AGUIA

21 March 2023

ASX Market Announcements
Level 6, Exchange Centre
20 Bridge Street
Sydney NSW 2000

UPDATED BFS OF PHOSPHATE PROJECT CONFIRMS ROBUST ECONOMICS

Sydney, Australia - Aguia Resources Limited (ASX:AGR) (**'Aguia'** or the **'Company'**) has two advanced mining projects in southernmost Brazil: metallic copper and organic phosphate. Both projects are 100% owned by Aguia.

Aguia is pleased to inform its shareholders that the Company is releasing an updated Bankable Feasibility Study (BFS) of its organic Phosphate Project (Project) located in Lavras do Sul, southernmost Brazil. The results of this updated BFS are listed in the table below, and, as expected, the Project continues to deliver excellent economics for our shareholders.

Project Highlights		
Outcomes	Post-Tax NPV @ 10% Discount Rate	A$ 110.8 million
	Internal Rate of Return (IRR)	54.7%
	EBITDA (average for years 1 to 18)	A$ 22.1 million
	Pay-back	2.9 years
Inputs	Production Rate (average)[1]	316,000 tonnes/year of product after 3 years of ramp-up
	Life of Mine (LOM)	18 years
	Capital Expenditure (CAPEX)	
	Year 0	A$ 15.9 million
	Year 1	A$ 2.9 million
	Year 2	A$ 3.7 million
	Year 3	A$ 3.7 million
	Total	A$ 26.2 million
	Operating Expenditure (OPEX)	
	Mining, processing and G&A	A$ 19.55/t product
	Marketing and Sales	A$ 7.20/t product
	Package	A$ 8.57/t product
	Total	A$ 35.32/t product
	Production Rate (average)[1]	316,000 tonnes/year of product after 3 years of ramp-up
	Strip Ratio (average for LOM)	0.46:1.00 (tonnes waste to tonnes ore)
	Run of Mine (ROM) @ 8% moisture	5.46 million tonnes

[1] @8% moisture

The Project is based on the production of an organic phosphate fertiliser by the mining of only the saprolite from the Phosphate Deposit (the Deposit). This option is attractive due to the high natural P_2O_5 grade in the oxidised ore (saprolite) (8.8% P_2O_5 on average) at the Deposit.

The project is very environmentally friendly, and the buildings are in the process of certification as net-zero constructions with EDGE, a green building certification system developed by the International Finance Corporation, part of the World Bank. Besides, no tailings dam or use of water resources in the production process, which is also projected to be energy self-sufficient.

Currently, the Rio Grande do Sul market is 100% dependent on imported phosphate. After the ramp-up period, the annual production of 316,000 tonnes of organic phosphate fertiliser will equal approximately 10% of the existing demand for this nutrient in a 300 km radius of the mine site.

The previous Economic Model for our Project was announced to the market on 17 December 2020. Subsequently, the project continued to advance its engineering and permitting, and on 2nd November 2022, the Construction Licence was issued by FEPAM, the State Environmental Authority. The impact both COVID and the European war has had on global supply chains over these past 2 years is well understood. These events, coupled with an increased local demand for phosphate, have caused a substantial but ultimately positive change in the cost structure of the Project, which is detailed as follows:

- Firstly, there is and continues to be upward pressure on the price of fertilisers locally due to growing demand in the State of Rio Grande do Sul. To put it simply, more land is continuing to go into cropping, resulting in increased demand for phosphate. Agricultural production in the State is now 40% of its GDP and over 70% of its exports. The European war which continues to impact phosphate prices in Brazil and has made both governments and farmers acutely aware of the need to secure a locally produced source of phosphate. There is currently no phosphate produced in the State or in neighbouring Uruguay, Northern Argentina or Paraguay, which are all substantial agricultural areas.

- Secondly, disruptions to global supply chains resulted in a substantial upward movement in the cost of both steel and diesel. Concrete prices were also negatively affected. Labour costs have, not surprisingly, also increased. The overall impact has been cost increases in both the capital cost (CAPEX) and the operational costs (OPEX) of the Project. Although there are some indications that costs might be returning to more normal levels, it is expected to take some time if, in fact, it eventuates. Nevertheless, the overall Project economics are excellent.

As a consequence, Aguia commissioned a thorough review of the Project's economics which included an independent review of all of the Project sourcing contracts. This updated Bankable Feasibility Study (BFS) was conducted by independent consulting firm GE21 Consultoria Mineral Ltda (**'GE21'**) in Brazil and is compliant with JORC (2012) for the Mineral Resources and Reserves of the TEPP Deposit. The current study is focused mostly on updating the CAPEX and OPEX estimates, the market studies, and the economic analysis. The remainder of the Project's structure, including pit optimisation and design, mine scheduling, project infrastructure, and metallurgical tests, are based on a Mineral Resource of 5.02Mt at 8.8% P_2O_5 which represents the oxidised ore portion of the Deposit (mineral resource estimation prepared by Milcreek Mining Group, released on 13 March 2018).

Management Commentary

Managing Director Dr Fernando Tallarico said: "The results from this BFS, which is an update of the 2020 economic assessment, reaffirms the superior project economics achieved by mining the high-grade oxidised ore from surface to produce a unique organic Phosphate Fertiliser."

"We believe that the investment which the company has made in agronomical testing over the past 3 years and more has established the efficacy of our phosphate fertiliser as a truly unique organic product. In addition to phosphate, it contains magnesium, calcium and a range of micronutrients essential for plant nutrition. We believe it's potential market reach in these times holds significant value for shareholders."

"We are reviewing and updating our line of credit with the local Development Bank, BRDE, and as soon as the public civil action is settled, we can initiate construction of the mine, as the construction licence has already been granted."

"We anticipate debt funding of 50% with the remaining capital being equity funded."

AUTHORISED FOR ISSUE TO ASX BY FERNANDO TALLARICO, MANAGING DIRECTOR OF AGUIA RESOURCES LIMITED

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About Aguia:
Aguia Resources Limited ("Aguia") is an ASX-listed multi-commodity company (AGR:ASX) with pre-production phosphate and metallic copper projects located in Rio Grande do Sul, the southernmost state of Brazil. Aguia has an established and highly experienced in-country team based in Porto Alegre, the capital of Rio Grande do Sul. Aguia is committed to advancing its existing projects into production whilst pursuing other opportunities within the sector.

JORC Code Competent Person Statements:

The information in this report that relates to Exploration Targets, Exploration Results, Mineral Resources or Ore Reserves is based on information compiled by Dr. Fernando Tallarico, who is a member of the Association of Professional Geoscientists of Ontario. Dr. Tallarico is a full-time employee of the company. Dr. Tallarico has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and to the activity being undertaken to qualify as a Competent Person as defined in the 2012 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'. Dr. Tallarico consents to the inclusion in the report of the matters based on his information in the form and context in which it appears. Mr. Guilherme Gomides Ferreira, a Mining Engineer and employee of GE21, registered as a Competent Person in the AIG (Australian Institute of Geoscientists). Mr. Ferreira has sufficient relevant experience to the style of mineralization, mining methods and process to qualify as a Competent Person as defined in the JORC Code (2012). The report compilation was done by Mr. Bernardo H C Viana, a geologist and full-time director and owner of GE21 and is registered as Competent Person in the AIG (Australian Institute of Geoscientists). Mr. Viana has sufficient relevant experience to the style of mineralization to qualify as a Competent Person as defined in the JORC Code (2012). Mr. Viana also meets the requirements of a Competent Person under the AIM Note for Mining, Oil and Gas Companies. Mr. Porfirio Cabaleiro Rodriguez is a Mining Engineer and full-time director and owner of GE21 and is registered as Competent Person in the AIG (Australian Institute of Geoscientists), he has sufficient relevant experience to the style of mineralization to qualify as a Competent Person as defined in the JORC Code (2012). Mr. Viana, Mr. Ferreira and Mr. Rodriguez consent to the inclusion in this report of the matters based on the GE21 study in the form and context in which it appears.

Caution regarding forward-looking information:

This press release contains "forward looking information" within the meaning of applicable Australian securities legislation. Forward looking information includes, without limitation, statements regarding the next steps for the project, timetable for development, production forecast, mineral resource estimate, exploration program, permit approvals, timetable and budget, property prospectivity, and the future financial or operating performance of the Company. Generally, forward looking information can be identified by the use of forward-looking terminology such as "plans", "expects" or "does not expect", "is expected", "budget", "scheduled", "estimates", "forecasts", "intends", "anticipates" or "does not anticipate", or "believes", or variations of such words and phrases or state that certain actions, events or results "may", "could", "would", "might" or "will be taken", "occur" or "be achieved". Forward-looking information is subject to known and unknown risks, uncertainties and other factors that may cause the actual results, level of activity, performance or achievements of the Company to be materially different from those expressed or implied by such forward-looking information, including, but not limited to: general business, economic, competitive, geopolitical and social uncertainties; the actual results of current exploration activities; other risks of the mining industry and the risks described in the Company's public disclosure. Although the Company has attempted to identify important factors that could cause actual results to differ materially from those contained in forward-looking information, there may be other factors that cause results not to be as anticipated, estimated or intended. There can be no assurance that such information will prove to be accurate, as actual results and future events could differ materially from those anticipated in such statements. Accordingly, readers should not place undue reliance on forward looking information. The Company does not undertake to update any forward-looking information, except in accordance with applicable securities law.

BFS – Bankable Feasibility Study
Tres Estradas Phosphate Project
Lavras do Sul, RS, Brazil.

Project GE21 – 230302

Prepared by GE21 for:

Aguia Resources Limited

Date: 21/03/2023

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Mineral Substances	Phosphate, Calcite and Dolomite
City and State	Lavras do Sul - RS
Company Name	Águia Resources
Nº Project GE21	230302
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INDEX

LIST OF TABLES

LIST OF FIGURES

ATTACHMENTS

COMMON UNITS & STANDARDS

°	Degree
%	Percent
°C	Celsius
Ha	Hectares
Kg	Kilogram
Km	Kilometer
km^2	Square kilometers
ktonnes	Kilo tonnes
kWh	Kilowatt hour
M	Meters
M	Million
Mm	Millimeters
MT, Mt	Million tonnes
Mtpy	Million tonnes per year
T, t	Metric tonne (1000 kg)
t/y	Metric tonnes per year
t/h	Metric tonnes per hour
t/m^3	Tonnes per cubic meter

COMMON ACRONYMS & ABBREVIATIONS

AACE	American Association of Cost Engineers	K_2O	Potassium oxide
Al_2O_3	Aluminum Oxide	tpy	Tonnes per year
ANM	Brazilian National Mining Agency	LOM	Life of Mine
AGR	Águia Resources Limited.	MgO	Magnesium oxide
ASX	Australian Securities Exchange	MnO_2	Manganese dioxide
AUD	Australian Dollar	Na_2O	Sodium oxide
AMPSAP	Saprolite of Amphibolite	NaOH	Sodium hydroxide
BaO	Barium Oxide	NPV	Net Present Value
BRL	Brazil Real	pH	Potential of hydrogen
Bond Ai	Bond Abrasion Index	P_2O_5	Phosphate
$CaCO_3$	Calcium carbonate	PCA	Public Civil Action
CaO	Calcium Oxide	PRAD	Plan of Recovery of Degraded Areas
CBTSAP	Saprolite of Carbonatite	QA/QC	Quality Assurance/Quality Control
CCE	Calcium Carbonate Equivalent	CP	Competent Person
CFEM	Compensation for the Exploitation of a Mineral Resource	RG-CM-02	Fresh carbonatite
DANF	Direct Application Natural Fertilizer	RG-CM-03	Saprolite of amphibolite
DCF	Discounted Cash Flow	ROM	Run of Mine
FEPAM	State Government Agency	RS	Rio Grande do Sul
FPPO	Federal Public Prosecutor's Office	SG	Specific Gravity
GPS	Global Positioning Satellite	SSMC GC	Santa Maria Chico Granulitic Complex
ICP	Inductively Coupled Plasma Spectrometry	SiO_2	Silicon Dioxide
ID	Identification	UTM	Universal Transverse Mercator
IRR	Internal Rate of Return	XRF	X-Ray Fluorescence
ITR	Independent Technical Report	WMCBT	Weathered carbonatite

1. SUMMARY

Aguia Resources Limited (Aguia or the Company) contracted GE21 Consultoria Mineral Ltda (GE21) to prepare a Bankable Feasibility Study that is compliant with JORC (2012) for the Mineral Resources and Reserves of the Tres Estradas Phosphate Project (TEPP or the Phosphate Project). The TEPP is located 320 kilometers (km) southwest of Porto Alegre, the capital city of Rio Grande do Sul State in southern Brazil (see Figure 1).

Figure 1: Project Location Map

Aguia is an exploration and development company focused on Brazilian phosphate projects to supply the Brazilian agriculture sector. Aguia is listed on the Australian Securities Exchange (ASX) under the symbol AGR. The company's corporate offices are located in Sydney, Australia and Porto Alegre, Brazil. The company currently controls over 1,823 km² of land in the states of Rio Grande do Sul and Paraiba , of which 260km² are being studied for phosphate mineralization through exploration permits it has acquired from the Brazilian National Mining Agency (ANM). The company seeks to develop its holdings of phosphate deposits into viable mining operations providing phosphate to Brazil's agriculture industry.

In March 2018 Aguia announced the completion of a Bankable Feasibility Study (BFS) for the TEPP, which was prepared by Millcreek Mining Group from Utah, USA, and considered a phased approach to the project.

Phase 1 (Saprolite): Open pit mining of 1.3Mtpy (run-of-mine, or ROM) of saprolitic ore, to the processing plant, to produce an average of 300ktpy of phosphate concentrate (phosrock).

Phase 2 (Carbonatite): Mining an average of 3.3Mtpy (ROM) of Carbonatite ore, with expansion of the processing plant to produce 300,000tpy of phosphate concentrate and 2.8 Mtpy of agricultural limestone (aglime). 1 Mtpy of aglime will be sold, the remainder stored in a Tailings Dam.

Phase 3 (Aglime): Following mining operations, recovery of 1Mtpy of the remaining aglime from the Tailings Dam.

Most recently the Company commenced studies aiming to produce Direct Application Natural Fertilizer (DANF) in Phase 1 (Saprolite) instead of the production of phosphate concentrate. The DANF production is attractive given the high natural P_2O_5 grade in the saprolite (8.78% P_2O_5 on average) with initial CAPEX much lower than the previously planned larger-scale processing facility that was proposed. In addition to the phosphate, which is an essential macronutrient in crop nutrition, the saprolite also contains important concentrations of CaO and MgO in the order of 15.8% and 5.2% on average, respectively.

This BFS is related to Phase 1 of the project, where only saprolite rock will mined, considering the production of DANF.

In February 2020, Aguia announced the completion of the Scoping Study for the TEPP, which was prepared by the Brazilian consulting firm GE21, with a focus on DANF production in Phase 1 of the project.

The DANF production should optimize the mining and processing of the phosphate resources from the saprolite, when compared to the previous plan of phosphate concentrate production. From a total of 5.02 Mt of ROM, approximately 4.78 Mt of final DANF product should be generated, representing an increase of around 400% in the production and extending the mine life for Phase 1 from 3.5 to 18 years, which represents an additional 15.5 years of operation, an increase of approximately 414%.

In November 2022, it was awarded the construction licence for the Project. However, because of the Public Civil Action (PCA) in progress, the Company has decided not to start construction in benefit of possible settlement negotiations. The proceedings brought against Aguia and FEPAM alleges flaws in the Environmental Impact Assessment (EIA). The grounds of the PCA were:

a) that Traditional Community of family ranchers present on the land affected by the TEPP was not consulted and did not provide prior, free and informed consent.

b) a second public hearing should have been held to encompass those people in the Municipality of Dom Pedrito and in the Torquato Servero district (locations that would be affected by environmental impacts of the TEPP), in addition to the public hearing held in Lavras do Sul.

c) Technical discrepancies in the EIA that was presented to FEPAM.

There was a first favourable decision , which had been appealed and granted , there is still an injunction request pending of decision that could prevent the Company from starting construction until the court makes a decision. Both the federal prosecutor currently representing the FPPO in the PCA and the federal trial court judge in charge of the case responded positively to Aguia's attempt to negotiate with all parties involved to resolve the matters under dispute as soon as possible. Between December 2022 and February 2023, a couple of meetings were held between the parties to discuss a possible settlement. The Company is confident that it should come to an end in a near future, however depending on the FPP, associations and Court.

1.1. .BFS Update

GE21 had prepared a Scoping Study for the Project that was released on 17 February 2020. Later, in the same year, GE21 was commissioned to conduct a BFS for the same project, which was released on 17 December (2020 BFS).

Meanwhile, the word was suffering the impact of the Covid-19 Pandemic, which has brought severe price increases in almost every single commodity. Not to mention the Russia and Ukraine war that put pressure in the fertilsers' prices. It couldn't be different with Aguia's Project, the goods and services used in construction and production has increased but also the fertiliser's price.

Seeking for a more efficient operation, Aguia has conducted tests on natural drying systems to improve the energy efficiency of the plant. A review on the processing system was also conducted in order to increase energy efficiency and improve ore recovery. Those changes were crucial to achieve self-sufficient energy plant using the same solar energy system dimension.

The Project was designed for a net-zero construction (energy, water and carbon). It allows Aguia to apply for a green building certification. The Company has chosen the Edge Certification, a globally accepted certifier created by the International Finance Corporation. Most of the buildings' projects are already approved by EDGE. The final certification will be issued after the construction based on a site visit to verify if the Company has complied to the engineering proposed.

GE21 was hired to conduct a review in the 2020 BFS. This review comprehends an updade in the following sections:

- mineral processing;
- recovery methods;
- marked study;
- environmental studies, permitting and social or community impacts;
- capital and operating costs; and
- economic analysis.

The remaining section were replicated as a true copy of the 2020 BFS.

1.2. Geology

The Tres Estradas Phosphate Project is situated in the Santa Maria Chico Granulitic Complex (SMCGC), part of the Taquarembó domain. The SMCGC exposes the deepest structural levels within Brazil and may represent the western edge of the Precambrian Rio de la Plata Craton. The granulite complex is bounded to the northeast by the Ibaré Lineament, to the west by Phanerozoic cover, and to the south by Neoproterozoic Braziliano granites (potential melts of the granulite). The age of the granulite protolith is late Archean to early Paleoproterozoic (ca. 2.5-2.3 Ga), and can therefore be interpreted as the basement to the Taquarembó domain and as an extension of the Valentines-Rivera Granulitic Complex within bordering Uruguay.

The Tres Estradas deposit consists of an elongated carbonatite intrusion (meta-carbonatite and amphibolite) with a strike of 50° to 60°. The meta-carbonatite and amphibolite form a tightly folded sequence with limbs dipping steeply from 70° to vertical (90°). The surface expression of the intrusion is approximately 2.5 km along strike with a width of approximately 300m. The Late Archean to Early Proterozoic intrusion is

intensely recrystallized and metamorphosed to amphibolite assemblages. The carbonatite intrusion is bound mostly by biotite gneiss along with meta-syenite along its northeast and southeast boundaries

Phosphate mineralization, occurring as the mineral apatite ($Ca_5(PO_4)_3(F,Cl,OH)$), is the primary mineralization of economic interest at Tres Estradas. Apatite is the only phosphate-bearing mineral occurring in the carbonatites. At Tres Estradas, phosphate mineralization occurs in both fresh and weathered meta-carbonatite and amphibolite. Phosphate also becomes highly enriched as secondary mineralization in the overlying saprolite.

1.3. Mineral Resource

The mineral resource is defined here as the portion of the in-situ geologic resource for which there is a reasonable expectation of economic extraction.

The Audited Mineral Resource identifies 83.21 Mt of Measured and Indicated material with an average grade of 4.11% P_2O_5 using a minimum cut-off of 3.0% P_2O_5 (Table 1) in the following ore domains:

- Carbonatite saprolite (CBTSAP);
- Amphibolite saprolite (AMPSAP);
- Weathered carbonatite (WMCBT);
- Fresh meta-carbonatite (MCBT); and
- Fresh amphibolite (MAMP).

The estimate also identifies 21.85Mt of Inferred material with an average grade of 3.67% P_2O_5. By classification, 79% of the resources contained within the mineable resource pit shell are Measured and Indicated with the remaining 21% of the resource classified as Inferred resource.

