extraction, while deeper portions could be extracted using an underground mining method. The historical mineral resources for the Langmuir W4 Zone were reported at two nickel cut-off grades (0.4 and 0.7% Ni) based on open pit and underground mining scenarios.

The historical mineral resource estimate was prepared on the basis of nickel and copper only and that cobalt, platinum and palladium contribute little to the resource and were not estimated.

Consolidated historical mineral resources for the W4 Nickel Deposit are presented in Table 6-19. The historical mineral resources for each modelled resource domain are presented in Table 6-20.

There are no recent estimates or data available to the Company.

Table 6-19. Consolidated historical mineral resources*, 27 April 2010 (Cole *et al.*, 2010).

Category	Quantity Tonnes	Grade Ni %	Cu %	Metal Ni lbs 000's	Cu lbs 000's
Open Pit**					
Indicated	590,000	0.99	0.06	12,816	840
Inferred	125,000	0.88	0.06	2,437	157
Underground **					
Indicated	87,000	1.04	0.08	1,997	149
Inferred	46,000	0.91	0.05	923	53
Combined					
Indicated	677,000	1.00	0.06	14,813	989
Inferred	171,000	0.89	0.06	3,360	210

* Mineral resources are reported in relation to optimized pit shells. Mineral resources are not mineral reserves and do not have demonstrated economic viability. All figures are rounded to reflect the relative accuracy of the estimate. All assays have been capped where appropriate.

** Open pit mineral resources are reported at a cut-off of 0.40 percent nickel inside a conceptual pit shell. Underground mineral resources are reported at 0.70 percent nickel and include resource blocks above cut-off outside the conceptual pit shell. Cut-off grades are based on a nickel price of US$8 per pound and a metallurgical recovery of eighty-seven percent, without considering revenues from other metals..

Table 6-20. Historical mineral resources*, 27 April 2010 (Cole *et al.*, 2010).

Category	Domain	Quantity Tonnes 000't	Grade Ni %	Cu %	Metal Ni lbs 000's	Cu lbs 000's
Open Pit**						
Indicated	Low Grade	244,000	0.75	0.04	4,016	218
	Medium Grade	192,000	0.69	0.05	2,903	198
	High Grade	154,000	1.73	0.12	5,897	424
	Sub-Total	**590,000**	**0.99**	**0.06**	**12,816**	**840**
Inferred	Low Grade	84,000	0.70	0.04	1,294	81
	Medium Grade	27,000	0.71	0.05	429	32
	High Grade	14,000	2.24	0.14	714	45
	Sub-Total	**125,000**	**0.88**	**0.06**	**2,437**	**157**
Underground **						
Indicated	Low Grade	49,000	0.90	0.06	976	67
	Medium Grade	23,000	1.01	0.08	511	41
	High Grade	15,000	1.52	0.12	510	42
	Sub-Total	**87,000**	**1.04**	**0.08**	**1,997**	**149**
Inferred	Low Grade	22,000	0.89	0.06	435	27
	Medium Grade	23,000	0.89	0.05	444	23
	High Grade	1,000	1.73	0.15	44	4
	Sub-Total	**46,000**	**0.91**	**0.05**	**923**	**53**
Combined						
Indicated	Low Grade	293,000	0.78	0.04	4,992	285
	Medium Grade	215,000	0.72	0.05	3,414	239
	High Grade	169,000	1.71	0.12	6,407	466
	Sub-Total	**677,000**	**1.00**	**0.06**	**14,813**	**989**
Inferred	Low Grade	106,000	0.74	0.04	1,729	108
	Medium Grade	50,000	0.79	0.05	873	55
	High Grade	15,000	2.21	0.14	758	49
	Sub-Total	**171,000**	**0.89**	**0.06**	**3,360**	**210**

* Mineral resources are reported in relation to optimized pit shells. Mineral resources are not mineral reserves and do not have demonstrated economic viability. All figures are rounded to reflect the relative accuracy of the estimate. All assays have been capped where appropriate.

** Open pit mineral resources are reported at a cut-off of 0.40 percent nickel. Underground mineral resources are reported at 0.70 percent nickel. Cut-off grades are based on a nickel price of US8/lb and a metallurgical recovery of eighty-seven percent, without considering revenues from other metals.

Verification of the historical mineral resources would require the twinning of a selected number of historical drill holes used in the historical resource estimate such that a statistically significant number of core sample assay results from the region of the historical resource estimate could be generated.

The historical mineral resource estimates presented in Table 6-19 and Table 6-20 used categories that conformed to CIM Definition Standards on Mineral Resources and Mineral Reserves (CIM, 2005) at the time of completion of the estimate, as outlined in NI 43-101, Standards of Disclosure for Mineral Projects.

Neither the Principal Author nor a qualified person have done sufficient work to classify any of the historical estimates as current mineral resources and as such, the Principal Author and the Issuer are treating the tonnages and grades reported as historical mineral resources. Investors are cautioned that the historical mineral resource estimates do not mean or imply that economic deposits exist on the Property.

6.12 Historical Mineral Processing and Metallurgical Testing

6.12.1 Historical Mineralogical Study (2010)

Three drill core sample thin sections were submitted to GeoLabs Geoscience Laboratories in Sudbury, Ontario (Hechler, 2010). The samples were collected from drill core GCL-7-10 (94.24 m), GCL-7-10 (94.7 m), and GCL-7-10 (94.84 m). After carbon coating the sections underwent electron backscatter imaging and semi-quantitative mineral identification using SEM-EDS (Scanning Electron Microscopy-Energy Dispersive Spectroscopy).

GCL-7-10-94.24

Sulfide mineralogy consisted primarily of pyrrhotite, pentlandite, minor chalcopyrite, and trace pyrite. The pyrrhotite often displayed slight variations in the Fe:S ratio. A few small (generally < 5 µm) arsenic iron sulfides were noted, often bearing a trace of Co. A few small PGM grains (generally < 1.5 µm) were noted, either as a Rh-arsenic sulfide or Os-arsenic sulfide. Iron oxide was noted in both the silicates and sulfides. The silicate matrix appears to be dominantly serpentine.

GCL-7-10-94.7

Sulfide mineralogy consisted primarily of pyrrhotite, pentlandite, and minor pyrite. The pyrrhotite often displayed slight variations in the Fe:S ratio, and the pentlandite often displayed a "blotchy" texture due to slight variations in the Fe:Ni ratio. A few small (generally < 5 µm) arsenic iron sulfides were noted. A few small PGM grains (generally < 1 µm) were noted, usually as an Os-arsenic sulfide, though a single Ir-Pt-arsenic sulfide grain was also located. A few iron oxide blebs were noted.

GCL-7-10-94.84

Sulfide mineralogy consisted primarily of pyrrhotite, pentlandite, and chalcopyrite. The pyrrhotite often displayed slight variations in the Fe:S ratio and the pentlandite often displayed a "blotchy" texture due to slight variations in the Fe:Ni ratio. Several large chromite grains were noted, all displaying an iron oxide rim. The non-sulfide matrix consisted primarily of serpentine and an iron carbonate. A few small PGM grains (generally < 1 µm) were noted, usually as an Os-arsenic sulfide, Pt-arsenic sulfide, or Rh-arsenic sulfide grains.

6.12.2 Historical Metallurgical Testing and Review (2011-2012)

In 2011, Rogue Resources contracted the Metallurgical Division of Inspectorate Exploration and Mining Services Ltd. ("Inspectorate") of Richmond, B.C. (A Bureau Veritas Group Company) to conduct a scoping study level of metallurgical tests on the recovery of base and precious metals using flotation methods (Shi and Redfearn, 2011). This work was overseen by Mr. John Starkey of Starkey & Associates Inc.

The objective of this program was to investigate mineral recovery by flotation. A total of 127 drill core samples were submitted to Inspectorate and composited into average grade (RA), low-grade (RB), and high-grade (RC) samples

(Table 6-21). Preliminary and scoping flotation tests were performed on the average grade (RA) composite, with confirmatory tests subsequently performed on each of the low (RB) and high (RC) grade composites (Shi and Redfearn, 2011). Results indicative of the preliminary metallurgy are provided in Table 6-22.

Table 6-21. Analyses of three composite samples used in 2011 metallurgical test work.

Inspectorate Analysis			Composite Analyses		
Element		Unit	RA	RB	RC
Nickel	Ni	%	0.95	0.42	2.33
Copper	Cu	%	0.067	0.033	0.203
Iron	Fe	%	6.40	5.59	8.91
Cobalt	Co	ppm	175.7	93.8	329.9
Platinum	Pt	ppm	0.112	0.050	0.247
Palladium	Pd	ppm	0.316	0.128	0.618

Table 6-22. Summary of results from preliminary metallurgical test work (Shi and Redfearn, 2011).

	Feed		Rougher Concentrate			Pct Rougher Recovery		
Comp	% Ni	Test	% Ni	% Cu	Co(ppm)	Ni	Cu	Co
RA	0.95	F20	3.14	0.20	521	81.6	78.3	82.9
RB	0.42	F16	1.79	0.17	339	66.0	72.7	67.7
RC	2.33	F5	6.15	0.71	785	59.8	75.2	60.0
			Cleaner Concentrate			**Pct Cleaner Recovery**		
Comp		**Test**	**% Ni**	**% Cu**	**Co(ppm)**	**Ni**	**Cu**	**Co**
RA		F11	16.8	1.21	2689	66.3	71.8	64.8

Nickel recovery for the RA composite in the roughers is reasonable. Cobalt recovery appears to mirror the recovery trends of the nickel very closely. Whereas copper recovery appears to be relatively independent of the Ni-Co trends.

Nickel recovery for the low-grade composite, RB, is slightly lower than that of the mid-grade composite, RA, which is expected, considering the feed grade is less than half that of RA.

High-grade composite, RC, appears to have quite different mineralogical and metallurgical characteristics compared to composites RA and RB. At a significantly higher feed grade (2.5 times RA) and a finer grind, recovery is much lower.

In 2012, Starkey & Associates Inc. (Starkey, 2012) completed a review of the metallurgical test work reported on by Shi and Redfearn (2011). Starkey (2012), made the following comments:

- The mineralogy was found to be difficult. All three samples were similar in the grain locking textures except that of the low-grade sample. The sulphides appeared to be intensely intergrown with fibrolamellar antigorite resulting in complex and fine-grained locking textures.
- Flotation testing on average ore was done to recover sulphides at a grind F80 of about 65 microns. This method succeeded in recovering 88% of the sulphur, 82% of the nickel and 78% of the copper in about 26% by weight from the sample.
- The reason for the poor cleaning performance at the fine regrind sizes was not determined.
- One Bond ball mill work index (BWi) test was done on a blended composite of the three samples and showed the ore to be quite hard to grind in a ball mill. The measured BWi was 19.9 kwh/t.

Starkey (2012), made the following conclusions:

- To advance the metallurgical recovery to more acceptable economic levels, the flotation of the ultrafine nickel bearing mineral particles may require different frothers and collectors to be used.
- In the event that flotation is not successful, it may then be necessary to look at a hydrometallurgical recovery process.

6.12.3 Historical Mineralogical Study (2015)

In June 2015, Rod Johnson & Associates, Inc., reported on a mineralogical study they had completed on six samples of drill core, provided by Kevin Montgomery of Rogue Resources (Johnson, 2015). The purpose of the petrographic study was to identify the minerals and textures in the samples and to make recommendations for improving the metallurgical recovery of nickel sulphide and improving the quality of the nickel concentrate. The six samples of drill core that were analyzed in this study are provided in Table 6-23.

Table 6-23. List of drill core samples used in the petrographic study of Johnson (2015).

Sample	Hole	From	To	Rogue Resource Sample Description	Ni Grade
8952	GCL08-64	133.90	134.00	Black aphanitic massive homogenous slightly magnetic KPdA 3% pyrrhotite/pentlandite blebs	2.22
8954	GCL08-64	150.00	150.20	Same as above, 5% Po/Pentlandite disseminations and local blebs	1.03
8955	GCL08-69	51.00	51.25	Same as above, 5-7% Po/Pentlandite disseminations, blebs and local stringers	6.61
8956	GCL08-69	52.35	52.55	Same as above.	5.86
8957	GCL08-69	53.00	53.15	Same as above, 3% Po/Pentlandite disseminations.	2.70
8958	GCL08-69	41.80	41.95	Same as above, 2% Po/Pentlandite disseminations.	1.99

The samples contain mineral assemblages typical of serpentinized ultramafic rocks, composed of antigorite and pentlandite with lesser and varying amounts of talc, dolomite, and siderite. The samples also contain minor amounts of chromite, chalcopyrite, pyrrhotite, and cubanite. Pentlandite occurs as disseminated blebs, semi-net textured aggregates, and as disseminated grains. Johnson (2015), noted that all magmatic mineral assemblages have been modified by subsequent metamorphism. The metamorphism produced complex textures through the intergrowth of antigorite plates and pentlandite.

The majority of pentlandite observed in this study is intergrown with antigorite. The resulting texture of thin tabular pentlandite domains alternating with thin antigorite plates creates problems for flotation and liberation.

6.13 Metal Leaching and Acid Rock Drainage Potential Studies

In 2011, SRK was commissioned to complete an initial characterization study of the metal leaching and acid rock drainage (ML/ARD) potential for selected samples from the W4 Nickel Deposit, as selected from drill core by SRK (Kennedy, 2011).

The majority of samples (21 out of 26) from the Langmuir W4 Zone were classified as non-potentially acid generating (NP/AP>3) when using Carbonate NP (Neutralizing Potential). Two samples were classified as uncertain and three were classified as potentially acid generating (NP/AP<1). The classification based on the average for all samples was non-potentially acid generating with a NP/AP ratio of 6.4, ranging from 0.5 to 34. While the potential was determined to be low, trace element leaching may be a concern for nickel, arsenic, cadmium, chromium, and selenium. A strong correlation was observed for total sulphur measured by ICP and Leco methods in addition to calcium measured by ICP and carbonates, indicating that an ICP database containing sulphur and calcium could be used to block model ARD potential (Kennedy, 2011).

The majority of samples tested from the Langmuir W4 area have low potential for ARD based on the average of all samples tested in this study. Two composites had uncertain potential and three composite samples were classified as potentially acid generating (PAG). The elevated concentration of nickel, arsenic, bismuth, cadmium, chromium and selenium relative to global basalt averages are an indication of potential leaching concern. Further work is required to refine the interpretations of from this initial characterization program.

7.0 GEOLOGICAL SETTING AND MINERALIZATION

7.1 Regional Geology

The Langmuir Nickel Property lies within the southwestern part of the Abitibi Subprovince of the Archean Superior Province, proximal to the Shaw Dome (Figure 7-1). The Abitibi Subprovince or "greenstone belt" is the world's largest and best preserved example of an Archean supracrustal sequence. The Abitibi Greenstone Belt ("AGB") is an assemblage of volcanic, sedimentary, and intrusive rocks deformed into a roughly east-trending, 200 km wide belt exposed from the Kapuskasing Structure in Ontario to the Grenville Orogen in Quebec, a distance of 400 kilometres (Ayer *et al.*, 1999).

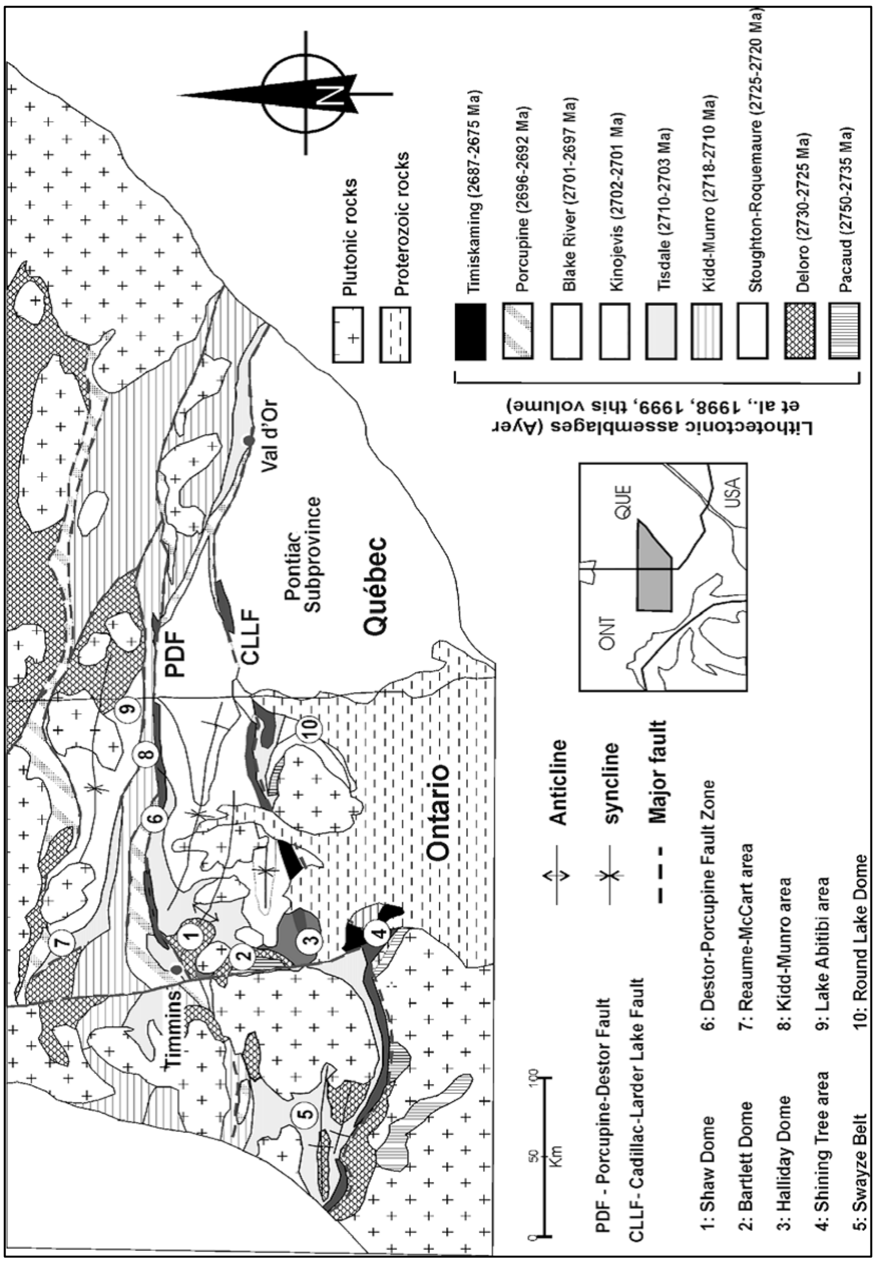


Figure 7-1. Location of the Langmuir Nickel Property, near the Shaw Dome (#1), within the Abitibi Greenstone Belt (Ayer *et al.*, 1999).

The AGB developed between 2.8 to 2.6 Ga (Jackson and Fyon, 1991) and compared to all other Archean Subprovinces of the Superior Province, is uniquely well endowed with metallic mineral deposits including the mining areas of Timmins (base metals and gold), Kirkland Lake (gold), Val d'Or (gold and base metals), and Noranda (base metals and gold). These mining areas are situated along major east and northeast trending deformation zones (Destor Porcupine Deformation Zone, Cadillac-Larder Lake Deformation Zone). These were active throughout the main periods of Archean volcanism and became the focus of a late period of alkaline volcanism and sedimentation between 2680 and 2677 Ma.

Several cycles of volcanism and sedimentation are known in the southern Abitibi Subprovince (*see* Figure 7-1). These sequences usually begin with the deposition of ultramafic flows and intrusions and tholeiitic basalts which have interflow argillaceous sediments. The cycles then typically evolve into calc-alkaline flows, pyroclastic rocks and epiclastic sedimentary rocks deposited in marine to fluvial basins. The layered stratigraphy is intruded by gabbroic to granitic plutons during and after deformation and metamorphism. Metamorphic grade varies from greenschist to lower amphibolite facies. The basal komatiitic parts of the volcanic cycles are of most interest for nickel exploration.

Within the Timmins mining camp, the early Precambrian metavolcanic rocks consist of two groups known as the Deloro and Tisdale Groups. The Deloro Group is older than the Tisdale Group and the two groups are separated from one another in Whitney and Tisdale townships by the Destor Porcupine Fault Zone (“DPFZ”). Here the Tisdale Group lies to the north of the DPFZ while the Deloro Group occurs to the south. The Deloro Group is a calc-alkaline volcanic sequence of andesite to basalt flows in the lower portion and dacite flows and felsic pyroclastic units in the upper portion. The Tisdale Group is composed of komatiitic ultramafic and basalt rocks in the lower portion and overlain by a thick sequence of tholeiitic basalt rocks.

The AGB has been subdivided into nine lithotectonic assemblages (Ayer *et al.*, 2002; Sproule *et al.*, 2002). Only four of these nine assemblages are generally accepted to contain komatiitic rocks and therefore considered prospective for komatiite-hosted Ni-Cu-(PGE) sulphide deposits. These four assemblages have distinct and well defined ages as well as spatial distribution (*see* Figure 7-1): the Pacaud assemblage (2750-2735Ma), the Stoughton-Roquemaure assemblage (2723-2720 Ma), the Kidd-Munro assemblage (2719-2711 Ma), and the Tisdale assemblage (2710-2703Ma). These four assemblages differ considerably in the physical volcanology and geochemistry of the komatiitic flows. It is important to note that the latter two of these assemblages contain larger volumes of high magnesium, Al-undepleted komatiite (>5% Al), while the Tisdale assemblage contains more andesitic rocks and sulphide facies iron formation (Sproule *et al.*, 2003).

7.1.1 The Shaw Dome

The Shaw Dome is a major northwest trending anticline centred approximately 20 km southeast of Timmins (Muir, 1979; Green and Naldrett, 1981) (*see* Figure 7-1; Figure 7-2; Figure 7-3). The anticlinal structure may be a result of regional folding that affected rocks north of the Shaw Dome or, more probably, due to the diapiric action of a large granitic body which partially outcrops in the central south-east portion of the dome.

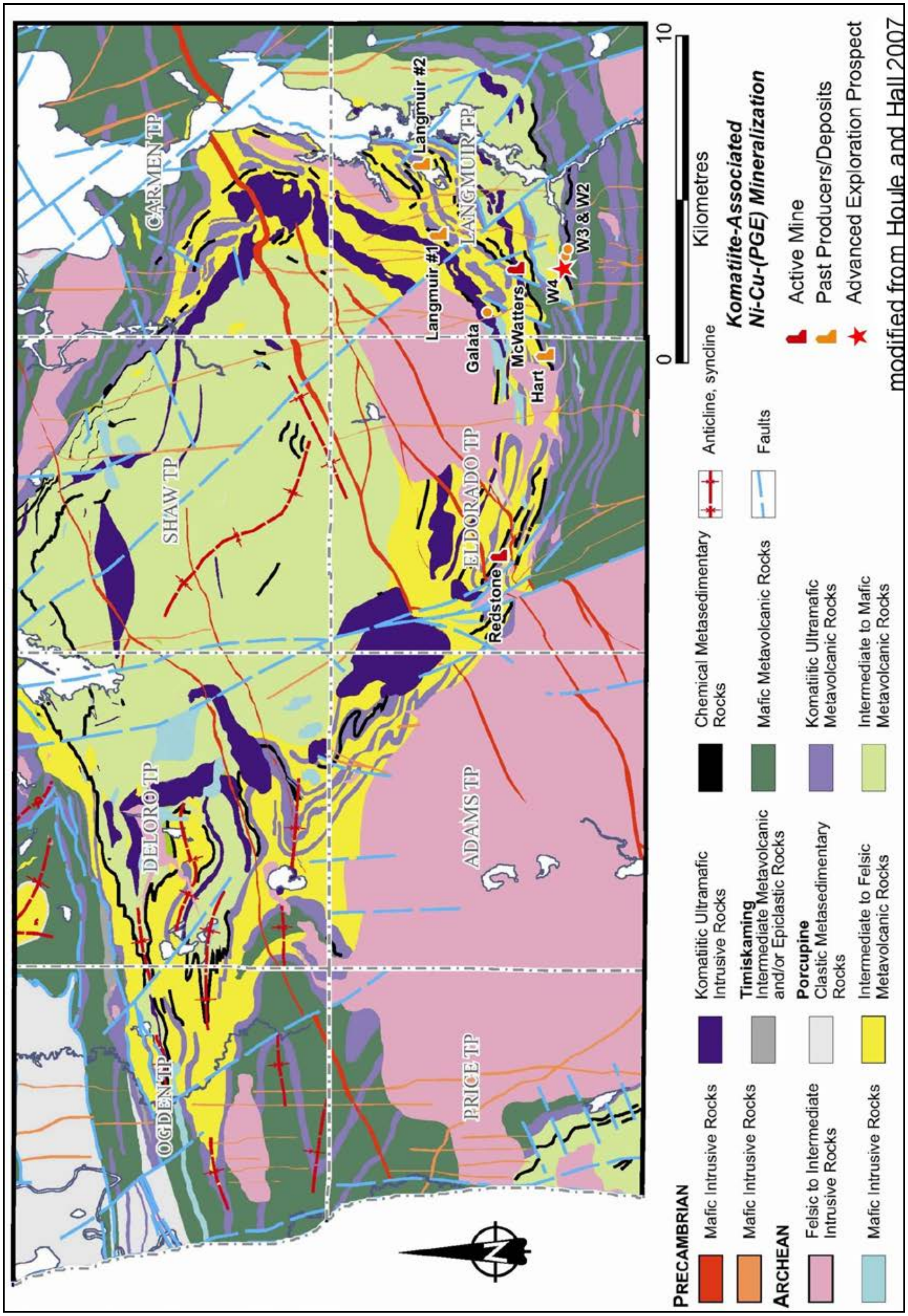


Figure 7-2. Regional geology and location of the Langmuir Nickel Property ("W4" red star) relative to the Shaw Dome (modified from Cole *et al*., 2010; geological base map P3595 from Houlé and Hall, 2007).

Volcanic rocks associated with the Shaw Dome have been interpreted to be a part of the Deloro Assemblage (2730 to 2725 Ma: Ayer *et al.*, 1999) and the younger Tisdale Assemblage. Pyke (1982) further sub-divided these assemblages into three volcanic formations: lower, middle, and upper volcanic formations. The lower formation of the Deloro Assemblage is not exposed in the Shaw Dome, while the middle formation occupies the central part of the dome north of the Redstone mine. The upper volcanic formation of the Deloro was described by Pyke (1982) to contain a relative abundance of sulphide facies iron formations and a predominance of intermediate to felsic volcanic rocks of dacitic to andesitic composition. Pyke (1982) does not mention the presence of extrusive komatiitic rock in this assemblage having mapped all of the ultramafic rocks contained within this supracrustal package as intrusive in nature (*e.g.*, Pyke, 1970a, 1970b and 1975). Pyke (1982) does, however note that there is some intercalation of the komatiite (of the Tisdale assemblage) with the Deloro Group volcanic rocks. Since, both intrusive and extrusive ultramafic rocks have been identified within the Deloro volcanic package (Hall and Houlé, 2003; Houlé *et al.*, 2004; Houlé & Guilmette, 2005) outlined by Pyke (1982). Therefore, either the assumption that the Deloro assemblage is devoid of komatiitic flows needs to be revised or the disconformity that delineates the contact between Deloro and Tisdale rocks modified (Cole *et al.*, 2010).

Stone and Stone (2000), divided the komatiitic rocks into two horizons making no reference to stratigraphy: the lower komatiitic horizon ("LKH") and the upper komatiitic horizon ("UKH"). The UKH consists of extrusive komatiitic rocks intercalated with calc-alkalic volcanic rocks and sulphide facies iron formations, while the LKH consists of komatiitic rocks that intrude the underlying felsic to intermediate volcanic flows and interbedded iron formations. The rocks that form the LKH are mostly dunite, wehrlite, pyroxenite, and gabbro that intruded sometime between 2725Ma and 2707Ma (Stone and Stone, 2000). The UKH rocks are cumulate, spinifex textured and aphyric komatiite that extruded sometime before 2703Ma (Corfu *et al.*, 1989). The LKH komatiitic intrusions are interpreted to represent part of the feeder system that resulted in the eruption of channelized komatiitic flows that are, at least initially, cogenetic and form what is now a large dike-sill-lava complex. Observations and interpretations by Stone and Stone (2000) are supported by later mapping of the Adams, Shaw, Langmuir, and Carman townships by Houlé *et al.* (2004) and Houlé and Guilmette (2005).

Six Ni-Cu-(PGE) deposits have been documented in the Shaw Dome (Table 7-1; *see* Figure 7-2; Figure 7-3) and numerous showings have been identified (*see* Section 23).

Table 7-1. Current and past producing nickel mines in the Timmins area (after Atkinson *et al.*, 2010).

Mine	Years of Production	Ore milled	% Ni	% Cu
Alexo	1912-1919	51,857 tons	4.5	0.55
	1943-1944	4,923 tons		
Alexo / Kelex	2004-2005	17 398 tonnes	2.3	0.23
Langmuir No. 1	1990-1991	111,502 tons	1.74	
Langmuir No. 2	1972-1978	1.1 M tons	1.47	
McWatters	2008	15 361 tonnes	0.55	
	2009	7 664 tonnes	0.41	
Montcalm	2004-2008	3 722 929 tonnes	1.26	0.67
Redstone	1989-1992	294,895 tons	2.4	
	1995-1996	10,228 tons	1.7	
	2006-2008	133 295 tonnes	1.92	

Mine	Years of Production	Ore milled	% Ni	% Cu
	2009	36,668 tonnes	1.16	
Texmont	1971-1972	unknown		

7.2 Property Geology and Mineralization

The Langmuir Property is predominantly underlain by the middle and lower formations of the Tisdale Group which consist of linear sequences of mafic volcanic units or ultramafic units (Figure 7-4). These linear sequences trend east-west in the southern portion of Eldorado and Langmuir townships and then swing north-south along the eastern halves of Langmuir and Carman townships.

The ultramafic sequences consist of mesocumulate to adcumulate peridotite flows with distinct spinifex textured flow tops. The flow tops indicate younging to the south. Graphitic argillite units are locally present between the peridotite flows. The mafic sequences consist of massive to pillowed basalt-andesite flows. The mafic-ultramafic sequences are locally intruded by north trending Matachewan diabase dikes and north-east trending Abitibi diabase dikes. Felsic intrusive bodies also intrude the sequences with the largest being a monzonite body in the southeast corner of Langmuir Township. The volcanic stratigraphy is cross cut by a major regional northwest trending fault “Montreal River Fault”, just east of the Night Hawk River (Cole *et al.*, 2010).

Overburden around the W4 Nickel Deposit ranges between 0 and 20 m in depth and is known to thicken to the west. Overburden is composed of lacustrine and shallow marine sediments with occasional boulders; no till sequences are reported (Campbell, 2011).

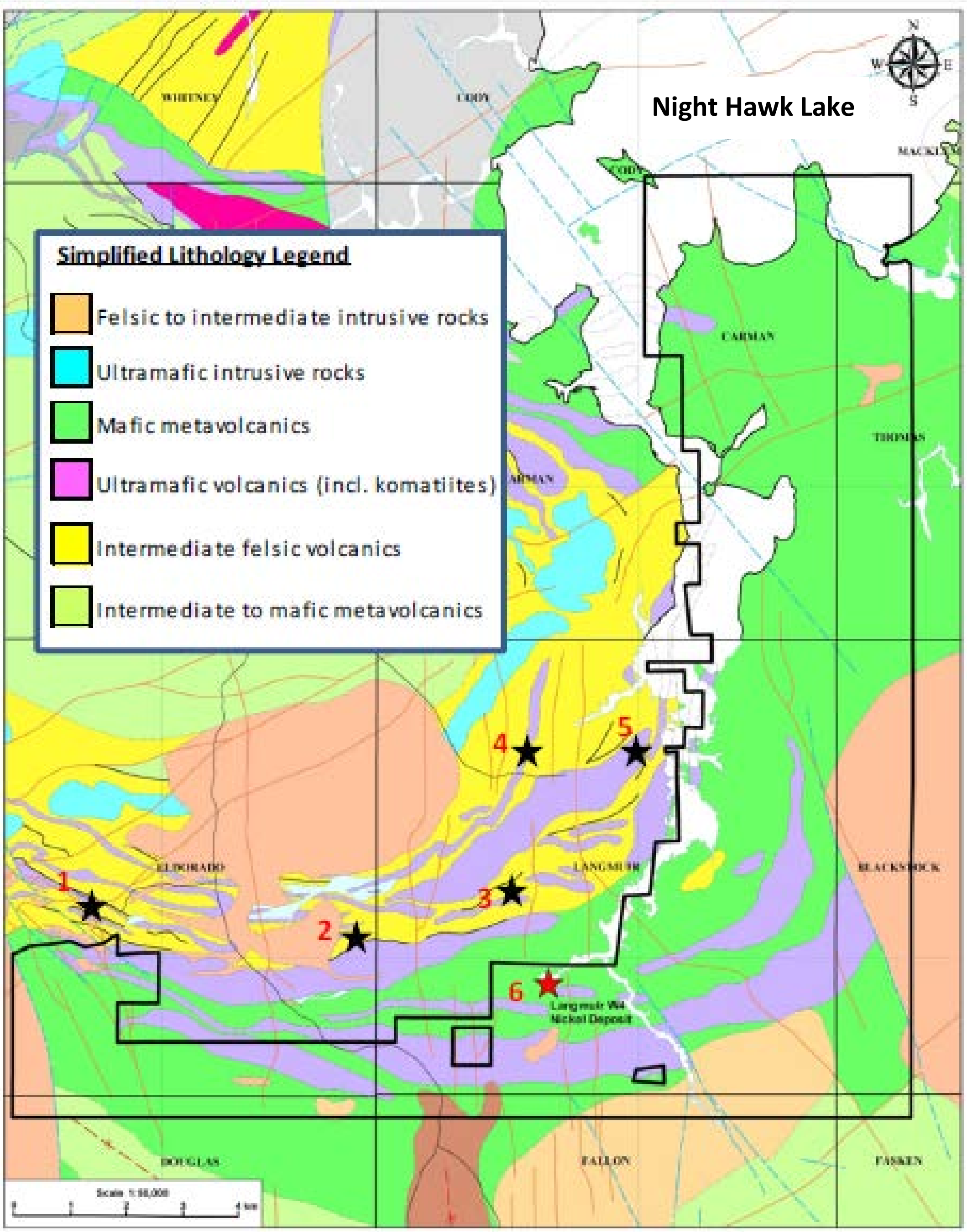


Figure 7-3. Generalized geology within and around the Langmuir Nickel Property showing the historical claim boundary (black outline), location of the W4 Nickel Deposit (red star, location #6, Langmuir W4 Nickel Deposit), and locations of other nickel deposits associated with the Shaw Dome: 1=Redstone Mine; 2=Hart Deposit; 3=McWatters Mine; 4=Langmuir Mine #1; 5=Langmuir Mine #2. The historical claim boundary (black) approximates the current Langmuir Nickel Property boundary (geology and locations from Houlé and Hall, 2007).

7.2.1 Property Mineralization

There are seven (7) primary target areas, W1 to W7, defined mainly from heliborne VTEM Mag-EM surveys (2005 and 2007) and shown in Figure 7-4. These airborne anomalies were interpreted to be the result of sulphide mineralization (Orta, 2005 and 2007).

