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DNI METALS INC.

TECHNICAL REPORT
MINERAL RESOURCE ESTIMATE
FOR THE
VOHITSARA GRAPHITE PROJECT,
REPUBLIC OF MADAGASCAR

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1.0 SUMMARY

1.1 GENERAL

DNI Metals Inc. (DNI) has retained Micon International Limited (Micon) to conduct the initial mineral resource estimate on its Vohitsara Graphite Project (Vohitsara Project) in the Republic of Madagascar (Madagascar) and disclose the estimate in a Technical Report prepared in accordance with Canadian National Instrument (NI) 43-101. This report also includes a discussion related to the exploration programs conducted on the Vohitsara Project and further exploration programs to be conducted. This is Micon's first Technical Report for the Vohitsara Project.

Neither Micon, nor the Qualified Persons (QPs) who authored this Technical Report, have, nor have previously had, any material interest in DNI or related entities. Micon's and the QP's relationship with DNI are solely a professional association between the client and the independent consultant. The report and mineral resource estimate were prepared in return for fees based upon agreed commercial rates and the payment of these fees is in no way contingent on the results of this report.

This report includes technical information which requires subsequent calculations or estimates to derive sub-totals, totals and weighted averages. Such calculations or estimations inherently involve a degree of rounding and consequently introduce a margin of error. Where these occur, neither Micon nor the QPs consider them to be material.

This report is intended to be used by DNI subject to the terms and conditions of its agreement with Micon. This agreement permits DNI to file this report containing the mineral resource estimate as a Technical Report on SEDAR (www.sedar.com) pursuant to provincial securities legislation or with the SEC in the United States. Except for the purposes legislated under provincial securities laws, any other use of this report, by any third party, is at that party's sole risk.

The conclusions and recommendations in this report reflect the authors' best independent judgment, in light of the information available to them at the time of writing. The authors reserve the right, but will not be obliged, to revise this report and conclusions if additional information becomes known to them subsequent to the date of this report. Use of this report acknowledges acceptance of the foregoing conditions.

1.2 PROPERTY LOCATION, DESCRIPTION AND OWNERSHIP

The Vohitsara Project is located approximately 50 km south-southwest of the port city and regional capital of Toamasina and 35 km northeast of the town of Brickaville in central eastern Madagascar. Administratively, it is located within the Fokontany (Village) Vohitsara, Rural Municipality Ambinaninony, District of Brickaville (North), Region Antsinanana, Toamasina Province. The Vohitsara permit is centred on (UTM Zone 39K) 7,952,000 mN/305,000 mE; using the World Geodetic System 1984 (WGS 84) datum.

The Project is comprised of two separate but contiguous mining permits leases (Vohitsara and Marofody). In total the two permits encompass 6,875 ha. Table 1.1 summarizes the information for each permit.

Table 1.1
Summary of the General Information for the Vohitsara and Marofody Permits

Permit Name	Permit Number	Number of Squares	Total Size (ha)	Permit Issue Date	Permit Expiry Date	Taxes/Payment per Annum	
						(USD)	Ar[1]
Vohitsara	38642	112	4,375	07/22/2015	07/22/2055	1,662	5,940,480
Marofody	8904	64	2,500	07/04/2016	07/04/2056	2,861	10,229,760
Total		**176**	**6,875**			**4,523**	**16,170,240**

Note [1] Madagascar currency = Malagasy Ariary. On February 15, 2019 USD 1.00 = 3,575 Malagasy Ariarys (MGA).

In this report, the term Vohitsara Project refers to the selected areas within the mineral permits controlled by DNI where the exploration and mineral resources actually are occurring, while the term Vohitsara property (the property) refers to the entire land package under DNI's control.

The Vohitsara permit is 100% owned by DNI Metals Madagascar Sarl (DNI-Mada), a private company incorporated under the laws of the Republic of Madagascar. In December, 2018, a meeting was held, a motion put forward and approved to merge DNI Metals Madagascar Sarl with a new company called DNI Madagascar Vohitsara Sarlu. The permits will be transferred to the new company, which is 100% owned by DNI Metals Inc., the publicly listed parent.

The Marofody permit is 100% owned by DNIM Holdings No.1 Sarl, a private company incorporated under the laws of the Republic of Madagascar. In December, 2018, a meeting was held, a motion put forward and approved to merge DNI Holdings No. 1 Sarl with a new company called DNI Madagascar Marofody Sarlu. The permits will be transferred to the new company, which is 100% owned by DNI Metals Inc., the publicly listed parent.

1.3 ACCESSIBILITY, CLIMATE, PHYSIOGRAPHY, LOCAL RESOURCES AND INFRASTRUCTURE

1.3.1 Accessibility

Flights from Paris, France, to Antananarivo, the capital of Madagascar, occur almost daily. From Antananarivo, access to the Vohitsara Project area is via the sealed Route Nationale No. 02 (RN2) highway to the village of Vohitsara. The village is located 50 km south-southwest of the eastern port city of Toamasina.

The RN2 highway traverses the property and from the village of Vohitsara, access to other portions of the property is currently by trail and requires crossing a creek which has an average depth of less than one metre. DNI has upgraded the trail for vehicle traffic to access the village of Ambatolampy, which is located close to the Main Zone deposit.
Portions of a historical road network dating from post-war colonial mining are still observed within the Project area. This road network is amenable to restoration and there are several sites

in the vicinity of the Project where the local drainage could be traversed by the installation of a ford or bridge.

1.3.2 Physiography

Madagascar is divided into four distinct regions, determined by the topography and ethnic distribution. The Vohitsara Project lies within the eastern coast subdivision dominated by narrow coastal plains. The fertile soil of the eastern coast of Madagascar makes agriculture possible and proximity to the sea provides a moderate climate in this region. The fishing industry is an important contributor to the economy of the East Coast.

Local terrain is of moderate dissection and relief, averaging between 30 and 115 m above mean sea level (AMSL). Flora on the Vohitsara property is primarily a mix of dense sub-tropical vegetation, regrowth and grassland; the latter associated with areas of lateritic carapace.

Regolith is almost entirely residual, with transported horizons restricted to local topographic lows which are frequently under cultivation.

1.3.3 Climate

The climate of the eastern and north western coasts is dominated by the almost constant south-easterly trade winds, which carry heavy rains during the austral winter (May to September). Generally, the climate throughout Madagascar is moderated by altitude, with the coast being hotter (average temperatures 21 to 27 degrees Celsius (°C)) and wetter than the plateau (average temperatures 13 to 19°C). Toamasina ('Tamatave'), on the east coast, receives 2,840 mm of rainfall annually, while Antananarivo, inland, and has about 1,400 mm.

The Tropic of Capricorn passes across the south of the island; hence it is subject to frequent cyclonic weather in the December to June period, particularly along the east coast. These cyclones have occasionally caused major devastation. In 2012, Cyclone Giovanna crossed the coast at Brickaville (25 km south of the Project), causing widespread damage and a number of deaths.

The Vohitsara Project features a tropical rainforest climate under the 'Koppen' climate classification system. While the area has no true dry season, September to November is the driest period of the year, while February to April is the wettest time of the year.

Average temperatures are relatively constant throughout the course of the year, though it is slightly cooler in the months of July and August, when highs average around 24°C and warmer in the months of January and February, where average high temperatures reach 30˚C. The area receives roughly 3,250 mm of precipitation annually.

1.4 HISTORY

There is no detailed information regarding the exploration activities during the historical production period. However, it can be assumed that surface prospecting and hand auguring; likely with the aid of visual indicators in the vegetation, were used.

Within the general Brickaville-Toamasina belt, there are approximately 45 graphite mineralization occurrences recorded.

The Ampositrabe-Vohilava trend (the AMP-VOH or Main Zone) extends for a recorded 3 km and is the principal graphite occurrence within the Project. An unnamed zone – an extension of the neighbouring Vatomaina trend – occurs 2 km southwest of the Main Zone.

According to Besarie (1966), the Main Zone was periodically exploited prior to 1952, with an estimated 3,500 tonnes (t) of graphitic material mined from four pits.

Adjacent mining centres at Menagisy and Vatomaina were reportedly exploited between 1949 and 1952. Menagisy was abandoned in 1951 due to low head grades (3% to 5% flake in-situ) whilst Vatomaina extracted an estimated 3,000 t over a three-year period to 1952. Head grades were generally above 5% flake graphite.

1.5 GEOLOGICAL SETTING AND MINERALIZATION

1.5.1 Regional Geology

The Precambrian shield of north-eastern Madagascar, excluding the Bemarivo region, consists of two geological domains, from north to south: Antongil and Antananarivo. The Antongil Domain consists of granite, granodiorite, migmatite, and tonalitic and amphibolitic gneiss, bound on the west by a belt of metasedimentary gneiss and migmatite. The Antananarivo Domain is the largest domain in Madagascar, consisting mainly of granitoid gneisses, migmatites, and schist intruded by calc-alkaline granites, gabbro, and syenite. Rocks of the Antananarivo Domain was thrusted to the east on the Betsimisiraka suture over the Antongil Domain, then intruded by granites (Peters, et al., 2003).

The Vohitsara Project (Vohitsara and Marofody properties) occurs within the far eastern part of the Antananarivo Domain, and is part of the Betsimisaraka Subdomain. The Neoproterozoic Betsimisaraka Subdomain separates the Antongil Domain from the Antananarivo Domain. It consists of a sequence of pelitic paragneisses with entrained podiform mafic to ultramafic bodies.

1.5.2 Vohitsara Project Geology

The Vohitsara Project tenements overlie a late-Mesoproterozoic – early-Neoproterozoic sequence of migmatised hornblende-garnet orthogneisses and quartzo-feldspathic orthogneisses of the Andasibe and Manampotsy Formations of the Manampotsy Group. Within

the latter, the Manampotsy Graphitic Schist (locally termed the Andasibe Formation) hosts the graphite mineralization within the Project.

In 2014, the Northern Discovery Ltd. (ND) and Vato Consulting Sarl (Vato) exploration program successfully delineated three distinct mineralized trends within the boundary of the mining permit PE38642 which comprises the main portion of the Vohitsara:

1. Main Zone.
2. Western Zone.
3. Southwestern Zone.

Of these, the Western Zone is considered to be of least interest, being of limited extent and general lower observed tenor graphitic carbon (GC) content.

Intercalated lenses of quartzite are ubiquitous in the area. Additionally, a gabbroic dyke of the Analalava suite cuts the sequence in the vicinity of the Western Zone and is associated with minor gold mineralization in the Project area.

The graphite mineralization strikes generally 010° to 015° northeast and dips on average 40° to the east. Graphite lenses frequently occur in multiple bands averaging 20 to 30 cm true thickness, with intercalated kaolinite-rich barren bands of weathered schist and gneiss.

Graphite remains essentially inert during weathering and lateritization and occurs as flakes up to and in excess of one to two mm, aligned with shear planes in the host rocks. Graphitic zones are reported to be anywhere from two to 10s of metres in thickness. The graphitic zones around the Vohitsara Project are essentially free from pyroxenite or porphyry dykes.

Graphite-mineralized units frequently form local topographic highs.

Mineralization at the Vohitsara Project is hosted within kaolinite-rich (low-silica) saprolite that is weathered to a depth of 20 to 30 m below the natural surface, on average. This weathering allows for ease of extraction with hand or mechanised digging equipment.

Tropical weathering of the graphitic gneiss units can further concentrate the comparatively inert graphite in residual regolith-hosted accumulations.

1.5.3 Graphite Mineralization

There are three (3) principal types of graphite mineralization (Bernier, et al. [SRK], 2015):

1. Amorphous graphite is the most abundant and lowest quality of graphite. It is so-called due to its small crystal size and lack of a (flake) crystal structure. China, Europe, Mexico and the US are known to host large deposits of amorphous graphite.
2. Crystalline (flake) graphite is less common and of a correspondingly higher quality and value than amorphous. It is formed primarily from recrystallization during

metamorphosis of host sedimentary sequences. It has a large variety of uses and can be up to four (4) times the price of its amorphous counterpart. Madagascar is particularly well known for its high-quality flake graphite deposits; although Canada, Brazil, China and Europe also host deposits of this type.

3. Vein or lump is the rarest and highest value form of graphite. It occurs in veins along intrusive contacts and is currently only commercially mined in Sri Lanka.

According to Taylor (2006; as cited by SRK, 2015), economic graphite deposits can be classified into five (5) categories reflecting the different types of graphite:

1. Disseminated flake graphite in silica-rich meta-sedimentary rock.
2. Disseminated flake graphite in marble.
3. Metamorphosed coal seams.
4. Vein deposits.
5. Contact metasomatic or hydrothermal deposits in marbles or similar calcareous meta-sediments.

Deposits of categories 1 and 2 generally comprise disseminated flake graphite, while those of categories 3 and 5 comprise the amorphous variety.

Graphite mineralization at the Vohitsara Project comprises disseminated crystalline graphite (Type 2 form) hosted within weathered low-silica meta-sediments. The mineralization is most closely associated with category 1 in Taylor's classification even though it is in a low-silica meta sedimentary rock.

Deposits hosted in free-dig material (weathered/oxidised regolith; esp. low silica saprolites) have a distinct advantage over their bedrock-hosted counterparts; specifically, the general lack of a requirement for milling/grinding of the economic rock, which is energy intensive and can reduce the size of graphite flakes in the process.

1.6 EXPLORATION PROGRAMS

Between March, 2015 and January, 2016, DNI completed several site visits during which trenching, surface sampling and ground geophysics were completed. The exploration focussed primarily on delineating graphite mineralization within the Main Zone.

In conjunction with the trenching program, ground geophysics comprising magnetics and electromagnetics (Mag/EM) were completed over the Main Zone. The survey was completed using a GDD Instruments BM8 'Beep Mat' sled that can measure Mag/EM to 10 m below the surface with simultaneous GPS location.

In 2017, two drilling programs were instituted on the Vohitsara Project. The first drilling program consisted of Reverse Circulation (RC) holes. The second was a diamond drilling program by DNI.

The RC drilling program consisted of 56 holes totalling 1,634.50 m on mining permit 38642 Vohitsara, comprised of 417.50 m on the Southwest Zone and 1,217 m on the Main Zone. The diameter of the RC drill holes was 89 mm.

The diamond drilling program consisted of 28 holes totalling 1,038.73 m on mining permit 38642 Vohitsara. The drilling comprised 165.68 m on the Southwest Zone and 873.05 m on the Main Zone. The diameter of the diamond drill holes was HQ.

In general, the RC and diamond drilling identified the broad extent of the graphite mineralization on the Vohitsara Project and provided the necessary information to support a mineral resource estimate. The mineralization remains open in the southerly direction in the Southwest Zone and in both the northerly and southerly directions in the Main Zone. In-fill drilling along with other exploration work such as trenching and systematic outcrop sampling will be required in order to identify the variability of flake size and grade more precisely than is currently known. This would assist in blending of process feed to achieve a desired flake size and grade of the material in future mining as, historically, graphite mining has been from a number of smaller pits which are blended to achieve a final concentrate specification.

DNI plans to continue to advance the Project with further exploration, testwork and studies to be conducted in in 2019 and 2020. Additionally, DNI plans to begin exploration on its adjacent Marofody Project in 2019.

1.7 VOHITSARA PROJECT MINERAL RESOURCE ESTIMATE

1.7.1 General Notes

This is the first mineral resource estimate to be conducted on DNI's Vohitsara Project in Madagascar. The mineral resource estimate is based on the exploration work conducted on the Project to date by DNI and other parties.

The database for DNI consists of 5 trenches, 56 RC dill holes and 28 diamond drill holes with the majority of the work completed on the Main zone and the remainder on the Southwest zone.

The resource estimate discussed in this Technical Report pertains only to the Main Zone which has been tested by 5 trenches, 22 vertical diamond drill holes and 38 vertical RC holes. The resource database comprises geological contacts, collar surveys, assay data, lithology tables and density information. The drill hole spacing is between 100 and 150 m except where the holes have been twinned; the average spacing is approximately 125 m.

While the quality of data for the Southwest Zone is sufficient, it was considered premature to include it in a mineral resource estimate for the following reasons:

- Despite the graphite mineralization being exposed in historical workings and in road cuts, these exposures were not sampled. DNI now recognises that this information is

important in order to better define the mineralization prior to conducting a resource estimate in this area.

- The topography and drilling appear to indicate that the mineralization is still open to the south. DNI would therefore like to investigate the possible southern extension of the zone, prior to declaring a mineral resource for this zone.

The topographic surface map is based on the topographic map that was provided by DNI. Bulk density estimation is based on the average of 100 determinations by the AGAT laboratory.

1.7.2 Economic Parameters

The CIM definition standards require that a mineral resource must have reasonable prospects for eventual economic extraction. The Main Zone of the Vohitsara Graphite Project outcrops at surface making it amenable to open-cast mining.

The economic parameters and cut-off grade calculation summarized in Table 1.2 were applied to Micon's open pit limit analysis in order to demonstrate the deposit's prospects for eventual economic extraction. Costs are based on an analogous mining operation in Africa while the remaining parameters are based upon metallurgical testwork conducted on material from the Project.

Table 1.2
Economic Parameters and Cut-off Calculation for the Vohitsara Project Main Zone

Economic Parameter	Units	
Graphite Price (prorated for flake size in USD)	$1,217.50/t	
Feed Grade (% TC)	5%	
Recovery	90%	
Yield	4.50%	90% concentrate recovery
Operating cost (USD/t concentrate)	$323.00	
Cut-off Grade Calculation		
$323 X 0.045 = $14.54/t		
$1,217.50 X 90% = $1,095.75/t		
$75.39 = 1 t product		
= 1.40 % cut-off		

The slope used to define the pit shell was set at 50° and the open pit was limited to a depth of approximately 30 m to correspond approximately to the contact between saprolite and bedrock. Graphite mineralization extends into the bedrock but, for the purposes of this resource estimate, the graphite contained in the bedrock was not considered as part of a mineral resource.

1.7.3 Mineral Resource Estimate

Micon's QPs have classified the mineral resource estimate at the Vohitsara Project in the Inferred category, based on widely spaced drill holes of approximately 125 m. Using the assumptions specified in Table 1.2 above, the cut-off grade for reporting the mineral resource

is 1.4% GC. However, to increase the level of confidence in the reasonable prospects for eventual economic extraction, DNI prefers to report the base case resource estimate at a higher cut-off grade of 3% GC as summarized in Table 1.3.

Table 1.3
Summary of the Mineral Resource of the Vohitsara Project as of March 29, 2019

Cut-off (GC%)	Tonnes (Mt)	Avg. Grade (GC%)	Graphite Content (T GC)
3.0	4.00	5.00	200,000

1. Graphite price (prorated for the flake size) USD 1,217.50 per tonne
2. Recovery 90%.
3. Operating cost USD 323.00 per tonne graphite concentrate.
4. Mineral resources constrained within a Whittle pit shell.
5. The mineral resources presented here were estimated by Micon's QPs using the Canadian Institute of Mining, Metallurgy and Petroleum (CIM) Definitions and Standards on Mineral Resources and Reserves as of May 10, 2014.
6. Mineral resources unlike mineral reserves do not have demonstrated economic viability.
7. At the present time, Micon does not believe that the mineral resource estimate is materially affected by environmental, permitting, legal, title, taxation, socio-political, marketing, or other relevant issues.

A sensitivity table outlining the mineral resources at various cut-off grades above and below the adopted 3% GC base case to allow DNI to determine the potential impact on the resources should efficiencies be identified in further studies is provided in Table 1.4.

Table 1.4
Vohitsara Project Pit Constrained Resource Sensitivity Analysis with 3% GC Base Case

Cut-offs (GC%)	Tonnes (Mt)	Avg. Grade (GC%)	Graphite Content (T GC)
5.0	1.65	6.59	109,000
4.5	2.09	6.20	130,000
4.0	2.61	5.81	152,000
3.5	3.28	5.39	177,000
3.0	**4.00**	**5.00**	**200,000**
2.5	4.83	4.61	223,000
2.0	5.76	4.23	244,000
1.5	6.83	3.85	263,000
1.0	7.60	3.58	272,000
0.5	8.34	3.33	278,000

1.8 CONCLUSIONS AND RECOMMENDATIONS

In the view of Micon's QPs, DNI's exploration and drilling programs have identified a graphite mineral resource at the Vohitsara Project which warrants further exploration to outline its full extent. Further exploration will demonstrate the extent to which the Southwest Zone may contribute to the overall mineral resources, since the zone is open to the south and appears to exhibit the same mineralization as the Main Zone. There is potential for the discovery of other mineralized zones on the Vohitsara permit and adjoining Marofody permit that may contribute further to the overall mineral resource.

1.9 EXPLORATION BUDGET AND OTHER EXPENDITURES

DNI's exploration and drilling programs have partially identified the extent and quality of the graphite mineralization at both the Southwest and Main Zones.

The graphite mineralization remains open in both north and south strike directions in the Main Zone and in the southern direction in the Southwestern Zone. Further exploration drilling will be needed to define the true extent of the graphite mineralization in these zones. There are indications of other zones of graphite mineralization within the mining permits that comprise the Vohitsara Project, but further exploration of the property will be needed to determine the extent and quality of the graphite mineralization in these zones.

During 2019 and 2020, DNI is planning to conduct further exploration and testwork regarding extent and quality of the graphite mineralization on the Vohitsara Project. The proposed budget expenditures by DNI are summarized in Table 1.5.

Table 1.5
Summary of DNI's Proposed Budget for the Vohitsara Project

Expenditure Item	2019 (USD)	2020 (USD)
Marofody Exploration	2,000,000	----
Testwork Pilot Plant	8,000,000	----
Feasibility Studies	----	1,500,000
Commercial Plant	----	Subject to Feasibility
Total	**10,000,000**	**1,500,000**

In 2019, DNI is planning to construct a pilot plant on the Vohitsara mining permit in order to indicate the Project's potential commercial viability by optimizing the grade and recovery of the graphite mineralization into a concentrate at the Main Zone. DNI is also planning to conduct an exploration program on the Marofody mining permit which will consist of geophysical, trenching, sampling and drilling to determine the extent of the graphite mineralization in this area.

In 2020, DNI is planning to complete a feasibility study based upon the pilot plant work and, should it be determined that the mineral resource on its permits is of sufficient commercial quantity and quality, a decision will be made on construction of a commercial production plant.

Micon's QP's agree with the direction of DNI's program and regard the expenditures and studies as appropriate. Micon and the authors realize that the nature of the programs and expenditures may change as the program advances due to various causes and that the final expenditures and results may not be the same as originally proposed.

1.10 FURTHER RECOMMENDATIONS

Micon's QPs understand that DNI will conduct further exploration program on the Vohitsara Project in order to gain knowledge regarding the true extent of the graphite mineralization on the mining permits and conduct further testwork to determine the commercial viability of the

graphite mineralization. In that context, Micon's QPs make the following additional recommendations:

1. Drilling should be conducted using diamond drilling methods as opposed to RC drilling methods as this will allow for a more refined model of the geology and graphite mineralization to be constructed.
2. DNI should conduct some infill drilling to further outline any variability within the mineralization (grade and thickness) and potentially upgrade the confidence in the classification categories for the resource estimate.
3. DNI should conduct further exploration drilling to outline the true extent of the zones currently identified (Southwest and Main) and outline further zones on the property which could be included in any future resource update.
4. DNI continues with its plans to build a new exploration facility to store the core and samples on the property nearer to the entrance of the property at some point in the near future.
5. DNI should have a topographic survey conducted to cover the entire property or at least the relevant portions of it and tie all the historical workings, roads, trails, drilling and trenching. This will improve any future mineral resource estimates and set up the project better for conducting mine planning exercises in the future. This could possibly be completed using a drone to potentially maximize the coverage and minimize the cost of this survey.
6. DNI should conduct further metallurgical testwork to potentially optimize the areas that could be blended together but more importantly determine the extent and variability of the flake size within the mineralized zones.

2.0 INTRODUCTION

2.1 TERMS AND REFERENCE

At the request of Mr. Daniel J. Weir, Executive Chairman of DNI Metals Inc. (DNI), Micon International Limited (Micon) has been retained to estimate the mineral resource at the Vohitsara Graphite Project (Vohitsara Project) in the Republic of Madagascar (Madagascar) and compile a Canadian National Instrument (NI) 43-101 Technical Report disclosing the results of that estimate. This is Micon's first Technical Report on the Vohitsara Project.

This report discloses technical information, the presentation of which requires Micon to derive sub-totals, totals and weighted averages that inherently involve a degree of rounding and, consequently, introduce a margin of error. Where these occur, the authors and Micon do not consider them to be material.

The conclusions and recommendations in this report reflect the authors' best independent judgment in light of the information available to them at the time of writing. The Qualified Persons (QPs) and Micon reserve the right, but will not be obliged, to revise this report and conclusions if additional information becomes known to them subsequent to the date of this report. Use of this report acknowledges acceptance of the foregoing conditions.

This report is intended to be used by DNI subject to the terms and conditions of its agreements with Micon. That agreement permits DNI to file this report as a Technical Report on SEDAR (www.sedar.com) pursuant to provincial securities legislation or with the SEC in the United States. Except for the purposes legislated under provincial securities laws, any other use of this report, by any third party, is at that party's sole risk.

Neither Micon nor the QPs have, nor have they previously had, any material interest in DNI or related entities. The relationship with DNI is solely a professional association between the client and the independent consultants. This report is prepared in return for fees based upon agreed commercial rates and the payment of these fees is in no way contingent on the results of this report.

Micon and the QPs are pleased to acknowledge the helpful cooperation of DNI management and consulting field staff, all of whom made any and all data requested available and responded openly and helpfully to all questions, queries and requests for material.

2.2 DISCUSSIONS, MEETINGS, SITE VISITS AND QUALIFIED PERSONS

A site visit was conducted between January 27 and February 3, 2019, during which the Vohitsara property was inspected and various aspects of the Project were discussed. The exploration programs for the Project were also discussed in detail and the onsite exploration Quality Assurance and Quality Control (QA/QC) procedures were reviewed.

The QPs responsible for the preparation of this report and their areas of responsibility and site visits are noted in Table 2.1.

Table 2.1
Qualified Persons, Areas of Responsibility and Site Visits

Qualified Person	Title and Company	Area of Responsibility	Site Visit
William J. Lewis, B.Sc. P.Geo.	Senior Geologist, Micon	1 (except 1.7), 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12 (except 12.3), 23, 25 (except 25.2), 26	2019-01-27 - 2019 02-03
Charley Murahwi, M.Sc., P.Geo., Pr.Sci.Nat., FAusIMM	Senior Geologist, Micon	1.7, 12.3, 14, 25.2	None
Lyn Jones, M.A.Sc., P.Eng.	Senior Consultant, M.Plan	13	None
NI 43-101 Sections not applicable to this report		15,16,17,18,19,20,21 and 22	

Messrs. Lewis and Murahwi are employees of Micon and Mr. Jones is an employee of M.Plan International Limited (M.Plan). M.Plan is a joint venture corporation between Micon and Dorfner Analysenzentrum und Anlagenplanungsgesellschaft mbH (ANZAPLAN).

2.3 SOURCES OF INFORMATION

Micon's review of the Vohitsara Project was based on published material researched by the QPs, as well as data, professional opinions and unpublished material submitted by the professional staff of DNI or its consultants. Much of these data came from reports prepared and provided by DNI. The information sources for this report are noted in Section 28.0.

The descriptions of geology, mineralization and exploration used in this report are taken from reports prepared by various organizations and companies or their contracted consultants, as well as from various government and academic publications. The conclusions of this report use, in part, data available in published and unpublished reports supplied by the companies which have conducted exploration on the property, and information supplied by DNI. The information provided to DNI was supplied by reputable companies and the QPs have no reason to doubt its validity and has used the information where it has been verified through its own review and discussions.

Some of the figures and tables for this report were reproduced or derived from reports on the property written by various individuals and/or supplied to the QPs by DNI. Most of the photographs were taken by Mr. Lewis during his January, 2019 site visit. In cases where photographs, figures or tables were supplied by other individuals or DNI, the source is referenced below that item.

2.4 UNITS OF MEASUREMENT AND ABBREVIATIONS

All currency amounts, costs and commodity prices are stated in US dollars (USD or $) unless otherwise stated. Australian dollars (AUD) or Canadian dollars (CAD) are used where appropriate. Quantities are generally stated in metric units, the standard Canadian and

international practice, including metric tonnes (t) and kilograms (kg) for mass, kilometres (km) or metres (m) for distance, hectares (ha) for area, grams (g) and grams per metric tonne (g/t) for gold and silver grades (g/t Au, g/t Ag). Wherever applicable, Imperial units have been converted to Système International d'Unités (SI) units for reporting consistency. Precious metal grades may be expressed in parts per million (ppm) or parts per billion (ppb) and their quantities may also be reported in troy ounces (ounces, oz), a common practice in the mining industry. A list of abbreviations is provided in Table 2.2. Appendix 1 contains a glossary of mining and other related terms.

Table 2.2
List of Abbreviations

Name	Abbreviation
Adsorption/desorption/reactivation	ADR
AGAT Laboratories Ltd.	AGAT Laboratories
Annum	a
Australian dollars	AUD
Bureau du Cadastre Minière de Madagascar	BCMM
Canadian Association for Laboratory Accreditation	CALA
Canadian dollars	CAD
Canadian Institute of Mining, Metallurgy and Petroleum	CIM
Canadian National Instrument 43-101	NI 43-101
Canadian Securities Administrators	CSA
Centimetre(s)	cm
Cougar Metals NL	Cougar
Degree(s), Degrees Celsius	°, °C
Digital elevation model	DEM
DNI Metals Inc.	DNI
DNI Metals Madagascar Sarl	DNI-Mada
Dorfner Analysenzentrum und Anlagenplanungsgesellschaft mbH	ANZAPLAN
Grams per metric tonne	g/t
French Bureau de Recherches Géologiques et Minières	BRGM
Graphite	C
Graphic Carbon	GC
Hectare(s)	ha
Hendry Consulting Sarl	Hendry Consulting
Hour	h
Inductively Coupled Plasma – Emission Spectrometry	ICP-ES
Internal diameter	ID
Independent Metallurgical Operations Pty. Ltd.	IMO
Kilogram(s)	kg
Kilometre(s)	km
Life of mine	LOM
Litre(s)	L
Madagascar Geological Service	MGS
Metre(s)	m
Micon International Limited	Micon
Micron(s)	µm
Million (e.g. million tonnes, million ounces, million years)	M (Mt, Moz, Ma)
Milligram(s)	mg
Millimetre(s)	mm

Name	Abbreviation
M.Plan International Limited	M.Plan
Northern Discovery Ltd.	ND
Not available/applicable	n.a.
Ounces (troy)/ounces per year	oz, oz/y
Parts per billion, part per million	ppb, ppm
Percent(age)	%
Projet de Gouvernance des Ressources Minérales	PGRM
Quality Assurance/Quality Control	QA/QC
Republic of Madagascar	Madagascar
Route Nationale No. 02	RN2
Specific gravity	SG
Square kilometre(s)	km^2
Standards Council of Canada	SCC
System for Electronic Document Analysis and Retrieval	SEDAR (www.sedar.com)
Three-dimensional	3D
Tonne (metric)/tonnes per day, tonnes per hour	t, t/d, t/h
Tonne-kilometre	t-km
Tonnes per cubic metre	t/m^3
United States of America	US
United States Bureau of Mines	USBM
United States Dollar(s)	USD
United States Geological Survey	USGS
United States Securities and Exchange Commission	SEC
Universal Transverse Mercator	UTM
Value Added Tax (or IVA)	VAT or IVA
Vato Consulting Sarl	Vato
Year	y

3.0 RELIANCE ON OTHER EXPERTS

In this report, discussions regarding royalties, permitting, taxation, and environmental matters are based on material provided by DNI. The QPs and Micon are not qualified to comment on such matters and have relied on the representations and documentation provided by DNI for such discussions.

All data used in this report was originally provided by DNI. The QPs have reviewed and analyzed this data and have drawn their own conclusions therefrom. The QPs' comments are augmented where applicable by their direct field examinations during their site visit.

The QPs and Micon offer no legal opinion as to the validity of the title to the mineral concessions claimed by DNI and in that regard have relied on information provided by it.

4.0 PROPERTY DESCRIPTION AND LOCATION

4.1 GENERAL DESCRIPTION OF MADAGASCAR

Madagascar, which is the world's fourth largest island, is located about 420 km east of Mozambique in the Indian Ocean. Madagascar has an area of 587,040 km^2 and a population of approximately 22 million people.

The capital of Madagascar is Antananarivo (Tana/Tananarivo), a city of approximately 2,500,000 people comprised of numerous smaller population centres that have merged over time. Located approximately 180 km inland from the central-eastern coast of Madagascar, Antananarivo lies at an elevation of just over 1,300 m above sea level.

The country is divided into six (6) semi-autonomous administrative regions. After 65 years of French colonial rule, Madagascar gained its independence in 1960. Despite an association with the Soviet Union during the following two decades, the French have maintained a reasonably strong presence that continues into the present.

Madagascar is governed under a unitary, bicameral system comprising a National Assembly (Lower House) and a Senate, overseen by an Executive branch comprising a directly elected President, a Prime Minister (PM) and PM-appointed Cabinet.

Madagascar has an ethnically diverse population comprising peoples of Indo-Asian, African, Arab, Indian and Portuguese origin. Occupying the central highland plateau of Madagascar are some 26 distinct ethnic groups within Madagascar with the dominant ethnicities being the Merina and Betsileo people; of predominantly Indonesian origin. People of African descent occupy the coastal parts of the country, with Arabian and Portuguese in the extreme north.

Madagascar is officially bilingual; French being the language of government, business and the educated elite, with Malagasy comprising the official local language. English is taught in schools but is not widely spoken outside of business and government circles. The average official literacy rate is 70%.

The mining industry of Madagascar consists of both small- and large-scale mining operations, found mainly in remote locations. Mineral deposits include ilmenite, graphite, limestone, gypsum, dolomite, silica, mica, titanium, quartz, gold, platinum group, silver, iron, copper, zinc, nickel, cobalt, chromite, coal and uranium. Madagascar is also rich in precious and semi-precious stones: ruby, sapphire, emerald, aquamarine, beryl, tourmaline, topaz, garnet, cordierite, rose quartz, amethyst and citrine. Decorative stones found are marble, silicified wood, and jasper.

4.2 VOHITSARA PROJECT

The Vohitsara Project is located approximately 50 km south-southwest of the port city and regional capital of Toamasina 35 km northeast of the town of Brickaville in central eastern

Madagascar. Administratively, it is located within the Fokontany (Village) Vohitsara, Rural Municipality Ambinaninony, District of Brickaville (North), Region Antsinanana, Toamasina Province. The Vohitsara permit is centred on (UTM Zone 39K) 7,952,000 mN/305,000 mE; using the World Geodetic System 1984 (WGS 84) datum.

The Project is comprised of two separate but contiguous mining permits (Vohitsara and Marofody). The UTM coordinates for the vertices of each permit, as noted in the title documents, are summarized in Table 4.1. The location of the Project is shown in Figure 4.1.

Table 4.1
Summary of the Geographic Corner Co-ordinates for the Vohitsara and Marofody Permits

Vohitsara Permit		Marofody Permit	
Corner Co-ordinates		Corner Co-ordinates	
Xv	Yv	Xv	Yv
677500	842500	680312.5	837812.5
677500	845000	680312.5	842187.5
685000	842500	684687.5	837812.5
685000	835000	684687.5	842187.5
687500	835000		
687500	845000		

In total, the two permits encompass 176 contiguous squares of 0.3909 km^2 (625 m a side) for a total of 6,875 ha. Table 4.2 summarizes the information for each permit with the location of the two permits shown in Figure 4.2.

Table 4.2
Summary of the General Information for the Vohitsara and Marofody Permits

Permit Name	Permit Number	Number of Squares	Total Size (ha)	Permit Issue Date	Permit Expiry Date	Taxes/Payment per Annum	
						(USD)	Ar[1]
Vohitsara	38642	112	4,375	07/22/2015	07/22/2055	1,662	5,940,480
Marofody	8904	64	2,500	07/04/2016	07/04/2056	2,861	10,229,760
Total		**176**	**6,875**			**4,523**	**16,170,240**

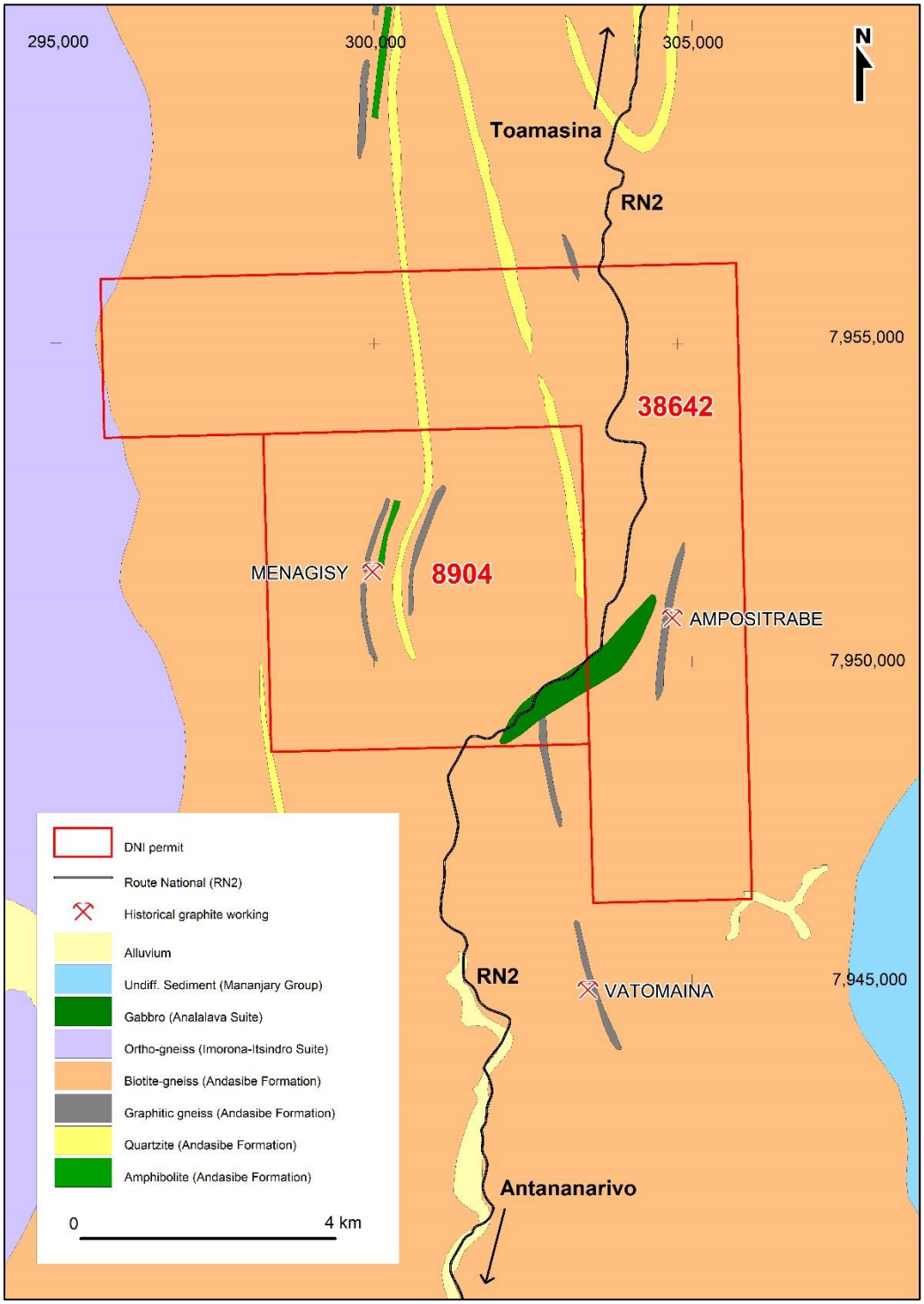
Note [1] Madagascar currency = Malagasy Ariary. On February 15, 2019 the exchange rate was 1 USD = 3,575 Ar.