Table 1: Summary of Mineral Resource Estimate

Audited Mineral Resource Estimate Table* - Tres Estradas Phosphate Project Effective Date September 8, 2017 - Block Model: 12 m x 6 m x 10 m						
Resource Classification	**Domain**	**Tonnage (t x 1000)**	**P_2O_5 (%)**	**CaO (%)**	**P_2O_5 as Apatite (%)**	**CaO as Calcite (%)**
Measured	AMSAP	55	6.63	10.75	15.7	19.19
	CBTSAP	796	10.18	18.2	24.11	32.49
	WMCBT	1,686	4.24	34.07	10.03	60.82
	MCBT	33,004	3.85	34.26	9.12	61.15
	MAMP	655	3.72	19.09	8.81	34.08
Total Measured		**36,196**	**4.01**	**33.59**	**9.5**	**59.95**
Indicated	AMSAP	653	5	11.49	11.85	20.5
	CBTSAP	3,834	9.21	16.24	21.82	28.99
	WMCBT	1,026	4.38	34.57	10.39	61.71
	MCBT	36,984	3.67	35.08	8.69	62.62
	MAMP	4,517	3.98	19.63	9.43	35.04
Total Indicated		**47,014**	**4.18**	**31.72**	**9.91**	**56.63**
Total Measured + Indicated Resources		**83,210**	**4.11**	**32.53**	**9.73**	**58.07**
Inferred	CBTSAP	45	5.41	20.17	12.82	36.01
	WMCBT	45	3.93	33.86	9.32	60.44
	MCBT	20,247	3.65	34.72	8.64	61.98
	MAMP	1,508	3.89	19.21	9.22	34.3
Total Inferred		**21,845**	**3.67**	**33.62**	**8.69**	**60.01**

*Mineral resources are not mineral reserves and do not have demonstrated economic viability. All numbers have been rounded to reflect relative accuracy of the estimates. Mineral resources are reported within a conceptual pit shell at a cut-off grade of 3% P_2O_5. Mineral Resource classification of Tres Estradas Project was performed by Millcreek Mining Group March 13, 2018, as verified by GE21 on NI43-101 Technical Report format named “Tres Estradas Phosphate Project, Rio Grande do Sul, Brazil dated on April 4, 2018”.
Mr. Steven B. Kerr, C.P.G., Principal (Geology), Millcreek Mining Group is responsable

1.4. Mineral Reserves

Mine planning, cost estimation and economic analysis has indicated that a significant portion of the resource may be reasonably considered to be feasible for economic recoverability.

Total estimated Proven and Probable reserves for the Tres Estradas Phosphate Project, are summarized in Table 2. Reserves and head grade are reported on a mill-feed (post mining) basis and are inclusive of ore losses and dilution.

Table 2: Proven and Probable Reserves

Block dimensions 12x6x10 (m) Mine Recovery 98%, Dilution 2% (Effective date 08/01/2020)										
Litho	Class	Mass	P_2O_5	CaO	MgO	SiO_2	K_2O	Fe_2O_3	MnO_2	Al_2O_3
		Mt	%							
CBTSAP	Proved	0.64	10.2	18.1	5.2	28.5	0.45	19.1	0.89	4.7
	Probable	3.67	9.2	16.2	4.6	31.8	0.39	18.4	0.87	5.9
AMPSAP	Proved	0.04	6.7	10.9	9.5	37.3	0.71	15.3	0.68	7.3
	Probable	0.67	4.9	11.4	7.6	39.9	1.07	15.4	0.47	8.6
	Total Proved	0.68	10.0	17.7	5.5	29.0	0.5	18.9	0.9	4.9
	Total Probable	4.34	8.5	15.5	5.1	33.1	0.5	17.9	0.8	6.3
Total Proved and Probable		**5.02**	**8.8**	**15.7**	**5.1**	**32.5**	**0.49**	**18.1**	**0.82**	**6.1**

Mineral Reserves were estimated using the Geovia Whittle 4.3 software and following the economic parameters: Sale price for DANF@9%P_2O_5 = AUD$72.00 and for DANF@5%$P_2O_5$ = AUD$43.20 Exchange rate AUD$ 1.00 = R$ 2.85.
Mining costs: AUD$2.32/t mined, processing costs: AUD$4.81 /t milled and G$A:AUD$3.34/t DANF. Mineral reserves are the economic portion of the Measured and Indicated mineral resources.
Dilution 2% and Recovery 98%
Final slope angle: 34º
Waste = 2.50Mt
Inferred = 0.03Mt @ 5.2%P_2O_5 Inferred Resources were not included in the Mineral Reserves. The inferred is not a Mineral Reserve.It needs confirmation to become Mineral Rerserves.
Strip Ratio = 0.5 t/t - (Waste+inferred)/Ore
The Competent Person for the estimate is Guilherme Gomides Ferreira, BSc. (MEng), MAIG, an employee of GE21

1.5. Mining

The TEPP will be an open pit operation utilizing a mining fleet composed of a hydraulic excavator with 2.0m³ of capacity and 10m³ haul trucks, associated with correspondent ancillary equipment. The mine planning model adopted is a “diluted” model, adding approximately 5% dilution and 95% of recovery to the source model.

The disposal of waste rock will be executed on an area close to the pit. The site shall be adequately prepared to include drainage at its base and channels to direct the flow of water with the aim of aiding geotechnical stability and mitigating the erosion of the stockpiled material. The operation of this phase, in accordance with the ascending method, shall begin during the construction of the heap at the base of this area. Waste rock will be disposed of by truck, which will then be uniformly distributed and levelled by an operator using a tractor. The procedure is then repeated, stacking another bank above the original one, while maintaining a ramp for the trucks to be able to access the area.

1.6. Metallurgical Tests

Metallurgical and process testing began in 2012 with a bench-top study that covered mineralogical composition, particle size distribution and liberation by size fraction.

In 2017 Metso Minerals (Metso) developed a series of comminution tests, including Sag Mill Comminution (SMC) tests, Crushing Bond Work Index (CWI) tests, Bond Ball Mill Work Index (BWi), Rod Mill Work Index (RWi), Point Load Test - PLT (UCS) and Bond Abrasion Index (Bond Ai), with an objective of establishing the characteristics of the ore at Tres Estradas, regarding crushability and grindability.

In 2019 Aguia collected two samples of approximately 530kg each, from the saprolite ore types CBTSAP and AMPSAP, and submitted them to chemical analysis by grain size at the SGS Geosol (SGS)

laboratory in Vespasiano - MG and grinding tests in a hammer mill at Mecmining do Brasil Ltda in Vespasiano - MG.

In 2020 Metso:Outotec (Metso) developed 2 pilot grinding test in closed circuit using CBTSAP and AMPSAP, with an objective to determine the energy consumption and simulate the industrial scale of closed milling circuit. The test was carried out at Metso laboratory in Sorocaba – S.P. The results confirm a low energy consumption in the close milling circuit and the feasibility of the process.

From 2020 to 2022 Aguia Fertilizantes developed pilot Natural Drying tests achieving good results in terms of drying rate (0.4% per day). The results confirm and allow the concept of a Natural Drying operation composed by the windrow turner machine turning the ore piles under sheds with a translucent roof. This drying operation represents low opex and permit a carbon free drying operation.

1.7. Recovery Methods and Processing Plant Design

The processing facilities for the Tres Estradas Phosphate Project - Phase 1 comprises essentially a comminution circuit. The processing plant will produce approximately 285 ktpy (dry basis) of DANF from a feed rate of approximately 300 ktpy.

During the phase the facility will consist of the following processing circuits:

- Closed Grinding Circuit – Consisting of the vibrating feeder, the primary hammer mill system and conveyance to the High Frequency Sieve system.
- Bagging and bulk Circuit – A bagging system and a bulk system working in parallel, bag filter and conveyance to the product warehouse.

1.8. Market Studies

For the phosphate market of Rio Grande do Sul State, Aguia utilized market research data from Integrar Gestão e Inovação Agropecuária, a local Brazilian company specializing in fertilizers and agriculture.

Rio Grande do Sul State currently imports 100% of their phosphate needs. The planted area of grains in the state has increased significantly in the last four years, mainly due to the conversion of native fields in the southern half of the State into soybean crops. This region is currently one of the main agricultural frontiers of expansion in the country. Consequently, the estimate of phosphate consumption grew in the same proportion, going from about 642kt of P_2O_5 nutrient in the 2015/16 harvest to 678kt in the 2019/20 harvest.

It is proposed that Aguia will sell their entire production of DANF from Tres Estradas domestically and directly to the consumers as a substitute and/or complement for conventional phosphate products.

1.9. Environmental and Permitting

The environmental impact and permitting review is reliant on work completed by Golder Associates in 2015, 2016 and 2017. Golder Associates has been instrumental in collecting and analysing environmental field data to develop the necessary regulatory material submitted to the Rio Grande do Sul Government. This information has been incorporated into this BFS.

A comprehensive Environmental and Social Impact Assessment (EIA/RIMA), that meets national and international standards, was undertaken in 2015 and 2016 by Golder Associates based on over 14 months of field data collection and subsequent interpretation. The first version on the EIA/RIMA was submitted to the State Government Agency (FEPAM) on October 7th, 2016 and an updated version of the EIA/RIMA was submitted to FEPAM on September 1st, 2017.

The community Public Hearing for the TEPP was held on March 20th, 2019 in Lavras do Sul and after FEPAM analysis, the Preliminary License (LP) was granted on October 15th, 2019.

In early 2021 the Company has submitted the Basic Environmental Plan (PBA) and the completion of the LP conditions to FEPAM. Also received the pre-approval of the mine development plan (PAE) from Brazilian Mining Agency.

In November 2022 the Installation Licence (LI) was issued by FEPAM. Due to the existing Public Civil Action around the Project permitting, Aguia has decided not to start construction in benefit of the conciliation proceedings that took place shortly after the LI award.

Once evidence that all required environmental programs have been implemented, the Operation License (LO) may then be issued.

1.10. Cost Estimate

Capital Expenditure (CAPEX) was estimated based on quotation, as well as the use of industry guidelines and databases. The total CAPEX is shown in Table 3 in Australian Dollars (AUD).

Table 3: CAPEX

	Value AUD$(Mi)				
ITEM	**Year 0**	**Year 01**	**Year 02**	**Year 03**	**TOTAL**
INFRASTRUCTURE	**3.671**			**0.886**	**4.557**
Terrain Preparation	0.857				0.857
Civil Work	0.286				0.286
Paving area	0.600				0.600
Fences	0.086				0.086
Plant Road Desviation	0.714				0.714
Mine Road Desviation				0.600	0.600
Power - Grid construction				0.286	0.286
Power - Fotovoltaic Panels	0.857				0.857
Electrical instalations	0.271				0.271
FACILITIES	**4.823**		**0.191**	**1.000**	**6.015**
Fuel Area	0.089		0.029		0.117
Waste center	0.037				0.037
Truck Parking Area	0.048				0.048
Drying Shed (3.600m²)	0.857				0.857
Plant Shed	1.009				1.009
Product Warehouse 1	1.560				1.560
Product Warehouse 2				1.000	1.000
Core Shed			0.163		0.163
Dispacht Area	0.021				0.021
Lab	0.050				0.050
Warehouse	0.023				0.023
Workshop	0.023				0.023
Office	0.061				0.061
First aid post	0.143				0.143
Refectory	0.050				0.050
Sanitary	0.028				0.028
Dresser + toilets	0.049				0.049
Plant office	0.037				0.037
Plant process control room	0.041				0.041
security cabin (x2)	0.032				0.032
Furniture	0.086				0.086
Seedling nursery	0.014				0.014

Civil Work	0.057				0.057
Freight	0.051				0.051
Elect Instalation	0.314				0.314
General offices	0.143				0.143
PLANT	**2.860**	**0.839**	**1.326**		**5.025**
Vibrating feeder	0.103				0.103
Vibrating feeder			0.103		0.103
Conveyor Belt 6,4mx36"	0.066				0.066
Metal Extractor	0.043				0.043
Conveyor Belt 27mx36"	0.160				0.160
Metal Detector	0.006				0.006
Hammer Mill	0.090				0.090
Hammer Mill	0.090				0.090
Hammer Mill			0.090		0.090
Hammer Mill			0.090		0.090
Conveyor Belt 26mx36" (CT.003)	0.103				0.103
Metal Detector	0.006				0.006
High Frequency Screen	0.102				0.102
High Frequency Screen			0.102		0.102
Conveyor Belt 15,4mx30" (CT.004)	0.059				0.059
Conveyor Belt 19mx30" (CT.005)	0.063				0.063
Conveyor Belt 17mx30" (CT.006)	0.071				0.071
Conveyor Belt 9mx30" (CT.007)	0.043				0.043
Conveyor Belt 9mx30" (CT.008)	0.043				0.043
Dedusting system	0.157				0.157
Air Compressor	0.040				0.040
Bucket Elevator (120 ton/h)		0.085			0.085
Bulk Loading System		0.270			0.270
Bucket Elevator (120 ton/h)	0.086				0.086
Silo	0.060				0.060
Bagging System	0.167				0.167
Silo		0.060			0.060
Bagging System		0.167			0.167
Silo			0.060		0.060
Bagging System			0.167		0.167
Bridge Crane			0.714		0.714
Forklift (3ton 6m) (4x)	0.114	0.114			0.229
Water treatment station	0.057				0.057
Weight scale 120ton capacity)		0.143			0.143
Mec Instalation + Freight	0.143				0.143
Elect Instalation	0.989				0.989
MINING	**0.200**				**0.200**
Truck (L200 Triton 4x4)	0.086				0.086
Car 1	0.057				0.057
Car 2	0.057				0.057
ENGINEERING	**0.471**				**0.471**
GENERAL EXPENSES	**0.263**				**0.263**
NATURAL DRYING	**1.429**	**1.714**	**2.057**	**1.714**	**6.914**
Front Loader (WA320 2,7m³) (2x)	0.286		0.286		0.571
Dump truck (1x)	0.229				0.229
Drying Shed (18.000m²)		1.714	0.857	1.714	4.286
Windrow side turner (Willibald TBU 3P)(x2)	0.429		0.429		0.857
Tractor 300CV (x2)	0.486		0.486		0.971
CONTINGENCY	**0.857**	**0.286**			**1,143**
ENVIRONMENTAL PERMITTING	**1.343**	**0.086**	**0.086**	**0.114**	**1.629**

Environmental program	1.343				1.343
Others		0.086	0.086	0.114	0.286
GRAND TOTAL	**15.917**	**2.925**	**3.660**	**3.714**	**26.217**

Operating expenditure (OPEX) was estimated based on quotation, as well as the use of industry guidelines and databases. The total operating cost for the Tres Estradas Phosphate Project is estimated to be AUD$19.55/t of DANF after ramp-up (year 4). The estimated project OPEX after ramp up (year 4) is presented in Table 4. Besides of the operating costs, to sell and pack the product there will be an extra AUD 7.20 for sales and Marketing and AUD 8.57 relating to big bag costs.

Table 4: OPEX

Group	Sub-Area	(AUD/t mov)	(AUD/t ROM)	(AUD/t Prod)
Mining	Outsourced	3.85	5.77	6.09
	Topography	0.08	0.11	0.12
	Others	0.28	0.43	0.45
Total Mining		4.21	6.31	6.66
Processing	Electrical power	0.68	1.02	1.05
	Power demand	0.10	0.15	0.16
	Photovoltaic power	-0.33	-0.49	-0.51
	Drying	0.64	0.97	1.00
	Maintenance Items	0.55	0.83	0.86
	Miscellaneous and Others	1.23	1.85	1.91
	Labor	2.5	3.75	3.88
	Laboratory	0.01	0.02	0.02
Total Processing		5.39	8.09	8.37
G&A		2.88	4.30	4.52
Total Plant Operation		**12.42**	**18.61**	**19.55**
Marketing & Sales		4.58	6.85	7.20
Big bag		5.45	8.16	8.57
Grand Total		**22.45**	**33.62**	**35.32**

1.11. Economic Analysis

A Discounted Cash Flow – DCF – base case scenario was developed to assess the project based on economic-financial parameters, the results of the mine scheduling, and on CAPEX and OPEX estimates. Table 5 presents the Real Profit Dicounted Cash Flow results for the Tres Estradas Phosphate Project, based on actual profit.

Table 5: Real Profit DCF

CAPEX (AUD$M)	26.2
NPV (AUD$M) @ 10%	110.8
OPEX (AUD$/t of ROM)	33.62
IRR (%)	54.7%
Payback (Years)	2.9 Years

1.12. Project Implementation Schedule

As with the operations, schedules of operating and capital expenditures (‘OPEX’ and ‘CAPEX’) have been specifically estimated for Phase 1 (Saprolite).

Capital and operating costs for the project have been derived according to a cost estimation classification system, as proposed by the American Association of Cost Engineers (AACE). The majority of costs have been estimated to a standard appropriate for post-feasibility study budgeting (‘Class 3’). Typical accuracy ranges for Class 3 estimates are -10% to -20% on the low side, and +10% to +30% on the high side, depending on the technological, geographical and geological complexity of the project, appropriate reference information, and other risks (after inclusion of an appropriate contingency determination). The

uncertainty varies by work type with moderate ranges applying to structures and plant commodities, wider ranges applying to earthworks and infrastructure and narrower ranges applying to equipment installation.

An exchange rate of BRL 3.50: AUD 1.00 for the Australian Dollar (AUD) to the Brazil Real (BRL) was assumed; costs are reported on a constant AUD basis, as of March, 2023.

1.13. Conclusion

Mineral Resource classification of Tres Estradas Project was performed by Millcreek Mining Group March 13, 2018, as verified by GE21 on NI43-101 Technical Report format titled “Tres Estradas Phosphate Project, Rio Grande do Sul, Brazil dated on April 4, 2018. GE21 received data related to the mineral resource estimates and verified that there are no flaws in the mineral resources model. GE21 agrees with Mineral Resource classification from Millcreek.

According to Millcreek Mining Group results from quality assurance and quality control of analyses program are considered inside acceptance limits for the purpose of Mineral Resource classification. GE21 evaluated the procedures and results related to QA/QC during the site visit. GE21 did not detect flaws or inconsistencies in the QA/QC procedures. Results are inside acceptance limits for mineral industry.

The Mineral Resource identifies 83.21 Mt of Measured and Indicated material with an average grade of 4.11% P_2O_5 using a minimum cut-off of 3.0% P_2O_5. The estimate also identifies 21.85Mt of Inferred material with an average grade of 3.67% P_2O_5. By classification, 79% of the resources contained within the mineable resource pit shell are Measured and Indicated with the remaining 21% of the resource classified as Inferred resource.

Currently the project is planned to be developed and explored in three phaseas

- Phase 1 – Production of Direct Application of Natural fertilizer (DANF), based on the saprolite of carbonatite and amphibolite material;
- Phase 2 – Production of Phosphate Rock concentrate from carbonatite; and
- Phase 3 (Aglime): Following mining operations., recovery the remaining aglime from the tailings dam.

The Mineral Reserves for the Phase 1 were estimated based on Measured and Indicated Mineral Resources and using the following the parameters: Sale price for DANF @9%P2O5 (from carbonatite saprolite) = AUD$72.00/t and for DANF @5%P2O5 (amphibolite saprolite) = AUD$43.20/t. Mining costs: AUD$2.32/t mined, processing costs: AUD$4.81/t milled and G$A:AUD$3.34/t DANF. The declared Reserve for Phase 1 is presented is presented in the simplified Table 6 below.

Table 6: Proven and Probable Reserves

Block dimensions 12x6x10 (m) Mine Recovery 98%, Dilution 2% (Effective date 08/01/2020)										
Litho	Class	Mass	P_2O_5	CaO	MgO	SiO_2	K_2O	Fe_2O_3	MnO_2	Al_2O_3
		Mt	%							
CBTSAP	Proved	0.64	10.2	18.1	5.2	28.5	0.45	19.1	0.89	4.7
	Probable	3.67	9.2	16.2	4.6	31.8	0.39	18.4	0.87	5.9
AMPSAP	Proved	0.04	6.7	10.9	9.5	37.3	0.71	15.3	0.68	7.3
	Probable	0.67	4.9	11.4	7.6	39.9	1.07	15.4	0.47	8.6
	Total Proved	0.68	10.0	17.7	5.5	29.0	0.5	18.9	0.9	4.9
	Total Probable	4.34	8.5	15.5	5.1	33.1	0.5	17.9	0.8	6.3
Total Proved and Probable		**5.02**	**8.8**	**15.7**	**5.1**	**32.5**	**0.49**	**18.1**	**0.82**	**6.1**

Mineral Reserves were estimated using the Geovia Whittle 4.3 software and following the economic parameters: Sale price for DANF@9%P_2O_5 = AUD$72.00 and for DANF@5%$P_2O_5$ = AUD$43.20 Exchange rate AUD$ 1.00 = R$ 2.85.
Mining costs: AUD$2.32/t mined, processing costs: AUD$4.81 /t milled and G$A:AUD$3.34/t DANF. Mineral reserves are the economic portion of the Measured and Indicated mineral resources.
Dilution 2% and Recovery 98%
Final slope angle: 34º
Waste = 2.50Mt
Inferred = 0.03Mt @ 5.2%P_2O_5 Inferred Resources were not included in the Mineral Reserves. The inferred is not a Mineral Reserve.It needs confirmation to become Mineral Rerserves.
Strip Ratio = 0.5 t/t - (Waste+inferred)/Ore
The Competent Person for the estimate is Guilherme Gomides Ferreira, BSc. (MEng), MAIG, an employee of GE21

During Phase 1, the TEPP will be a traditional open pit operation utilizing an owned mining fleet with a hydraulic excavator 2.0m^3 of capacity and 36t haul trucks, associated with correspondent ancillary equipment. The mine planning model adopted is a “diluted” model, adding approximately 2% dilution and 98% of recovery to the source model.