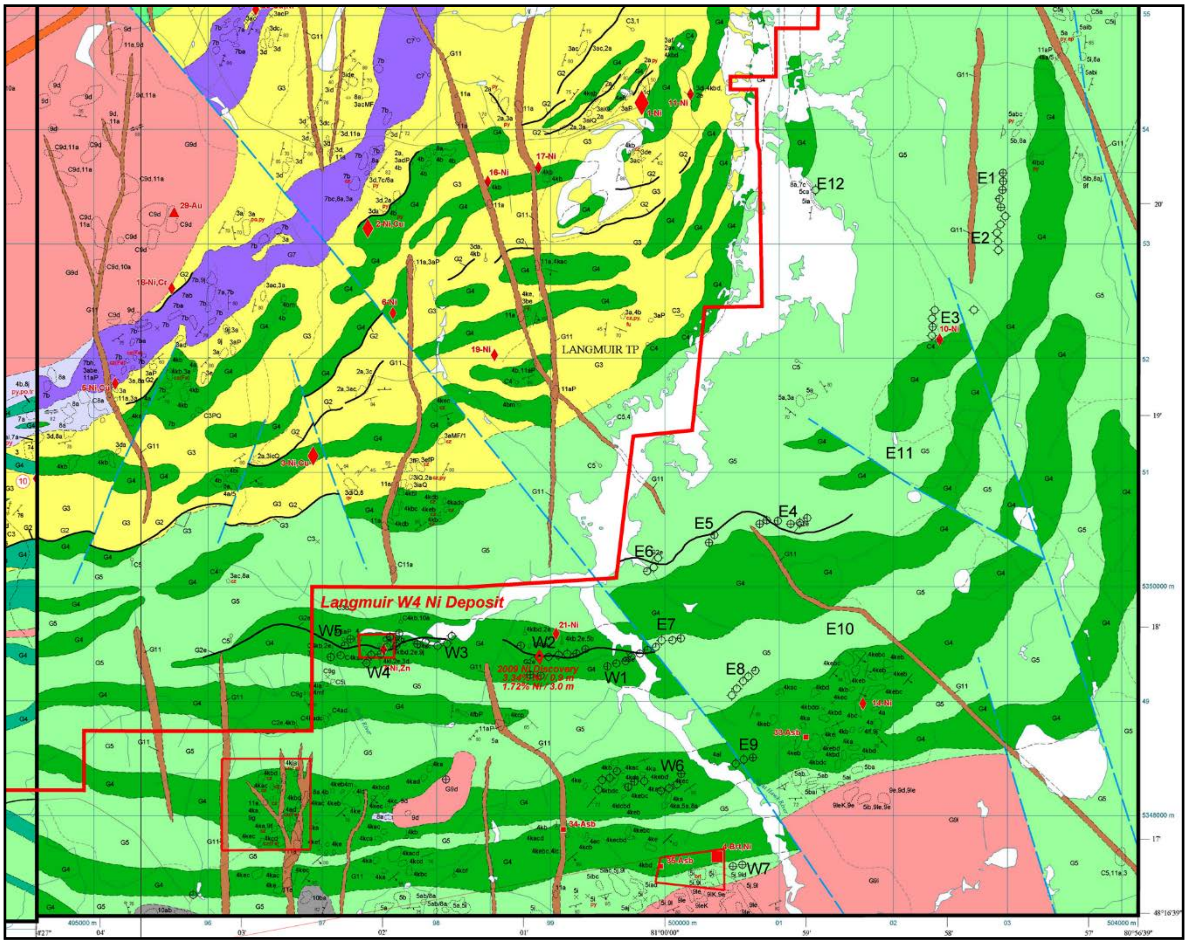


Figure 7-4. Locations of target (W1 to W7) areas on the Property as defined mainly from airborne VTEM mag-EM surveys (2005 and 2007). Geological base map P3268 (Houlé and Guilmette, 2005).

7.2.2 Geology of the W4 Nickel Deposit

The W4 Nickel Deposit (Langmuir W4 Zone) was interpreted to consist of three sub-parallel nickel zones hosted by komatiitic peridotite flows (Cole *et al.*, 2010). These east-west trending peridotite flows have good spinifex flow tops and associated thin graphitic argillite interflow units. The peridotite flows are typically black, fine-grained, soft, weak to moderately serpentinized and typically have adcumulate to mesocumulate textures. Detailed examinations of the spinifex flow top sequences and flow morphologies indicate the flows have a southward younging direction.

This initial interpretation of three separate sub parallel nickel zones at the base of individual peridotite flows was based on the drill data from the Golden Chalice exploration campaigns, through holes that were drilled obliquely to the dip and strike of the mineralization. EV Nickel, in their 2021, 2022 and 2023 drilling campaigns were able to drill holes that were oriented more perpendicular to the mineralization and these holes helped to better define the geometry of mineralization. The drilling from EV Nickel holes did not intercept three separate sub-parallel nickel zones but rather, defined a continuous but faulted unit. Detailed revision of the downhole locations of the mineralized contacts, and the lithological contacts within the volcanic flows indicated that the previous concept of three flows, could actually be one unit that has been faulted with repeated throws. The mineralized flow is now interpreted to be split by five faults, creating six blocks with a measurable strike-slip displacement.

Immediately south of the peridotite flows in the Langmuir W4 Zone, a pink medium-grained hornblende-rich (5-10%) granodiorite intrusive is present. It is thought that this intrusive may represent an east-west dike. The peridotite flows in the vicinity of this granodiorite are strongly brecciated and often contain graphite. Smaller felsic to intermediate, feldspar porphyry, mafic, and gabbro dikes or sills intrude the peridotite flows locally (Cole *et al.*, 2010).

The mineralization is now considered to be one flow dipping at 70-75 degrees to the north, split by 5 faults and limited at the eastern end by another north-south oriented subvertical fault. The east-west strike extent of the zones has been defined for at least 200 metres. The zones may be open below the granodiorite dike and/or at a vertical depth of 400 metres. The nickel zones have an average true thickness of 8 to 19 metres.

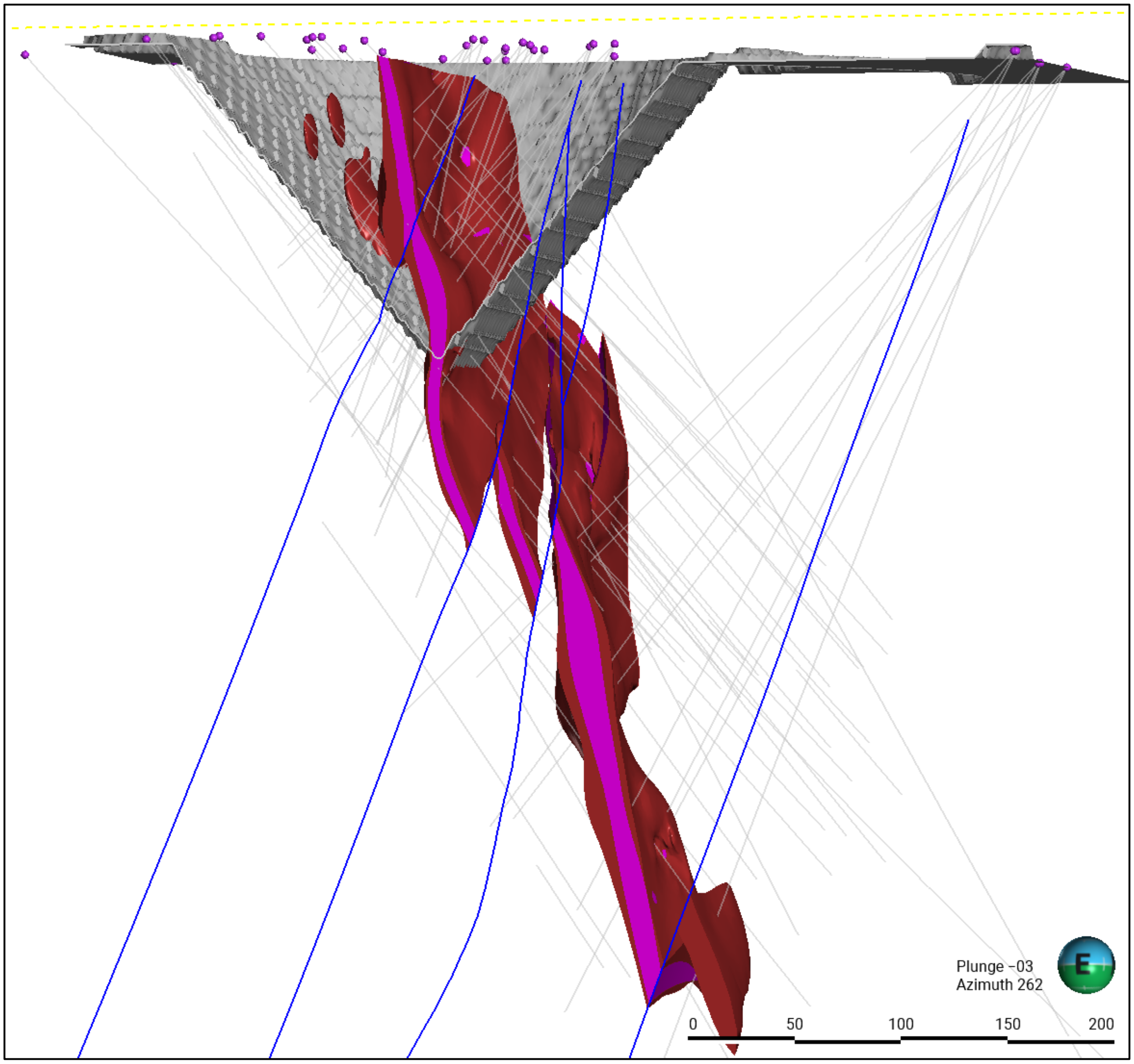


Figure 7-5. Isometric view looking west-southwest (262Az), with the new faulted interpretation of the W4 Nickel Deposit (*see* Section 14); interpreted faults are shown in blue and the optimized open pit as grey. Also shown are drill hole collars (purple dots) and traces (grey) from historical Golden Chalice drilling and current EV Nickel drilling. Coloured nickel-grade domains: red = >0.2% Ni (Low-grade Nickel Domain); magenta = >0.5% Ni (High-grade Nickel Domain).

7.2.3 Mineralization in the W4 Nickel Deposit

The sulphide assemblage in the W4 Nickel Deposit consists primarily of pentlandite, millerite, pyrrhotite, and minor pyrite and chalcopyrite within the nickel zones. The pentlandite occurs intergrown with pyrrhotite as irregular grains that are generally relatively coarse-grained.

The region nearest the surface, the principal and discovery zone, consists of a basal lower horizon of stringer/fracture filling sulphides to semi-massive-massive sulphides and a stratigraphically overlying upper disseminated to blebby sulphide horizon (Figure 7-6: A to E). Locally, massive sulphide veinlets occur mainly in the lower region (Figure 7-6: F).

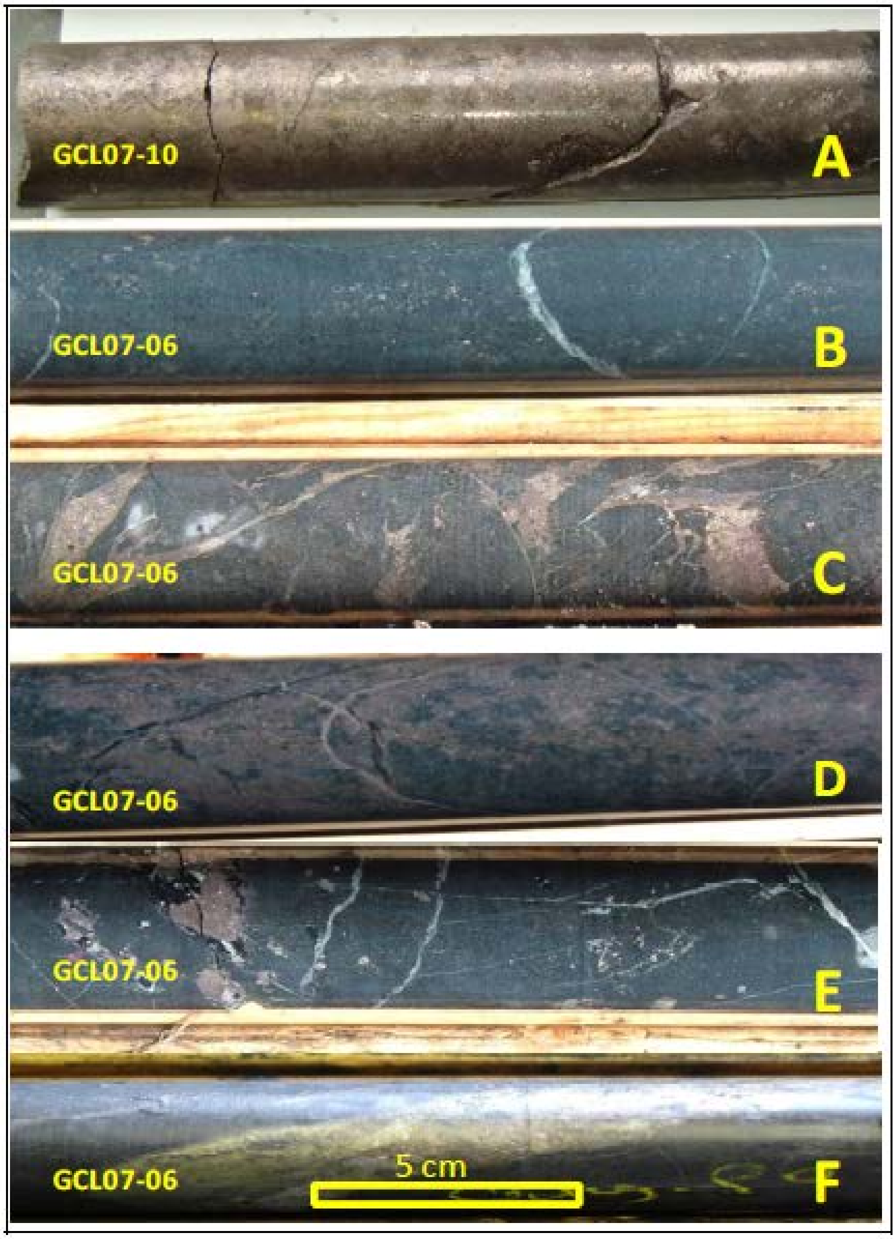


Figure 7-6. Typical W4 Nickel Deposit sulphide mineralization styles. Panels are, A=massive sulphide; B=disseminated sulphide; C=fracture-filling sulphide; D=semi-massive sulphide; E=blebby sulphide; F=local massive sulphide veinlet (after Cole *et al.*, 2010).

In the lower region of the deposit, the sulphide modal abundance is over 15% and in the upper region, the sulphide modal abundance varies from 3% to 15%. Nickel grades are typically 0.5% to 3.0% Ni within the upper disseminated sulphide zone. Higher nickel concentrations of 5% to 7% Ni occur where sulphide concentrations increase to 30% or 35% (semi-massive sulphides). Locally, massive sulphide sections are present grading in some cases up to 17.9% Ni; these higher nickel concentrations generally occur in the lower regions (Cole *et al.*, 2010).

8.0 DEPOSIT TYPES

The distribution of magmatic nickel-copper-platinum group metal sulphide deposits within Canada, with a resource size greater than 100,000 tonnes is shown in Figure 8-1. The W4 Nickel Deposit consists of nickel sulphide minerals (*i.e.*, pentlandite, millerite, pyrrhotite, chalcopyrite) hosted by komatiitic rocks (magnesium-rich and high-temperature volcanic rocks).

Considerable research by various writers over the years indicates that komatiite hosted nickel deposits in the Timmins area are similar to the Archaean age nickel deposits of the Kambalda and Windarra areas in Western Australia. Komatiite-hosted Ni-Cu-PGE deposits are one of several lithological associations within the broader group of magmatic Ni-Cu-PGE deposits. Mineralization occurs in both extrusive and intrusive settings and experimental studies indicate that komatiitic magmas/lavas are mantle-derived and emplaced at very high temperatures. Deposits of this association are mined primarily for their nickel contents, but they contain economically-significant amounts of Cu, Co, and PGE (Lesher and Keays, 2002; Sproule *et al.*, 2005).

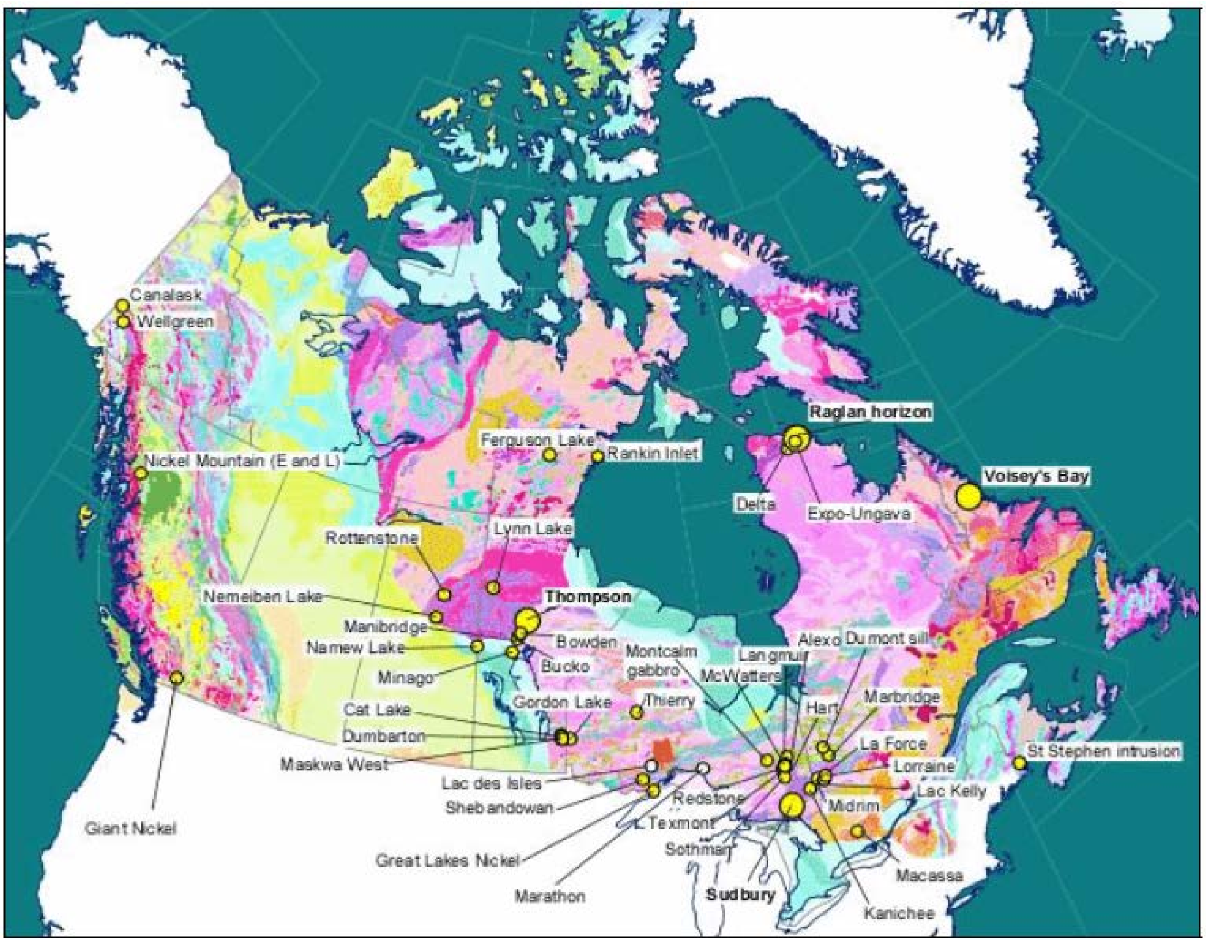


Figure 8-1. Map of Canada showing the distribution of magmatic Ni-Cu-PGE sulphide deposits in Canada with resources greater than 100,000 tonnes (after Wheeler *et al.*, 1996).

Within the AGB four of the assemblages contain komatiites. Komatiite-associated Ni-Cu-(PGE) deposits have only been identified within the Kidd-Munro and Tisdale assemblages, including the Langmuir W4 Zone and the other Shaw

Dome deposits. This is consistent with the interpretation that komatiite associated Ni-Cu-(PGE) deposits form within lava channels.

Tisdale assemblage ultramafic volcanic rocks with high-MgO content (up to 32%) are defined as aluminum undepleted komatiite ("AUK"). Individual flows are usually less than 100 m thick and typically occur at or near the base of ultramafic sequences; however, the W4 Nickel Deposit is an exception as it occurs well-above the basal contact, within the volcano-sedimentary sequence. The flow units can be recognized by the presence of chilled contacts, the distribution of spinifex textures, marked compositional or mineralogical changes at unit boundaries and the presence of ultramafic breccia or sulphidic sediments at contacts. Intrusive counterparts have also been recognized in the Tisdale assemblage.

Komatiite-associated nickel sulphide deposits are part of a continuum of lithotectonic associations in the family of magmatic Ni-Cu-PGE deposits, which contains a variety of mineralization types (Lesher and Keays, 2002). Mineralization discovered to date on the Langmuir Nickel Property can be characterized as ultramafic extrusive komatiite-hosted Ni-Cu-Co-(PGE) deposit type, which recognizes two sub-types or styles (Lesher and Keays, 2002):

1) Type I Kambalda-style: komatiite-hosted; channelized flow theory; dominated by net-textured and massive sulphides situated at or near the basal ultramafic/footwall contact with deposits commonly found in footwall embayments up to 200 m in strike length, 10s to 100s of metres in down-dip extent, and metres to 10s of metres in thickness; generally on the order of a million tonnes (usually <1Mt) with nickel grades that are typically much greater than 1% Ni; tend to occur in clusters (*e.g.*, Alexo-Dundonald, Ontario; Langmuir, Ontario; Redstone, Ontario; Thompson, Manitoba; Raglan, Quebec).

2) Type II Mt. Keith-style: thick olivine adcumulate-hosted; sheet flow theory; disseminated and bleb sulphides, hosted primarily in a central core of a thick, differentiated, dunite-peridotite dominated, ultramafic body; more common nickel sulphides such as pyrrhotite and pentlandite but also sulphur-poor mineral heazlewoodite (Ni3S2) and nickel-iron alloys such as awaruite (Ni3-Fe); generally on the order of 10s to 100s of million tonnes with nickel grades of less than 1% Ni (*e.g.*, Mt. Keith, Australia; Dumont Deposit, Quebec).

The W4 Nickel Deposit is more closely associated with the Type I Kambalda-style (*stratiform basal*).

The genesis of the Shaw Dome and the Australian deposits may be attributed to the combined effect of lava channels and intrusions that provide the heat and metal sources to interact with sulphide-bearing host rocks which provide an external sulphur source. Thermal erosion of the underlying rocks by the komatiite flows is considered to be a dominant mechanism for adding sulphur to the magma.

Characteristics of this deposit type which should be considered in exploration strategies include:

- Geological mapping of komatiite flow units.
- Presence of sulphidic footwall rocks.
- Identification of AUK through lithogeochemical sampling.
- Airborne and ground electromagnetic surveys to detect massive sulphide mineralization.

- Airborne and ground magnetic geophysical surveys to detect pyrrhotite-rich sulphide mineralization.

8.1 Komatiite Geological Models

After the discovery of the Kambalda and Mt. Keith Ni-Cu-Co-(PGE) deposits in Australia (*ca.* 1971), geological models were developed for these ultramafic extrusive komatiite-hosted deposits (*e.g.*, Lesher and Keays, 2002; Butt and Brand, 2003; Barnes *et al.*, 2004).

Komatiitic rocks are derived from high degree partial melts of the Earth's mantle. Due to the high degree of partial melting the komatiitic melt is enriched in elements such as nickel and magnesium. When erupted, the melts have a low viscosity and tend to flow turbulently over the substrate eroding the footwall lithologies through a combination of physical and chemical processes. Due to the low viscosity of the komatiitic melts, the lavas tended to concentrate in topographic lows. Komatiitic eruptions have been envisaged to have a high effusion rate and large volumes of lava and/or magma.

Komatiite-hosted Ni sulphide deposits, whether they are Archean or Proterozoic, occur in clusters of small sulphide bodies that are generally less than 1 million tonnes. At 1:25 0000 scale, these deposits usually occur at a pronounced thickening of ultramafic stratigraphy, and at 1:5 000 scale, these deposits occur as net-textured to massive sulphide in small embayments up to 200 m in strike length, tens to hundreds of metres in down-dip length and metres to tens of metres thick. The shape can be cylindrical, podiform, or in rare instances tabular.

8.1.1 Komatiite Volcanic Facies

The five major volcanic facies that are common constituents of komatiitic flow fields include (Barnes *et al.*, 2004) (Table 8-1):

- Thin differentiated flows (TDF).
- Compound sheet flows with internal pathways (CSF).
- Dunitic compound sheet flows (DCSF).
- Dunitic sheet flows (DSF).
- Layered lava lakes or sills (LLLS).

DCFS and CSF facies represent high-flow magma pathways characterized by olivine cumulates and can be identified by their elevated Ni/Ti and Ni/Cr ratios and low Cr contents (Barnes *et al.*, 2004). Although only DCFS and CSF facies are known to host economic nickel sulfide mineralization (Burley and Barnes, 2019), it does not discount the prospectivity of the other facies, particularly the thick sheets and/or sills associated with the DSF and LLLS types.

Table 8-1. Features of komatiite volcanic facies (Barnes *et al.*, 2004).

Facies	Description	Type Examples
Thin Differentiated Flows (TDF)	Multiple compound spinifex-textured flows; generally less than 10 m thick, with internal differentiation into spinifex and cumulate zones	Munro Township (Pyke et al., 1973)
Compound Sheet Flows with Internal Pathways (CSF)	Compound sheet flows with internal pathways (CSF) Compound thick cumulate-rich flows, with central olivine-rich lava pathways flanked by multiple thin differentiated units, from tens of metres to ~200 m maximum thickness	Silver Lake Member at Kambalda (Lesher et al., 1984)
Dunitic Compound Sheet Flowws (DCSF)	Thick olivine-rich sheeted units with central lenticular bodies of olivine adcumulates, up to several hundred metres thick and 2 km wide, flanked by laterally extensive thinner orthocumulate-dominated sequences with minor spinifex. CSF and DCSF correspond to 'Flood Flow Facies' of Hill et al. (1995).	Perseverance and Mount Keith (Hill et al., 1995)
Dunitic Sheet Flows (DSF)	Thick, laterally extensive, unfractionated sheet-like bodies of olivine adcumulates and mesocumulates, in some cases laterally equivalent to layered lava lake bodies	Southern section of the Walter Williams Formation (Gole and Hill, 1990; Hill et al., 1995)
Layered Lava Lakes and/or Sills (LLLS)	Thick, sheeted bodies of olivine mesocumulates and adcumulates with lateral extents of tens of kilometres, with fractionated upper zones including pyroxenites and gabbros, up to several hundred metres in total thickness	Kurrajong Formation (Gole and Hill, 1990; Hill et al., 1995)

9.0 EXPLORATION

Other than the geophysical surveys described below, EV Nickel has focused on diamond drilling programs (*see* Section 10) and metallurgical test work (*see* Section 13) within the Langmuir Nickel Property and specifically on and in the area of the W4 Nickel Deposit (Langmuir W4 Zone).

9.1 Geophysical Surveys

9.1.1 Processing and Analysis of Multiple Geophysical Surveys

EVNi commissioned Condor North Consulting ULC ("Condor") to process and analyze the airborne, ground and borehole time-domain electromagnetic (TEM) geophysical data in the Langmuir area in April of 2021. The purpose of the data review was to aid in the identification of komatiitic-hosted nickel deposits, which are expected to be characterized by high conductivity and magnetic association. The focus of the processing and analysis was identifying EM conductive responses through line-by-line picking of the 2005 and 2007 VTEM surveys and ranking these based on their EM character, associated magnetic response, geologic setting and any additional known information. Included historical geophysical data included two VTEM surveys, including TEM and magnetics data, surface fixed loop TEM surveys and a total of 24 borehole TEM surveys.

The result of the processing and analysis by Condor was the identification of 21 Target Zones (TZs), seven of which are deemed a high priority for follow-up exploration. Of the remaining TZs, 10 have a low priority and four have a moderate priority. The high priority TZs lie near known mineralization or have nearby diamond drilling that has indicated favourable geology.

The examination of the EM profiles identified discrete conductors as the predominant style within the 2005 and 2007 VTEM data. The majority of the EM responses were easily classified as single peak response ("SPR") and double peak response ("DPR") responses; Figure 9-1 provides an example of moderate SPR and strong DPR responses. The strength of the response (weak, moderate, or strong) was assigned based on the amount of noise in the response and the decay signature.

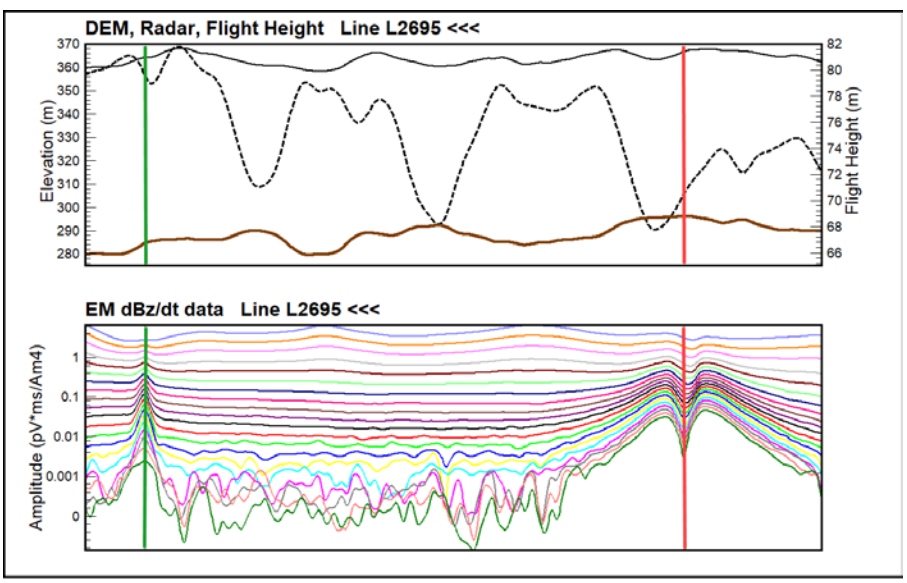


Figure 9-1. Example of (left) moderate SPR and (right) strong DPR response from the 2007 VTEM survey. The anomaly pick locations are shown by a green line for moderate and red line for strong anomalies (Condor North Consulting ULC, 2021).

The picks are plotted in map view and in general (Figure 9-2), the picks follow the trend of the mapped komatiite flows and predominantly trend east-west in the western part of the property before changing to north-south trend in the eastern and northern parts of the property. Target Zones are selected by logically grouping EM picks that appear to be related, usually by trend line-to-line.

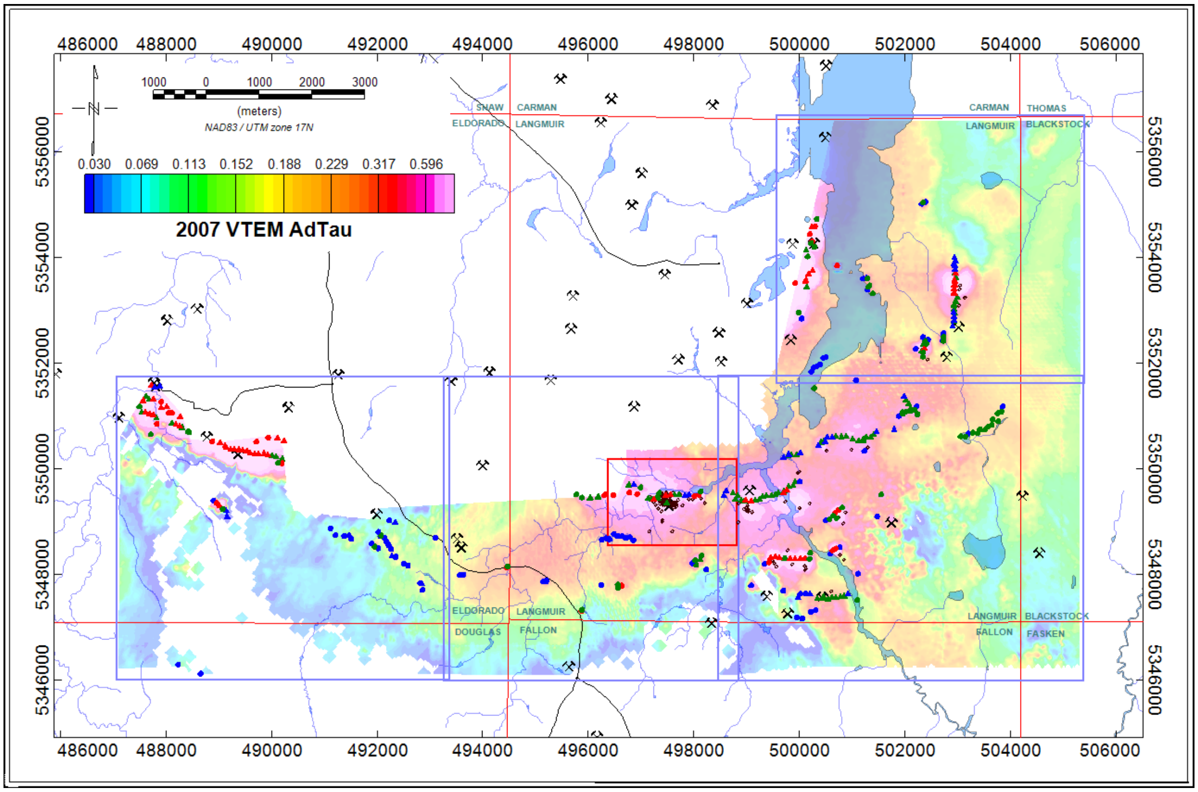


Figure 9-2. The VTEM AdTau grid with EM anomaly picks over the entire Property (Condor North Consulting ULC, 2021).

The Total Magnetic Intensity (TMI) grid (Figure 9-3) indicated that the relatively high magnetic response areas correspond with the ultramafic peridotitic flows, although it must be considered that the interpretation is based on interpreted geophysical data and not field mapped. Some of the magnetic responses are likely due to mapped dikes and related iron formations. The magnetic signatures follow the same directional trends as the EM picks and often the TZs lie on the northern flank or within a relatively high magnetic response. The magnetic bodies are generally elongated, with depth extent and narrow widths. This is the expected geometry of the komatiitic flows.

The anomaly picking of the VTEM EM data identified 21 groupings (Figure 9-4), that are classified as low, moderate, and high priority TZs. Each TZ was summarized (Table 9-1), along with the magnetic character, geologic setting, nearby borehole information, and structural setting. The highest ranked EM TZs are clustered around the Langmuir W4 deposit with other highly ranked TZs near the Redstone Mine and the W2 and W3 mineralized zones.