In this report, the term Vohitsara Project refers to the portion of the mineral licenses controlled by DNI within which the exploration and mineral resources occur, while the term Vohitsara property (the property) refers to the entire land package under DNI's control.

Figure 4.1
Location Map for the Vohitsara Project

Map taken from the website Geology.com.

Figure 4.2
Location of the Vohitsara and Marofody Permits



Modified after Vato, February, 2019.

4.3 OWNERSHIP

The Vohitsara mining lease is 100% owned by DNI Madagascar Vohitsara SARLU (DNI Madagascar) which in turn is owned 100% by DNI Mauritius Vohitsara, which in turn owned 100% by DNI. DNI Madagascar is a result of the merger of the previous local companies which held the leases. The Marofody mining lease is 100% owned by DNI Madagascar Marofody SARLU which in turn is owned 100% by DNI Mauritius Marofody, which in turn owned 100% by DNI.

4.4 PROPERTY AGREEMENTS

4.4.1 Vohitsara Permit

The original small-scale artisanal mining permit (38642) for the Vohitsara Project was issued to Mme. Mamy Estelle Randrianasolo (the Vendor) on 1st December, 2010, for a period of eight years. The permit authorises the exploration and mining of graphite, gold, pyrite, rose quartz and ruby (corundum).

Environmental Authorisation No.42/10 was subsequently granted on 30th November, 2010.

Through its original local subsidiary DNI Metals Madagascar Sarl (DNI-Mada), DNI entered into an option agreement on 12th June, 2015 to acquire the Permit from the Vendor via staged payments. Pursuant to that agreement, DNI-Mada acquired the Permit in exchange for an aggregate of USD 400,000 in cash, staged over a period of three years. The agreement was revised in late 2015 and as a result of the revision the payment dates were shortened from three years to two years. The last option payment was made as of 12th June 2017.

In terms of the option agreement, Robert Barnes, lends to DNI-Mada, the Borrower, a Loan amounting to USD 380,000 (representing USD 400,000, less USD 10,000 paid previously to each of Barnes and the Vendor). The Loan is intended to formalise the reimbursement by the Borrower of certain expenses and funds made by the Lender in respect of the activities carried out by Ms. Mamy Estelle over the property; which is in the process of being acquired by the Borrower via a Madagascar-domiciled Mining Permit Sale Agreement.

As security for this loan, DNI has entered into a pledge agreement, whereby DNI pledged the entirety of the shares of its 100% owned subsidiary DNI-Mada to Mr. Barnes as Lender. The pledge will expire upon discharge of all payments owing under the Definitive Agreement.

Prior to entering into the option agreement, the Vendor had obtained the requisite environmental permits for artisanal extraction. Whilst this will suffice for the exploration and bulk testing phase of development of the Vohitsara Project, it will be necessary to upgrade the existing environmental permit to a commercial mining environmental permit. This process will be undertaken as part of the requisite surface access, community consultation and reclamation planning (Environmental Impact Study) that is necessary prior to commencing physical mining operations in Madagascar.

Annual tenement rents are necessary to maintain the Permit.

4.4.2 Marofody Permit

On October 25, 2017, DNI announced that it acquired the Marofody mineral permit adjacent to its existing Vohitsara mineral permit. The Marofody property (8904) allows for production, is good for 40 years and may be extended. The purchase price for Marofody was USD 1,650,000 cash. The Marofody property is free of any royalties or obligations other than to the government related to owning a mineral permit in Madagascar.

4.4.3 Cougar Metals NL

The following section summarizes the chronological details of agreements with Cougar Metals NL (Cougar).

On November 9, 2016 and revised on December 13, 2016, DNI signed a Letter of Intent with Cougar, whereby Cougar could participate in an earn-in option ("Working Right and Earn In") to develop DNI's Vohitsara property. A definitive agreement was signed on March 24, 2017.

In order to maintain the Working Right and Earn In in good standing, Cougar was required to make payments as follows:

- Pay DNI AUD 200,000 within 10 days of a capital raise of at least AUD 500,000 or by March 31, 2017, whichever is earlier.
- Unless Cougar has withdrawn from the Agreement by April 12, 2017, pay DNI USD 150,000 by June 7, 2017.
- AUD 11,000 plus expenses per month from March 31, 2017 to June 30, 2017. representing payment for the main focus of the DNI Madagascar team to assist Cougar's Earn-In into the project. Any additional workers hired by the DNI Madagascar team as needed for development on the NI 43-101 compliant mineral resource report and/or PEA, shall be billed by DNI to Cougar separately.

Further, in order to maintain the Working Right and Earn-In in good standing Cougar was required, in addition to payments referred to above, to:

- Design, fund, manage and present to DNI a NI 43-101 compliant mineral resource report covering a pre-selected area of the project measuring approximately 300 m x 900 m by June 30, 2017.
- Complete a NI 43-101 compliant PEA using the parameters of 10,000 TPA graphite production from the Property by October 31, 2017.
- The mineral resource report and the PEA shall include a minimum of 3,000 m of drilling to a maximum of 50 m and 1,000 m of surface trenching.
- The Program shall be conducted in such a way as to not unreasonably hinder future development of the Property and shall be based on sound mining practice and other

applicable industry standards and practices and in material compliance with the terms of all applicable permits and laws.

Pursuant to the agreement if there were any delays in Cougar's ability to complete the Program, as described above, beyond the reasonable control of Cougar, then the date by which the Programs were to be completed and the Earn-In Period could be extended by prior consent in writing of DNI, with consent not being unreasonably held.

At June 30, 2017, Cougar made all payments, but did not complete the drilling, trenching, and the NI 43-101 compliant resource report.

As of August 21, 2017, DNI and Cougar were able to negotiate an extension to October 31, 2017, to complete the NI 43-101 resource report and December 31, 2017 to complete the PEA.

The payment of AUD 11,000 plus expenses per month from March 31, 2017 was extended to October 31, 2017 or until field work was completed. The payment was for DNI's Madagascar team to assist Cougar's Earn-In into the project. Any additional workers hired by the DNI Madagascar team as needed for development on the NI 43-101 compliant mineral resource report and/or PEA, were to be billed by DNI to Cougar separately.

In July 2017, DNI's board ascertained, that Cougar's RC drilling rig, would not provide proper samples to determine the flake size distribution of the graphite. DNI brought in and paid for 1,040 m of diamond core drilling, which was completed in 60 days, to determine the flake size distribution, and to provide a better evaluation of the property.

As at October 31, 2017, Cougar had not completed the required 3,000 m of drilling and did not present DNI with an NI 43-101 compliant resource report.

On October 31, 2017, DNI granted Cougar an additional 20 days, to comply with the terms of the Definitive Agreement/Option Agreement, and again Cougar did not complete its requirements.

On December 1, 2017, DNI issued Cougar a Notice of Default. Under the Option Agreement, Cougar had seven days to remedy the Defaults. In the event that certain of the Defaults were not remedied, DNI had the right to cancel the Option Agreement. DNI exercised that right. The defaults of Cougar which were not remedied were not subject to arbitration under the Option Agreement.

On September 24, 2018, DNI announced that it had signed a settlement agreement with Cougar and that the arbitration initiated by Cougar against DNI would not proceed.

4.4.3.1 Details of the Settlement

DNI will pay to Cougar:

1. Eight quarterly payments of CAD 250,000, starting 6 months from the settlement date or 14 days after DNI's next successful financing.
2. Two additional payments of CAD 250,000 will be made in addition to the third and fourth quarterly payments mentioned above.

In addition, no security over the Vohitsara property was granted to Cougar. However, if DNI sells an interest in the Vohitsara property of more than 50%, up to CAD 1 million of the net proceeds of sale will be paid towards the balance owing to Cougar. In that event, if there are still additional monies owing to Cougar, DNI will skip the next two CAD 250,000 payments.

The drilling program conducted by Cougar is noted in Section 10.0 of this Technical Report.

4.5 PERMITTING, ENVIRONMENTAL AND SURFACE RIGHTS

4.5.1 Madagascar Mining Sector

Most of the (domestic resource) industry is held in private hands; particularly the small-scale mining sector. There are few large enterprises. The Ambatovy nickel-cobalt project east of the capital Antananarivo and the QMM-Toalagnaro titanium project in the south of the country are owned by conglomerates of foreign companies, with the government of Madagascar owning a 20% interest in the latter. The Kraoma chromite mine is owned by the state mining company Kraomita Malagasy SA.

Historically Madagascar's mining industry has been noted for the production and export of chemical and metallurgical-grade chromite ore, high-quality crystalline flake graphite, and precious, semiprecious, and ornamental gemstones. In addition to these minerals, small quantities of beryllium and gold and such industrial mineral commodities as cement, feldspar, ornamental stone, quartz, and salt were produced. Madagascar is also known to have resources of bauxite, coal, cobalt, copper, lead, manganese, nickel, platinum, tin, titanium, zinc, iron and zirconium.

4.5.2 Madagascar Mining Law

At the instigation of the World Bank, a new mining code for Madagascar was promulgated in 1999, followed in 2000 by a decree on the conditions of application. The current Mining Code is established under the Law n° 99-022 of 19 August, 1999 modified by the Law 2005-021 of 17 October, 2005, and under its decree of application n° 2006-910 of 19 December, 2006.

In conjunction with this step, the Bureau du Cadastre Minière de Madagascar (BCMM) as it is known locally, was established in May 2000. The BCMM is designed to serve as a 'one-stop tenement office' for mining operators. All mineral permits in Madagascar are issued by the BCMM; with title documents signed by the Minister for Mines.

For the purpose of permit license, Madagascar is divided into cadastral squares of 0.3906 km² (i.e. 625 m per side). Coordinates are defined by the Laborde projection, which is based on a Paris datum. Conversion algorithms between Laborde and UTM (WGS84) projections are in common use in Madagascar.

The Government retains the right to declare certain areas unavailable for mining activities. There are no such declared areas within or adjacent to the Vohitsara Project.

Virtually all normal BCMM permitting operations ceased in early September, 2010, following a decree by then Minister for Mines and Hydrocarbons, Mr. Mamy Ratovomalala. However, small-scale artisanal mining permits ('PRE') – available exclusively to Malagasy Nationals – were excluded from the 2010 decree and have remained largely unaffected by the cessation of normal BCMM permitting operations. This is largely attributed to the formidable political clout that can be mustered by the small mining operators lobby.

This situation was considerably relaxed following the inauguration of an elected government in Madagascar in January, 2014. Currently the only BCMM administrative activity that remains on hold are the reception of new applications for commercial mining and exploration permits. The Vohitsara permit was acquired by DNI (DNI-Mada) through a process of Cession or Transformation of the original PRE.

All prospecting, research, exploitation, possession, transportation, transformation and commercialisation of minerals except for water and hydrocarbons are ruled by the Mining Code. Research and exploitation of minerals are authorized under an appropriate permit license. Research, exploitation, transformation, packaging, transportation and commercialization of radioactive minerals and hydrocarbons require special agreement with the Malagasy State.

4.5.2.1 Types of Commercial Mineral Permits

The different types of permits (summarised from the Malagasy Mining Code, Ministère des Mines 2007a; 2007b; and 2007c) are as follows:

- Exploration Permit (Permis de Recherche, or PR) grants the exclusive right for prospecting and research. This type of permit has a validity of 5 years and can be renewed twice, each for a period of three years. The granted entity can hold a maximum of 10,000 km^2 (or 25,600 individual 625 x 625 m squares).
- Mining Permit (Permis d'Exploitation, or PE) grants the exclusive right to exploit commodities and carry on prospecting and research of the specified commodities. This type of permit has a validity of 40 years and can be renewed multiple times, each for a period of 20 years. With this type of permit, the granted entity can hold a maximum of 1,000 km^2 (or 2,560 individual 625 x 625 m squares).
- Permit Reserved for Small Mining Developers (Permis Réservés aux Petits Exploitants, or PRE) grants the exclusive right to carry out prospecting, research and exploitation.

This type of permit is only available to Malagasy citizens and organisations legally formed with Malagasy citizens, using traditional techniques. This type of permit has a validity of 8 years and can be renewed multiple times each for a period of 4 years. With this type of permit, the granted entity can hold a maximum of 100 km^2 (or 256 individual 625 x 625 m squares).

- Exclusive Authorisation to Reserve a Perimeter (Autorisations Exclusives de Réservation de Périmètres, or AERP) grants the exclusive right to carry out prospecting. This type of permit is granted for a maximum of three months, by which time it should be transferred to either a Permis de Recherche or Permis d'Exploitation. With this type of permit, the granted entity can hold a maximum of 15,000 km^2 (or 38,400 individual 625 x 625 m squares).

Table 4.3 summarizes the details for various exploration and permits in Madagascar.

The Mining Code treats all parties the same way, irrespective of their origin or their capital ownership. However, mineral permits can only be granted to a Malagasy citizen or resident, or company incorporated in Madagascar. The fundamental principle for the granting of permits is based on a 'first come, first served' basis where discretionary procedures and discrimination have been abolished. Reasonable and progressive fees have been established to discourage the speculative holding of permits.

4.5.2.2 Rights and Obligations of Permit Holders

The holder of mining title has a right to occupy the surface of the area covered by the title, subject to payment of rent to be determined in conjunction with the owner of the land surface. The parties must outline their respective rights and obligations under a permit agreement. More recently, the government has decreed that extractive mineral operators should acquire title to the land surface affected by their operations.

In the event that the owner of the surface rights cannot come to an agreement with the permit holder, litigation must be referred to the competent authority in the Province or the Collectivité territoriale décentralisée (Madagascar Administrative Division) before the matter can be referred to the Comité Provincial des Mines (Provincial Mining Committee), in order to arrive at an amicable settlement.

Table 4.3
Summary of Various Exploration and Mining Permits in Madagascar

Permit Types	AERP	PRE	PR	PE
Permit Description	Prospecting	Artisanal Mining Permit	Exploration Permit	Mining Permit
Term of Validity	3 months	8 years	5 years	40 years
Renewal	No	4 years - multiple	3 years x 2	20 years - multiple
Eligibility	All Local Entities	Malagasy Nationals	All Local Entities	All Local Entities
Maximum Size (km^2)	15,000	100	1,000	1,000
Rights Conferred	Prospecting	Exploration and Mining	Exploration	Exploration and Mining
Sale of Mineral Products	No	Yes	No	Yes
Restrictions	Prospecting only but can partly transferred to either a PRE or PR license upon expiry	Maximum 20 Workers/No Mechanized Mining Operations (Artisanal Only)	No Commercial Mining Allowed	Full Commercial Mining Allowed
Environmental	No	Simple Preliminary Study (P.E.E)	Simple Preliminary Study (P.E.E)	Full Impact Study (E.I.E.)

Table partly extracted from DNI Press Release, July 26, 2017.

Mining permits provide exclusive rights for all commodities applied for and granted inside the permit area, with guaranteed security of tenure during the transition period from exploration to mining. The free commercialisation of the products is guaranteed, as well as the reduction of custom duties for imported equipment and goods used for exploration and mining.

Prior to field-based exploration activities, a permit holder must establish whether their project requires an environmental engagement program, locally known as a Program d'Engagement Environnemental (PREE) or an Environmental Impact Assessment (EIA), locally known as an Etude d'Impact Environnemental (EIE) (DBSA, 2009).

At the very least, mineral exploration activities require a PREE. This is evaluated by the Environmental Unit in the sector ministry concerned, which then sends its report and opinion to the Minister in Charge of Environment (MoE) and the Office National de l'Environnement (ONE). Approval of the PREE is a mandatory requirement prior to any field-based exploration activities.

If the permit is considered to include environmentally sensitive sites, or the intention is exploitation, it could be necessary to complete an EIE. Usually, additional environmental authorizations are required should the holder apply for permission to mine different minerals than those originally applied for, e.g., gold instead of graphite.

The addition of other minerals implies modification of the mining title. Such modification is subject to payment of complementary fees determined by decision of the Minister of Mining. The extension of mineral substances is confirmed and registered by the BCMM after the payment of complementary fees. The mention of the additional mineral substances is recorded as an amendment in the existing mining title. The law does not provide any limitation in the number of mineral substances that can be covered by a mining title.

4.5.3 Environmental Studies

DNI has concluded two environmental impact studies for its Vohitsara Project, one on the Vohitsara mining permit dated November, 2017 and one on its Marofody mining permit dated January, 2018. These reports are in Malagasy and French, however, a short summary of the two reports for the permits within the Vohitsara Project is contained below.

4.5.3.1 Vohitsara and Marofody Mining Permit Impact Studies

The environmental impact study report covers the potential exploitation of the graphite deposits on the Vohitsara and Marofody mining permits and any related activities. The project parameters provided for open pit mining at the Vohitsara and Marofody permits with an annual production rate of 15,000 t of pure graphite concentrate at approximately 70% graphite content. The study impact was based on a 15-year production period, that may be extended depending on the results of further exploration.

The evaluation of the foreseeable impacts of the Project focused on the analyzing environmental components based on the current state of the property. The evaluation was conducted from first principles in order to highlight the direct and indirect impacts, any permanent and or temporary measures, and to define measures to remove, reduce or compensate for any negative effects of the Project.

The impact study of the graphite exploitation at the Vohitsara Project, prior to the commencement of mining activities, allows for the minimization of any potential impacts on the environment by highlighting, a few environmental issues such as the location of water supply equipment installations.

The report noted that monitoring of the relevant elements of the various environment components (biological, physical, social) will be implemented in order to detect potential consequences that the graphite mining operations will of the functioning of operations of Graphite and to limit the effects that it could have on the environment.

The most important impacts of mining are those that will affect the natural environment. Although there will be a certain social impact, it is of moderate importance. The positive economic impact is important as the taxes that will be paid to the Malagasy Government can be used to bring significantly improvements to the economy of the area surrounding the Project. The participation of DNI in a number of social projects will also be of benefit to the local community.

The reports were accepted by the Madagascar National Office for the Environment and work regarding the issuing of the environmental permits was ongoing during the QPs site visit in January, 2019, with DNI observed to be holding meetings with local villagers.

5.0 ACCESSIBILITY, CLIMATE, LOCAL RESOURCES, INFRASTRUCTURE AND PHYSIOGRAPHY

5.1 ACCESSIBILITY

Flights from Paris, France, to Antananarivo, the capital of Madagascar, almost occur daily. From Antananarivo, access to the Vohitsara Project area is via the sealed Route Nationale No. 02 (RN2) highway to the village of Vohitsara. The village is located 50 km south-southwest of the eastern port city of Toamasina.

The RN2 highway traverses the property and from the village of Vohitsara, access to other portions of the property is currently by trail and requires a crossing a creek which has an average depth of less than one metre. DNI has improved the local trails and upgraded the main trail for passage by vehicular traffic in order to access not only the Southwest Zone but the Main Zone which is located closer to the village of Ambatolampy.

Portions of a historical road network dating from post-war colonial mining are still observed within the project area. This road network is amenable to restoration and there are several sites in the vicinity of the Project where the local drainage can be traversed by the installation of a ford or bridge. Figure 5.1 shows the ford in the river through which access to the Vohitsara Project is obtained.

Figure 5.1
Ford across the Local River to Access the Vohitsara Project

5.2 PHYSIOGRAPHY

Madagascar is divided into four distinct regions, determined by the topography and ethnic distribution. The Vohitsara Project lies within the eastern coast subdivision dominated by

narrow coastal plains. The fertile soil of the East Coast of Madagascar makes agriculture possible and the close proximity to the sea provides a moderate climate, in this region. The eastern coastal strip is suitable for the cultivation of cash crops like coffee, fruits, vanilla and cloves. The fishing industry is also another part of the economy of the East Coast.

The dominant ethnic group in this region is the Betsimisaraka. The Betsimisaraka constitute 15% of the Malagasy population and are the second largest ethnic group after the dominant Merina. The Betsimisaraka speak several dialects of the Malagasy language, which is a branch of the Malayo-Polynesian language group derived from the Barito languages, spoken in southern Borneo. Like the Sakalava to the west, the Betsimisaraka are composed of numerous ethnic sub-groups united by historical circumstances under the same denomination. Most Betsimisaraka are of mixed Bantu-African and Asian-Austronesian descent.

Local terrain is of moderate dissection and relief averaging between 30 and 115 m above mean sea level (AMSL). Flora on the Vohitsara property is primarily a mix of dense sub-tropical vegetation and regrowth and grassland; the latter associated with areas of lateritic carapace. Figure 5.2 shows the terrain and vegetation in the Southwest portion of the Vohitsara Project.

Regolith is almost entirely residual, with transported horizons restricted to local topographic lows which are frequently under cultivation.

Figure 5.2
Terrane and Vegetation in the Southwest Portion of the Vohitsara Project

5.3 CLIMATE

The climate of the eastern and north western coasts is dominated by the almost constant blowing of the south-easterly trade winds, which carry heavy rains during the austral winter (May to September). The central plateau and the western coast are sheltered from these winds but receive rain from the monsoon winds, which blow during the austral summer (October to April). Neither the trade winds nor the monsoons reach the southern part of the island, which consequently receives little rain and is, in places, a semi-desert. The central plateau enjoys a

tropical mountain climate with well-differentiated seasons. Generally speaking, the climate throughout the island is moderated by altitude, with the coast being hotter (average temperatures 21-27 degrees Celsius (°C) and wetter than the plateau (average temperatures 13 to 19°C). Toamasina (Fr: Tamatave), on the east coast, has 2,840 mm of rainfall annually, while Antananarivo, inland, and has about 1,400 mm.

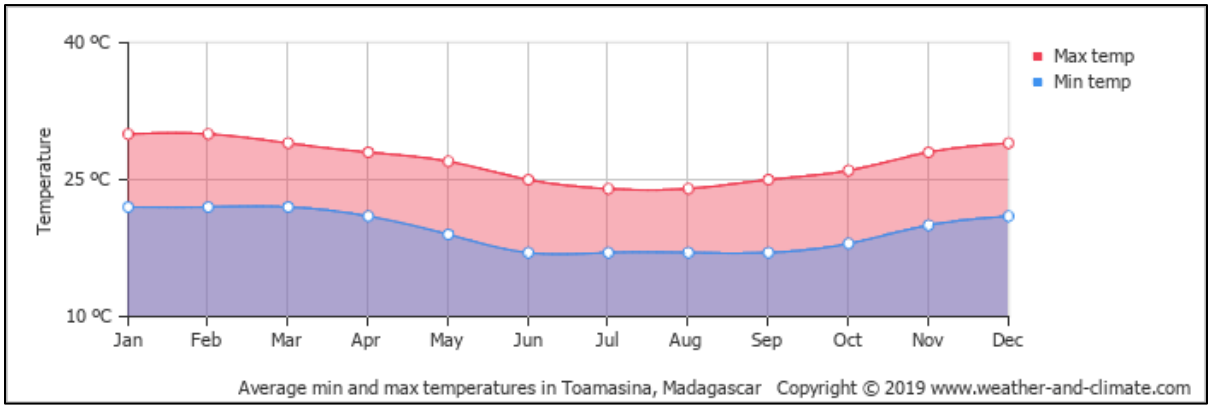
The Tropic of Capricorn passes across the south of the island; hence it is subject to frequent cyclonic weather in the December to June period, particularly along the east coast. These cyclones have occasionally caused major devastation. Cyclone Giovanna hit eastern Madagascar in mid-February, 2012; crossing the coast at Brickaville (75 km south of Tamatave), causing widespread damage and a number of deaths.

The Vohitsara Project features a tropical rainforest climate under the 'Koppen' climate classification system. While the area has no true dry season month (i.e. where the precipitation average falls below 60 mm), the area has noticeably wetter and drier periods of the year. September to November is the driest period of the year, while February to April is the wettest time of the year.

Average temperatures are relatively constant throughout the course of the year, though it is slightly cooler in the months of July and August, where average highs hover around 24˚ C and warmer in the months of January and February, where high temperatures on average reach 30˚ C. The area averages roughly 3,250 mm of precipitation annually.

The Project is located approximately 20 km from the coast and 50 km south of the regional centre of Toamasina. Figure 5.3 graphically shows the weather information for Toamasina.

Figure 5.3
Summary of the Average Temperatures in Toamasina



5.4 LOCAL RESOURCES AND INFRASTRUCTURE

The local population is openly supportive of reinvigoration of the historical graphite industry. A number of older residents of Vohitsara and the surrounding villages have previously worked directly on graphite exploitation; both during and after the post-war colonial period.

Toamasina, which is Madagascar's chief port, is connected by rail with Antananarivo and is the closest major population centre. Toamasina is the second largest city in Madagascar, with a population of approximately 250,000. It is the capital of the Atsinanana (Eastern) administrative region of Madagascar and is known informally as the commercial capital. Toamasina exports sugar, coffee, cloves and rice with the chief industries being food processing and goods trans-shipment.

The city's name – meaning 'place of salt' – originally derived from the extensive salt marshes around the area. It is located at the northern extremity of the Canal des Pangalanes, an impressive chain of semi-natural coastal canals and lakes that extend for 645 km down the eastern coastline of Madagascar. The marshes were the root cause of numerous outbreaks of disease in Toamasina, until they were drained by the French at the close of the 19th century.

The city itself was rebuilt following its near total destruction from a cyclone in 1926. The port is on the Northern Network of the Malagasy Railway which consists of three lines, built between 1903 and 1926. They carry 94% of the rail freight and 86% of the passenger rail traffic of the country. The network is entirely single track, metric gauge with a maximum axle load of 16 tonnes. The TCE line connects the port of Toamasina to the capital city of Antananarivo.

Anchorage depth is between 9.0 and 15.2 m, with the cargo pier depth up to 6 m. The port offers a well-protected anchorage and can handle ships up to 150 m in length. The core port system has been left largely untouched since independence in 1960; though in some areas, the private sector has begun to manage the port facilities. Since 2006, a consortium of companies led by Sherritt and Dynatec have invested approximately USD 1.0 billion in trans-shipment and processing facilities at the port. This was related to their development of the Ambatovy lateritic nickel-cobalt operation some 120 km inland from Toamasina.

Toamasina is serviced by an international airport and terminal; with daily flights to and from the capital Antananarivo, as well as selected internal destinations (Reunion-based Air Austral operates a regular service between Toamasina and St. Denis – Reunion).

6.0 HISTORY

6.1 SNAPSHOT OF PAST GRAPHITE MINING IN MADAGASCAR

Carl A. Lamey in his 1966 book "Metallic and Industrial Mineral Deposits" noted the following with regards to the graphite deposits of Madagascar:

> *The deposits of the Malagasy Republic have been worked commercially since 1907. Although deposits are known throughout almost the eastern half of the island, the chief producing area extends along the east-central coast from Tamatave to Marovintsy, a distance of about 90 miles, and an area of sub-ordinate importance is inland in the uplands, extending southward from Tananarive. The deposits occur in schists and gneisses of Precambrian age and make layers that vary in thickness from 10 to more than 100 ft, some of which are thousands of feet long. The average size of the flakes of graphite is perhaps 1 to 3 mm but flakes larger than 1 cm across have been reported and the deposits are noted for their high proportion of coarse flakes. The world standard for high quality flake graphite is set by these deposits. The average grade of deposits worked recently is 4 to 11 percent graphite.*
>
> *An interesting feature of these deposits, and one of practical importance as well, is the deep lateritic weathering to which they have been subjected. In general, most of the minerals except graphite and quartz have been converted into clay, and weathering is so deep that operations do not enter unweathered material. Water for concentrating the deposits is abundant along the coast, and because of that, as well as because of greater accessibility, deposits of somewhat lower grade can be mined there than can be mined in the uplands.*

According to the publication "Mineral Industry During 1915", "*the French Government placed an embargo on the exportation of Madagascar graphite to other countries than France in the Fall of 1914, and while the order has been modified to permit shipment to neutral countries, yet the bulk of the island's graphite exports went to France during 1915.*"

Table 6.1 summarizes the production and exports of graphite from Madagascar between 1921 and 1928, according to the Imperial Institute in Britain.

Table 6.1
Production of Graphite (Long Tons) in Madagascar 1923 to 1928

Description	Units	Year							
		1921	1922	1923	1924	1925	1926	1927	1928
Production	**Long tons**	6,268[1]	6,568[1]	10,595[1]	12,837	12,796	15,651	14,526	13,678
Exports (Domestic Produce)	**Long tons**	6,268	6,568	10,595	11,370	14,739	11,270	14,103	13,680

Notes: [1] Exports

Table 6.2 summarizes the graphite export from Madagascar by various countries between 1929 and 1938, as noted in the publication "Mineral Industry During 1940".

Table 6.2
Graphite Exported from Madagascar, by Countries[1], 1929 to 1938 (metric tonnes)

Exported to	France	United Kingdom	Germany	United States	Japan	Other Countries	Total
1929	6,959	5,388	1,535	1,770	'----	366	16,020
1930	3,408	3,709	676	1,239	'----	200	9,222
1931	1,632	2,990	1,976	'----	'----	'----	6,286
1932	'----	'----	'----	'----	'----	'----	2,150
1933	'----	'----	'----	'----	'----	'----	6,795
1934	'----	'----	'----	1,030[2]	'----	'----	9,353
1935	2,309	2,820	1,045	1,691	'----	181	8,046
1936	1,983	4,210	380	1,600	'----	385	8,558
1937	2,830	4,199	332	1,518	1,615	608	11,102
1938	3,742	4,226	612	1,627	1,667	626	12,500

Notes: [1] Statistiques du Commerce de la Navigation, Direction des Douanes.
[2] 11 months.

H.G. Ferguson el al., (1920), noted that of the various countries that produced flake graphite Madagascar was the most important producer which was followed by Bavaria and the United States. They believed that Madagascar at the time could produce up to nearly 50,000 short tons per year. The article also noted that the flake graphite from Madagascar had recently replaced the material from Ceylon (Sri Lanka) in European practice.

According to the volume "Mineral Industry During 1940" during 1940 there was a greatly increased demand for Madagascar graphite (in the US) but there was considerable difficulty in obtaining it and then when it was obtained it was in insufficient quantities. Madagascar was a French Colony that remained loyal to the Vichy Government after the fall of France and the British established a blockage of the island to prevent shipments to the Axis powers. The United States through diplomatic channels was able to obtain graphite shipments from Madagascar by means of vessels of neutral countries.

The Malagasy Republic produced on average 5.7% of the world's total graphite between 1945 and 1959 and 2.9% in 1962 (Lamey, 1966).

Table 6.3 summarizes the graphite production of Madagascar between 1985 and 1987 as recorded in Table 36 of the publication "Industrial Minerals, Geology and World Deposits (1990)".

Table 6.3
Graphite Production from Madagascar 1985 to 1987

Madagascar	Units	Years		
		1985	1986	1987
Production	tonnes	14,700	16,188	13,168

6.2 HISTORICAL EXPLORATION BY PRIOR OWNERS/OPERATORS (38642 PERMIT)

6.2.1 38642 Permit

No formal records exist for the period prior to the acquisition of the Permit by the Vendor as 38642. Anecdotal reports compiled by the Madagascar Geological Service (MGS) during and after the colonial period are the best available source of information in this regard.

Exploration from the historical production period is not detailed. However, it can be assumed that surface prospecting and hand augering; likely with the aid of visual indicators in the vegetation, were used.

During the 1950s, the French government funded country-scale mapping through the old MGS. At the same time, the United States Bureau of Mines (USBM) – forerunner of the United States Geological Survey (USGS) – completed a detailed overview of Madagascar's mineral potential. These works produced some very high-quality data; and were in turn used as baseline data for extensive interpretive mapping completed by subsequent geological team under the supervision of Henri Besairie during the 1970s.

More recently, in the early 1980s, the French Bureau de Recherches Géologiques et Minières (BRGM) completed a country-wide review of the geology and mineralization potential of the island. This was published in three volumes in 1985. Quite a bit of drilling was completed during this period; although it is not clear how much if any was done in the Vohitsara area specifically.

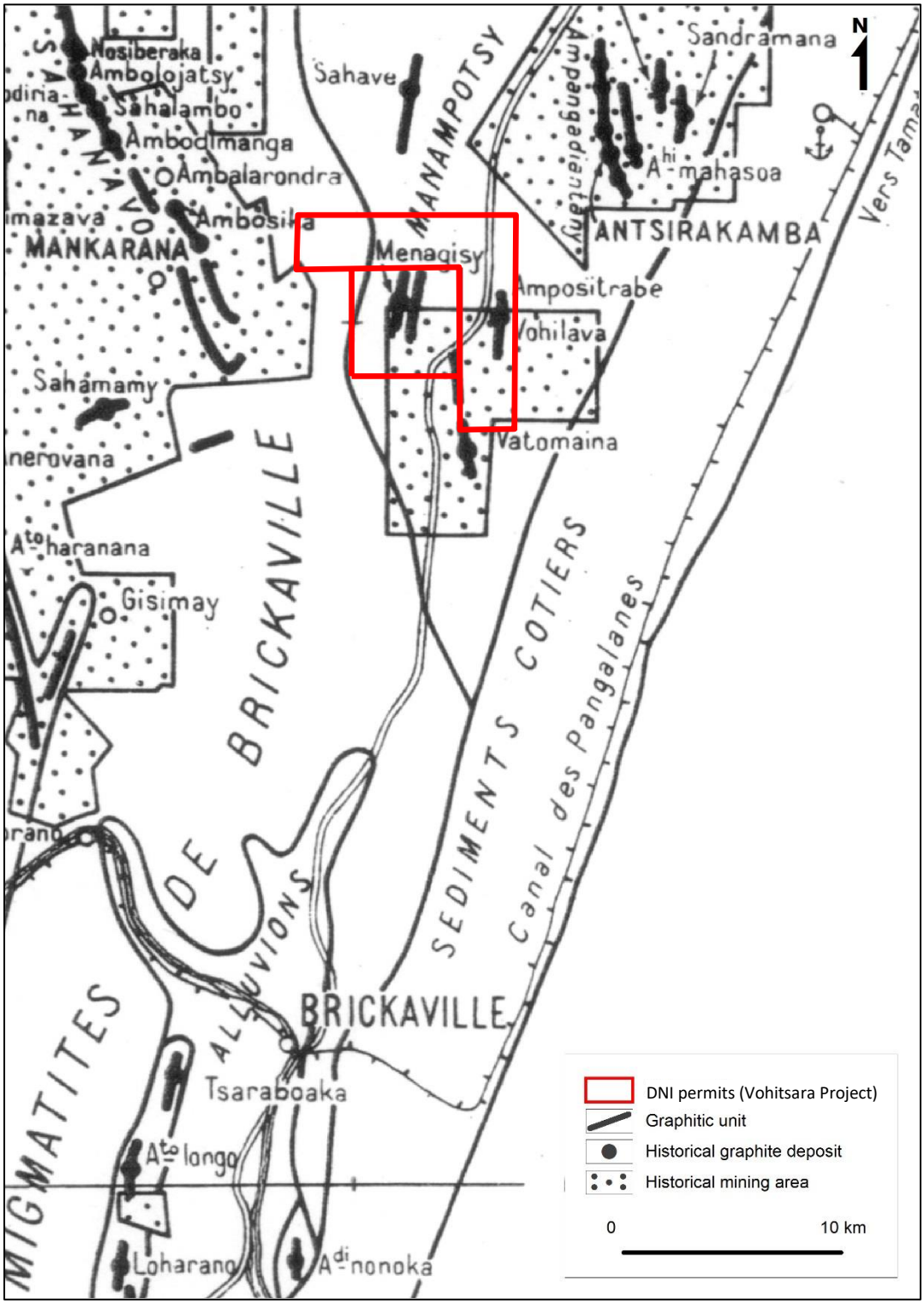
Within the general Brickaville-Toamasina belt, there are approximately 45 historical graphite mineralization centres recorded (Vato, 2014). Those in closest general proximity to the Vohitsara permit are shown in Figure 6.1.

The Ampositrabe-Vohilava trend (the AMP-VOH or Main Zone) extends for a recorded 3km and is the principal graphite occurrence within the Permit. An unnamed zone – an extension of the neighbouring Vatomaina trend – occurs 2 km southwest of the Main Zone and lies approximately 250 m inside the western boundary of Permit 38642.

According to Besarie (1966) the Main Zone was periodically exploited prior to 1952 with the mineralization generally striking 010-015 °M and an average dip of 40° to the east.

The adjacent Menagisy and Vatomaina zones were reportedly exploited between 1949 and 1952 (Figure 6.1). The Vatomaina zone strikes 350 to 355° N and dips 50° to the west. The parallel Menagisy zones may extend into the Vohitsara permit and future exploration programs will test this possibility. The mineral permits covering Vatomaina were acquired in 2014 by an Indian group, Tirupati Carbons under an option agreement.

Figure 6.1
Historical Graphite Occurrences and Production Centres in the area of the Vohitsara Project



Base map from Besarie, 1966, by Vato, February, 2019.