Due the characteristics of the Tres Estradas Phosphate Project and the applicable legal regulation, the environmental feasibility of the intended mining activity was proven, attested by the issuance of the Preliminary License issued by FEPAM, including with respect to the project review for the Installation License phase.

This BFS confirms the Project's technical and economic viability potential to produce DANF. According to economic analysis, the project's NPV is AUD$ 110.8 million @ WACC of 10% and an internal rate of return of 54.7%, for sales prices of AUD 120.0/t for DANF @ 9% P_2O_5.

1.14. Recommendation

GE21 recommends that Aguia Resources:

- Receive a quotation for third party company mine operation in the first three years, to improve the mining costs;
- Develop a grade control pratice in the future mine in order to guarantee product quality;
- Complete the environmental studies to obtain the Operational License;
- Develop the regional market for the DANF;
- Develop a detailed geotechnical study, including Phase 2 of the project, to guarantee the continuity of activities with safety and economicity;

- Develop studies to better define the time to implement Phase 2, using conclusions and the confirmation that the regional market is demanding more fertilizer options;
- Develop agricultural tests using amphibolite saprolite to improve the economicity of the project.

2. INTRODUCTION

GE21 Consultoria Mineral Ltda. (GE21) has prepared this BFS on the Tres Estradas Phosphate Project at the request of Aguia Resources Limited (Aguia). The purpose of this work is to present the findings of a 'Bankable' Feasibility Study (the BFS) for Project Phase 1 which builds upon a previous mineral resource estimate update and Scoping Study for Project Phase 1. The resource and reserves estimate presented in this report have effective dates of September 8th, 2017, and March 13th, 2018, respectively.

Project Phase 1 consists of mining and processing the saprolite material. The saprolite material represents the oxidized ore, composed of CBTSAP and AMPSAP, which will be mined at an annual rate of approximately 300kt/year of ROM with an expected 18 years of Life of Mine. In this phase, a Direct Application Natural Fertilizer (DANF) will be produced, combining the presence of P_2O_5, CaO and MgO.

Aguia is an exploration and development company focused on Brazilian phosphate projects to supply the Brazilian agriculture sector. Aguia is listed on the Australian Securities Exchange (ASX) under the symbol AGR. The company's corporate office is located in Porto Alegre, Brazil. The company currently controls over 11,823 km^2 of land in the states of Rio Grande do Sul and Paraiba, of which 260km^2 are being studied forphosphate mineralization through exploration permits it has acquired from the ANM. The company seeks to develop its holdings of phosphate deposits into viable mining operations providing phosphate to Brazil's agriculture industry.

2.1. Recent Project History

Phosphate mineralization was first observed at Tres Estradas in a gold exploration program being conducted jointly by Santa Elina and CBC. Santa Elina was prospecting for gold in DNPM #810.090/1991, conducting soil, stream sediment and rock geochemistry, ground geophysical surveys (magnetrometry and induced polarization) and a limited drilling program.

In July 2011, CBC entered into a partnership with Aguia Metais Ltda, a subsidiary of Aguia, to explore and develop phosphate deposits in Rio Grande do Sul State. The two companies entered into an option agreement providing Aguia with the irrevocable purchase option for phosphate mineral rights. Aguia exercised the purchase option the following year, granting it 100% interest in the Tres Estradas deposit. Since 2011, Aguia has carried out a systematic and detailed exploration program to delineate phosphate mineralization at the deposits.

In 2012, SRK Consulting (Canada) Inc., was engaged by Aguia to prepare a geological model and mineral resource estimate for the project, in accordance with the JORC code. The results of additional drilling were incorporated in an updated resource estimate released by Aguia in January 2013. In April 2013, permit exploration rights for Tres Estradas were granted by the ANM, and shortly thereafter SRK provided an updated mineral resource estimate to reflect Aguia's revised permit status.

SRK's updated resource estimate and ITR for 2013 served as the basis for a conceptual mining study / PEA completed in September 2014. This PEA study was developed and updated during the interim with a summary report released in August 2015.

In early 2016, Millcreek was engaged by Aguia to complete a new PEA for the Tres Estradas Phosphate Project. The PEA was issued as a JORC compliant report on July 7th, 2016. The PEA was later reformatted as an NI 43-101 technical report and issued on May 12th, 2017, in support of Aguia's listing on the TSX-V. A PEA reporting the latest resource estimate as a result of the 2016 - 2017 drilling program was later prepared.

A BFS was completed by Millcreek and was issued as a JORC and as NI 43-101 in early 2018 reporting the M&I Resource, mining plan, cost estimation and economic analysis, considering production of phosphate concentrate in Project Phase 1 (Saprolite) and Phase 2 (Carbonatite), and aglime production in Project Phase 3.

In December 2019, GE21 was engaged by Aguia Resources to develop a Scoping Study on the Tres Estradas Phosphate Deposit with a focus on DANF production in Phase 1. The Scoping Study completed by GE21 was issued as a JORC compliant report on February 12th, 2020.

Immediately following the Scoping Study, Aguia began work on preparation of the BFS. GE21 was hired to prepare the document including the mining plan, cost estimation and economic analysis for Project Phase 1 considering DANF production based on the high natural P_2O_5 grade in the saprolite (8.78% P_2O_5 on average).

The current report aims to update the 2020 BFS regarding mineral processing, recovery methods, marked study, permitting, capital and operating costs and economic analysis, but not Mineral Reserves.

2.2. Terms of Reference

2.2.1. Site Visit

In accordance with accepted standards and best-practices for resources certification, GE21 personnel have completed two site visits to the Tres Estradas Phosphate Project. The first site visit took place between December 10th and 12th, 2019. GE21's representatives included Mr. Porfirio Cabaleiro Rodriguez and Mr. Bernardo H. C. Viana, who are considered Competent Persons (CPs) under the JORC Standards of Disclosure for Mineral Projects. The second site visit was held between October 26th and 28th, 2020. GE21's representatives included Mr. Guilherme Gomides Ferreira and Mr. Bernardo H. C. Viana, who are considered Competent Persons (CPs) under the JORC Standards of Disclosure for Mineral Projects. No material work has been done on the property since the visit, and the CPs consider their personal inspections to be considered current, for their respective fields.

During their visits, Mr. Rodriguez, Mr. Viana and Mr. Ferreira were accompanied and assisted by various Aguia staff, including Dr. Fernando Tallarico, Mr. Luiz Clerot, Mr. Lucas Galinari and Mr. Alan Nascimento.

2.2.2. Purpose of BFS

This BFS is related to Phase 1 of the project, where only saprolite rock will be mined, and considers the production of DANF.

GE21 personnel have completed two visits to the Tres Estradas Phosphate Project.

Competent Person Mr. Porfirio Cabeleiro Rodriguez, a mine engineer that has 40 years of experience in the field of mineral resource and reserve estimation. He possesses considerable experience dealing with various commodities, such as phosphate, iron, uranium, gold and nickel ore, in addition to rare earth elements, among others. Mr. Rodriguez is a member of the Australian Institute of Geoscientists (MAIG).

Competent Person Mr. Bernardo H. C. Viana, a geologist with 18 years of geological and mining related experience ranging from execution, management and coordination of geology projects, to resource estimation in a variety of commodities including Fe, Mn Bauxite, Au, Cu, Ni, Zn and Phosphate in Brazil, Uruguay, Peru, Argentina, Venezuela, Colombia, Chile and Angola. He is a member of the Australian Institute of Geoscientists (MAIG) and is independent of Aguia.

Competent Person Mr. Guilherme Gomides Ferreira, a mine engineer that has 15 years of experience in open mining with focus on mining planning (Pit optimization, mining scheduler and fleet), economic analysis (CAPEX/OPEX,DCF), risk analysis, Mineral Reserves and mine reconciliation. He has experience dealing with various commodities, such as phosphate, iron ore, gold, copper, lithium, vanadium and PGM. Mr. Ferreira is a member of the Australian Institute of Geoscientists (MAIG).

Mineral Resource estimation and classification of the Tres Estradas Project was performed by Millcreek Mining Group March 13th, 2018, as verified by GE21 on NI43-101 Technical Report titled “Tres Estradas Phosphate Project, Rio Grande do Sul, Brazil dated April 4th, 2018. GE21 received data related to the mineral resource certification and verified that there are no flaws in the mineral resources model. GE21 agrees with the Mineral Resource classification from Millcreek.

2.3. Statement of Limitation

The accuracy of resource estimates is, in part, a function of the quality and quantity of available data and of engineering and geological interpretation and judgment. Given the data available at the time this BFS was prepared, the estimates presented herein are considered reasonable. However, they should be accepted with the understanding that additional data and analysis available subsequent to the date of the estimates may necessitate revision. These revisions may be material. There is no guarantee that all or any part of the estimated resources or reserves will be recoverable.

Economic analyses in technical reports are based on commodity prices, costs, sales, revenue, and other assumptions and projections that can change significantly over short periods of time. As a result, economic information in a technical report can quickly become outdated. Continued reference to outdated technical reports or economic projections without appropriate context and cautionary language could result in misleading disclosure.

3. RELIANCE ON OTHER EXPERTS

GE21 has relied, in part, on information from Aguia as well as the opinions and statements of other experts who are not Competent Persons.

GE21 has prepared this BFS specifically for Aguia. The findings and conclusions are based on information developed by GE21 available at the time of preparation and data supplied by outside sources. GE21 staff have not conducted any independent field work for the preparation of this BFS and have relied on the results of exploration documented in various public reports and on recent drilling data supplied by Aguia.

Aguia has supplied the appropriate documentation that supports the exploration permits it holds with the ANM of Brazil, believed to be in good standing. The existence of encumbrances to the exploration permits have not been investigated.

4. PROPERTY DESCRIPTION AND LOCATION

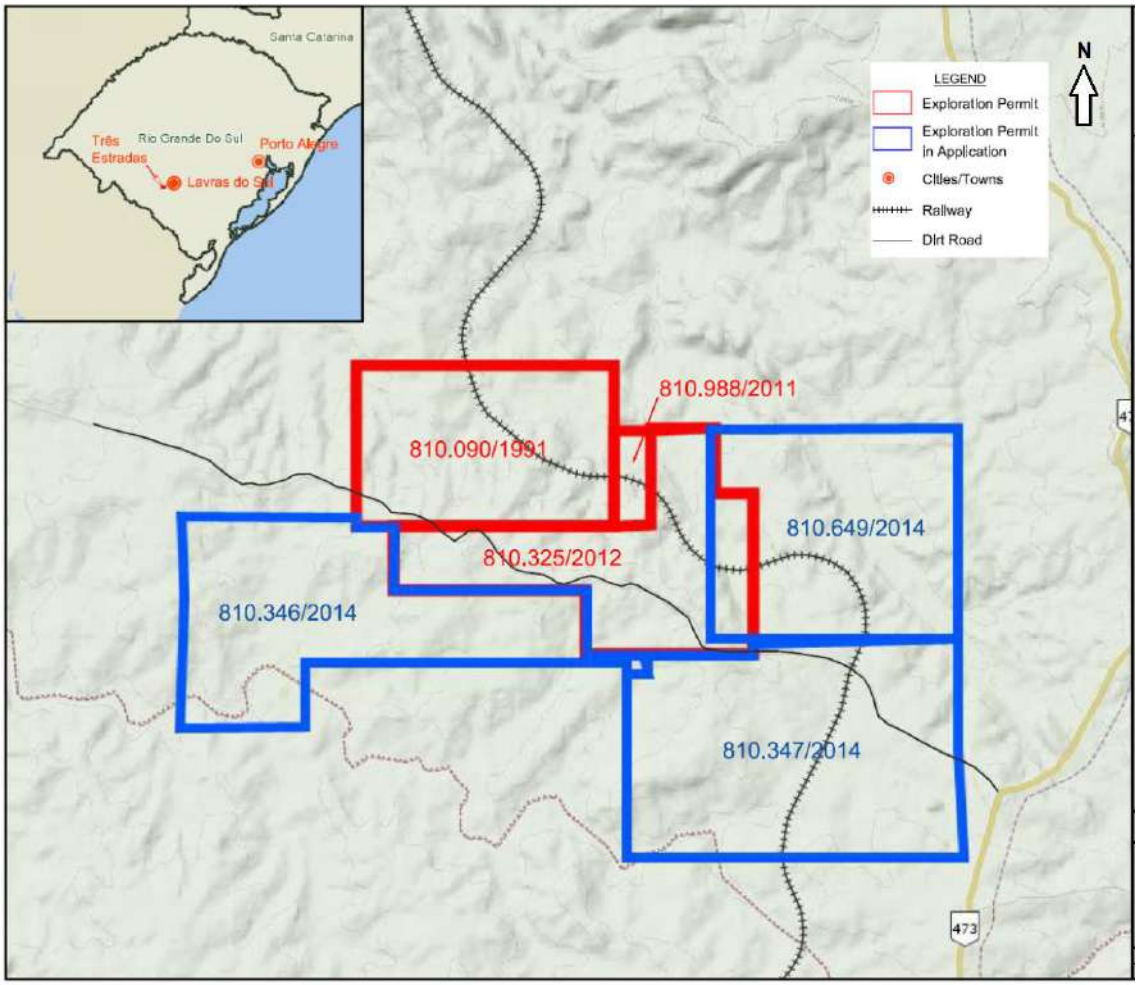
The Tres Estradas Phosphate Project area is situated at latitude -30.906137°, longitude -54.197328°. Mineral tenure is held through three mineral rights, all issued by the National Mining Agency (ANM), previously Departamento Nacional de Produção Mineral (DNPM), as listed in Table 7.

The three mineral rights combined cover a total area of 1,985.34ha. Figure 2 shows the three exploration permits for Tres Estradas. Aguia holds 100% interest in the three mineral rights permits covering the Tres Estradas Phosphate Project area.

Table 7: Tenement Permits Area Summary

ANM Permit	Issuing Date	Period	Expiry Date	Area (ha)	Status	Municipality/State	Title Holder
810.090/1991	16/08/2010	2	17/08/2021	1,000.00	PAE applied	Lavras do Sul/RS	Aguia Fertilizantes S.A.
810.325/2012	03/05/2017	3	17/08/2021	900.95	PAE applied	Lavras do Sul/RS	Aguia Fertilizantes S.A.
810.988/2011	15/04/2015	3	15/04/2018	84.39	Extension Submitted	Lavras do Sul/RS	Falcon Petróleo S.A.
			Total Area	**1,985.34**			

Figure 2: Tenement permit areas - location map



4.1. Ownership

Aguia holds 100% interest in the three mineral rights permits covering the Tres Estradas Phosphate Project area.

On July 1st, 2011, Companhia Brasileira do Cobre (CBC) and Aguia Metais Ltda., a subsidiary of Aguia in Brazil, executed an option agreement providing for the irrevocable purchase option of mineral rights #810.090/1991 and #810.325/2012 by Aguia Metais (or its affiliate or subsidiaries). On May 30th, 2012, Aguia Metais exercised the purchase option concerning the mineral rights of permit #810.090/1991 by means of its affiliate, Aguia Fertilizantes S/A (Aguia Fertilizantes). On July 20th, 2012, CBC filed a request before the ANM applying for the transfer of this mineral right to Aguia Fertilizantes. On May 16th, 2013, Aguia Metais exercised the purchase option concerning mineral rights of permit #810.325/2012 by means of its affiliate Aguia Fertilizantes.

The transfer of the mineral rights #810.090/1991 from CBC to Aguia Fertilizantes was approved by ANM on November 30th, 2017 and registered by ANM on December 7th, 2017.

The transfer request of the mineral rights #810.325/2012 was approved by ANM on July 3rd, 2018 and registered by ANM on July 27th, 2018.

The permits #810.090/1991 and #810.325/2012 had the Final Exploration Report approved by ANM on August 17th, 2020. Aguia filed the mine development plan (PAE) on October 26th, 2020 which is currently under ANM's review.

The transfer request of the mineral rights #810.988/2011 is under ANM´s review. As per the Brazilian mining legislation, in order to be considered lawful and to also have legal effectiveness, the ANM will analyze technical and legal aspects in order to approve or oppose the transfer. The assignor shall continue to be liable for any rights or covenant regarding the mining title up to the regular register of the full assignment. Falcon has requested for an extension of the permit 810.988/2011 which is currently under ANM's review.

4.2. Licensing Process

Exploration permits are granted for up to a three-year period, renewable for a further period at the decision of ANM, under the objective conditions stipulated in the mining code. Exploration must begin no later than 60 days after the granting of the permit. Exploration must not stop, without due reason, for more than three consecutive months or 120 non-consecutive days. The permit holder must notify the ANM of any changes to the exploration plan and, on completion of the work, submit a final report on exploration. The holder of an exploration permit is required to pay annual fees to ANM in the amount: (i) R$3.55 (three Brazilian reais and fifty-five cents) per hectare, during the effectiveness of the authorization in its original term; and (ii) R$5.33 (five Brazilian reais and thirty-three cents) per hectare, under the extended term of the authorization. The holder of an exploration permit is also responsible for all expenses related to ANM site inspections of the area.

Mining concessions are granted, solely and exclusively, to individual firms or companies incorporated under Brazilian law, which have head offices and management in Brazil, and are authorized to operate as a mining company.

Mining concessions can be applied for upon the presentation of: (i) a mining plan within one (1) year, counted from the approval of the final exploration report by ANM; and (ii) installation license issued by environmental license.

The mining plan must include an economic feasibility analysis, and the company must demonstrate to the ANM that it has the financial capability to carry out the forecasted plan. Once the legal and regulatory requirements are met, a mining concession is granted. Mining Code stipulates that the mining right holder shall: (i) exploit the mine according to an exploitation plan previously approved by ANM; (ii) not interrupt the exploitation works for a period of more than six consecutive months after the beginning of the operation; (iii) exploit only minerals expressly mentioned in the Mining Concession; and (iv) comply with the applicable Environmental Law. As per the Mining Code, the mining right holder may exploit additional mineral substances (originally not mentioned in the mining title) upon their prior register in the respective mining title.

The holder of a mining concession shall also comply with the Compensation for the Exploitation of a Mineral Resource (CFEM), which is a legal royalty based on the type of commodity and levied on the sale of the ore. The Law #13.540, enacted on December 18th, 2017 as a result of the Provisional Measure #789/20174, sets forth several modifications on the legal regime of CFEM. Pursuant to such law, in case of sale of the mineral production, CFEM is levied on the gross revenues resulting from the sale of raw or improved mineral at a rate of: (i) 2% (two percent) for “other mineral substances”, such as phosphate; and (ii) 1.5% for gold. Its calculation base is the gross revenue from the sale of the mineral product, understood as the total of sales less taxation that arises from the commercialization of the mineral product and are paid or compensated in accordance with any applicable tax regimes

The company holding the mining concession has the right to mine the deposit until it is completely exhausted according to the mining plan approved by ANM and the environmental license granted by the relevant agency. The mined product can be disposed of without any restriction except general taxation. The concession holder also has the right to sell, transfer or lease the mining rights to another mining company, with prior consent of the federal government.

4.3. Mining Activities in International Border Zones

The project area falls within the International Border Zone of Brazil. The International Border Zone is a 150 km buffer zone to the country’s international borders. Tres Estradas is within this zone with respect to the Uruguay border. The mining activities in border zones are ruled by special laws. According to Federal Law No. 6.634/1979 and Decree No. 85.064/1980, mining activities in border areas must be submitted to prior approval of the National Defense Council. Companies interested in performing mining activities within the border areas must fulfill these requirements:

- At least 51% of the company’s capital shares must be held by Brazilian citizens;
- At least two-thirds of the employees involved in the mining activities must be Brazilian citizens;
- The management of the company must be exercised by a majority of Brazilian individuals. Furthermore, the delegation of management or directory powers of the company to foreigners is forbidden, as stipulated in Decree #85.064/1980 (article 15, third paragraph).

4.4. Surface Access Rights for Development

Brazilian Law grants to the titleholder of an exploration license the right to enter into the mineral right area and execute exploration activities by means of a private agreement with the landowner. Should any landowner refuse the access to a mineral right area, under article 27 of the Brazilian Mining Code, a judicial order could be obtained, through a specific lawsuit, under which the local court would guarantee the access of the titleholder to the area.