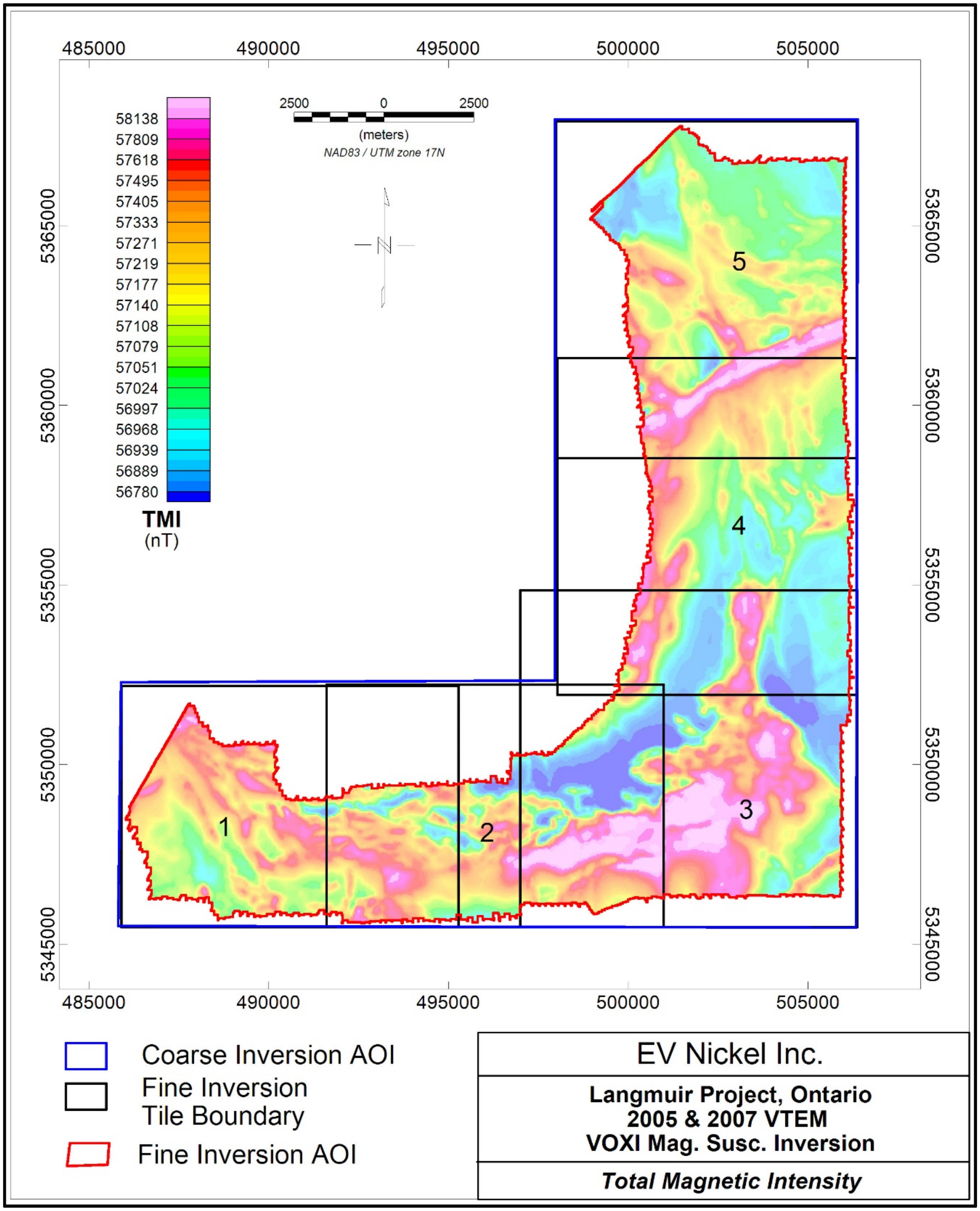


Figure 9-3. Merged TMI with inversions (Condor North Consulting ULC, 2021).

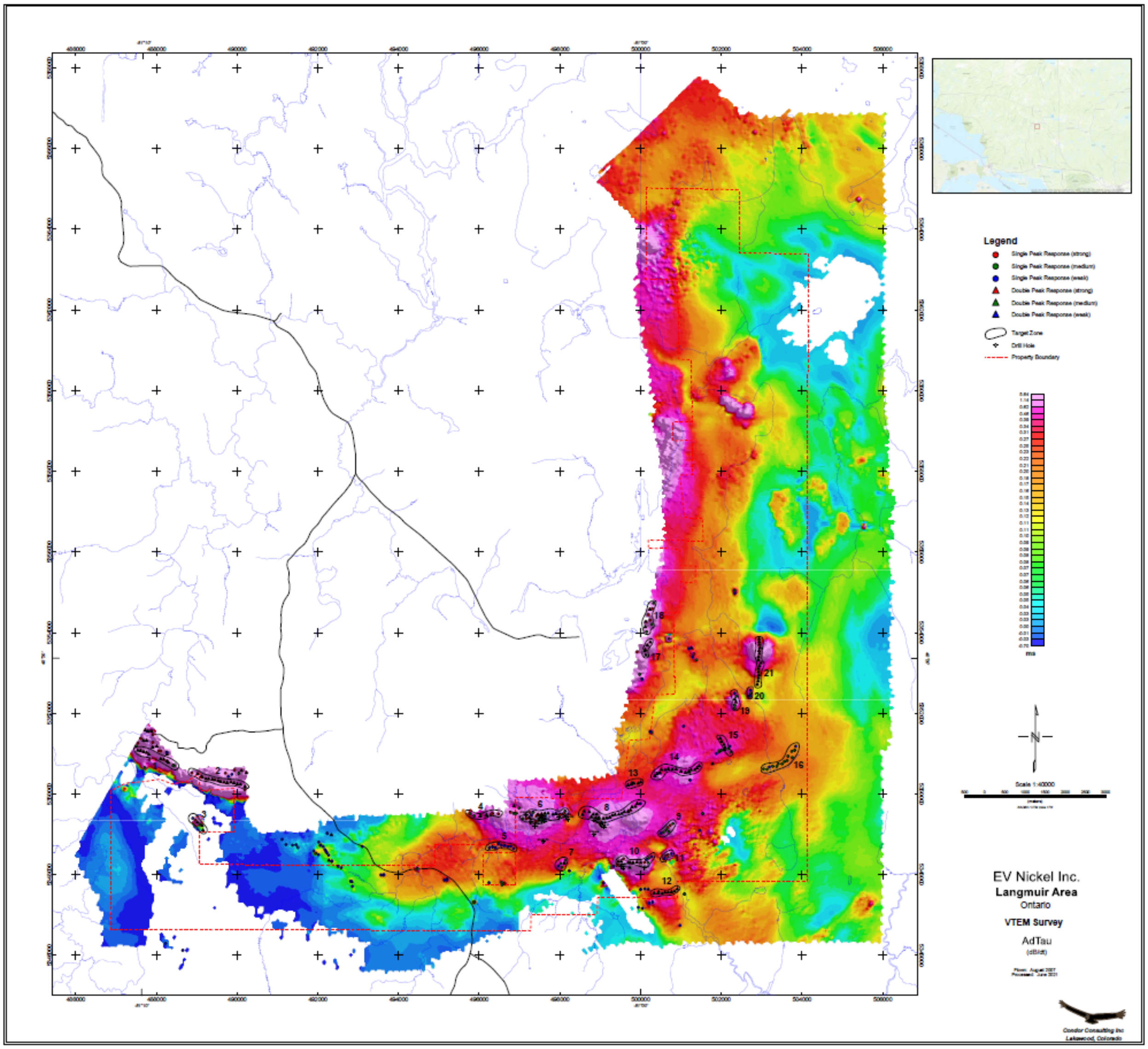


Figure 9-4. The EM TZs from picking the VTEM EM data, along with the picks and the 2007 VTEM AdTau (Condor North Consulting ULC, 2021).

Table 9-1. The TZs are summarized using short remarks and ranked low, moderate or high priority for follow up.

TZ	Ranking	Remarks
1	Low	Near Redstone Mine
2	Low	Near known mineralization, along geological contact
3	High	Pencil-like shape, steeply dipping, near dike
4	High	Directly west of Langmuir W4 area
5	Moderate	Weak responses with different character than other TZs
6	High	Langmuir W4 area
7	Low	Aligns with tonalite unit
8	High	Langmuir W2 area
9	Low	Nearby drill holes show no conductive material
10	Low	Nearby drill holes show graphitic sediments and minor sulphide bands

TZ	Ranking	Remarks
11	Low	Possible extension of TZ 10 across from fault
12	Low	Nearby drill holes show no conductive material
13	High	Possible extension of TZ 8 across from fault
14	High	Nearby drill holes show graphitic argillite, indicating favourable setting for nickel mineralization
15	Moderate	Cross-like feature due to perpendicular dense flight lines
16	Moderate	May be associated with a marshy area, terminating at a lake
17	Low	Outside of claim boundary
18	Low	Outside of claim boundary
19	High	Nearby drilling indicates komatiitic volcanics and anomalous nickel overlying andesite
20	Moderate	Similar setting as TZ 19 but may also be offset by fault from TZ 21
21	Low	Nearby drilling indicates andesitic volcanics with graphitic sediments

Condor recommended that the high priority TZs are Maxwell modelled, which allows for better definition of the strike length, dip and conductance associated with the EM Trends. Modelling of the EM responses can also help to ensure that any drilling planned for the high priority TZs hit the conductive plates.

10.0 DRILLING

To date, EV Nickel has completed 13,295 m of diamond drilling in 68 diamond drill holes on the Langmuir Nickel Property (Table 10-1; Figure 10-1). A total of 9,168 m in 32 holes were completed at the W4 Nickel Deposit and 4,127 m in 18 holes were completed within the remainder of the Property referred to as reconnaissance drill holes (Figure 10-1). The drilling programs were completed under the supervision of Philip Vicker (P.Geo.). The information and data from these drill holes was used in the calculation of the current mineral resource estimate (*see* Section 14).

Table 10-1. Summary of all drilling programs completed by EV Nickel on the Langmuir Nickel Property.

Year	Target Area	No. Holes	Length (m)	Logged (m)	Primary Core Samples	Check Samples	Standards	Blanks
2021	W4	10	1,833	1,833	183	0	11	8
2022	W4	13	4,830	4,830	642	0	32	29
2023	W4	9	2,505	2,431	486	0	17	17
	Totals:	**32**	**9,168**	**9,094**	**1,311**	**0**	**60**	**54**
2021	Recon	10	2,360	2,360	599	0	26	25
2022	Recon	8	1,767	1,617	572	0	26	27
2023	Recon	0	0	0	0	0	0	0
	Totals:	**18**	**4,127**	**3,977**	**1,171**	**0**	**52**	**52**
	G-Totals:	**50**	**13,295**	**13,071**	**2,482**	**0**	**112**	**106**

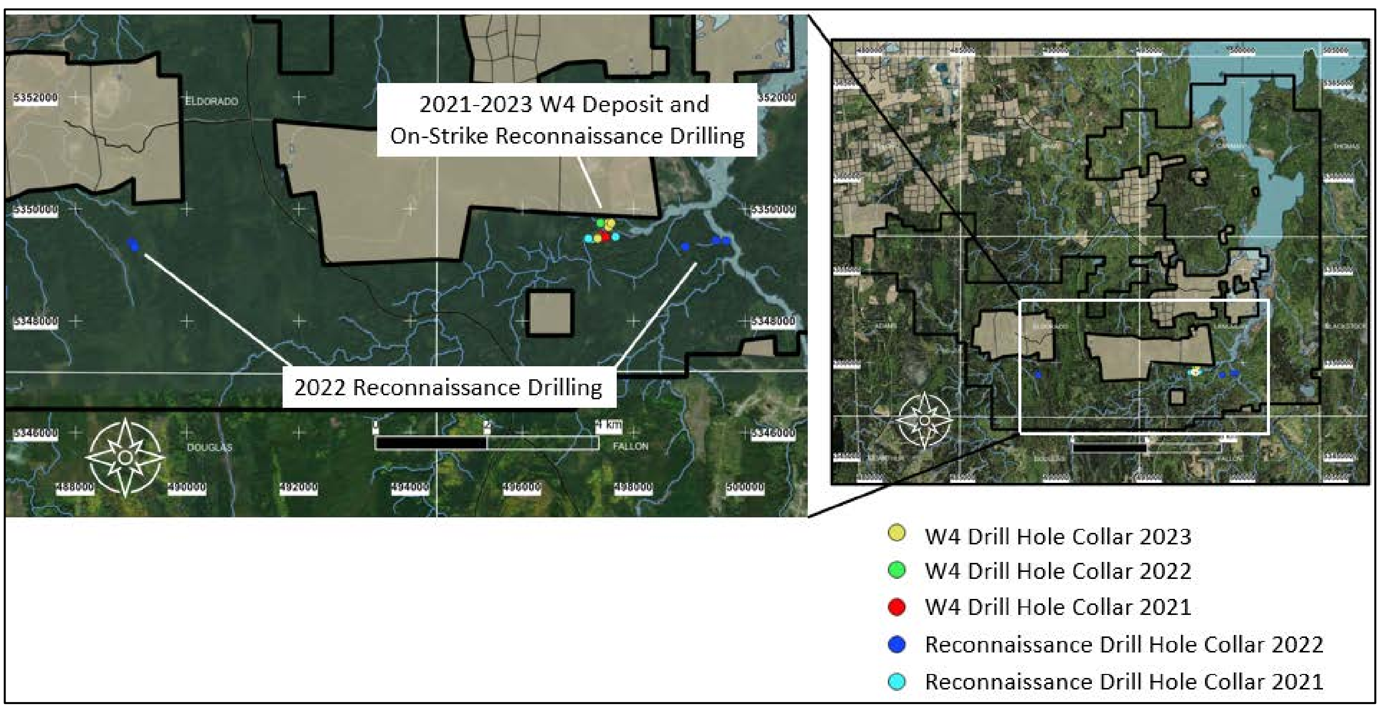


Figure 10-1. Location of drill hole collars completed by EV Nickel from 2021 to 2023, Langmuir Nickel Property. Inset map (left) shows the location of the drilling within the Shaw Dome Project boundary (black outline) (EV Nickel, 2023).

10.1 Diamond Drilling (June 2021)

A surface diamond drilling program was initiated by EVNi on the Langmuir Property in late June 2021 and completed by late September 2021. The drilling program consisted of 20 diamond drill holes (NQ-size) totalling 4,193 metres (Table 10-2). Ten of the drill holes targeted the W4 Nickel Deposit (Langmuir W4 Zone) and another 10 were reconnaissance drill holes in other areas of the Langmuir Nickel Property (Figure 10-2).

The drilling was contracted to Forage Fusion Drilling Ltd. of Hawkesbury, Ontario, using a CS10 fully hydraulic diamond drill rig with depth capabilities in excess of 1,000 metres. Accessory equipment including a bulldozer and Marooka was used to set-up, move and service the drill rig. Accessibility to the drill sites was by Marooka and/or muskeg using pre-existing and new drill roads. The drilling program was under the supervision of Philip Vicker, P.Geo.

Table 10-2. List of diamond drill holes and parameters from 2021 drilling, Langmuir Nickel Property.

Drill Hole	UTM_mE	UTM_mN	Elevation (m)	Dip	Az	Length (m)	Area
EV21-01	497450	5349480	294	-78.6	176.7	210	W4
EV21-02	497450	5349480	294	-63.1	175.6	175	W4
EV21-03	497400	5349540	294	-59	181	219	W4
EV21-04	497400	5349540	294	-45.4	183.1	200	W4
EV21-05	497400	5349540	294	-71.4	179.5	276	W4
EV21-06AB	497340	5349480	294	-69.7	178.1	41	W4
EV21-07	497340	5349480	294	-43.3	176.5	148	W4
EV21-08	497340	5349480	294	-72.4	169.1	195	W4
EV21-09	497500	5349505	294	-68.4	180.1	202	W4
EV21-10	497500	5349505	294	-40.2	178.4	167	W4
EV21-11	497255	5349465	294	-44.9	353.4	252	Recon
EV21-12	497255	5349465	294	-75.4	1.9	212	Recon
EV21-13	497255	5349462	294	-60.6	177.5	251	Recon
EV21-14	497255	5349462	294	-77.7	184.1	251	Recon
EV21-15	497192	5349471	294	-44.1	343.8	275	Recon
EV21-16	497192	5349473	294	-44.9	199.8	200	Recon
EV21-16AB	497192	5349473	294	-42.7	20	76	Recon
EV21-17	497192	5349473	294	-80.9	211.2	302	Recon
EV21-18	497678	5349515	294	-44.3	3.1	236	Recon
EV21-19	497678	5349500	294	-45.7	181	305	Recon

NAD83 Z17

Drill holes EV21-06AB and EV21-16AB were lost due to in-hole caving.

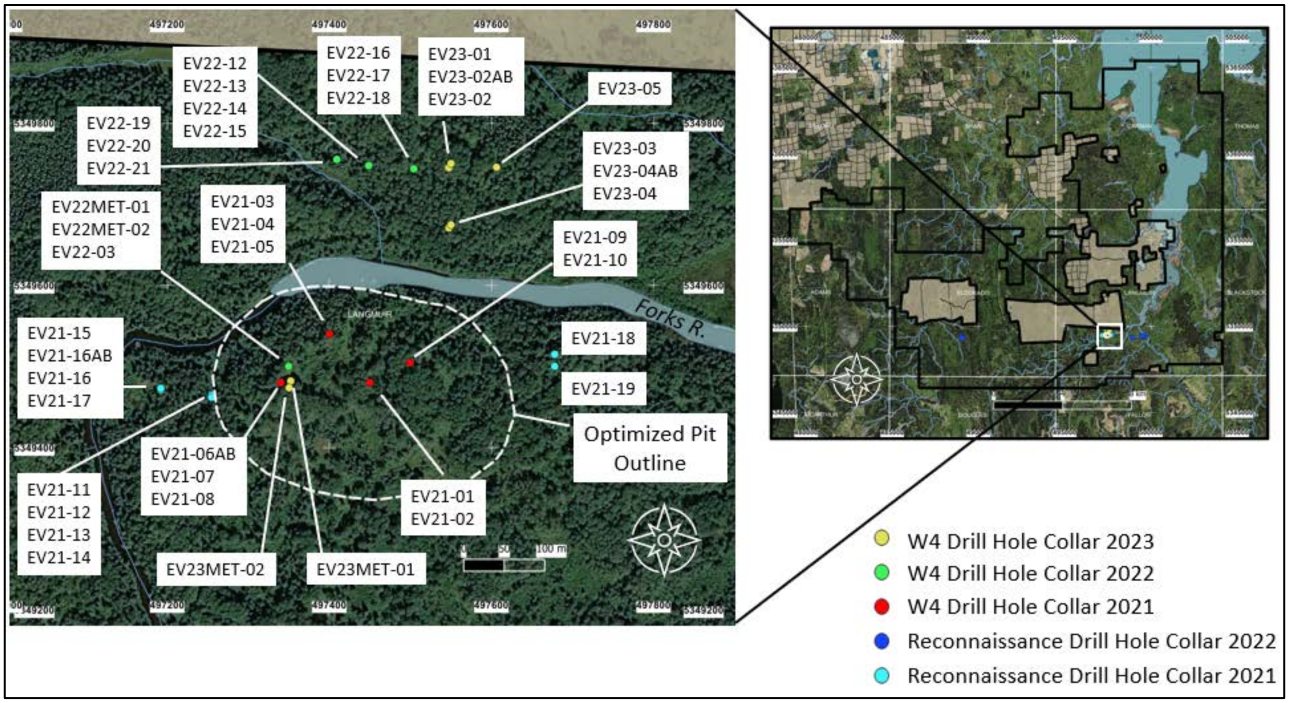


Figure 10-2. Drill hole collar locations for holes completed in 2021 (EV21), 2022 (EV22), and 2023 (EV23) in the area of the W4 Nickel Deposit (Langmuir W4 Zone) and surface expression of the outline of the current optimized open pit (dashed white). Inset map (left) shows the location of the drilling within the Shaw Dome Project boundary (black outline) (EV Nickel, 2023).

10.1.1 Analytical Results

A total of 782 primary half core samples and 70 control samples (QA/QC standards and blanks) were submitted for analyses to ALS Canada Ltd. ("ALS"), located in Timmins, Ontario. Requested analysis included Ni, Cu, Co, S by sodium peroxide fusion followed by ICP finish and Pt, Pd, Au by fire assay and ICP-AES finish (*see* Section 11). Selected results from assays of the drill core are provided in Table 10-3.

Table 10-3. Selected drill core assay results from 2021 drilling.

Drill Hole	Area	From (m)	To (m)	Length (m)	Ni (%)	Cu (%)	Co (%)	S (%)	Au (ppm)	Pt (ppm)	Pd (ppm)
EV21-01	W4	99.00	103.50	4.50	2.87	0.12	0.05	3.98	0.05	0.17	0.44
including		99.00	100.11	1.11	8.66	0.47	0.12	13.26	0.04	0.49	1.10
and		103.50	105.00	1.50	0.61	0.01	0.02	0.77	0.17	0.04	0.11
and		114.50	117.00	2.50	0.52	0.00	0.01	0.43	0.01	0.03	0.05
EV21-02	W4	69.00	86.10	17.10	0.91	0.09	0.02	0.97	0.04	0.12	0.26
EV21-03	W4	124.50	136.50	12.00	0.82	0.05	0.02	0.79	0.02	0.08	0.20
including		130.00	132.00	2.00	1.35	0.11	0.03	1.68	0.02	0.16	0.34
and		144.00	148.50	4.50	0.61	0.04	0.01	0.48	0.00	0.07	0.12
EV21-04	W4	116.00	119.00	3.00	1.27	0.10	0.02	1.95	0.49	0.12	0.29
EV21-08	W4	40.80	81.00	40.20	0.68	0.02	0.01	0.87	0.06	0.07	0.18
including		40.80	43.10	2.30	2.40	0.08	0.04	5.57	0.02	0.26	0.74
and including		45.60	55.50	9.90	1.13	0.03	0.02	1.12	0.02	0.12	0.34
EV21-09	W4	123.30	139.00	15.70	1.14	0.13	0.02	2.10	0.02	0.14	0.33
EV21-10	W4	89.30	94.60	5.30	0.73	0.07	0.02	1.07	0.00	0.10	0.19
including		89.30	90.30	1.00	1.28	0.15	0.03	1.95	0.01	0.22	0.29

Note: drill intercepts represent drill core lengths and are not true widths

10.1.2 Overview and Conclusions

Upon acquisition of the Langmuir Property in 2021, the Company embarked on a diamond drilling campaign to examine the W4 Nickel Deposit through the summer of 2021. The Company's intentions were to get fresh material from the deposit for assaying, to test the veracity of the historical mineral resource and geological models, and to explore the potential to expand the mineral resource. Historical drill holes and modelled wireframes of geological surfaces were examined in 3D. Drilling was intended to fill wider spaced gaps in the upper 200 metres vertical depth, which the Company refers to as Tier 1, within the geological model, and to laterally test the distal flanks of the deposit trend with reconnaissance drilling. This drilling campaign concluded that the nickel mineralization at W4 was very high tenor pentlandite-dominated sulphide, hosted in a complex komatiitic volcano-sedimentary lithological stratigraphic package, that likely was complicated by structural and metasomatic post-magmatic activities. The distal reconnaissance drilling failed to identify strike extents to the deposit, and it was concluded that some of the regional structure, partially noted in offsets to magnetic features identified in historical airborne geophysical surveys, might have displaced the stratigraphy and complicating exploration efforts to identify if the W4 deposit continues laterally.

10.2 Diamond Drilling (2022)

A surface diamond drilling program was initiated by EVNi on the Langmuir Property in early March 2022 and completed by mid-June 2022 (Company news release dated 17 January 2022). The drilling program consisted of 21 diamond drill holes (NQ-size) totalling 6,597 metres (Table 10-4). The drilling was contracted to Missinaibi Drilling Services and NPLH Drilling of Timmins, Ontario. The drilling program was under the supervision of Philip Vicker, P.Geo.

Thirteen of the drill holes targeted the W4 Nickel Deposit (Langmuir W4 Zone) and another eight were reconnaissance drill holes in other areas of the Langmuir Nickel Property (*see* Figure 10-2; Figure 10-3). Three of the 21 drill holes were drilled into the W4 Nickel Deposit for the purposes of metallurgical test work (*see* Section 10.2.3).

Table 10-4. List of diamond drill holes and parameters from 2022 drilling, Langmuir Nickel Property.

Drill Hole	UTM_mE	UTM_mN	Elevation (m)	Dip	Az	Length (m)	Area
*EV22MET-01	497350	5349500	294	-64.5	184.6	102	W4
*EV22MET-02	497350	5349500	294	-75.3	181	186	W4
*EV22-03	497350	5349500	294	-55.9	183.2	96	W4
EV22-04AB	499660	5349428	285	-45	25	78	Recon
EV22-05AB	499475	5349435	286	-45	0	72	Recon
EV22-06	499475	5349435	286	-45	0	81	Recon
EV22-07	498925	5349325	287	-48.7	359.9	165	Recon
EV22-08	489004	5349414	322	-45.6	220.7	414	Recon
EV22-09	489045	5349364	320	-45.1	218.4	411	Recon
EV22-10	489045	5349364	322	-75.1	217	279	Recon
EV22-11	489065	5349313	322	-54.65	208.88	267	Recon
EV22-12	497448.82	5349746.9	280.61	-46.14	178.11	426	W4
EV22-13	497448.83	5349747.32	280.64	-55.1	176.38	441	W4
EV22-14	497448.85	5349747.58	280.65	-63.65	176.48	498	W4
EV22-15	497448.87	5349747.76	280.63	-70.78	174.25	519	W4
EV22-16	497503.88	5349743.48	284.28	-45.41	174.49	405	W4
EV22-17	497503.91	5349743.79	284.37	-56.61	177.73	420	W4
EV22-18	497504.02	5349744.08	284.42	-64.43	181.31	453	W4
EV22-19	497409.22	5349754.59	281.24	-44.7	180.08	399	W4
EV22-20	497409.18	5349755.17	281.27	-54.95	180.94	438	W4

Drill Hole	UTM_mE	UTM_mN	Elevation (m)	Dip	Az	Length (m)	Area
EV22-21	497409.24	5349755.42	281.38	-63.72	181.47	447	W4

NAD83 Z17; *drill holes for metallurgical test work

Drill holes EV22-04AB and EV22-05AB were lost due to in-hole caving while in overburden.

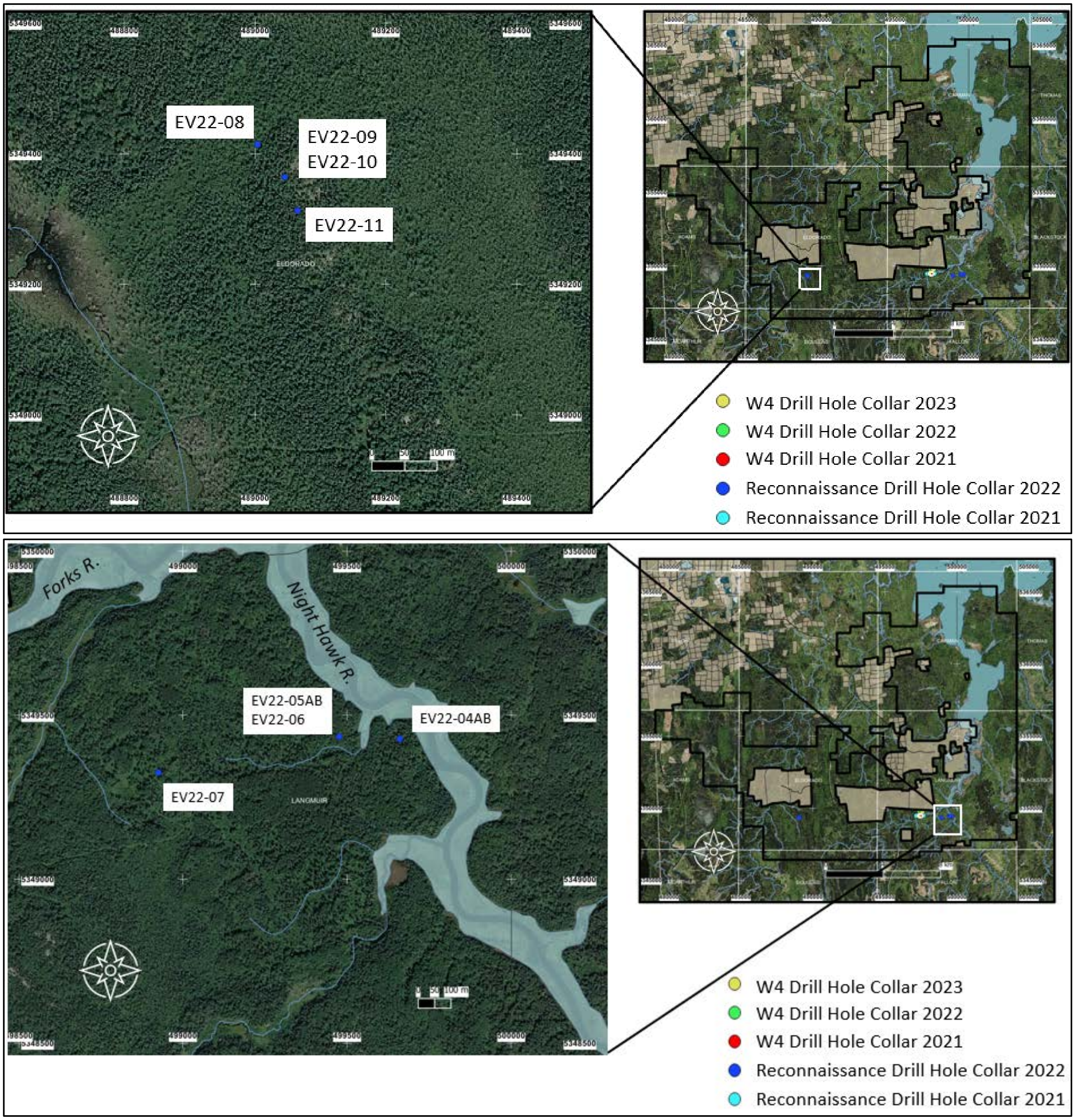


Figure 10-3. Reconnaissance drill hole collar locations for holes completed in 2022 (EV22) located outside of the area of W4 Nickel Deposit (Langmuir W4 Zone). Inset maps (left) in each panel shows the location of 2022 drilling within the Shaw Dome Project boundary (black outline) (EV Nickel, 2023).

10.2.1 Analytical Results

A total of 1,214 primary half core samples and 114 control samples (QA/QC standards and blanks) were submitted for analyses to ALS Canada Ltd. ("ALS"), located in Timmins, Ontario. Requested analysis included Ni, Cu, Co, S by sodium peroxide fusion followed by ICP finish and Pt, Pd, Au by fire assay and ICP-AES finish (*see* Section 11). Selected results from assays of the drill core are provided in Table 10-5.

Table 10-5. Selected drill core assay results from 2022 drilling.

Drill Hole	Area	From (m)	To (m)	Length (m)	Ni (%)	Cu (%)	Co (%)	S (%)	Au (ppm)	Pt (ppm)	Pd (ppm)
EV22MET-01	W4	37.30	85.90	48.60	1.31	0.07	0.02	0.00	-	-	-
including		47.90	60.90	13.00	2.98	0.17	0.03	0.00	-	-	-
EV22MET-02	W4	78.00	111.00	33.00	0.74	0.03	0.02	0.52	-	-	-
		86.00	95.00	9.00	1.47	0.08	0.03	1.01	-	-	-
EV22-03	W4	38.00	55.30	17.30	0.70	0.02	0.01	0.73	0.11	0.07	0.17
including		51.00	55.30	4.30	1.18	0.05	0.02	1.09	0.28	0.11	0.28
and		64.70	65.30	0.60	0.54	<0.002	0.02	0.43	0.03	0.05	0.10
EV22-12	W4	311.80	326.10	14.30	1.50	0.10	0.02	1.76	0.06	0.21	0.48
including		311.80	317.20	5.40	2.96	0.25	0.04	3.48	0.09	0.41	0.97
EV22-13	W4	364.20	380.00	15.80	0.85	0.03	0.02	0.82	0.01	0.10	0.21
including		364.20	365.90	1.70	1.13	0.03	0.02	1.10	0.01	0.14	0.31
and including		373.50	379.00	5.50	1.33	0.03	0.02	1.31	0.01	0.15	0.31
EV22-14	W4	392.00	406.00	14.00	0.84	0.10	0.01	1.31	0.03	0.10	0.24
including		399.00	405.00	6.00	1.20	0.07	0.02	1.79	0.03	0.16	0.37
EV22-16	W4	325.50	328.80	3.30	0.56	0.05	0.01	1.39	0.00	0.07	0.17
		334.00	334.50	0.50	0.65	0.01	0.02	0.60	0.00	0.07	0.15
EV22-17	W4	334.90	355.50	20.60	1.23	0.08	0.02	1.34	0.03	0.16	0.40
including		337.50	339.80	2.30	2.14	0.14	0.02	1.88	0.15	0.39	0.87
and including		344.00	352.50	8.50	1.70	0.14	0.03	2.16	0.03	0.15	0.43
EV22-18	W4	402.80	418.50	15.70	0.90	0.05	0.02	1.17	0.05	0.08	0.18
including		404.30	409.20	4.90	1.71	0.12	0.03	2.47	0.04	0.15	0.38
EV22-19	W4	327.90	333.20	5.30	1.06	0.11	0.02	2.37	0.04	0.10	0.26

Note: drill intercepts represent drill core lengths and are not true widths

10.2.2 Overview and Conclusions

The Company returned to the W4 Nickel Deposit area in 2022 after re-examining the results of the 2021 campaign in conjunction with the historical drilling. Modelling of the Deposit indicated that at depth, the W4 Nickel Deposit was historically poorly tested with down-dip oriented drill holes cutting the stratigraphy at oblique angles. The Company endeavored to test the previously overlooked and underexplored depth potential with a drilling program designed to test the 200 to 400 metre depth area, referred to as Tier 2, from drilling platforms north of the Forks River, facilitating the testing of the stratigraphy from a more optimal, orthogonal orientation. Significant widths of nickel sulphide mineralization were encountered in the Tier 2 drilling, with the eastern flank and down plunge of the identified mineralization remaining untested at the end of the 2022 campaign. An additional focus in 2022 was to collect fresh material for metallurgical testing, with several shallow holes collecting the required materials.

10.2.3 Metallurgical Drilling (2022)

The Company completed three metallurgical diamond drill holes in March 2022 (*see* Figure 10-2), with mineralized core (NQ-size) from two of the holes (EVMET22-01 and 02) used in metallurgical test work at SGS Canada Inc. (Company news release 9 June 2022) (*see* Section 13). Drill hole parameters and assay results are summarized in Table 10-6 and 10-5, respectively. The three holes totalled 384 metres and drilling was contracted to Missinaibi Drilling Services of Timmins, Ontario.

Table 10-6. Summary of metallurgical drill hole parameters (2022).

Drill Hole	UTM_mE	UTM_mN	Elevation (m)	Dip	Az	Length (m)
EVMET22-01	497350	5349500	294	-68	180	102
EVMET22-02	497350	5349500	294	-78	180	186
EV22-03	497350	5349500	294	-56	180	96

NAD83 Z17

Each of the three drill holes intersected high-grade nickel sulphide mineralization consistent with the Langmuir W4 Zone (W4 Nickel Deposit) (*see* Table 10-5).