6.2.2 Permit 38642, 2014 (Northern Discovery Ltd.) Exploration Program

In 2014, 38642 was temporarily under option to an Australian consortium, Northern Discovery Ltd. (ND). Prior to expiry of the option in January, 2015, limited surface mapping and sampling were commissioned by the option holder to assess the Project. During the period October to December, 2014, Antananarivo-based Vato Consulting Sarl (Vato) and ND personnel made two visits to the permit area and collected a total of 18 samples. These samples contained an estimated flake graphite content of 2% to 10% graphitic carbon (GC).

The Vato/ND program successfully delineated three distinct mineralized trends within the boundary of 38642:

1. Main Zone.
2. Western Zone.
3. Southwest Zone.

Of these, the Western Zone is considered to be of least interest, being of limited extent and general lower observed tenor GC content. These results provided the basis for subsequent exploration on the Main and Southwestern Zones by DNI during 2015 and 2016.

6.3 HISTORICAL RESOURCE AND RESERVE ESTIMATES

Despite there being evidence of mining at the Vohitsara Project and in the geological and mining literature for the region, there are no formal records of any prior historical resource or reserve tonnage and grade estimations for the mineralized graphite deposits at the Vohitsara Project and in the surrounding area.

6.4 PRODUCTION FROM THE VOHITSARA PROJECT AREA

According to Besarie (1966) the Main Zone was periodically exploited, prior to 1952, with an estimated 3,500 t of graphitic material mined from four pits.

Adjacent mining centres at Menagisy and Vatomaina (Figure 6.1) were reportedly exploited between 1949 and 1952. Menagisy was abandoned in 1951 due to low head grades (3% to 5% flake in-situ), whilst Vatomaina extracted an estimated 3,000 t over a three-year period to 1952. Head grades were generally above 5% flake graphite.

7.0 GEOLOGICAL SETTING AND MINERALIZATION

7.1 MADAGASCAR GEOLOGY

Madagascar comprises a fragment of the African Plate, rifted from the vicinity of Tanzania at the time of the break-up of Gondwana some 200 million years ago. At that time, Madagascar remained joined with India; moving east-by-south until the late Cretaceous (approximately 70 million years ago), whereupon the two land masses split apart.

The eastern two-thirds of Madagascar is composed of Precambrian basement complex of Archaean to Neoproterozoic age (the 'Malagasy Shield'). The rocks provide a record of the opening and closing of a major Neoproterozoic ocean and mountain building event during the assembly of Gondwana. This amalgamation formed one the largest orogenic belts known on the planet, the East African Orogen, stretching from the Middle East to southern Africa, a distance of 7,000km.

In Madagascar, a series of accreted Proterozoic terraines were thrust over a fragment of Archaean basement, thought to have once been part of the Dharwar Craton of India. These orogenic belts and associated thrust sheets show variable but generally high (upper amphibolite to granulite facies) metamorphic deformation.

Extensive work by the, World Bank funded, Projet de Gouvernance des Ressources Minérales (PGRM) mapping review, delineated a total of six (6) accretionary terrains:

- Antongil-Masora.
- Antananarivo (Tsaratanana).
- Ikalamavony.
- Androyen-Anosyen.
- Vohibory.
- Bemarivo.

The largest of these, the Antananarivo Domain, covers the eastern center of the Island and hosts the Vohitsara Project.

Unconformably overlying the crystalline rocks of the Malagasy Shield is a sequence of Upper Palaeozoic to middle Mesozoic sediments. These unmetamorphosed sediments comprise the western third of the country and are dominated by the Karoo Supergroup, so named due to its known similarity and presumed correlation to its namesake sequence in South Africa.

Various components of the Karoo sediments host the bulk of known uranium and coal occurrences in Madagascar. They are also highly prospective for petroleum resources.

Subsequent rifting associated with the separation of India and Madagascar in the late Mesozoic resulted in numerous volcanic events of varying composition. The following 2009 synopsis from GAF/BRGM reports provide an overview of the structure and genesis of the Antananarivo Domain:

> *The Antananarivo Domain crops out in central Madagascar. This tectonic domain preserves a long-lived geologic history of sedimentation, igneous activity and orogenesis. The oldest rocks collectively define the Mangoro Complex, a sequence of Neoarchaean para- and orthogneisses that form the basement onto which the super-crustal rocks of the Ambatolampy and Manampotsy Groups were deposited in the Meso- and Neoproterozoic. The Mangoro Complex consists of the Vondrozo Formation and the Betsiboka Suite. The Vondrozo Formation is dominated by metaluminous hornblende and biotite bearing felsic rocks of andesitic to dacitic composition. The age of these rocks is unconstrained, although are inferred to be at least 2550 Ma old given that they host the Betsiboka Suite. The Betsiboka Suite is compositionally similar to the rocks of the Vondrozo Formation and is defined by metaluminous granodiorites, granites and alkali-granites. These rocks are well dated and were emplaced between 2550 Ma and 2450 Ma, an interval that coincided with the earliest phase of orogenesis observed in the Antananarivo Domain. This event occurred at granulite facies and partially melted rocks from both the Vondrozo Formation and the Betsiboka Suite.*
>
> *There is no recorded orogenic or plutonic activity until the Middle of the Neoproterozoic. Instead the Early to Middle Proterozoic is punctuated by a number of periods of sediment deposition. The Ambatolampy Group defines the older of the two observed cover sequences. These rocks crop out along the western margin of the Antananarivo Domain and consist of a heterogeneous sequence of sediments that now are defined by biotite (± sillimanite, ± garnet, ±graphite) schist, hornblende biotite gneiss and quartzite. The Ambatolampy Group is interpreted to have been deposited approximately 1000 Ma ago based on the youngest observed detrital zircons. The Manampotsy Group crops out on the eastern side of the Antananarivo Domain and, similar to the Ambatolampy Group, is predominantly defined by biotite (± sillimanite/kyanite, ± garnet, ±graphite) schist, hornblende biotite gneiss and quartzite. Based on a combination of detrital zircon ages and intrusive relationships with the Imorona-Itsindro (820-760 Ma) Suite, these rocks are constrained to have been deposited at approximately 800 Ma.*
>
> *Both the Ambatolampy and Manampotsy Groups, together with the underlying Mangoro basement were extensively intruded by plutons from the Imorona-Itsindro (820-760 Ma) and Ambalavao (580-520 Ma) Suites. Both igneous events were accompanied by some deformation and metamorphism. The relative importance of these two events was not determined during the study. Nevertheless, one or both of these events metamorphosed the two cover sequences to upper-amphibolite facies conditions (700-750˚C) and transposed the structures within both the basement and the super-crustal cover north-south trend and an east vergence. (GAF/BGR – 2009).*

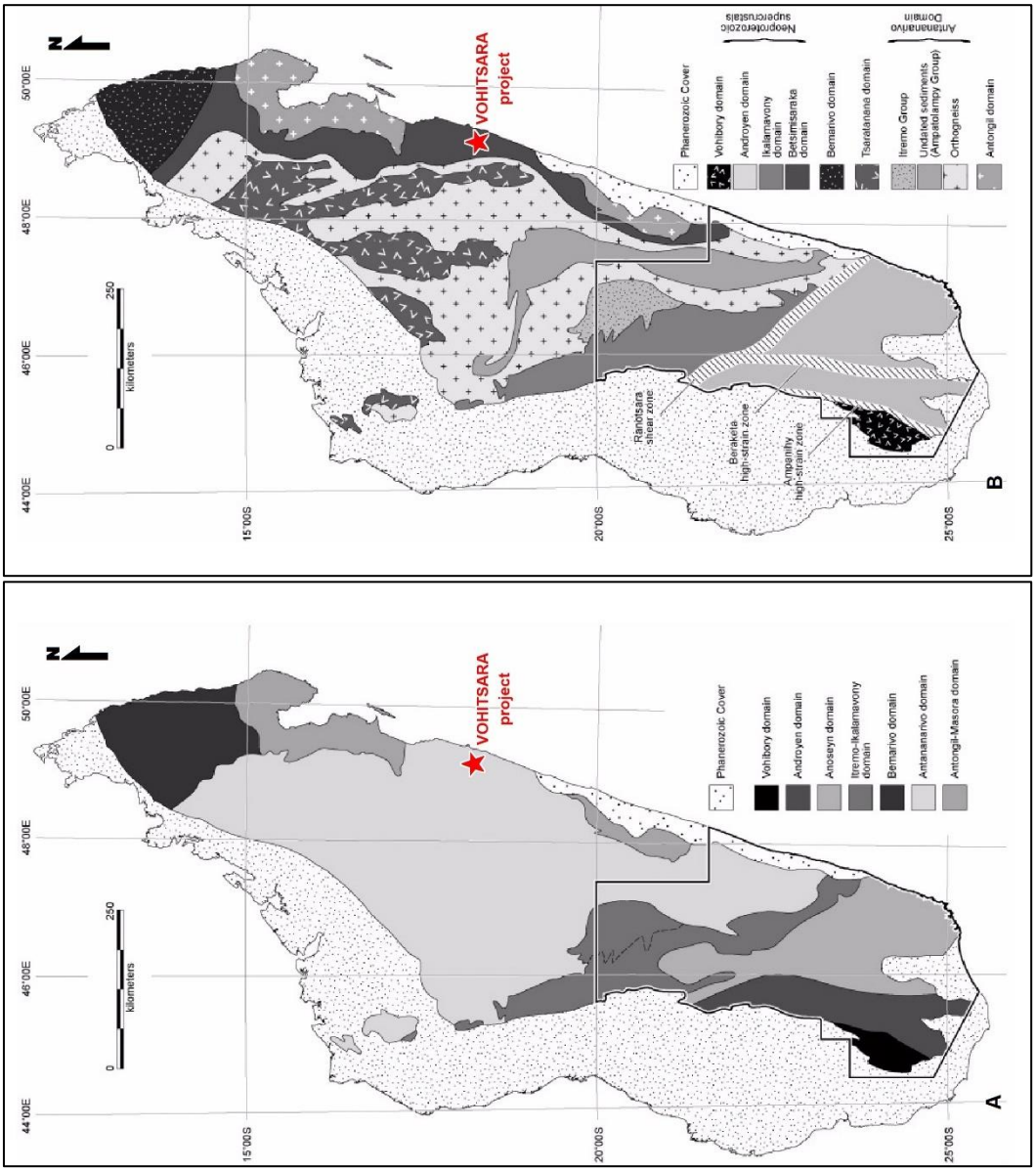
There are a wide variety of mineral deposits in Madagascar, including precious, base and strategic metals, non-metalliferous and gemstones. The vast majority of these however can be classified only as occurrences, as few have been mined or explored sufficiently to delineate them for tonnage and grade.

7.2 REGIONAL GEOLOGICAL SETTING

The Precambrian shield of north-eastern Madagascar, excluding the Bemarivo region, consists of two geological domains, from north to south: Antongil and Antananarivo (Figure 7.1 – A). The Antongil Domain consists of granite and granodiorite, migmatite, and tonalitic and amphibolitic gneiss, bound on the west by a belt of metasedimentary gneiss and migmatite. The Antananarivo Domain is the largest domain in Madagascar, consisting mainly of granitoid gneisses, migmatites, and schist intruded by calc-alkaline granites, gabbro, and syenite. Rocks of the Antananarivo Domain was thrusted to the east on the Betsimisiraka suture over the Antongil Domain, then intruded by granites (Peters, et al., 2003).

The Vohitsara Project (Vohitsara and Marofody properties) occurs within the far eastern part of the Antananarivo Domain, and is part of the Betsimisaraka Subdomain (Figure 7.1 – B). The Neoproterozoic Betsimisaraka Subdomain separates the Antongil Domain from the Antananarivo Domain. It consists of a sequence of pelitic paragneisses with entrained podiform mafic to ultramafic bodies. The Ambatolampy Group overlies the central Antananarivo Domain, while the Ampasary and Manampotsy Groups lie along the Antananarivo Domain's eastern margin of the region defined by previous studies as the Betsimisaraka Subdomain (GAF-BGR, 2008).

Figure 7.1
Map Showing the Geological Domains and Subdomains of Madagascar (after GAF-BGR, 2008)



By Vato, February, 2019.

7.3 VOHITSARA PROJECT GEOLOGY AND MINERALIZATION

The Vohitsara Project tenements overlie a late-Mesoproterozoic – early-Neoproterozoic sequence of migmatised hornblende-garnet orthogneisses and quartzo-feldspathic orthogneisses of the Andasibe and Manampotsy Formations of the Manampotsy Group. Within the latter, the Manampotsy Graphitic Schist (locally termed the Andasibe Formation) hosts the graphite mineralization within the Project. The generalized geology of the Vohitsara Project is shown in Figure 7.2.

In 2014, the Vato/ND exploration program successfully delineated three distinct mineralized trends within the boundary of the mining permit 38642 which comprises the main portion of the Vohitsara:

- Main Zone.
- Western Zone.
- Southwestern Zone.

Of these, the Western Zone is considered to be of least interest, being of limited extent and general lower observed tenor GC content.

Intercalated lenses of quartzite are ubiquitous in the area. Additionally, a gabbroic dyke of the Analalava suite cuts the sequence in the vicinity of the Western Zone and is associated with minor gold mineralization in the Project area.

The graphite mineralization strikes generally 010° to 015° northeast and dips on average 40° to the east. Graphite lenses frequently occur in multiple bands averaging 20 to 30 cm true thickness, with intercalated kaolinite-rich barren bands of weathered schist and gneiss.

Graphite remains essentially inert during weathering and lateritization and occurs as flakes up to and in excess of one to two mm, aligned with shear planes in the host rocks. Graphitic zones are reported to be anywhere from two to 10s of metres in thickness. The graphitic zones around the Vohitsara Project are essentially free from pyroxenite or porphyry dykes.

Graphite-mineralized units frequently form local topographic highs.

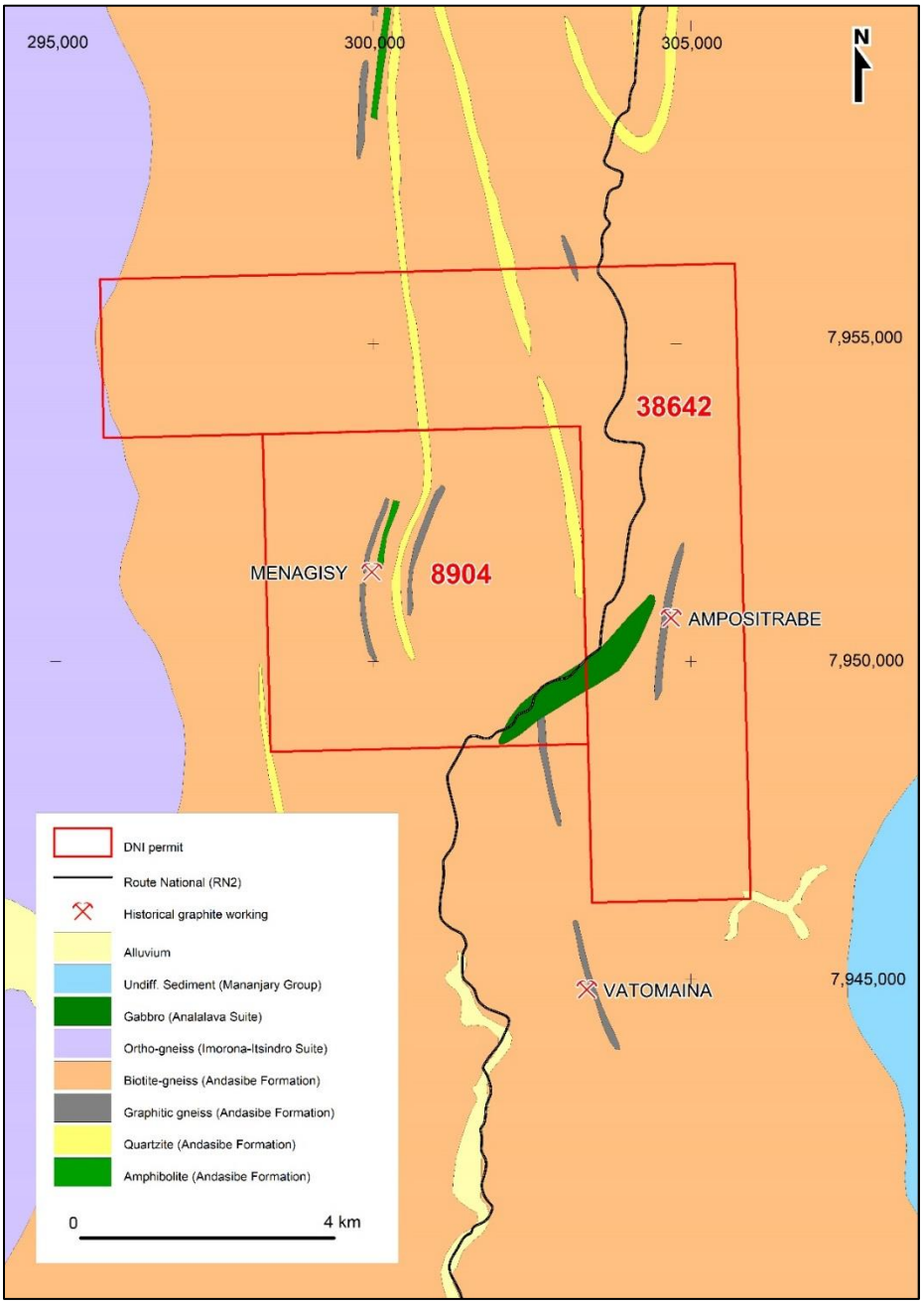
Mineralization at the Vohitsara Project is hosted within kaolinite-rich (low-silica) saprolite that is weathered to a depth of 20 to 30 m below the natural surface, on average. This weathering allows for ease of extraction with hand or mechanised digging equipment.

Tropical weathering of the graphitic gneiss units can further concentrate the comparatively inert graphite in residual regolith-hosted accumulations.

Regolith is the term used to describe the weathered material that occurs above unweathered bedrock and its formation is due to many different factors, including bedrock composition and

structure, the rate of weathering, the rate of erosion, climate change, tectonic history and cultural activity.

Figure 7.2
Geology (simplified) of the Vohitsara Project



By Vato, February, 2019.

In favourable conditions the regolith can develop into a generally predictable profile that includes several distinct subdivisions, each with its own physical and chemical characteristics. The two primary subdivisions are the pedolith and the saprolith, with the pedolith including

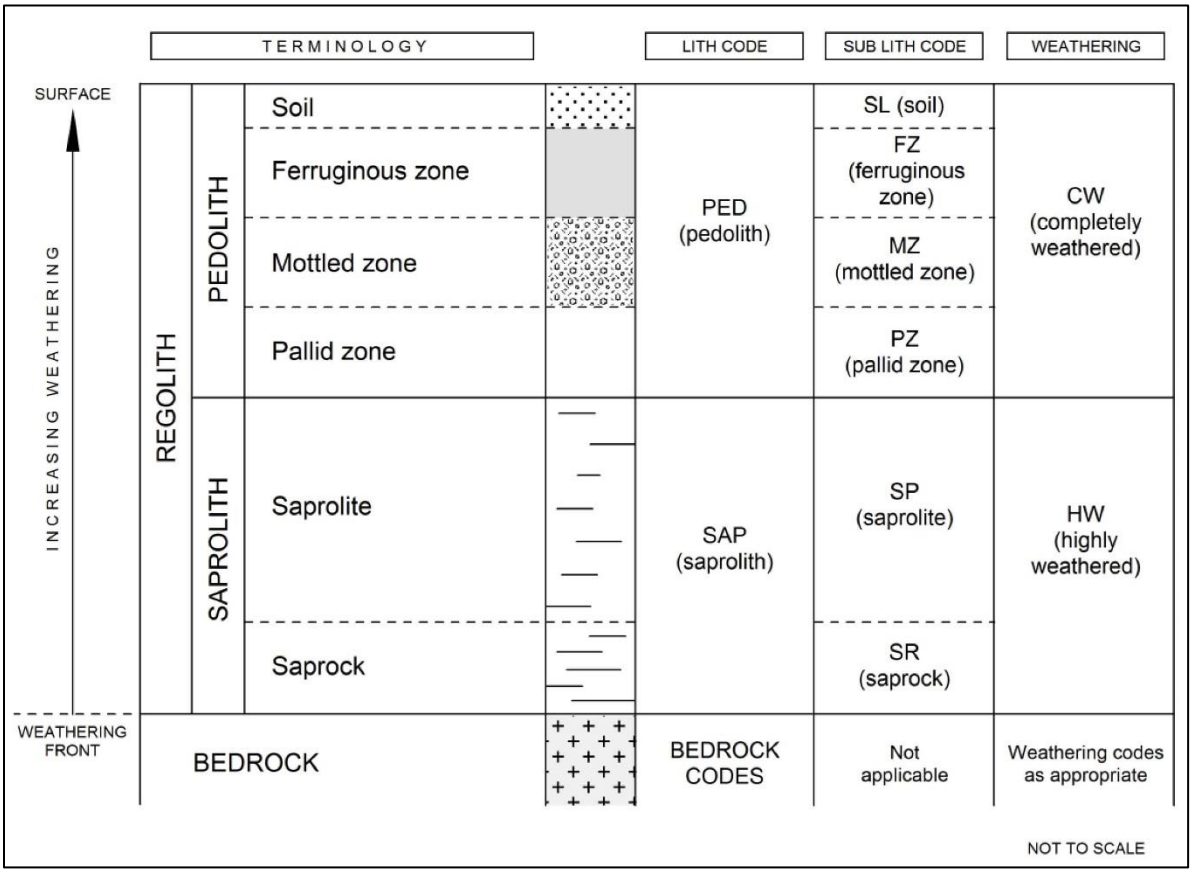
both residual / in-situ weathering products (in which all traces of the original bedrock textures and fabrics have been destroyed), and transported material (such as alluvium, colluvium and aeolian deposits). The pedolith or soil profile is erratically developed at the Vohitsara Project, in part due to the variable and hilly topography.

The saprolith comprises bedrock that is highly weathered, but where primary fabric (e.g. foliation) are still preserved. It typically consists of two subdivisions: saprolite and saprock:

- Saprolite is weathered rock in which at least 20 percent and possibly all weatherable primary minerals have been either psuedomorphically replaced or dissolved to leave voids.
- Saprock is typically defined as rock that is partially weathered where less than 20 percent of weatherable minerals have been replaced.

Figure 7.3 is a schematic cross-section through a regolith profile (modified from Eggleton, 2001) which is somewhat typical of the Vohitsara Project, although the all of layers will vary in actual depth and in some cases certain layers may not be present.

Figure 7.3
Schematic Cross-Section Through a Regolith Profile



Taken from Vato, November, 2017, modified from Eggleton, 2001.

7.4 GRAPHITE MINERALIZATION

Madagascar possesses very large quantities of excellent quality flake graphite. The bulk of production historically has been of large flake graphite (>98% GC); with the first commercial mining operation being commissioned in 1907. Between 1907 and 1927 the industry progressively modernized; first with conversion to flotation beneficiation followed by the gradual introduction of mechanized mining at the end of World War II.

The graphite mineralization occurs predominantly in quartzo-feldspathic schists and gneisses (+/- sillimanite, garnet and biotite), that have been variably weathered. The graphite, originally formed along cleavage and shear planes, remains relatively inert during the formation of the (lateritic) regolith, resulting in a free-dig graphitic ore material comprised of clays and other oxide minerals.

Graphite mineralization in Madagascar is concentrated primarily in the central and eastern-coastal areas of the country; within graphitic horizons of the highly prospective Manampotsy Formation between Toamasina, Brickaville and Moramanga. Most of the mineralization remains under or unexploited; with substantial quantities still available for commercial mining. The bulk of the deposits in the Tamatave-Moramanga belt form topographic highs that can be stripped via free-dig methods. This allows for very economical extraction of the mineralization.

Graphite production, historically the second largest official mineral product in Madagascar, totalled 10,600 t in 1992, down from 18,500 t in 1990. More recent production figures are difficult obtain. However, competition from other countries and price undercutting by Chinese interests; combined with a lack of investment in country infrastructure; have seriously eroded the graphite industry in Madagascar over the past 20 years.

Several graphite projects are in the process of being revived, expanded or worked on in Madagascar due to the quality of the deposits and its historical importance regarding larger flake size production.

8.0 DEPOSIT TYPES

Graphite is a soft crystalline form of carbon. It is opaque, charcoal gray in colour and has a silvery metallic lustre. It occurs naturally in metamorphic rocks and can also be found in veins and intrusive rocks like pegmatites. It is a good conductor; which can be useful as an exploration tool.

There are three (3) principal types of graphite mineralization (Bernier, et al. [SRK], 2015):

1. Amorphous graphite is the most abundant and lowest quality of graphite. It is so-called due to its small crystal size and lack of a (flake) crystal structure. China, Europe, Mexico and the US are known to host large deposits of amorphous graphite.
2. Crystalline (flake) graphite is less common and of a correspondingly higher quality and value than amorphous. It is formed primarily from recrystallization during metamorphosis of host sedimentary sequences. It has a large variety of uses and can be up to four (4) times the price of its amorphous counterpart. Madagascar is particularly well known for its high-quality flake graphite deposits; although Canada, Brazil, China and Europe also host deposits of this type.
3. Vein or lump is the rarest and highest value form of graphite. It occurs in veins along intrusive contacts and is currently only commercially mined in Sri Lanka.

According to Taylor (2006; as cited by SRK, 2015), economic graphite deposits can be classified into five (5) categories reflecting the different types of graphite:

1. Disseminated flake graphite in silica-rich meta-sedimentary rock.
2. Disseminated flake graphite in marble.
3. Metamorphosed coal seams.
4. Vein deposits.
5. Contact metasomatic or hydrothermal deposits in marbles or similar calcareous meta-sediments.

Deposits of categories 1 and 2 generally comprise disseminated flake graphite, while those of categories 3 and 5 comprise the amorphous variety.

Graphite mineralization at the Vohitsara Project comprises disseminated crystalline graphite (Type 2 form) hosted within weathered low-silica meta-sediments. The mineralization is most closely associated with category 1 in Taylor's classification even though it is in a low-silica meta sedimentary rock.

Airborne and ground electromagnetic surveying are effective early-stage targeting tools for locating graphite mineralisation. Properly interpreted ground magnetics (e.g. response inflection points) has also proven effective (Vato, pers comm, 2014).

Graphite is usually mined via open-cut methods; although vein deposits are almost exclusively extracted via underground mining. With the exception of vein deposits, the ores invariably require some degree of beneficiation. This is generally accomplished via a combination of grinding, screening and flotation. Flotation agents can assist in separating the graphite flake from associated gangue minerals.

Deposits hosted in free-dig material (weathered/oxidised regolith; esp. low silica saprolites) have a distinct advantage over their bedrock-hosted counterparts; specifically, the general lack of a requirement for milling/grinding of the economic rock, which is energy intensive and can reduce the size of graphite flakes in the process. Mineralization at the Vohitsara Project is hosted within kaolinite-rich (low-silica) saprolite that is weathered to a depth of 20 to 30 m below the natural surface, on average.

Figure 8.1 show graphite flakes littering the ground at the historical mining area in the northeast portion of the Vohitsara Project (Main Zone).

Figure 8.1
Graphite Flakes Littering the Ground in one of the Historical Mining Areas at the Main Zone

9.0 EXPLORATION

The following section contains a description of the exploration conducted only on the Vohitsara property; DNI has conducted no exploration on the Marofody property which comprises the second portion of the Vohitsara Project.

9.1 SUMMARY OF DNI EXPLORATION PROGRAMS

9.1.1 March, 2015 to January, 2016

During the period March, 2015 to January, 2016, DNI completed several site visits; during which trenching, surface sampling and ground geophysics were carried out. The exploration focussed primarily on delineating mineralization within the Main Zone.

The following information was partly extracted from and modified from the February 28, 2016 Technical Report by Hendry Consulting Sarl (Hendry Consulting):

9.1.1.1 Ground Prospecting and Sampling

DNI made initial site visit to evaluate the Vohitsara Project in March, 2015, to assess its potential for acquisition and development. Samples taken from test pits and historical workings returned head-grade results of 9.85%, 10.0% and 35.5% GC. Assaying was completed by independent consulting laboratory AGAT Laboratories Ltd. (AGAT Laboratories) in Ontario Canada, via washed Loss on Ignition (LOI) furnace method with Infrared detection (Furnace IR Finish)[1].

Subsequent testing for crystalline graphite content yielded the following flake size distribution, as summarized in Table 9.1.

Table 9.1
Flake Size Distribution from Initial Sampling on the Vohitsara Project

Flake Size	Flake Description	Flake Distribution (%)	Graphic Carbon (GC) Content (%)
+20 Mesh/+841 µm	Jumbo	13.70	97.90
+30 Mesh/+595 µm	Jumbo	1.90	n/a
+50 Mesh/+297 µm	Jumbo	40.00	96.70
+70 Mesh/+210 µm	Large	6.90	91.30
+100 Mesh/+149 µm	Medium	12.90	88.80
+140 Mesh/+105 µm	Small	4.20	87.30
+140 Mesh/+105 µm	Small	20.40	89.00
Total		**100**	

Table taken from the February 28, 2016 Technical Report.

[1] AGAT Laboratories is accredited for specific tests as listed in the laboratory's current scope of accreditation by the following organizations; The Standards Council of Canada (SCC), The Canadian Association for Laboratory Accreditation (CALA) and SAI Global. AGAT Laboratories is accredited for specific tests, to the following standard; ISO/IEC 17025:2005. AGAT Laboratories is certified to the following standard; ISO 9001:2015

The initial tests demonstrated that there was a Large to Jumbo flake distribution for the Vohitsara graphite of greater than 62.5% with associated GC content ranging from 91.3% to 97.9%.

Subsequent surface sampling during the July, 2015, trenching program returned results ranging from 3.00% GC to 7.30% GC and averaging 4.60% GC. Assaying methodology was identical to that used in the initial sampling program; with samples collected from the central portion of the Main Zone. Results are plotted on Figure 9.1.

9.1.1.2 Trenching

During July, 2015, DNI completed a trenching program over the Main Zone. The objective was to delineate a mineralized zone of sufficient tenor to justify follow-up drilling.

A total of five trenches totalling 75 line-metres of trenching were completed. Trenches were hand-dug and averaged 2 to 3 m in depth. A total of 73 samples were collected and submitted to AGAT Laboratories.

The results delineated a mineralized zone approximately 700 m in strike and averaging 250 to 300 m in width. Significant results are summarized in Table 9.2.

Table 9.2
Significant Results of the 2015 Trenching Program

Trench Number	General Location	Elevation above Sea Level (AMSL)	Sample Width (m)		Graphic Carbon (GC) Content (%)
Tr02	Hilltop	86	21		3.41
			including	1	10.60
			including	5	5.04
Tr03	Side-cut into a local topographic high	66	20		13.14
			including	5	18.48
			5 m includes	1	25.30
			including	10	14.90
			including	9	11.92

Data partly tabulated from the February 28, 2016 Technical Report.

A full listing of sample results from Tr 02 and Tr 03 for 2015 Trenching program, including the location of the significant interval, are summarized in Table 9.3.

Figure 9.1
Summary of the Trench and Surface Sample Locations and Assays for the Vohitsara Project

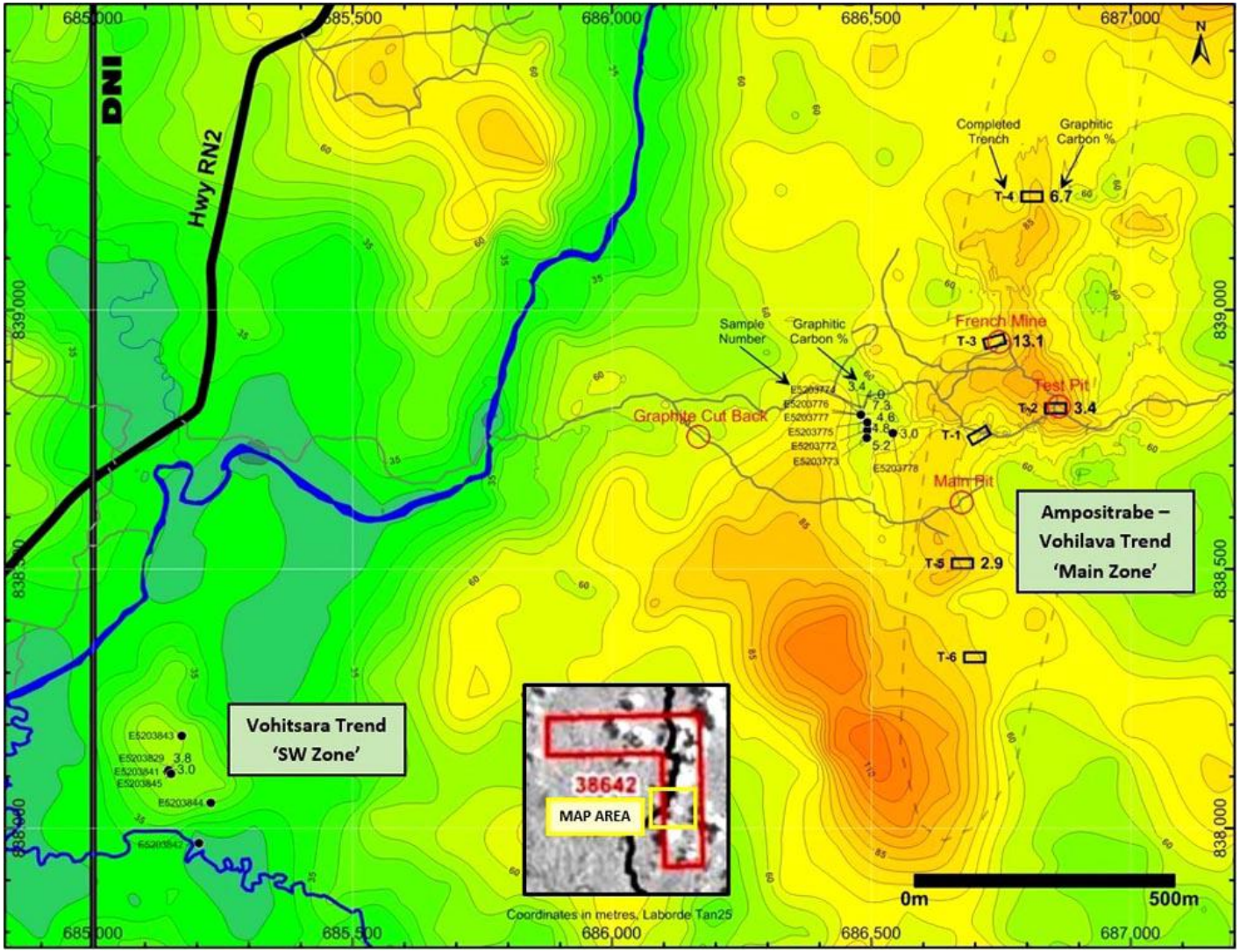


Figure taken from the February 28, 2016 Technical Report.

Table 9.3
Summary of the Individual and Significant Sample Results from the 2015 Trenches 02 and 03

Sample No.	Sample ID	Individual Sample Grade (% GC)	Individual Sample Length (m)	Significant Sample Composites			
				From (m)	To (m)	Total Length (m)	Average Grade (% GC)
E5203779	Tr02-01	5.90	1	0	1	1	5.90
E5203780	Tr02-02	4.10	1				
E5203781	Tr02-03	2.45	1				
E5203782	Tr02-04	1.97	1				
E5203783	Tr02-05	1.56	1				
E5203784	Tr02-06	1.29	1				
E5203785	Tr02-07	0.95	1				
E5203786	Tr02-08	2.80	1				
E5203787	Tr02-09	10.60	1	8	9	1	10.60
E5203788	Tr02-10	3.30	1				
E5203789	Tr02-11	1.24	1				
E5203790	Tr02-12	1.53	1				
E5203791	Tr02-13	4.17	1				
E5203792	Tr02-14	5.00	1				
E5203793	Tr02-15	6.50	1				
E5203794	Tr02-16	4.70	1				
E5203795	Tr02-17	4.65	1	12	17	5	5.00
E5203796	Tr02-18	3.44	1				
E5203797	Tr02-19	1.38	1				
E5203798	Tr02-20	0.55	1				
E5203799	Tr02-21	3.45	1	0	21	21	3.41
E5203800	Tr03-01	12.60	1				
E5203801	Tr03-02	10.40	1				
E5203802	Tr03-03	11.00	1				
E5203803	Tr03-04	10.20	1				
E5203804	Tr03-05	17.60	1				
E5203805	Tr03-06	25.30	1	5	6	1	25.30
E5203806	Tr03-07	15.70	1				
E5203807	Tr03-08	15.90	1				
E5203808	Tr03-09	17.90	1	5	9	4	18.48
E5203809	Tr03-10	12.40	1	0	10	10	14.90
E5203810	Tr03-11	6.50	1				
E5203811	Tr03-12	9.00	1				
E5203812	Tr03-13	9.50	1				
E5203813	Tr03-14	12.20	1				
E5203814	Tr03-15	11.80	1				
E5203815	Tr03-16	9.80	1				
E5203816	Tr03-17	15.00	1				
E5203817	Tr03-18	12.10	1				
E5203818	Tr03-19	13.50	1				
E5203819	Tr03-20	14.40	1	0	20	20	13.14
				14	20	6	12.69

Note: True width of the mineralized zones remains to be determined as it varies throughout the deposit.

9.1.1.3 Ground Geophysics

In conjunction with the trenching program, ground geophysics comprising magnetics and electromagnetics (Mag/EM) were completed over the Main Zone. The survey was completed using a GDD Instruments BM8 'Beep Mat' sled that can measure Mag/EM to 10 m below the surface with simultaneous GPS location.

The instrument operates via drag harness trailing behind the operator; who wears the data collection/control unit on a frontal pouch. Sampling rate was set to six readings per second.

Approximately 1,800 m of surveying was completed along six cross lines at 100 m to 250 m intervals along the strike of the Main Zone. A considerably larger amount of surveying was completed in an unstructured manner by dragging the instrument along various access trails as reconnaissance sampling. Figure 9.2 below is a 3D DTM/EM plot along the Main Zone with the trench locations shown for context. Stronger HFR responses are representative of stronger conductors.