In relation to mining, the holder of the exploration license may, judicially or amicably with the landowner, obtain servitudes on the property where the mine is located, as well as on bordering and neighboring properties, with prior indemnification.

As project development moves forward, Aguia will need to secure surface access rights for the lands it intends to develop. Aguia has engaged Vaz de Mello, an independent consulting company to assess property values and to assist in discussions and negotiations with property owners to secure surface rights for the land needed to develop the project.

4.5. Royalties

Under the terms of the Option Agreement, executed by and between CBC and Aguia Metais Ltda. ("Aguia Metais") on July 1st, 2011 and amended on December 13th, 2011 and March 27th, 2014, CBC is entitled to receive royalties levied at the rate of 2% (two percent) of the net revenue (royalties capped at USD$10,000,000) that results from the commercialization of the mineral products for Tres Estradas, from mineral rights #810.090/1991 and #810.325/2012. However, Aguia may, at any time, purchase the royalty right from CBC for USD$5,000,000.

The legal opinion includes a description of rights forthcoming to CBC which include a pre-emptive right to acquire any calcium carbonate production in the mineral rights area, a right to purchase up to 30% of produced calcium carbonate (after exercising the option), and the issuance of 600,000 Aguia shares upon exercise of the option. However, while these factors may affect share dilution or market, they do not impact the costs of the project, its revenues, or its NPV valuation.

4.6. Environmental Liabilities

Properties required for the development of the open pit, beneficiation plant, waste dumps and sump are in the process of being obtained by Aguia.

Aguia is not aware of any environmental liabilities or any other royalties that may apply, other than described here and in the Title Opinion (Appendix A).

Current environmental liabilities are limited to cut lines for drilling, drill pad clearings, mud pumps and various infrastructures.

The Project will comply with the environmental provisions of the Brazilian Constitution and mining code, including:

- The rehabilitation of the surface soil or other areas adjacent to the mine or deposit in accordance with a rehabilitation plan or land use, concurrently, or with other work required in case of closure or cessation of work;
- The reinstatement of forests or other areas whose integrity has been impaired as a result of mining activities; and
- The work of exploration or exploitation of a mine or quarry will be in compliance with the obligations relating to:
    - Safety and health of personnel and the population;
    - Protection of the environment;

- Preservation of the mine;
- Conservation of buildings, ground safety and soundness of dwellings;
- Conditions of environmental permit license.

To the extent known, the CPs are not aware of any significant factors or risks besides those noted in this Technical Report that may affect access, title, or the right or ability to perform work on the property.

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

5.1. Accessibility

The Tres Estradas Phosphate Project is located approximately 30 km southwest of Lavras do Sul, located in the south-central portion of the state of Rio Grande do Sul. The project area is located approximately 320 km from Porto Alegre, the capital and largest city of Rio Grande do Sul State. Porto Alegre is a major metropolitan hub to the region with a population of approximately 4.4 million inhabitants and serviced by an international airport. A network of modern paved highways connect Lavras do Sul to Porto Alegre and other communities throughout the region. Highways BR-290, BR-392, and BR-357 are the primary links from Porto Alegre to Lavras do Sul.

Lavras do Sul is a community of 8,300 inhabitants. The town has a history founded in gold mining dating back to the 1880s. The town has well-developed infrastructure, including an airstrip for small planes, availability of unskilled and semi-skilled mining personnel and access to non-specialized supplies. Aguia bases its field operations in Lavras do Sul with an office complex and core storage facility.

From Lavras do Sul, the Tres Estradas Phosphate Project area is accessed by RS-357, southwestward for approximately 23 km, then south on BR-473 for 7 km to an intersection with a secondary ranch road. The southeast corner of the property is located another 10 km northeast on the ranch road from the intersection with BR-473.

5.2. Climate and Physiography

The region has a humid subtropical climate. Annual precipitation ranges from 1,300 to 1,800 millimeters (mm) and is relatively uniform throughout the year. April, May, November and December are typically the driest months of the year where monthly rainfall may fall below 100mm (Figure 3). Temperature ranges from 8° to 25°C between April and September and 13° to 31°C from October to March. Frost is known to occur during the winter months; the temperature occasionally reaches 40°C in the summer (Figure 4).

Figure 3: Average Monthly Rainfall for the Tres Estradas Phosphate Project – INMET Station of Bagé (Normal Climate 1961-1990)

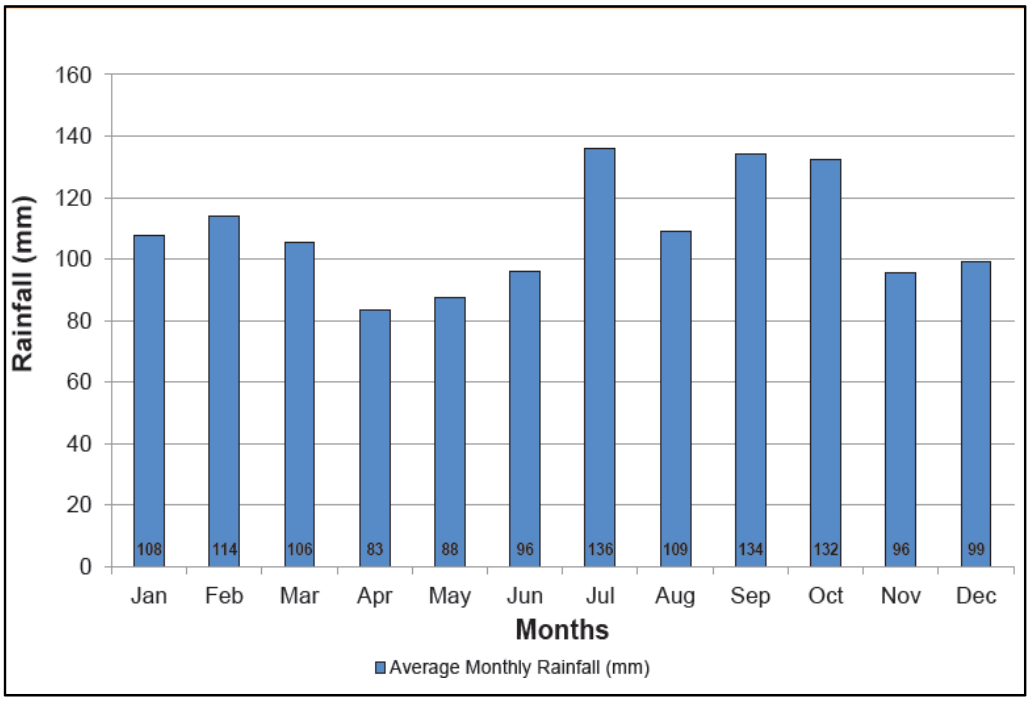
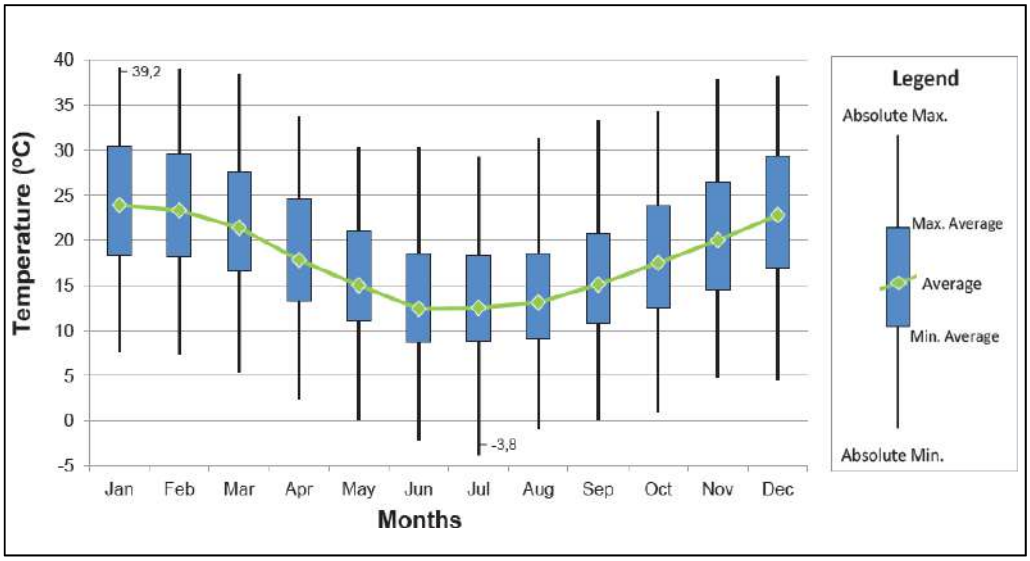


Figure 4 - Monthly Temperature Variation in the Tres Estradas Phosphate Project Region – INMET Station of Bagé (Normal Climate 1961-1990)



The landscape surrounding Lavras do Sul and the Tres Estradas Phosphate Project site can be characterized as low, gently sloping hills. The gentle hills and intervening valleys are a mix of Pampas grass lands, shrubs and small to medium height trees. The Tres Estradas Phosphate Deposit is located between two hydrographic basins: the Santa Maria River Basin and the Camaquã River Basin. Elevation for the Tres Estradas Phosphate Project area ranges from 249m to 367m with a mean elevation of 348m MASL for the deposit area (Figure 5).

Figure 5: Overview of the Tres Estradas Phosphate Project Site

5.3. Local Resources and Infrastructure

Electric power for the region is provided by Companhia Estadual de Energia (CEEE – State Electric Power Company). CEEE has 62 substations in Rio Grande do Sul with a total capacity of 8,237.4MVA and 6,056 km of transmission lines that are supported by 15,058 structures and operate voltages of 230, 138, and 69 kilovolts.

The water supply in the Lavras do Sul and Bagé municipalities is managed by the Rio Grande do Sul State water utility, CORSAN. Regional water demands are carefully managed during the summer months, when demand is high due to local rice farming, in order to avoid impact on the urban supply.

A railroad crosses through the Tres Estradas Phosphate Project area and through Lavras do Sul. The railroad is operated by RUMO Logistics and links the cities of Cacequi and Rio Grande. The city of Rio Grande is the largest port in the state.

6. HISTORY

Lavras do Sul was originally developed in the 1880's as a gold mining camp on the Camaquã of Lavras River. In 1959, more detailed studies were organized by the DNPM, which were followed in the 1970s by major survey and sampling programs of all mineral occurrences by the Companhia de Pesquisa e Recursos Minerais (CPRM – The Geological Survey of Brazil). In recent years there have been renewed exploration activities for gold and base metals in the region by Companhia Brasileira do Cobre (CBC), Amarillo Mining, Companhia Riograndense de Mineração (CRM) and Votorantim Metais Zinco SA.

Phosphate mineralization was first observed at Tres Estradas in a gold exploration program being conducted jointly by Santa Elina and CBC. Santa Elina was prospecting for gold in DNPM #810.090/1991, conducting soil, stream sediment and rock geochemistry, ground geophysical surveys (magnetrometry and induced polarization) and a limited drilling program.

Results of the soil sampling and drilling program led to the discovery of phosphate-rich rocks. A total of 944 soil samples were collected in a regular North-South grid of 400m by 500m and within detailed grids ranging from 25m by 50m to 200m by 50m.

Exploration results for gold were not encouraging and Santa Elina pulled out of the joint venture with CBC. However, the phosphate chemical analysis from two core boreholes in the DNPM #810.090/1991 area yielded results of 6.41% P_2O_5 from soil and 6.64% P_2O_5 from core. This information was communicated to

CPRM. Following petrographic studies, apatite mineralization occurring in carbonatite was confirmed. This discovery was published in the proceedings of the 45° Congresso Brasileiro de Geologia (Brazilian Geology Congress), in Belém, Pará (Parisi et al., 2010), and in the Simpósio de Exploração Mineral (SIMEXMIN), in Ouro Preto, MG, in 2010 (Toniolo et al., 2010).

In July 2011, CBC entered into a partnership with Aguia Metais Ltda, a subsidiary of Aguia, to explore and develop phosphate deposits in Rio Grande do Sul State. The two companies entered into an option agreement providing Aguia the irrevocable purchase option for phosphate mineral rights. Aguia exercised the purchase option the following year, granting them 100% interest in the Tres Estradas deposit. Since 2011, Aguia has carried out a systematic and detailed exploration program to delineate phosphate mineralization at the deposits.

In 2012, SRK Consulting (Canada) Inc. were engaged by Aguia to prepare a geological model and mineral resource estimate for the project, in accordance with the JORC code. The results of additional drilling were incorporated in an updated resource estimate released by Aguia in January 2013. In April 2013, permit exploration rights for areas including Tres Estradas were granted by the DNPM, and shortly thereafter SRK provided an updated mineral resource statement to reflect Aguia's revised permit status.

SRK´s updated resource estimate and ITR for 2013 served as the basis for a conceptual mining study / Preliminary Economic Assessment (PEA) completed in September 2014.

In February 2016, the Millcreek Mining Group (Millcreek) was engaged to perform an updated PEA of the project in accordance with the JORC code. In 2017 Millcreek was engaged to prepare a Bankable Feasibility Study (BFS) reporting the M&I Resource, mining plan, cost estimation and economic analysis, considering production of phosphate concentrate in Project Phase 1 (Saprolite) and Phase 2 (Carbonatite) and aglime production in Project Phase 3. The BFS was completed by Millcreek and was issued as a JORC and as NI 43-101 in early 2018.

In December 2019, GE21 was engaged by Aguia Resources to develop a Scoping Study on the Tres Estradas Phosphate Deposit with a focus on DANF production in Phase 1. The Scoping Study completed by GE21 was issued as a JORC compliant report on February 12th, 2020.

Immediately following the Scoping Study, Aguia began work on preparation of the BFS. GE21 was hired to prepare the document including the mining plan, cost estimation and economic analysis for Project Phase 1 considering DANF production based on the high natural P_2O_5 grade in the saprolite (8.78% P_2O_5 on average).

7. GEOLOGICAL SETTINGS AND MINERALIZATION

7.1. Regional Stratigraphy

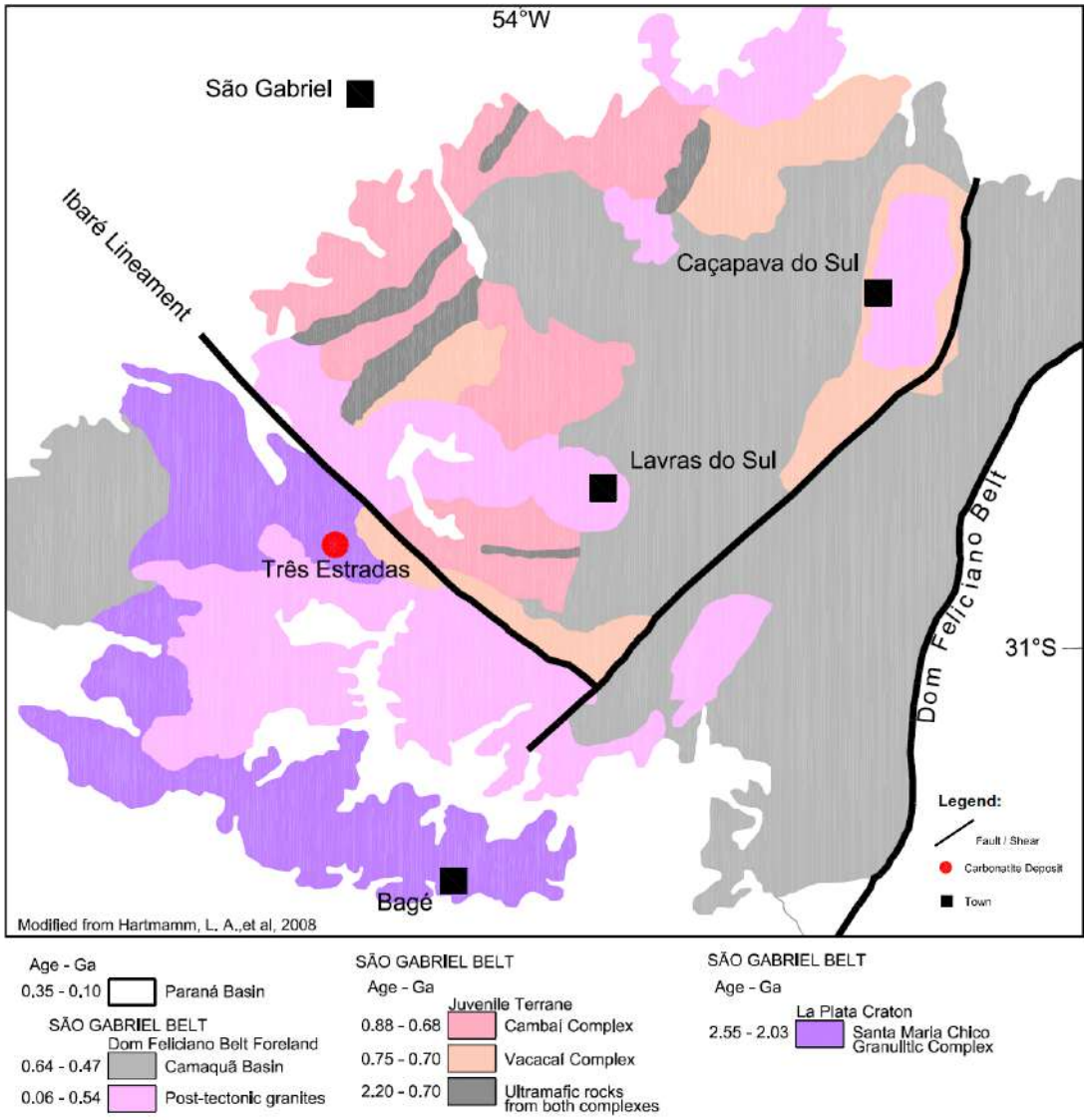
The region surrounding Lavras do Sul consists of geologic domains within the Sul-rio-grandense Shield, a major lithotectonic assemblage in southernmost Brazil, which includes a Paleoproterozoic basement and Neoproterozoic orogenic belts linked to the Brasiliano/Pan-African cycle (Figure 6)

The Tres Estradas Phosphate Project is situated in the Santa Maria Chico Granulitic Complex (SMCGC), part of the Taquarembó domain. The SMCGC exposes the deepest structural levels within Brazil and may represent the western edge of the Precambrian Rio de la Plata Craton. The granulite complex is bounded to the northeast by the Ibaré Lineament, to the west by Phanerozoic cover and to the south by Neoproterozoic Braziliano granites (potential melts of the granulite). The age of the granulite protolith is late

Archean to early Paleoproterozoic (ca. 2.5-2.3 Ga), and can therefore be interpreted as the basement to the Taquarembó domain and as an extension of the Valentines-Rivera Granulitic Complex within bordering Uruguay.

The granulitic complex and post-tectonic granites are largely surrounded by volcanic and sedimentary cover rocks of the Camaquã Basin. These rocks were deposited as a result of Neoproterozoic to Early Cambrian post-orogenic extension.