10.3 Diamond Drilling (2023)

A surface diamond drilling program was initiated by EVNi on the Langmuir Property in early February 2023 and completed by early March 2023 (Company news release dated 9 February 2023). The drilling program consisted of nine diamond drill holes totalling 2,505 metres (Table 10-7). All of the drill holes targeted the W4 Nickel Deposit (Langmuir W4 Zone) (*see* Figure 10-2). Two of the nine drill holes were drilled into the W4 Nickel Deposit for the purposes of metallurgical test work (*see* Section 10.3.3).

The drilling was contracted to NPLH Drilling of Timmins, Ontario. The drilling program was under the supervision of Philip Vicker, P.Geo.

Table 10-7. List of diamond drill holes and parameters from 2023 drilling, Langmuir Nickel Property.

Drill Hole	UTM_mE	UTM_mN	Elevation (m)	Dip	Az	Length (m)	Area
*EV23MET-01	497352.08	5349482.42	289.15	-83.19	180.96	120	W4
*EV23MET-02	497350.75	5349473.49	289.32	-88.93	186.00	141	W4
EV23-01	497546.50	5349745.40	286.66	-59.71	179.99	450	W4
EV23-02	497547.37	5349745.29	286.71	-66.34	178.85	477	W4
EV23-02AB	497550.00	5349750.00	286.50	-65.00	180.00	108	W4
EV23-03	497547.35	5349672.18	277.73	-59.44	181.20	357	W4
EV23-04	497547.27	5349670.95	277.55	-50.52	178.61	330	W4
EV23-04AB	497550.00	5349675.00	278.00	-49.00	180.00	72	W4
EV23-05	497606.42	5349745.69	289.10	-63.92	179.70	450	W4

NAD83 Z17; *drill holes for metallurgical test work

Drill holes EV23-02AB and EV23-04AB were abandoned as they were deviating off-target as they exited overburden.

10.3.1 Analytical Results

A total of 486 primary half core samples and 34 control samples (QA/QC standards and blanks) were submitted for analyses to ALS Canada Ltd. ("ALS"), located in Timmins, Ontario. Requested analysis included Ni, Cu, Co, S by sodium peroxide fusion followed by ICP finish and Pt, Pd, Au by fire assay and ICP-AES finish (*see* Section 11). Selected results from assays of the drill core are provided in Table 10-8.

Table 10-8. Selected drill core assay results from 2023 drilling.

Drill Hole	Area	From (m)	To (m)	Length (m)	Ni (%)	Cu (%)	Co (%)	S (%)	Au (ppm)	Pt (ppm)	Pd (ppm)
EV23MET-01	W4	31.10	103.00	71.90	0.97	0.07	0.01	1.12	0.04	0.11	0.27
including		31.10	61.00	29.90	1.44	0.15	0.01	1.89	0.01	0.16	0.40
including		44.00	47.30	3.30	4.00	0.46	0.04	4.68	0.02	0.38	1.26
EV23MET-02	W4	31.40	92.70	61.30	0.81	0.03	0.01	0.84	0.16	0.07	0.18
including		46.00	59.00	13.00	1.87	0.08	0.02	2.05	0.09	0.16	0.44
EV23-01	W4	373.90	376.10	2.20	0.89	0.12	0.03	2.97	0.01	0.12	0.28
and		384.70	385.30	0.60	0.80	0.01	0.03	0.64	0.00	0.29	0.45
EV23-02	W4	424.90	438.00	13.10	1.47	0.11	0.03	2.10	0.04	0.16	0.42
including		424.90	429.60	4.70	2.77	0.28	0.04	4.23	0.02	0.27	0.80
EV23-03	W4	295.30	302.10	6.80	1.58	0.14	0.04	3.07	0.02	0.17	0.41
including		295.30	297.40	2.10	3.01	0.29	0.08	6.86	0.02	0.28	0.69
EV23-04	W4	273.50	274.30	0.80	0.58	0.02	0.02	0.44	0.00	0.04	0.09

Note: drill intercepts represent drill core lengths and are not true widths

10.3.2 Overview and Conclusions

In 2023, the Company returned to the W4 Nickel Deposit area to continue the exploration of the eastern extension potential of the nickel sulphide mineralization in Tier 2. The Company continued the definition drilling of this area with wide spaced holes (50 metre sections, 60+ metre toe spacings), and expanded the mineralization with intersections of nickel sulphide mineralization in four of five holes, with the final hole of the campaign intersecting diabase dike at the target depth, apparently truncating the eastern flank of the deposit. The down-plunge of the nickel sulphide mineralization system into Tier 3 remains open. Additionally in 2023, two metallurgical holes were drilled near surface to collect a 1,000 kg bulk sample to advance the Company’s Clean Nickel research into metallurgy and bioleaching.

Further exploration work at the W4 Nickel Deposit and area is proposed to in-fill the mineral resource model area to 25 metre sections, 30 metre toe spacing and with orthogonally oriented drill holes to increase the confidence in the current mineral resource model; examine the potential for expansion of additional nickel sulphide mineralization into Tier 3; and collect detailed geophysical data to reinterpret the strike potential of the deposit lateral from the diabase dikes truncating the deposit flanks.

10.3.3 Metallurgical Drilling (2023)

In March 2023, the Company completed two HQ-size metallurgical diamond drill holes (EVMET23-01 and 02) into the upper part of the Langmuir W4 Zone (Table 10-9; *see* Figure 10-2). The mineralized core was submitted to SGS Canada Inc. for analyses and processing and to provide a suitable quantity and quality of material for the development of the nickel concentrate (Company news release dated 15 May 2023) (*see* Section 13). Drill hole parameters and assay results are summarized in Table 10-9 and Table 10-8, respectively. The two holes totalled 261 metres and drilling was contracted to NPLH Drilling of Timmins, Ontario.

Table 10-9. Summary of metallurgical drill hole parameters (2023).

Drill Hole	UTM_mE	UTM_mN	Elevation (m)	Dip	Az	Length (m)
EV23MET-01	497352.08	5349482.42	289.15	-83.19	180.96	120
EV23MET-02	497350.75	5349473.49	289.32	-88.93	186	141

NAD83 Z17

The two drill holes intersected high-grade nickel sulphide mineralization consistent with the Langmuir W4 Zone (W4 Nickel Deposit) (*see* Table 10-8).

10.4 Drilling Procedures (2021-2023)

Diamond drill holes from the 2021, 2022, and 2023 drilling campaigns were planned in 3D space to intercept the modelled target pierce point. EVNi geologists and geo-techs used a hand-held Garmin GPS to position and mark the planned collar location. Wooden pickets were erected to mark the position of both the collar and a front site directional picket, the latter of which was emplaced along the proposed azimuth as measured by hand-held compass from the collar location. Beginning in 2022, the NPLH Drilling drill rig crews utilized a Reflex TN14 gyrocompass to accurately align the drill rig along the proposed azimuth.

The drill hole collar locations were originally positioned using a handheld GPS, known to have an accuracy of +/- 5 m, and then measured again after the drilling using a similar handheld GPS device to ensure that the holes were drilled where spotted. The drill rig crews utilized a Reflex TN14 gyrocompass to accurately align the drill rig along the proposed azimuth.

The downhole deviation of all drill holes were initially measured using a Reflex EZ-Shot survey tool, taking single shot readings ~10 m after casing and subsequently every 100 m down-hole to ensure the drill hole was on track, followed by an end-of-hole multi-shot gyro survey taking regular readings (at 3, 6, or 10 metres spacing depending on the drill hole). The multi-shot gyro data was then uploaded directly into the drill hole database in GeoBank Mobile. A copy of each Reflex measurement was sent to the geologist in charge as either a paper or electronic copy containing the depth, azimuth, dip and magnetic susceptibility.

All exploration and metallurgical drill holes completed by EVNi were drilled as NQ-size with the exception of two metallurgical drill holes in 2023 which were HQ-size. Drill core was transported by EVNi personnel from the Langmuir Nickel Property to the EVNi core shack located at Northern Sun's Redstone Mill Facility, located approximately 10 km from the Property. In the core shack, EVNi technicians removed the tape and placed the open boxes on the logging tables. They verified that the distances are correctly indicated on the wooden blocks placed every three metres. The core is measured and marked and all boxes are labelled with metal tags that display the hole number, box number and from, to measurements.

Information regarding lithologies, alteration, mineralization, structure, assay or geochemical samples and QA/QC samples are entered directly into GeoBank Software. The entire length of the hole is photographed and photos are labeled with the hole number followed by the box numbers and all electronic files are saved into the external hard drives.

All geological information collected on the drill core is digitally recorded using GeoBank. Periodically the information is exported to an external hard drive in excel file format.

The Authors have reviewed and discussed the EVNi drilling program with EVNi personnel and believes the Langmuir drilling programs follow best practice guidelines as outlined by the CIM Mineral Exploration Best Practice Guidelines (CIM, 2018). The Authors are unaware of any sampling, recovery factors that materially impact the accuracy and reliability of the results.

11.0 SAMPLE PREPARATION, ANALYSIS AND SECURITY

This section reviews all known sample preparation, analysis and security as it relates to exploration work and drilling (*i.e.*, 2021, 2022, 2023 diamond drilling campaigns) completed on the Langmuir Nickel Property by EV Nickel Inc. To the extent that it is known, data and information related to historical exploration programs and drilling on the Property is provided in Section 6.

Mr. Philip Vicker, P.Geo., a Qualified Person as defined by NI 43-101, is responsible on-site for the on-going drilling and sampling program, including quality assurance (QA) and quality control (QC), together QA/QC.

It is the Authors' opinion that the procedures, policies and protocols for drilling verification are sufficient and appropriate and that the core sampling, core handling and core assaying methods used are consistent with good exploration and operational practices such that the data is reliable for the purpose of mineral resource estimation. In the opinion of the Authors, the assay data is adequate for the purpose of verifying drill core assays, estimating mineral resources, and for the purposes of the Report.

11.1 Sample Collection and Transportation

NQ-size (47.6 mm diameter) drill core was used for the majority of drilling and HQ-size core for two metallurgical drill holes (2023). The drill core was collected from the drill rig into wooden core trays at the drill site by the drilling contractor, following industry standard procedures. Small wooden tags mark the length drilled in metres at the end of each core tube run. On each filled core box, the drill hole number and sequential box numbers are marked by the drill helper and checked by the site geologist. Once each core tray is filled and identified, it is covered and secured shut.

The drill core was transported approximately 13 km by EVNi personnel each morning from the area of drilling to the EVNi core shack.

Casing was left in the completed drill holes, with the casing capped and marked with a metal flag.

11.2 Core Logging and Sampling Procedures

EVNi rents a secure storage and logging facility, which includes some office space for the professional and technical staff, located at the gated and guarded Redstone Mine/Mill Facility of Northern Sun Mining Corp., located approximately 10 km west-northwest of the W4 Nickel Deposit. The drill core is brought to the facility from the field by EVNI personnel and unloaded within the confines of the secure property. Once the core boxes arrive at the logging facility, they are opened and laid out on the logging tables for core logging process.

Geological core logging records the lithology, alteration, texture, colour, mineralization, structure and sample intervals and pays particular attention to the target rock types. All geotechnical logging, geological logging and sample data are recorded and entered into a computer database. As the core is logged, the target rock type(s) is marked for sampling at a nominal sample interval of 1.5 metres where visible sulphide is noted. Shorter sample intervals are used in areas of particular interest (lithology or mineralization).

Once the core is logged and marked for sampling, the sequential boxes are photographed on the logging tables.

Sections marked for sampling are cut in half with a diamond saw with one portion being placed in sample bags with the corresponding sample tags. These sample bags are stapled shut and groups of two or three of these are placed in a larger rice bag and sealed with a cable tie. Bags are also marked externally with the sample tag number. Certified reference and blank material are inserted into the sample stream on a regular basis, targeting one of each per 25 primary core samples.

Core boxes are currently stored, cross-stacked, in palletized piles in a secure area on the Redstone Mill site.

The database held by the Issuer and made available to the Authors contains all of the assay certificates reported from the laboratory. On the basis of information and data available to the Principal Author, it is the opinion of the Principal Author that EVNi applied industry best practices in the collection, handling, and management of drill core assay samples. There is no evidence that the sampling approach and methodology used by EVNi introduced any material sampling bias or contamination.

11.3 Analytical

The services of ALS Canada Ltd. ("ALS") were used in the analyses of samples from the Langmuir Nickel Property. ALS is independent of EVNi and the Authors. EVNi personnel are responsible for transporting the samples to the ALS Timmins analytical facility, a driving distance of approximately 42 km from the core shack location.

ALS is a geochemical services company accredited to international standards, with assay lab ISO 17025:2017 certification and certification to ISO 9001:2015. The ALS laboratory in Timmins, Ontario carried out the sample login/registration, sample weighing and sample preparation while analyses were performed at ALS' facilities in North Vancouver, BC. ALS certificates and report numbers are prefixed with an "TM" and year designation (*e.g.*, TM23).

At ALS, samples are crushed to 70% less than 2mm. A riffle split is pulverized to 85% passing 75 microns. Nickel, copper, cobalt, and sulphur are analyzed by sodium peroxide (Na_2O_2) fusion digestion with an ICP finish. The sodium peroxide fusion method is suitable for the "total" digestion of refractory minerals and samples with high sulphide content. Platinum group elements (PGEs) palladium (Pd) and platinum (Pt), and precious metal gold (Au) were analyzed by fire assay with an ICP-AES finish.

Detection limits and reporting styles for all elements at ALS are summarized in Table 11-1.

Table 11-1. Lower Limits of Detection for elements measured and as reported by ALS.

Element	Lab Method	LLD	Unit
Au	FA-ICP	0.001	μg/g (ppm)
Pt	FA-ICP	0.005	μg/g (ppm)
Pd	FA-ICP	0.001	μg/g (ppm)
Ni	FUS-Na2O2	0.002	%
Cu	FUS-Na2O2	0.002	%
Co	FUS-Na2O2	0.002	%
S	FUS-Na2O2	0.01	%

Note: FA-ICP = fire assay with ICP-OES finish; FUS-Na_2O_2 = sodium peroxide fusion digestion with ICP-OES finish; % = percent by weight.

For statistical purposes within the Report, any analytical result that was reported to be less than the detection limit was set to one half of that detection limit (*e.g.*, a result reported as <0.5 was set to a numeric value of 0.25). Results reported to be greater that maximum value reportable, and where no corresponding over limit analysis was performed, were set to that maximum value (*e.g.*, a result reported as >25.0 was set to a numeric value of 25).

11.4 QA/QC – Control Samples

A total of 1,311 drill core samples from 2021, 2022, and 2023 drilling campaigns were submitted for analysis by EV Nickel. This includes 386 samples that were submitted for metallurgical sample purposes; a net of 926 samples were therefore submitted for exploration and resource estimate purposes. Of this latter total, 113 samples (12.2%) were included for QA/QC purposes; this rate of QA/QC sample submission is close to the generally accepted rate for QA/QC control samples (approximately 15%). The metallurgical sampling includes only one CRM and one blank sample for control purposes; this sampling is not included in this discussion.

ALS, as a matter of course, carries out the analysis of certified reference materials, run blank aliquots and also carries out duplicate and replicate ("preparation split") analyses within each sample batch as part of their own internal monitoring of quality control.

EVNi has inserted samples of three different CRMs into the sample stream: CFRM-100 ("low-grade" material, 27 samples), CFRM-101 ("medium-grade" material, 16 samples) and CFRM-102 ("high-grade" material, 17 samples). These CRMs are produced by CF Reference Materials, Inc. of Sudbury, Ontario and were sourced from mineralized gabbroic/noritic rocks from the Sudbury area. The Authors have reviewed the Certificates of Analysis for each of the CRMs which provide the certified analytical values for various element concentrations in each CRM.

EVNi also introduced 53 samples of blank material into the sample stream.

The Authors are not aware of EVNi quartering half-core sample intervals to generate "sampling" or "field" duplicates in order to evaluate the reproducibility of the sampling procedures nor are they aware of EVNi submitting any core pulp samples to a referee lab.

11.5 QA/QC – Data Verification

This section pertains only to the core samples collected from the W4 Nickel Deposit and the drill hole database used in the calculation of the Mineral Resource Estimate.

11.5.1 Certified Reference Material

Certified reference materials are used by EVNi to monitor the accuracy of the analyses performed by ALS. The results for the Ni and Cu analyses for CFRM-100, CFRM-101 and CFRM-102 are presented in Figures 11-1 to 11-6, courtesy of EVNi.

It is observed that in general the analyses for the certified reference material examined in detail averaged within two standard deviations of the certified concentrations over the span of the laboratory work and that, over time, averaged close to their certified concentration; this gives reason that the accuracy of the analyses be considered as acceptable. Only two of the Ni analyses for CFRM-102 exceeded three standard deviations from the certified value; an explanation for these anomalies is not at hand.

ALS uses a variety of CRMs for their internal QA/QC; however, many of the CRMs used are believed to be proprietary to the lab. A review of one of the commercially available CRMs used, namely GBM317-11 produced by Geostats Pty Ltd., returned Ni analyses, on average, within 0.5 standard deviations of the certified analytical value (n = 31, maximum difference = 1.49 std. dev.).

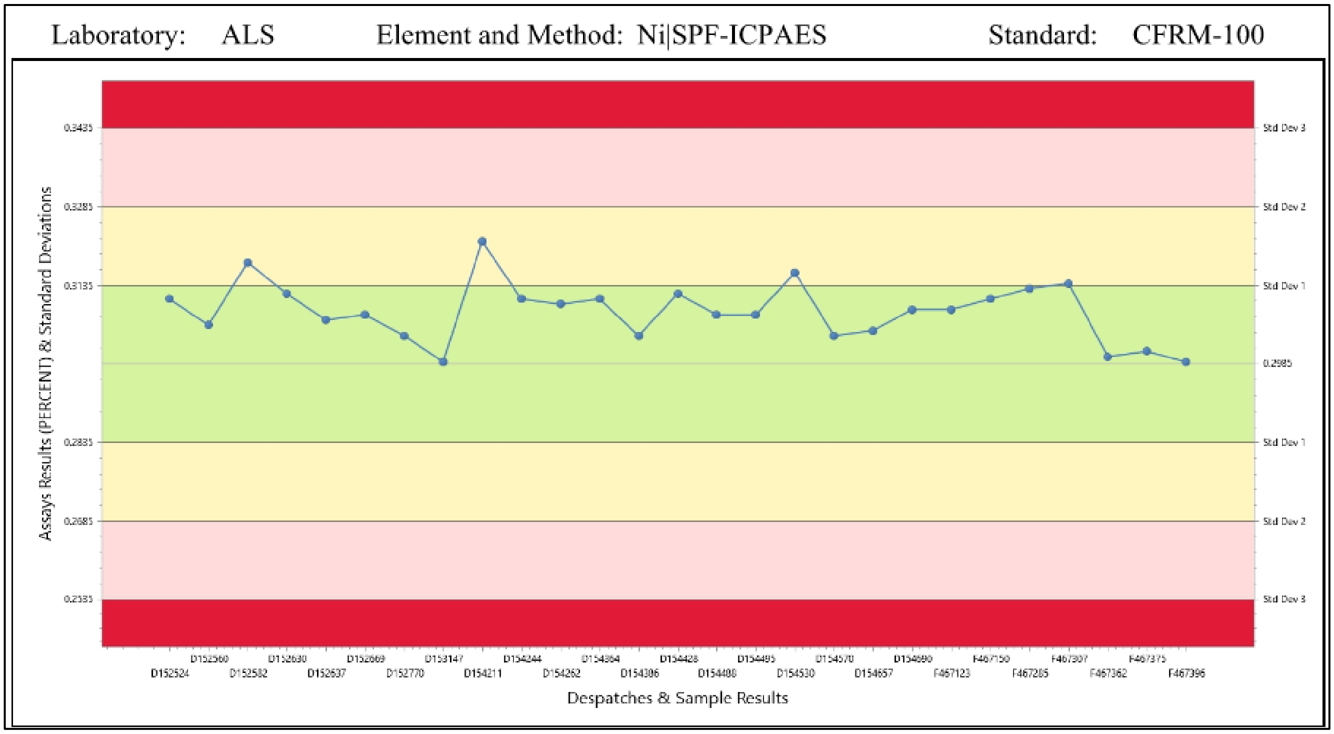


Figure 11-1. Results for nickel analyses from CFRM-100.

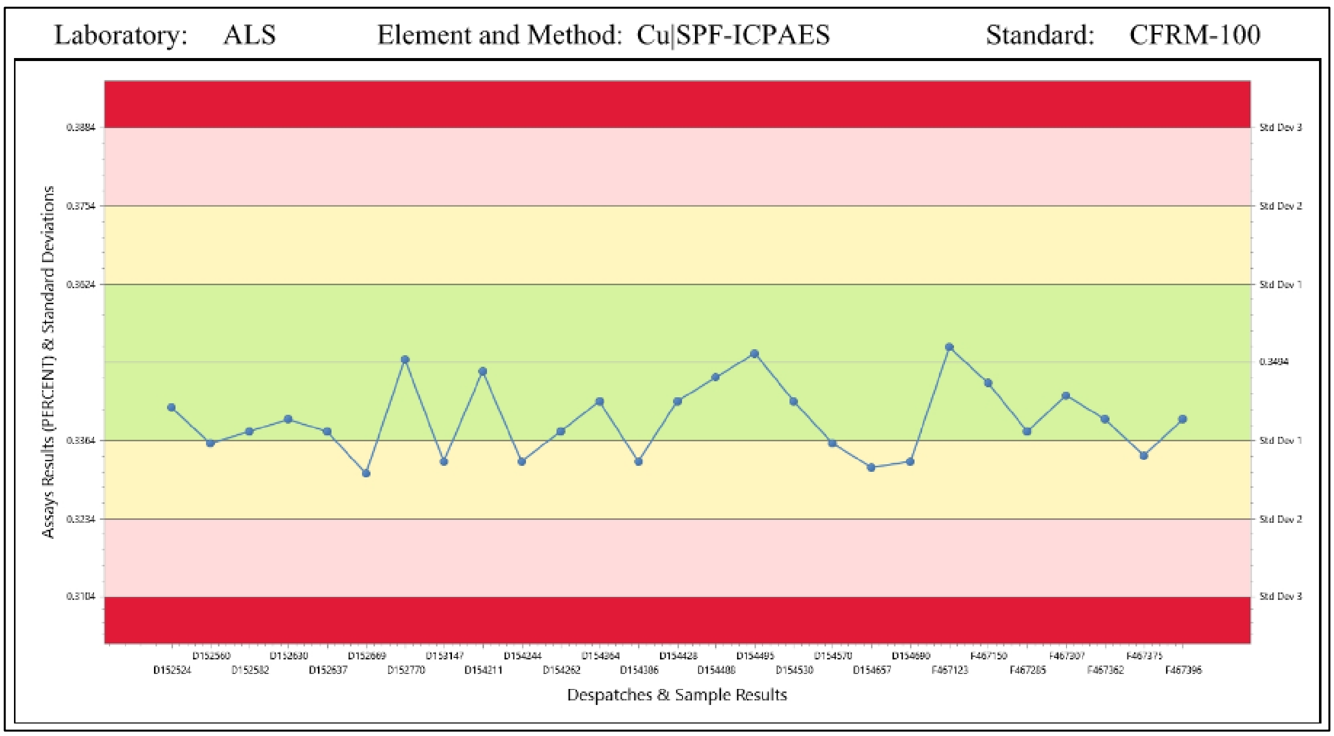


Figure 11-2. Results for copper analyses from CFRM-100.

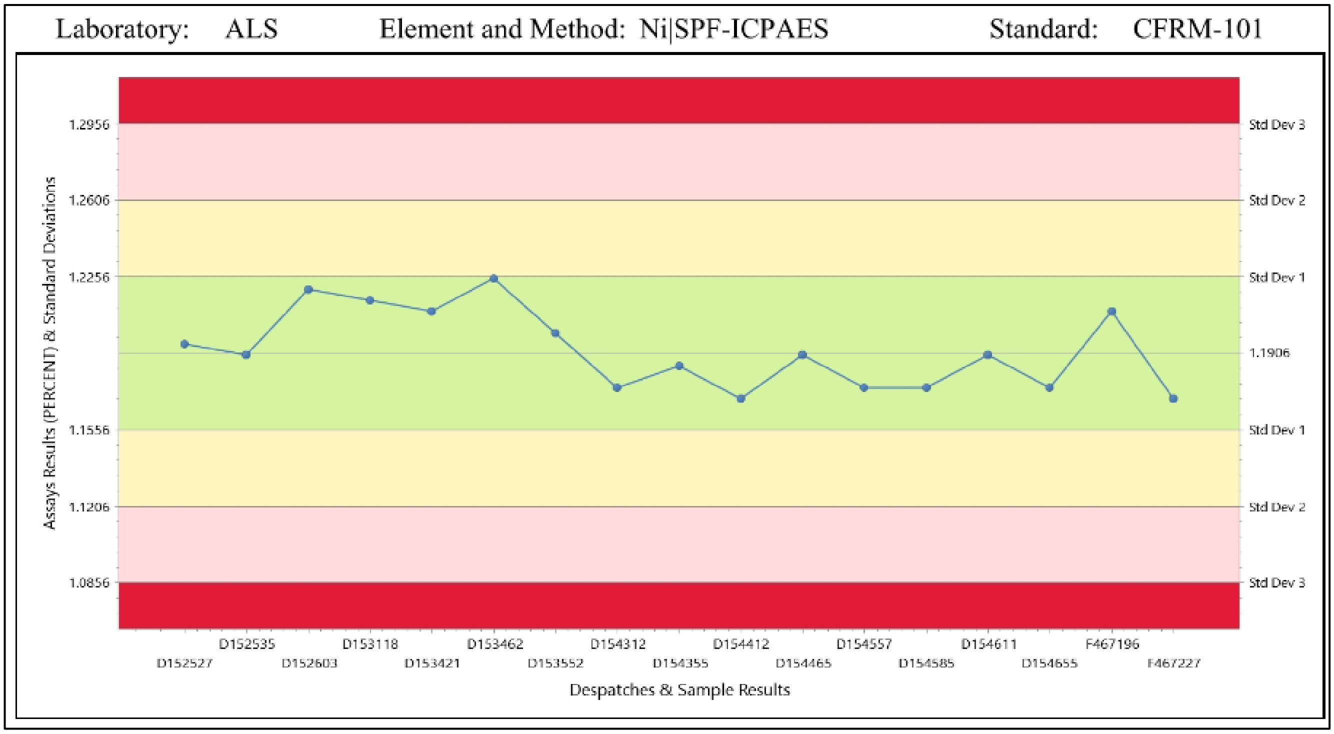


Figure 11-3. Results for nickel analyses from CFRM-101.

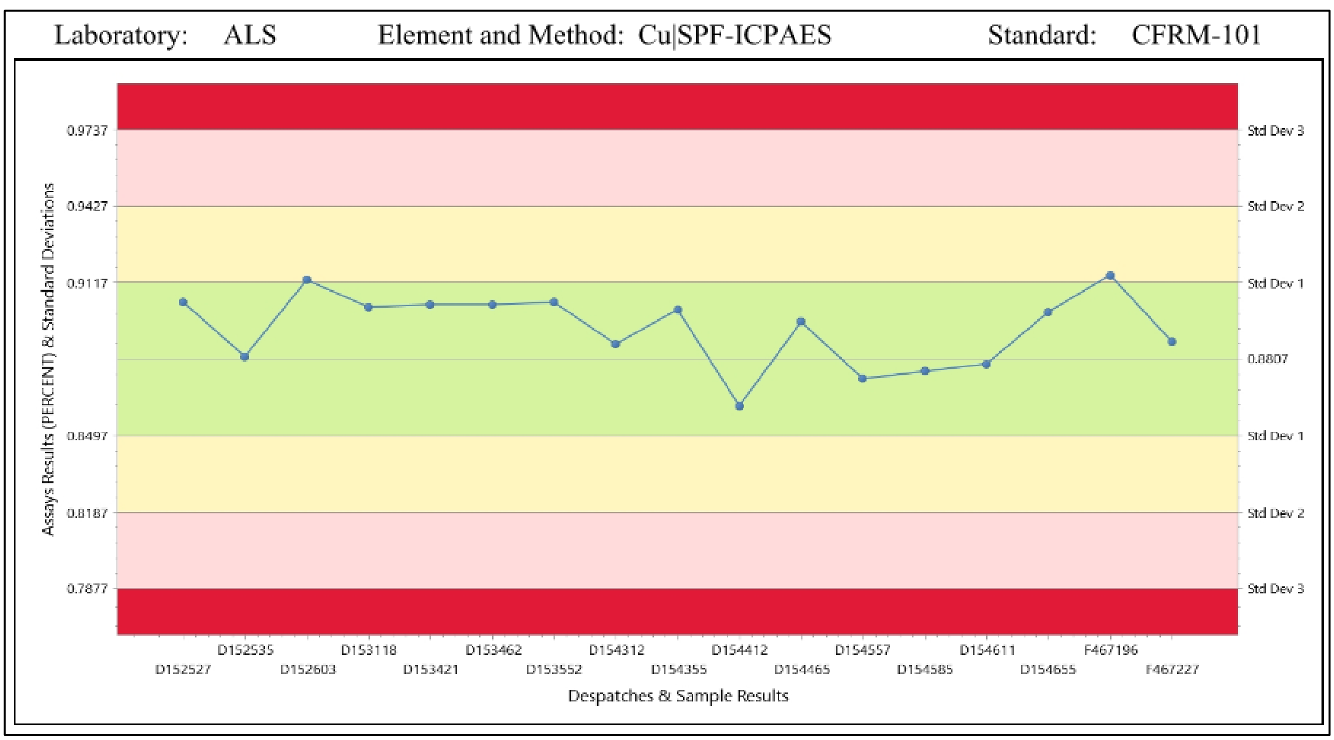


Figure 11-4. Results for copper analyses from CFRM-101.

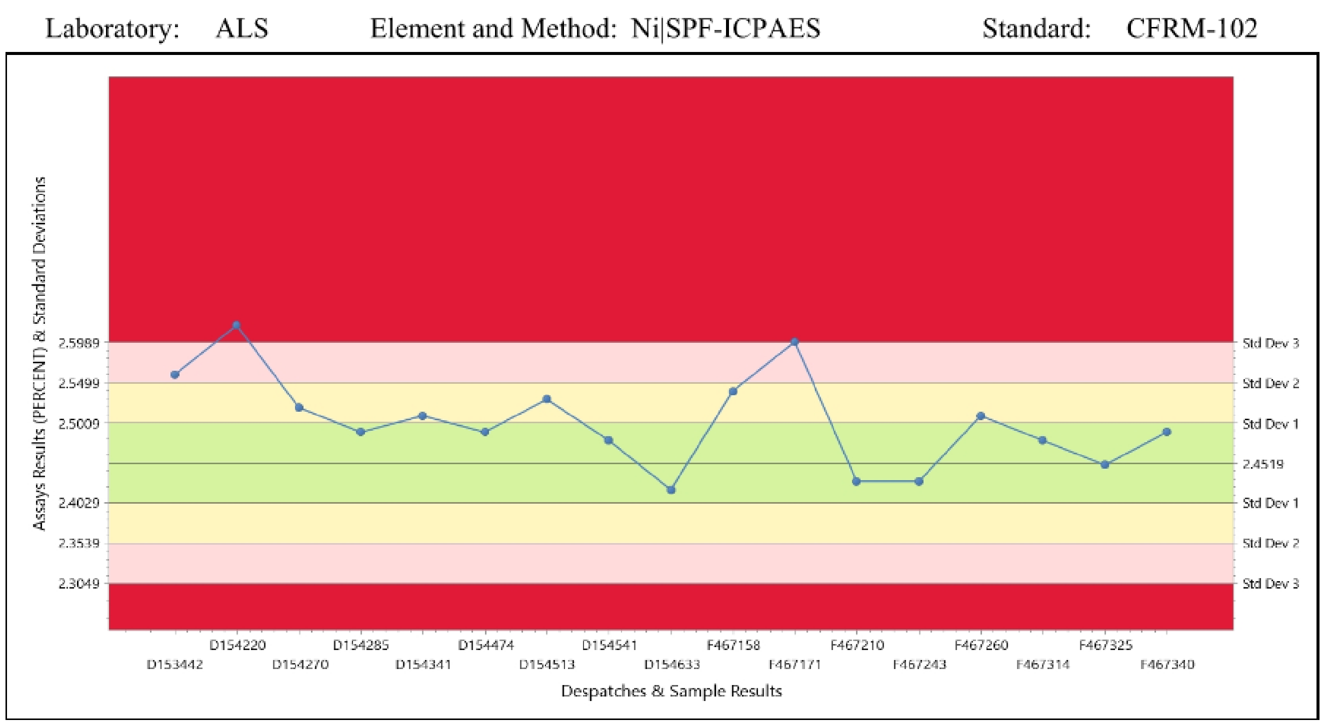


Figure 11-5. Results for nickel analyses from CFRM-102.

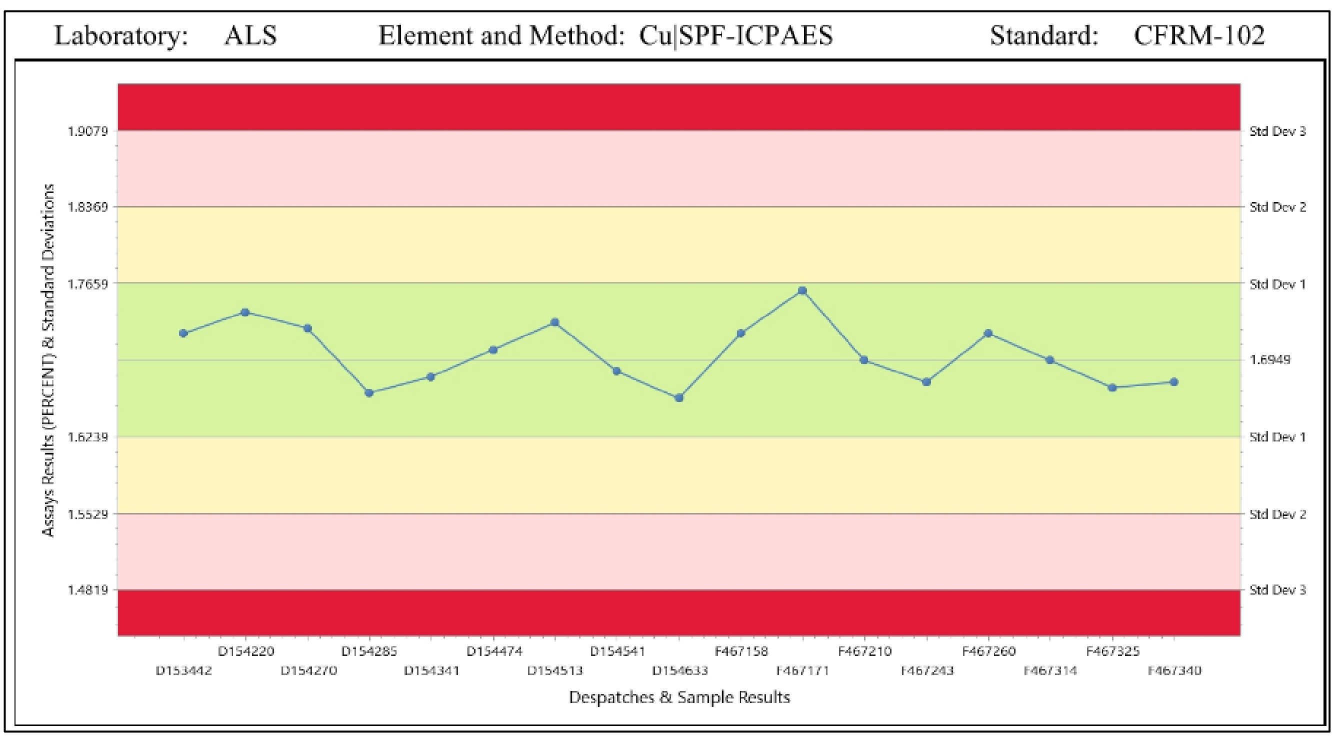


Figure 11-6. Results for copper analyses from CFRM-102.