Figure 9.2
Summary of the High-Frequency-Response (HFR) EM Data along the Main Zone

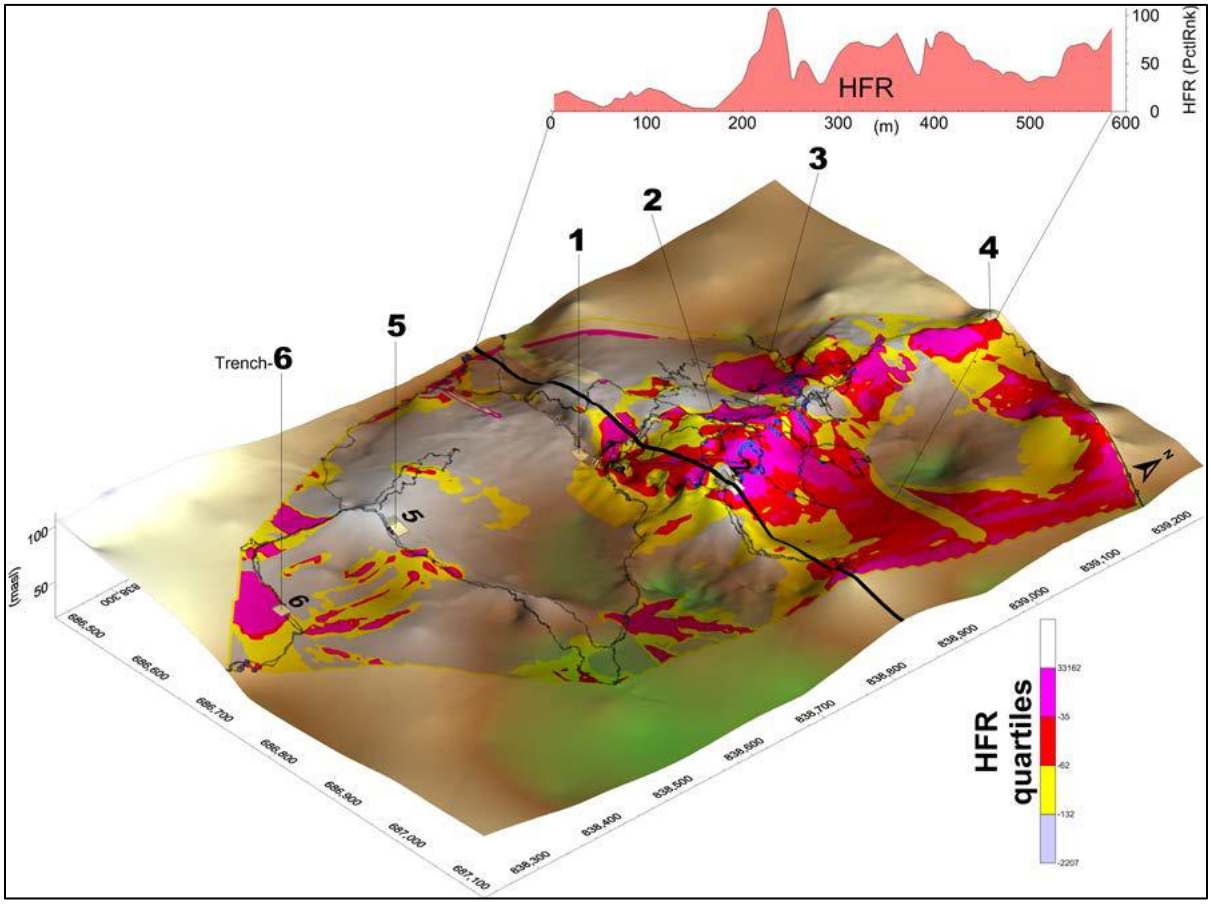


Figure taken from the February 28, 2016 Technical Report.

9.1.2 2017 Drilling Programs

In 2017, two drilling programs were instituted on the Vohitsara Project. The first drilling program consisted of RC holes begun as part of Cougar's earn-in expenditures on the Vohitsara Project. The second was a diamond drilling program begun by DNI.

The RC drilling program consisted of 56 holes totalling 1,634.50 m with all of the drilling occurring on mining permit 38642 Vohitsara. The total 1,634.50 m of drilling was comprised of 417.50 m on the Southwest Zone and 1,217 m on the Main Zone. The diameter of the RC drill holes was 89 mm.

The diamond drilling program consisted of 28 holes totalling 1,038.73 m with all of the drilling occurring on mining permit 38642 Vohitsara. The total 1,038.73 m of drilling was comprised of 165.68 m on the Southwest Zone and 873.05 m on the Main Zone. The diameter of the RC drill holes was HQ.

9.2 QUALIFIED PERSON COMMENTS

The exploration programs conducted by DNI to date on the Project have outlined the extent of the graphite mineralization at the Vohitsara Project. Further work will be needed to determine the full north-south extent of the graphite mineralization in the Southwest and Main Zones as well as identify the extent and tenure of the mineralization in a number of secondary zones which have been identified either historically or in recent road cuts.

10.0 DRILLING

To the QP's knowledge, no historical drilling had been completed within the area encompassed by the Vohitsara Project prior to DNI's program.

10.1 DRILL TYPES AT THE VOHITSARA PROJECT

Drilling to date has comprised of two types of drilling at the Vohitsara Project:

1. Reverse circulation (RC) drilling, also noted as Air Core drilling in literature for the Vohitsara Project.
2. Diamond core drilling.

10.1.1 Reverse Circulation Drilling

RC drilling uses hardened steel or tungsten blades to bore a hole into unconsolidated ground. The drill bit has three blades arranged around the bit head. The rods are hollow and contain an inner tube inside the hollow outer rod barrel.

The drilling mechanism is a pneumatic reciprocating piston known as a hammer, driving a tungsten-steel drill bit. RC drilling utilizes large rigs and machinery and depths of up to 300 m are routinely achieved. RC drilling ideally produces dry rock chips, as large air compressors dry the rock ahead of the advancing drill bit. RC drilling is slower and costlier but achieves better penetration than percussion rotary air blast drilling; it is less expensive than diamond coring and is thus preferred for mineral exploration work in a number of areas around the world.

Reverse circulation is achieved by blowing air down the rods, with the differential pressure creating air lift of the water and cuttings up the inner tube. The cuttings reach the bell at the top of the hole, then move through a sample hose which is attached to the top of the cyclone. The drill cuttings travel around the inside of the cyclone until they fall through an opening at the bottom and are collected in a sample bag or pail.

Although RC drilling is air-powered, water is also used, to reduce dust, keep the drill bit cool, and assist in pushing the cuttings back upwards. A drilling mud is mixed with water and pumped into the rod string, down the hole. When the drill reaches hard rock, a collar is put down the hole around the rods. Collaring a hole prevents the walls from caving in and bogging the rod string at the top of the hole.

Recoveries of the material from RC drilling at the Vohitsara Project were generally good however, due to the nature of the saprolites, the recoveries can and did vary with the material encountered. The RC drilling recoveries within the mineralized zones were sufficient (80% +) to conduct a mineral resource estimate.

10.1.2 Diamond Core Drilling

Diamond core drilling utilizes an annular diamond-impregnated drill bit attached to the end of hollow drill rods to cut a cylindrical core of solid rock. The diamonds used are fine to microfine industrial grade diamonds. They are set within a matrix of varying hardness, from brass to high-grade steel. Holes within the bit allow water to be delivered to the cutting face.

Core samples are retrieved via the use of a lifter tube, a hollow tube lowered inside the rod string by a winch cable until it stops inside the core barrel. As drilling proceeds, the core barrel slides over the core as it is cut. The winch is then retracted, pulling the core barrel to the surface.

Once the core barrel is removed from the hole, the core is removed and catalogued. The core is washed, measured and broken into smaller pieces to make it fit into the sample trays.

Diamond rigs can also be part of a multi-combination rig. Multi-combination rigs are capable of operating in either an RC or diamond drilling mode (though not at the same time). This is a common scenario where exploration drilling is being performed in an isolated location.

In general, core recovery for the diamond drill holes at the Vohitsara Project was better than 88.02% with some core loss occurring in the soft/sandy completely to highly weathered zones.

10.2 DIAMOND DRILLING PROCEDURES

Prior to conducting a drilling program DNI first needed to obtain an environmental permit. The environmental permit is good for the life of the Project, with further environmental studies needed as a project advances towards a production decision.

A partial summary of DNI's general drill set-up and drilling procedures are as follows:

- Locate the planned drill hole collar using a handheld GPS, using the WGS84, UTM Zone 39S projection system.
- For angled drilling, the azimuth must be checked by the geologist using a compass that takes into account local magnetic declination, while avoiding interference from the metal construction of the rig.
- Once the drill rig is set up, but prior to the commencement of drilling, double check the azimuth and dip of the drill hole, making use of a clinoruler or compass clinometer.
- All drillholes are named and numbered sequentially as drilled with the following designation e.g. VHTDD001, VHTDD002, VHTDD003, etc. No a, b, c nomenclature should be used, except for failed holes from same collar.
- During drilling, verify the accurate measurement and recording of depth and observe and record the colour of the water/mud rising from the drill hole.

After each drill hole was completed, the collar location was marked with a cement marker denoting the drill hole number. Figure 10.1 is a photograph of the cement marker located in

the Southwest Zone on Platform VHT075 marking RC drill hole VHTAC042 and close by the marker for diamond drill Hole VHTDD006. Most of the markers were located during the site visit for the drill holes that were visited. However, drill sites can become overgrown in a fairly short period and markers have become obscured in many instances.

Figure 10.1
Cement Markers for the RC and Diamond Drill Collar Locations in the Southwest Zone

10.3 VOHITSARA PROJECT DRILLING PROGRAMS

10.3.1 RC Drilling Program

The current drilling information related to the RC drilling program conducted in 2017 was begun as part of Cougar's earn-in expenditures on the Vohitsara Project. While Cougar conducted the RC drilling program using its own drill rigs, Vato personnel were primarily responsible for outlining the program and conducting the day to day work at the site.

The RC drilling program consisted of 56 holes totalling 1,634.50 m with all of the drilling occurring on mining permit 38642 Vohitsara. The total 1,634.50 m of drilling is comprised of 417.50 m on the Southwest Zone and 1,217 m on the Main Zone. The diameter of the RC drill holes was 89 mm. Table 10.1 summarizes the collar information for the RC drilling conducted at the Vohitsara Project.

Table 10.1
Summary of the RC Drilling at the Vohitsara Project

Mineralized Zone	Platform ID	Drill Collar ID	UTM X Co-ordinates	UTM Y Co-ordinates	Elevation (m)	Azimuth (°)	Inclination (°)	Length (m)
Southwest	VHT065	VHTAC001	303,621	7,949,566	35	0	-90	30.00
Southwest	VHT068	VHTAC002	303,614	7,949,487	34	0	-90	29.00
Southwest	VHT071	VHTAC003	303,610	7,949,398	28	0	-90	14.00
Southwest	VHT070	VHTAC004	303,531	7,949,400	26	0	-90	20.00
Southwest	VHT074	VHTAC005	303,621	7,949,647	31	0	-90	25.00
Southwest	VHT073	VHTAC006	303,542	7,949,645	39	0	-90	14.50
Southwest	VHT065a	VHTAC007	303,621	7,949,566	35	40	-60	20.00
Southwest	VHT066	VHTAC008	303,488	7,949,564	66	0	-90	22.00
Southwest	VHT067	VHTAC009	303,547	7,949,564	73	0	-90	32.50
Southwest	VHT064	VHTAC010	303,545	7,949,483	47	0	-90	20.00
Southwest	VHT072	VHTAC011	303,460	7,949,644	46	0	-90	8.50
Southwest	VHT063	VHTAC012	303,460	7,949,487	49	0	-90	25.00
Southwest	VHT069	VHTAC013	303,442	7,949,424	40	0	-90	8.50
Main	VHT025	VHTAC014	305,048	7,950,215	68	0	-90	29.50
Main	VHT016	VHTAC015	305,125	7,950,367	74	0	-90	29.50
Main	VHT019	VHTAC016	305,044	7,950,281	73	0	-90	49.00
Main	VHT020	VHTAC017	305,111	7,950,293	86	0	-90	28.00
Main	VHT024	VHTAC018	305,119	7,950,214	74	0	-90	26.50
Main	VHT023	VHTAC019	305,193	7,950,210	93	0	-90	31.00
Main	VHT028	VHTAC020	305,120	7,950,145	52	0	-90	20.50
Main	VHT029	VHTAC021	305,207	7,950,139	54	0	-90	38.50
Main	VHT030	VHTAC022	305,282	7,950,084	47	0	-90	34.00
Main	VHT027	VHTAC023	305,035	7,950,135	78	0	-90	26.50
Main	VHT026	VHTAC024	305,272	7,950,212	90	0	-90	35.50
Main	VHT018	VHTAC025	305,194	7,950,371	82	0	-90	31.00
Main	VHT021	VHTAC026	305,193	7,950,286	68	0	-90	38.50
Main	VHT007	VHTAC027	305,120	7,950,528	84	0	-90	37.00
Main	VHT012	VHTAC028	305,124	7,950,443	72	0	-90	32.50
Main	VHT002	VHTAC029	305,110	7,950,609	71	0	-90	40.00
Main	VHT006	VHTAC030	305,051	7,950,540	83	0	-90	34.00
Main	VHT001	VHTAC031	305,033	7,950,611	61	0	-90	31.00
Main	VHT008	VHTAC032	305,158	7,950,539	76	0	-90	44.50
Main	VHT003	VHTAC033	305,181	7,950,614	86	0	-90	29.50
Main	VHT022	VHTAC034	305,272	7,950,286	45	0	-90	40.00
Main	VHT017	VHTAC035	305,270	7,950,369	53	0	-90	25.00
Main	VHT004	VHTAC036	305,254	7,950,611	77	0	-90	44.50
Main	VHT005	VHTAC037	305,351	7,950,608	72	0	-90	40.00
Main	VHT010	VHTAC038	305,333	7,950,514	67	0	-90	35.50
Main	VHT013	VHTAC039	305,198	7,950,442	73	0	-90	40.00
Main	VHT014	VHTAC040	305,256	7,950,475	61	0	-90	35.50
Main	VHT009	VHTAC041	305,252	7,950,549	45	0	-90	37.00
Southwest	VHT075	VHTAC042	303,692	7,949,558	35	0	-90	38.50
Southwest	VHT076	VHTAC043	303,693	7,949,474	30	0	-90	38.50
Southwest	VHT077	VHTAC044	303,694	7,949,403	28	0	-90	15.50
Southwest	VHT079	VHTAC045	303,791	7,949,504	31	0	-90	26.50
Southwest	VHT078	VHTAC046	303,776	7,949,553	45	0	-90	29.50
Main	VHT037	VHTAC047	305,102	7,949,966	78	0	-90	38.50
Main	VHT038	VHTAC048	305,193	7,949,967	75	0	-90	32.50
Main	VHT032	VHTAC049	305,105	7,950,048	60	0	-90	19.00
Main	VHT040	VHTAC050	304,967	7,949,883	93	0	-90	26.50
Main	VHT045	VHTAC051	304,952	7,949,808	99	0	-90	17.50
Main	VHT031	VHTAC052	305,038	7,950,064	68	0	-90	32.50
Main	VHT036	VHTAC053	305,025	7,949,964	96	0	-90	16.00

Mineralized Zone	Platform ID	Drill Collar ID	UTM X Co-ordinates	UTM Y Co-ordinates	Elevation (m)	Azimuth (˚)	Inclination (˚)	Length (m)
Main	VHT035	VHTAC054	304,970	7,949,969	84	0	-90	17.50
Main	VHT039	VHTAC055	305,258	7,949,973	62	0	-90	26.50
Main	VHT046	VHTAC056	305,035	7,949,780	95	0	-90	26.50
Southwest Total								**417.50**
Main Total								**1,217.00**
Total Program								**1,634.50**

The true widths of the graphite mineralization are generally masked when RC drilling is conducted as most sampling is conducted using a sample length that equals the drill run length which is at least one metre, therefore, any mineralization less than 1 m is treated as 1 m for logging and sampling purposes. All of the RC drilling was conducted using vertical drill holes therefore, while the width of the mineralization can be logged, the true width of the mineralization is at an oblique angle to the drilling and because the true contacts of the mineralized lenses are not specifically known the true width of the mineralization can not be determined.

All drill holes were logged, however only those with graphite mineralization were sampled and assayed. The some of the holes not sampled were due to their being drilled entirely within the occasional dolerite dykes that cross-cut the mineralized zones while others lay beyond the extent of the mineralized zone. All RC drill hole samples have been retained and they can be resampled and assayed, if needed. Table 10.2 summarizes the RC drill holes that were logged but not sampled.

Table 10.2
Summary of the RC Drill Holes Logged but Not Sampled at the Vohitsara Project

Mineralized Zone	Drill Collar ID	UTM X Co-ordinates	UTM Y Co-ordinates	Elevation (m)	Azimuth (˚)	Inclination (˚)	Length (m)
Southwest	VHTAC011	303,460	7,949,644	46	0	-90	8.50
Southwest	VHTAC013	303,442	7,949,424	40	0	-90	8.50
Main	VHTAC020	305,120	7,950,145	52	0	-90	20.50
Main	VHTAC022	305,282	7,950,084	47	0	-90	34.00
Main	VHTAC023	305,035	7,950,135	78	0	-90	26.50
Main	VHTAC024	305,272	7,950,212	90	0	-90	35.50
Main	VHTAC031	305,033	7,950,611	61	0	-90	31.00
Main	VHTAC034	305,272	7,950,286	45	0	-90	40.00
Main	VHTAC037	305,351	7,950,608	72	0	-90	40.00
Main	VHTAC038	305,333	7,950,514	67	0	-90	35.50
Main	VHTAC055	305,258	7,949,973	62	0	-90	26.50

10.3.2 Diamond Drilling Program

In 2017, as part of a separate drilling program DNI engaged a core drilling contractor to test the graphite mineralization at the Vohitsara Project at various locations within the Southwest and Main Zones. In a number of cases, the core drilling twinned the RC drilling.

The diamond drilling program commenced on August 15, 2017 and consisted of 28 holes totalling 1,038.73 m, with all of the drilling occurring on mining permit 38642 Vohitsara. The

total 1,038.73 m of drilling is comprised of 165.68 m on the Southwest Zone and 873.05 m on the Main Zone. The diameter of the RC drill holes was HQ.

Table 10.3 summarizes the collar information for the diamond drilling conducted at the Vohitsara Project.

Table 10.3
Summary of the Diamond Drilling at the Vohitsara Project

Mineralized Zone	Platform ID	Drill Collar ID	UTM X Co-ordinates	UTM Y Co-ordinates	Elevation (m)	Azimuth (°)	Inclination (°)	Length (m)
Southwest	VHT067	VHTDD001	303,547	7,949,564	73	0	-90	32.27
Southwest	VHT068	VHTDD002	303,614	7,949,487	34	0	-90	29.33
Southwest	VHT071	VHTDD003	303,610	7,949,398	28	0	-90	30.42
Southwest	VHT077	VHTDD004	303,694	7,949,403	28	0	-90	15.42
Southwest	VHT076	VHTDD005	303,693	7,949,474	30	0	-90	38.50
Southwest	VHT075	VHTDD006	303,692	7,949,558	35	0	-90	19.74
Main	VHT025	VHTDD007	305,048	7,950,215	68	0	-90	23.96
Main	VHT019	VHTDD008	305,044	7,950,281	73	0	-90	48.37
Main	VHT003	VHTDD009	305,181	7,950,614	86	0	-90	28.47
Main	VHT007	VHTDD010	305,120	7,950,528	84	0	-90	37.36
Main	VHT012	VHTDD011	305,124	7,950,443	72	0	-90	32.51
Main	VHT023	VHTDD012	305,193	7,950,210	93	0	-90	34.34
Main	NA	VHTDD013	305,222	7,950,265	95	90	-60	53.37
Main	NA	VHTDD014	305,157	7,950,278	94	90	-60	52.14
Main	NA	VHTDD015	304,923	7,950,341	92	0	-90	42.30
Main	NA	VHTDD016	305,082	7,950,281	85	90	-60	54.21
Main	NA	VHTDD017	305,051	7,950,281	85	90	-60	37.70
Main	VHT004	VHTDD018	305,256	7,950,607	76	90	-60	40.15
Main	VHT003	VHTDD019	305,184	7,950,619	80	90	-60	64.94
Main	VHT012	VHTDD020	305,131	7,950,440	76	90	-60	36.30
Main	VHT002	VHTDD021	305,114	7,950,600	87	90	-60	56.72
Main	VHT011	VHTDD022	305,068	7,950,453	54	0	-90	28.02
Main	VHT011	VHTDD023	305,065	7,950,455	54	90	-60	35.82
Main	VHT015	VHTDD024	305,037	7,950,361	72	0	-90	29.42
Main	VHT015	VHTDD025	305,036	7,950,361	72	90	-60	24.20
Main	VHT015	VHTDD026	305,077	7,950,406	57	90	-60	26.84
Main	NA	VHTDD027	305,113	7,950,189	66	90	-60	43.72
Main	VHT025	VHTDD028	305,047	7,950,216	78	90	-60	42.19
Southwest Total								**165.68**
Main Total								**873.05**
Total Program								**1,038.73**

A total of 12 diamond drill holes twinned RC drill holes; the remainder were in-fill drill holes with one then being used as a new water well for the community of Ambatolampy. Table 10.4 summarizes the diamond drill holes which twinned the RC drill holes.

The diamond drill holes were either vertical (-90°) or drilled at an oblique angel of -60°. Therefore, while the width of the mineralization can be logged, the true width of the mineralization is at an oblique angle to the drilling and the true width of the mineralized zone can not always be readily determined. During the next exploration it is recommended that the drilling is angled such that the true width of the mineralization is readily apparent in the drill holes.

Table 10.4
Summary of the Diamond Drill Holes Which Twinned the RC Drill Holes

Mineralized Zone	Platform ID	Drill Collar ID	RC Drill Hole Twinned
Southwest	VHT067	VHTDD001	VHTAC009
Southwest	VHT068	VHTDD002	VHTAC002
Southwest	VHT071	VHTDD003	VHTAC003
Southwest	VHT077	VHTDD004	VHTAC044
Southwest	VHT076	VHTDD005	VHTAC043
Southwest	VHT075	VHTDD006	VHTAC042
Main	VHT025	VHTDD007	VHTAC014
Main	VHT019	VHTDD008	VHTAC016
Main	VHT003	VHTDD009	VHTAC033
Main	VHT007	VHTDD010	VHTAC027
Main	VHT012	VHTDD011	VHTAC028
Main	VHT023	VHTDD012	VHTAC019

All diamond drill holes were logged and sampled. The core was split using a saw and half of the core was retained and is stored in a secure location in the village of Vohitsara along with other exploration equipment.

Figure 10.2 shows the general locations of the RC and diamond drill holes in both the Southwest and Main Zones.

Figure 10.3 shows the location of the individual RC and diamond drill holes in the Southwest Zone.

Figure 10.4 shows the location of the individual RC and diamond drill holes in the Main Zone.

10.4 SIGNIFICANT RESULTS FROM THE RC AND DIAMOND DRILLING PROGRAMS

Table 10.5 summarizes the significant assay results for the RC drilling in the Southwest Zone.

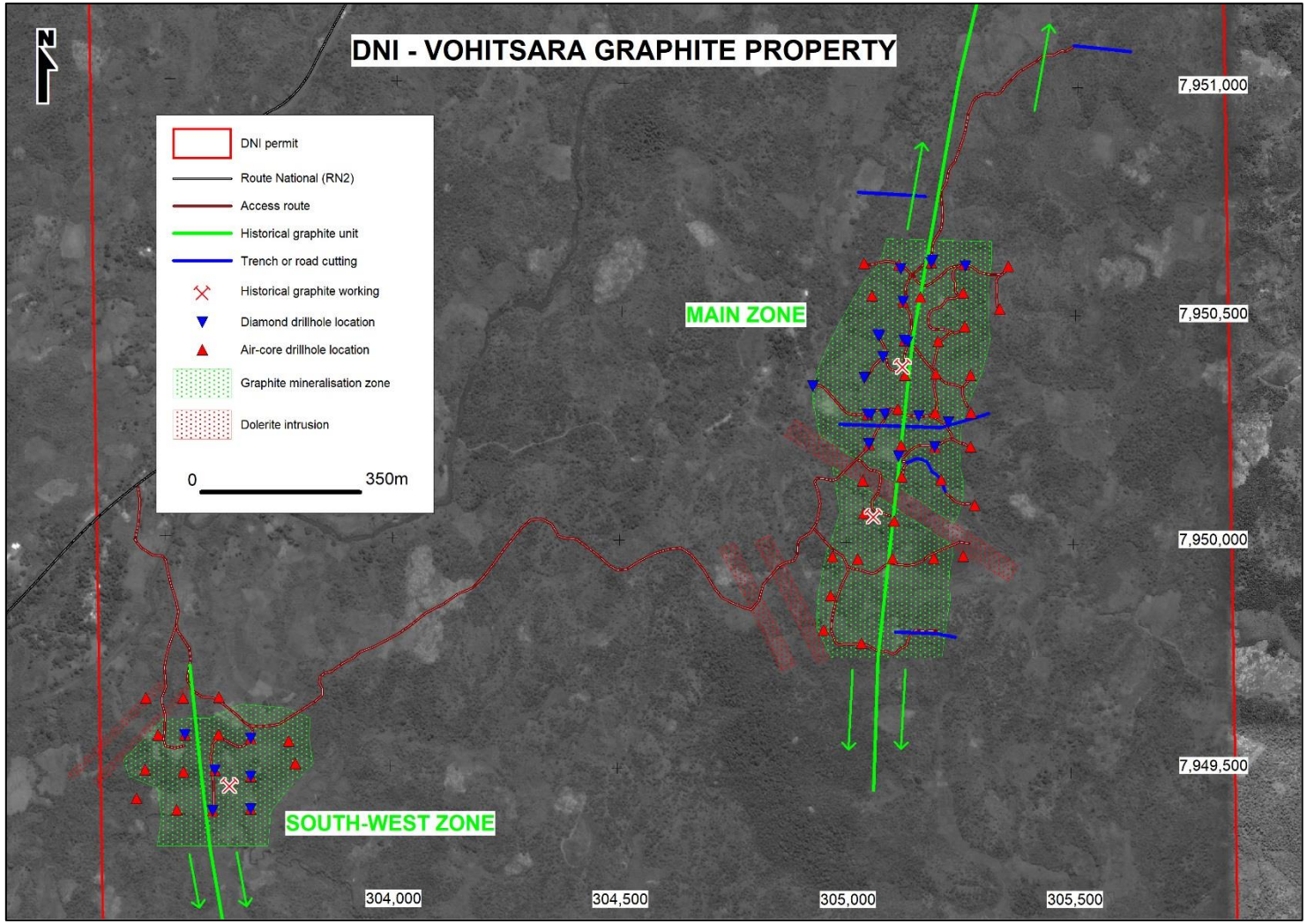
Table 10.6 summarizes the significant assay results for the diamond drilling in the Southwest Zone.

Table 10.7 summarizes the significant assay results for the RC drilling in the Main Zone.

Table 10.8 summarizes the significant assay results for the diamond drilling in the Main Zone.

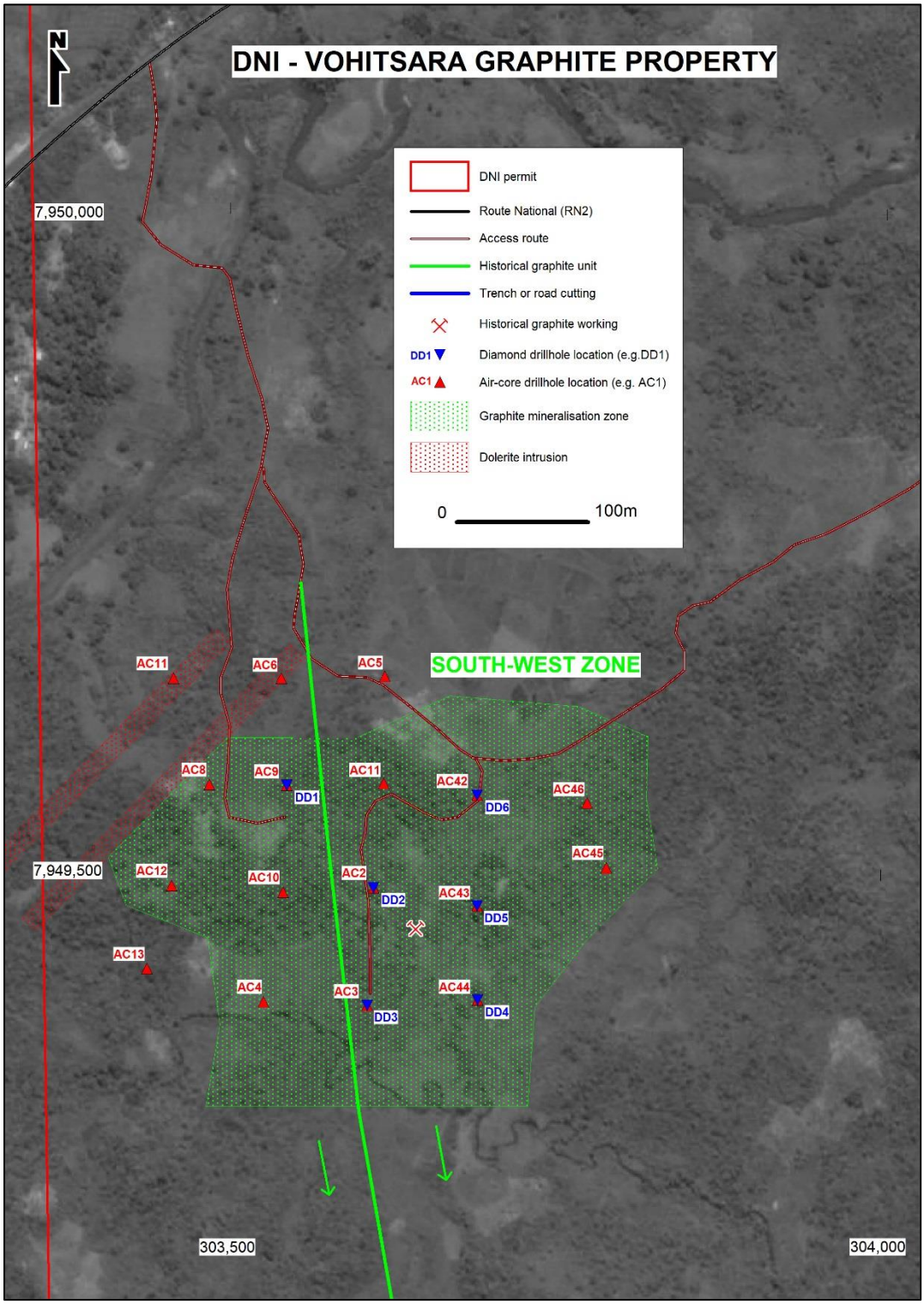
Significant results for the Vohitsara Project are those that are over 3% GC.

Figure 10.2
General RC and Diamond Drill Hole Locations in the Southwest and Main Zones for the Vohitsara Project



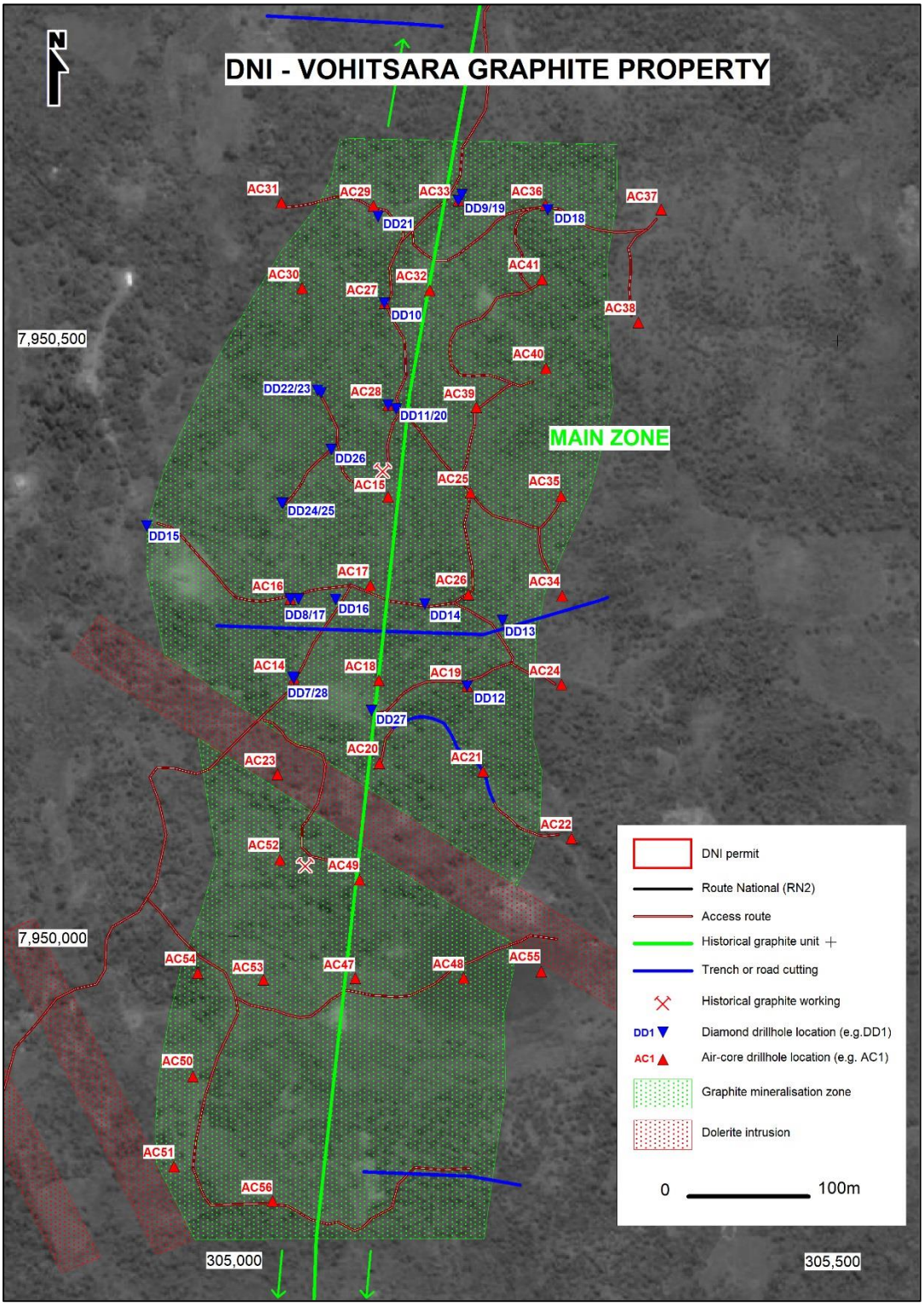
Map supplied by DNI/Vato, January, 2019.

Figure 10.3
Location of Individual RC and Diamond Drill Holes in the Southwest Zone



Map supplied by DNI/Vato, January, 2019.

Figure 10.4
Location of Individual RC and Diamond Drill Holes in the Main Zone



Map supplied by DNI/Vato, January, 2019.