Figure 6: Regional Geological Map -Tres Estradas Phosphate Project



7.2. Tres Estradas

The Tres Estradas Phosphate Project area is situated in the SMCGC, south of the northwest trending Ibaré Lineament (Figure 7). The area is characterized by Late Archean to Early Proterozoic rocks of the granulite complex and Neoproterozic felsic intrusive and sedimentary rocks of the Camaquã basin. The area has undergone amphibolite grade metamorphism and significant deformation throughout and following the emplacement of the granulite complex. This was followed by felsic intrusions and deposition of cover rocks during the formation of the Camaquã Basin during the Neoproterozoic and into the early Cambrian. The dominant rock types found within the local confines of the Tres Estradas Phosphate Project include:

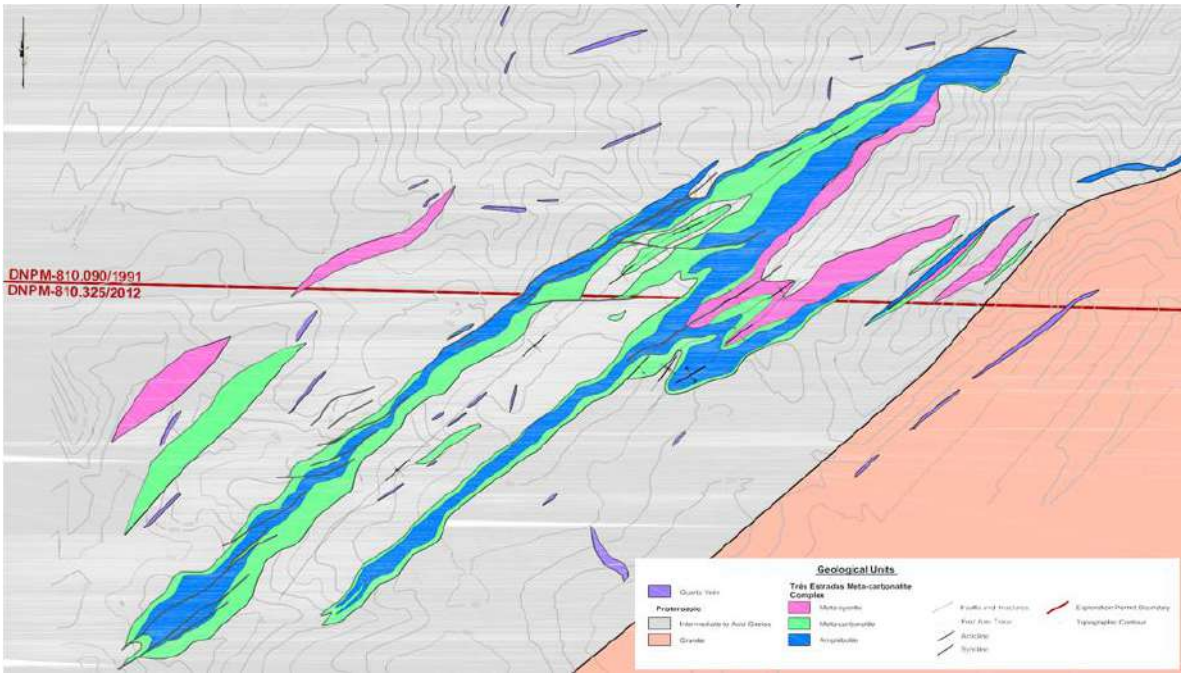
- Intermediate gneiss, amphibolite, schist, and metatonalite of the SMCGC. These lithologies have been strongly deformed and metamorphosed to amphibolite assemblages. They are interpreted to have experienced deformation during at least two tectonic events during the Paleo and Neoproterozoic, and subsequently have been affected by retrograde amphibolite metamorphism.
- Granites belonging to the São Gabriel Domain. Granites from this domain are poorly exposed. Where exposed, the granites show little evidence of deformation though extensive quartz veins trending parallel to the Cerro dos Cabritos Fault are common where they are in contact with gneiss of the SMCGC.
- The Tres Estradas meta-carbonatite. The meta-carbonatite is intensely recrystallized and metamorphosed to amphibolite assemblages. The carbonatite intrusion is characterized by three magmatic phases: apatite bearing pyroxenite, carbonatite and syenite.
- Medium to coarse grained, subangular to subrounded poorly sorted, white to gray sandstone of the Maricá Formation, a component of the Camaquã Basin sedimentary cover units. This unit is characterized by cross bedding, lenses of polymictic conglomerates and rhythmites associated with sandy to pelitic turbidites; and
- Quartz veins are common and are both concordant and crosscutting all lithologies. The veins can reach widths of up to 30m and can reach strike extents of up to 300m.

The majority of the Tres Estradas Phosphate Project area is composed of the major rock types described above. The targeted area consists of an elongated carbonatite intrusion with a strike of 50° to 60° similar to that of the Cerro dos Cabritos Fault. Shear sense indicators suggest a sinistral sense of motion along this fault. The carbonatite and amphibolite form a tightly folded sequence with limbs dipping steeply from 70° to vertical (90°). The surface expression of the intrusion is approximately 2.5 km along strike with a width of approximately 300m.

With the exception of meta-syenite along its northeast and southeast boundaries, the carbonatite is surrounded by biotite gneiss of the SMCGC. The carbonatite is tightly folded and strongly foliated, resulting in a well-developed gneissic texture. Locally, abundant subparallel quartz veins are present resulting in elevated topographic ridges as the quartz is more resistant to weathering than the surrounding country rock. These veins range from a few centimeters to a couple of meters in width and can be up to 300m long. Also flanking the carbonatite is a minor unit of meta-tonalite with intercalated meta-carbonatite and amphibolite. The unit is characterized by gneissic banding, a gray-green color on weathered surfaces and a recrystallized granular texture.

The carbonatite intrusion is characterized by varying amounts of amphibolite. Amphibolite and carbonatite bands alternate on a meter-to-millimeter-scale. Phosphate mineralization is disseminated and contained in apatite crystals throughout the carbonatite intrusion and in the overlying saprolite (discussed in detail in following section). Aguia's current interpretation suggests that the carbonatite intrusion is formed from three magmatic phases that were later metamorphosed to an amphibolite assemblage.

Figure 7:Tres Estradas Geology Map



7.3. Mineralization

Phosphate mineralization, occurring as the mineral apatite ($Ca_5(PO_4)_3(F,Cl,OH)$), is the primary mineralization of economic interest at Tres Estradas. Apatite is the only phosphate-bearing mineral occurring in the carbonatites. At Tres Estradas, phosphate mineralization occurs in both fresh and weathered meta-carbonatite and amphibolite. Phosphate also becomes highly enriched in the overlying saprolite.

Apatite is a common accessory mineral in carbonatite and ultramafic igneous deposits. The apatite forms submillimeter-sized, subhedral to euhedral crystals that are disseminated throughout the groundmass. Apatite crystals are pale in color, requiring care when observing fresh, unaltered rock. In weathered rock, apatite is resistive to weathering relative to the carbonate matrix, making then easier to identify with a hand lens.

Calcite is the primary carbonate mineral at Tres Estradas and accounts for approximately 60% of the mass of the carbonatite.

Carbonatites are typically complex, multi-phase intrusions with subsequent phases showing signs of fractionation. Apatite along with anatase and magnetite tends to be dominant in early phases of an intrusion while later phases of intrusion tend to be dominated by higher concentrations of niobium and rare-earth elements. Aguia geologists have noted up to three distinct phases within the cores from the Tres Estradas Phosphate Project.

8. DEPOSIT TYPES

Phosphate is an important raw material that is used primarily for the production of fertilizers and for a variety of industrial applications. It occurs in both sedimentary and igneous deposits. In both types of deposits, the primary phosphate mineral is apatite. In igneous rocks appreciable quantities are most commonly found in layered mafic intrusions and carbonatite complexes. The Tres Estradas deposit is a

carbonatite intrusion. Carbonatite melts contain at least 50% carbonate by volume, rich in calcium, magnesium, iron and/or sodium and form as a result of fractional crystallization from silicate and carbonate-rich source rocks and/or through carbon dioxide degassing in the presence of calcium and magnesium.

Carbonatite intrusions are often complex bodies formed from multiple intrusive phases, and are typically small in size, with dimensions ranging from 1.5 to 2 km (Biondi, 2003). Carbonatites are often associated with ultramafic complexes in cratonic regions. The magma uses deep fractures as a conduit for emplacement. In an alkaline-carbonatitic ultramafic complex the first products are alkaline-ultramafic rocks and the carbonatite rock corresponds to the final phase of magma crystallization.

Carbonatite intrusions typically fall into two morphological classes: (i) central or dome type intrusions; and (ii) linear type intrusions. Central-type carbonatites typically form in regions of tectonic and magmatic reactivation in stable cratons or platform regimes. They tend to be shallow seated events with high energy and are often the final fractionate of a larger alkalic intrusion. Central-type carbonatites have occurred throughout geologic history. Linear-type carbonatites are predominantly Paleoproterozic, preferential to deep faults and are typically not linked by magmatic differentiation to ultramafic rocks like central-type carbonatites.

Brazil hosts some of the best-known mineralized carbonatites in the world. Well known examples include Araxá - Minas Gerais, Catalão - Goiás, Cajati - São Paulo, and Tapira - Minas Gerais. All of these have an early Cretaceous to Eocene age range and are developed along the margins of the Parana Basin and can be classified as central-type carbonatites. Tres Estradas is a linear-type carbonatite and is one of only two known linear-type carbonatite complexes known in Brazil.

The vast majority of Brazil's phosphate production is derived from the mining of carbonatite bodies and their near surface weathered products (Biondi, 2003).

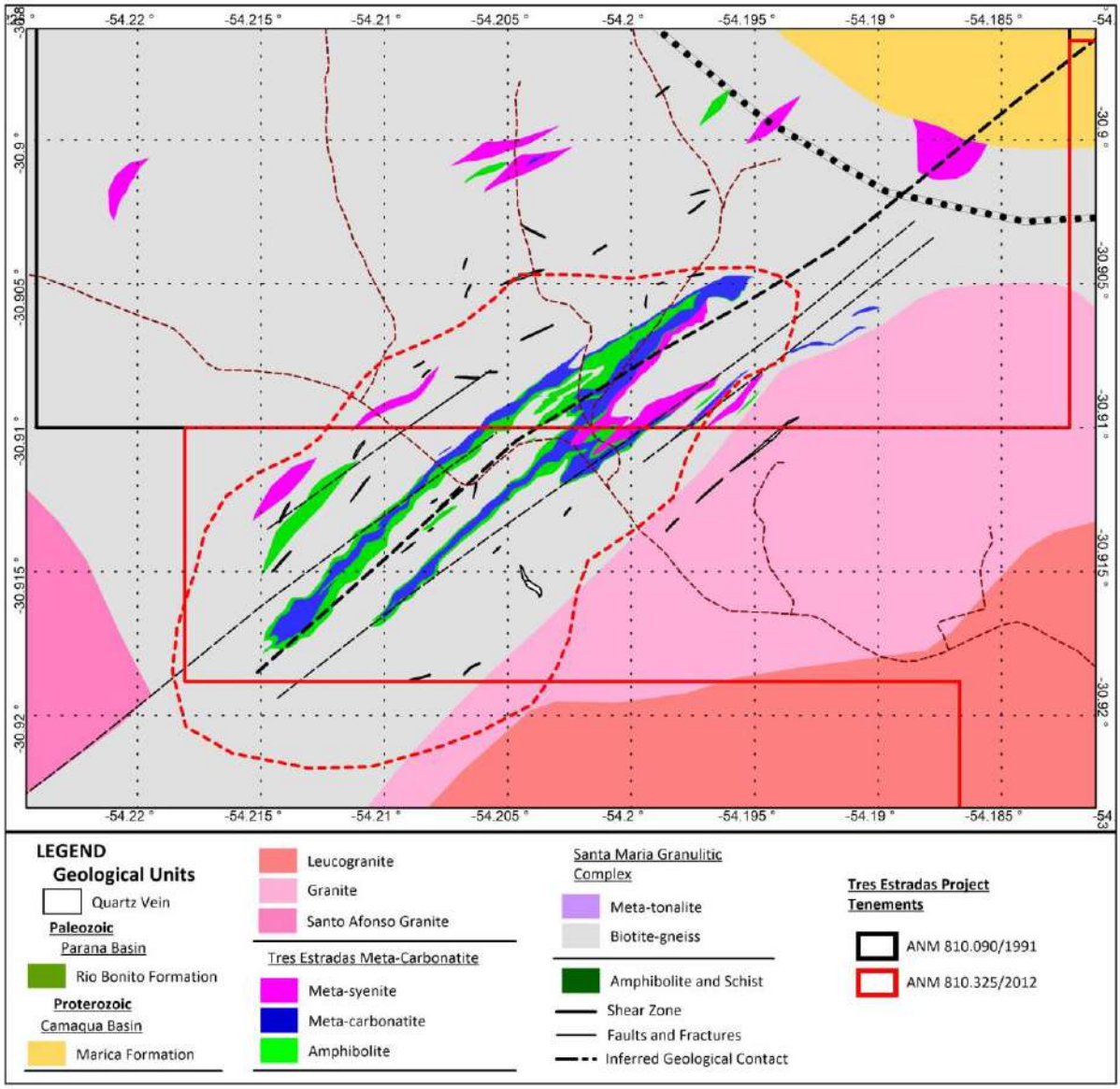
9. EXPLORATION

Aguia has been diligent following a systematic approach in its exploration programs for the Tres Estradas Phosphate Project.

9.1. Geological Mapping

The geological mapping of the three exploration permits presented in Figure 8 was executed by Aguia geologists on a scale of 1:10,000. Mapping was performed along north-south profiles at intervals of 100m. Within the area surrounding the meta-carbonatite, geologic mapping was completed at a scale of 1:1,000. Detailed mapping of the carbonatite complex was completed at a scale of 1:200.

Figure 8:Exploration areas geological mapping



9.2. Topography

In March 2012, Aguia commissioned a detailed topographic survey of the meta-carbonatite area using differential GPS technology. The survey was carried out by Planageo – Serviços e Consultoria Ltda., from Caçapava do Sul, RS, Brazil. The survey comprised 35.35 line kilometers, consisting of survey lines spaced 25m apart and control lines spaced 100m apart. In addition, relief points between the lines, borehole collars, and auger borehole collars from the first exploration campaign were used to build the topography. The topographic survey generated contour lines at 1m intervals in the meta-carbonatite area. Contour lines at 5m intervals were obtained for the remaining area using shuttle radar topography mission (SRTM) and orthorectified Geoeye images with 0.5m resolution.

In December 2016, Aguia completed an expanded detailed topographic survey of the area to cover an extended area beyond the main deposit. The air survey was carried out by SAI (Serviços Aéreos Industriais) or Industrial Air Services, using Lidar technology (light detection and ranging) including a new set

of orthorectified images. The contour lines at 1m intervals were obtained in 1:2,000 scale and the adopted flight level returned orthophotographic images at 1:5,000 scale.

9.3. Remote Sensing

Images from Landsat 7, sensor ETM+ and Geoeye-1 satellites were used to help in the geological interpretation and in the understanding of physiographic and infrastructure aspects.

9.4. Soil Geochemistry

Aguia, in a partnership with CBC, executed a soil sampling program in the northern portion of the meta-carbonatite exposure. The program covered a small area of the meta-carbonatite along the southern edge of ANM #810.090/91 to complement the historical soil sampling completed by Santa Elina. Soil samples were collected every 25m along lines spaced 100m apart, for a total of 52 soil samples.

Results of both soil sampling programs were used to delimit P_2O_5 anomalies in a northeast direction following the Cerro dos Cabritos Fault, to test for a continuation of the meta-carbonatite in that direction. Values higher than 1.42% P_2O_5 were considered first order anomalies and values between 0.83% and 1.42% P_2O_5, were considered second order anomalies.

9.5. Rock Geochemistry

A total of 77 rock samples have been collected from within the project area. The majority of these samples represent meta-carbonatite. Assay results yielded up to 32% P_2O_5 within the meta-carbonatite. Fresh or weathered carbonatite yielded mean values of 4% to 5% P_2O_5. Gneiss and meta-syenite rocks within the area did not return any significant P_2O_5 grades. Few results are available from the amphibolite unit, as outcrops are scarce in the area.

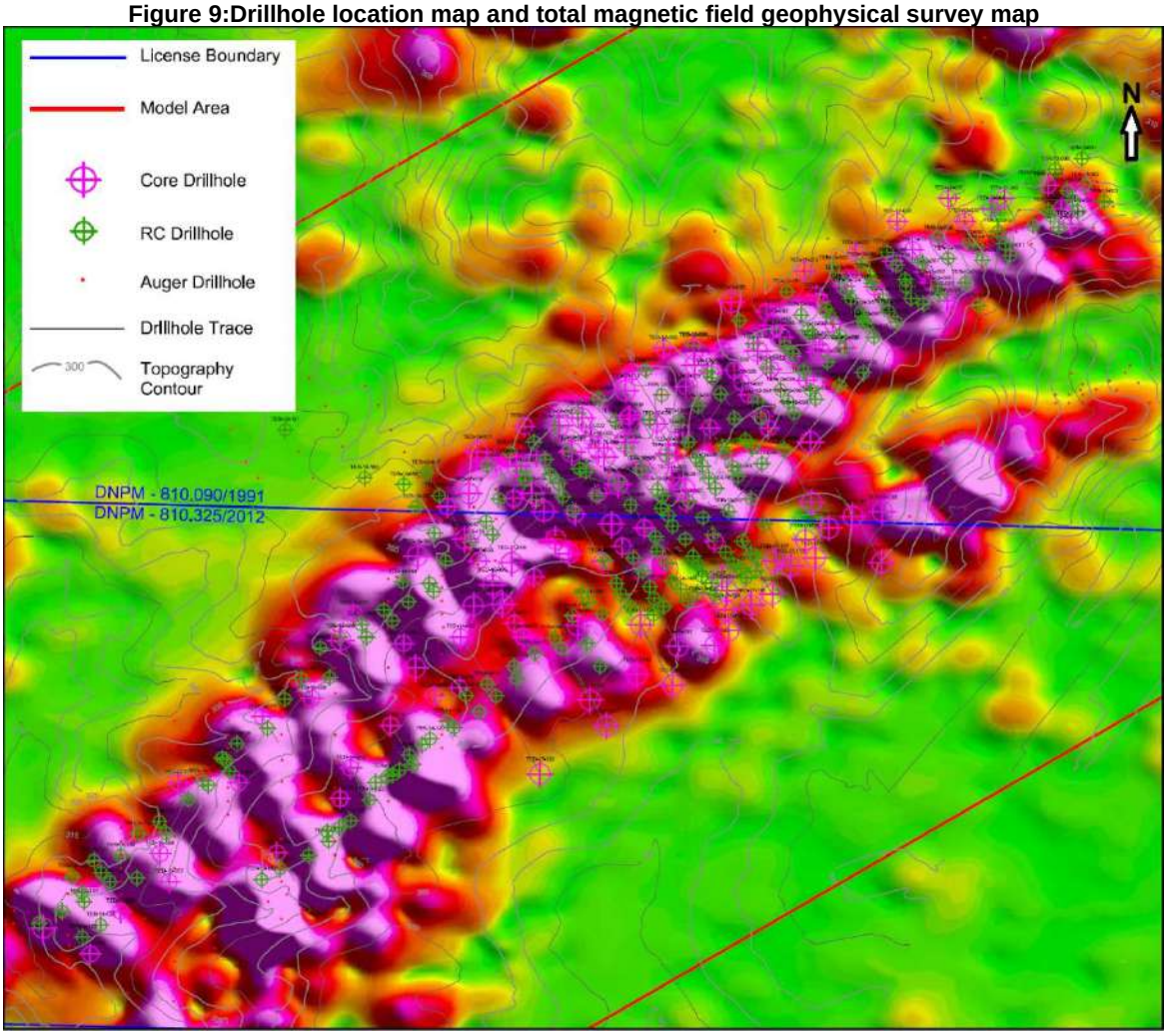
9.6. Trenching

One historical trench exists on the tenement, cut perpendicular to the meta-carbonatite. According to Aguia, this trench was dug over 10 years ago by Santa Elina while prospecting for gold in the area. Within the trench Aguia sampled three vertical channels. Within each channel, two samples were collected from bottom to top. The P_2O_5 results from these samples vary from 24.10% to 28.80%.

9.7. Geophysical Survey

Aguia made use of data from an airborne geophysical survey completed by CPRM, using rectified imagery for Total Magnetic Field (TMF), signal amplitude of TMF, First Derivative of the TMF, Uranium Concentration and Total Count of Gamma spectrometry. The magnetic anomalies identified in the airborne survey assisted in delineating areas of interest and led to Aguia completing a ground-based magnetic survey over the entire northern tenement area in March 2012. The survey was carried out by AFC Geofísica, Ltda. from Porto Alegre, Brazil. The survey comprised 104km of lines oriented north-south. Survey lines and control lines were spaced at 25m and 100m apart respectively (Figure 9).