11.5.2 Replicate Samples

EVNi did not add any replicate material to the sample stream or specifically request the labs to perform any regular re-analyses. A re-analysis of prepared pulp was carried out routinely by the lab at an overall frequency of 9.1% for their own internal QA/QC requirements. In general, the replicate material exhibited exceptional reproducibility of the assays as demonstrated by the examples in Figures 11-7 and 11-8.

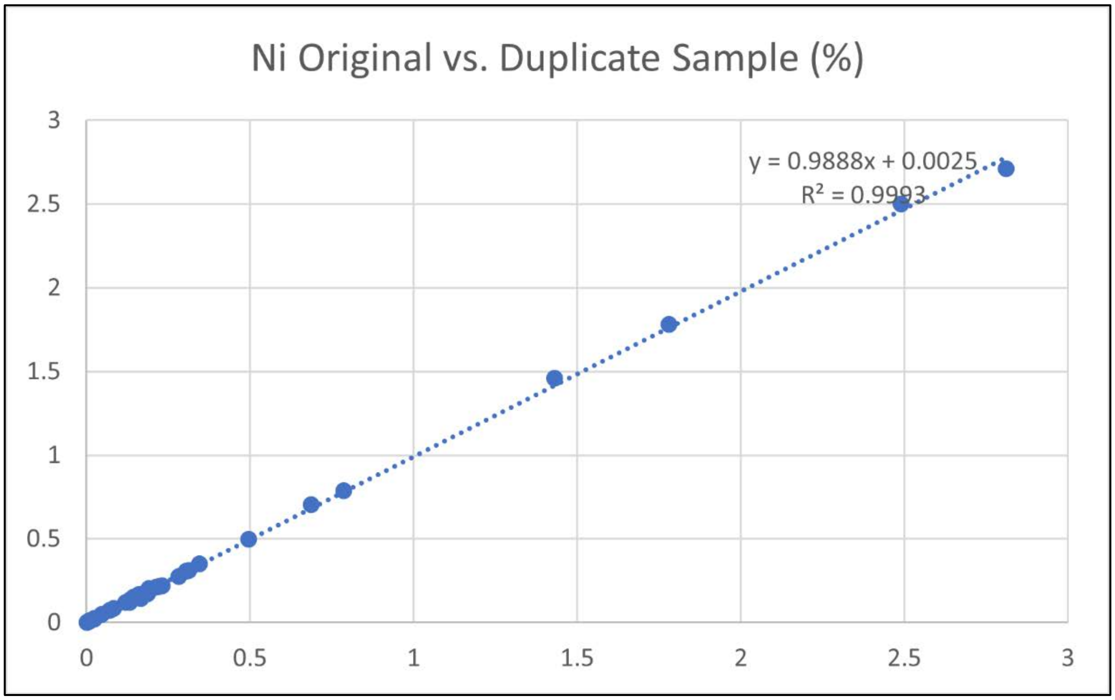


Figure 11-7. Original versus duplicate sample assay results for nickel.

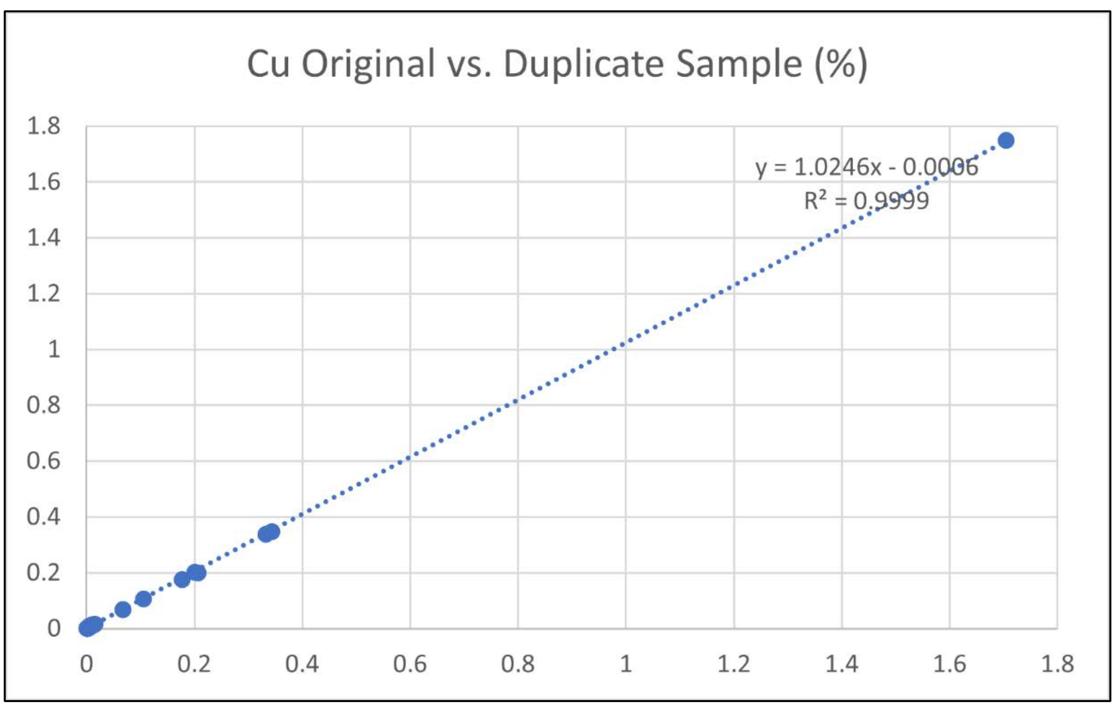


Figure 11-8. Original versus duplicate sample assay results for copper.

11.5.3 Duplicate Samples ("Preparation Duplicates")

Coarse reject portions of samples submitted for analysis were re-prepared and analyzed by the labs at an overall frequency of 0.8% for their own internal QA/QC requirements. In general, the duplicate material exhibited good reproducibility of the assays as demonstrated by the examples in Figure 11-9.

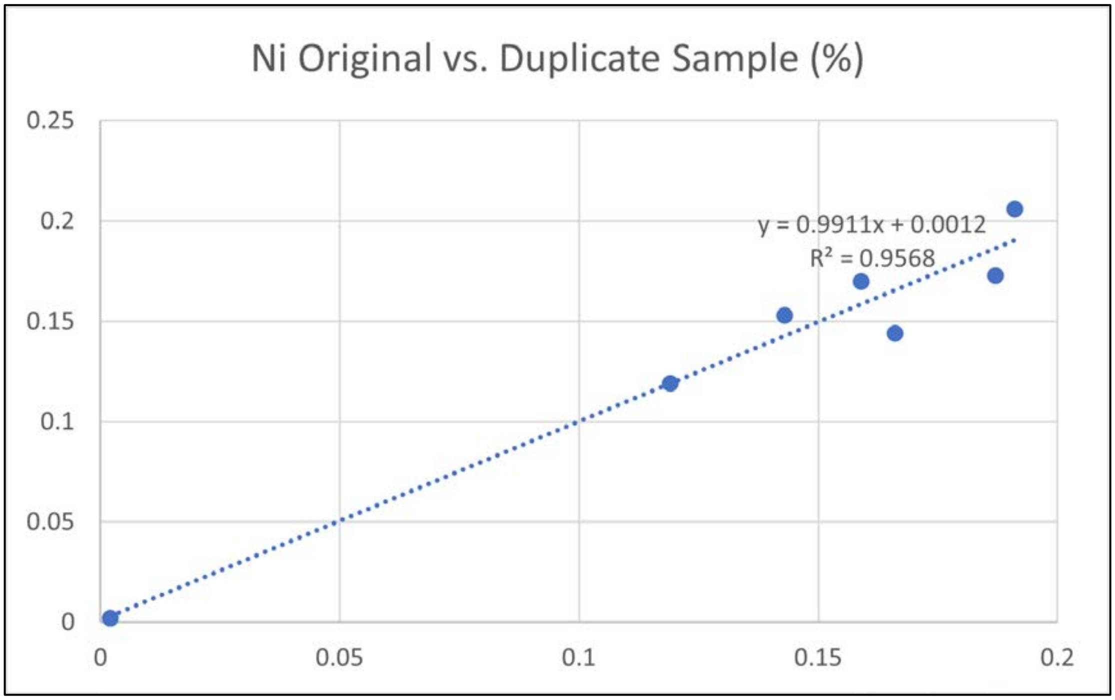


Figure 11-9. Original versus preparation duplicate sample assay results for nickel.

11.5.4 Replicate Samples – Referee Analyses

As previously stated, the Authors are not aware of EVNi submitting any core pulp samples or coarse reject material to a referee lab.

11.5.5 Blank Material

The blank samples (53 samples) introduced by EVNi into their QA/QC program are considered to be acceptable as the analytical results were observed to report low or negligible variance for each element examined. There was no evidence of any systematic trend to the minor discrepancies though analytical values above the detection limits were most prevalent in the numerically lower (earlier?) samples (Figure 11-10).

Similarly, there was no evidence of any systematic trends or major discrepancies noted in the analytical results of the blank aliquots routinely analyzed by the labs as part of their internal QA/QC regime.

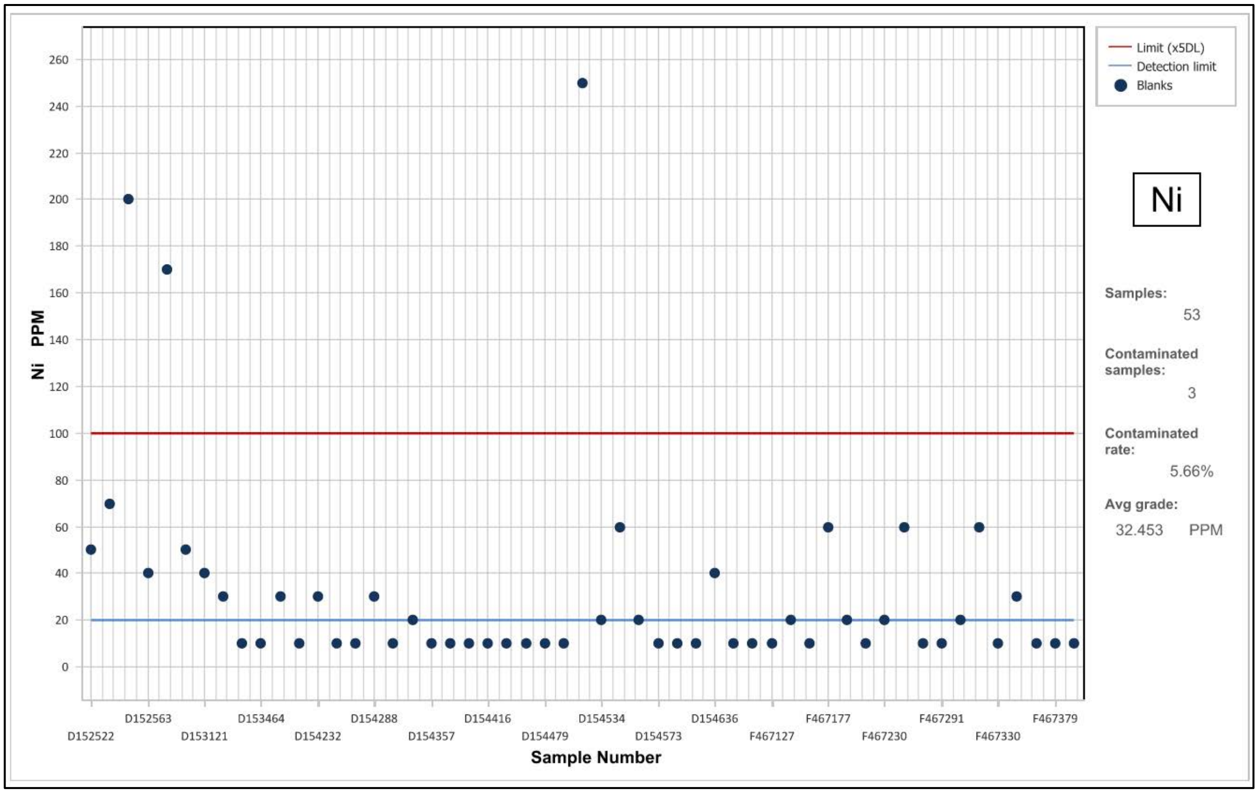


Figure 11-10. Nickel assay results from blank samples submitted into the sample stream to monitor for contamination.

12.0 DATA VERIFICATION

The Authors have reviewed the data and information regarding past and current exploration work on the Property, as provided by the Issuer and available in the public domain. The Authors have no reason to doubt the adequacy of current and historical sample preparation, security and analytical procedures for the exploration work completed by the Issuer and by past operator Golden Chalice, and the Authors maintain a high level of confidence in the current and historical data and information.

Having reviewed and verified the database and information provided by the Issuer, it is the Authors' opinion that this data and information is suitable to be used for the purposes of the Report as outlined in Section 2.1.

12.1 Internal-External Data Verification

The Authors have reviewed historical and current data and information regarding past and current exploration work on the property. No verification of the data related to metallurgical test work, as discussed in Section 13 of the Report, was completed by the Authors.

The Authors have no reason to doubt the adequacy of the historical sample preparation, security and analytical procedures and have complete confidence in all historical information and data that was reviewed.

12.2 Personal Inspection of the Property

Mr. John Siriunas (M.A.Sc., P.Eng.) visited the Project on 15 February 2023 (*see* Section 2.5). During the site visit, diamond drilling procedures were discussed and a review of the on-site logging and sampling facilities for processing the drill core were carried out.

Random verification of several drill site locations was carried out during field visits to the Langmuir Nickel Property (W4 Nickel Deposit) location north of the Forks River. Locations and orientation of drill holes was found to be consistent with those reported in the drill hole database.

12.3 Comments on Data Verification

It is the Authors' opinion that the procedures, policies and protocols for drilling verification are sufficient and appropriate and that the core sampling, core handling and core assaying methods used are consistent with good exploration and operational practices such that the data is reliable for the purpose of mineral resource estimation.

In the opinion of the Authors, the assay data is adequate for the purpose of verifying drill core assays, estimating mineral resources, and for a preliminary economic assessment and for the purposes of the Report (see Section 2.1).

13.0 MINERAL PROCESSING AND METALLURGICAL TESTING

13.1 Flotation Test Work

In June 2022, the Issuer submitted two diamond drill holes (EVMET22-01 and EVMET22-02) from the Langmuir W4 Zone which had intersected high-grade nickel mineralization (Company news release dated 9 June 2022). The core was submitted to SGS Canada Inc. (Lakefield, Ontario) for metallurgical analysis (scoping level test program), providing a suitable quantity and quality of mineralized material for their test work (Le and Imeson, 2023).

Drill hole EVMET22-01 intersected 48.6 m grading 1.31 Ni%, including 13.0 m grading 2.98% Ni, and drill hole EVMET22-02 intersected 33.0 m grading 0.74% Ni, including 9.0 m grading 1.47% Ni (*see* Section 10).

The metallurgical test program completed by SGS Canada Inc. had the specific goals of characterizing the samples for mineralogy and grindability and the application to existing processing mill flowsheets to determine the flotation characteristics for potential recoveries and concentrate quality. Three composite samples, a master, a low-grade, and a high-grade composite, representative of the W4 mineralization, were generated from drill core collected from holes EVMET22-01 and EVMET22-02.

13.1.1 Relevant Results

The following was reported from the test work completed by SGS Canada Inc. (Le and Imeson, 2023):

- Comminution:
    - Based on SMC and abrasivity testing, the Lang Master Composite was categorized as “Hard” in JK Tech Database, but “Very Low” in abrasivity.
    - Bond ball mill work indices of the three composites were between 24 and 27 kWh/t, which categorized them as “Very Hard” relative to the SGS database.
- Mineralogy:
    - Pentlandite and millerite were the main nickel sulphide minerals species.
    - Serpentine was the main mineral in the composites, representing 83% of the sample. It contained solid-solution nickel which is not recoverable through flotation.
    - F9’s rougher concentrate recovered most of the free and liberated pentlandite as well as the pentlandite associated with silicates. The pentlandite recovered in F9’s rougher scavenger was mostly associated with silicates.
    - The pentlandite in the rougher/scavenger tailings was mostly associated with silicates or in solid-solution in the silicates (serpentine).
- Flotation scoping testing was performed on all three composites but mostly on the master composite sample. The following results summarizes the Lang MC testwork:
    - Rougher nickel recovery from the composites at a primary grind P80 of 104 microns was mostly between 75% to 80%, using a combination of 3477 and PAX collectors.
    - In the best open-circuit test (F5), a cleaner concentrate grade of 20.3% Ni was achieved, at an overall nickel recovery of 51.1% and with regrind particle size of P80 of 20 microns. The use of CMC helped supress gangue and allowed better metallurgy. If a lower concentrate grade of 12% Ni was acceptable, nickel recovery would be approximately 65%. These recoveries are based on

open-circuit test results. With recirculation of middling streams in a plant environment, nickel recovery would be higher.

- A small amount of additional nickel could be recovered by regrinding and scavenging the rougher tailings. Economical analysis is needed to determine whether the additional nickel recovery justifies the additional processing cost.
- A split flowsheet generating high-grade and low-grade nickel concentrate did not appear to provide noticeable benefits compared to the conventional flotation circuit.
- Differences in flotation performance between the three composites appeared to be related solely to difference in head grade.
- Gravity and magnetic separation were tested on the master composite but did not appear to provide any overall benefit.

13.1.2 Conclusions and Recommendations

The following are the recommendations made by SGS Canada Inc. for further study:

- Primary grind sizing could be revisited to determine the optimum grind size from an economics perspective.
- Serpentine recovery to the rougher concentrate is a problem as it is difficult to efficiently depress it during cleaning. Investigating the mechanism of its recovery and depressants to control it should be carried out to improve final concentrate grade.
- An economical investigation should be performed to determine if creating a high-grade and low-grade concentrate is feasible. Additionally, scavenging of the rougher tailings should be further evaluated to determine if it is economically feasibly to operate this circuit and if the resulting concentrate is marketable.
- Once a final flowsheet is developed, a locked cycle test should be completed as a better assessment of expected metallurgy in a plant environment.
- Further variability testing (grindability and flotation) should be completed on discrete samples from the resource.
- Tailings characterization (solid-liquid separation and environmental testing) should be carried out.

13.2 Bioleaching Test Work

In 2022, EV Nickel initiated a scoping study at the Research and Productivity Council Science & Engineering ("RPC") of Fredericton, New Brunswick, to investigate the potential of treating nickel ore from the W4 Nickel Deposit. The nickel mineralized material provided to RPC was being investigated by EV Nickel in conjunction with RPC to look at ways of recovering nickel and cobalt as well as utilizing magnesium biproducts for carbon dioxide sequestration (Cheung and Botha, 2022).

13.2.1 Relevant Results

An initial assessment was conducted by RPC and reported on in August 2022 (Cheung and Botha, 2022) involving raising indigenous bacteria collected from the Redstone Mill tailings pond and conducting a literature search to identify conceptual process options in moving the project forwards. Two conceptual flowsheets were designed to process the materials and the test program findings and recommendations for the way forward were as follows (August 2022):

- The nickel-mineralized material provided to RPC is amenable to bioleaching under the conditions tested. The material tested contains 0.786% Ni, 0.015% Co, 20.2% Mg and 0.69% total S. Ni, Co, Cu and Mg extractions of 86.0%, 85.2%, 55.5% and 10.6% were achieved within 12 days in a batch bioleach, respectively.
- Acid consumption of the nickel-mineralized material as tested was high in a whole-ore-heap bioleach scenario due to the rich presence of magnesium minerals as well as the low sulphide content in the material.
- A tank bioleach process recovering Ni and Co from flotation concentrate is recommended in moving the project forward. The acid consumption is expected to be considerably lower than that of the heap leach option.
- No magnesium-carbon dioxide capture testing was conducted in the current program. However, it is expected that the extracted Mg can be converted to MgO or $Mg(OH)_2$ which is capable of capturing and mineralizing CO_2. The residual Mg minerals in the bioleach residue or flotation tails could also be used for CO_2 sequestration purposes. Optimization and validation testing will be required to confirm the CO_2 sequestration opportunities and efficiencies.
- EV Nickel is looking to develop a flotation process for producing Ni/Co concentrates. It is recommended that the concentrates produced be tested to confirm the amenability in tank bioleaching. Unit operation requirement and optimization of metals recoveries, as well as process requirement for CO_2 sequestration utilizing the magnesium biproducts should be included in future test program.

13.2.2 Conclusions and Recommendations

In May 2023, EV Nickel announced the preliminary results from its bioleaching test work (Company new release dated 3 May 2023). The evaluation by RPC used locally occurring bacteria from Shaw Dome water samples and then developed two conceptual flow sheets to process the material through:

a. A Whole Ore to Heap Bioleach (“Heap Bioleach”, Figure 13-1); and

b. A Crushing-Grinding-Flotation to Tank Bioleach (“Tank Bioleach”, Figure 13-2).

RPC completed initial bench scale testing which proved the nickel-mineralized material is amenable to bioleaching and extraction rates realized for Ni and Co were very encouraging, indicating a strong bioleaching potential for W4, likely greater with Tank Bioleach. Based upon these results, RPC’s bench scale testing now enters an optimization phase.

The RPC research study was completed on a sample of W4 nickel-mineralized material with a composite grade of 0.78% Ni and 0.02% Co. Extractions achieved by the test work ranged from 86.0% to 90.5% for Ni and 85.2% to 90.1% for Co after tests ranging from 8-12 days of leaching under defined pH and temperature conditions.

The degree of sulphuric acid (“H_2SO_4”) consumption is a key consideration when assessing bioleaching potential and based upon the composition of the host ultramafic- magnesium-rich materials with low sulphide content- the Heap Bioleach scenario was determined to be problematic for the W4 Nickel Deposit material. RPC recommended the Tank Bioleach scenario because it is expected to have a considerably lower acid consumption and by incorporating flotation to upgrade the feed it will likely result in even higher bioleaching efficiency. Plus, the Tank Bioleach scenario has a far smaller processing footprint and likely lower capital costs.

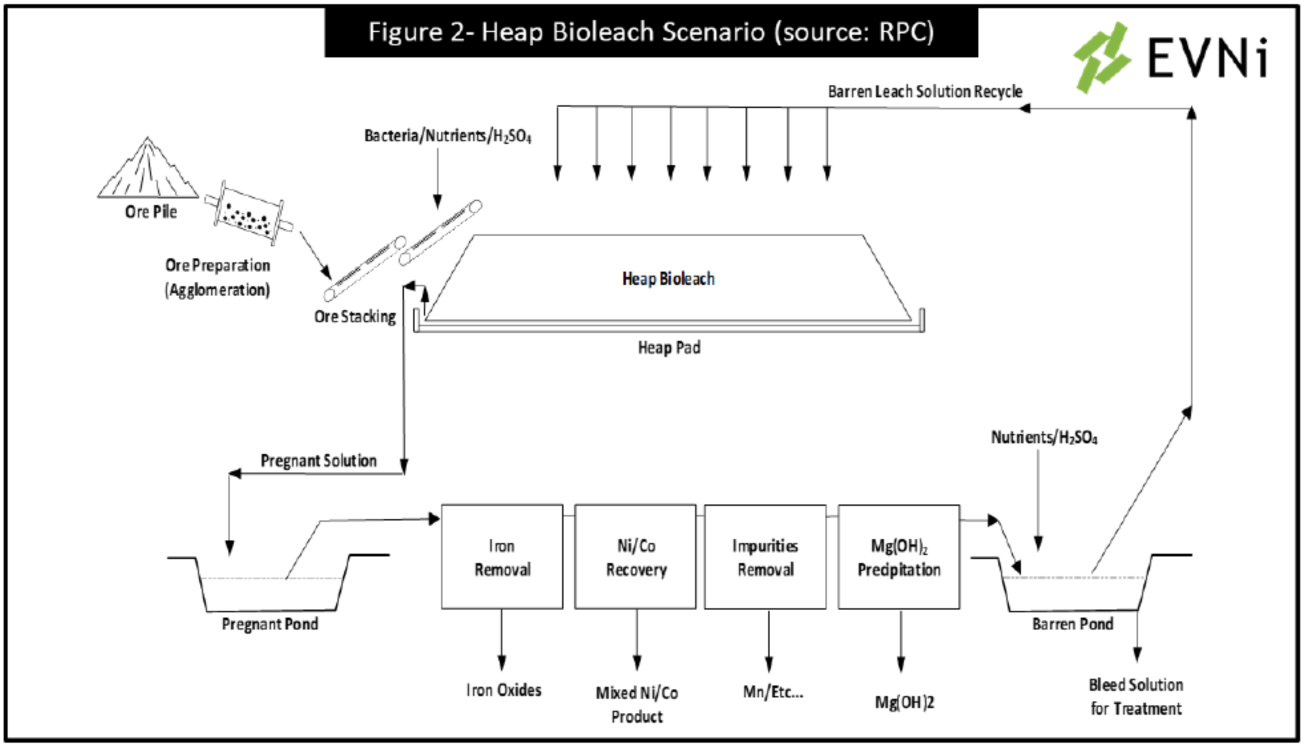


Figure 13-1. Heap Bioleach scenario (RPC, 2023).

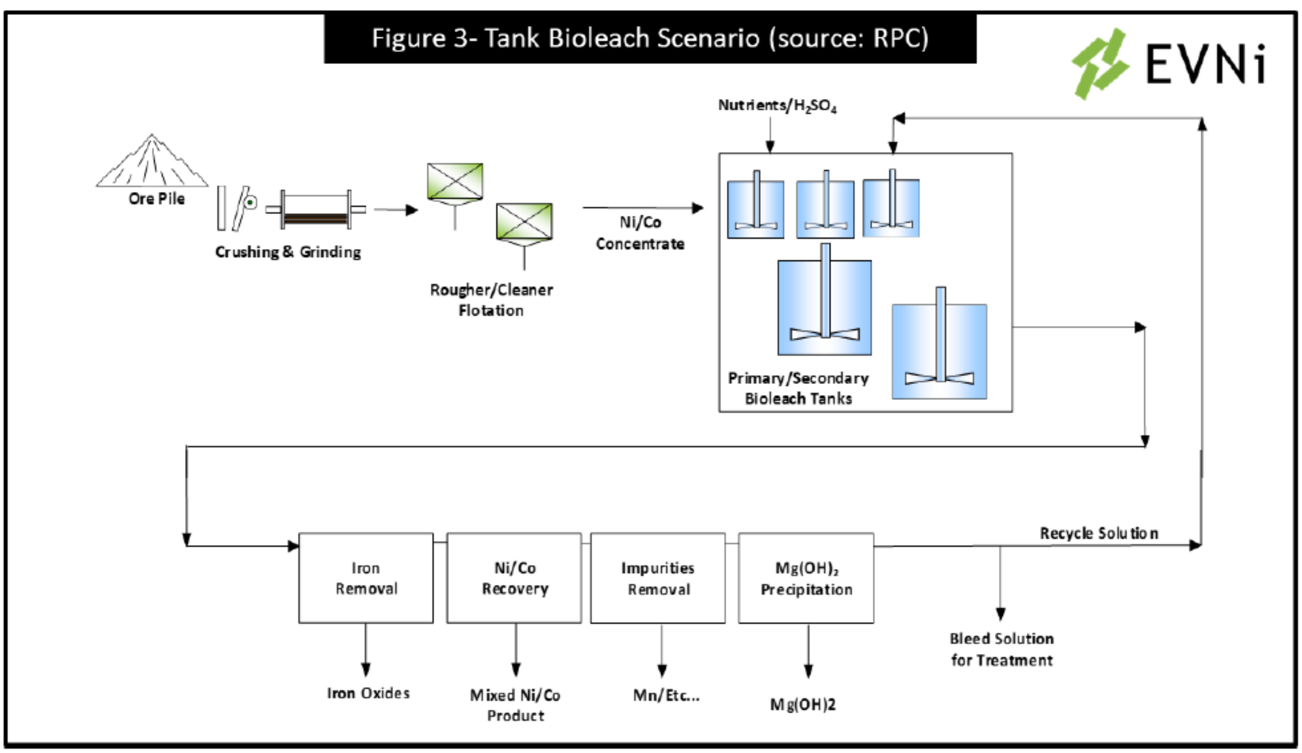


Figure 13-2. Tank bioleach scenario (RPC, 2023).

13.2.2.1 Commercial Opportunity to Change the Current Nickel Value Chain

If successful, the Tank Bioleach scenario could facilitate a small footprint, localized production of the product required by the planned battery plants. This avoids the need to send concentrate to foreign-owned smelters and refiners plus cuts down on the distance material currently travels before the critical metal reaches the state which the battery plants require- a current challenge for the industry (Figure 13-3). The Tank Bioleach scenario could precipitate the end-product to match the input specifications of the customers, a huge benefit to the new buyers of nickel.

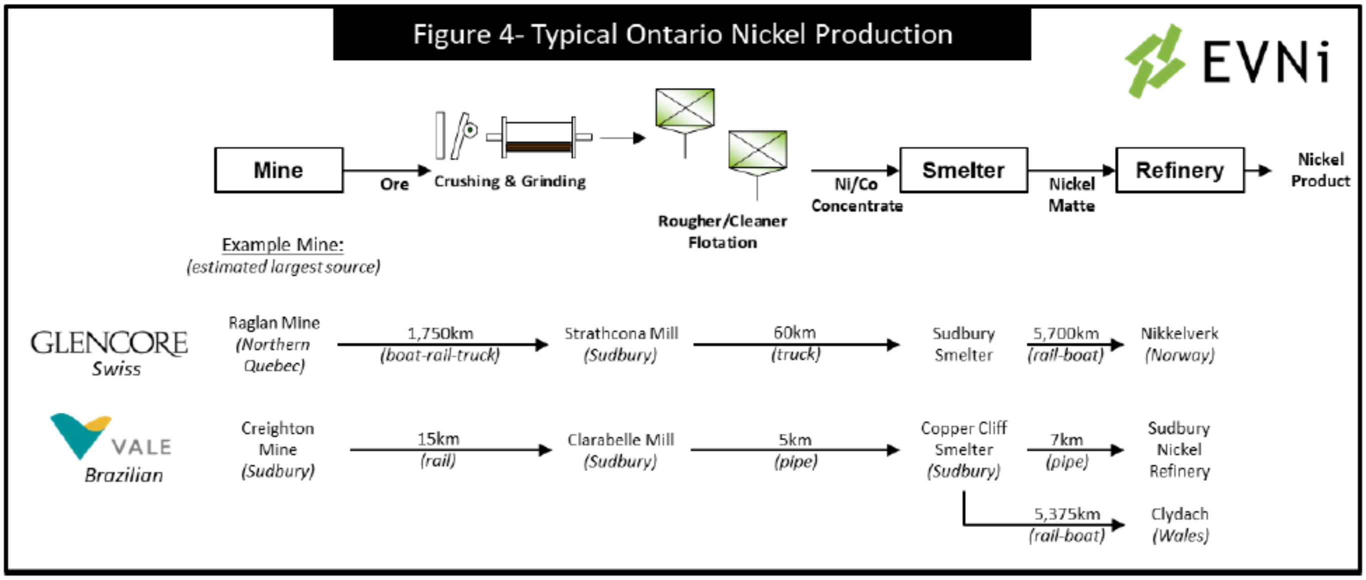


Figure 13-3. Typical Ontario nickel production (EV Nickel, 2023).

13.2.2.2 Additional Carbon Capture and Storage Potential

As part of the bioleaching process, magnesium (“Mg”) is extracted and can be converted to magnesium hydroxide (“$Mg(OH)_2$ “, in nature as brucite) which is capable of capturing and mineralizing CO_2. EVNi is researching this in the parallel Clean Nickel™ research stream, for Carbon Capture and Storage (“CCS”) (Company news release dated 20 April 2023). RPC indicated that the residual Mg minerals in the bioleach residue or floatation tails could be used for CCS and recommended further testing to optimize and validate the CO_2 capture potential.

It should be recognized that the nature of this research is experimental and successful results are not a certainty.

14.0 MINERAL RESOURCE ESTIMATES

14.1 Introduction

EV Nickel Inc. engaged Caracle Creek International Consulting Inc. to prepare a mineral resource estimate for the W4 Nickel Deposit (the “MRE” or “Mineral Resource Estimate”), located within the Langmuir Nickel Property, and which was publicly announced on 12 June 2023. The Effective Date of the MRE is 12 June 2023.

The MRE was prepared under the direction of Simon Mortimer (Co-Author and QP) with assistance from Luis Huapaya (geologist). The Co-Author developed the geological interpretation and the construction of the lithology model and the mineralized domain models, Mr. Huapaya completed the work on the statistics, geo-statistics and the grade interpolation.

The MRE on the W4 Nickel Deposit that is contained in the Report was completed in accordance with NI 43-101 and following the CIM Definition Standards for Mineral resources & Mineral Reserves (CIM, 2018) and CIM Estimation of Mineral Resources & Mineral Reserves Best Practice Guidelines (CIM, 2019).

14.2 Resource Database

Information used for the MRE is derived from the historical Golden Chalice drilling campaigns of 2007 to 2010 (*see* Section 6) and the current EV Nickel drilling campaigns of 2021 to 2023 (*see* Section 10).

14.2.1 Surface Control

A topographic surface was created from interpolating between drill hole collar locations, without reference to a DEM, as the collar locations were known to be accurately measured, providing the best surface for the area of the W4 Nickel Deposit.

Specifically, the geological model was constructed using a topographic surface which was built from interpolating between the measured drill hole collar locations with an isotropic radial basis function interpolation. The surface was constructed as a 15 metre wireframe mesh adding in the collar locations as control points in order to give the most accurate surface relative to the drill hole data.

14.2.2 Drilling Database

Golden Chalice carried out drilling campaigns from 2007 to 2010, completing 126 diamond drill holes within the boundary of the mineral resource, drilling a total of 42,482.40 m and taking 9,062 core samples. EV Nickel completed drilling campaigns from 2021 to 2023, drilling 32 diamond holes within the resource boundary, a total of 9,168.00 metres and taking 1,023 core samples. All drilling and sampling data has been verified, validated and imported into a SQL Server cloud-based data management system, including data and meta-data on the collar, survey and the lithology and assay samples. Lithology information from all the 158 drill holes were used in the resource, including a total of 10,085 samples, using analyses of nickel, cobalt, copper, platinum and palladium in the resource calculation. The drill database also contains a data table of the 318 density measurements, 90 from historical work by Golden Chalice and 228 collected from EV Nickel’s 2023 metallurgical drill holes with density measurements completed at SGS Canada Inc.