Table 10.5
Significant Assay Results for the RC Drilling in the Southwest Zone

Platform ID	Drill Collar ID	Sample				
		ID	From (m)	To (m)	Intersection Width (m)	Graphite Grade (%)
VHT068	VHTAC002	E5813536	0.00	1.00	1.00	3.29
		E5813537	1.00	2.50	1.50	3.93
		E5813539	4.00	5.50	1.50	3.11
VHT071	VHTAC003	E5814959	3.00	4.00	1.00	3.03
		E5814962	6.00	7.00	1.00	3.13
		E5814966	10.00	11.00	1.00	3.10
VHT065a	VHTAC007	E5813194	3.00	4.00	1.00	3.31
VHT066	VHTAC008	E5811292	1.00	2.50	1.50	3.70
		E5811293	2.50	4.00	1.50	3.76
		E5811294	4.00	5.50	1.50	3.85
		E5811295	5.50	7.00	1.50	3.53
		E5811296	7.00	8.50	1.50	4.27
		E5811297	8.50	10.00	1.50	3.08
VHT067	VHTAC009	E5815015	4.00	5.50	1.50	3.14
		E5815016	5.50	7.00	1.50	3.14
		E5815017	7.00	8.50	1.50	3.82
		E5815031	28.00	29.50	1.50	3.06
VHT063	VHTAC012	E5811281	8.50	10.00	1.50	4.54
		E5811283	11.50	13.00	1.50	3.25
		E5811285	14.50	16.00	1.50	3.05
		E5811286	16.00	17.50	1.50	3.23
VHT075	VHTAC042	E5812363	1.00	2.50	1.50	4.15
		E5812366	5.50	7.00	1.50	4.32
		E5812368	8.50	10.00	1.50	4.26
VHT079	VHTAC045	E5812393	1.00	2.50	1.50	3.14
		E5812394	2.50	4.00	1.50	3.03
VHT078	VHTAC046	E5812347	10.00	11.50	1.50	4.26
		E5812348	11.50	13.00	1.50	9.04
		E5812349	13.00	14.50	1.50	5.28
		E5812359	26.50	28.00	1.50	3.23
		E5812361	28.00	29.50	1.50	3.74

Table 10.6
Significant Assay Results for the Diamond Drilling in the Southwest Zone

Platform ID	Drill Collar ID	Sample				
		ID	From (m)	To (m)	Intersection Width (m)	Graphite Grade (%)
VHT067	VHTDD001	E5811604	4.00	5.50	1.50	3.55
		E5811605	5.50	7.00	1.50	3.81
		E5811606	7.00	8.50	1.50	3.72
		E5811607	8.50	10.00	1.50	3.21
		E5811622	28.00	29.50	1.50	3.36
VHT068	VHTDD002	E5811626	0.00	1.00	1.00	3.41
		E5811627	1.00	2.50	1.50	4.22
		E5811629	4.00	5.50	1.50	3.30

Platform ID	Drill Collar ID	Sample				
		ID	From (m)	To (m)	Intersection Width (m)	Graphite Grade (%)
		E5811643	21.50	23.00	1.50	3.00
		E5811644	23.00	24.50	1.50	3.35
VHT071	VHTDD003	E5811663	14.00	15.00	1.00	3.00
VHT076	VHTDD005	E5811935	35.50	37.00	1.50	7.06
		E5811936	37.00	38.50	1.50	3.40
VHT075	VHTDD006	E5811942	5.50	7.00	1.50	5.94
		E5811944	8.50	10.00	1.50	3.43
		E5811945	10.00	11.50	1.50	5.00

Table 10.7
Significant Assay Results for the RC Drilling in the Main Zone

Platform ID	Drill Collar ID	Sample				
		ID	From (m)	To (m)	Intersection Width (m)	Graphite Grade (%)
VHT025	VHTAC014	E5814868	0.00	1.00	1.00	6.86
		E5814869	1.00	2.50	1.50	5.08
		E5814870	2.50	4.00	1.50	8.22
		E5814871	4.00	5.50	1.50	9.21
		E5814872	5.50	7.00	1.50	8.67
		E5814873	7.00	8.50	1.50	8.44
		E5814874	8.50	10.00	1.50	6.08
		E5814875	10.00	11.50	1.50	5.26
		E5814880	17.50	19.00	1.50	3.10
VHT016	VHTAC015	E5814895	8.50	10.00	1.50	3.12
		E5814896	10.00	11.50	1.50	5.44
		E5814898	13.00	14.50	1.50	5.38
		E5814899	14.50	16.00	1.50	3.76
		E5814900	16.00	17.50	1.50	5.31
		E5814152	19.00	20.50	1.50	4.55
		E5814156	25.00	26.50	1.50	5.11
		E5814157	26.50	28.00	1.50	5.94
		E5814158	28.00	29.50	1.50	4.56
VHT019	VHTAC016	E5814161	2.50	4.00	1.50	3.78
		E5814166	10.00	11.50	1.50	6.25
		E5814167	11.50	13.00	1.50	6.78
		E5814168	13.00	14.50	1.50	3.54
		E5814169	14.50	16.00	1.50	7.22
		E5814170	16.00	17.50	1.50	6.09
		E5814171	17.50	19.00	1.50	4.26
		E5814172	19.00	20.50	1.50	8.68
		E5814173	20.50	22.00	1.50	10.20
		E5814174	22.00	23.50	1.50	12.90
		E5814175	23.50	25.00	1.50	4.78
		E5814177	26.50	28.00	1.50	3.30
		E5814178	28.00	29.50	1.50	3.77
		E5814181	32.50	34.00	1.50	3.85
		E5814183	35.50	37.00	1.50	5.49
		E5814184	37.00	38.50	1.50	4.38

Platform ID	Drill Collar ID	Sample				
		ID	From (m)	To (m)	Intersection Width (m)	Graphite Grade (%)
VHT024	VHTAC018	E5810931	4.00	5.50	1.50	4.82
		E5810932	5.50	7.00	1.50	5.85
		E5810933	7.00	8.50	1.50	6.48
		E5810934	8.50	10.00	1.50	8.01
		E5810935	10.00	11.50	1.50	9.89
		E5810936	11.50	13.00	1.50	6.77
		E5810937	13.00	14.50	1.50	5.83
		E5810946	25.00	26.50	1.50	3.44
VHT023	VHTAC019	E5811209	1.00	2.50	1.50	4.59
		E5811211	2.50	4.00	1.50	4.35
		E5811212	4.00	5.50	1.50	6.13
		E5811213	5.50	7.00	1.50	4.48
		E5811215	8.50	10.00	1.50	5.17
		E5811216	10.00	11.50	1.50	3.62
		E5811217	11.50	13.00	1.50	5.64
		E5811218	13.00	14.50	1.50	6.13
		E5811219	14.50	16.00	1.50	11.80
		E5811221	16.00	17.50	1.50	14.00
		E5811222	17.50	19.00	1.50	8.07
		E5811223	19.00	20.50	1.50	7.48
		E5811224	20.50	22.00	1.50	4.65
		E5811226	22.00	23.50	1.50	6.94
		E5811227	23.50	25.00	1.50	4.32
		E5811228	25.00	26.50	1.50	7.02
		E5811231	28.00	29.50	1.50	8.39
		E5811232	29.50	31.00	1.50	5.09
VHT029	VHTAC021	E5812255	10.00	11.50	1.50	6.24
		E5812263	20.50	22.00	1.50	3.40
VHT018	VHTAC025	E5814399	7.00	8.50	1.50	3.81
		E5814400	8.50	10.00	1.50	3.54
		E5813951	10.00	11.50	1.50	8.16
		E5813952	11.50	13.00	1.50	6.62
		E5813953	13.00	14.50	1.50	3.46
		E5813954	14.50	16.00	1.50	6.77
		E5813955	16.00	17.50	1.50	5.49
		E5813957	19.00	20.50	1.50	6.90
		E5813958	20.50	22.00	1.50	5.82
		E5813959	22.00	23.50	1.50	7.74
		E5813960	23.50	25.00	1.50	8.08
		E5813961	25.00	26.50	1.50	3.55
VHT021	VHTAC026	E5810953	2.50	4.00	1.50	6.55
		E5810954	4.00	5.50	1.50	4.51
		E5810955	5.50	7.00	1.50	4.09
		E5810956	7.00	8.50	1.50	3.78
		E5810959	11.50	13.00	1.50	4.62
		E5810963	17.50	19.00	1.50	4.10
		E5810964	19.00	20.50	1.50	13.40
		E5810965	20.50	22.00	1.50	7.06
		E5810966	22.00	23.50	1.50	5.74

Platform ID	Drill Collar ID	Sample				
		ID	From (m)	To (m)	Intersection Width (m)	Graphite Grade (%)
		E5810967	23.50	25.00	1.50	5.35
		E5810968	25.00	26.50	1.50	6.09
		E5810969	26.50	28.00	1.50	10.30
		E5810970	28.00	29.50	1.50	9.00
		E5810971	29.50	31.00	1.50	10.90
		E5810972	31.00	32.50	1.50	9.46
		E5810973	32.50	34.00	1.50	6.96
		E5810974	34.00	35.50	1.50	11.30
		E5810975	35.50	37.00	1.50	4.51
VHT007	VHTAC027	E5813993	7.00	8.50	1.50	5.46
		E5813996	11.50	13.00	1.50	3.91
		E5813997	13.00	14.50	1.50	3.20
		E5813998	14.50	16.00	1.50	3.38
		E5814431	19.00	20.50	1.50	6.16
		E5814439	31.00	32.50	1.50	4.24
		E5814441	32.50	34.00	1.50	6.01
		E5814442	34.00	35.50	1.50	7.68
		E5814443	35.50	37.00	1.50	5.62
VHT012	VHTAC028	E8511126	2.50	4.00	1.50	5.24
		E8511127	4.00	5.50	1.50	5.13
		E5811128	5.50	7.00	1.50	6.53
		E8511129	7.00	8.50	1.50	5.16
		E5811132	10.00	11.50	1.50	11.40
		E5811133	11.50	13.00	1.50	7.52
		E5811134	13.00	14.50	1.50	3.32
		E5811135	14.50	16.00	1.50	4.98
		E5811136	16.00	17.50	1.50	3.24
		E5811142	23.50	25.00	1.50	9.43
		E5811143	25.00	26.50	1.50	3.24
		E5811145	28.00	29.50	1.50	4.13
		E5811146	29.50	31.00	1.50	4.58
		E5811147	31.00	32.50	1.50	3.78
VHT002	VHTAC029	E5811317	13.00	14.50	1.50	4.50
		E5811318	14.50	16.00	1.50	11.00
		E5811319	16.00	17.50	1.50	9.85
		E5811321	17.50	19.00	1.50	12.30
		E5811322	19.00	20.50	1.50	9.55
		E5811323	20.50	22.00	1.50	3.12
		E5811329	28.00	29.50	1.50	3.08
VHT006	VHTAC030	E5811171	29.50	31.00	1.50	3.30
		E5811172	31.00	32.50	1.50	3.16
VHT008	VHTAC032	E5811187	16.00	17.50	1.50	4.30
		E5811197	29.50	31.00	1.50	3.76
VHT003	VHTAC033	E5811107	8.50	10.00	1.50	10.20
		E5811108	10.00	11.50	1.50	7.84
		E5811109	11.50	13.00	1.50	5.44
		E8511111	13.00	14.50	1.50	3.14
		E8511115	19.00	20.50	1.50	8.36
		E5811116	20.50	22.00	1.50	3.61

Platform ID	Drill Collar ID	Sample				
		ID	From (m)	To (m)	Intersection Width (m)	Graphite Grade (%)
VHT017	VHTAC035	E5811259	7.00	8.50	1.50	3.32
VHT014	VHTAC040	E5813172	10.00	11.50	1.50	3.88
		E5813174	13.00	14.50	1.50	3.29
VHT037	VHTAC047	E5812161	7.00	8.50	1.50	8.42
		E5812162	8.50	10.00	1.50	4.49
		E5812167	16.00	17.50	1.50	3.39
		E5812168	17.50	19.00	1.50	11.50
		E5812169	19.00	20.50	1.50	11.50
		E5812171	20.50	22.00	1.50	8.36
		E5812172	22.00	23.50	1.50	5.26
		E5812177	28.00	29.50	1.50	5.15
		E5812178	29.50	31.00	1.50	4.98
		E5812179	31.00	32.50	1.50	4.31
VHT032	VHTAC049	E5812315	7.00	8.50	1.50	10.30
		E5812316	8.50	10.00	1.50	8.31
		E5812317	10.00	11.50	1.50	4.64
VHT040	VHTAC050	E5812534	19.00	20.50	1.50	3.34
		E5812535	20.50	22.00	1.50	4.17
VHT031	VHTAC052	E5812189	5.50	7.00	1.50	5.10
		E5812191	7.00	8.50	1.50	6.44
		E5812192	8.50	10.00	1.50	8.27
		E5812193	10.00	11.50	1.50	6.40
		E5812194	11.50	13.00	1.50	3.96
		E5812195	13.00	14.50	1.50	10.10
		E5812196	14.50	16.00	1.50	9.58
		E5812197	16.00	17.50	1.50	5.92
		E5812198	17.50	19.00	1.50	7.15
		E5812199	19.00	20.50	1.50	14.90
		E5812301	20.50	22.00	1.50	19.50
		E5812302	22.00	23.50	1.50	6.28
VHT035	VHTAC054	E5812512	8.50	10.00	1.50	5.02

Table 10.8
Significant Assay Results for the Diamond Drilling in the Main Zone

Platform ID	Drill Collar ID	Sample				
		ID	From (m)	To (m)	Intersection Width (m)	Graphite Grade (%)
VHT025	VHTDD007	E5811954	1.00	2.50	1.50	11.60
		E5811955	2.50	4.00	1.50	13.30
		E5811956	4.00	5.50	1.50	11.10
		E5811957	5.50	7.00	1.50	9.99
		E5811958	7.00	8.50	1.50	8.20
		E5811959	8.50	10.00	1.50	8.38
		E5811961	10.00	11.50	1.50	5.80
		E5811962	11.50	13.00	1.50	5.87
		E5811966	17.50	19.00	1.50	5.79
		E5811967	19.00	20.50	1.50	5.97
VHT019	VHTDD008	E5811973	1.00	2.50	1.50	3.22

Platform ID	Drill Collar ID	Sample				
		ID	From (m)	To (m)	Intersection Width (m)	Graphite Grade (%)
		E5811974	2.50	4.00	1.50	4.27
		E5811978	7.00	8.50	1.50	3.08
		E5811981	10.00	11.50	1.50	6.14
		E5811982	11.50	13.00	1.50	7.20
		E5811984	14.50	16.00	1.50	3.80
		E5811985	16.00	17.50	1.50	5.95
		E5811986	17.50	19.00	1.50	6.71
		E5811987	19.00	20.50	1.50	7.55
		E5811988	20.50	22.00	1.50	17.10
		E5811989	22.00	23.50	1.50	10.60
		E5811991	23.50	25.00	1.50	6.25
		E5811993	26.50	28.00	1.50	4.48
		E5811998	34.00	35.50	1.50	3.14
VHT003	VHTDD009	E5812014	5.50	7.00	1.50	6.19
		E5812015	7.00	8.50	1.50	9.90
		E5812016	8.50	10.00	1.50	11.30
		E5812017	10.00	11.50	1.50	8.62
		E5812018	11.50	13.00	1.50	7.67
		E5812019	13.00	14.50	1.50	4.26
		E5812021	14.50	16.00	1.50	7.27
		E5812022	16.00	17.50	1.50	8.19
		E5812023	17.50	19.00	1.50	10.50
VHT007	VHTDD010	E5812038	7.00	8.50	1.50	3.83
		E5812047	19.00	20.50	1.50	8.72
		E5812054	28.00	29.50	1.50	3.85
		E5812055	29.50	31.00	1.50	4.96
		E5812056	31.00	32.50	1.50	3.56
		E5812057	32.50	34.00	1.50	7.97
		E5812058	34.00	35.50	1.50	4.22
		E5812059	35.50	37.00	1.50	4.40
		E5812061	37.00	37.36	0.36	5.98
VHT012	VHTDD011	E5812064	2.50	4.00	1.50	6.93
		E5812065	4.00	5.50	1.50	7.50
		E5812066	5.50	7.00	1.50	5.98
		E5812067	7.00	8.50	1.50	5.80
		E5812068	8.50	10.00	1.50	5.01
		E5812071	11.50	13.00	1.50	3.21
		E5812073	14.50	16.00	1.50	3.26
		E5812074	16.00	17.50	1.50	4.50
		E5812076	17.50	19.00	1.50	4.84
		E5812077	19.00	20.50	1.50	8.30
		E5812082	25.00	26.50	1.50	5.48
		E5812083	26.50	28.00	1.50	4.77
		E5812085	29.50	31.00	1.50	6.67
VHT023	VHTDD012	E5812087	0.00	1.00	1.00	7.62
		E5812088	1.00	2.50	1.50	4.13
		E5812089	2.50	4.00	1.50	3.56
		E5812093	7.00	8.50	1.50	3.68
		E5812094	8.50	10.00	1.50	4.98

Platform ID	Drill Collar ID	Sample				
		ID	From (m)	To (m)	Intersection Width (m)	Graphite Grade (%)
		E5812095	10.00	11.50	1.50	4.47
		E5812096	11.50	13.00	1.50	5.94
		E5812097	13.00	14.50	1.50	5.37
		E5812098	14.50	16.00	1.50	4.59
		E5812099	16.00	17.50	1.50	12.50
		E5812101	17.50	19.00	1.50	10.80
		E5812102	19.00	20.50	1.50	5.02
		E5812103	20.50	22.00	1.50	5.14
		E5812104	22.00	23.50	1.50	6.67
		E5812105	23.50	25.00	1.50	9.00
		E5812106	25.00	26.50	1.50	6.12
		E5812107	26.50	28.00	1.50	4.25
		E5812109	29.50	31.00	1.50	7.76
		E5812111	31.00	32.50	1.50	6.11
		E5812112	32.50	34.00	1.50	5.28
NA	VHTDD013	E5812114	0.00	1.00	1.00	3.39
		E5812115	1.00	2.50	1.50	6.62
		E5812116	2.50	4.00	1.50	6.77
		E5812117	4.00	5.50	1.50	6.85
		E5812118	5.50	7.00	1.50	8.33
		E5812119	7.00	8.50	1.50	5.40
		E5812121	8.50	10.00	1.50	5.16
NA	VHTDD014	E5812448	13.56	14.14	0.58	3.88
		E5812477	38.64	39.32	0.68	4.70
		E5812478	39.32	40.08	0.76	4.76
		E5812479	40.08	40.54	0.46	3.45
		E5812481	40.54	41.64	1.10	5.28
		E5812482	41.64	43.54	1.90	4.52
		E5812483	43.54	44.10	0.56	9.96
		E5812484	44.10	45.39	1.29	6.94
		E5812485	45.39	46.30	0.91	6.43
		E5812486	46.30	47.00	0.70	6.34
		E5812488	49.20	49.64	0.44	7.37
		E5812489	49.64	49.89	0.25	3.95
NA	VHTDD015	E5812331	33.40	34.90	1.50	3.79
		E5812332	34.90	36.40	1.50	11.10
		E5812333	36.40	37.50	1.10	4.05
		E5812334	37.50	38.28	0.78	3.55
		E5812336	38.70	39.71	1.01	3.91
NA	VHTDD017	E5809412	3.20	4.20	1.00	5.58
		E5809413	4.20	6.00	1.80	5.30
		E5809418	10.70	11.15	0.45	11.80
		E5809419	11.15	12.70	1.55	4.58
		E5809421	12.70	13.17	0.47	7.33
		E5809423	14.70	15.25	0.55	11.20
		E5809424	15.25	16.10	0.85	5.66
		E5809426	16.10	17.20	1.10	6.28
		E5809429	19.56	20.30	0.74	6.22
		E5809431	20.30	21.20	0.90	8.67

Platform ID	Drill Collar ID	Sample				
		ID	From (m)	To (m)	Intersection Width (m)	Graphite Grade (%)
		E5809432	21.20	22.20	1.00	4.59
		E5809433	22.20	24.20	2.00	9.41
		E5809436	26.30	26.60	0.30	4.06
VHT004	VHTDD018	E5809584	10.65	11.15	0.50	5.48
		E5809585	11.15	12.65	1.50	6.17
		E5809586	12.65	14.15	1.50	6.02
		E5809588	14.65	15.58	0.93	4.80
VHT003	VHTDD019	E5810009	7.10	7.74	0.64	6.26
		E5810011	7.74	8.66	0.92	6.16
		E5810013	9.24	9.74	0.50	3.91
		E5810014	9.74	10.80	1.06	4.19
		E5810015	10.80	11.74	0.94	6.84
		E5810016	11.74	12.48	0.74	9.65
		E5810018	13.49	14.33	0.84	7.05
		E5810021	14.74	15.58	0.84	3.17
		E5810023	16.24	17.24	1.00	4.51
		E5810026	18.68	19.40	0.72	10.20
VHT012	VHTDD020	E5812272	3.80	5.30	1.50	8.54
		E5812273	5.30	5.95	0.65	6.92
		E5812276	6.93	7.48	0.55	3.56
		E5812278	8.46	9.30	0.84	4.25
		E5812281	10.30	10.80	0.50	3.80
		E5812283	11.92	12.30	0.38	6.60
		E5812284	12.30	13.30	1.00	3.05
		E5812287	15.30	16.30	1.00	9.40
		E5812288	16.30	17.30	1.00	8.39
		E5812289	17.30	17.80	0.50	6.54
		E5812292	18.80	19.80	1.00	4.53
		E5812293	19.80	20.80	1.00	8.53
		E5812294	20.80	21.30	0.50	5.77
		E5812295	21.30	22.30	1.00	9.99
		E5812296	22.30	23.00	0.70	10.20
		E5812297	23.00	24.30	1.30	7.18
		E5812298	24.30	24.80	0.50	9.68
		E5812299	25.30	26.80	1.50	8.07
		E5813151	26.80	27.80	1.00	5.48
		E5813152	27.80	28.30	0.50	7.41
		E5813155	29.55	30.54	0.99	7.89
		E5813159	32.14	33.30	1.16	4.33
		E5813161	33.30	34.20	0.90	4.87
		E5813162	34.20	34.69	0.49	4.55
VHT002	VHTDD021	E5813231	14.18	14.72	0.54	12.50
		E5813232	14.72	15.72	1.00	11.70
		E5813247	25.23	25.73	0.50	9.11
		E5813249	27.11	27.72	0.61	3.59
		E5813251	27.72	28.29	0.57	6.74
		E5813253	28.94	29.72	0.78	4.37
		E5813255	30.47	31.22	0.75	3.44
		E5813256	31.22	31.72	0.50	4.30

Platform ID	Drill Collar ID	Sample				
		ID	From (m)	To (m)	Intersection Width (m)	Graphite Grade (%)
		E5813257	31.72	32.10	0.38	4.26
		E5813258	32.10	32.84	0.74	3.57
		E5813259	32.84	33.72	0.88	6.03
		E5813261	33.72	34.72	1.00	5.63
		E5813262	34.72	35.72	1.00	6.08
		E5813263	35.72	36.72	1.00	6.53
		E5813264	36.72	37.22	0.50	6.24
		E5813265	37.22	38.17	0.95	5.99
		E5813267	39.22	40.22	1.00	4.14
		E5813268	40.22	41.72	1.50	5.65
		E5813269	41.72	42.33	0.61	6.52
		E5813271	42.33	43.22	0.89	8.06
		E5813272	43.22	43.72	0.50	12.40
		E5813274	44.72	45.14	0.42	3.74
		E5813276	45.14	45.72	0.58	9.98
		E5813277	46.22	46.72	0.50	8.71
VHT011	VHTDD022	E5813292	0.50	1.34	0.84	5.45
		E5813293	1.34	2.25	0.91	7.03
		E5813294	2.25	2.96	0.71	11.20
		E5813295	2.96	4.02	1.06	12.50
		E5813296	4.02	4.52	0.50	12.30
		E5813297	4.52	5.26	0.74	12.00
		E5813298	5.26	6.02	0.76	9.19
		E5813299	6.02	6.52	0.50	9.51
		E5813351	6.52	7.52	1.00	8.03
		E5813352	7.52	7.89	0.37	9.08
		E5813353	7.89	8.80	0.91	8.44
		E5813354	8.80	9.80	1.00	6.42
		E5813356	10.37	11.02	0.65	7.42
		E5813357	11.02	11.52	0.50	3.51
		E5813359	12.02	12.52	0.50	5.79
		E5813361	12.52	13.26	0.74	8.62
		E5813362	13.26	14.06	0.80	6.42
		E5813363	14.06	14.52	0.46	4.89
		E5813364	14.52	15.02	0.50	7.73
		E5813374	20.62	21.52	0.90	5.41
VHT011	VHTDD023	E5813386	0.55	1.15	0.60	5.07
		E5813388	1.79	2.99	1.20	6.69
		E5813389	3.22	3.82	0.60	9.76
		E5813391	3.82	4.82	1.00	10.60
		E5813392	4.82	5.82	1.00	10.30
		E5813393	5.82	6.82	1.00	11.00
		E5813394	6.82	7.82	1.00	8.89
		E5813395	7.82	8.40	0.58	7.68
		E5813396	8.40	8.82	0.42	5.77
		E5813397	8.82	9.11	0.29	6.79
		E5813398	9.11	9.63	0.52	7.53
		E5813399	9.63	10.32	0.69	5.58
		E5813601	10.32	10.82	0.50	8.20

Platform ID	Drill Collar ID	Sample				
		ID	From (m)	To (m)	Intersection Width (m)	Graphite Grade (%)
		E5813602	10.82	11.50	0.68	6.36
		E5813604	12.32	13.32	1.00	5.89
		E5813605	13.32	14.32	1.00	5.38
		E5813606	14.32	14.82	0.50	4.62
		E5813607	14.82	15.46	0.64	5.02
		E5813614	18.68	19.30	0.62	3.95
VHT015	VHTDD024	E5813638	14.22	14.92	0.70	9.62
		E5813639	14.92	15.34	0.42	5.89
		E5813641	15.34	15.79	0.45	9.71
		E5813642	15.79	16.42	0.63	5.47
		E5813643	16.42	17.42	1.00	3.39
		E5813645	18.29	19.30	1.01	6.35
		E5813646	19.30	19.92	0.62	3.48
VHT015	VHTDD025	E5813668	5.77	6.88	1.11	4.82
		E5813672	8.93	9.70	0.77	6.85
		E5813673	9.70	10.20	0.50	4.20
		E5813674	10.20	11.20	1.00	5.24
		E5813676	12.25	12.86	0.61	20.30
VHT015	VHTDD026	E5813687	1.61	2.70	1.09	4.47
		E5813755	14.74	15.74	1.00	3.12
NA	VHTDD027	E5813771	5.08	5.72	0.64	3.35
		E5813773	6.49	7.22	0.73	3.24
		E5813776	8.12	9.10	0.98	3.16
		E5813782	11.43	12.22	0.79	8.60
		E5813784	12.54	13.22	0.68	11.80
		E5813785	13.22	14.22	1.00	14.20
		E5813786	14.22	15.22	1.00	18.20
		E5813787	15.22	15.72	0.50	15.30
		E5813788	15.72	16.46	0.74	10.60
VHT025	VHTDD028	E5813815	0.00	0.73	0.73	3.18
		E5813816	0.73	2.00	1.27	5.80
		E5813817	2.00	2.66	0.66	12.10
		E5813818	2.66	3.69	1.03	9.85
		E5813819	3.69	4.19	0.50	11.80
		E5813821	4.19	4.69	0.50	22.70
		E5813822	4.69	5.50	0.81	9.41
		E5813824	6.00	6.69	0.69	9.79
		E5813826	6.69	7.69	1.00	11.40
		E5813827	7.69	8.69	1.00	10.40
		E5813828	8.69	9.69	1.00	9.64
		E5813829	9.69	10.69	1.00	10.40
		E5813831	10.69	11.15	0.46	9.82
		E5813832	11.15	11.69	0.54	7.41
		E5813833	11.69	12.19	0.50	10.90
		E5813834	12.19	13.19	1.00	9.64
		E5813835	13.69	13.99	0.30	9.89
		E5813836	13.99	14.64	0.65	11.90
		E5813842	17.69	18.24	0.55	4.71
		E5813843	18.24	18.86	0.62	5.95

Platform ID	Drill Collar ID	Sample				
		ID	From (m)	To (m)	Intersection Width (m)	Graphite Grade (%)
		E5813845	19.57	20.45	0.88	6.19
		E5813847	21.69	22.19	0.50	5.11
		E5813848	22.19	23.19	1.00	4.41
		E5813849	23.19	24.19	1.00	3.08
		E5813851	24.19	25.19	1.00	3.13
		E5813852	25.19	25.93	0.74	7.05

In general, the RC and diamond drilling identified the broad extent of the graphite mineralization on the Vohitsara Project and provided the necessary information to support a mineral resource estimate. The mineralization remains open in the southerly direction in the Southwest Zone and in both the northerly and southerly directions in the Main Zone. In-fill drilling along with other exploration work such as trenching and systematic outcrop sampling will be required in order to identify the variability of flake size and grade more precisely than is currently known. This would assist in blending of process feed to achieve a desired flake size and grade of the material in future mining as, historically, graphite mining has been from a number of smaller pits which are blended to achieve a final concentrate specification.

10.5 QUALIFIED PERSON COMMENTS

Micon's QP has reviewed and discussed the drilling programs with DNI personnel during the site visit and believes that the programs have followed the best practices guidelines as outlined by the CIM for exploration.

In the opinion of Micon's QP for this section, DNI has achieved its objective of broadly outlining the graphite mineralization in the Southwest and Main Zones with its RC and diamond drilling programs. The drilling program on both the Southwest and Main Zones was sufficiently extensive to be used as the basis of a mineral resource estimate at the Vohitsara Project.

11.0 SAMPLE PREPARATION, ANALYSES AND SECURITY

11.1 INITIAL SAMPLING PREPARATION, ANALYSIS AND SECURITY AT THE VOHITSARA PROJECT

According to the February 28, 2016, Technical Report the following information was supplied for Section 11.0, regarding sampling preparation, analysis and security of the samples. by Steven B. Goertz, the author of the report:

> *All sampling was collected and dispatched under the supervision of the author in conjunction with other DNI personnel.*
>
> *Assay samples from the Vohitsara project were dispatched via secure courier (TNT) ex-Antananarivo Madagascar to AGAT Laboratory in Ontario Canada. AGAT are accredited ISO/IEC 17025:2005 by the Standards Council of Canada……*
>
> *Samples submitted to AGAT were analysed for graphitic carbon with infrared analysis to a detection limit of 0.01 percent; plus total carbon with infrared analysis and detection limit of 0.01 percent (method code 201-109). For graphitic carbon, the sample is subjected to a multistage furnace treatment to remove all forms of carbon with the exception of graphitic carbon; and for total carbon a procedure that determines the most volatile organic carbon species (Bernier et al, 2015).*
>
> *Results were delivered electronically by the laboratory direct to DNI via spreadsheet and PDF Certificate of Analysis files. Check assaying and standards were utilised internally by AGAT as standard procedure.*

11.2 DNI SAMPLING PREPARATION, ANALYSIS AND SECURITY

Sampling preparation, analysis and security procedures under both Cougar the previous DNI management in Madagascar are not recorded but discussions with DNI personnel during the site visit have indicated that the RC drilling followed standard industry practices described below. The trench sampling, diamond drilling and other exploration practices and procedures are recorded in an internal DNI report/manual prepared by Vato dated November, 2017.

Micon's QP notes that DNI's internal report/manual for its procedures stresses the importance of environmental sensitivities and safety concerns when conducting its exploration. Importantly, these procedures specify the need to relocate pits, trenches and drill holes a sufficient distance away from the original location to reduce or remove any unnecessary environmental impact or eliminate a safety concern.

11.3 RC DRILLING AT THE VOHITSARA PROJECT

From the RC drilling, a portion of the material generated for each sample interval was retained. The samples in specimen trays constitute the primary reference for the hole in much the same way as the core does for diamond drilling. The specimen tray was marked with the drill hole number and each compartment within the tray was marked with both the interval and number for the respective sequential sample it contained. In some cases, empty compartments can be left for the locations where the blank and standard samples are inserted into the sequential sample stream and two compartments can be used to identify duplicate samples.

Due to the nature of RC drilling, only rock chip fragments are produced, and these particles range in size from a very fine-grained powder up to coarse chips 2 cm in size. Since the stratigraphic contact between the different rock units cannot be identified during drilling, the holes were sampled on equal 1.0 or 1.5 m intervals from the collar to the toe of the hole. The sample intervals were chosen because generally these are considered to be standard sampling length for RC drilling within the industry.

Samples were taken in the overlying alluvium as well as within the underlying rock units, and all samples were subject to the same assaying. Recoveries of the material from RC drilling at the Vohitsara Project were generally good however, due to the nature of the saprolites, the recoveries can and did vary with the material encountered. The RC drilling recoveries within the mineralized zones were sufficient (80% +) to conduct a mineral resource estimate.

A common feature in the sampling process for RC drilling is that a uniquely numbered tag is inserted into the bag with each sample, and each sample bag is marked with its individual sample number. The bags containing the blank and standard samples are added into the sequential numbering system prior to shipment of the samples to the preparation facility. Sample preparation and assaying are performed by AGAT Laboratories in Mississauga, Ontario, Canada.

Samples identified as field duplicate samples during the RC drilling are split into two separate sequentially numbered samples during the sampling process at the drill.

11.4 CORE DRILLING AT THE VOHITSARA PROJECT

The following has been extracted and summarized from the internal DNI report/manual prepared by Vato dated November, 2017. For drill holes the following items apply:

- Locate the planned drill hole collar using a handheld GARMIN GPS, making use of the WGS84, UTM Zone 39S projection system.
- For angled drilling the azimuth relative to true north must be checked using a compass that takes into account the local magnetic declination. The compass reading for the bearing should be taken from outside the influence sphere of the metal construction of the rig in order to accurately determine azimuth of the hole.

- Once the drill rig is set up, but prior to the commencement of drilling the azimuth is checked again and dip of the drill hole is checked using a clinoruler or compass clinometer.
- All drill holes will be named and numbered sequentially as drilled with no a, b, c nomenclature used except for failed holes drilled using the same collar.
- During drilling the accurate measurement of penetration depth of drill hole core needs to be checked and verified as well as the colour of the water/mud rising from the drill hole should be observed and recorded.
- Drilling progress must be monitored on a regular basis by the responsible geologist to ensure maximum recovery and any issues with incorrect driller's blocks must be addressed with the drillers prior to removing core from drill site. Driller's marks should reflect actual depth drilled according to rods in the ground at start/end of run in the appropriate part of the core block. The drillers run length and the core recovery must also be marked in the appropriate part of the core block.
- Careful drill monitoring must be enforced to ensure intact core intersections. Run by run recoveries will be monitored and recorded on the DNI logging sheet and captured in the DNI geotech spreadsheet on a run by run basis. Only holes with greater than 85% recovery within the mineralized zone are be considered representative.

In general, core recovery for the diamond drill holes at the Vohitsara Project was better than 88.02% with some core loss occurring in the soft/sandy completely to highly weathered zones.

11.5 SAMPLE COLLECTION AND TRANSPORTATION

11.5.1 Sampling and Shipping Procedures

The sampling procedures as dictated by DNI's procedures are generally specific according to what type of sampling is conducted, i.e., trench, pit or drilling. However, the general rules that are followed are:

- Sampling across any type of lithological contact represents the cardinal sin of sampling and seriously reduces the usability of the geochemical results. All sampling must be constrained within lithological contacts.
- Individual sample lengths should ideally be approx. 1 m, with any subdivision contacts ultimately dictating the sample length. As auger sampling increments are in 0.50 m intervals, samples will need to be composited to 1 m intervals, however lithological contacts/breaks will override this.
- Where possible, the entire regolith profile and at least one sample into the bedrock (if possible) should be collected and submitted for geochemical analysis. Sampling must be contiguous with no gaps.

- It is not necessary to sample the Soil (SL) or Ferruginous Zone (FZ) sub-lithologies, as in general, these lithologies are poorly mineralised (< 1 to 2 % graphite). However, if the FZ lithology does contain significant and visible graphite it should be sampled.

For the diamond drilling, and to a certain extent the RC drilling, the selection of the sample intervals is based on considering the following factors:

- Changes in regolith subdivisions.
- Changes in clay content.
- Sudden changes in estimated grade of mineralization - within each sample interval the grade should be relatively uniform.
- Changes in the style of mineralization.
- The thickness of the mineralized zone.
- Changes in rock strength produced by weathering, alteration, faulting, etc.
- Whether sample values will be composited at a later stage.
- Sample intervals should not cross lithological, alteration or structural subdivisions.
- Ideally, samples should not exceed 1.0 m in length or be less than 0.2 m.

Procedures for sampling either cut drill core or riffled RC samples are as follows:

- Prior to bagging the sample, check that the polythene sample bag is not damaged (torn or split).
- Insert both a paper sample tag and an aluminium tag (scribed with the SampleID) into the sample bag.
- Put the sample in the bag, breaking off any sharp edges if necessary, to prevent bag damage.
- Seal the bag (squeeze out the excess air, twist the bag opening, fold it over and cable tie it).
- Add the second paper sample tag to the outside of the plastic bag and secure with staples.
- Ensure that the sample bag is transported in an upright position and so that it will not be damaged or tampered with during shipment to the sample preparation facility.
- Samples are shipped to a sample preparation facility in the capital Antananarivo.

11.5.2 Sample Preparation

Regolith and bedrock samples were split on site, bagged and sent to AGAT laboratories in Mississauga, Canada. AGAT laboratories preparation mini-method for code 200-001 are described as follows:

Steps:

1. Sample Reception – Laboratory Information Management System (LIMS).
2. Mining, drying of geological samples.
3. Mining branches, crushing mineralogical samples.
4. Mining branches, sample size reduction of mineralogical samples.
5. Mining branches, milling of minerological samples.
6. Standard operating procedure for compressed air usage.
7. Compressed air usage – mining branches.

Sample Reception:

- Samples will arrive via courier, client drop-off or picked up by AGAT Laboratories or an AGAT Representative.
- Samples are inspected and compared to the Chain of Custody (COC) and logged into the AGAT LIMS program.
- Deviations from the COC are noted in AGAT Laboratories' Sample Integrity Report (SIR) and sent immediately to the client via email and posted on the clients *WebMINING* account.

Drying: Specified samples are dried to 60°C.

Crushing and Splitting: Unless instructed by the client, specified samples are crushed to 75% passing 10 mesh (2 mm) and split to 250 g using a Jones riffler splitter or rotary split.

Pulverizing: Unless instructed by the client, specified samples are pulverized to 85 per cent passing 200 mesh (75 μm).

Screening: After drying specific sample are shaken on an 80-mesh sieve with the plus fraction stored and the minus fraction sent to the laboratory for analysis.

All equipment is cleaned using quartz and air from a compressed air source. Blanks, sample replicates, duplicates, and internal reference materials (both aqueous and geochemical standards) are routinely used as part of AGAT Laboratories' quality assurance program.

Instrumentation used:

- Rocklabs Boyd Crusher with RSD Combo, TM Terminator Crushers, TM TM-2 Pulverizers are routinely used in sample preparation procedures.

11.5.3 Sample Dispatch

The prepared samples will be sent in batches to an accredited laboratory, and for consistency, the following batch naming convention should be used:

- Project abbreviation + Year + Sequential numeric (for example, DNI1701).

The prepared samples will be accompanied by the batch number, sample submittal and instructions sheets as required by the laboratory.

Chain of Custody procedures are be implemented to document the possession of the samples from collection through to storage, customs, export, analysis and reporting of results. Chain of custody forms will be the permanent records of sample handling and off-site dispatch.

The on-site geologist will be responsible for the care and security of the samples from the sample collection through to the export stage. Samples prepared during the day will be stored in the preparation facility in labelled sealed plastic bags.

Complete instructions of analysis, reporting requirements and a signed Chain of Custody form will be provided, physically and electronically at the time of sample submission. The Chain of Custody form contains the following information:

- Sample identification numbers.
- Type of sample.
- Date of sampling.
- List of analyses required.
- Customs approval.
- Waybill number.
- Name and signature of sampling personnel.
- Transfer of custody acknowledgement.

Samples will be delivered to the analytical laboratory by courier. A copy of the Chain of Custody form will be signed and dated and placed in a sealable plastic bag taped on top of the lid of the sample box. Each sample batch should be accompanied by a Chain of Custody form.

11.6 QUALITY ASSURANCE/QUALITY CONTROL PROCEDURES

QA/QC procedures are an essential part of any geochemical sampling program to ensure high quality results. Fundamentally, certified reference material (standards), blanks and duplicates are included with the submitted samples.

11.6.1 Standards

A certified graphite standard is included as every 40th sample, starting at the 20th (therefore at the 20th, 60th, 100th, etc.). Each certified standard used is placed into the sample run, assigned with a unique sample number, and a record of the certified standard number is kept electronically.

For the Vohitsara Project, Table 11.1 summarizes the standards and standard source used for the drilling programs and who used them.