Figure 9:Drillhole location map and total magnetic field geophysical survey map



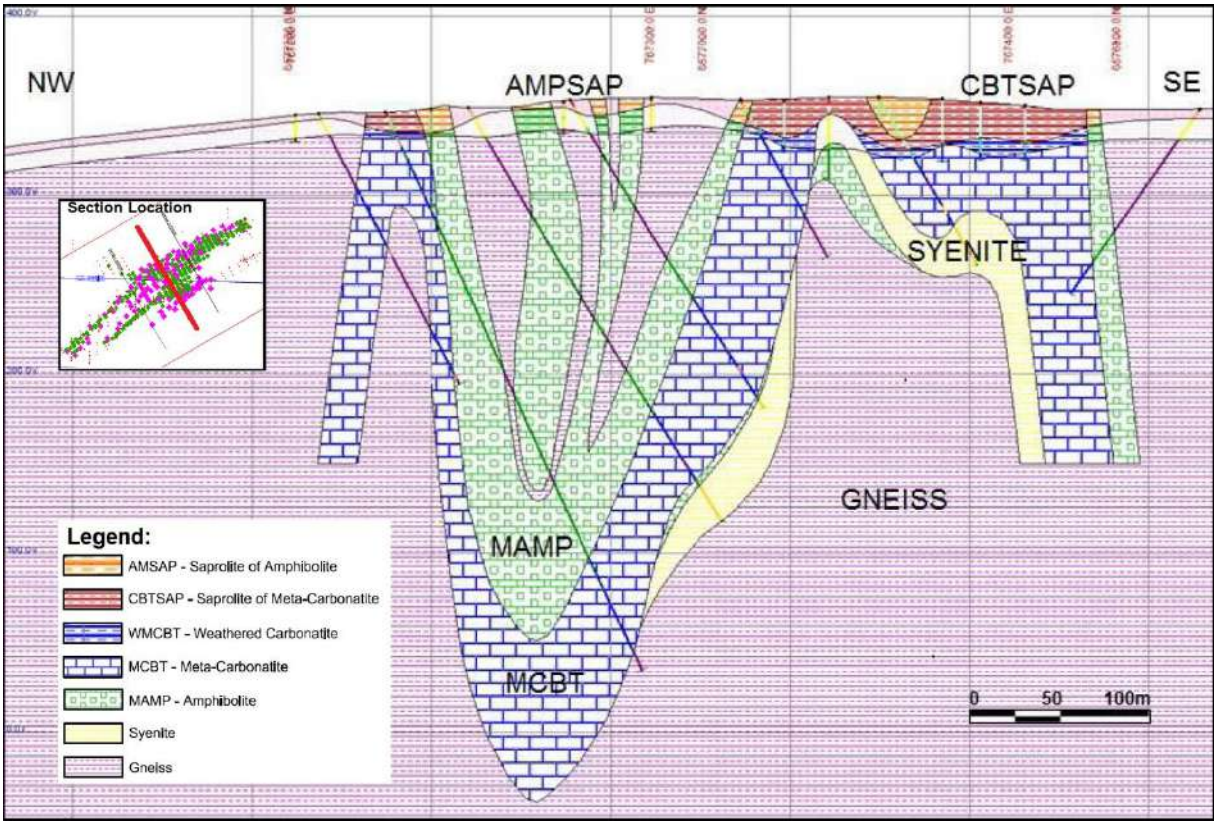
10. DRILLING

Aguia has completed five drilling campaigns on the Tres Estradas area between 2011 and 2017. Drilling has included 139 diamond drill (DD) holes (20,509.5m), 244 reverse circulation (RC) holes (7,800.0m) and 487 auger drill holes (2,481.65m). Table 8 presents a summary of Aguia's drilling activities at Tres Estradas. Figure 10 presents an example of interpreted vertical NW-SE drillhole section.

Table 8: Aguia's drilling activities summary

Company	Drilling Campaign	Time Period	Type	No. of Holes	Total Length (m)
Águia Resources Limited	1	Oct - Nov 2011	Core	19	1,317.15
			Auger	26	169.90
	2	Jul - Oct 2012	Core	21	4,016.75
			Auger	158	994.65
			RC	105	2,151.00
	3	Nov 2014 - Jan 2015	Core	20	3,272.90
			RC	49	1,153.00
			Auger	203	818.70
	4	Oct - Dec 2015	Core	18	2,194.65
			Auger	100	498.40
	5	Nov 2016 - Jun 2017	Core	61	9,708.05
			RC	90	4,496.00
Total				**719**	**30,791.15**

Figure 10: Interpreted vertical NW-SE drillhole section



10.1. Drilling Methods

Aguia used REDE Engenharia e Sondagens S.A. (REDE) to complete all diamond drilling in the five drilling campaigns at Tres Estradas. Auger drilling was completed by Aguia personnel and RC drilling was undertaken by Geosedna Perfurações Especiais S.A. (Geosedna). All drill collars are surveyed using

differential GPS both before and after drill hole completion. Coordinates are recorded in Universal Transverse Mercator (UTM) using the SAD69 Datum, Zone 21S. Following completion of a drill hole, collar locations are marked by concrete markers with an embedded plastic collar pipe and an aluminum tag identifying drill hole ID, coordinates, azimuth, dip, and penetration depth.

10.2. Exploration Core Drilling

All core holes were drilled using wireline coring methods. HQ size (63.5mm diameter core) core tools were used for drilling through weathered material and NQ size (47.6mm diameter core) tools were used for drilling through fresh rock. Core recovery has exceeded 90% in 97% of all core holes.

All but 10 of the core holes (129) have been drilled as angle holes with dip angles ranging from -45° to -75°, with the majority drilled at -60°. Two principal orientations have been used in core drilling. Ninety-six (96) of the core holes have an azimuth bearing of 150°, with the remaining 33 angle holes having an azimuth of 330°. Beginning in the second drilling campaign at Tres Estradas, down hole surveys were completed on core holes using a Maxibore II down-hole survey tool. Readings were collected on three-meter intervals. A total of 96 core holes have received down-hole surveys at Tres Estradas.

10.3. RC Drilling

RC drilling was used to complete 244 holes with a cumulative length of 7,800m. All RC holes were drilled vertically (-90°) using 140mm button hammer bit. Holes were primarily drilled dry.

10.4. Auger Drilling

Auger drilling was completed by Aguia personnel testing the extents of mineralization in the overlying saprolites. Auger holes were drilled to a maximum depth of 15m. Two tipper scarifier motorized augers were used to drill the auger holes.

11. SAMPLE PREPARATION, ANALYSES AND SECURITY

According to Millcreek Mining Group, Aguia has followed standard practices in their geochemical surveys, core, RC and auger drilling programs. They have followed a set of standard procedures in collecting cuttings and core samples, logging and data acquisition for the project. Their procedures are well documented and meet generally recognized industry standards and practices.

All core logging was completed by Aguia geologists and directly entered into a comprehensive database program. Aguia's geologists were responsible for identifying and marking core intervals for sampling. Sample intervals ranged in length from 0.15m to 6.20m with 90% of all core samples falling within the range of 0.8m to 1.2m. GPS and hard copies of all sampling and shipment documentation were stored in the project office at Lavras do Sul. Documentation includes geological logs, core photographs, core recovery records, portable XRF readings and down-hole surveys.

From the start of exploration activities up through to October 2012, ALS Laboratory in Vespasiano, MG was the primary facility used for the analysis of soil, rock and drilling samples. After October 2012, all subsequent samples from Tres Estradas were sent to SGS Geosol, also in Vespasiano, as the primary analytical laboratory.

The ALS laboratory in Vespasiano was primarily an intake and preparation facility. Samples were crushed and pulverized into rejects and pulps and entered into the ALS tracking system before being forwarded to ALS Peru S.A. in Lima or ALS Minerals in North Vancouver, Canada. The ALS laboratories

used by Aguia are commercial fee-for-service testing facilities and are independent of Aguia. The SGS Geosol laboratory is a full analytical facility. SGS Geosol is an internationally recognized mineral testing laboratory. Its management system is accredited to ISO 9001:2008 by ABS Quality Evaluation Inc., Texas, USA. SGS Geosol was not specifically accredited for the methods used to analyze the samples submitted by Aguia. The SGS Geosol laboratory is a commercial fee-for-service testing facility and is independent of Aguia.

XRF analysis has been used to determine major oxide amounts on all auger, core and RC samples following the same procedures outlined above for rock samples. Sample pulps were fused with lithium metaborate and analyzed by XRF for Al_2O_3, CaO, Fe_2O_3, K_2O, MgO, MnO_2, Na_2O, P_2O_5, SiO_2, and TiO_2. All oxides were reported in weight percent. In addition, samples from the first campaign of drilling at Tres Estradas were also subjected to the 31 element ICP analysis.

During the first drilling campaign in 2011, the specific gravity of 48 core samples were measured by SGS Geosol using a standard weight in water and weight in air methodology. Uncut core segments of approximately 15 to 20 centimeter lengths were wrapped in PVC film and submerged in water. Aguia took over this testing with all subsequent drilling following the same procedures used by SGS Geolsol. To date, 4,216 specific gravity measurements have been determined for Tres Estradas.

For quality assurance and quality control of analyses (QA/QC), Aguia used a combination of reference samples, blanks, duplicate samples and umpire check assays. Aguia followed a protocol for accepting/refusing each batch of assays returned from the analytical laboratory. Reference, blanks and duplicate samples were inserted into the stream of drill samples such that one in 20 samples was a reference sample, one in every 30 samples was a blank sample, and one in every 30 samples was a duplicate sample. Table 9 summarizes the samples used to evaluate QA/QC of the drilling samples.

Table 9: QAQC samples summary

Type		Core	%	RC	%	Total	%
Sample Assays		16,046	67.29	7,800	32.71	23,846	100.00
Reference Samples	**GRE-3**	15	0.06	104	0.44	119	0.50
	GRE-4	182	0.76	0	0.00	182	0.76
	ITAK-910	561	2.35	192	0.81	753	3.16
	ITAK-911	57	0.24	102	0.43	159	0.67
Blanks	**Fine**	466	1.95	237	0.99	703	2.95
	Coarse	470	1.97	237	0.99	707	2.96
Check Assays		478	2.00	301	1.26	779	3.27
Duplicates		733	3.07	412	1.73	1,145	4.80
Total QA/QC Samples						**4,547**	**19.07**

Aguia used two certified control samples, GRE-3 and GRE-4, prepared by Geostats Pty. Aguia had two samples prepared by Instituto de Technologia August Kekulé (ITAK) to be used as certified reference samples. Both samples were prepared from meta-carbonatite material sourced from Tres Estradas.

Blank samples were used to monitor physical contamination during sample preparation. A coarse-grained blank was created using locally sourced quartz to track possible carryover contamination of samples through crushing and pulverizing of samples. The fine-grained blank was used to monitor and track any other signs of physical contamination that should affect analytical results.

Duplicate samples were used to track analytical precision. Duplicate samples were prepared by creating two identical samples for an interval. The second pulp was re-inserted with a blind identity into the submitted samples. There are 1,145 pairs of duplicate samples for Tres Estradas. Selected samples were routinely subject to a second umpire analysis as a further check on laboratory performance. There are 713 check assays for Tres Estradas showing a strong correlation with an R2 of 0.9992.

According to Millcreek Mining Group personnel, the results from QA/QC of the analyses program was considered inside acceptance limits for the purpose of Mineral Resource classification. GE21 evaluated the procedures and results related to QA/QC during the site visit. GE21 did not detect flaws or inconsistencies in the QA/QC procedures. Results are inside acceptance limits for the minerals industry.

12. TECHNICAL CHARACTERIZATION

Aguia intends to produce a Direct Application Natural Fertiliser (DANF) product at its Tres Estradas Phosphate Project, to be classified as a "natural phosphate" with the Brazilian Ministry of Agriculture, Livestock and Supply (MAPA).

12.1. Natural Phosphate Definition

According the Normative Instrument N°39/2018 (NI39/2018) from MAPA, which sets out the definition and specifications for mineral fertilizers for agriculture, “natural phosphate” is a product which uses in its production exclusively raw material of phosphate rock origin, through a process of grinding and screening, resulting in a safe use in agriculture. Considering the nutrient content and solubility the natural phosphate specifications are as follow:

1. Minimum of 5% of P_2O_5; and
2. 15% of the total P_2O_5 content soluble in 2% citric acid in the 1:100 ratio.

With respect to granulometry the NI39/2018 defines that mineral fertilizers, according to their physical specifications (Table 10), will have the follow granulometric guarantee:

Table 10: Physical Specification based on particle sizes (NI39/2018).

Class	Sieve size	Passed particles
Meal	4.8 mm	100%
	2.8 mm	80% (minimum)
	0.84 mm	50% (maximum)
Powder	2.0 mm	100%
	0.84 mm	70% (minimum)
	0.3 mm	50% (minimum)
Micro granulate	2.8 mm	90% (minimum)
	1.00 mm	10% (maximum)
Granulate	4.8 mm	90% (minimum)
	2.0 mm	40% (maximum)
	1.00 mm	5% (maximum)

To be certified as a natural phosphate, the product must undergo chemical analysis in an accredited laboratory with MAPA to confirm it meets the minimum specification and does not contain toxic heavy metals as defined in MAPA Normative Instrument N°27/2006 (NI27/2006), for which the limits are shown in Table 11.

Table 11: Maximum limits for toxic heavy metals admitted in mineral fertilizers containing phosphor nutrient, micronutrients or with phosphor and micronutrients mixed with other nutrients.

Heavy Metal	Allowed value in milligrams per kilogram (mg/kg)* per percentage point (%) of P_2O_5 and per percentage point of the sum of micronutrients (%)		Maximum allowed value in milligrams per kilogram (mg/kg) * in total fertilizer mass	
	Column A	Column B	Column C	Column D
	P_2O_5	Sum of micronutrients guarantee	Applicable to mixed and complex mineral fertilizers with guaranteed primary macronutrients and micronutrients	Applicable to micronutrient-only fertilizers and to fertilizer with secondary macronutriens
As	2.00	500.00	250.00	4,000.00
Cd	4.00	15.00	57.00	450.00
Pb	20.00	750.00	1,000.00	10,000.00
Cr	40.00	500.00		
Hg	0.05	10.00		

*mg/kg = ppm

For mixed and complex fertilizers containing P_2O_5 and micronutrients (Mn, Zn, Co, Cu and others), the maximum permitted contaminant value will be obtained by multiplying the sum of the guaranteed or declared percentages of micronutrients in the fertilizer by the value of column B, plus the value obtained by multiplying the highest percentage of P_2O_5 guaranteed or stated by the value in column A. The maximum permitted contaminant shall be limited to the values in column C.

Based in the NI27/2006 the product limits, considering the total P_2O_5 grade plus Mn micronutrient grade, were calculated and are listed in Table 12 below.

Table 12: Calculated product limits for toxic heavy metals admitted in a fertilizer containing P_2O_5 and micronutrients.

Heavy Metal	Maximum allowed value in milligrams per kilogram (mg/kg)* in total fertilizer mass	
	CBTSAP	AMPSAP
As	250	113
Cd	51	22
Pb	930	288
Cr	860	317
Hg	10	2,8

*mg/kg = ppm

12.2. Agronomic Results

12.2.1. Lab analisys

As part of the application process for product registration with MAPA, the agronomic lab tests have been carried out at the Instituto Brasileiro de Análises Agronomic Lab (IBRA) in Sumaré – SP in accordance with MAPA guidelines for testing fertilizers. The agronomic lab tests were carried out on a representative sample from the carbonatite saprolite ore (CBTSAP) and amphibolite saprolite ore (AMPSA) from the TEPP. The analytical methods used in the determinations are references in the Brazilian fertilizer sector and follow the methodologies determined by MAPA.

Both samples CBTSAP and AMPSAP were previously tested in ALS Global Lab in Belo Horizonte – MG, resulting in a total P_2O_5 content of 9.08% and 4.64%, respectively (Table 13).

Solubility results for P_2O_5 in citric acid (2% concentration in the 1:100 ratio), which among the other solutions reveals as the nearest acidity condition to Brazilian soils, resulted in 22.9% and 51.9%, for CBTSAP and AMPSAP, respectively (Table 13), which is above the minimum required of 15%.

Table 13: P_2O_5 solubility results.

Sample	ALS Lab	IBRA Lab	IBRA Lab	IBRA Lab	IBRA Lab	IBRA Lab	IBRA Lab
	P_2O_5 Total	P_2O_5 Acid. Cit.	P_2O_5 NAC	P_2O_5 H_2O	Solubility Citric acid	Solubility NAC	Solubility H_2O
CBTSAP	9.08	2.08	1.36	0.56	22.9%	14.9%	6.1%
AMPSAP	4.64	2.41	1.12	0.88	51.9%	24.1%	18.9%

NAC = Neutral Ammonia Citrate

The CBTSAP sample was also tested for secondary macronutrients Ca and Mg and for elements which are potentially micronutrients; Co, Fe, Mn, Mo and Zn (Table 14).

Table 14: Results for Ca, Mg and potential micronutrients in Agronomic Lab.

Sample	Ca (%)	Mg (%)	Co (ppm)	Fe (%)	Mn (%)	Mo (ppm)	Zn (%)
CBTSAP	6.54	0.41	114.9	11.33	1.11	81.19	0.02
AMPSAP	11.41	2.02	71.37	6.73	0.26	0.0	0.01

Results regarding toxic heavy metals (As, Cd, Pb, Cr and Hg) were excellent with the CBTSAP sample passing all the tests and all the results inside the minimum specifications and guarantees for a natural phosphate as defined by MAPA (Table 15).

Table 15: Results for toxic heavy metals in Agronomic Lab.

Sample	As (ppm)	Cd (ppm)	Pb (ppm)	Cr (ppm)	Hg (ppm)
CBTSAP	5.97	< 0.09	267.6	50.09	< 0.1
AMPSAP	3.91	< 0.09	80.7	108.2	< 0.1

12.2.1. Agronomic trials

The Company retained Integrar Gestão e Inovação Agropecuária (Integrar) to plan and supervise the program. Integrar is a renowned independent agronomic consulting firm located in the State. A summary of the tests results is presented in Table 16.

Table 16: Summary of agronomic tests results

Crop	Highlight	Announcement date
Soybean	Pampafos® (CBTSAP) applied to soybean crop resulted in a yield of 98% of that achieved using TSP in the same P^2O^5 dosage.	16 June 2020
Corn (Maize)	Green mass and grain productivity from treatment with a dosage of 100 kg/ha surpassed the productivity achieved using conventional phosphate fertilisers.	9 July 2020
Rice	Pampafos® returned yields of up to 99.8% of those achieved using conventional fertilisers	11 May 2021
Rice	Rice productivity results using Pampafos® in a dosage of 50 kg/ha of P^2O^5 surpassed the productivity achieved using conventional TSP in the same dosage.	8 September 2021

Oat	Oat productivity results using Pampafos® in a dosage of 100kg/ha of P^2O^5 achieved 92% of the yield achieved using conventional TSP in the same dosage.	22 December 2021
Wheat	Wheat productivity results using Pampafos® in a dosage of 50 and 200 kg/ha of P^2O^5 surpassed the productivity achieved using conventional TSP in a dosage of 90 kg/ha of P^2O^5.	3 February 2022
Corn	Corn productivity results using Pampafos® in a dosage of 125kg/ha of P^2O^5 surpassed the productivity achieved using conventional Triple Superphosphate (TSP) in the same dosage at Pelotas Agronomic Station.	1 June 2022

13. MINERAL PROCESSING

13.1. Comminution Tests (Metso, 2017)

Metso Minerals (Metso) was selected to develop the comminution testwork. The objective of this test program was to establish the characteristics of the ore at Tres Estradas regarding crushability and grindability in order to provide reliable and consistent data to support the selection of the comminution circuit as well as the sizing of the comminution equipment for the industrial plant.

To achieve this objective, a testing program was carried out covering the following determination and assays: Sag Mill Comminution (SMC) tests, Crushing Bond Work Index (CWI tests), Bond Ball Mill Work Index (BWi), Rod Mill Work Index (RWi), Point Load Test - PLT (UCS) and Bond Abrasion Index (Bond Ai).

13.2. Sampling for Comminution Tests

To cover the main lithology of Tres Estradas, samples of fresh carbonatite (MCBT, nine samples), saprolite of carbonatite (CBTSAP, two samples), fresh amphibolite (MAMP, one sample) and saprolite of amphibolite (AMPSAP, one sample) were gathered. The MCBT (plus weathered MCBT) is the predominant type of mineable ore corresponding to 87% of the total reported resource. The CBTSAP represents 6% of the total and the MAMP and AMPSAP represent, respectively, 6% and 1% of the total resource. The criteria to select the samples was based on the geo-spatial approach.

To ensure good representation, the samples were selected considering the lithological and mineralogical composition. In addition to the lithological characterization, geospatial representation was ensured by sampling from different depths along the strike of the ore body. The sampling distribution considered five cross-sections, spaced 400 to 550m, along three different levels. In order to provide the samples for this program, a specific HQ drilling campaign was carried out. The campaign totalled 870m in six drill holes to generate 13 samples (nine in MCBT, one in MAMP, two in CBTSAP and one in AMPSAP).

A detailed description of the procedures and test work results is given in the report “Programa de Testes de Cominuição para o Projeto Tres Estradas – Relatório Final” (Metso, 2017).

Metso established the required amount of each one of the samples to perform the proposed tests. The total amount of samples delivered to Metso was:

- 1,500 kg of fresh carbonatite (MCBT);
- 240 kg of saprolite of carbonatite (CBTSAP);
- 110 kg of fresh amphibolite (MAMP);
- 120 kg of saprolite of amphibolite (AMPSAP).