14.2.3 Collar Location and Down-hole Deviation

The earlier holes drilled by Golden Chalice were originally positioned on a grid which was measured using a tape measure and compass, with the later campaigns positioning the drill collar locations using a handheld GPS. All the Golden Chalice drill hole collar locations were later surveyed using a differential GPS system known to have an accuracy sub-centimetre. The EVNi drill hole collar locations were first located using handheld GPS. The drill holes located north of the Forks River and the 2023 metallurgical drill holes were surveyed by Talbot Surveys Ltd. using a Differential GPS (DGPS).

The down-hole deviation of all the Golden Chalice drill holes were done using a device taking azimuth and dip measurements every 30 to 50 m down-hole. The down-hole deviation (azimuth and dip) on the EV Nickel holes were surveyed using a REFLEX multi-shot instrument taking readings approximately every 5 metres.

14.2.4 Assay Sample Summary

The sample interval lengths are based on geological contacts and vary between 13 cm and 2.4 metres. Over 90% of the samples have a length of 1.0 m and were collected across mineralized material. Those with a shorter sample length were collected across visual limits of mineralization noted through a change in lithology. In total, 10,085 core samples were taken from 51,650.40 m of mineralized drill core. Figure 14-1 details the number of sample interval lengths that were taken over the drilling campaigns. Samples were only taken within lithologies favoured for containing mineralization.

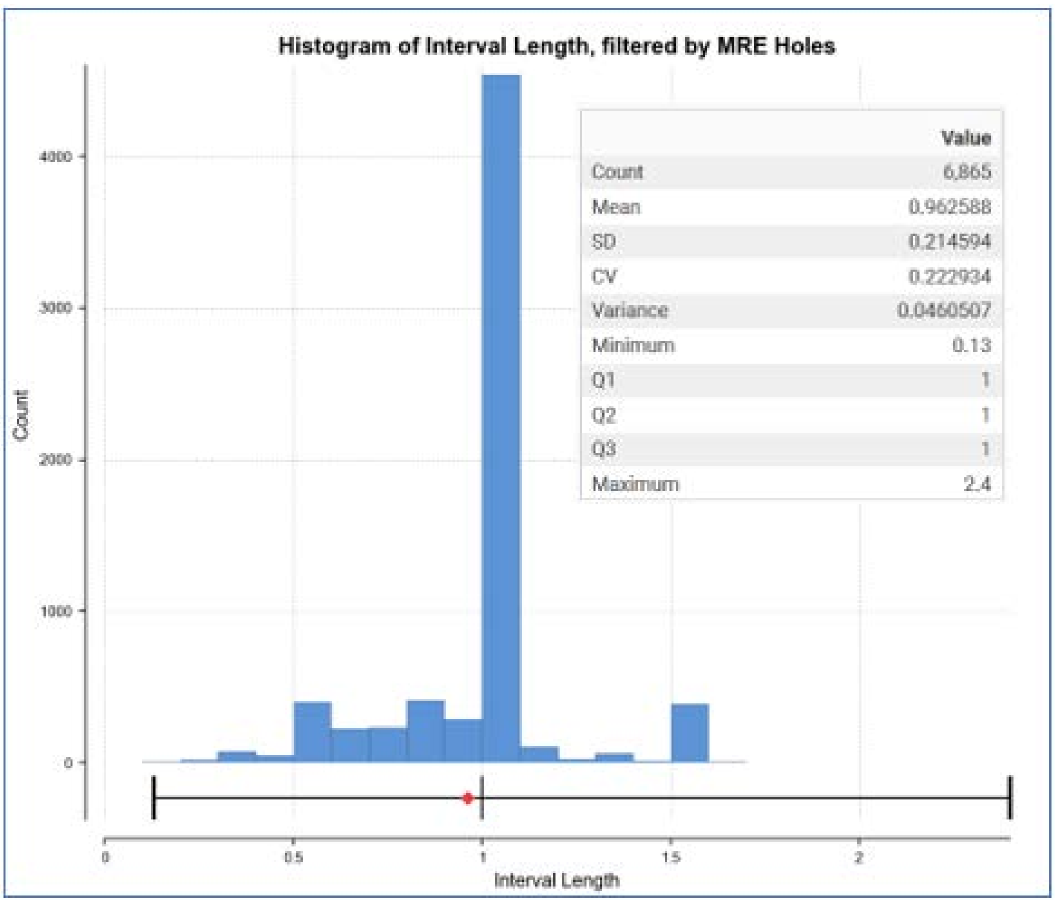


Figure 14-1. Summary of the sample intervals lengths for the drill holes used in the MRE.

14.3 Estimation Methodology

The Mineral Resource Estimate for the W4 Nickel Deposit is located within the southern portion of the Langmuir Nickel Property (Figure 14-2). The mineral resource model limits are between 497100mE and 497800mE, and 5349200mN and 5349800mN.

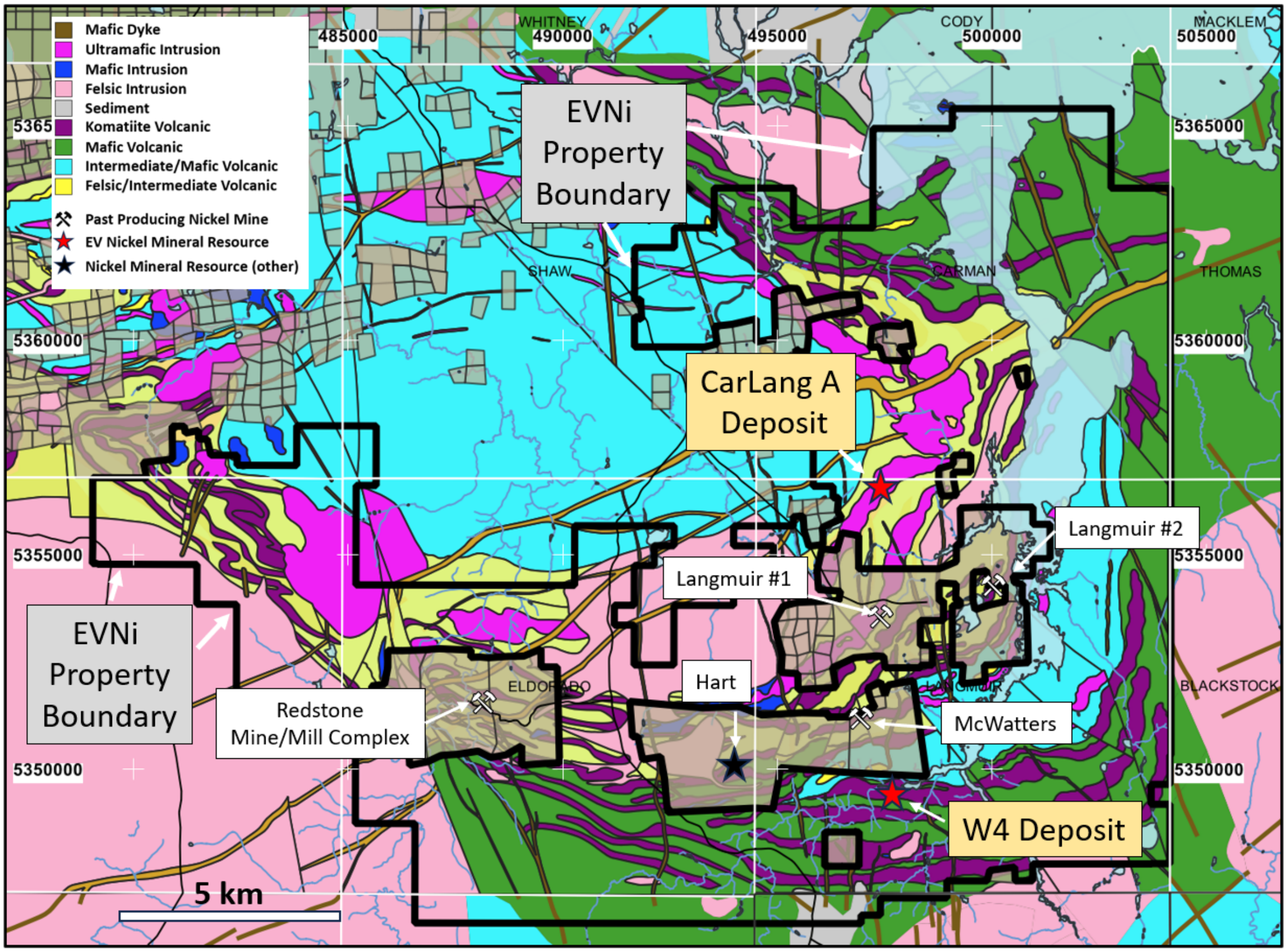


Figure 14-2. Project-scale map showing the location of the W4 Nickel Deposit (lower red star) within the Langmuir Nickel Property of the Shaw Dome Project (black boundary) (geological base map from Houlé and Hall, 2007) (EV Nickel, 2023).

The estimation of the MRE can be broken down into the following stages:

- Validation of the information utilized in the resource and database compilation.
- Interpretation and 3D modeling of the lithology, structure, mineralization, and grade.
- Development of the estimation domains.
- Compositing of grade within the domains.
- Exploratory data analysis.
- Block model definition.
- Interpolation of grade within the defined domains.
- Review and model the variability in the rock density.
- Evaluation of confidence in the estimation.

- Model validation.
- Definition of reasonable economic extraction.

Validation of the data and database compilation was completed using the Geobank™ data management software. The interpretation and 3D geological modeling was completed using the Leapfrog Geo™ software, statistical studies were performed using Micromine™ tools, the block model, subsequent estimation and validation was carried out using the Micromine™ 2020 software, and the definition of reasonable economic extraction utilized the tools within Datamine's NPV Scheduler™.

14.4 Geological Interpretation and Modelling

The interpretation of the geology utilized information from the assay and lithology data tables taken from the historical Golden Chalice drilling campaigns and the recent EV Nickel drilling campaigns.

The geological modelling was completed using Leapfrog Geo™ software, building integrated models for lithology and mineralization following the event modelling methodology, constructing each surface and subsequent solid in sequence with respect to the genesis and evolution of the mineral deposit. No alteration data was collected in the field; hence no alteration model was completed.

14.4.1 Lithology Model

The drill hole logging defined the contact of the ultramafic volcanics against the older intermediate to felsic metavolcanic rocks of the Deloro Assemblage (2730-2724 Ma), a younger felsic intrusion, and the cross-cutting dikes of the Matachewan Dike Swarm (2500-2450 Ma). The ultramafic volcanic rock package, which contains nickel sulphide mineralization, exists as a series of ultramafic volcanic flows with spinifex textures and intercalating mafic flows with occasional narrow bands of sedimentary rocks (Figure 14-3).

Detailed modelling of the volcanic sequences within the ultramafic volcanic package revealed that the block containing nickel sulphide mineralization is faulted, creating a repetition of a single mineralized disseminated to massive sulphide layer. Six faults were interpreted, five orientated approximately east-west with dip towards the south with a measurable, strike-slip displacement, and the sixth orientated north-south, truncating the mineralization on the western side of the W4 Nickel Deposit.

Diabase dikes of the Matachewan Dike Swarm are known to pass through this region with an orientation of between north and north-northeast and vertical. The drill data have identified diabase intercepts; however, the modelled dikes appear to be limited in extension and depth.

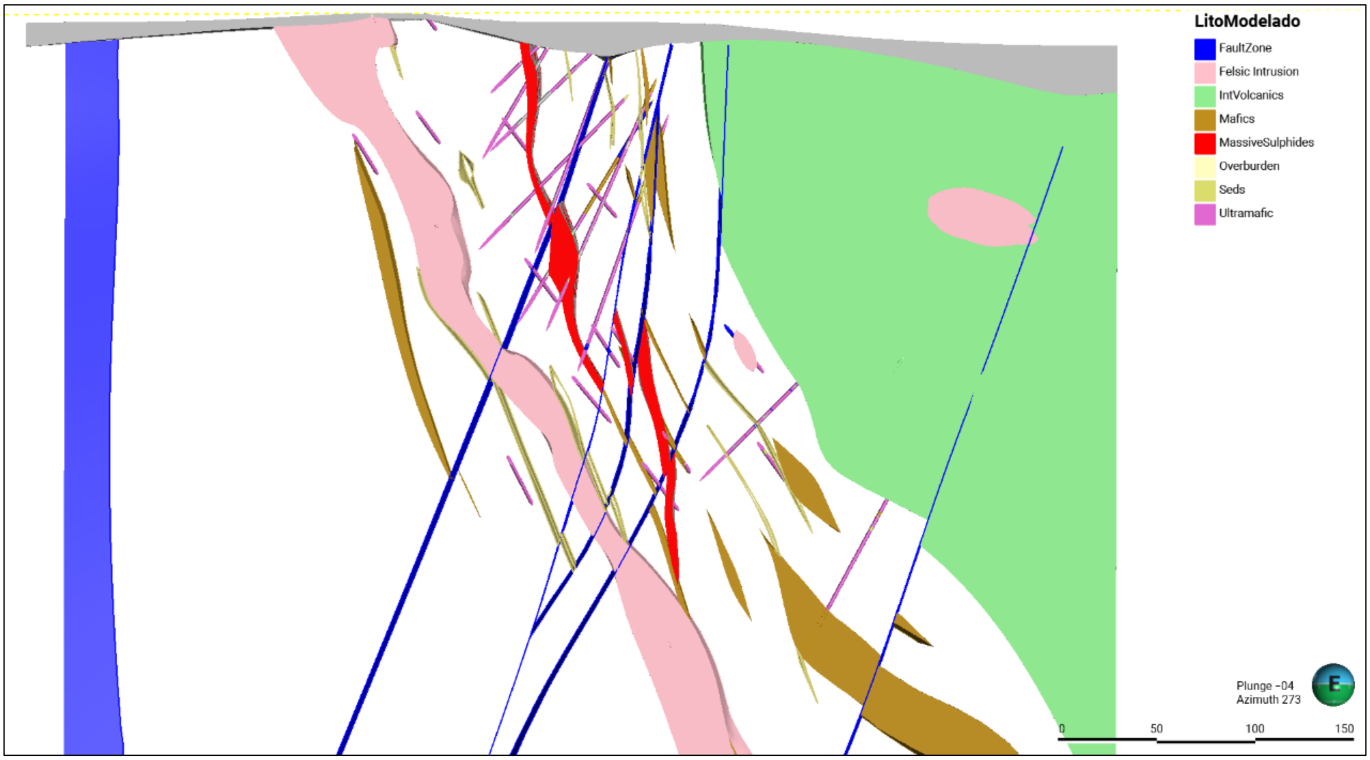


Figure 14-3. Section view of the 3D lithology model, looking west, showing the felsic intrusion, the older intermediate volcanics, the layering within the ultramafic volcanic flows, and the faulted, mineralized nickel sulphide layer.

14.4.2 Mineralization Model

Nickel-cobalt mineralization exists as disseminated and massive to semi-massive sulphides within the ultramafic volcanic flows. As limited information exists in the drill holes on sulphide characterization, the mineralization model was based on nickel assay grade, using a threshold of the 0.2% Ni to define the limit of low-grade mineralization (Low-grade Nickel Domain) and a threshold of 0.5% Ni to define the higher grade (High-grade Nickel Domain). The mineralization model utilizes the faults and the post mineral lithologies defined in the litho-structural model to generate the estimation domains, a lower-grade sulphide domain that halos a higher-grade sulphide domain.

The lower-grade domain has been modelled as it has relevance in an open pit scenario, while the higher-grade domain identifies the portion of the deposit that could be extracted via underground mining methods (Figure 14-4).

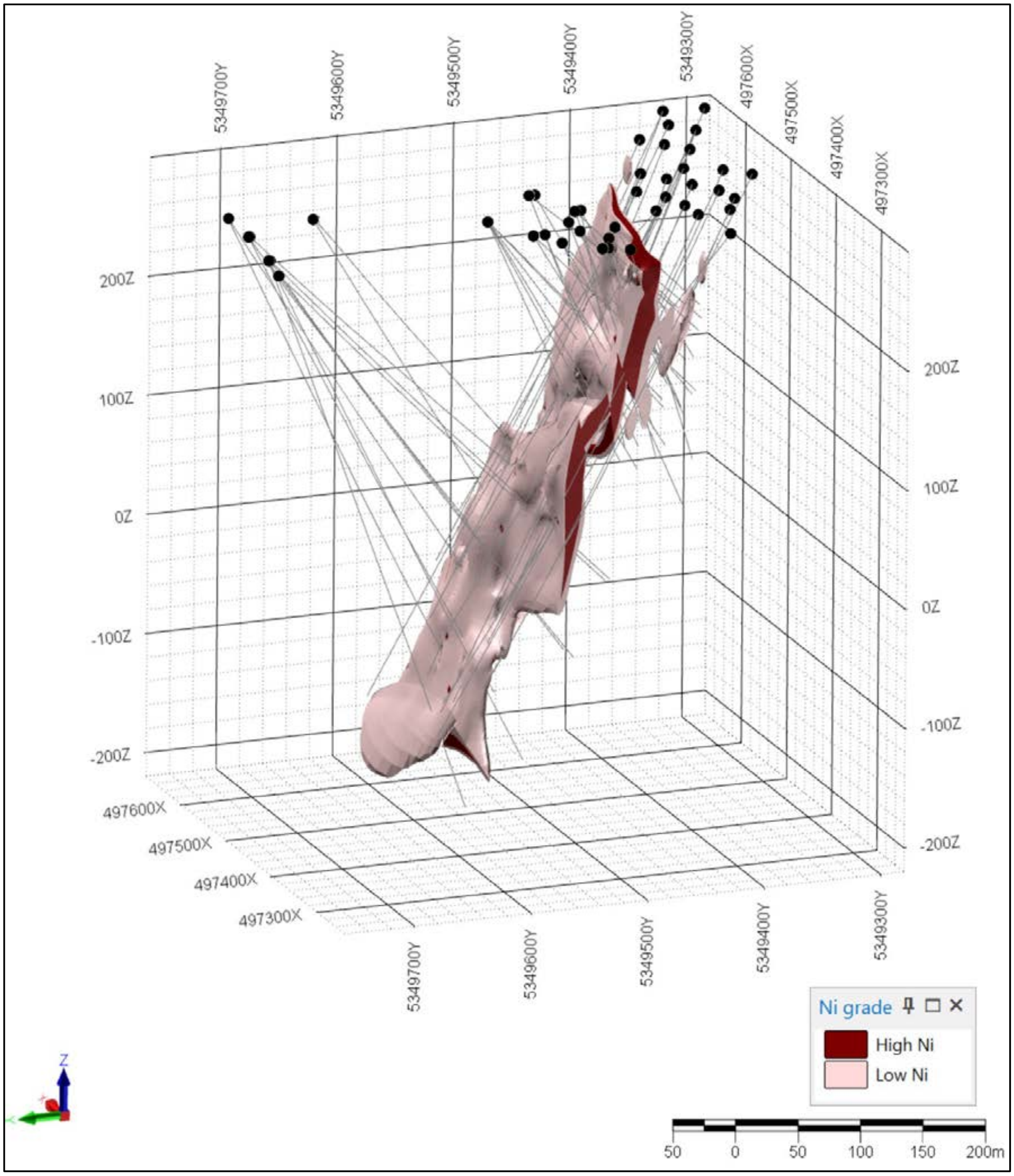


Figure 14-4. Isometric view of the 3D mineralization model (looking east) showing the High-grade Nickel Domain (High Ni: red) within the thinner Low-grade Nickel Domain (Low Ni: pink). Drill hole collars (black circles) and traces (black lines) are also shown.

14.5 Data Analysis and Estimation Domains

14.5.1 Exploratory Data Analysis (EDA)

Mineralization is restricted to sulphide lenses within the ultramafic volcanic flows and the geological modelling has identified an individual mineralized unit that has been split into five (5) solids through faulting. The mineralized unit exhibits a higher-grade main lens with a narrow lower-grade halo, defining a low-grade and a high-grade nickel sulphide domain.

An analysis of the statistics of the assay data points that fall within the high-grade and low-grade domain solids, both combined and separated, are detailed in Table 14-1, Table 14-2, and Table 14-3. The current MRE considers the analysis for the elements of nickel, cobalt, copper, platinum, and palladium.

Table 14-1. Summary of the basic statistics for the assay data points across the low-grade and high-grade domains.

Input Data Assay HG and LG										
Element	**Min**	**Max**	**N° Samples**	**Mean**	**Variance**	**Std Dev**	**Coef Var**	**25 Prcntl**	**50 Prcntl**	**75 Prcntl**
Ni_ppm	113	179000	1977	8234	167853721	12956	1.57	2120	3440	9801
Cu_ppm	0.02	17200	1977	589	1352787	1163	1.97	96	194	680
Co_ppm	14	6551	1977	150	41196	203	1.36	80	101	165
Pt_ppb	3	12900	1862	225	431263	657	2.92	13	50	140
Pd_ppb	1	37100	1862	543	3449144	1857	3.42	22	82	300

Table 14-2. Summary of the basic statistics of the assay data points that fall within the High-grade Nickel Domain.

Input Assay Data. HighGrade Domain										
Element	**Min**	**Max**	**N° Samples**	**Mean**	**Variance**	**Std Dev**	**Coef Var**	**25 Prcntl**	**50 Prcntl**	**75 Prcntl**
Ni_ppm	169	179000	1164	12109	239478772	15475	1.28	3524	7830	14500
Cu_ppm	0.02	17200	1164	890	2038089	1428	1.60	165	432	1114
Co_ppm	14	6551	1164	190	64393	254	1.34	93	140	220
Pt_ppb	3	12900	1105	345	682541	826	2.39	33	92	241
Pd_ppb	3	37100	1105	840	5331981	2309	2.75	66	203	548

Table 14-3. Summary of the basic statistics of the assay data points that fall within the Low-grade Nickel Domain.

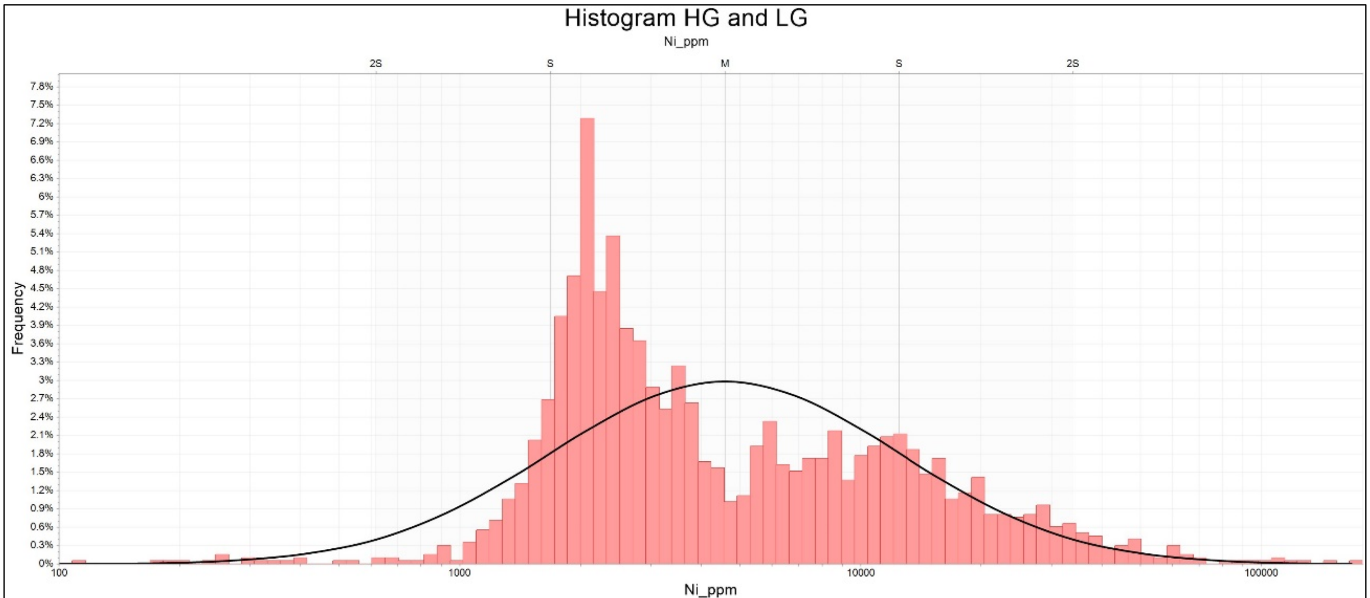
Input Assay Data LowGrade Domain										
Element	**Min**	**Max**	**N° Samples**	**Mean**	**Variance**	**Std Dev**	**Coef Var**	**25 Prcntl**	**50 Prcntl**	**75 Prcntl**
Ni_ppm	113	90600	813	2686	13123739	3623	1.35	1870	2200	2710
Cu_ppm	0.02	4115	813	158	57357	239	1.51	58	111	176
Co_ppm	20	797	813	91	2289	48	0.52	71	86	100
Pt_ppb	3	1530	757	50	13268	115	2.29	5	16	50
Pd_ppb	1	16050	757	109	386536	622	5.70	8	27	60

The basic statistics for the input assay data filtered by domain indicate that the nickel, copper, and cobalt could all be adequately estimated using Ordinary Kriging (“OK”) and that the separation into high- and low-grade domains would produce a more robust model than if estimated in one single mineralized domain. It can also be seen from the maximum values, that the input assay data sets contain outliers that could adversely affect the estimation and that these would need to be reviewed and possibly capped.

The platinum and palladium demonstrate an increased variability compared with nickel, copper, and cobalt, indicating that their estimation if considered within the nickel-based domains, would require an Inverse Distance (“ID”) methodology or OK, with more restrictive estimation parameters.

Figures 14-5 is a histogram of the input assay showing the distribution of the economic elements within the mineralized domains, the low-grade and high-grade together.

The distribution of nickel within the mineralized domains indicates the presence of a high- and low-grade populations, plus a few outliers within the high-grade.



Ni_ppm		3rd Highest	128800.00	Variance	153166194.33	Lognormal Mean	8.43	Sichel's Estimator	7564.10	Degrees of Freedom	65
Minimum Value	113.00	4th Highest	120300.00	Standard Deviation	12376.03	Lognormal Std Deviation	1.00	Sichel's V	1.00		
Maximum Value	176000.00	N	1976	Coeff. of Variation	1.52	Geometric Mean	4581.64	Sichel's Gamma	1.65		
2nd Highest	145500.00	Mean	8147.77	Median	3438.00	Geometric Std Dev	2.72	Experimental Chi²	758.768		

Figure 14-5. Histogram of the distribution of nickel assay data points within the low- (LG) and high-grade (HG) mineralized domains.

Nickel is the principal economic element and defines the mineralized domains, with the copper, cobalt, platinum, and palladium considered as by-products. A visual review of the different economic elements within the nickel domains indicate that the mineralization exists throughout, and that there is no evidence for separation or segregation of the different metals into zones.

A statistical analysis of the correlation between the economic elements can be seen in Table 14-4; a correlation of between 0.1 to 0.3 is extremely low, 0.3 to 0.4 is low, 0.4 to 0.5 is moderate, 0.5 to 0.7 is moderately high, 0.7 to 0.8 is high, and 0.8 to 1.0 is extremely high. This correlation matrix shows a moderately-high correlation between nickel and copper and cobalt, and a very high correlation between platinum and palladium, but with a low correlation between platinum-palladium and nickel-copper-cobalt.

Table 14-4. Correlation matrix for the potentially economic elements within the mineralized domain.

Correlation Matrix					
Ni_ppm	1.0				
Co_ppm	0.64593	1.0			
Cu_ppm	0.692223	0.504157	1.0		
Pd_ppb	0.42205	0.334274	0.389199	1.0	
Pt_ppb	0.332168	0.249162	0.275718	0.88542	1.0

The correlation matrix in Table 14-4 indicates that the copper and cobalt can be adequately estimated alongside the nickel utilizing the same estimation parameters and within the same estimation domain. The platinum and palladium can still be estimated within the nickel mineralization domains, but they may require different parameters.

14.5.2 Contact Analysis, Compositing and Capping

The domain boundaries utilize a combination of information from the lithology model and the mineralization model, but as the mineralization solids lie almost entirely with the favourable ultramafic lithology, except for the presence of post mineral dikes, the definition of the domain boundary is essentially a function of the nickel grade.

An analysis of the contact between the low-grade domain and high-grade domain can be seen in Figure 14-6, looking at the samples either side of the domain boundary in 5 m increments, it shows that there is an abrupt change in nickel grade either side of the contact.

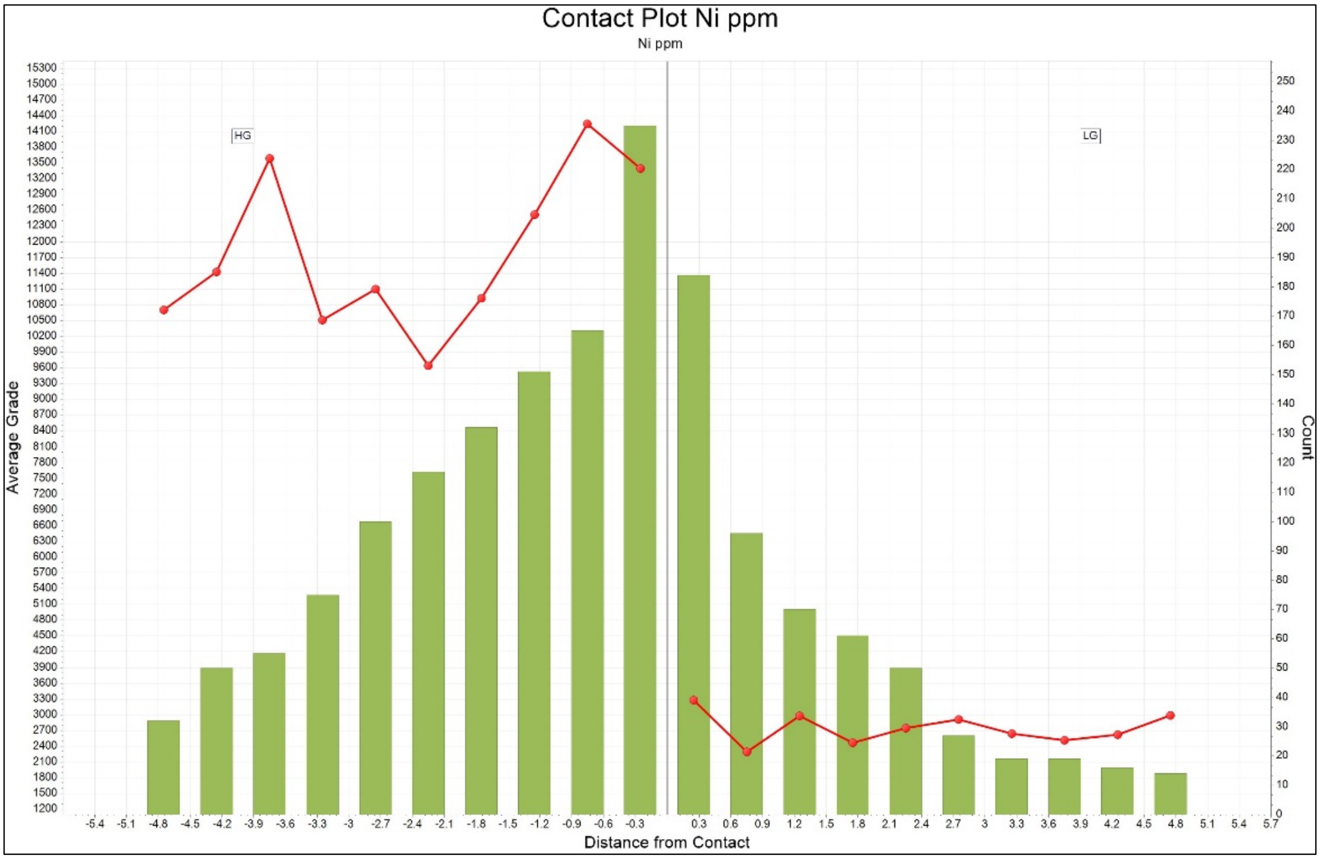


Figure 14-6. Contact analysis plot showing the variation in grade between the Low-Grade Nickel Domain against the High-grade domain.

The domain boundary between the low-grade domain and the un-mineralized ultramafic host rock can be seen in Figure 14-7 and shows a hard contact boundary albeit less defined than the high-grade, low-grade contact. The contact analyses confirms that the estimation should be carried individually for each domain.

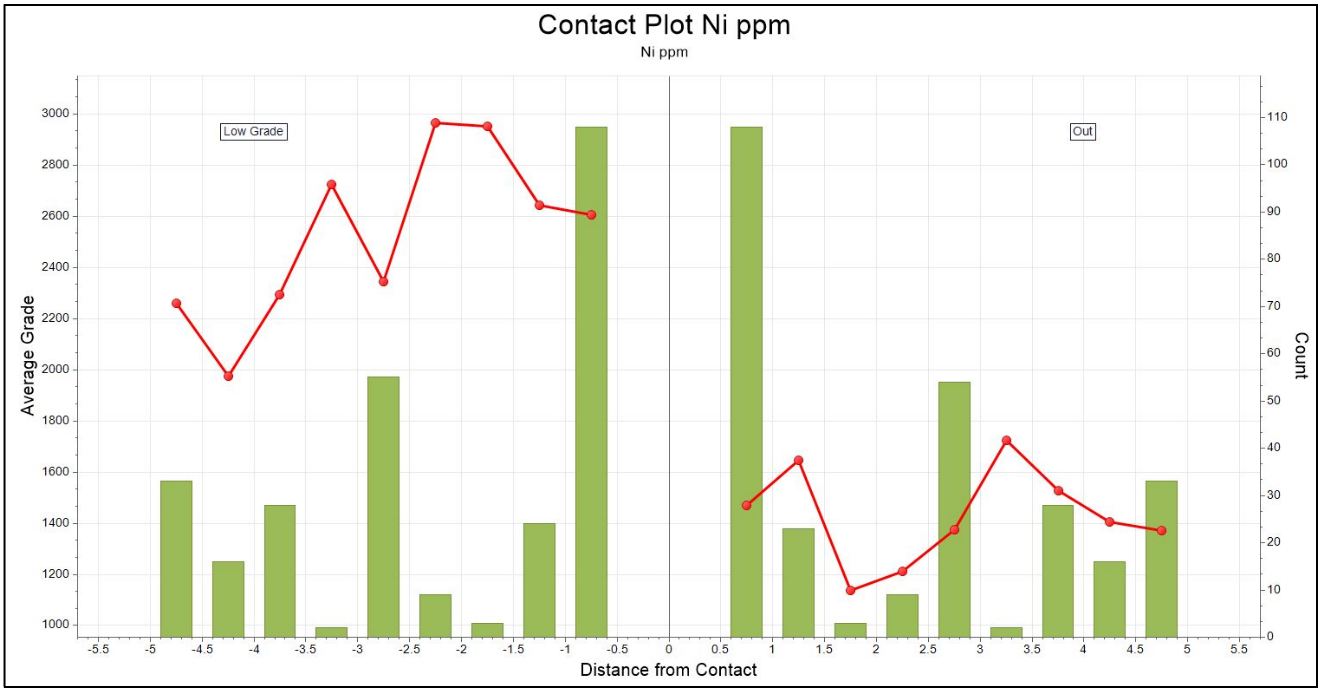


Figure 14-7. Contact analysis plot showing the variation in grade between the Low-Grade Nickel Domain against the un-mineralized ultramafic host rock.

The predominant sample length taken within this drilling campaign is 1.0 m and the scale of the deposit is such that the majority of the modelled resource should be extracted via underground mining methods; therefore, the input drill data has been composited within the estimation domains using a composite length of 1.0 metre.