Table 11.1
Summary of the Standards and Source of the Standard used for the Vohitsara Project

Standards Used By	Source of Standard	Standard
AGAT Laboratories	Geostats Pty Ltd	GGC-01
		GGC-05
		GGC-09
DNI	Ore Research & Exploration P/L	DWHG1
		MPHLG1
		TCMG1

Table 11.2 summarizes some of the important parameters for each of the Standards

Table 11.2
Summary of Important Parameters for Each Standard

Standard	Certified Value (TGC%)	1 Standard Deviation	95% Confidence Level
GGC-01	24.97	0.94	+/- 0.30
GGC-05	8.60	0.55	+/- 0.16
GGC-09	2.41	0.27	+/- 0.08
DWHG1	23.91	0.745	+/- 0.58
MPHLG1	3.22	0.228	+/-0.16
TCMG1	7.54	0.566	+/-0.39

11.6.2 Blanks

DNI did not use blank samples during its exploration sampling and drilling programs. It is recommended that for future exploration sampling and drilling programs DNI inserts a blank sample into the sample runs.

11.6.3 Duplicates

Due to the difficulty in creating duplicates, DNI requests that the prepping laboratory complete the preparation and collect some of the reject pulp material for analysis. DNI requests that 2 to 4 duplicate analyses per 100 samples be prepared, with the chosen samples being those are anticipated to be mineralized. Each duplicate is provided with a unique sample number and inserted into the sample stream, and a record of the duplicate sample is kept electronically.

11.6.4 Laboratory Used for Assaying

Assaying was completed by independent consulting laboratory AGAT Laboratories Ltd. (AGAT Laboratories) in Ontario Canada, via washed Loss on Ignition (LOI) furnace method with Infrared detection (Furnace IR Finish).

AGAT Laboratories is accredited for specific tests as listed in the laboratory's current scope of accreditation by the following organizations; The Standards Council of Canada (SCC), The Canadian Association for Laboratory Accreditation (CALA) and SAI Global. AGAT Laboratories is accredited, for specific tests, to the following standard; ISO/IEC 17025:2005. AGAT Laboratories is certified to the following standard; ISO 9001:2015.

Upon receipt of the assay information, DNI reviews the data and notes the performance of the QA/QC sampling to see if the results meet the parameters for the confidence and tolerance limits outlined in the certificate for the sample. If the QA/QC samples fail to meet the required standards DNI aske the assay laboratory to repeat the assays for the batch that failed.

11.7 QUALIFIED PERSON COMMENTS

Micon's QP has reviewed the results of DNI's QA/QC program and considers that the sample preparation, security and analytical procedures in place as part of DNI's QA/QC procedures are of sufficient quality to be considered as following the best practices guidelines as published by the CIM and therefore the results are suitable to be used as the basis of mineral resource estimate.

12.0 DATA VERIFICATION

12.1 GENERAL

This is Micon's first Technical Report for the Vohitsara Project in Madagascar. The QP's site visit and data verification was conducted to independently verify the geology and data provided by DNI for this Technical Report. Independent check sampling was conducted to verify the nature of the mineralization at the Vohitsara Project.

The QPs responsible for the preparation of this report and their areas of responsibility and site visits are noted in Table 12.1.

Table 12.1
Qualified Persons, Areas of Responsibility and Site Visits

Qualified Person	Title and Company	Area of Responsibility	2019 Site Visit
William J. Lewis, B.Sc. P.Geo.	Senior Geologist, Micon	1 (except 1.7), 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12 (except 12.3), 23, 25 (except 25.2), 26	January/February
Charley Murahwi, M.Sc., P.Geo., Pr.Sci.Nat., FAusIMM	Senior Geologist, Micon	1.7, 12.3, 14, 25.2	None
Lyn Jones, M.A.Sc., P.Eng.	Senior Consultant, M.Plan	13	None
NI 43-101 Sections not applicable to this report		15,16,17,18,19,20,21 and 22	

Messrs. Lewis and Murahwi are employees of Micon and Mr. Jones is an employee of M.Plan.

12.2 SITE VISIT

The site visit to the Vohitsara Project was conducted between January 27, 2019 and February 3, 2019. January 30, 2019 was spent reviewing the drill sites, bulk sample area for the Southwest Zone and core storage location in the village of Vohitsara. On January 31, 2019 the Main Zone where most of the RC drilling had been conducted was visited. During that visit the trenches, a number of drilling pads and some historical mining areas as well as the site of the bulk sample from this area were inspected.

Figure 12.1 shows the face where the bulk sample was extracted by DNI in Southwest Zone and location for 2 of the grab samples taken by Micon during the January, 2019, site visit. Figure 12.2 shows one of the historical mining areas in the Main Zone area of the Vohitsara Project and the location of the bulk sample extracted by DNI from this portion of the Project.

Mr. Lewis conducted the site visit with the assistance of Daniel Weir, Executive Chairman of DNI and Jannie Leeuwner BSc (Hons) MGSSA Pr.Sci.Nat., Director/Principal Geologist of Vato Consulting LLC.

Figure 12.1
Southwest Zone Bulk Sample Area

Figure 12.2
Northeast (Main) Zone Historical Mining and Bulk Sample Area (Centre of Picture)

During the site visit, Micon's QP, Mr. Lewis, took 6 random grab samples covering the 2 mineralized zones at the Vohitsara Project during the site visit. The samples were placed in plastic bags and sealed on site, and then these samples were placed in a larger plastic bag and sealed with a zip tie. Due to the necessary paperwork needed to accompany any samples that are to be shipped out of Madagascar, these samples were shipped directly to AGAT Laboratories in Mississauga, Ontario where testwork on the samples were conducted for Micon.

Table 12.2 summarizes the grab samples and descriptions taken during the site visit.

Table 12.2
Micon Vohitsara Project Site Visit Independent Sample Description

Sample Number	Sample Type	Mineralized Zone Sampled	Sample Location and Description
75028	Grab	Southwest Zone	Bulk sample area
75029	Grab	Southwest Zone	Bulk sample area
75030	Grab	Southwest Zone	Road cut
75031	Grab	Main Zone	Lower face old mining area/Bulk sample area
75032	Grab	Main Zone	Upper Face old mining area/Bulk sample area
75033	Grab	Main Zone	Eastern end of Trench 2 on old working face

Table 12.3 summarizes the method information for the preparation and assay procedures used by AGAT Laboratories for the Micon samples. These methods are the same as those used for DNI samples.

Table 12.3
Summary of Method Information for the Preparation and Assay Procedures used by AGAT Laboratories

Parameter	AGAT SOP	Literature Reference	Analytical Technique
Sample Login Weight (TOR)	MIN-12009		Balance
C	MIN-200-12000	ASTM E1915-07a	LECO
S	MIN-200-12000	ASTM E1915-07a	LECO
Graphitic C	MIN-200-12036	ASTM E1915-13	Furnace IR

Table 12.4 summarizes the results of the grab samples taken by Micon's QP during the site visit to DNI's Vohitsara Project.

Table 12.4
Summary of the Sample Results for the Samples taken by Micon at the Vohitsara Project

Sample Number	AGAT ID	Sample Login Weight – Wet (kg)	Sample Login Weight – Dry (kg)	Total Carbon (C) (%)	Total Sulphur (S) (%)	Graphitic Carbon (C) (%)
75028	9917846	1.159	1.096	5.50	0.027	5.30
75029	9917847	0.876	0.805	4.11	0.031	3.79
75030	9917848	0.624	0.578	7.07	0.026	6.64
75031	9917849	0.947	0.766	17.2	0.042	16.5
75032	9917850	0.890	0.703	18.2	0.043	17.9
75033	9917851	0.663	0.580	11.0	0.014	10.3

AGAT Laboratories is an independent laboratory which according to its website has been accredited by the following organizations:

- The Standards Council of Canada (SCC).
- The Canadian Association for Laboratory Accreditation (CALA).
- SAI Global.

Further, AGAT Laboratories is accredited, for specific tests, to the following standard:

- ISO/IEC 17025:2005.

AGAT Laboratories is also certified to the following standard:

- ISO 9001:2015.

The graphite results obtained for the grab samples taken by Micon's QP during the site visit are in line with the sampling results obtained by DNI through both its drilling and trenching programs at the Vohitsara Project. Micon's QP, therefore, believes that the sampling results obtained by DNI, through its exploration programs, is indicative of the graphite mineralization to be found at the Vohitsara Project.

12.3 DATABASE REVIEW

The foundation of any resource estimate is the geological database. Therefore, Micon's QPs performed a thorough review of the data to ensure its integrity. The review of the data was performed in Micon's Toronto offices, and involved the following steps:

- Comparing the database assays and intervals against the original assay certificates and drill logs; checking for non-conforming assay information such as duplicate samples and/or mis-matched assays.
- Verifying the collar elevations to ensure a satisfactory match with the topography map for each hole.
- Comparative examination of twinned drill hole assays.

Micon's QPs generally found the integrity of DNI's database sufficient to support a mineral resource estimate for the Vohitsara Project. Given that further exploration is planned by DNI for the Project area, Micon's QPs expect that any new data will be able to expand upon and not only increase the data density already noted for the various mineralized zones within the database but increase the confidence within the mineralized zones.

12.3.1 Database Assay Table Versus Original Assay Certificates

Assay table entries for all drill holes were thoroughly checked against the laboratory assay certificates. A few mis-matched assays (less than 1% of the database) were found and easily corrected.

12.3.2 Drill Hole Collars versus Topography Map

Micon's QPs found six drill holes where the collars were above the topographic surface. The DNI geologist explained this discrepancy as being due to collars being sited before the surface was levelled to accommodate the drill rig and its accessories. Micon found this explanation to be acceptable. and recommends that a professional surveyor checks all collars after the next phase of drilling.

12.3.3 Twinned Drill Hole Assays

Micon's QPs established that diamond core holes drilled as twin holes to verify the RC holes assays generally yielded higher grades. This variation has been discussed with DNI and the differences will be investigated as exploration continues.

12.4 QUALIFIED PERSONS COMMENTS

The Micon QPs responsible for reviewing the work conducted by DNI and conducting the mineral resource estimate have reviewed the material provided by DNI and found that the data were adequate for the use in undertaking a mineral resource estimate on the Vohitsara Project and for inclusion in this Technical Report.

13.0 MINERAL PROCESSING AND METALLURGICAL TESTING

There are no historical records of processing testwork regarding the mineralization at the Vohitsara Project. However, DNI and Cougar have both carried out some testwork for the Vohitsara Project over the last few years. Micon's QP notes that Cougar referred to the property as the Toamasina Project.

13.1 INITIAL DNI TESTWORK

The following information was extracted from the February 28, 2016 Technical Report by Hendry Consulting.

13.1.1 Ground Prospecting and Sampling

An initial site visit to evaluate the Vohitsara Project was conducted in March, 2015, to assess its potential for acquisition and development. Samples taken from test pits and historical workings returned head-grade results of 9.85%, 10.0% and 35.5% graphitic carbon (GC). Assaying was completed by independent consulting laboratory AGAT Laboratories in Ontario Canada, via washed Loss on Ignition (LOI) furnace method with Infrared detection (Furnace IR Finish).

Subsequent testing for crystalline graphite content yielded the following flake size distribution as summarized in Table 13.1.

Table 13.1
Flake Size Distribution from Initial Sampling on the Vohitsara Project

Flake Size	Flake Description	Flake Distribution (%)	Graphitic Carbon (GC) Content (%)
+20 Mesh/+841 µm	Jumbo	13.70	97.90
+30 Mesh/+595 µm	Jumbo	1.90	n/a
+50 Mesh/+297 µm	Jumbo	40.00	96.70
+70 Mesh/+210 µm	Large	6.90	91.30
+100 Mesh/+149 µm	Medium	12.90	88.80
+140 Mesh/+105 µm	Small	4.20	87.30
+140 Mesh/+105 µm	Small	20.40	89.00
Total		**100**	

Table taken from the February 28, 2016 Technical Report.

The initial tests demonstrated that there was a Large to Jumbo (+70 Mesh to +20 Mesh) flake distribution for the Vohitsara graphite of greater than 62.5% with associated GC content ranging from 91.3% to 97.9%.

Subsequent surface sampling during the July, 2015 trenching program returned results ranging from 3.00% GC to 7.30% GC and averaging 4.60% GC. Assaying methodology was identical to that used in the initial sampling program; with samples collected from the central portion of the Main Zone.

13.2 COUGAR GRAPHITE FLAKE CHARACTERIZATION TESTWORK

The following information has been extracted from the executive summary of the Independent Metallurgical Operations Pty. Ltd. (IMO) characterization testwork report of August, 2017.

IMO conducted metallurgical testwork to characterise the flake content and graphite grade of two (2) final beneficiation concentrates. The concentrates originated from a low grade (LG) and a high grade (HG) composite sample, respectively, from the Toamasina Project (Vohitsara Project) located in Madagascar.

The composites underwent sample preparation and preliminary open circuit cleaner flotation testwork.

The flotation test final concentrate total carbon (TC) and loss on ignition (LOI) grades and size distribution results are summarised in Table 13.2.

Overall concentrate grades were excellent with both LG and HG composites being greater than 98% TC. Coarse particle distribution was high with 52.73% and 65.04% of the respective LG and HG composites being larger than180 μm.

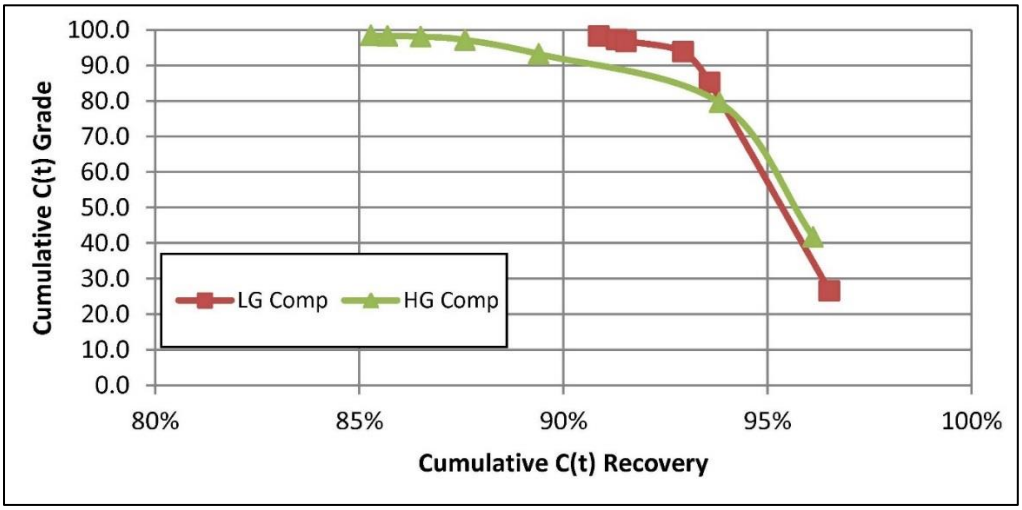
Table 13.2
Final Composite Results

Concentrate Size Fraction (μm)	Composite 1 LG				Composite 2 HG			
	Con Mass Distn. (%)	Con Mass Cum. Retained (%)	Assay (%)		Con Mass Distn. (%)	Con Mass Cum. Retained (%)	Assay (%)	
			TC	LOI			TC	LOI
+500	0.99	0.99	98.52	99.04	28.37	28.37	98.31	99.49
+300	21.71	22.70	98.52	99.04	21.31	49.67	98.95	99.35
+180	30.03	52.73	98.92	98.63	15.37	65.04	98.65	99.25
+150	12.03	64.76	97.29	98.36	6.59	71.63	99.12	99.28
+106	10.67	75.43	97.11	98.44	7.00	78.63	98.98	99.21
+75	7.55	82.98	98.17	98.31	5.99	84.62	99.00	99.20
-75	17.02	100.00	98.17	97.48	15.38	100.00	96.53	96.27
Total/Calc Head	**100.0**		**98.26**	**98.45**			**98.37**	**98.88**

Table extracted from the August, 2017, IMO testwork report.

TC grade recovery curves for the cleaner flotation tests are presented in Figure 13.1. Final concentrate TC recovery for the LG composite was found to be 90.8%, compared to 85.3% for the HG composite. Lower recovery from the HG composite was likely due to an extra (6) stage of open circuit cleaning being added, as well as a using a coarser regrind size. Locked circuit testing has the potential improve overall TC recovery by recycling tailings from the 2 to the 6 cleaner stages.

Figure 13.1
Flotation Test TC Grade Recovery Curves



Graph extracted from the August, 2017, IMO testwork report.

Some coarse flake (greater than 2 mm) was observed in the final concentrate from the HG composite, see Figure 13.2.

Figure 13.2
Graphite Concentrate Flake

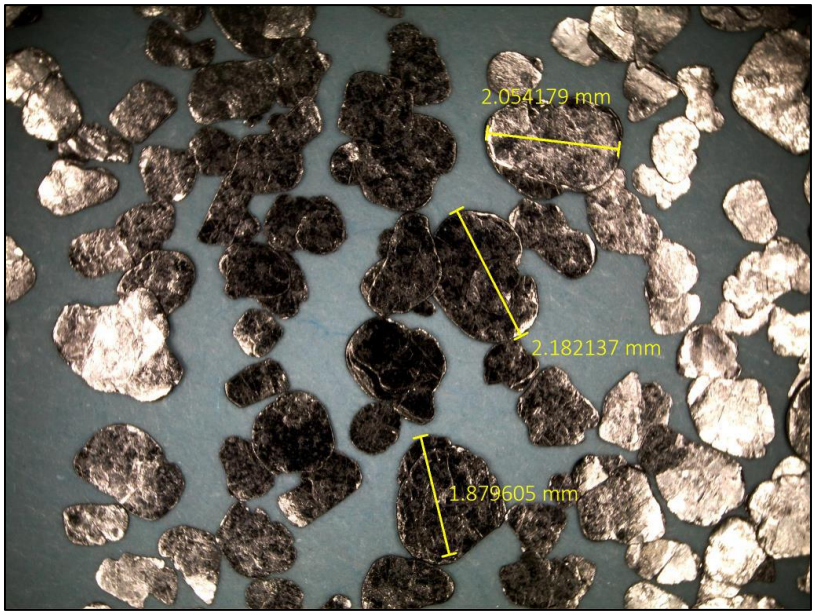


Image extracted from the August, 2017, IMO testwork report.

13.2.1 IMO Conclusions

Based on analysis of all testwork phases conducted during the Graphite Flake Characterisation Testwork program, IMO presented the following findings:

- The as-received samples used for composite makeup were friable and required minimal energy to crush below 3.35 mm.
- Whilst not a definitive measure, it was observed that the LG and HG samples required significantly less grinding than other East African hard rock deposits.
- Both LG and HG final concentrate TC grades grade were greater than the target 95% at 98.26% and 98.37% respectively.
- TC recoveries were 90.8% and 85.3% for respective LG and HG composites.
- Concentrate material greater than 2 mm was observed.
- TC recoveries from the flotation flowsheet tested could significantly increase with the recycling of tailings during locked cycle testing.

13.3 DNI BULK SAMPLE SENT TO INDIA

On January 25, 2018, DNI announced that it had delivered a 28-t bulk sample to a potential off-taker based in India. The bulk sample comprised of 14 t from each of the Main Zone and Southwest Zone located on the Vohitsara Project. The Indian group processed the material at its plant and reported the results back to DNI. The Indian group had previously tested a small sample from the Vohitsara Project and were encouraged by the results, and so requested a larger sample. The results of the 28-t bulk sample sent to India are summarized in Table 13.3.

Since work by the Indian group was carried out in their own processing facilities, rather than in an independent laboratory, the results presented here should not be considered representative of the Vohitsara Project as a whole.

DNI collected a total of 60 t of mineralized material in November, 2017, comprising 30 t from the Southwest Zone, and 30 t from the Main Zone. While 28 t was sent to India as part of the bulk sample the balance of 32 t is currently stored in bags near the port city of Toamasina, Madagascar.

13.4 FUTURE TESTWORK

Due to the importance of having the ability to deliver larger, multi-tonne bulk samples in the range of 10 t to 20 t to potential customers, DNI plans to construct a pilot plant on its property in Madagascar in the near term. This will allow DNI to test material from the two zones already identified and allow testwork to be conducted on other untested zones which may be identified through its ongoing work at the Vohitsara Project. The pilot plant will also allow DNI to mix material from various areas within the zone to potentially optimize a concentrate product.

Table 13.3
Summary of Results for 28 Tonne Bulk Sample (14 Tonne per Zone)

Location of Bulk Sample	Mesh Size	.+30	.-30+52	.-52+64	.-64+72	.-72+85	.-85+100	.-100+120	.-120+150	.-150+210	.-200+300	.-300	Ash (%)	V.M. (%)	F.C. (%)
Main Zone	Feed Sample	-	-	-	-	-	-	-	-	-	-	-	93.32	3.24	3.44
	Ball Mill Discharge	-	-	-	-	-	-	-	-	-	-	-	90.75	3.60	5.65
	1st Wash	11.10%	23.30%	13.40%	11.20%	2.00%	7.60%	5.30%	3.60%	4.90%	0.40%	17.20%	38.85	3.50	57.65
	2nd Wash	9.00%	23.00%	14.50%	10.80%	2.00%	9.10%	6.40%	4.20%	5.50%	0.40%	15.11%	16.46	3.80	79.74
	3rd Wash	7.00%	21.40%	13.50%	11.80%	2.10%	9.00%	6.50%	4.70%	6.90%	1.90%	15.20%	7.69	1.75	90.56
	4th Wash	3.40%	15.10%	11.50%	12.00%	2.10%	9.40%	7.10%	5.70%	8.70%	7.60%	17.40%	4.78	1.47	93.75
	5th Wash	2.70%	14.10%	12.80%	14.30%	2.70%	10.30%	7.30%	5.70%	8.20%	7.90%	14.00%	4.19	1.28	94.53
	Mesh Size	**.+30**	**.-30+52**	**.-52+64**	**.-64+72**	**.-72+85**	**.-85+100**	**.-100+120**	**.-120+150**	**.-150+210**	**.-200+300**	**.-300**	**Ash (%)**	**V.M. (%)**	**F.C. (%)**
Southwest Zone	Feed Sample	-	-	-	-	-	-	-	-	-	-	-	91.06	3.07	5.92
	Ball Mill Discharge	-	-	-	-	-	-	-	-	-	-	-	87.76	3.50	8.74
	1st Wash	16.30%	35.10%	15.10%	9.70%	1.40%	5.30%	3.10%	1.80%	2.60%	0.00%	9.60%	55.91	3.67	40.47
	2nd Wash	10.30%	30.00%	15.10%	11.10%	1.90%	7.10%	5.10%	3.70%	5.10%	1.00%	9.30%	27.94	3.44	68.62
	3rd Wash	7.60%	25.60%	14.10%	11.10%	2.10%	7.90%	5.70%	4.50%	6.40%	3.70%	11.30%	12.67	2.36	85.07
	4th Wash	4.90%	19.00%	12.30%	11.50%	2.30%	8.90%	6.70%	5.30%	8.10%	6.10%	14.90%	7.84	1.85	90.31
	5th Wash	3.10%	17.00%	13.00%	12.50%	2.40%	9.40%	6.90%	5.40%	8.30%	7.90%	14.10%	6.17	1.44	92.37

14.0 MINERAL RESOURCE ESTIMATES

14.1 INTRODUCTION

This is the first mineral resource estimate to be conducted on DNI's Vohitsara Project in Madagascar. The mineral resource estimate is based on the exploration work conducted on the Project to date by DNI and other parties, that has been reviewed and accepted by the QP.

14.2 CIM MINERAL RESOURCE DEFINITIONS AND CLASSIFICATIONS

If a company is a reporting Canadian entity, all resources and reserves presented in a Technical Report should follow the current CIM definitions and standards for mineral resources and reserves. The latest edition of the CIM definitions and standards was adopted by the CIM council on May 10, 2014, and includes the resource definitions reproduced below:

Mineral Resources are sub-divided, in order of increasing geological confidence, into Inferred, Indicated and Measured categories. An Inferred Mineral Resource has a lower level of confidence than that applied to an Indicated Mineral Resource. An Indicated Mineral Resource has a higher level of confidence than an Inferred Mineral Resource but has a lower level of confidence than a Measured Mineral Resource.

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

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

Material of economic interest refers to diamonds, natural solid inorganic material, or natural solid fossilized organic material including base and precious metals, coal, and industrial minerals.

The term Mineral Resource covers mineralization and natural material of intrinsic economic interest which has been identified and estimated through exploration and sampling and within which Mineral Reserves may subsequently be defined by the consideration and application of Modifying Factors.

Inferred Mineral Resource

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

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

An Inferred Mineral Resource is based on limited information and sampling gathered through appropriate sampling techniques from locations such as outcrops, trenches, pits, workings and drill holes. Inferred Mineral Resources must not be included in the economic analysis, production schedules, or estimated mine life in publicly disclosed Pre-Feasibility or

Feasibility Studies, or in the Life of Mine plans and cash flow models of developed mines. Inferred Mineral Resources can only be used in economic studies as provided under NI 43-101.

Indicated Mineral Resource

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

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

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

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

Measured Mineral Resource

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

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

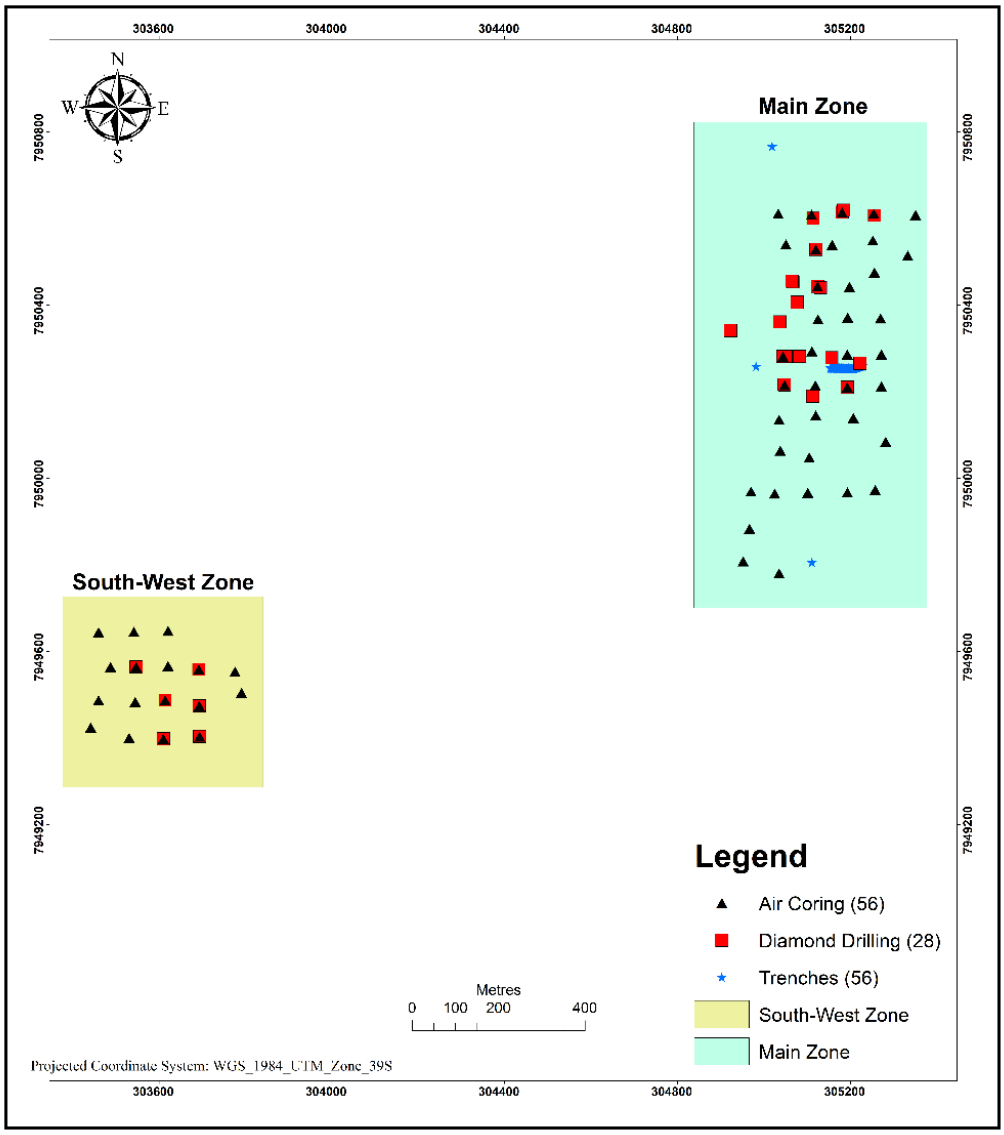
A Measured Mineral Resource has a higher level of confidence than that applying to either an Indicated Mineral Resource or an Inferred Mineral Resource. It may be converted to a Proven Mineral Reserve or to a Probable Mineral Reserve.

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

14.3 EXPLORATORY DATA ANALYSIS

DNI's Vohitsara Project currently has two areas that have been investigated by trenching and drilling; these are the Main Zone in the northwest and the Southwest Zone as shown in Figure 14.1.

Figure 14.1
Vohitsara Project Drilled Resource Areas



The database for DNI consists of 5 trenches 56 RC dill holes and 28 diamond drill holes with the majority of the work completed on the Main zone and the remainder on the Southwest zone.

The resource estimate discussed in this Technical Report pertains to only the Main Zone which has been tested by 5 trenches, 22 vertical diamond drill holes and 38 vertical RC holes. The resource database comprises geological contacts, collar- and down-hole surveys, assay data, lithology tables and density information. The drill hole spacing is between 100 and 150 m except where RC and core holes have been twinned; the average spacing is approximately 125 m.

While the quality of the data for the Southwest Zone is sufficient upon which to conduct a mineral resource estimate, a mineral resource estimate for the zone was not conducted. The mineral resource estimate for the Southwest Zone was not conducted for the following reasons:

- Despite the graphite mineralization being exposed in historical workings and in road cuts, these exposures were not sampled. DNI now recognizes that this information is important in order to better define the mineralization prior to conducting a resource estimate in this area.
- The topography and drilling appear to indicate that the mineralization is still open to the south. DNI would therefore like to investigate the possible southern extension of the zone, prior to declaring a mineral resource for this zone.

The topographic surface map is based on the topographic map that was provided by DNI. Bulk density estimation is based on the average of 100 determinations by the AGAT laboratory.

The assay table was verified against the original csv file assay certificates and some minor typographic corrections were made to bring it to an error free status.

14.4 OVERVIEW OF THE ESTIMATION METHODOLOGY

Following the completion of the Project data verification as outlined in Section 12.3 above, Micon has estimated the Vohitsara Project mineral resources following a logical sequence involving the following steps:

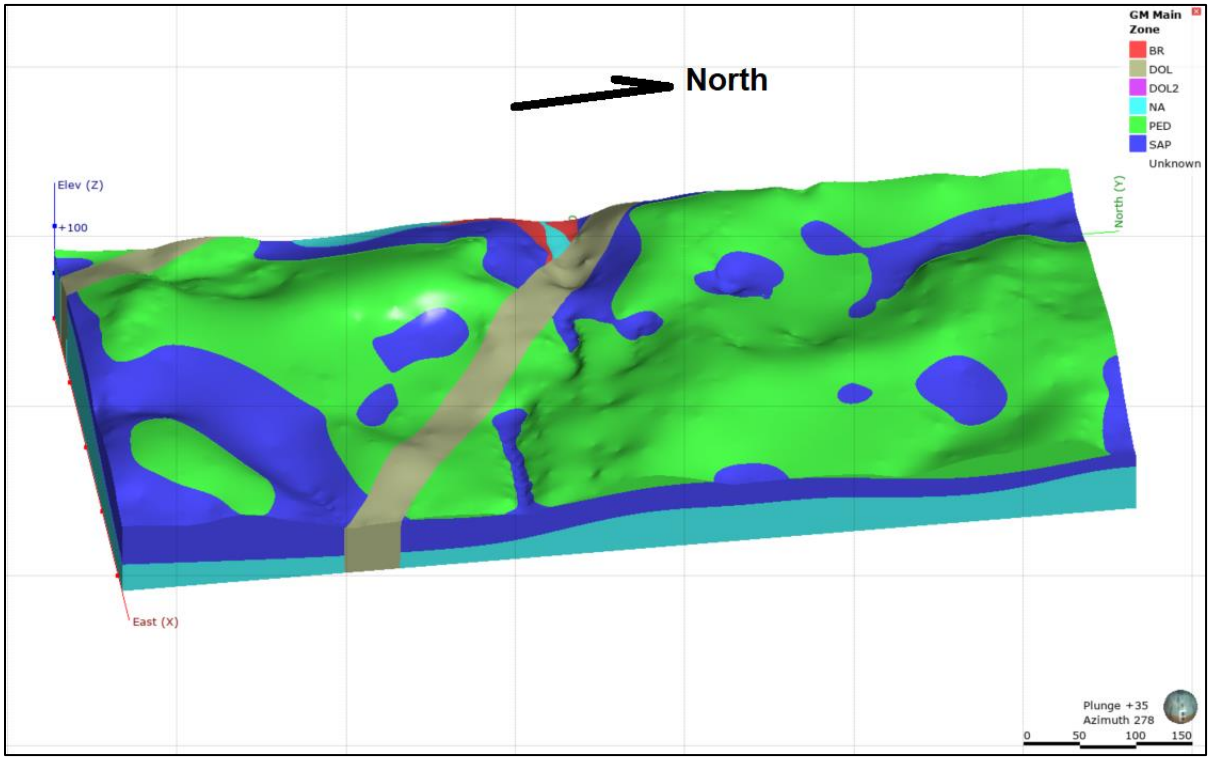
- Geological interpretation.
- Domain selection, compositing and grade capping.
- Variography/spatial analysis.
- Definition of estimation parameters and block model attributes.
- Grade interpolation and resource definition.
- Mineral resource parameters and report.

14.5 GEOLOGICAL INTERPRETATION

A 3D geological interpretation of the Main Zone area is shown in Figure 14.2. The divisions into pedolith and saprolite are due to varying degrees of weathering of the underlying parent gneiss, a meta-sedimentary rock resulting from high grade metamorphism. Cross-cutting

dolerite dykes identified by surface mapping and drilling are also shown on the 3D interpretation.

Figure 14.2
3D Geological Interpretation of the Main Zone of the Vohitsara Project



Graphite mineralization occurs in stratiform layers striking north-south with a gentle dip of between 20° and 30° westwards. Graphite mineralization appears to be fairly continuous along strike and down dip, however both high grade and large flake size portions of the zone appear to be restricted in extent. The discontinuous nature of current and previous mining excavations within the Project area and surrounding areas generally appears to confirm that the high-grade large flakes occur in lenticular bodies rarely exceeding 50 m in strike.

14.6 DOMAIN SELECTION, COMPOSITING AND GRADE CAPPING

The pedolith and saprolite were considered as different domains. However, for both domains, sample lengths were composited to 1.5 m based on the mode/average of the sample lengths. Grade capping was conducted using population histograms and log-probability plots to remove outlier values from the sample populations within each domain. The capping was applied after compositing to give equal weighting to the values prior to statistical analysis. The histograms, summary statistics and log-probability plots are shown in Figure 14.3 to Figure 14.6.