The main results of the Metso comminution testing campaign are summarized below. Abrasion index testing yielded the following results in Table 17 below:

Table 17 : Abrasion Index

ID Samples		Abrasion Index (g)	Abrasiveness Classification
CT-001	Fresh Carbonatite	0.029	Non-Abrasive
CT-002	Saprolite of Carbonatite	Na	Non-Abrasive
CT-003	Fresh Carbonatite	0.011	Non-Abrasive
CT-004	Fresh Carbonatite	0.071	Slightly Abrasive
CT-005	Saprolite of Amphibolite	Na	Non-Abrasive
CT-006	Fresh Carbonatite	0.175	Average Abrasion
CT-007	Saprolite of Carbonatite	Na	Non-Abrasive
CT-008	Fresh Carbonatite	0.050	Slightly Abrasive
CT-009	Fresh Carbonatite	0.097	Slightly Abrasive
CT-010	Fresh Carbonatite	0.038	Non-Abrasive
CT-011	Fresh Carbonatite	0.048	Non-Abrasive
CT-012	Fresh Carbonatite	0.030	Non-Abrasive
CT-013	Fresh Amphibolite	0.033	Non-Abrasive

Results of testing to determine the Bond Work Index (for ball and rod milling) are as follows in Table 18 below:

Table 18: Bond Work Index (Ball and Roll Milling)

ID Samples		Bond Ball Mill Work Index		Bond Rod Mill Work Index	
		(kWh/t)	(kWh/st)	(kWh/t)	(kWh/st)
CT-001	Fresh Carbonatite	11.56	10.49	12.00	10.88
CT-002	Saprolite of Carbonatite	9.30	8.43	6.23	5.65
CT-003	Fresh Carbonatite	9.80	8.89	10.19	9.25
CT-004	Fresh Carbonatite	11.98	10.87	13.64	12.37
CT-005	Saprolite of Carbonatite	8.97	8.14	4.96	4.50
CT-006	Fresh Carbonatite	11.90	10.80	11.89	10.78
CT-007	Saprolite of Amphibolite	8.43	7.65	4.85	4.40
CT-008	Fresh Carbonatite	10.89	9.88	13.78	12.50
CT-009	Fresh Carbonatite	11.13	10.10	13.04	11.83
CT-010	Fresh Carbonatite	8.82	8.00	10.24	9.29
CT-011	Fresh Carbonatite	9.04	8.20	10.64	9.65
CT-012	Fresh Carbonatite	10.15	9.21	9.48	8.60
CT-013	Fresh Amphibolite	10.63	9.64	13.87	12.59

The Bulk Density and Specific Gravity for each ore type is reported in Table 19 below:

Table 19: Bulk Density and Specific Gravity

ID SAMPLE		Bulk Density (t/m^3)	Specific Gravity (t/m^3)
CT-001	Fresh Carbonatite	1.79	2.87
CT-002	Saprolite	1.28	1.70
CT-003	Fresh Carbonatite	1.85	2.91
CT-004	Fresh Carbonatite	1.81	2.94
CT-005	Saprolite of Amphibolite	1.20	2.10
CT-006	Fresh Carbonatite	1.76	2.74
CT-007	Saprolite	1.04	1.90
CT-008	Fresh Carbonatite	1.83	2.90
CT-009	Fresh Carbonatite	1.85	2.87
CT-010	Fresh Carbonatite	1.98	2.99
CT-011	Fresh Carbonatite	1.84	2.97
CT-012	Fresh Carbonatite	1.79	2.90
CT-013	Fresh Amphibolite	1.69	2.79

Point Load testing results are summarized in Table 20 below:

Table 20: Point Load Tests

ID Samples		Point Load Test - Is50		
		Average (Mpa)	Std. Dev. (Mpa)	Estimate UCS
CT-002	Saprolite of Carbonatite	0.31	0.04	7.44
CT-005	Saprolite of Amphibolite	0.27	0.05	6.48
CT-007	Saprolite of Carbonatite	0.28	0.04	6.72

The results of Impact Work Index testing are summarized in Table 21 below:

Table 21: Impact Work Index

ID Samples		Impact Work Index (IWi)
		Results (kWh/t)
CT-001	Fresh Carbonatite	5.75
CT-010	Fresh Carbonatite	5.00
CT-011	Fresh Carbonatite	7.41

SMC tests results are covered in Table 22 below:

Table 22: SMC Results

Sample ID		SMC Test						
		Dwi	A	b	A*b		Sg	ta
		Result (kWh/m³)	-	-	-	Class	(t/m³)	-
CT-001	Fresh Carbonatite	4.00	70.4	1.02	71.8	Soft	2.87	0.65
CT-002	Saprolite of Carbonatite	na	na	na	na	na	na	na
CT-003	Fresh Carbonatite	4.13	78.2	0.90	70.4	Soft	2.91	0.63
CT-004	Fresh Carbonatite	4.67	75.1	0.84	63.1	Mod. Soft	2.94	0.56
CT-005	Saprolite of Amphibolite	na	na	na	na	na	na	na
CT-006	Fresh Carbonatite	na	na	na	na	na	na	na
CT-007	Saprolite of Carbonatite	na	na	na	na	na	na	na
CT-008	Fresh Carbonatite	5.07	78.9	0.73	57.6	Mod. Soft	2.90	0.51
CT-009	Fresh Carbonatite	4.22	75.7	0.90	68.1	Soft	2.87	0.61
CT-010	Fresh Carbonatite	3.67	78.7	1.04	81.8	Soft	2.99	0.71
CT-011	Fresh Carbonatite	2.28	74.0	1.76	130.2	Very Soft	2.97	1.14
CT-012	Fresh Carbonatite	3.61	80.5	1.00	80.5	Soft	2.90	0.73
CT-013	Fresh Amphibolite	4.25	76.5	0.86	65.8	Mod. Soft	2.79	0.61

The comminution testing program results confirmed, as previously suggested in earlier testing, that the saprolites are less abrasive and require less power to achieve the required size distribution. Also, the results indicated that the grinding behaviour of the saprolite of amphibolite would be similar to that of the saprolite. Despite being more abrasive than saprolite ore, the fresh rock samples, regardless of geospatial location, are generally considered non-abrasive, or slightly abrasive. Sample pairs taken from the same section of ore body but at different elevations, indicated a slight trend of hardening with greater depth.

13.3. Chemical Analysis by Grain Size

In October 2019, Aguia collected two samples of approximately 530kg each, from the ore types CBTSAP and AMPSAP, to conduct chemical analysis in different grain sizes and grinding tests in a hammer mill.

Both samples were received at the testing unit of Mecmining do Brasil Ltda. (MMB) in Vespasiano - MG, where they were homogenized. An aliquot of approximately 20kg was taken from each sample and submitted for chemical analysis by grain size in the SGS Geosol (SGS) laboratory in Vespasiano - MG.

The sample preparation procedure at SGS included drying at 60°C and homogenization. Samples were sieved into the following grain sizes via wet flow: 4.75 mm, 2.80 mm, 2.00 mm, 1.00 mm, 0.84 mm, 0.50 mm, 0.30 mm, 0.15 mm, 0.088 mm, 0.038 mm. Aliquots with mass ranging from 250g to 300g of the material retained in each sieve were pulverized 100% <150 #(mesh) and submitted to chemical analysis by XRF, with chemical opening by fusion of lithium metaborate, and by ICP-OES/MS, with chemical opening by Aqua Regia.

The granulometric distribution of CBTSAP and AMPSAP ore samples in natura, with no previous comminution process, is summarized in Figure 11 and Figure 12, respectively.

Figure 11: CBTSAP granulometric distribution.

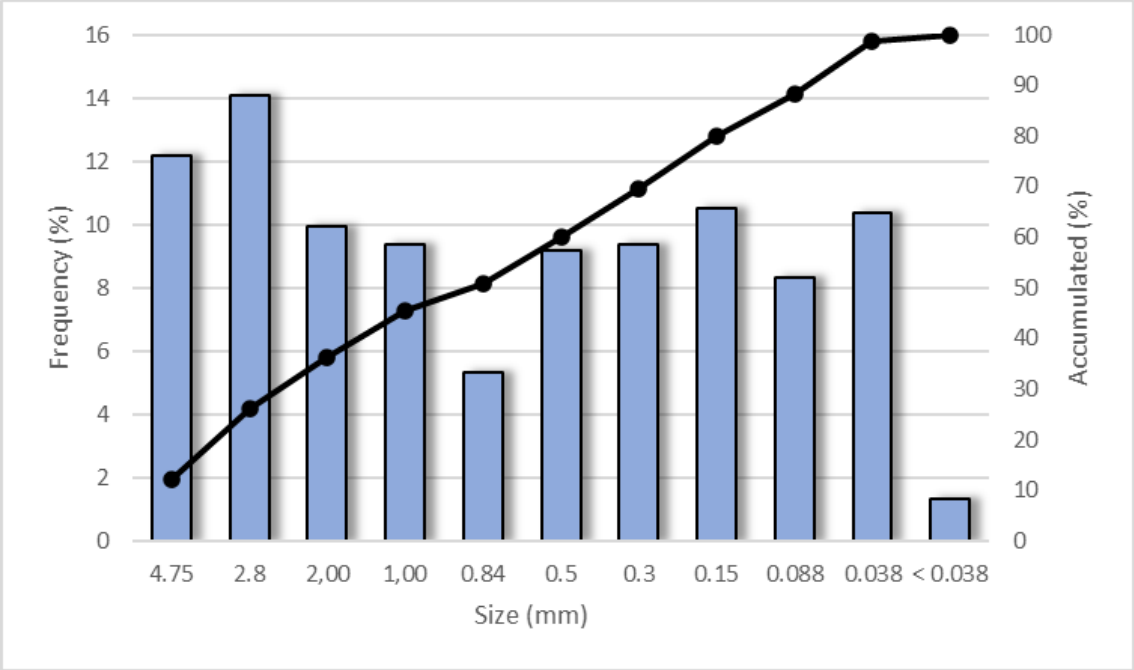
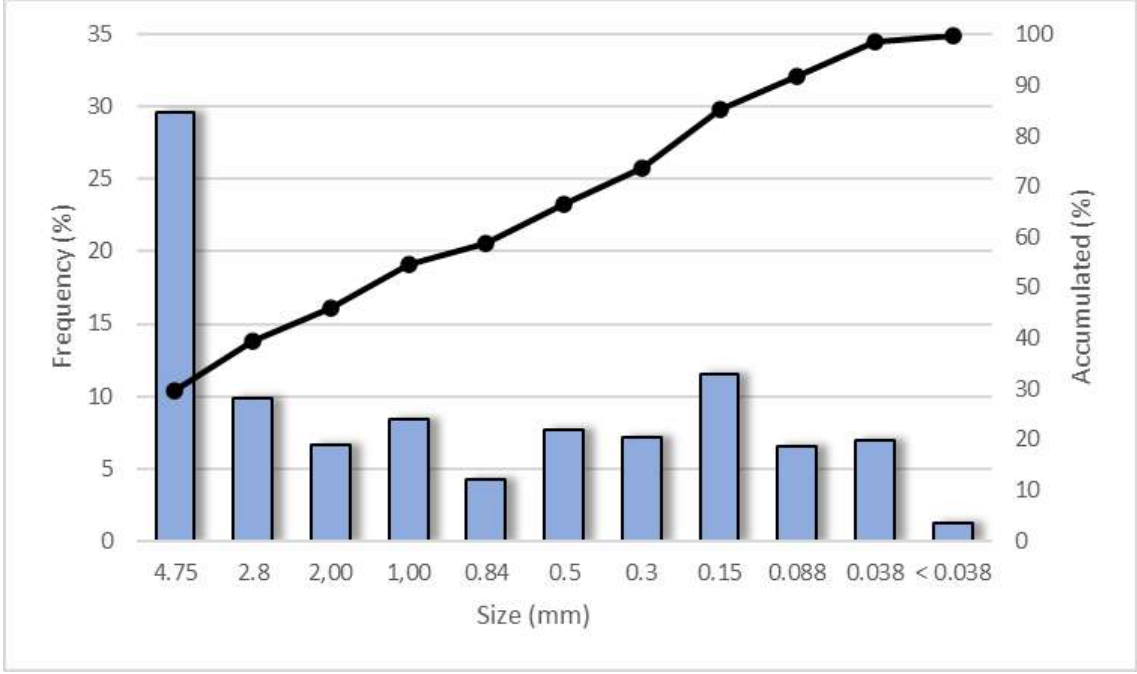


Figure 12: AMPSAP granulometric distribution.



The chemical results by grain size are summarized in Table 23 and Table 24.

Table 23: Summary of chemical results by grain size - CBTSAP.

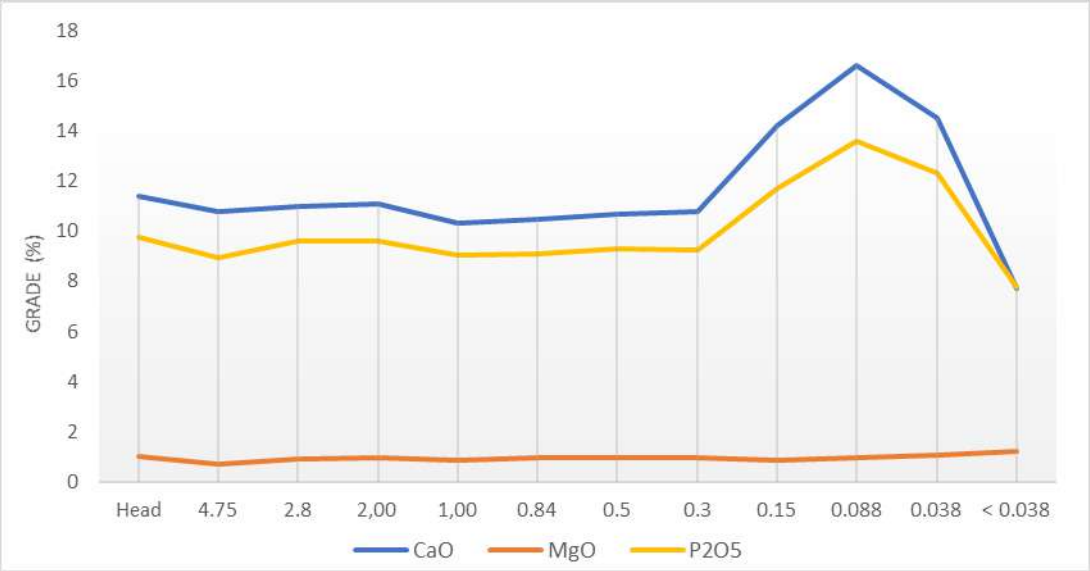
CBTSAP	CaO (%)	MgO (%)	K_2O (%)	P_2O_5 (%)	S (%)	B (ppm)	Co (ppm)	Cu (ppm)	Fe_2O_3 (%)	MnO (%)	Mo (ppm)	Zn (ppm)
Head	11.40	1.00	0.22	9.78	<0.01	<10	80.9	78.7	25.90	1.91	17.05	188
4.75	10.80	0.69	0.12	8.96	<0.01	<10	57.2	48.8	30.80	1.30	20.84	165
2.80	11.00	0.9	0.17	9.62	0.01	<10	88.3	85.7	24.30	1.82	19.38	204
2.00	11.10	0.95	0.18	9.60	<0.01	<10	91.7	90.1	24.50	1.85	19.00	200
1.00	10.30	0.87	0.17	9.03	<0.01	<10	123.2	92	24.20	2.12	20.90	210
0.84	10.50	0.95	0.19	9.10	0.01	<10	118.5	101	24.70	2.16	21.27	210
0.50	10.70	0.97	0.19	9.28	<0.01	<10	111.5	99.3	25.20	2.14	21.29	211
0.30	10.80	0.99	0.19	9.25	<0.01	<10	96.7	96.7	25.20	2.00	19.57	209
0.15	14.20	0.89	0.17	11.69	0.01	<10	85.4	90.3	24.30	1.80	20.04	221
0.088	16.60	0.95	0.19	13.61	0.01	<10	61.7	80.2	24.00	1.61	15.87	209
0.038	14.50	1.08	0.24	12.33	0.01	<10	64.7	101.3	25.00	1.74	17.40	267
< 0.038	7.720	1.23	0.30	7.78	0.01	14	73.1	143.9	30.70	1.98	22.27	454

Table 24: Summary of chemical results by grain size - AMPSAP.

AMPSAP	CaO (%)	MgO (%)	K_2O (%)	P_2O_5 (%)	S (%)	B (ppm)	Co (ppm)	Cu (ppm)	Fe_2O_3 (%)	MnO (%)	Mo (ppm)	Zn (ppm)
Head	23.1	5.78	0.48	4.37	0.05	<10	40.6	78.6	12.7	0.38	4.70	112
4.75	26.2	4.13	0.20	4.96	0.06	<10	33.6	59.0	12.1	0.40	4.16	84
2.80	18.8	4.97	0.31	5.37	0.04	<10	47.1	87.7	14.3	0.43	7.39	107
2.00	18.8	5.54	0.36	5.14	0.03	<10	50.0	89.8	14.7	0.46	6.44	117
1.00	19.5	6.11	0.42	4.33	0.04	<10	46.1	89.8	14.6	0.44	6.64	113
0.84	17.1	6.5	0.55	4.27	0.03	<10	39.2	80.8	15.2	0.43	4.89	401
0.50	16.5	7.37	0.77	3.83	0.04	<10	46.9	99.2	15.4	0.39	5.13	154
0.30	15.3	7.87	0.91	3.78	0.04	<10	47.3	102.4	16	0.39	4.46	151
0.15	14.8	7.8	0.87	4.67	0.03	<10	46.8	103.2	15.6	0.38	3.48	153
0.088	16.2	7.19	0.75	6.49	0.02	<10	41.6	103.2	14.8	0.37	2.84	126
0.038	17.0	6.52	0.70	7.59	0.02	<10	39.4	114.2	14.4	0.42	2.84	133
< 0.038	14.6	5.79	0.65	6.29	0.02	14	47.5	153.3	16.3	0.62	4.44	186

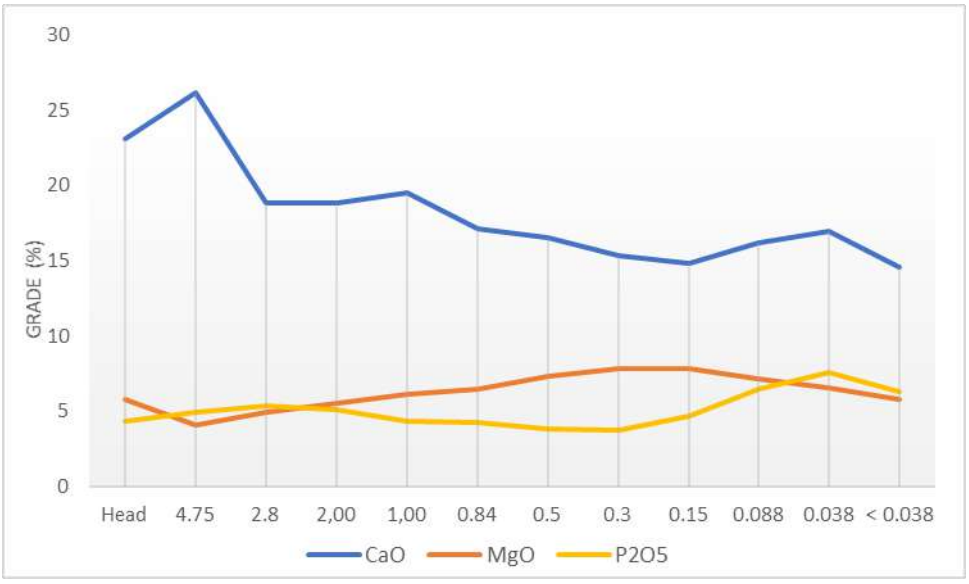
The CBTSAP head sample resulted in 9.78% P_2O_5, which is very similar to the CBTSAP average grade at the Tres Estradas deposit (9.4% P_2O_5). The P_2O_5 grades are very consistent for grain sizes from 4.75 mm to 0.30 mm, with an increase in the sizes of 0.15 mm, 0.088 mm and 0.38 mm (Figure 13).

Figure 13: P_2O_5, CaO and MgO grades distribution by grain size - CBTSAP.



The AMPSAP head sample resulted in 4.37% P_2O_5, being similar to the average resource grade of AMPSAP ore type at the Tres Estradas deposit (4.95% P_2O_5). The highest P_2O_5 grades, reaching over 6%, occur in fine grain sizes of 0.088 mm, 0.38 mm and <0.38 mm (Figure 14).

Figure 14: P_2O_5, CaO and MgO grades distribution by grain size - AMPSAP.



13.4. Grinding Tests in Hammer Mill

The grinding tests in a hammer mill were carried out with CBTSAP and AMPSAP samples at MMB unit in Vespasiano - MG. The processing test consisted of milling the samples in a hammer mill brand Mecmining, model MMB-6560, with installed power of 75hp, feed opening of 160 x 600mm, 4mm screen and production capacity of 14 tph. The tests had two main objectives, the first to collect information about the physical behavior of the type of ore in a simple processing plant and the second to adjust the ore granulometry according to the specifications determined by MAPA (see Table 25).