The exploratory data analysis revealed that the a few extreme outliers are present in the high-grade domain, across all the estimated elements. Table 14-5 details the parameters of the capping applied in the estimation.

Table 14-5. Capping values for each of the estimated elements.

Element	Capped At	Percentile
Ni (ppm)	69,000 ppm	99
Cu (ppm)	8,500 ppm	99
Co (ppm)	1,500 ppm	99
Pt (ppb)	6,000 ppb	99
Pd (ppb)	16,050 ppb	99

14.6 Specific Gravity

A total of 90 density measurements were collected by Golden Chalice and 228 were acquired by SGS Canada Inc., for EV Nickel (Figure 14-8). The density measurements from the historical Golden Chalice exploration campaign were taken from 23 drill holes (2008 drilling campaign), with approximately 75% of those being taken from the mineralized material. Of these samples, 75 were sent to SGS Laboratory and analysed by pycnometry on pulverised core, and 15 samples were measured by JVX Consultants using a water immersion technique.

EV Nickel measurements were collected from 228 core samples from the 2023 metallurgical sample drill holes, with 202 samples taken from mineralized material and 26 from un-mineralized rock. These samples were sent to SGS Canada Inc. (Lakefield) and were analysed by pycnometry.

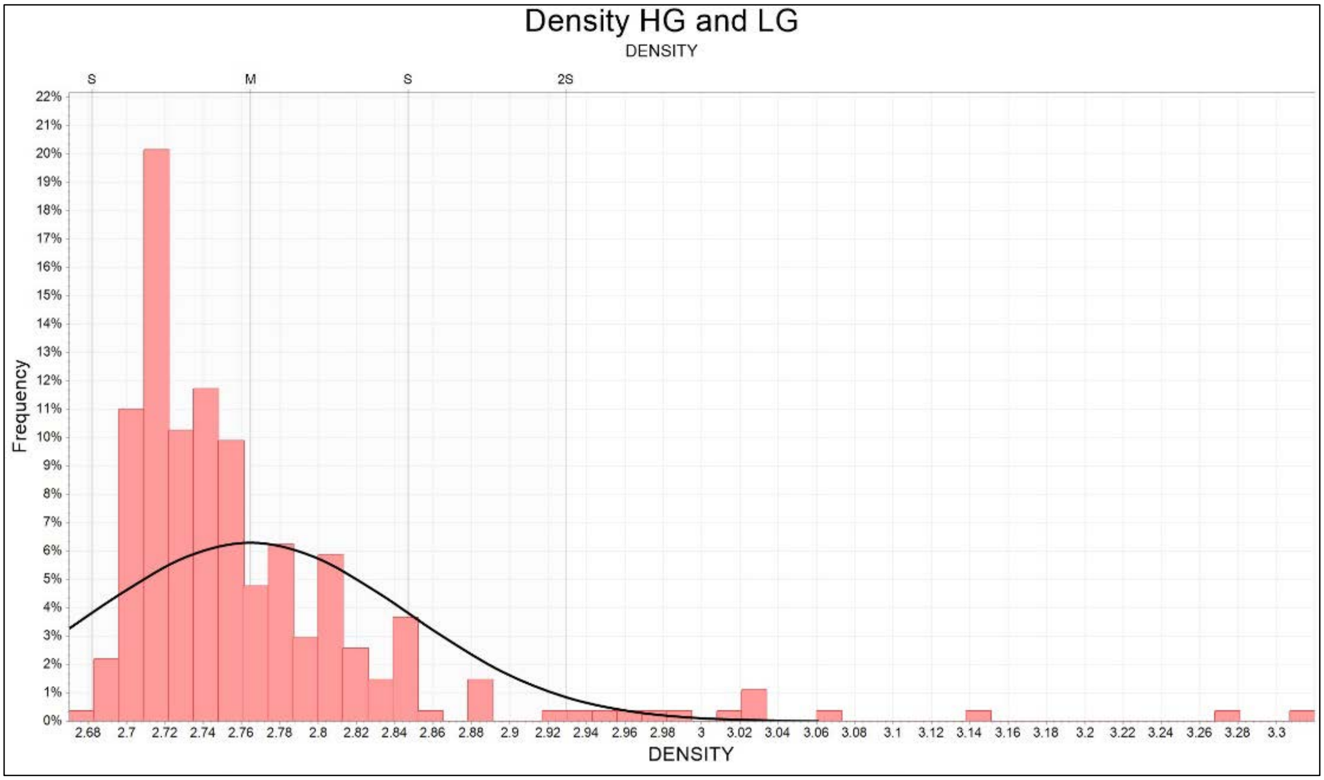


Figure 14-8. Histogram of the density data within the low- and high-grade sulphide mineralized domains.

It is known that the mineralized material contains varying amounts of sulphides, which will locally affect the density and as density measurements have only been taken from a few numbers of drill holes, relatively close to the surface they do not cover the majority of the mineralized volume.

At present a single density value has been assigned to the blocks within the low-grade and high-grade nickel domains, but as a relationship exists between sulphide mineralization and density, the model would be more robust if density of the mineralized domain was estimated or assigned relative to sulphide mineralization. Specific gravity (SG), as assigned to each of the rock types and the mineralized domain, is provided in Table 14-6.

Table 14-6. Specific gravity (SG) as assigned to each of the rock types and the mineralized domain.

Rock Type	Value	Method
Felsic Intrusion	2.69	Assigned
Int. Volcanics	2.74	Assigned
Mafic Volcs	2.88	Assigned
Mineralised Domain	2.82	Assigned
Sediments	2.75	Assigned
Ultramafic	2.89	Assigned

Outside of the "Mineralised Domain" in Table 14-6, the density values assigned to the other rocks are based on referential library densities for these specific rock types.

14.7 Block Modelling

To attain a model most representative of the geology and then to apply economic factors to the model, a block model was created; being a sub-blocked model optimized for the geometry of the domains and considering the size of the deposit and extraction of material in pit and underground.

The block model was built in Micromine software, the dimensions of the parent block model are 3 m x 3 m x 3 m with a sub-blocking ratio of 3, 3 and 3, respectively, generating minimum sub- blocks dimensions of 1 m x 1 m x 1 metre. The block model has been oriented to align with the geological strike of the deposit and is restricted to mineralized domains. Details of the block model definitions are provided in Table 14-7.

Table 14-7. Parameters of the definition of the block models.

	Block Model - Azimuth (Z) = 95°			
	Origin Min Centre	**Block Size**	**Factor Sub-Block**	**Min Block Size**
X Coordinate	497272	3m	3	1m
Y Coordinate	5349311	3m	3	1m
Z Coordinate	-210	3m	3	1m

14.8 Variography

The geological modelling identified a series of faults which have offset the lithology and mineralization. As the variography involves the spatial location of sample pairs, the variograms would only consider the samples points within each individual fault block, and it was found that there are too few data points within each fault block to model the variography.

Upon closer review of the geological model and accepting that the spatial location of the downhole drill data is accurate, there is enough geological data on either side of the faults to determine the relative movement between each fault block. Each block could then be "un-faulted", returning each sample point to its original position, prior to completing the variogram analysis and subsequent estimation. Once the blocks were estimated they were returned to their actual position using the observed measured displacement.

The experimental variograms for nickel within the high-grade domain fitted the theoretic model and returned a reasonable evaluation on the distribution; however, in the low-grade domain there were much fewer data points and the variography inconclusive, so the data points for the low-grade were added to the high-grade and the variogram model parameters were applied to estimation of both the domains. The variogram models for copper and cobalt were almost identical, within an acceptable margin of error, to that of the nickel, which is to be expected as the mineralization of these two elements are part of the same event, following the same orientations and with a very similar distribution. The same variogram parameters were applied in the estimation of copper and cobalt as for nickel. Experimental variogram for the platinum and palladium did not produce good models. Table 14-8 provides the experimental variogram parameters for nickel, which are also the same for copper and cobalt.

Table 14-8. Variogram parameters for nickel, copper, and cobalt.

		Structure					
	Nugget	Major	Semi Major	Minor	Strike	Plunge	Dip
Ni ppm	0.16	70.37	43.1	8.27	93.62	0.34	-71.56

The definition of the axes was given by the orientations of the mineralization trend as depicted in the geological modelling. All variograms were modelled following these principal orientations, defining the ranges in the major, semi-major and minor axes.

14.9 Estimation Strategy

14.9.1 Estimation Methodology

The estimation of all the economic elements, nickel, copper, cobalt, platinum, and palladium were carried out using Ordinary Kriging (OK), with the estimation being completed over four passes. The first estimation was set at 70% of the search ellipse ranges, the second set at 100%, the third at 200%, and the fourth an extensive distance to estimate all the remaining blocks. This sequence enabled the estimation of all the blocks with the estimation domains and assisted in the definition of the resource categories. Most of the blocks within each domain were estimated within the first two passes, the third pass was used to estimate blocks along the peripheries, and then the fourth pass was to estimate the blocks in the deepest fault block distal to the last drill hole.

14.9.2 Estimation Parameters

The search ellipsoids and estimation parameters are summarized in Table 14-9.

Table 14-9. Ordinary kriging estimation parameters applied to the estimation of Ni, Co, Cu, Pt and Pd.

	Estimation Pass	Domain	Min # of Composites	Max # of Composites	Range			Estimation Technique
					Major	intermediate	Minor	
Ni ppm	Pass1	HG	3	32	49	28	3.5	OK
	Pass2	HG	3	32	70	40	5	OK
	Pass3	HG	3	32	140	80	10	OK
	Pass4	HG	2	32	350	200	25	OK
	Pass1	LG	3	32	49	28	3.5	OK
	Pass2	LG	3	32	70	40	5	OK
	Pass3	LG	3	32	140	80	10	OK
	Pass4	LG	2	32	350	200	25	OK

14.10 Block Model Validation

The block model estimation has been validated using the following techniques:

1. Visual inspection of the estimated block grades relative to the assay composites.
2. A comparison of the sample composite means against the estimated means from each of the block model domains.
3. A swath plot evaluation of the block model grade profiles in an east-west axis against a nearest neighbour estimation and the assay composites.

14.10.1 Visual Validation

The visual validation of the estimated blocks for nickel, copper, cobalt, all show a good correlation between the estimated values and the input composited assay data, respecting the domain boundaries and the geological trends seen within the model (Figure 14-9). A visual validation of the estimated block for platinum and palladium also shows a good correlation between the estimated values and the input composited assay data, however further away from the drill data the estimated values, exhibit a higher level of smoothing.

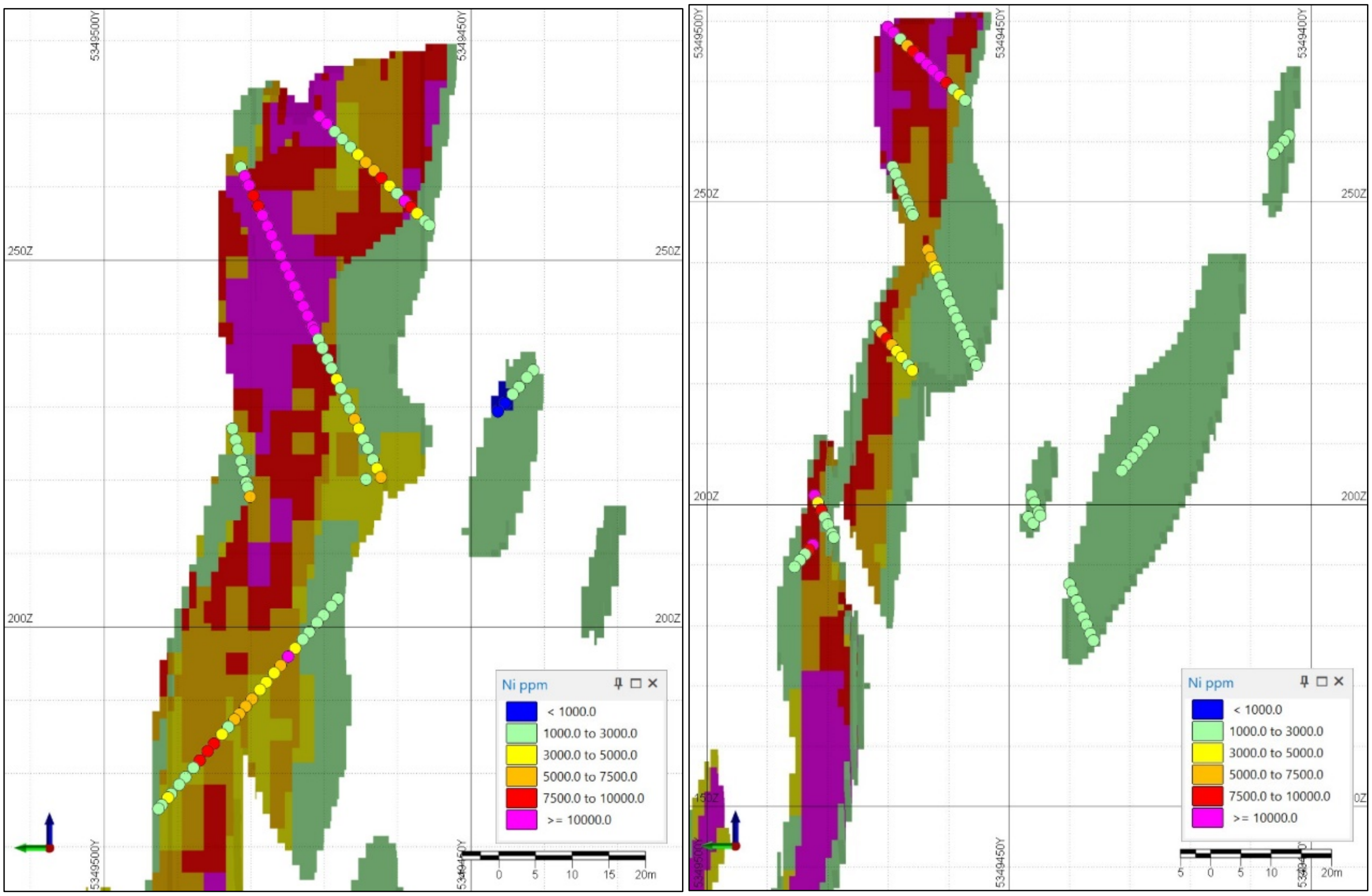


Figure 14-9. Cross-section visual validation of blocks against input composite, in the low-grade and high-grade nickel domains.

14.10.2 Comparison of Means

A comparison of the means and basic statistics for the nickel, copper, and cobalt input data against the estimated data shows that there is no bias in the estimation and that the resultant values all fall within the predicted range.

Table 14-10. Comparison of the statistics between the estimated results and input data.

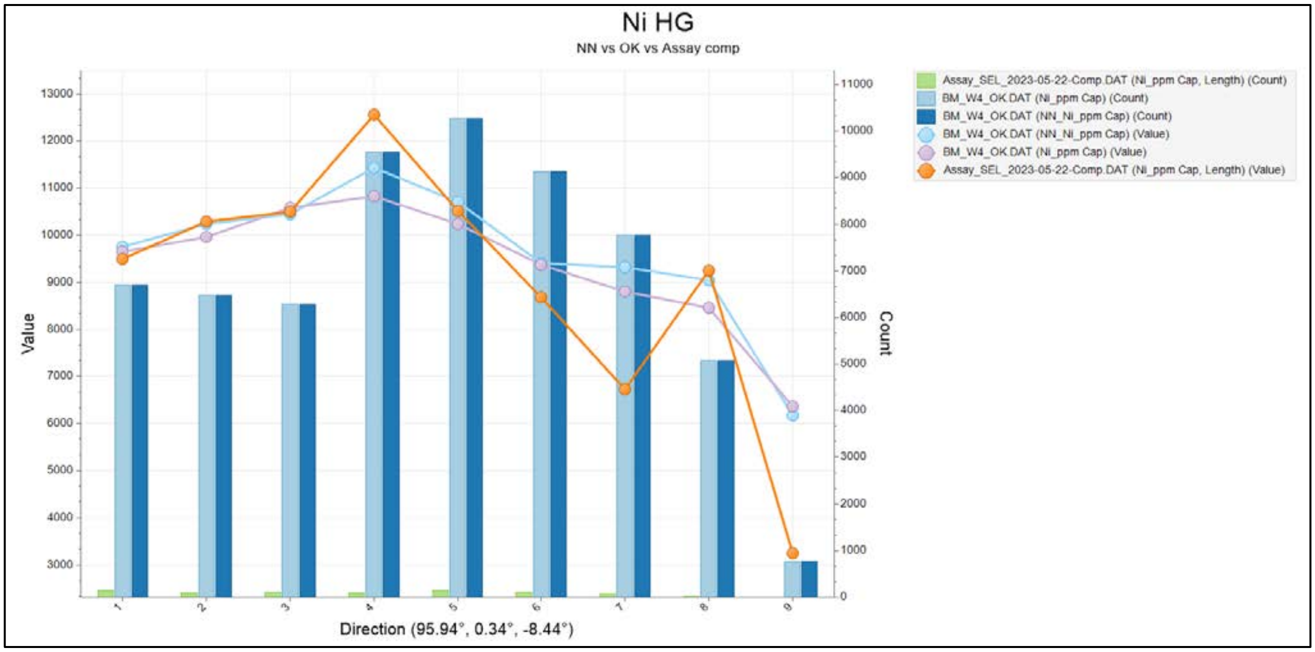
Metadata Val	Field Name	Minimum	Maximum	No of Points	Mean	Variance	Std Dev	Coeff. of Variation
Composites	Ni_ppm	317.20	67500.00	745	10468.60	84097626	9170	0.88
	Cu_ppm	0.02	7740.00	745	764.0600	869682	933	1.22
	Co_ppm	20.73	982.33	745	171.02	12585	112	0.66
	Pt_ppb	3.00	5242.67	709	327.73	361945	602	1.84
	Pd_ppb	3.00	11493.33	709	754.84	1973421	1405	1.86
BlockModel	Ni_ppm	1713.63	36648.33	66026	9781.06	14916774	3862	0.40
	Cu_ppm	34.45	5940.11	66026	742.3710	179182	423	0.57
	Co_ppm	46.48	587.03	66026	166.20	2052	45	0.27
	Pt_ppb	3.78	2481.07	66026	442.97	160499	401	0.90
	Pd_ppb	5.32	5418.82	66026	1033.57	940631	970	0.94

14.10.3 Statistical Validation of Ordinary Kriging Estimation Compared to Nearest Neighbour

The block model was populated with a simple Nearest Neighbour (NN) estimation and a set of swath plots generated to show how the OK estimation varies with respect to the NN and the input assay composite values.

The swath plots show graphically how the grade distribution varies along strike of the deposit, plotting the OK estimated values against the NN estimated values, and the input assay composite values. In general, there is a good correlation between the drillhole assay data, the nearest neighbor model, and the estimated block grades in Ni.

Figure 14-10 and Figure 14-11 show the swath plots for nickel in the high-grade domain, reviewing the difference down dip and along strike, respectively. Both graphs demonstrate a good correlation between the OK and NN estimates, and a good representation of the input data, showing no bias and maintaining a local average.



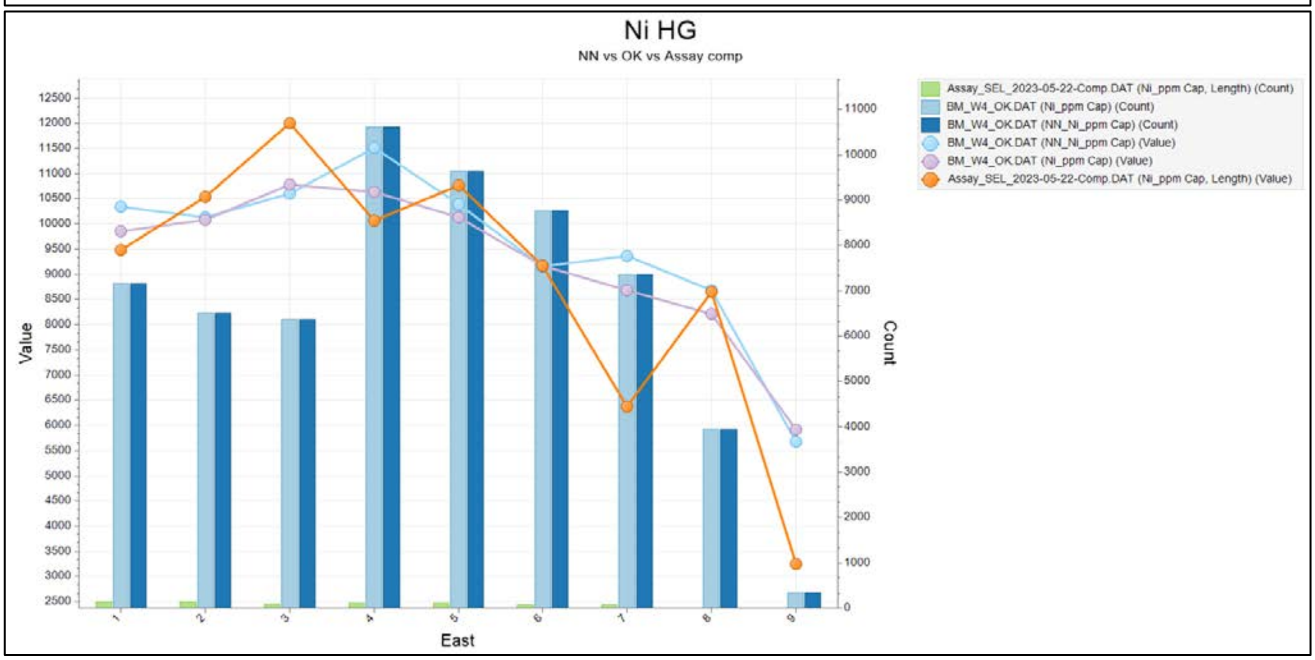


Figure 14-10. Swath Plot Validations for the Ni ppm grade estimation within the high-grade nickel domain.

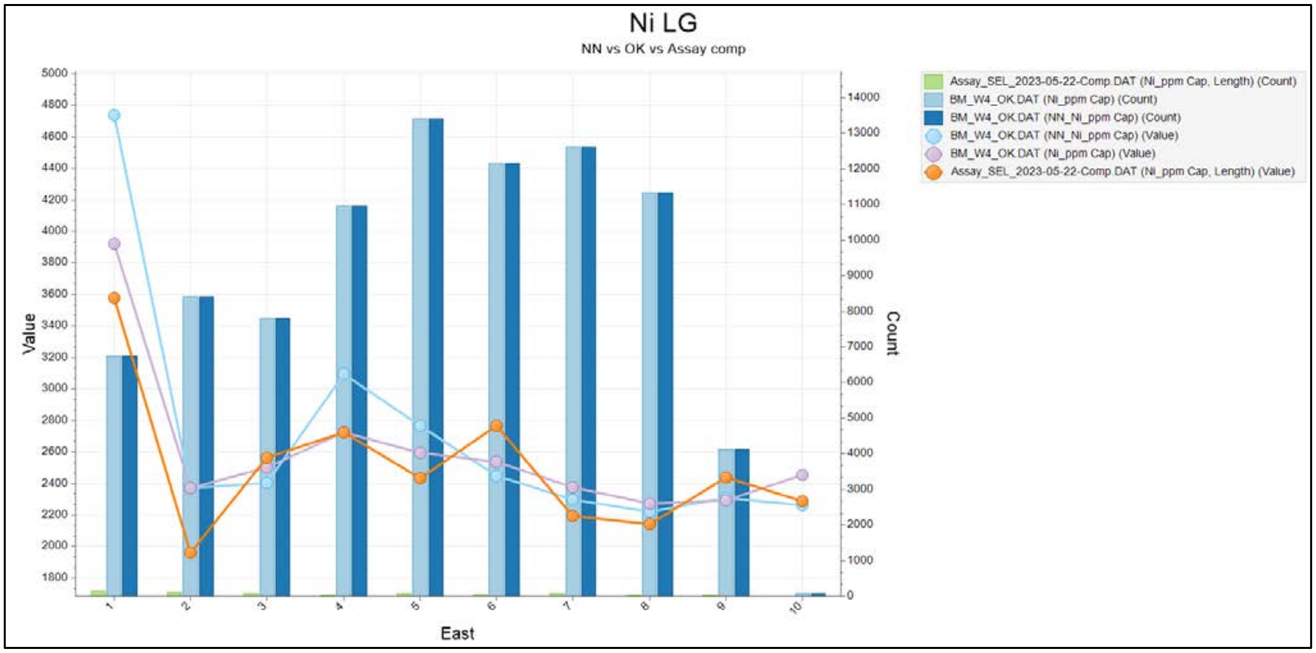


Figure 14-11. Swath Plot Validations for the Ni ppm grade estimation within the low-grade nickel domain.

The swath plots for the Ni in Low-grade domain maintain a good correlation with the NN estimation across the entire deposit.

Overall, the validation results indicate that the ordinary kriging model for the estimation of nickel is a reasonable reflection of the input data.

14.11 Mineral Resource Classification

The classification of the resource is based upon the ranges observed in the variogram models and the number of the drill hole composites that went into estimating the blocks. Table 14-11 shows the parameters used to define the different mineral resource classifications. After the blocks were assigned their classification based on the parameters outlined in Table 14-11, they were reviewed and the edges of the classification boundaries were smoothed to produce the final classification model (Figure 14-12).

Table 14-11. Mineral resource classification parameters applied to the estimation.

	Distance			
	X (along structure)	Z (down dip)	Min N° Drillholes	Min N° Samples
Measured	20	20	3	3
Indicated	25	25	3	3
Inferred	50	50	2	3

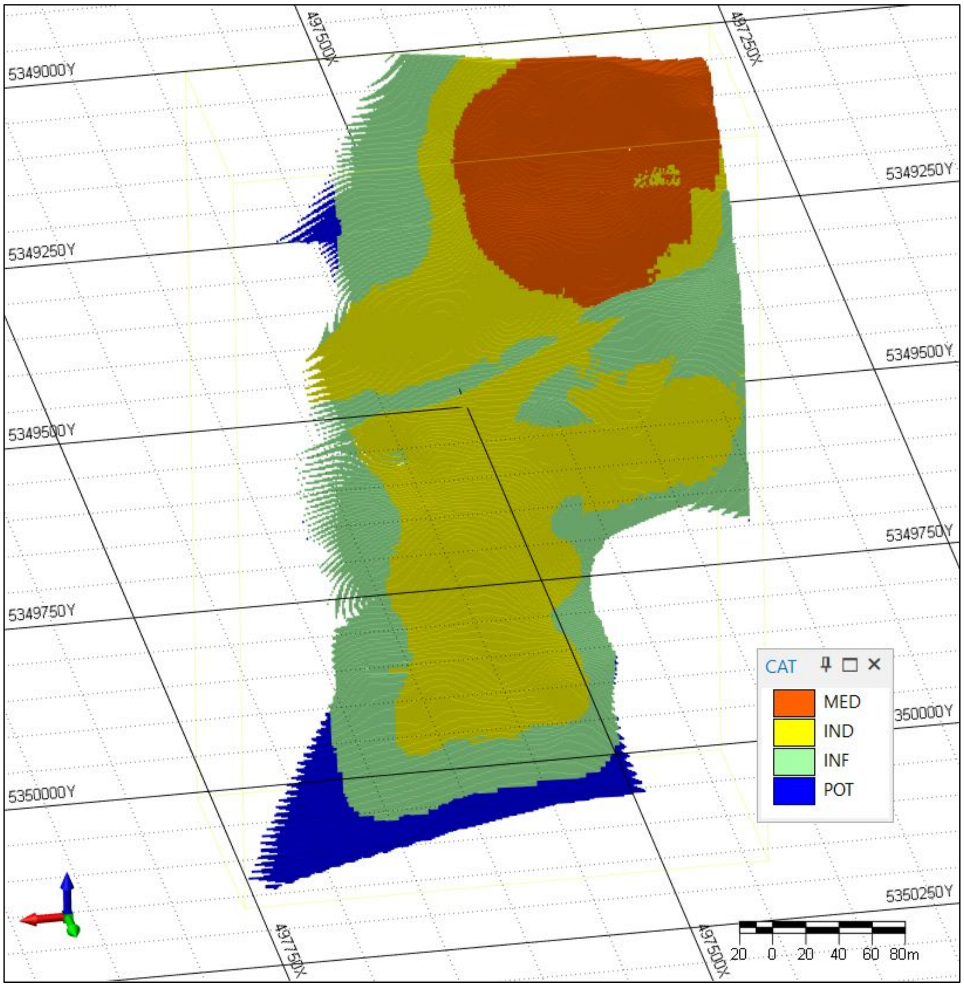


Figure 14-12. Oblique long-section of the W4 Nickel Deposit looking south-southwest with the classification of the mineral resources.

14.12 Reasonable Prospects for Eventual Economic Extraction and Cut-off Grade

For a mineral deposit to be considered a mineral resource, it must show that there are “reasonable prospects for eventual economic extraction” (“RPEEE”). This implies that mineral resources are reported at an appropriate cut-off grade that takes into account the costs of extraction scenarios and processing recoveries. Open pit mining methods were used to determine the amount of mineral resource that shows a RPEEE, an open pit optimization was performed using Datamine NPVS, which uses the Lerchs-Grossman algorithm. This algorithm uses the final net value of each block to determine the final extent of an open pit, which maximizes the overall value of the project. In addition, an underground scenario was considered, in which all mineral resources below the open pit and above an underground cut-off grade, were considered as mineral resources that have RPEEE from underground.

14.12.1 Economic Cut-off Grade

Based on economic, metallurgical and cost parameters, an economic cut-off grade for potential open pit and underground mining scenarios was determined. These parameters were obtained by benchmarking other projects with similar characteristics to this deposit type. The parameters used for the calculation are provided in Table 14-12.

Table 14-12. Parameters used in the calculation of an economic cut-off grade.

Parameters (Open Pit)		
Price Ni	$8.00	US$/lb
Recovery Ni	85	%
Mining Cost Open Pit	$3.80	$C/t
Process Cost	$45.00	$C/t
G&A	$5.00	$C/t
Selling Cost	$0.75	US$/lb
Exchange Rate	1.3	$C/$US

Based on these parameters, the value of the economic cut-off grade for a possible open pit extraction scenario was calculated with the following formula:

$$Cut - Off\ Open\ Pit_{(Economic)} = \frac{Mining\ Cost + Processing\ Cost + G\&A}{(Recovery * \ (Price - Selling\ Cost) * 2204.62)}$$

$$Cut - Off\ Open\ Pit_{(Economic)} = \ 0.3\%\ Ni$$

For a possible underground economic mining scenario, the economic, metallurgical and cost parameters used are provided in Table 14-13:

Table 14-13. Economic parameters used to calculate an economic cut-off for an underground mining scenario.

Parameters (Underground)		
Price Ni	$8.00	US$/lb
Recovery Ni	85	%
lining Cost Underground	$46.00	$C/t
Process Cost	$45.00	$C/t
G&A	$5.00	$C/t
Selling Cost	$0.75	US$/lb
Exchange Rate	1.3	$C/$US

Based on these parameters, the value of the economic cut-off grade for a possible underground extraction scenario was calculated with the following formula:

$$Cut - Off\ Underground_{(Economic)} = \frac{Mining\ Cost + Processing\ Cost + G\&A}{(Recovery * \ (Price - Selling\ Cost) * 2204.62)}$$

$$Cut - Off\ Underground_{(Economic)} = \ 0.5\%\ Ni$$

These economic cut-off grades, 0.3% Ni for open pit and 0.5% Ni for underground, were used to report the mineral resources in the current MRE.

14.12.2 Metal Equivalency Grades

As it is a polymetallic deposit, since it has more than one metal of value, an equivalence of grades was carried out to be able to report mineral resources based on the main metal, nickel. For the calculation of nickel equivalent (NiEq), the following metals were considered: nickel, cobalt, copper, palladium, and platinum.

The metallurgical prices and recoveries of the five (5) metals are the same as those used in the optimization parameter table (Table 14-14). The NiEq (%) formula is as follows:

$$NiEq\ (\%) = Ni\ (\%) + Co\ (\%) * 0.02 + Cu\ (\%) * 0.03 + Pd\ (g/t) * 0.05 + Pt\ (g/t) * 0.01$$

14.12.3 Open Pit Optimization

An open pit optimization was performed in Datamine NPVS™ to determine the final extent of a hypothetical open pit. The economic and technical parameters assumed are provided in Table 14-14 and Figure 14-13 is an isometric 3D-view of the block model classification within the optimized pit shell.

Table 14-14. Economic parameters used in the optimization of the pit shell.

Metal Prices		
Nickel	US$/lb	$8.00
Cobalt	US$/lb	$13.00
Copper	US$/lb	$3.25
Platinum	US$/oz	$900.00
Palladium	US$/oz	$1,200.00
Metal Recoveries		
Nickel	%	85.0
Cobalt	%	80.0
Copper	%	70.0
Platinum	%	50.0
Palladium	%	50.0
Mining Cost	$C/t	$3.8
Processing Cost	$C/t	$45.0
G&A	$C/t	$5.0
Overall Pit Slope	degrees	50.0
Dilution	%	5.0
Mining Recovery	%	95.0
Mill throughput	tonne/day	1,500
Discount Rate	%	10
Exchange Rate	$C/$US	1.30

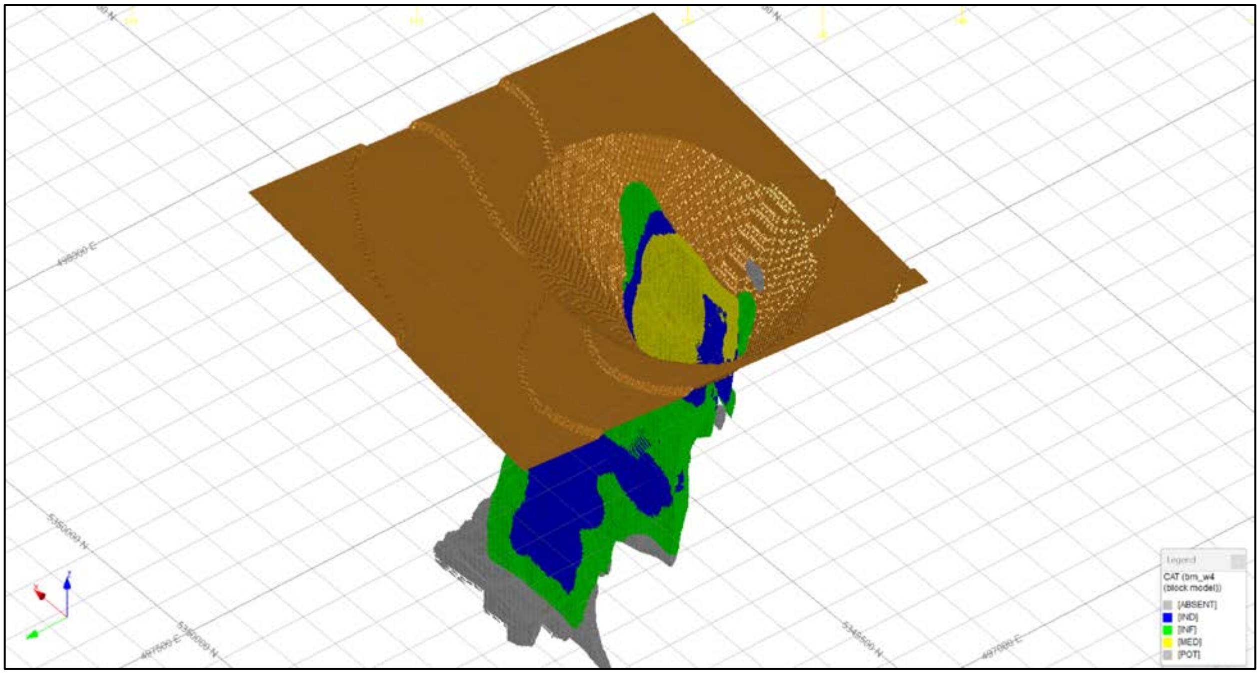


Figure 14-13. Isometric 3D-view of the classification of the block model classification within the optimized pit shell.