Figure 14.3
Histogram and Summary Statistics for the Pedolith Domain

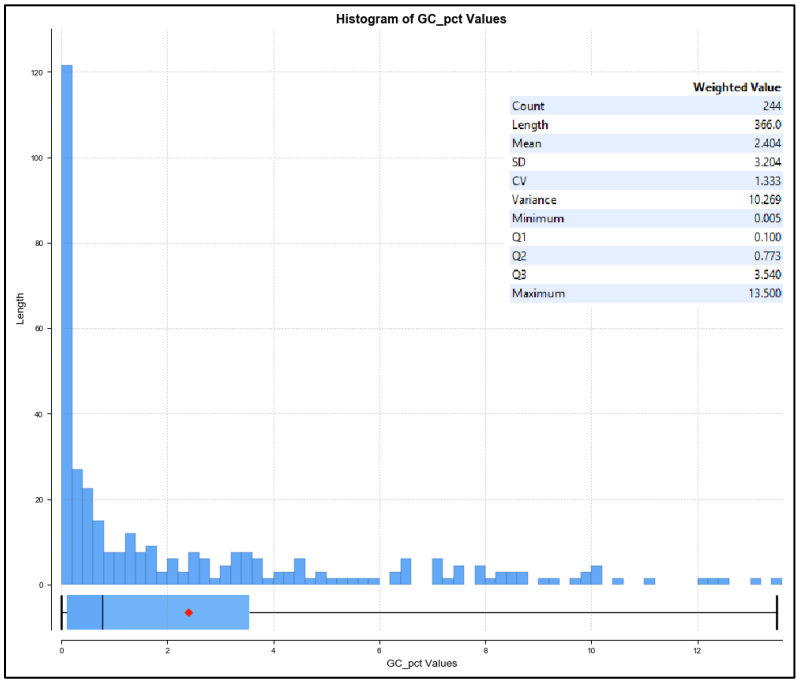


Figure 14.4
Log-probability Plot of the Pedolith Domain Showing the Capping Threshold Value

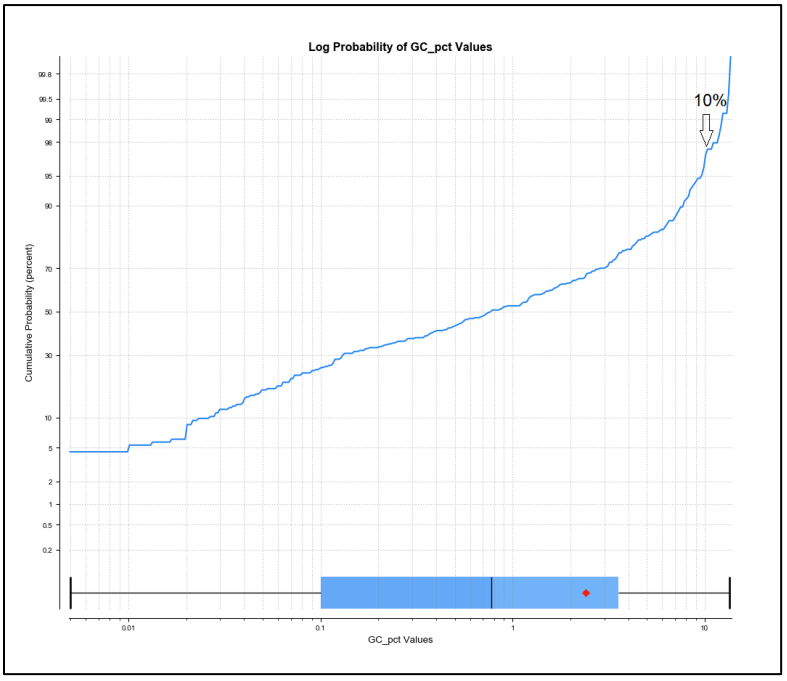


Figure 14.5
Histogram and Summary Statistics for the Saprolite Domain

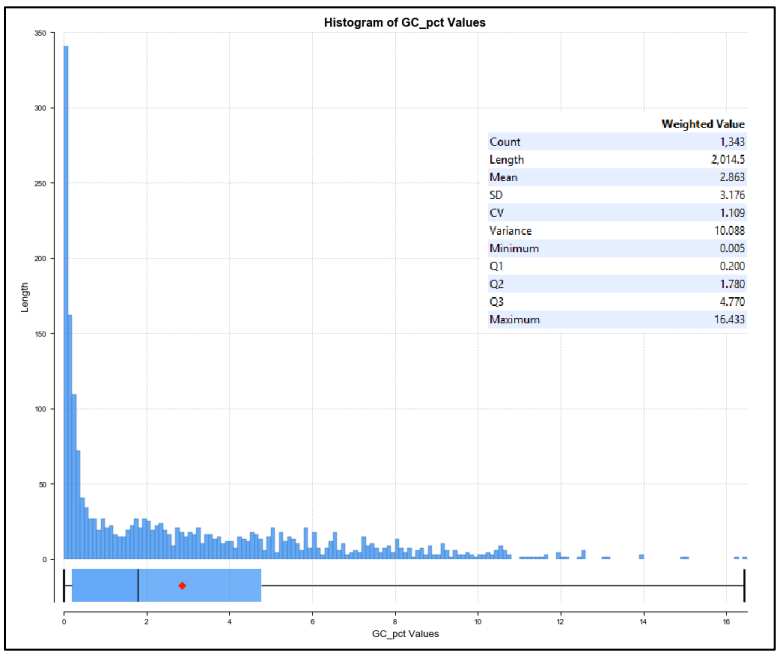
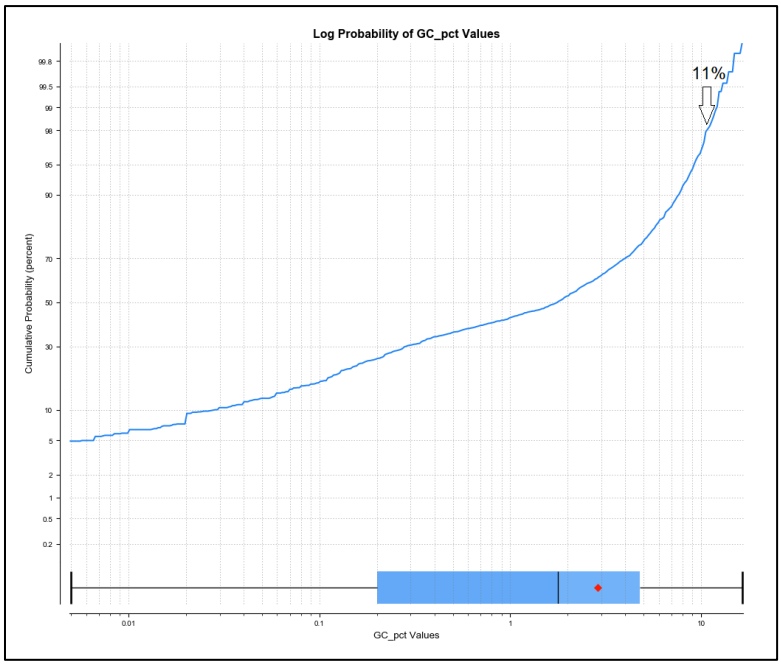


Figure 14.6
Log-probability Plot of the Saprolite Domain Showing the Capping Threshold Value



The statistics of the capped and uncapped composites are shown in Table 14.1.

Table 14.1
Statistics of the Capped and Un-capped Composites

Item	Saprolite Zone		Pedolith Zone	
	Un-Capped	Capped	Un-Capped	Capped
Count	1,343	1,343	244	244
Mean	2.86	2.83	2.40	2.34
Std Dev	3.18	3.07	3.20	3.03
CV	1.11	1.09	1.33	1.29
Variance	10.09	9.45	10.27	9.16
Minimum	0.01	0.01	0.01	0.01
Q1	0.20	0.20	0.10	0.10
Q2	1.78	1.78	0.77	0.77
Q3	4.77	4.77	3.54	3.54
Maximum	16.43	11.00	13.50	10.00

14.7 VARIOGRAPHY/SPATIAL ANALYSIS

Variography was conducted using the 1.5 m composite samples in order to define the continuity of the mineralization, to establish the maximum range (distance) over which samples/drill hole intercepts may be spatially correlated, and the optimum parameters for the search ellipse to be used in the interpolation of grades. The spatial analysis of the Saprolite and the Pedolith zones was conducted separately although the latter contains fewer data as seen in Table 14.1 above.

Initially, down-hole variograms were computed in order to establish the nugget effect; thereafter, 3D variogram to cover the three principal geometrical directions were computed and modelled using the nugget effect established from the down-hole variogram. The variograms for the Saprolite zone (i.e. principal domain) are shown in Figure 14.7 and Figure 14.8. The variographic results for both the Pedolith and Saprolite zones are summarized in Table 14.2.

Figure 14.7
Downhole Variogram for the Saprolite Zone

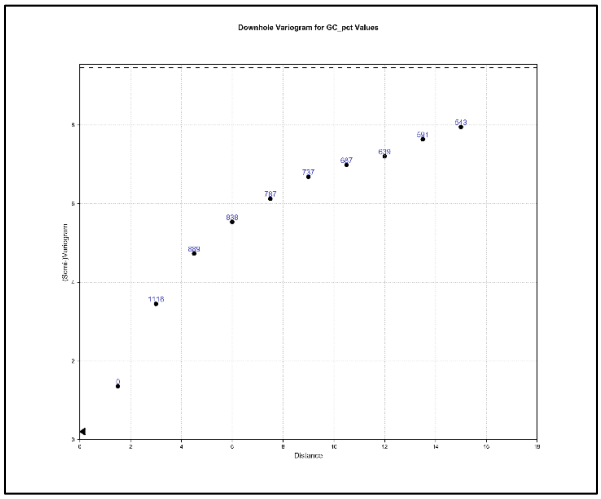


Figure 14.8
Saprolite Zone Variograms for the Principal Directions (Strike, Down-dip and Vertical Directions)

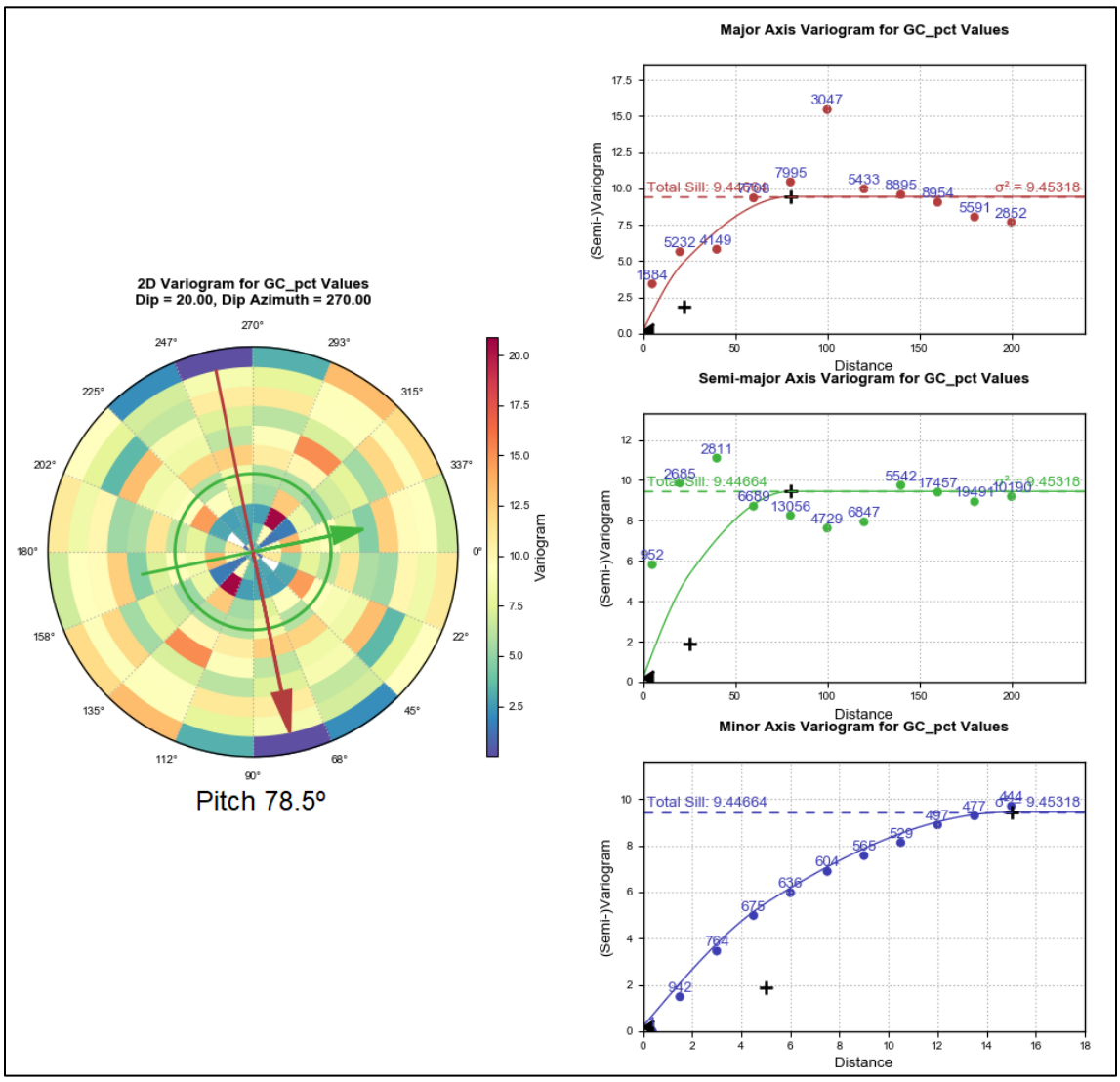


Table 14.2
Summary of Variography Results for the Main Zone

Domain	Variogram Model	Nugget	Major Axis Range	Semi-major Axis Range	Minor Axis Range	Bearing	Pitch	Dip
Saprolite	Spherical	0.05	80	80	15	270	145	-20
Pedolith	Spherical	0.05	75	60	10	270	145	-20

The ranges of influence in the respective directions indicate reasonable mineralization continuity and are used to define the appropriate limits of the search ellipse for grade interpolation.

14.8 DEFINITION OF ESTIMATION PARAMETERS AND BLOCK MODEL ATTRIBUTES

The search ellipse parameters are based on the variography results and are summarized in Table 14.3.

Table 14.3
Search Parameters for the Main Zone of the Vohitsara Project

Domain	X (m)	Y (m)	Z (m)	Min. S	Max. S	Max. S/DH
Pedolith	75	60	10	2	12	2
Saprolite	80	80	15	2	12	2

The block model attributes are presented in Table 14.4. The upper limit representing surface topography is based on the topographic map that was provided by DNI. The parent block size was based on drill hole spacing, envisaged selective mining unit (SMU) and the geometry of the deposit. A volume check of the block model versus the wireframes revealed a good representation of the volume for the deposit components.

Table 14.4
Vohitsara Project Main Zone Block Model Attributes

Item	X (m)	Y (m)	Z (m)
Origin/Minimum Coordinates	304,690	7,949,650	120
Extents	640	1,100	120
Block Size	10	10	1.5
Rotation	0		

14.9 GRADE INTERPOLATION AND RESOURCE DEFINITION

Grade interpolation was constrained by geology and assumes an average dip of 20° westwards.

Ordinary kriging (OK) was used for grade interpolation for the pedolith and saprolite domains. Figure 14.9, Figure 14.10 and Figure 14.11 show the global distribution of block grades in the Main Zone at different elevations without pit constrains.

Figure 14.9
Vohitsara Project Main Zone 80 m Elevation Plan View of GC Grades Distribution

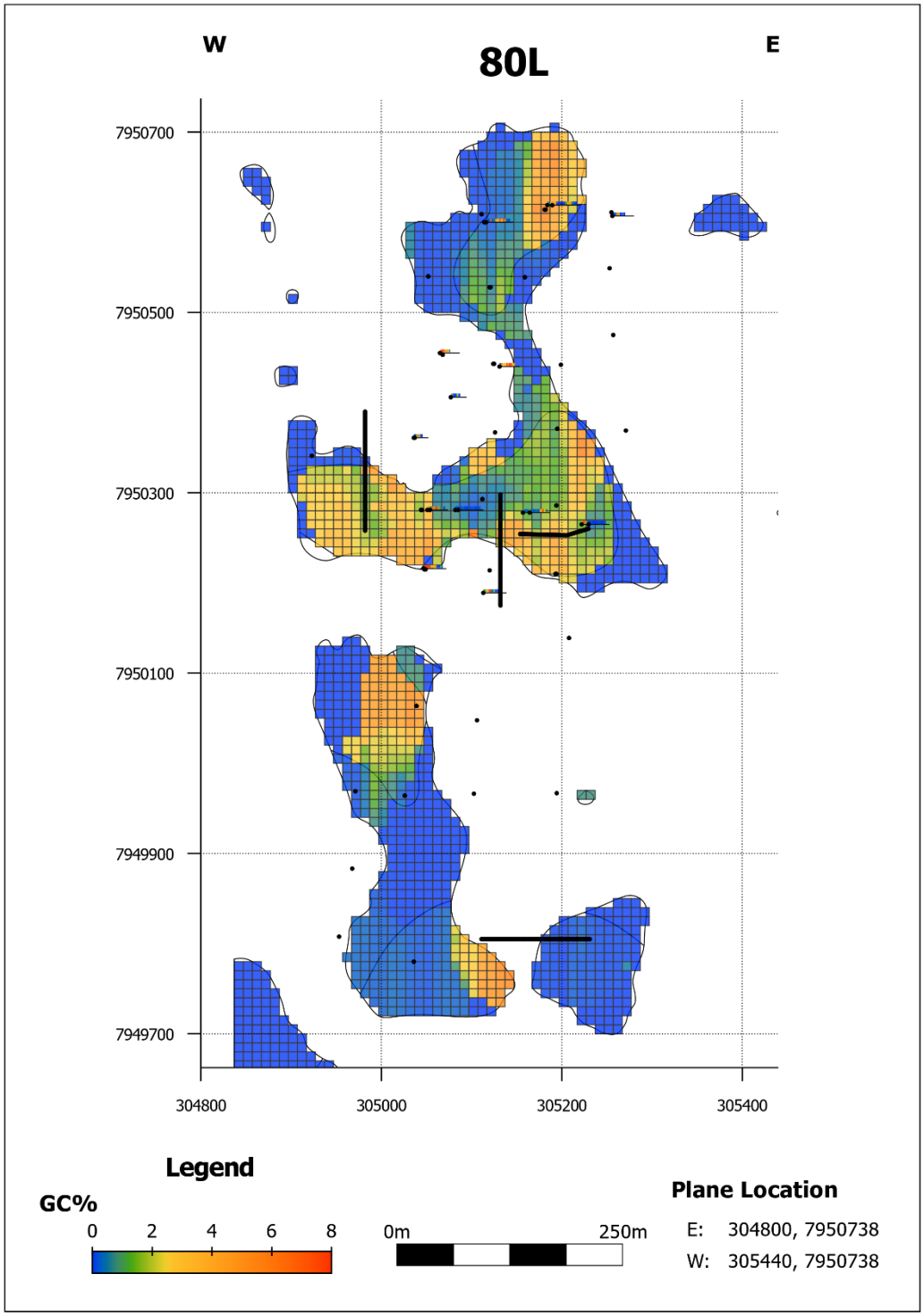


Figure 14.10
Vohitsara Project Main Zone 70 m Elevation Plan View of GC Grades Distribution

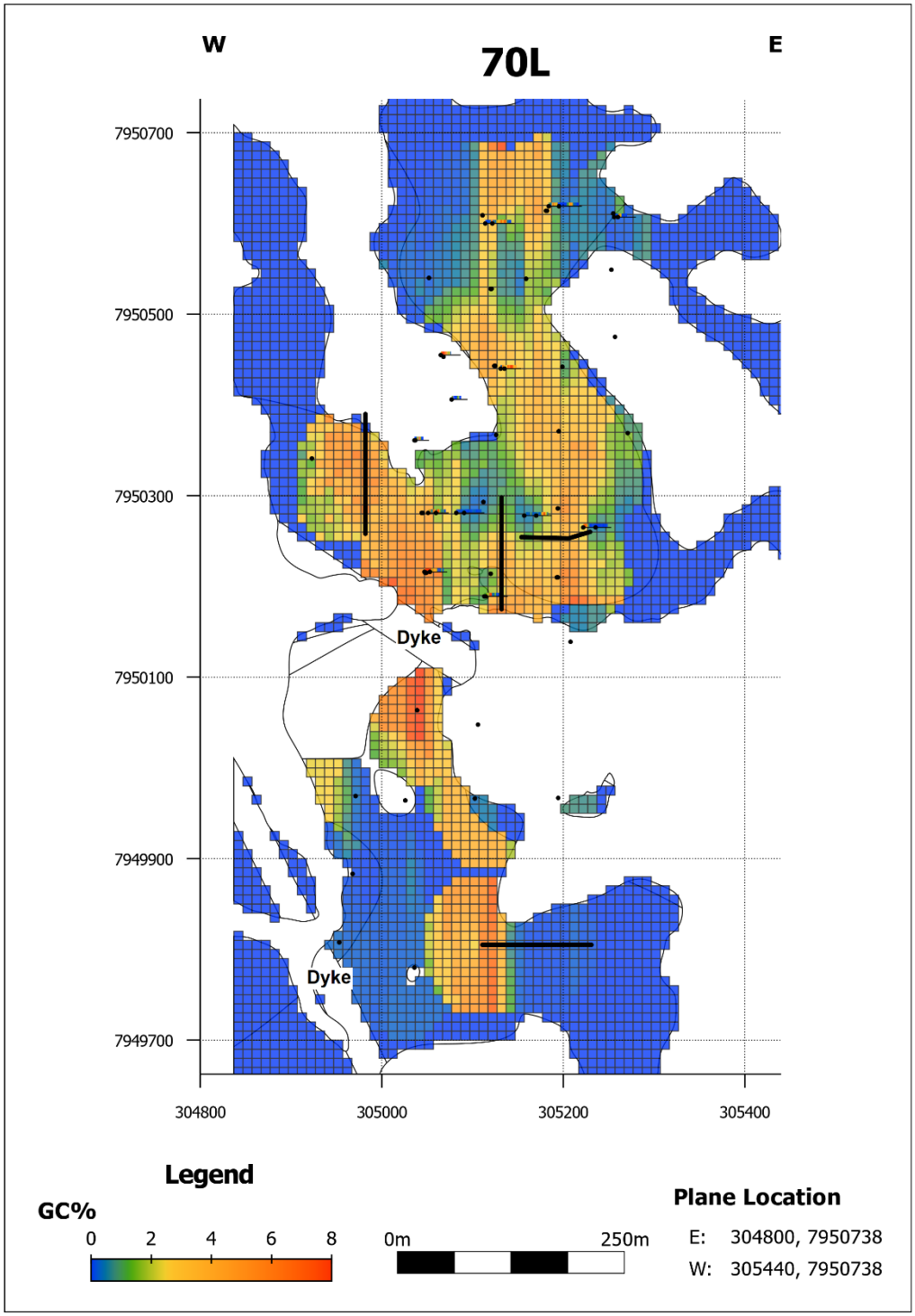
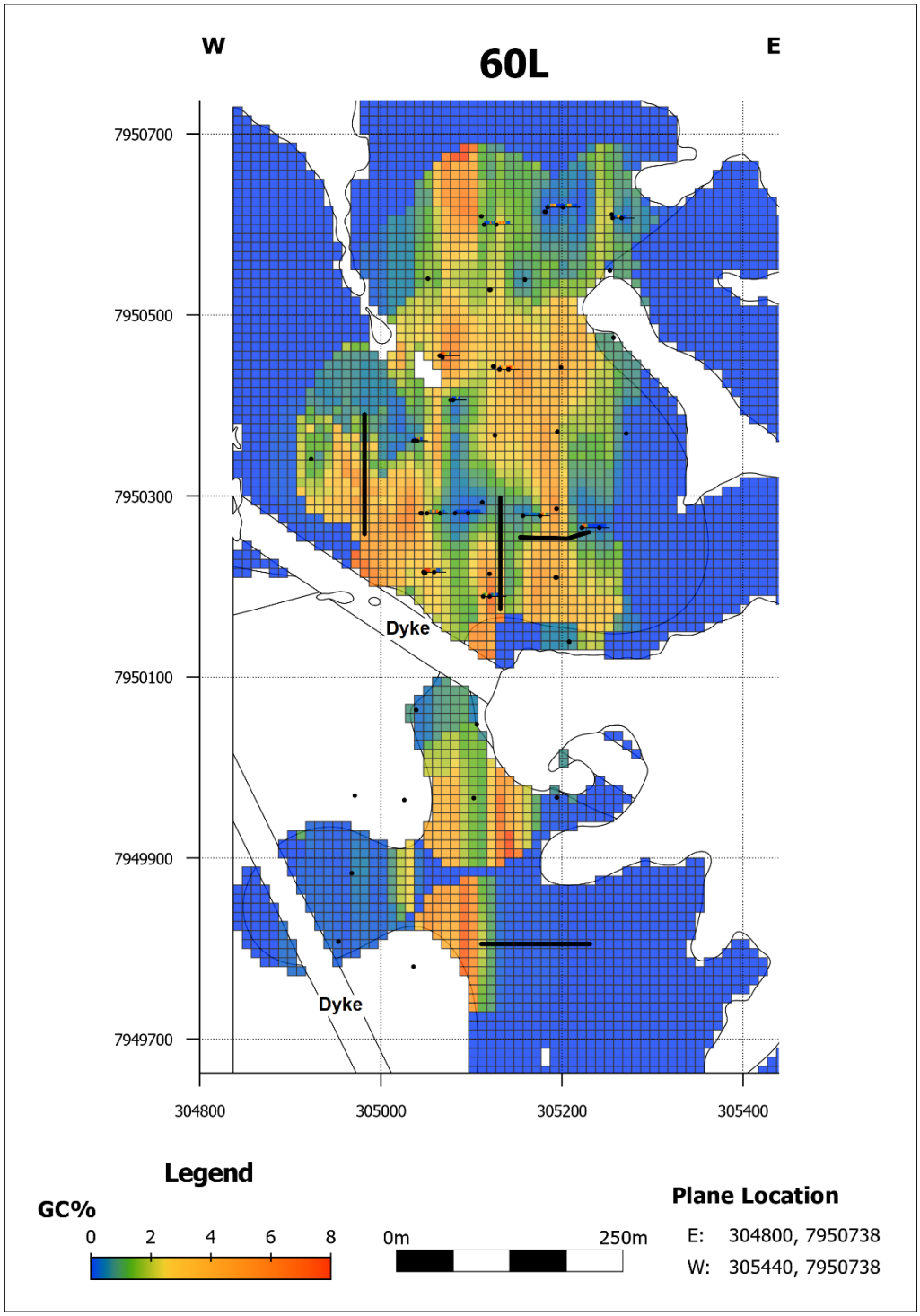


Figure 14.11
Vohitsara Project Main Zone 60 m Elevation Plan View of GC Grades Distribution



14.10 MINERAL RESOURCE PARAMETERS AND REPORTING

14.10.1 Prospects for Economic Extraction

The CIM definition standards require that a mineral resource must have reasonable prospects for eventual economic extraction. The Main Zone of the Vohitsara Project outcrops at surface, making it amenable to open-cast mining.

The metallurgical testwork conducted by Cougar was used to determine the value of the graphite mineralization at the Vohitsara Project as summarized in Table 14.5.

Table 14.5
Summary for the Determination of the Graphite Value for Vohitsara Project

Flake Size and Price			Vohitsara Project		
Size of Flake	Mesh Size	Price Per Tonne[1] (USD)	Cougar Flake Distribution[2]		Price VS flake distribution
			%		Price per tonne (USD)
XL flake	+50	$1,800.00	27.0	0.270	$486.00
Large flake	+80	$1,200.00	27.0	0.270	$324.00
Medium flake	+100 to -80	$1,000.00	11.0	0.110	$110.00
Small flake	-100	$850.00	35.0	0.350	$297.50
			100.0	**1.000**	**$1,217.50**

Notes: [1] December, 2018, China graphite flake-194 EXW spot prices.
[2] Flake distribution based on data collected for the Cougar testwork.

The economic parameters and cut-off grade calculation summarized in Table 14.6 were applied to Micon's open pit limit analysis in order to demonstrate the deposit's prospects for eventual economic extraction. Costs are based on an analogous mining operation in Africa while the remaining parameters are based upon metallurgical testwork conducted on material from the Project.

Table 14.6
Economic Parameters and Cut-off Calculation for the Vohitsara Project Main Zone

Economic Parameter	Units	
Graphite Price (prorated for flake size in USD)	$1,217.50/t	
Feed Grade, Total Carbon	5%	
Recovery	90%	
Yield	4.50%	90% concentrate recovery
Operating cost (USD/t concentrate)	$323.00	
Cut-off Grade Calculation		
$323 X 0.045 = $14.54/t		
$1,217.50 X 90% = $1,095.75/t		
$75.39 = 1 t product		
= 1.40 % cut-off		

The optimized pit shell was then used to constrain the resources, as shown in Figure 14.12 and Figure 14.13. The slope used to define the pit shell was set at 50° and the open pit was limited

to a depth of approximately 30 m to correspond approximately to the contact between saprolite and bedrock. Graphite mineralization extends into the bedrock but, for the purposes of this resource estimate, the graphite contained in the bedrock was not considered as part of a mineral resource.

Figure 14.12
3D Perspective of the Optimized Pit Shell Constrained Resource

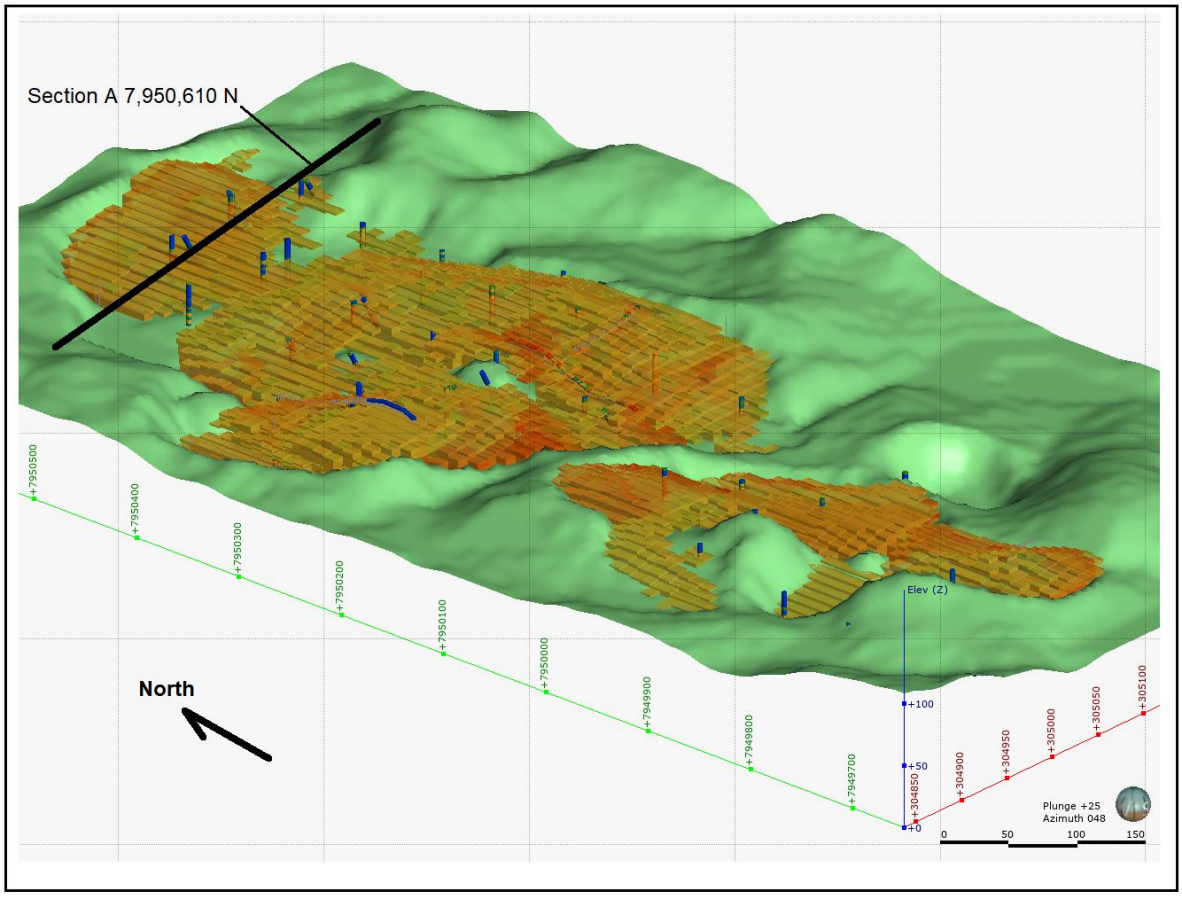
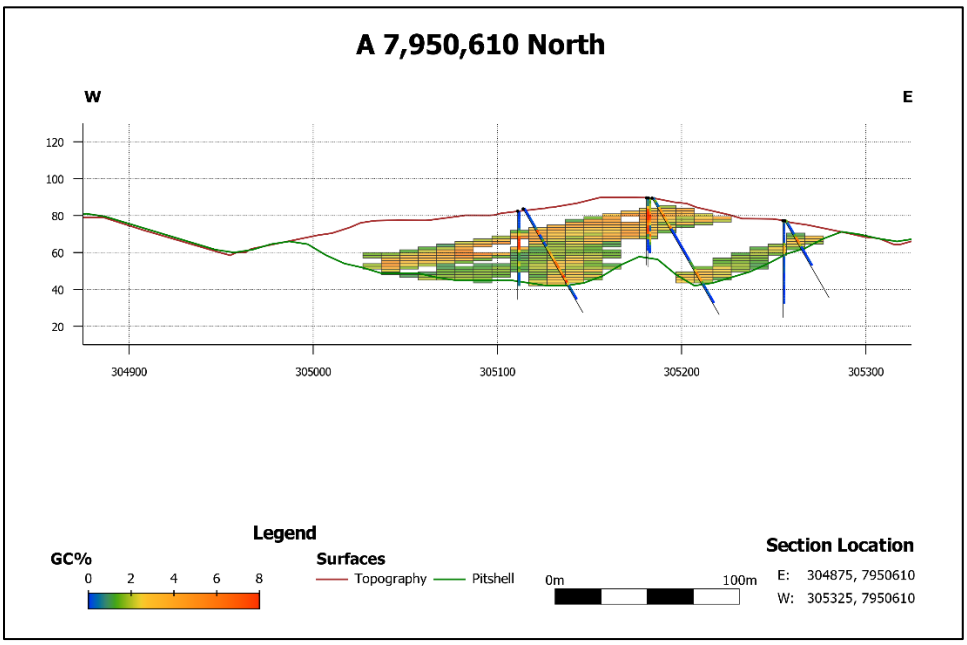


Figure 14.13
Section A East-West Section Through the Optimized Pit Shell Constrained Model



14.10.2 Classification and Mineral Resource Estimate Statement

Micon's QPs have classified the mineral resource estimate at the Vohitsara Project in the Inferred category, based on widely spaced drill holes of approximately 125 m. Using the assumptions specified in Table 14.7, the cut-off grade for reporting the mineral resource is 1.4% GC. However, to increase the level of confidence in the reasonable prospects for eventual economic extraction, DNI prefers to report the base case resource estimate at a higher cut-off grade of 3% GC as summarized in Table 14.5.

Table 14.7
Summary of the Mineral Resource of the Vohitsara Project as of March 29, 2019

Cut-off (GC%)	Tonnes (Mt)	Avg. Grade (GC%)	Graphite Content (T GC)
3.0	4.00	5.00	200,000

1. Graphite price (prorated for the flake size) USD 1,217.50 per tonne.
2. Recovery 90%.
3. Operating cost USD 323.00 per tonne graphite concentrate.
4. Mineral resources constrained within a Whittle pit shell.
5. The mineral resources presented here were estimated by Micon's QPs using the Canadian Institute of Mining, Metallurgy and Petroleum (CIM) Definitions and Standards on Mineral Resources and Reserves as of May 10, 2014.
6. Mineral resources unlike mineral reserves do not have demonstrated economic viability.
7. At the present time, Micon does not believe that the mineral resource estimate is materially affected by environmental, permitting, legal, title, taxation, socio-political, marketing, or other relevant issues.

A sensitivity table outlining the mineral resources at various cut-off grades above and below the adopted 3% GC base case to allow DNI to determine the potential impact on the resources should efficiencies be identified in further studies is provided in Table 14.8.

Table 14.8
Vohitsara Project Pit Constrained Resource Sensitivity Analysis With 3% GC Base Case

Cut-offs (GC%)	Tonnes (Mt)	Avg. Grade (GC%)	Graphite Content (T GC)
5.0	1.65	6.59	109,000
4.5	2.09	6.20	130,000
4.0	2.61	5.81	152,000
3.5	3.28	5.39	177,000
3.0	**4.00**	**5.00**	**200,000**
2.5	4.83	4.61	223,000
2.0	5.76	4.23	244,000
1.5	6.83	3.85	263,000
1.0	7.60	3.58	272,000
0.5	8.34	3.33	278,000

TECHNICAL REPORT SECTIONS NOT REQUIRED

The following sections which form part of the NI 43-101 reporting requirements for advanced projects or properties are not relevant to the current Technical Report for the Vohitsara Project:

15.0 MINERAL RESERVE ESTIMATES

16.0 MINING METHODS

17.0 RECOVERY METHODS

18.0 PROJECT INFRASTRUCTURE

19.0 MARKET STUDIES AND CONTRACTS

20.0 ENVIRONMENTAL STUDIES, PERMITTNG AND SOCIAL OR COMMUNITY IMPACT

21.0 CAPITAL AND OPERATING COSTS

22.0 ECONOMIC ANALYSIS

23.0 ADJACENT PROPERTIES

23.1 VATOMINA GRAPHITE PROJECT

The Vatomina Graphite Project (Vatomina Project) is contained on a single mining permit 38321 which is contiguous with the southern boundary of the Vohitsara Project.

The initial exploration work was conducted at the Vatomaina historical mining area by an Indian company, Tirupati Carbons & Chemical PVT. Ltd. (Tirupati). Its local Malagasy subsidiary, Tirupati Ventures Madagascar Sarl (TVM), has conducted limited surface chip and panel sampling of existing cutbacks along the known mineralised trend.

Tirupati has noted in their literature that the mineralisation at the Vatomina Project is a disseminated flake type.

According to Tirupati's website, Tirupati Graphite PLC (Tirupati Graphite) in partnership with Optiva Securities is developing the Vatomina Project in Madagascar.

According to Tirupati Graphite's website, the project was acquired from Tirupati on May 11th, 2017.

According to Tirupati Graphite's website literature, it is developing the Project to an eventual capacity of 60,000 TPA flake graphite production by 2021, and the following activities have been executed at the project:

- ***"Exploration:*** *Exploration has been done to a proved level - drilling of 57 holes up to 80 m depth completed at an operating cost of c. $25/m, exploratory mining conducted."*
- ***"Infrastructure:*** *Internal roads about 20 km, bridges built, solar powered campsite, in-country headquarters at Antananarivo, plant area land leveling completed and stage 1 construction initiated."*
- ***"Equipment:*** *First set of earth work equipment deployed, first stage plant equipment being manufactured and procured."*
- ***"Metallurgical Tests:*** *The company commissioned an independent research institute for testing bulk samples from the project at lab scale for enhancement of flow sheet and characterization of product. The inherited flow sheet was further enhanced with technologies for retaining flake size and lowering production costs and further maximising output."*

Tirupati Graphite also noted that it had completed all the land acquisitions for the Project and has engaged in community welfare activities. Its engineers, geoscientists and project management team are working on ground.

It should also be noted that the resource potential noted in the website disclosure lacks an accompanying Competent Persons Report or other material to indicate how it was derived.

23.2 SAHAMAMY GRAPHITE PROJECT

In October, 2017, Tirupati Graphite acquired a 100% equity stake in the Sahamamy-Sahasoa Project (Sahamamy Project). The Sahamamy Project is located 8 km from the Vatomina Project.

The Sahamamy Project currently has an 8 km^2 mining permit, with an additional 8 km^2 applied for. The second mining permit is understood to have been granted and is currently being processed. The strike length at the Sahamamy Project has been established for over 1 km in length and a further 600 m of strike length has been identified at the Sahasoa Project. Prior operations at the Sahamamy Project produced at the rate of 250 t/a, which was enhanced by Tirupati Graphite, after its acquisition, to 850 t/a.

23.3 MICON COMMENTS

Micon's QP for this section has been unable to verify the information disclosed by Tirupati or Tirupati Graphite for its projects and is of the opinion that the information is not necessarily indicative of mineralization within the permits that comprise the Vohitsara Project.

24.0 OTHER RELEVANT DATA AND INFORMATION

All relevant data and information regarding DNI's Vohitsara Project are included in other sections of this Technical Report.

The independent authors of this report are not aware of any other data that would make a material difference to the quality of this Technical Report or make it more understandable, or without which the report would be incomplete or misleading.

25.0 INTERPRETATION AND CONCLUSIONS

25.1 GENERAL

Since DNI has acquired the Vohitsara Project, in Madagascar, it has conducted an exploration programs and subsequent drilling program at the property. DNI has begun to outline the extent of the graphite mineralization at the Vohitsara Project. DNI plans to continue to advance the Project with further exploration, testwork and studies to be conducted in in 2019 and 2020. Additionally, DNI plans to begin exploration on its adjacent Marofody Project in 2019.

DNI engaged Micon to conduct the graphite mineral resource estimate based on the data DNI had obtained through its exploration and drilling programs. Micon's QP's have reviewed data related to the project and considers that the work was conducted using best practices for exploration work and that the results support a mineral resource estimate.

25.2 VOHITSARA PROJECT MINERAL RESOURCE ESTIMATE

25.2.1 General Notes

This is the first mineral resource estimate to be conducted on DNI's Vohitsara Project in Madagascar. The mineral resource estimate is based on the exploration work conducted on the Project to date by DNI and other parties, that has been reviewed and accepted by the QP.

The database for DNI consists of 5 trenches 56 RC dill holes and 28 diamond drill holes with the majority of the work completed on the Main zone and the remainder on the Southwest zone.

The resource estimate discussed in this Technical Report pertains only to the Main Zone which has been tested by 5 trenches, 22 vertical diamond drill holes and 38 vertical RC holes. The resource database comprises geological contacts, collar-surveys, assay data, lithology tables and density information. The drill hole spacing is between 100 m and 150 m except where the holes have been twinned; the average spacing is approximately 125 m.

While the quality of the data for the Southwest Zone is sufficient upon which to conduct a mineral resource estimate, a mineral resource estimate for the zone was not conducted. The mineral resource estimate for the Southwest Zone was not conducted for the following reasons:

- Despite the graphite mineralization being exposed in historical workings and in road cuts, these exposures were not sampled. DNI now recognizes that this information is important in order to better define the mineralization prior to conducting a resource estimate in this area.
- The topography and drilling appear to indicate that the mineralization is still open to the south. DNI would therefore like to investigate the possible southern extension of the zone, prior to declaring a mineral resource for this zone.

The topographic surface map is based on the topographic map that was provided by DNI. Bulk density data is based on the average of 100 determinations by the AGAT laboratory.

25.2.2 Economic Parameters

The CIM definition standards require that a mineral resource must have reasonable prospects for eventual economic extraction. The Main Zone of the Vohitsara Graphite Project outcrops at surface making it amenable to open-cast mining.

The economic parameters and cut-off grade calculation summarized in Table 14.6 were applied to Micon's open pit limit analysis in order to demonstrate the deposit's prospects for eventual economic extraction. Costs are based on an analogous mining operation in Africa while the remaining parameters are based upon metallurgical testwork conducted on material from the Project.

Table 25.1
Economic Parameters and Cut-off Calculation for the Vohitsara Project Main Zone

Economic Parameter	Units	
Graphite Price (prorated for flake size in USD)	$1,217.50/t	
Grade	5%	
Recovery	90%	
Yield	4.50%	95% concentrate recovery
Operating cost (USD/t concentrate)	$323.00	
Cut-off Grade Calculation		
$323 X 0.045 = $14.54/t		
$1,217.50 X 90% = $1,095.75/t		
$75.39 = 1 t product		
= 1.40 % cut-off		

The slope used to define the pit shell was set at 50° and the open pit was limited to a depth of approximately 30 m to correspond approximately to the contact between saprolite and bedrock. Graphite mineralization extends into the bedrock but, for the purposes of this resource estimate, the graphite contained in the bedrock was not considered as part of a mineral resource.

25.2.3 Mineral Resource Estimate

Micon's QPs have classified the mineral resource estimate at the Vohitsara Project in the Inferred category, based on widely spaced drill holes of approximately 125 m. Using the assumptions specified in Table 14.7 above, the cut-off grade for reporting the mineral resource is 1.4% GC. However, to increase the level of confidence in the reasonable prospects for eventual economic extraction, DNI prefers to report the base case resource estimate at a higher cut-off grade of 3% GC as summarized in Table 25.2.

Table 25.2
Summary of the Mineral Resource of the Vohitsara Project as of March 29, 2019

Cut-off (GC%)	Tonnes (Mt)	Avg. Grade (GC%)	Graphite Content (T GC)
3.0	4.00	5.00	200,000

1. Graphite price (prorated for the flake size) USD 1,217.50 per tonne.
2. Recovery 90%.
3. Operating cost USD 323.00 per tonne graphite concentrate.
4. Mineral resources constrained within a Whittle pit shell.
5. The mineral resources presented here were estimated by Micon's QPs using the Canadian Institute of Mining, Metallurgy and Petroleum (CIM) Definitions and Standards on Mineral Resources and Reserves as of May 10, 2014.
6. Mineral resources unlike mineral reserves do not have demonstrated economic viability.
7. At the present time, Micon does not believe that the mineral resource estimate is materially affected by environmental, permitting, legal, title, taxation, socio-political, marketing, or other relevant issues.

A sensitivity table outlining the mineral resources at various cut-off grades above and below the adopted 3% GC base case to allow DNI to determine the potential impact on the resources should efficiencies be identified in further studies is provided in Table 25.3.

Table 25.3
Vohitsara Project Pit Constrained Resource Sensitivity Analysis With 3% GC Base Case

Cut-offs (GC%)	Tonnes (Mt)	Avg. Grade (GC%)	Graphite Content (T GC)
5.0	1.65	6.59	109,000
4.5	2.09	6.20	130,000
4.0	2.61	5.81	152,000
3.5	3.28	5.39	177,000
3.0	**4.00**	**5.00**	**200,000**
2.5	4.83	4.61	223,000
2.0	5.76	4.23	244,000
1.5	6.83	3.85	263,000
1.0	7.60	3.58	272,000
0.5	8.34	3.33	278,000

25.3 CONCLUSIONS

In the view of Micon's QPs, DNI's exploration and drilling programs have identified a graphite mineral resource estimate at the Vohitsara Project which warrants further exploration to outline its full extent. Further exploration will demonstrate the extent to which the Southwest Zone may contribute to the overall mineral resources, since the zone is open to the south and appears to exhibit the same mineralization as the Main Zone. There is potential for the discovery of other mineralized zones on the Vohitsara permit and adjoining Marofody permit that may contribute further to the overall mineral resource.

26.0 RECOMMENDATIONS

26.1 EXPLORATION BUDGET AND OTHER EXPENDITURES

Since acquiring the mining permits comprising the Vohitsara Project, DNI has completed a number of exploration programs and a drilling program on the main Vohitsara mining license. DNI has not conducted any exploration on the Marofody mining permit as of the date of this Technical Report. These exploration and drilling programs have partially identified the extent and quality of the graphite mineralization at both the Southwest and Main Zones.

The graphite mineralization remains open in both north and south strike directions in the Main Zone and in the southern direction in the Southwestern Zone. Further exploration drilling will be needed to define the true extent of the graphite mineralization in these zones. There are indications of other zones of graphite mineralization within the mining permits that comprise the Vohitsara Project, but further exploration of the property will be needed to determine the extent and quality of the graphite mineralization in these zones.

During 2019 and 2020, DNI is planning to conduct further exploration and testwork regarding extent and quality of the graphite mineralization on the Vohitsara Project. The proposed budget expenditures by DNI are summarized in Table 26.1.

Table 26.1
Summary of DNI's Proposed Budget for the Vohitsara Project

Expenditure Item	2019 (USD)	2020 (USD)
Marofody Exploration	2,000,000	----
Testwork Pilot Plant	8,000,000	----
Feasibility Studies	----	1,500,000
Commercial Plant	----	Subject to Feasibility
Total	**10,000,000**	**1,500,000**

In 2019, DNI is planning to construct a pilot plant on the Vohitsara mining permit in order to indicate the Project's potential commercial viability by optimizing the grade and recovery of the graphite mineralization into a concentrate at the Main Zone. DNI is also planning to conduct an exploration program on the Marofody mining permit which will consist of geophysical, trenching, sampling and drilling to determine the extent of the graphite mineralization in this area.

In 2020, DNI is planning to complete a feasibility study based upon the pilot plant work and, should it be determined that the mineral resource on its permits is of sufficient commercial quantity and quality, a decision will be made on construction of a commercial production plant.

Micon's QPs agree with the direction of DNI's program and regard the expenditures and studies as appropriate. Micon and the authors realize that the nature of the programs and expenditures may change as the program advances due to various causes and that the final expenditures and results may not be the same as originally proposed.

26.2 FURTHER RECOMMENDATIONS

Micon's QPs understand that DNI will conduct further exploration program on the Vohitsara Project s in order to gain knowledge regarding the true extent of the graphite mineralization on the mining permits and conduct further testwork to determine the commercial viability of the graphite mineralization. In that context, Micon's QPs make the following additional recommendations:

1. Drilling should be conducted using diamond drilling methods as opposed to RC drilling methods as this will allow for a more refined model of the geology and graphite mineralization to be constructed.
2. DNI should conduct some infill drilling to further outline any variability within the mineralization (grade and thickness) and potentially upgrade the confidence in the classification categories for the resource estimate.
3. DNI should conduct further exploration drilling to outline the true extent of the zones currently identified (Southwest and Main) and outline further zones on the property which could be included in any future resource update.
4. DNI continues with its plans to build a new exploration facility to store the core and samples on the property nearer to the entrance of the property at some point in the near future.
5. DNI should have a topographic survey conducted to cover the entire property or at least the relevant portions of it and tie all the historical workings, roads, trails, drilling and trenching. This will improve any future mineral resource estimates and set up the project better for conducting mine planning exercises in the future. This could possibly be completed using a drone to potentially maximize the coverage and minimize the cost of this survey.
6. DNI should conduct further metallurgical testwork to potentially optimize the areas that could be blended together but more importantly determine the extent and variability of the flake size within the mineralized zones.

27.0 DATE AND SIGNATURE PAGE

27.1 MICON INTERNATIONAL LIMITED

The independent Qualified Persons for this report are:

"William J. Lewis" {signed and sealed as of the report date}

William J. Lewis, B.Sc., P.Geo.
Senior Geologist

Report Date: May 15, 2019.
Effective Resource Date: April 19, 2019.

"Charley Murahwi" {signed and sealed as of the report date}

Charley Murahwi, M.Sc., P.Geo., Pr.Sci.Nat., FAusIMM
Senior Geologist.

Report Date: May 15, 2019.
Effective Resource Date: April 19, 2019.

27.2 M.PLAN INTERNATIONAL LIMITED

The independent Qualified Person for this report is:

"Lyn Jones" {signed and sealed as of the report date}

Lyn Jones, M.A.Sc., P.Eng.
Senior Consultant

Report Date: May 15, 2019.
Effective Resource Date: April 19, 2019.

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29.0 CERTIFICATES OF AUTHORS

CERTIFICATE OF AUTHOR
William J. Lewis, B.Sc., P.Geo.

As the co-author of this report for DNI Metals Inc. entitled "Technical Report Mineral Resource Estimate for the Vohitsara Graphite Project, Madagascar" dated May 15, 2019 with effective dates of March 29, 2019, I, William J. Lewis do hereby certify that:

1. I am employed as a Senior Geologist by Micon International Limited, 900 – 390 Bay Street, Toronto, Ontario M5H 2Y2, tel. +1 416 362 5135, fax +1 416 362 5763, e-mail wlewis@micon-international.com;
2. This certificate applies to the Technical Report titled "Technical Report Mineral Resource Estimate for the Vohitsara Graphite Project, Madagascar" dated May 15, 2019 with effective dates of March 29, 2019.
3. I hold the following academic qualifications:
   B.Sc. (Geology) University of British Columbia 1985
4. I am a registered Professional Geoscientist with the Association of Professional Engineers and Geoscientists of Manitoba (membership # 20480); as well, I am a member in good standing of several other technical associations and societies, including:
   - Engineers and Geoscientists of British Columbia (Membership # 20333)
   - Association of Professional Engineers, Geologists and Geophysicists of the Northwest Territories (Membership # 1450)
   - Professional Association of Geoscientists of Ontario (Membership # 1522)
   - The Canadian Institute of Mining, Metallurgy and Petroleum (Member # 94758)
5. I have worked as a geologist in the minerals industry for over 35 years;
6. I am familiar with NI 43-101 and, by reason of education, experience and professional registration, I fulfill the requirements of a Qualified Person as defined in NI 43-101. My work experience includes 4 years as an exploration geologist looking for gold and base metal deposits, more than 11 years as a mine geologist in underground mines and 18 years as a surficial geologist and consulting geologist on precious and base metals and industrial minerals;
7. I have read NI 43-101 and this Technical Report has been prepared in compliance with the instrument;
8. I have visited the Vohitsara Graphite Project in January, 2019;
9. This my first Technical Report for the mineral properties that are the subject of this Technical Report;
10. I am independent of DNI Metals Inc. and any subsidiaries according to the definition described in NI 43-101 and the Companion Policy 43-101 CP;
11. I am responsible for Sections 1 (except 1.7), 2 to 12 (except 12.3), 23, 24, 25 (except 25.2), and 26 of this Technical Report;
12. As of the date of this certificate, to the best of my knowledge, information and belief, the Technical Report contains all scientific and technical information that is required to be disclosed to make this technical report not misleading;

Report Dated this 15th day of May, 2019, with effective date of March 29, 2019.

"William J. Lewis" {signed and sealed as of the report date}

William J. Lewis, B.Sc., P.Geo.

CERTIFICATE OF AUTHOR
Charley Murahwi, M.Sc., P.Geo., Pr.Sci.Nat., FAusIMM

As the co-author of this report for DNI Metals Inc. entitled "Technical Report Mineral Resource Estimate for the Vohitsara Graphite Project, Madagascar" dated May 15, 2019 with effective dates of March 29, 2019, I, Charley Murahwi do hereby certify that:

1. I am employed as a Senior Geologist by Micon International Limited, 900 – 390 Bay Street, Toronto, ON, M5H 2Y2, tel. +1 416 362 5135, fax +1 416 362 5763, e-mail cmurahwi@micon-international.com;
2. This certificate applies to the Technical Report titled "Technical Report Mineral Resource Estimate for the Vohitsara Graphite Project, Madagascar" dated May 15, 2019 with effective dates of March 29, 2019.
3. I hold the following academic qualifications:
   B.Sc. (Geology) University of Rhodesia, Zimbabwe, 1979;
   Diplome d´Ingénieur Expert en Techniques Minières, Nancy, France, 1987;
   M.Sc. (Economic Geology), Rhodes University, South Africa, 1996.
4. I am a registered Professional Geoscientist in Ontario (membership # 1618) and in PEGNL (membership # 05662), a registered Professional Natural Scientist with the South African Council for Natural Scientific Professions (membership # 400133/09) and am a Fellow of the Australasian Institute of Mining & Metallurgy (FAusIMM) (membership number 300395).
5. I have worked as a geologist in the minerals industry for over 40 years;
6. I am familiar with NI 43-101 and, by reason of education, experience and professional registration, I fulfill the requirements of a Qualified Person as defined in NI 43-101. My work experience includes 18 years on gold, silver, copper, tin and tantalite projects (on and off mine), 12 years on Cr-Ni-Cu-PGE deposits in layered intrusions/komatiitic environments and 10 years as a consulting geologist on precious and base metals and industrial minerals;
7. I have read NI 43-101 and this Technical Report has been prepared in compliance with the instrument;
8. I have not visited the Vohitsara Graphite Project;
9. This my first Technical Report for the mineral properties that are the subject of this Technical Report;
10. I am independent of DNI Metals Inc. and any subsidiaries according to the definition described in NI 43-101 and the Companion Policy 43-101 CP;
11. I am responsible for Sections 1.7, 12.3, 14 and 25.2 of this Technical Report;
12. As of the date of this certificate, to the best of my knowledge, information and belief, the Technical Report contains all scientific and technical information that is required to be disclosed to make this technical report not misleading;

Report Dated this 15th day of May, 2019, with effective date of March 29, 2019.

"Charley Murahwi" {signed and sealed as of the report date}

Charley Murahwi, M.Sc., P.Geo., Pr.Sci.Nat., FAusIMM

CERTIFICATE OF AUTHOR
Lyn Jones, M.A.Sc., P.Eng.

As the co-author of this report for DNI Metals Inc. entitled "Technical Report Mineral Resource Estimate for the Vohitsara Graphite Project, Madagascar" dated May 15, 2019 with effective dates of March 29, 2019, I, Lyn Jones do hereby certify that:

1. I am employed as a Senior Consultant by M.Plan International Limited, 900 – 390 Bay Street, Toronto, Ontario M5H 2Y2, tel. +1 416 362 8007, fax +1 416 362 5763, e-mail lyn.jones@mplaninternational.com;
2. This certificate applies to the Technical Report titled "Technical Report Mineral Resource Estimate for the Vohitsara Graphite Project, Madagascar" dated May 15, 2019 with effective dates of March 29, 2019.
3. I hold the following academic qualifications:
   M.A.Sc. (Metals and Materials Engineering), University of British Columbia, 1998
   B.A.Sc. (Chemical and Bio-Resource Engineering), University of British Columbia, 1996
4. I am a registered Professional Engineer with the Association of Professional Engineers of Ontario (Membership # 100067095) and am a member of The Canadian Institute of Mining, Metallurgy and Petroleum.
5. I have worked as a metallurgist and process engineer in the minerals industry for over 20 years;
6. I am familiar with NI 43-101 and, by reason of education, experience and professional registration, I fulfill the requirements of a Qualified Person as defined in NI 43-101. My work experience includes 6 years in metallurgical flowsheet development and testing, 6 years in process engineering, and 8 years in project consulting in base metals, precious metals, and industrial minerals;
7. I have read NI 43-101 and this Technical Report has been prepared in compliance with the instrument;
8. I have not visited the Vohitsara Graphite Project;
9. This my first Technical Report for the mineral properties that are the subject of this Technical Report;
10. I am independent of DNI Metals Inc. and any subsidiaries according to the definition described in NI 43-101 and the Companion Policy 43-101 CP;
11. I am responsible for Sections 13 of this Technical Report;
12. As of the date of this certificate, to the best of my knowledge, information and belief, the Technical Report contains all scientific and technical information that is required to be disclosed to make this technical report not misleading;

Report Dated this 15th day of May, 2019, with effective date of March 29, 2019.

"Lyn Jones" {signed and sealed as of the report date}

Lyn Jones, M.A.Sc., P.Eng.

APPENDIX I

GLOSSARY OF MINING AND OTHER RELATED TERMS

GLOSSARY AND DEFINED TERMS

The following is a glossary of certain mining terms that may be used in this Technical Report.

A

Assay	A chemical test performed on a sample of ores or minerals to determine the amount of valuable metals contained.

B

Base metal	Any non-precious metal (e.g. copper, lead, zinc, nickel, etc.).
Bulk mining	Any large-scale, mechanized method of mining involving many thousands of tonnes of ore being brought to surface per day.
Bulk sample	A large sample of mineralized rock, frequently hundreds of tonnes, selected in such a manner as to be representative of the potential orebody being sampled. The sample is usually used to determine metallurgical characteristics.
By-product	A secondary metal or mineral product recovered in the milling process.

C

Channel sample	A sample composed of pieces of vein or mineral deposit that have been cut out of a small trench or channel, usually about 10 cm wide and 2 cm deep.
Chip sample	A method of sampling a rock exposure whereby a regular series of small chips of rock is broken off along a line across the face.
CIM Standards	The CIM Definition Standards on Mineral Resources and Mineral Reserves adopted by CIM Council from time to time. The most recent update adopted by the CIM Council is effective as of May 10, 2014.
CIM	The Canadian Institute of Mining, Metallurgy and Petroleum.
Concentrate	A fine, powdery product of the milling process containing a high percentage of valuable metal.
Contact	A geological term used to describe the line or plane along which two different rock formations meet.
Core	The long cylindrical piece of rock, about an inch in diameter, brought to surface by diamond drilling.
Core sample	One or several pieces of whole or split parts of core selected as a sample for analysis or assay.

Cross-cut	A horizontal opening driven from a shaft and (or near) right angles to the strike of a vein or other orebody. The term is also used to signify that a drill hole is crossing the mineralization at or near right angles to it.
Cut-off grade	The lowest grade of mineralized rock that qualifies as ore grade in a given deposit, and is also used as the lowest grade below which the mineralized rock currently cannot be profitably exploited. Cut-off grades vary between deposits depending upon the amenability of ore to gold extraction and upon costs of production.

D

Deposit	An informal term for an accumulation of mineralization or other valuable earth material of any origin.
Development drilling	Drilling to establish accurate estimates of mineral resources or reserves usually in an operating mine or advanced project.
Dilution	Rock that is, by necessity, removed along with the ore in the mining process, subsequently lowering the grade of the ore.
Dip	The angle at which a vein, structure or rock bed is inclined from the horizontal as measured at right angles to the strike.
DNI	DNI Metals Inc.., including, unless the context otherwise requires, the Company's subsidiaries.

E

Epithermal	Hydrothermal mineral deposit formed within one kilometre of the earth’s surface, in the temperature range of 50 to 200°C.
Epithermal deposit	A mineral deposit consisting of veins and replacement bodies, usually in volcanic or sedimentary rocks, containing precious metals or, more rarely, base metals.
Exploration	Prospecting, sampling, mapping, diamond drilling and other work involved in searching for ore.

F

Face	The end of a drift, cross-cut or stope in which work is taking place.
Fault	A break in the Earth's crust caused by tectonic forces which have moved the rock on one side with respect to the other.

Flotation	A milling process in which valuable mineral particles are induced to become attached to bubbles and float as others sink.
Fold	Any bending or wrinkling of rock strata.
Footwall	The rock on the underside of a vein or mineralized structure or deposit.
Fracture	A break in the rock, the opening of which allows mineral-bearing solutions to enter. A "cross-fracture" is a minor break extending at more-or-less right angles to the direction of the principal fractures.

G

Grade	Term used to indicate the concentration of an economically desirable mineral or element in its host rock as a function of its relative mass. With gold, this term may be expressed as grams per tonne (g/t) or ounces per tonne (opt).
Graphite	is a naturally-occurring form of crystalline carbon. It is a native element mineral found in metamorphic and igneous rocks. Graphite is a mineral of extremes. It is extremely soft, cleaves with very light pressure, and has a very low specific gravity.

H

Hangingwall	The rock on the upper side of a vein or mineral deposit.
High grade	Rich mineralization or ore. As a verb, it refers to selective mining of the best ore in a deposit.
Host rock	The rock surrounding an ore deposit.
Hydrothermal	Processes associated with heated or superheated water, especially mineralization or alteration.

I

Indicated Mineral Resource

An Indicated Mineral Resource is that part of a Mineral Resource for which quantity, grade or quality, densities, shape and physical characteristics are estimated with sufficient confidence to allow the application of Modifying Factors in sufficient detail to support mine planning and evaluation of the economic viability of the deposit. Geological evidence is derived from adequately detailed and reliable exploration, sampling and testing and is sufficient to assume geological and grade or quality continuity between points of observation. An Indicated Mineral Resource has a lower level of confidence than that applying to a Measured Mineral Resource and may only be converted to a Probable Mineral Reserve.

Inferred Mineral Resource

An Inferred Mineral Resource is that part of a Mineral Resource for which quantity and grade or quality are estimated on the basis of limited geological evidence and sampling. Geological evidence is sufficient to imply but not verify geological and grade or quality continuity. An Inferred Mineral Resource has a lower level of confidence than that applying to an Indicated Mineral Resource and must not be converted to a Mineral Reserve. It is reasonably expected that the majority of Inferred Mineral Resources could be upgraded to Indicated Mineral Resources with continued exploration.

Intrusive — A body of igneous rock formed by the consolidation of magma intruded into other

K

km — Abbreviation for kilometre(s). One kilometre is equal to 0.62 miles.

L

Leaching — The separation, selective removal or dissolving-out of soluble constituents from a rock or ore body by the natural actions of percolating solutions.

Level — The horizontal openings on a working horizon in a mine; it is customary to work mines from a shaft, establishing levels at regular intervals, generally about 50 m or more apart.

M

m — Abbreviation for metre(s). One metre is equal to 3.28 feet.

Measured Mineral Resource

A Measured Mineral Resource is that part of a Mineral Resource for which quantity, grade or quality, densities, shape, and physical characteristics are estimated with confidence sufficient to allow the application of Modifying Factors to support detailed mine planning and final evaluation of the economic viability of the deposit. Geological evidence is derived from detailed and reliable exploration, sampling and testing and is sufficient to confirm geological and grade or quality continuity between points of observation. A Measured Mineral Resource has a higher level of confidence than that applying to either an Indicated Mineral Resource or an Inferred Mineral Resource. It may be converted to a Proven Mineral Reserve or to a Probable Mineral Reserve.

Metallurgy — The science and art of separating metals and metallic minerals from their ores by mechanical and chemical processes.

Metamorphic	Affected by physical, chemical, and structural processes imposed by depth in the earth's crust.
Mill	A plant in which ore is treated and metals are recovered or prepared for smelting also, a revolving drum used for the grinding of ores in preparation for treatment.
Mine	An excavation beneath the surface of the ground from which mineral matter of value is extracted.
Mineral	A naturally occurring homogeneous substance having definite physical properties and chemical composition and, if formed under favourable conditions, a definite crystal form.
Mineral Claim/Permit	That portion of public mineral lands which a party has staked or marked out in accordance with federal or state mining laws to acquire the right to explore for and exploit the minerals under the surface.
Mineralization	The process or processes by which mineral or minerals are introduced into a rock, resulting in a valuable or potentially valuable deposit.
Mineral Resource	A Mineral Resource is a concentration or occurrence of solid material of economic interest in or on the Earth's crust in such form, grade or quality and quantity that there are reasonable prospects for eventual economic extraction. The location, quantity, grade or quality, continuity and other geological characteristics of a Mineral Resource are known, estimated or interpreted from specific geological evidence and knowledge, including sampling. Material of economic interest refers to diamonds, natural solid inorganic material, or natural solid fossilized organic material including base and precious metals, coal, and industrial minerals. The term mineral resource used in this report is a Canadian mining term as defined in accordance with NI 43-101 – Standards of Disclosure for Mineral Projects under the guidelines set out in the Canadian Institute of Mining, Metallurgy and Petroleum (the CIM), Standards on Mineral Resource and Mineral Reserves Definitions and guidelines adopted by the CIM Council on December 11, 2005 and recently updated as of May 10, 2014 (the CIM Standards).
Mineral Reserve	A Mineral Reserve is the economically mineable part of a Measured and/or Indicated Mineral Resource. It includes diluting materials and allowances for losses, which may occur when the material is mined or extracted and is defined by studies at Pre-Feasibility or Feasibility level as appropriate that include application of Modifying Factors. Such studies demonstrate that, at the time of reporting, extraction could reasonably be justified. The reference point at which Mineral Reserves are defined, usually the point where the ore

is delivered to the processing plant, must be stated. It is important that, in all situations where the reference point is different, such as for a saleable product, a clarifying statement is included to ensure that the reader is fully informed as to what is being reported. The public disclosure of a Mineral Reserve must be demonstrated by a Pre-Feasibility Study or Feasibility Study.

N

Net Smelter Return

A payment made by a producer of metals based on the value of the gross metal production from the property, less deduction of certain limited costs including smelting, refining, transportation and insurance costs.

NI 43-101

National Instrument 43-101 is a national instrument for the Standards of Disclosure for Mineral Projects within Canada. The Instrument is a codified set of rules and guidelines for reporting and displaying information related to mineral properties owned by, or explored by, companies which report these results on stock exchanges within Canada. This includes foreign-owned mining entities who trade on stock exchanges overseen by the Canadian Securities Administrators (CSA), even if they only trade on Over-The-Counter (OTC) derivatives or other instrumented securities. The NI 43-101 rules and guidelines were updated as of June 30, 2011.

O

Open Pit/Cut — A form of mining operation designed to extract minerals that lie near the surface. Waste or overburden is first removed, and the mineral is broken and loaded for processing. The mining of metalliferous ores by surface-mining methods is commonly designated as open-pit mining as distinguished from strip mining of coal and the quarrying of other non-metallic materials, such as limestone and building stone.

Outcrop — An exposure of rock or mineral deposit that can be seen on surface, that is, not covered by soil or water.

Oxidation — A chemical reaction caused by exposure to oxygen that results in a change in the chemical composition of a mineral.

P

Plant — A building or group of buildings in which a process or function is carried out; at a mine site it will include warehouses, hoisting equipment, compressors, maintenance shops, offices and the mill or concentrator.

Probable Reserve

A Probable Mineral Reserve is the economically mineable part of an Indicated, and in some circumstances, a Measured Mineral Resource. The confidence in the Modifying Factors applying to a Probable Mineral Reserve is lower than that applying to a Proven Mineral Reserve.

Proven Reserve

A Proven Mineral Reserve is the economically mineable part of a Measured Mineral Resource. A Proven Mineral Reserve implies a high degree of confidence in the Modifying Factors.

Pyrite — A common, pale-bronze or brass-yellow, mineral composed of iron and sulphur. Pyrite has a brilliant metallic luster and has been mistaken for gold. Pyrite is the most wide-spread and abundant of the sulfide minerals and occurs in all kinds of rocks.

Q

Qualified Person — Conforms to that definition under NI 43-101 for an individual: (a) to be an engineer or geoscientist with a university degree, or equivalent accreditation, in an area of geoscience, or engineering, related to mineral exploration or mining; (b) has at least five years' experience in mineral exploration, mine development or operation or mineral project assessment, or any combination of these, that is relevant to his or her professional degree or area of practice; (c) to have experience relevant to the subject matter of the mineral project and the technical report; (d) is in good standing with a professional association; and (e) in the case of a professional association in a foreign jurisdiction, has a membership designation that (i) requires attainment of a position of responsibility in their profession that requires the exercise of independent judgement; and (ii) requires (A.) a favourable confidential peer evaluation of nthe individual’s character, professional judgement, experience, and ethical fitness; or (B.) a recommendation for membership by at least two peers, and demonstrated prominence or expertise in the field of mineral exploration or mining.

R

Reclamation — The restoration of a site after mining or exploration activity is completed.

Regolith — Is inorganic and lies like a blanket over unfragmented rock. It is typically made up of material that is weathered away from the underlying rock. On

	Earth, discussion regarding regolith can also include the soil layer, which is an biologically active medium and a key component in plant growth. Also, defined as the layer of unconsolidated solid material covering the bedrock of a planet.
S	
Saprolite	Soft, thoroughly decomposed and porous rock, often rich in clay, formed by the in place chemical weathering of igneous, metamorphic, or sedimentary rocks. Saprolite is especially common in humid and tropical climates. It is usually reddish brown or grayish white and contains those structures (such as cross-stratification) that were present in the original rock from which it formed. (Dictionary.com)
Shoot	A concentration of mineral values; that part of a vein or zone carrying values of ore grade.
Skarn	Name for the metamorphic rocks surrounding an igneous intrusive where it comes in contact with a limestone or dolostone formation.
Stockpile	Broken ore heaped on surface, pending treatment or shipment.
Strike	The direction, or bearing from true north, of a vein or rock formation measure on a horizontal surface.
Stringer	A narrow vein or irregular filament of a mineral or minerals traversing a rock mass.
T	
Terrain	A terrain in geology, in full a tectonostratigraphic terrain, is a fragment of crustal material formed on, or broken off from, one tectonic plate and accreted or "sutured" to crust lying on another plate.
Tonne	A metric ton of 1,000 kilograms (2,205 pounds).
V	
Vein	A fissure, fault or crack in a rock filled by minerals that have travelled upwards from some deep source.
W	
Wall rocks	Rock units on either side of an orebody. The hanging wall and footwall rocks of a mineral deposit or orebody.
Waste	Unmineralized, or sometimes mineralized, rock that is not minable at a profit.

Working(s) May be a shaft, quarry, level, open-cut, open pit, or stope etc. Usually noted in the plural.

Z

Zone An area of distinct mineralization.

APPENDIX II

AGAT LABORATORIES ASSAY CERTIFICATES FOR MICON SAMPLES

AGAT Laboratories

5623 McADAM ROAD
MISSISSAUGA, ONTARIO
CANADA L4Z 1N9
TEL (905)501-9998
FAX (905)501-0589
http://www.agatlabs.com

Certificate of Analysis

AGAT WORK ORDER: 19T440021

PROJECT:

CLIENT NAME: MICON INTERNATIONAL LTD

ATTENTION TO: William Lewis

(200-) Sample Login Weight - Wet Weight

DATE SAMPLED: Feb 21, 2019 | **DATE RECEIVED: Feb 20, 2019** | **DATE REPORTED: Feb 27, 2019** | **SAMPLE TYPE: Rock**

Analyte:	Sample Login Weight (TOR)
Unit:	kg
Sample ID (AGAT ID) **RDL:**	0.01
75028 (9917846)	1.159
75029 (9917847)	.876
75030 (9917848)	.624
75031 (9917849)	.947
75032 (9917850)	.890
75033 (9917851)	.663

Comments: RDL - Reported Detection Limit

Certified By: Sherin Moussa

AGAT Laboratories

5623 McADAM ROAD
MISSISSAUGA, ONTARIO
CANADA L4Z 1N9
TEL (905)501-9998
FAX (905)501-0589
http://www.agatlabs.com

Certificate of Analysis

AGAT WORK ORDER: 19T440021

PROJECT:

CLIENT NAME: MICON INTERNATIONAL LTD

ATTENTION TO: William Lewis

(200-) Sample Login Weight - Dry Weight

DATE SAMPLED: Feb 21, 2019 | **DATE RECEIVED: Feb 20, 2019** | **DATE REPORTED: Feb 27, 2019** | **SAMPLE TYPE: Rock**

Analyte:	Sample Login Weight (TOR)
Unit:	kg
Sample ID (AGAT ID) RDL:	0.01
75028 (9917846)	1.096
75029 (9917847)	.805
75030 (9917848)	.578
75031 (9917849)	.766
75032 (9917850)	.730
75033 (9917851)	.580

Comments: RDL - Reported Detection Limit

Certified By: Sherin Moussa

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CANADA L4Z 1N9
TEL (905)501-9998
FAX (905)501-0589
http://www.agatlabs.com

Certificate of Analysis

AGAT WORK ORDER: 19T440021

PROJECT:

CLIENT NAME: MICON INTERNATIONAL LTD

ATTENTION TO: William Lewis

(201-109) Graphitic Carbon (Furnace IR Finish)

DATE SAMPLED: Feb 21, 2019 | **DATE RECEIVED: Feb 20, 2019** | **DATE REPORTED: Feb 27, 2019** | **SAMPLE TYPE: Rock**

Analyte:	Graphitic C
Unit:	%
Sample ID (AGAT ID) RDL:	0.01
75028 (9917846)	5.30
75029 (9917847)	3.79
75030 (9917848)	6.64
75031 (9917849)	16.5
75032 (9917850)	17.9
75033 (9917851)	10.3

Comments: RDL - Reported Detection Limit

Certified By: Sherin Moussa

AGAT Laboratories

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MISSISSAUGA, ONTARIO
CANADA L4Z 1N9
TEL (905)501-9998
FAX (905)501-0589
http://www.agatlabs.com

Certificate of Analysis

AGAT WORK ORDER: 19T440021

PROJECT:

CLIENT NAME: MICON INTERNATIONAL LTD

ATTENTION TO: William Lewis

(201-043) LECO (Combustion IR) - Total C, Total S

DATE SAMPLED: Feb 21, 2019 | **DATE RECEIVED: Feb 20, 2019** | **DATE REPORTED: Feb 27, 2019** | **SAMPLE TYPE: Rock**

Analyte:	C	S
Unit:	%	%
Sample ID (AGAT ID) **RDL:**	0.01	0.005
75028 (9917846)	5.50	0.027
75029 (9917847)	4.11	0.031
75030 (9917848)	7.07	0.026
75031 (9917849)	17.2	0.042
75032 (9917850)	18.2	0.043
75033 (9917851)	11.0	0.014

Comments: RDL - Reported Detection Limit

Certified By: Sherin Moussa

AGAT Laboratories

5623 McADAM ROAD
MISSISSAUGA, ONTARIO
CANADA L4Z 1N9
TEL (905)501-9998
FAX (905)501-0589
http://www.agatlabs.com

Quality Assurance - Replicate

AGAT WORK ORDER: 19T440021

PROJECT:

CLIENT NAME: MICON INTERNATIONAL LTD

ATTENTION TO: William Lewis

(201-043) LECO (Combustion IR) - Total C, Total S																
	REPLICATE #1				REPLICATE #2											
Parameter	Sample ID	Original	Replicate	RPD	Sample ID	Original	Replicate	RPD								
C	9917846	5.50	5.76	4.6%	9917854	1.22	1.21	0.8%								
S	9917846	0.027	0.022	20.4%	9917854	1.17	1.17	0.0%								
(201-109) Graphitic Carbon (Furnace IR Finish)																
	REPLICATE #1				REPLICATE #2											
Parameter	Sample ID	Original	Replicate	RPD	Sample ID	Original	Replicate	RPD								
Graphitic C	9917846	5.30	5.42	2.2%	9917854	1.03	1.03	0.0%								

AGAT Laboratories

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MISSISSAUGA, ONTARIO
CANADA L4Z 1N9
TEL (905)501-9998
FAX (905)501-0589
http://www.agatlabs.com

Quality Assurance - Certified Reference materials

AGAT WORK ORDER: 19T440021

PROJECT:

CLIENT NAME: MICON INTERNATIONAL LTD

ATTENTION TO: William Lewis

(201-043) LECO (Combustion IR) - Total C, Total S																
	CRM #1				CRM #2											
Parameter	Expect	Actual	Recovery	Limits	Expect	Actual	Recovery	Limits								
C	0.95	0.96	101%	90% - 110%	0.95	0.96	101%	90% - 110%								
S	0.8	0.8	100%	90% - 110%	0.8	0.8	100%	90% - 110%								
(201-109) Graphitic Carbon (Furnace IR Finish)																
	CRM #1				CRM #2											
Parameter	Expect	Actual	Recovery	Limits	Expect	Actual	Recovery	Limits								
Graphitic C	8.60	8.69	101%	90% - 110%	2.41	2.40	99%	90% - 110%								

AGAT Laboratories

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MISSISSAUGA, ONTARIO
CANADA L4Z 1N9
TEL (905)501-9998
FAX (905)501-0589
http://www.agatlabs.com

Method Summary

CLIENT NAME: MICON INTERNATIONAL LTD | **AGAT WORK ORDER: 19T440021**

PROJECT: | **ATTENTION TO: William Lewis**

SAMPLING SITE: | **SAMPLED BY:**

PARAMETER	AGAT S.O.P	LITERATURE REFERENCE	ANALYTICAL TECHNIQUE
Solid Analysis			
Sample Login Weight (TOR)	MIN-12009		BALANCE
C	MIN-200-12000	ASTM E1915-07a	LECO
S	MIN-200-12000	ASTM E1915-07a	LECO
Graphitic C	MIN-200-12036	ASTM E1915-13	FURNACE IR