Figure 14-14 shows how the mineral resource is sensitive to changes in cut-off for the open pit portion of the deposit; as the cut-off grade (NiEq%) is increased the tonnes of the extractable material decreases, demonstrating a rapid change in contained metal for the lower cut off grades, but at higher cut-off grades there is less variation. The open pit resource is therefore sensitive to changes in variations in cut-off between 0.2% and 0.35% NiEq, which could increase the contained resources if the economic cut-off were to be decreased slightly.

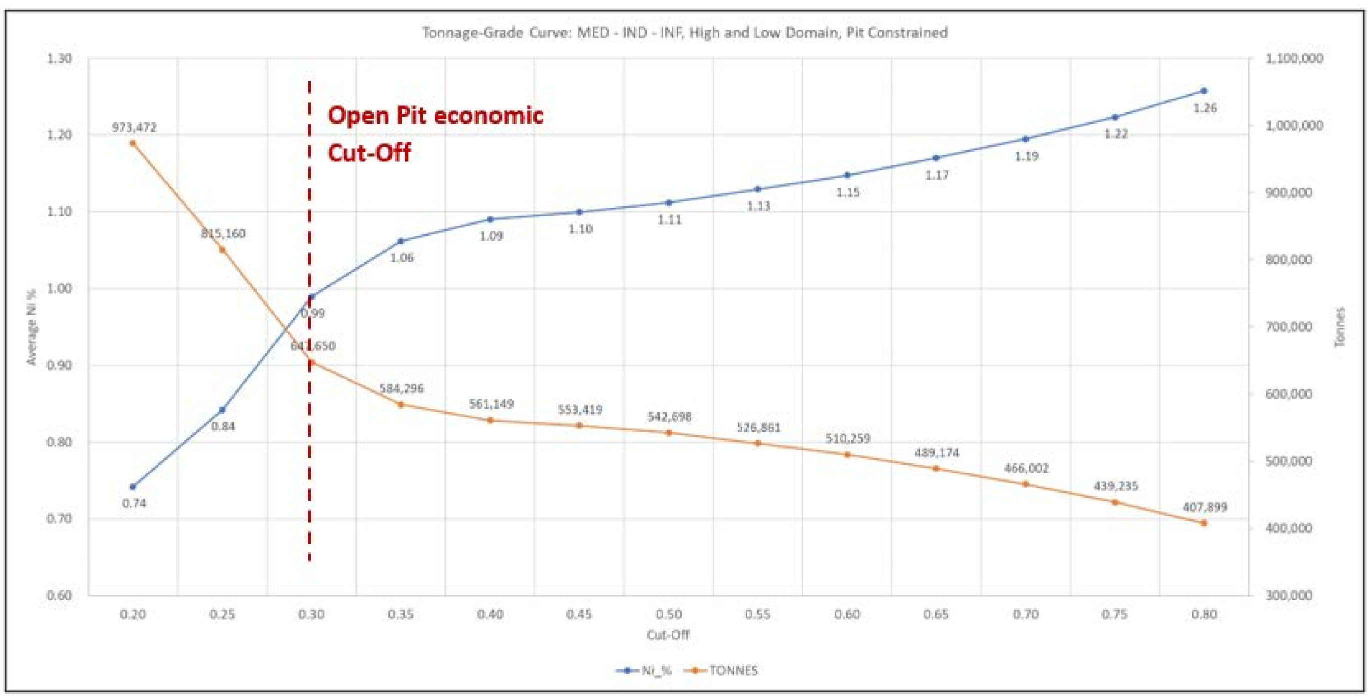


Figure 14-14. Grade-tonnage curve showing the deposit’s sensitivity to variations in cut-off grade (X-axis), using average Ni% and filtered for the blocks in the optimized pit.

Figure 14-15 shows how the resource is sensitive to changes in cut-off for the underground portion of the deposit; as the cut-off grade is increased the tons of the extractable material decreases, demonstrating minimal variations in contained metal with changes in cut-off above 0.35% NiEq. The underground resource is therefore not sensitive to variations in the cut-off.

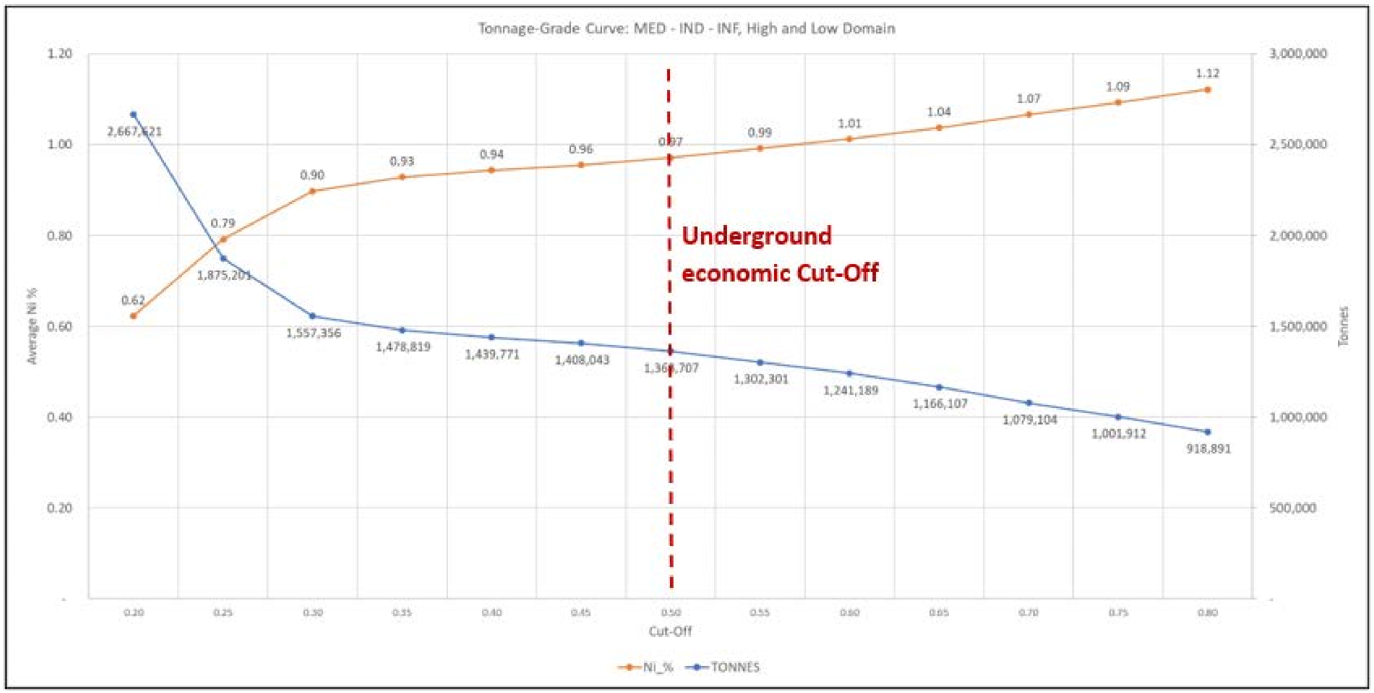


Figure 14- 15. Grade-tonnage curve showing the deposit's sensitivity to variations in cut-off grade (X-axis), using average Ni% and filtered for the blocks in the underground.

Figure 14-16 shows how the relative metal component values of the resource vary with the change in cut-off grade. The principal component, nickel, makes up over 95% of the value of the total mineral resource.

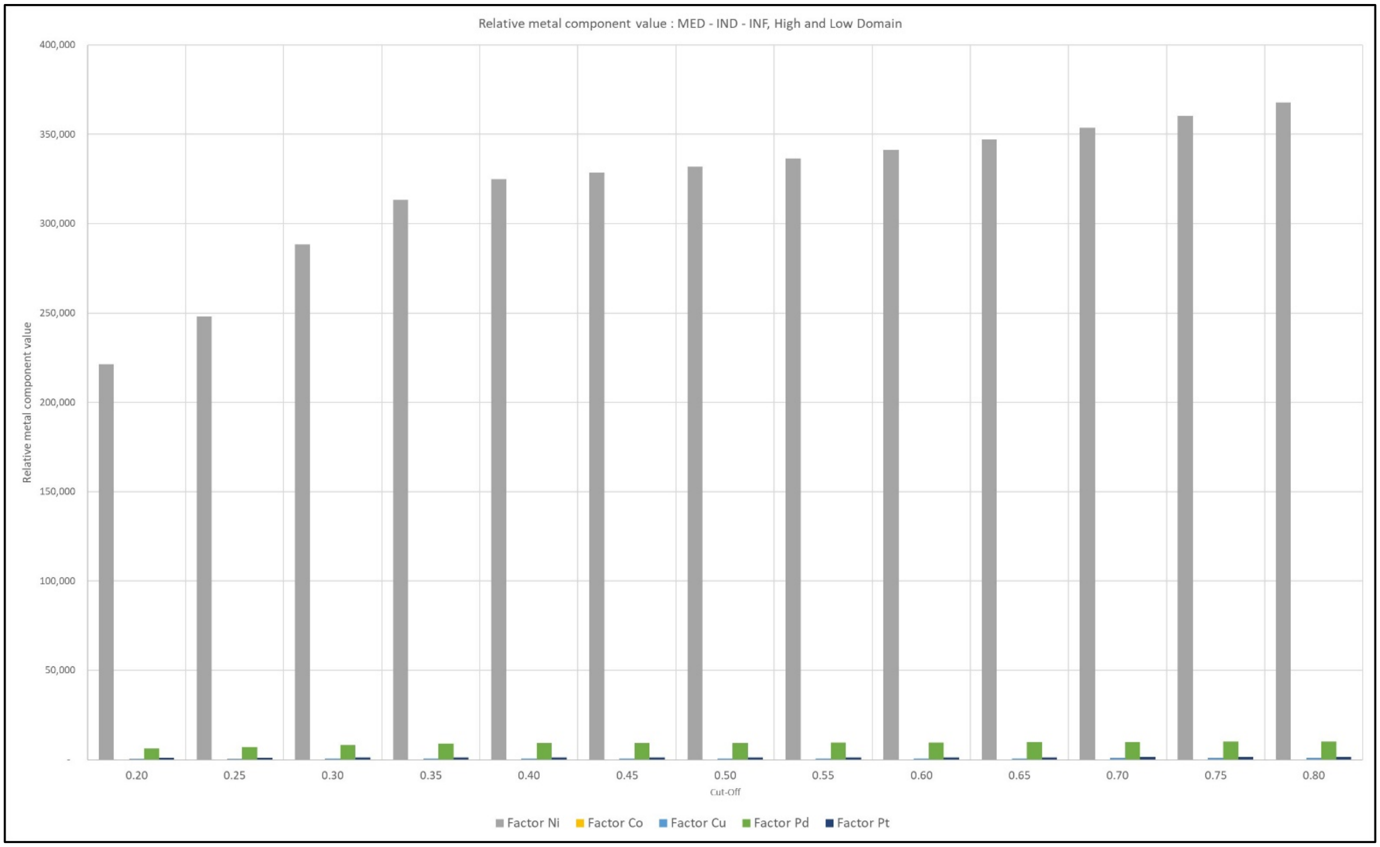


Figure 14- 16. Variation in relative metal component value (Y-axis) for nickel, copper, cobalt, platinum, and palladium against cut-off grades (X-axis).

14.13 Mineral Resource Statement

The Mineral Resource Statement of the MRE, using a cut-off of 0.30% Ni for open pit resources and 0.50% Ni underground resources, is provided in Table 25-1. NiEq (%) values are also provided in Table 25-1, used in the pit optimization process and calculated using the elements nickel, cobalt, copper, palladium and platinum (*see* Section 14.12.3).

Table 14-15. Mineral Resource Statement for the W4 Nickel Deposit, Langmuir Nickel Property.

Resource Category	Tonnage	Grade						Contained Metals				
		Ni (%)	Cu (%)	Co (%)	Pt (g/t)	Pd (g/t)	NiEq (%)	Ni (Klbs)	Cu (Klbs)	Co (Mlbs)	Pt (Koz)	Pd (Koz)
Open Pit (0.3% Ni COG)												
Measured	479,487	1.06	0.07	0.02	0.26	0.59	1.10	11,249	778	175	3.98	9.10
Indicated	115,733	0.88	0.06	0.02	0.33	0.75	0.93	2,251	158	43	1.21	2.79
Measured + Indicated	595,220	1.03	0.07	0.02	0.27	0.62	1.07	13,500	937	218	5.20	11.89
Inferred	52,429	0.54	0.03	0.01	0.30	0.60	0.58	626	38	15	0.51	1.02
Under Ground (0.5% Ni COG)												
Measured	7,831	1.58	0.09	0.02	0.16	0.32	1.60	272	15	3	0.04	0.08
Indicated	849,091	0.93	0.07	0.02	0.57	1.37	1.01	17,487	1,347	317	15.68	37.37
Measured + Indicated	856,922	0.94	0.07	0.02	0.57	1.36	1.02	17,759	1,362	320	15.72	37.45
Inferred	506,785	1.02	0.08	0.02	0.53	1.26	1.09	11,438	894	187	8.67	20.52
Total Open Pit and Under Ground												
Measured	487,319	1.07	0.07	0.02	0.26	0.59	1.11	11,521	793	178	4.02	9.18
Indicated	964,824	0.93	0.07	0.02	0.54	1.29	1.00	19,738	1,505	361	16.89	40.15
Measured + Indicated	1,452,142	0.98	0.07	0.02	0.45	1.06	1.04	31,260	2,298	538	20.92	49.33
Inferred	559,214	0.98	0.08	0.02	0.51	1.20	1.05	12,064	932	202	9.18	21.53

Highlights of the current Mineral Resource Estimate (MRE) on the W4 Nickel Deposit include (*see* also Company news release dated 9 June 2023):

- Measured Resources of 487,319 tonnes at an average grade of 1.07% Ni, containing 11,521 K lbs of nickel.
- Indicated Resources of 964,824 tonnes at an average grade of 0.93% Ni, containing 19,738 K lbs of nickel.
- Inferred Resources of 559,214 tonnes at an average grade of 0.98% Ni, containing 12,064 K lbs of nickel.

Nickel equivalent (NiEq%) used to determine economic cut-off values for open pit optimization, is calculated using metal values for nickel, cobalt, copper, platinum and palladium, and applying recovery factors and prices (*see* Section 14.12.3), and using the following formula:

$$NiEq\ (\%) = Ni\ (\%) + Co\ (\%) * 0.02 + Cu\ (\%) * 0.03 + Pd\ (g/t) * 0.05 + Pt\ (g/t) * 0.01$$

15.0 MINERAL RESERVES

This section is not applicable to the Property at its current stage.

16.0 MINING METHODS

This section is not applicable to the Property at its current stage.

17.0 RECOVERY METHODS

This section is not applicable to the Property at its current stage.

18.0 PROJECT INFRASTRUCTURE

This section is not applicable to the Property at its current stage.

19.0 MARKET STUDIES AND CONTRACTS

This section is not applicable to the Property at its current stage.

20.0 ENVIRONMENTAL STUDIES, PERMITTING AND SOCIAL OR COMMUNITY IMPACT

This section is not applicable to the Property at its current stage.

21.0 CAPITAL AND OPERATING COSTS

This section is not applicable to the Property at its current stage.

22.0 ECONOMIC ANALYSIS

This section is not applicable to the Property at its current stage.

23.0 ADJACENT PROPERTIES

The W4 Nickel Deposit, located within the EVNi Property claims, bears similarities to various past production and current production deposits within the Shaw Dome (*see* Figure 7-4). Most of the Shaw Dome nickel deposits are hosted by ultramafic rocks, which have generally been interpreted as extrusive komatiitic flows (*e.g.*, Sproule *et al.*, 2005; Houlé and Guilmette, 2005).

The W4 Nickel Deposit is located just south of five known deposits in the Shaw Dome. Three of these deposits, McWatters, Redstone and Hart, were owned by Liberty Mines Inc. (now Northern Sun Mining Corp.). Ownership of Langmuir No. 2 nickel zones is divided between Northern Sun Mining Corp. and Silk Energy Limited (previously Inspiration Mining Corp.), with Langmuir No. 1 solely belonging to Silk Energy Limited. A summary of the past producing nickel mines adjacent to the Property is provided in Table 23-1.

In 2010, the Redstone deposit contained reported Measured and Indicated mineral resources of 599,000 tonnes at an average grade of 1.47% Ni and Inferred Mineral Resources of 737,000 tonnes at 1.57% Ni (SRK, 2010a).

The McWatters deposit is hosted by steeply dipping serpentinite. The sulphide mineralization is divided into an upper irregular disseminated zone and a lower massive sulphide zone. In 2010, the McWatters mineral resources were estimated at 792,500 tonnes grading an average of 0.81% Ni in the Indicated category (SRK, 2009). As of 2010, the Hart nickel deposit had reported Indicated resources of 1,546,000 tonnes at 1.40% Ni and Inferred resources of 322,000 tonnes at 1.27% Ni (SRK, 2010b).

Both Langmuir No. 1 and Langmuir No. 2 are past producing mines with total reported production of 111,502 tonnes at an average grade of 1.74% Ni, and 1,133,750 tonnes at an average grade of 1.50% Ni, respectively (*e.g.*, Atkinson *et al.*, 2010). The Langmuir No. 1 deposit is estimated to contain an Indicated Mineral Resource of 1,733,000 tonnes grading 0.51% Ni (Pressacco *et al.*, 2010). The Indicated Mineral Resources for the Langmuir North deposit (Langmuir No. 2 North zone) are estimated at 8,324,000 tonnes grading 0.40% Ni (Pressacco *et al.*, 2010).

Table 23-1. Reported nickel production from mines adjacent to the Property, to 2010 (after Atkinson *et al.*, 2010).

Mine	Years of Production	Ore milled	% Ni
Langmuir No. 1	1990-1991	111,502 tons	1.74
Langmuir No. 2	1972-1978	1.1 M tons	1.47
McWatters	2008	15 361 tonnes	0.55
	2009	7 664 tonnes	0.41
Redstone	1989-1992	294,895 tons	2.4
	1995-1996	10,228 tons	1.7
	2006-2008	133 295 tonnes	1.92
	2009	36 668 tonnes	1.16

The Principal Author (Qualified Person) has been unable to verify the information presented above and this information is not necessarily indicative of the mineralization on the Property that is the subject of the Report.

24.0 OTHER RELEVANT DATA AND INFORMATION

The Principal Author is not aware of any additional information or explanations necessary to make the Report understandable and not misleading.

25.0 INTERPRETATION AND CONCLUSIONS

The objective of the Report was to prepare an independent NI 43-101 Technical Report, inclusive of a current Mineral Resource Estimate on the W4 Nickel Deposit, capturing historical information and data available about the current Property that comprises the Langmuir Nickel Property, and making recommendations for future work.

25.1 Property and Target Deposit Type

The centre of the Langmuir Nickel Property is approximately 30 km southeast of the City of Timmins and comprises approximately 10,496 hectares of unpatented mining claims. The Property contains komatiite-hosted nickel-copper-platinum group metals sulphide mineralization, similar to other mined nickel deposits within the Shaw Dome region. In particular, the W4 Nickel Deposit, in the south-central region of the Langmuir Nickel Property, is the current focus of exploration work and drilling by the Company and the subject of the current Mineral Resource Estimate and the Report.

25.2 Geology and Mineralization

The Langmuir Nickel Property lies within the southwestern part of the Abitibi Subprovince of the Archean Superior Province, proximal to the Shaw Dome. The Shaw Dome is a major northwest trending anticline centred approximately 20 km southeast of Timmins. The anticlinal structure may be a result of regional folding that affected rocks north of the Shaw Dome or, more probably, due to the diapiric action of a large granitic body which partially outcrops in the central south-east portion of the dome (Muir, 1979; Green and Naldrett, 1981).

Six Ni-Cu-(PGE) deposits have been documented in the Shaw Dome, including the W4 Nickel Deposit (Langmuir W4 Zone), and numerous showings have been identified. These nickel deposits occur in komatiitic rocks at or near the base of the Tisdale Assemblage.

Historical work completed on the Property between 2005 and 2014 generated a comprehensive body of exploration data and information from which EVNi will be able to move their Property forward. The historical search for Kambalda-style nickel sulphide mineralization resulted in the discovery of the W4 Nickel Deposit in May 2007 (drill hole CGL07-06).

25.2.1 W4 Deposit Sulphide Mineralization

The W4 Nickel Deposit (Langmuir W4 Zone) was interpreted to consist of three sub-parallel nickel zones hosted by komatiitic peridotite flows (Cole *et al.*, 2010). This initial interpretation of three separate sub parallel nickel zones at the base of individual peridotite flows was based on the drill data from the Golden Chalice drilling campaigns, which included holes that were drilled obliquely to the dip and strike of the sulphide mineralization.

EV Nickel, in their 2021, 2022 and 2023 drilling campaigns were able to drill holes that were oriented more perpendicular to the mineralization and these holes helped to better define the geometry of mineralization. The drilling from EV Nickel holes did not intercept three separate sub-parallel nickel zones but rather, defined a continuous but faulted unit. Detailed revision of the downhole locations of the mineralized contacts, and the lithological contacts within the volcanic flows indicated that the previous concept of three flows, could actually be one unit that has been faulted with repeated throws. The mineralized flow is now interpreted to be split by five faults, creating six blocks with a measurable strike-slip displacement.

Immediately south of the peridotite flows in the Langmuir W4 Zone, a pink medium-grained hornblende-rich (5-10%) granodiorite intrusive is present. It is thought that this intrusive may represent an east-west dike. The peridotite flows in the vicinity of this granodiorite are strongly brecciated and often contain graphite. Smaller felsic to intermediate, feldspar porphyry, mafic, and gabbro dikes or sills intrude the peridotite flows locally (Cole et al., 2010).

Mineralization is now interpreted to be one volcanic flow dipping at 70-75 degrees to the north, split by five (5) faults and limited at the eastern end by another north-south oriented subvertical fault. The east-west strike extent of the zones has been defined for at least 200 metres. The zones may be open below the granodiorite dike and/or at a vertical depth of 400 metres. The nickel zones have an average true thickness of 8 to 19 metres.

The sulphide assemblage in the W4 Nickel Deposit consist primarily of pentlandite, millerite, pyrrhotite, and minor pyrite and chalcopyrite within the nickel zones. The pentlandite occurs intergrown with pyrrhotite as irregular grains that are generally relatively coarse-grained.

Sulphide-bearing komatiitic flows that host the W4 Nickel Deposit have been shown to continue at depth, below 450 metres vertical. Future exploration in the immediate area of the W4 Nickel Deposit should focus on drill testing the depth and eastern extension of the deposit.

25.3 Mineral Resource Estimates

EV Nickel Inc. engaged Caracle Creek International Consulting Inc. to prepare a Mineral Resource Estimate for the W4 Nickel Deposit (MRE) which was publicly announced on 12 June 2023. The Effective Date of the MRE is 12 June 2023.

The MRE was prepared under the direction of Simon Mortimer (Co-Author and QP) with assistance from Luis Huapaya (geologist). The Co-Author developed the geological interpretation and the construction of the lithology model and the mineralized domain models, Mr. Huapaya completed the work on the statistics, geo-statistics and the grade interpolation.

The MRE that is contained in the Report was completed in accordance with NI 43-101 and following the CIM Definition Standards for Mineral resources & Mineral Reserves (CIM, 2018) and CIM Estimation of Mineral Resources & Mineral Reserves Best Practice Guidelines (CIM, 2019).

25.3.1 Resource Database

Information used for the MRE is derived from the historical Golden Chalice drilling campaigns of 2007 to 2010 and the current EV Nickel drilling campaigns of 2021 to 2023.

Golden Chalice carried out drilling campaigns from 2007 to 2010, completing 126 diamond drill holes within the resource boundary, drilling a total of 42,482.40 m and taking 9,062 core samples. EV Nickel completed drilling campaigns from 2021 to 2023, drilling 32 diamond holes within the resource boundary, a total of 9,168.00 metres and taking 1,023 core samples.

All drilling and sampling data has been verified, validated and imported into a SQL Server cloud-based data management system, including data and meta-data on the collar, survey and the lithology and assay samples. Lithology information from all the 158 drill holes were used in the resource, including a total of 10,085 samples, using analyses of nickel, cobalt, copper, platinum and palladium in the resource calculation. The drill database also contains a data table of the 318 density measurements, 90 taken by the Golden Chalice and 228 taken by the EV Nickel geology team.

25.3.2 Estimation Methodology

The estimation of the MRE can be broken down into the following stages:

- Validation of the information utilized in the resource and database compilation.
- Interpretation and 3D modeling of the lithology, structure, mineralization, and grade.
- Development of the estimation domains.
- Compositing of grade within the domains.
- Exploratory data analysis.
- Block model definition.
- Interpolation of grade within the defined domains.
- Review and model the variability in the rock density.
- Evaluation of confidence in the estimation.
- Model validation.
- Definition of reasonable economic extraction.

Validation of the data and database compilation was completed using the Geobank™ data management software. The interpretation and 3D geological modeling was completed using the Leapfrog Geo™ software, statistical studies were performed using Micromine™ tools, the block model, subsequent estimation and validation was carried out using the Micromine™ 2020 software, and the definition of reasonable economic extraction utilized the tools within Datamine's NPV Scheduler™.

The estimation of all the economic elements, nickel, copper, cobalt, platinum, and palladium were carried out using Ordinary Kriging (OK), with the estimation being completed over four passes. The first estimation was set at 70% of the search ellipse ranges, the second set at 100%, the third at 200%, and the fourth an extensive distance to estimate all the remaining blocks.

25.3.3 Geological Interpretation and Modelling

The interpretation of the geology utilized information from the assay and lithology data tables from the Golden Chalice drilling campaigns and the EV Nickel drilling campaigns.

The geological modelling was completed using Leapfrog GeoTM software, building integrated models for lithology and mineralization following the event modelling methodology, constructing each surface and subsequent solid in sequence with respect to the genesis and evolution of the mineral deposit. No alteration data was collected in the field; hence no alteration model was completed.

Mineralization in the W4 Nickel Deposit is restricted to sulphide lenses within the ultramafic volcanic flows and the geological modelling has identified an individual mineralized unit that has been split in to five (5) solids through faulting. The mineralized unit exhibits a higher-grade main lens with a narrow lower grade halo, defining a low-grade and a high-grade domain.

The block model was built in Micromine software, the dimensions of the parent block model are 3 m x 3 m x 3 m with a sub-blocking ratio of 3, 3 and 3, respectively, generating minimum sub- blocks dimensions of 1 m x 1 m x 1m. The block model has been oriented to align with the geological strike of the deposit and is restricted to mineralized domains.

25.3.4 Mineral Resource Classification and Cut-Off Grade

The classification of the resource is based upon the ranges observed in the variogram models and the number of the drill hole composites that went into estimating the blocks.

For a mineral deposit to be considered a mineral resource, it must show that there are "reasonable prospects for eventual economic extraction" (RPEEE). This implies that mineral resources are reported at an appropriate cut-off grade that takes into account the costs of extraction scenarios and processing recoveries.

Open pit mining methods were used to determine the amount of mineral resource that shows a RPEEE, an open pit optimization was performed using Datamine NPVS, which uses the Lerchs-Grossman algorithm. This algorithm uses the final net value of each block to determine the final extent of an open pit, which maximizes the overall value of the project.

In addition, an underground scenario was considered, in which all mineral resources below the open pit and above an underground cut-off grade, were considered as mineral resources that have RPEEE from underground.

A cut-off grade of 0.3% Ni was applied for open pit resources and 0.5% Ni for underground resources, occurring below the conceptual open pit.

25.3.5 Mineral Resource Statement

The Mineral Resource Statement of the MRE, using a cut-off of 0.30% Ni for open pit resources and 0.50% Ni underground resources, is provided in Table 25-1. NiEq (%) values are also provided in Table 25-1, used in the pit optimization process and calculated using the elements nickel, cobalt, copper, palladium and platinum (*see* Section 14.12.3).

Table 25-1. Mineral Resource Statement for the W4 Nickel Deposit, Langmuir Nickel Property.

Resource Category	Tonnage	Grade						Contained Metals				
		Ni (%)	Cu (%)	Co (%)	Pt (g/t)	Pd (g/t)	NiEq (%)	Ni (Klbs)	Cu (Klbs)	Co (Mlbs)	Pt (Koz)	Pd (Koz)
Open Pit (0.3% Ni COG)												
Measured	479,487	1.06	0.07	0.02	0.26	0.59	1.10	11,249	778	175	3.98	9.10
Indicated	115,733	0.88	0.06	0.02	0.33	0.75	0.93	2,251	158	43	1.21	2.79
Measured + Indicated	595,220	1.03	0.07	0.02	0.27	0.62	1.07	13,500	937	218	5.20	11.89
Inferred	52,429	0.54	0.03	0.01	0.30	0.60	0.58	626	38	15	0.51	1.02
Under Ground (0.5% Ni COG)												
Measured	7,831	1.58	0.09	0.02	0.16	0.32	1.60	272	15	3	0.04	0.08
Indicated	849,091	0.93	0.07	0.02	0.57	1.37	1.01	17,487	1,347	317	15.68	37.37
Measured + Indicated	856,922	0.94	0.07	0.02	0.57	1.36	1.02	17,759	1,362	320	15.72	37.45
Inferred	506,785	1.02	0.08	0.02	0.53	1.26	1.09	11,438	894	187	8.67	20.52
Total Open Pit and Under Ground												
Measured	487,319	1.07	0.07	0.02	0.26	0.59	1.11	11,521	793	178	4.02	9.18
Indicated	964,824	0.93	0.07	0.02	0.54	1.29	1.00	19,738	1,505	361	16.89	40.15
Measured + Indicated	1,452,142	0.98	0.07	0.02	0.45	1.06	1.04	31,260	2,298	538	20.92	49.33
Inferred	559,214	0.98	0.08	0.02	0.51	1.20	1.05	12,064	932	202	9.18	21.53

Highlights of the current Mineral Resource Estimate on the W4 Nickel Deposit include (*see* also Company news release dated 9 June 2023):

- Measured Resources of 487,319 tonnes at an average grade of 1.11 % Ni, containing 11,521 K lbs of nickel.

- Indicated Resources of 964,824 tonnes at an average grade of 1.00 % Ni, containing 19,738 K lbs of nickel.
- Inferred Resources of 559,214 tonnes at an average grade of 1.05 % Ni, containing 12,064 K lbs of nickel.

Nickel equivalent (NiEq%) used to determine economic cut-off values for open pit optimization, is calculated using metal values for nickel, cobalt, copper, platinum and palladium, and applying recovery factors and prices (*see* Section 14.12.3), and using the following formula:

$$NiEq\ (\%) = Ni\ (\%) + Co\ (\%) * 0.02 + Cu\ (\%) * 0.03 + Pd\ (g/t) * 0.05 + Pt\ (g/t) * 0.01$$

25.4 Risks and Uncertainties

Risks and uncertainties which may reasonably affect reliability or confidence in future work on the Property relate mainly to the reproducibility of exploration results (*i.e.*, exploration risk) in a future production environment. Exploration risk is inherently high when exploring for Kambalda-type nickel sulphide deposits, however these risks are mitigated by applying the latest geophysical techniques to develop high confidence targets for future drilling programs.

The Authors are not aware of any other significant risks or uncertainties that would impact the Issuer's ability to perform the recommended work program (*see* Section 26) and other future exploration and development work programs on the Property.

25.5 Conclusions

Based on the Property's favourable location within a prolific Kambalda-style nickel belt, the high quality historical systematic exploration work completed from 2005 to 2014, the availability of all of this historical data and information and that from public (government) sources, the diamond drilling (2021, 2022, 2023) completed by EV Nickel, and the requirement for dedicated and systematic exploration programs which are required to be successful in making discoveries for this particular deposit type, the Property presents excellent potential for the discovery of additional nickel sulphide deposits, and is worthy of further evaluation.

The characteristics of the W4 Nickel Deposit are of sufficient merit to justify the undertaking of preliminary engineering, environmental, and metallurgical studies aimed at completing the characterization of the nickel sulphide mineralization and offering economic guidelines for future exploration strategies, including a Preliminary Economic Assessment (PEA) level study.

In addition, the close proximity of the W4 Nickel Deposit to the nickel processing facility at Northern Sun Mining's Redstone Mill Facility, located approximately 10 km west-northwest of the W4 Nickel Deposit, could favourably impact future economic studies related to the potential mining of the deposit.

26.0 RECOMMENDATIONS

It is the opinion of the Authors that the geological setting and character of the nickel sulphide mineralization delineated to date within the Langmuir Nickel Property and specifically the W4 Nickel Deposit is of sufficient merit to justify additional exploration and development expenditures. A recommended work program, arising through the preparation of the Report and consultation with the Company, is provided below.

The W4 Nickel Deposit is at a stage of exploration where it should be advanced to a Preliminary Economic Assessment ("PEA") study level. It is expected that this work can be accomplished within a time frame of 18 months from initiation, considering geotechnical diamond drilling, environmental studies, and metallurgy, and taking into account all of the studies to date including the current MRE (Table 26-1). The expected cost of the recommended PEA is estimated at C$1,694,000.

Table 26-1. Budget estimate for recommended Preliminary Economic Assessment level study, W4 Nickel Deposit.

ITEM	DESCRIPTION	AMOUNT (C$)
Metallurgical Test Work	Closed cycle flotation	$60,000
	Mineralogical	$20,000
	Bioleach	$500,000
	Bulk sample diamond drilling (350 m)	$100,000
Geotechnical	Drilling (1,000 m)	$250,000
	Analysis and report	$80,000
Environmental	Ground Water study	$30,000
	Waste rock geochem analysis (ABA and Humidity cell testing); Note: drilling combined with geotechnical	$50,000
	Aquatic and Terrestrial wildlife studies	$145,000
	Archeological Studies	$45,000
	Surface water quality	$25,000
Remote Sensing	High Resolution Drone-Mag and LiDAR Survey	$50,000
Engineering		$85,000
Reporting	Preliminary Economic Assessment (PEA)	$100,000
Contingency	10%	$154,000
	Total:	**$1,694,000**

26.1 General Recommendations

General recommendations, compiled during the preparation of the Report, are as follows:

- Additional density (SG) measurements should be collected in order to be able to better model the variability and association with respect to sulphide mineralization concentration.
- Referee samples collected and sent to a thirds party lab should be introduced into the QA/QC process in order to check results from the primary lab.
- A regular regime of field duplicate sampling (either formal quartering of core or just splitting sample material into two unique samples) should also be introduced into the QA/QC process.

- The Company should consider a new low-grade nickel CRM to replace CFRM-100 for monitoring low-grade nickel as CFRM-100 is not officially vetted/certified by sodium peroxide fusion.

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