The granulometric analyses for the CBTSAP and AMPSAP samples after granulometric comminution in a hammer mill are presented in Table 25. After comminution, both samples were within the

"powder" granulometric classification, showing that the granulometric comminution processing was effective with the hammer mill in the tested configuration.

Table 25: Granulometric analyzes for the CBTSAP and AMPSAP samples after granulometric comminution in a hammer mill

Sample	Sieve size	Unit	Passed particles	MAPA Specification (powder)* Passed particles
CBTSAP	2.0 mm	%	99.87	> 100
	0.84 mm	%	95.55	> 70
	0.3 mm	%	73.59	> 50
AMPSAP	2.0 mm	%	99.77	> 100
	0.84 mm	%	95.38	> 70
	0.3 mm	%	71.35	> 50

* tolerance limit = 5%

13.5. Grinding Tests in Closed circuit

The grinding tests in a closed circuit VSI Crusher were carried out with CBTSAP, and AMPSAP samples at Metso pilot unit in Sorocaba – S.P. Pilot tests were carried out on a pilot VSI model Barmac 3000 with a crushing chamber. The tests took place in a closed circuit with the material at 0% moisture and 4% moisture. Both tests proceeded with the material feeding on the VSI Barmac 3000, with the product sieved in a 2 mm mesh with the retained material and returned to the crusher feed. The operating characteristics of the VSI can be seen in Table 26

Table 26: Operation data to VSI Barmac 3000.

Machine	VSI Barmac	
Rotor diameter	300	mm
Rotor velocity	65	m/s
Motor	20	HP
Rated amperage	30.5	A
Empty amperage	11.5	A
Operating amperage	29-31	A
Rotor outlet opening	19	mm
Circuit	Closed	
Mesh opening	2	mm

In both tests, the operation was smooth in the crusher, with no accumulation or clogging by the material, with only the need to use non-stick transfer shuts for 4% moisture and scrapers for the belt system. In addition, the sieve did not show accumulations or was blinded by the material. The results of the tests performed are presented below.

Table 27 presents the table with the granulometry date of the feed, discharge, circulating load and final product with 0% moisture.

Table 27: PSD of VSI Barmac 3000 pilot test with 0% moisture.

Passed Particles % - VSI closes circuit crushing at 0% of moisture				
Sieve size (mm)	Crusher feed	Crusher discharge	Crusher circulating load	Crusher product
19.10	100.00	100.00	100.00	100.00
12.70	95.00	93.90	98.50	100.00
9.52	89.30	89.60	93.30	100.00
6.35	76.00	81.70	77.40	100.00
4.76	67.50	77.10	63.70	100.00
2.80	53.30	68.00	35.30	100.00
2.00	42.80	64.10	7.80	98.50
1.00	31.60	52.80	1.10	80.60
0.84	29.30	50.10	1.10	76.00
0.50	23.30	39.90	1.00	64.10
0.30	16.50	28.10	1.00	48.10
0.15	10.40	17.60	0.80	30.70
0.09	6.90	12.00	0.70	18.90
0.04	2.50	5.00	0.50	8.40
Capacity (t/h)	5.23	8.81	3.53	5.90

Figure 15 shows the PSD curves of the feed, discharge, circulating load and final product with 0% moisture.

Figure 15: PSD curves of VSI barmac 3000 pilot test with 0% moisture.

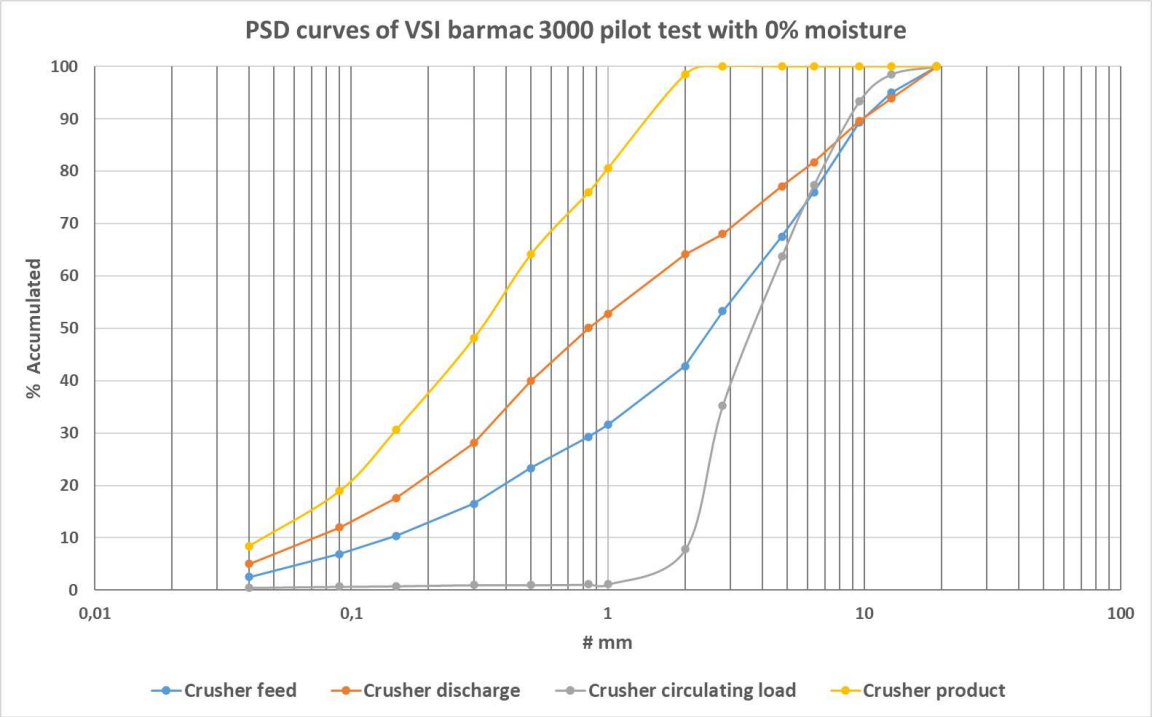


Table 28 presents the table with the PSD data of the feed, discharge, circulating load and final product with 4% moisture.

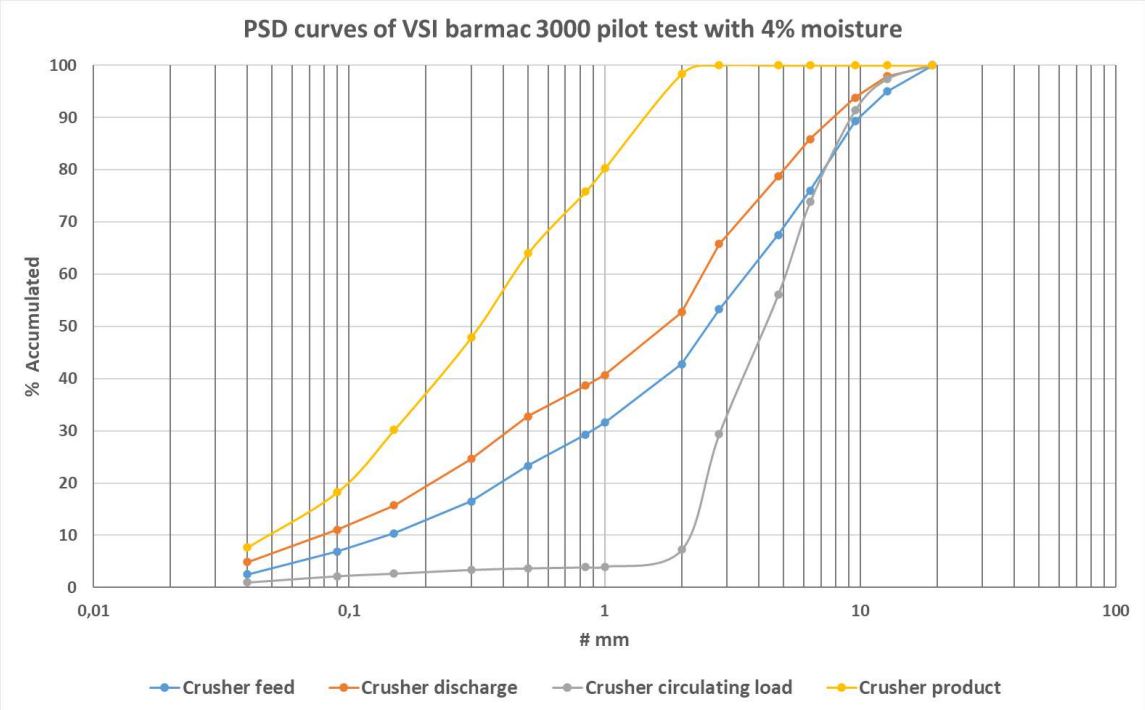
Table 28: PSD of VSI Barmac 3000 pilot test with 4% moisture.

Passed Particles % - VSI closes circuit crushing at 4% of moisture				
Sieve size (mm)	Crusher feed	Crusher discharge	Crusher circulating load	Crusher product
19.10	100.00	100.00	100.00	100.00
12.70	95.00	97.90	97.40	100.00
9.52	89.30	93.80	91.40	100.00
6.35	76.00	85.90	73.90	100.00

4.76	67.50	78.70	56.10	100.00
2.80	53.30	65.80	29.40	100.00
2.00	42.80	52.70	7.30	98.40
1.00	31.60	40.70	4.00	80.30
0.84	29.30	38.70	3.90	75.80
0.50	23.30	32.80	3.70	64.00
0.30	16.50	24.60	3.40	47.90
0.15	10.40	15.70	2.70	30.20
0.09	6.90	11.10	2.20	18.30
0.04	2.50	4.90	1.00	7.70
Capacity (t/h)	5.30	10.03	4.53	6.02

Figure 16 shows the PSD curves of the feed, discharge, circulating load and final product with 4% moisture.

Figure 16: PSD curves of VSI barmac 3000 pilot test with 4% moisture.



According to the results obtained, we can observe that the difference in crushing efficiency between the material with 0% and 4% moisture is not considerable, limiting the range of granulometry between 2 mm and 0.5 mm. Furthermore, this difference in efficiency disappeared when we analyzed the closed circuit of

crushing, indicating that the difference in moisture did not impact the overall efficiency of the VSI crusher, thus not altering the production capacity.

Analyzing the VSI crushing at the cutting diameter of D70 (cutting diameter with 70% through), there is a size reduction in the order of 1.6 times in the discharge of the crusher, equivalent to a primary crushing of the material. We have a total size reduction efficiency of 8 times for the closed circuit.

With these data, we can compare the open circuit VSI with the primary crushing of the hammer crusher and the closed circuit with the result of the secondary crushing of the hammer crusher with a 2 mm grid. According to the productive capacity of the pilot crusher, a circulating load of 85% of the Crusher feed was verified, obtaining a crushing energy consumption of approximately 3.0 kW/ton.

13.6. Natural Drying tests

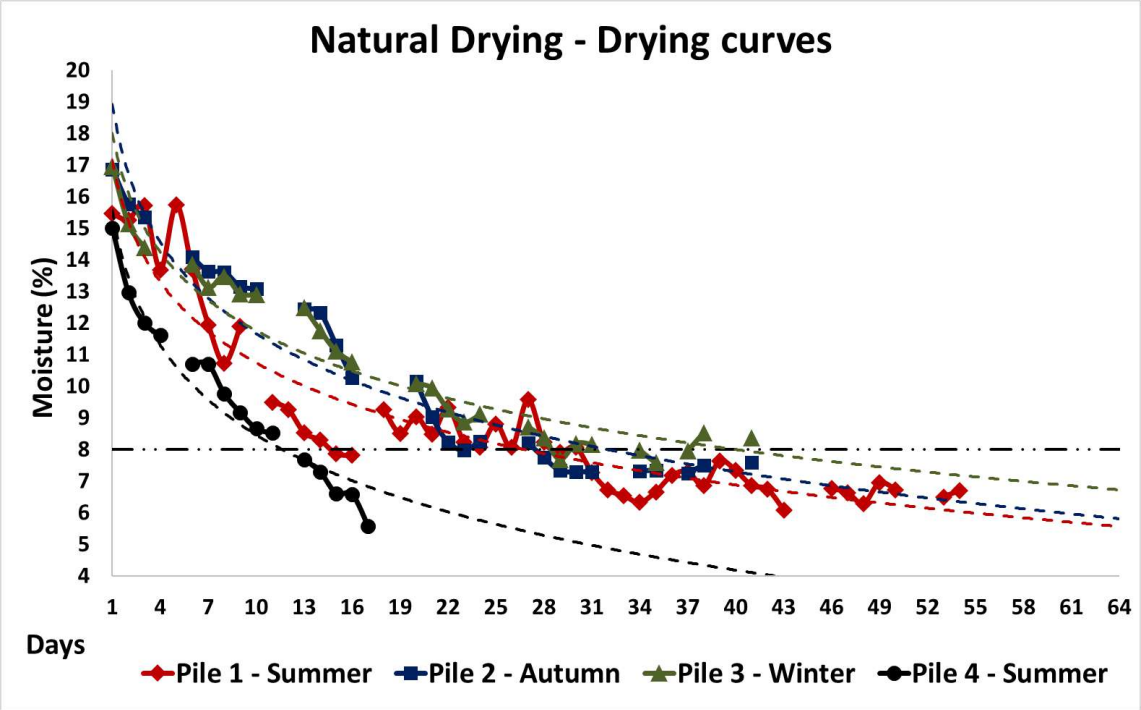
From 2020 to 2022, Aguia Fertilizantes developed natural drying pilot tests where overturned piles' efficiency and drying rate can be observed. The drying pilot tests were carried out using a prototype of a windrow turner developed and made by Aguia and a local mechanical supplier that was used to perform the tests. Figure 17 shows the prototype in operation.

Figure 17: Prototype of windrow turner in operation

The windrow tuner machine takes the below material in a pile and moves it to the top. This movement of the material increases the contact area of particles and the solar radiation increasing the drying rate.

After several pilot tests in different conditions and seasons of the year, it was possible to analyse the results regarding moisture rate reduction to check the viability of the natural drying process. Figure 18 presents the results of the tests.

Figure 18: Drying curves of natural drying tests.



As a result of the tests, we achieved a drying rate average of 0.4% a day which was considered to develop the engineering of Natural Drying operation composed by the windrow turner machine turning the ore piles under sheds with a translucent roof. This translucent roof takes the process able to avoid rain and allows solar radiation to reach the piles. This drying operation represents low opex and permit a carbon free drying operation.

14. MINERAL RESOURCE ESTIMATES

The mineral resource model prepared by Millcreek for Tres Estradas considered the 139 core holes and 244 RC holes drilled during the period from October 2011 to June 2017. Sampling information from auger holes were not considered in the model.

The database used for mineral resource evaluation includes 139 core holes (20,509.5m) and 244 RC holes (7,800m) for the Tres Estradas deposit (Table 29).

Table 29: Drillhole database summary

Drilling	Count	Cumulative Meters	Assay Intervals
Core Holes	139	20,509.5	16,046
RC Holes	244	7,800.0	7,800
Total	**383**	**28,309.5**	**23,846**

The geologic block model of the Tres Estradas Property phosphate deposit uses GEMSTM software. Modelling was constructed by developing a series of vertical sections spaced at 50m intervals. Three-dimensional shells were developed by linking the vertical sections together with tie lines. Mineralization has an approximate strike length of 2,400m and extends to a depth of 370m below surface (Figure 19).

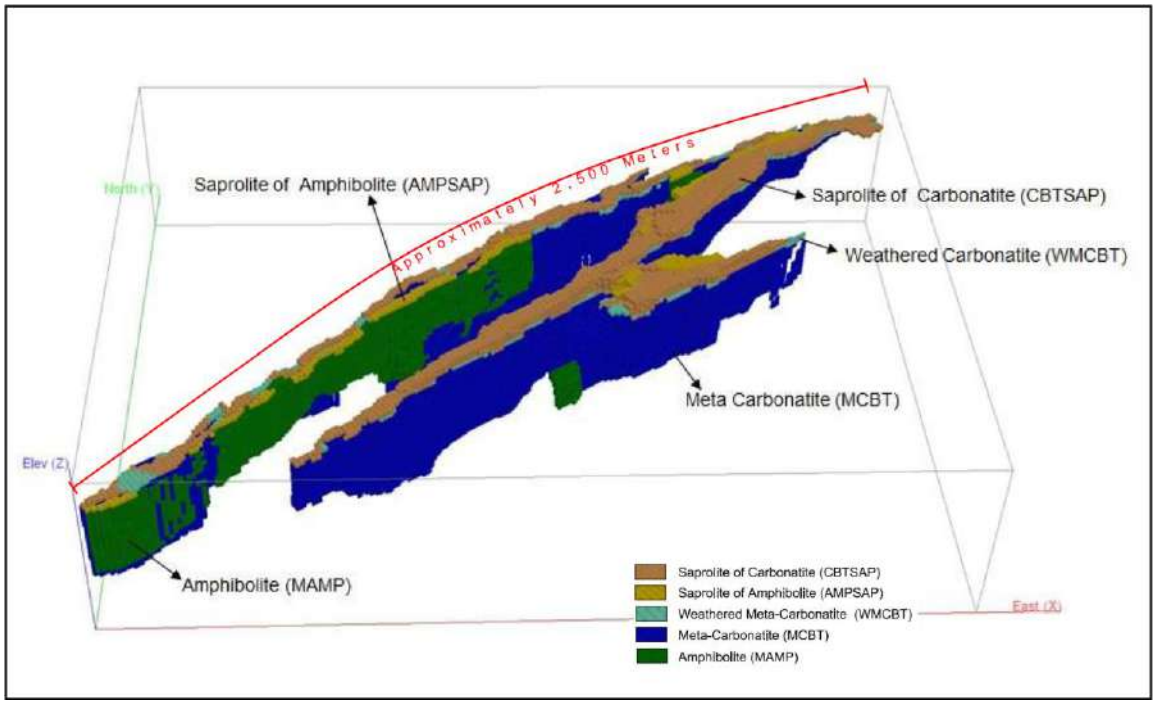
Mineralized zones range in thickness from 5m to 100m. The outer mineralized envelopes were modelled into wireframe solids using a 3.00% P_2O_5 cut-off grade. The model recognizes five mineralized, lithologic domains and nine non-mineralized domains as listed in Table 30.

Table 30: Lithological and mineralization domains summary

Typology	Domain	Average Ordinary Kriging Density	Block Model Code	Description
MINERALIZED	CBTSAP	1.60	120	Saprolite of Carbonatite
	WMCBT	2.80	110	Weathered Carbonatite
	MCBT	2.85	100	Meta-Carbonatite
	AMPSAP	1.65	220	Saprolite of Amphibolite
	MAMP	2.87	200	Amphibolite
WASTE	AMPSAP-WASTE	1.77	22	Saprolite of Amphibolite Waste
	WMAMP-WASTE	2.83	21	Weathered Amphibolite Waste
	MAMP-WASTE	2.91	20	Amphibolite Waste
	W-SAP	1.81	32	Saprolite Waste (Meta-Syenite, Gneiss)
	W-WEATH	2.59	31	Weathered Waste (Meta-Syenite, Gneiss)
	W-ROCK	2.68	30	Fresh Rock Waste (Meta-Syenite, Gneiss)
	CBTSAP-WASTE	1.63	42	Saprolite of Carbonatite Waste
	WMCBT-WASTE	2.76	41	Weathered Carbonatite Waste
	MCBT-WASTE	2.80	40	Meta-Carbonatite Waste

Wireframes of the meta-carbonatite and the amphibolite were constructed. Meta-carbonatite is differentiated by weathering into three domains: saprolite (CBTSAP), weathered carbonatite (WMCBT), and fresh meta-carbonatite (MCBT). Amphibolite is separated into two domains: saprolite (AMPSAP) and fresh amphibolite (MAMP).

Figure 19: Geological 3D model presenting mineralized lithologic domains



Grade estimations were made using ordinary kriging interpolation for all of the mineralized domains. All assays were composited to 1.0m lengths. All estimations are based on a homogeneous block model. Dimensions of the block model are displayed in Table 31.

Table 31: Block model summary

Dimensions	Minimum	Maximum	Block Size	Number of blocks
X	766,350	769,110	12	230
Y	6,575,650	6,576,820	6	195
Z	-100	400	10	50
Rotation	40°			

A high-grade limit was applied to reduce the influence of the high-grade values.

A series of variograms and variogram maps in GEMS mining software were performed to model the spatial continuity of the six oxides (P_2O_5, CaO, Al_2O_3, Fe_2O_3, MgO, and SiO_2) and for specific gravity of MCBT and MAMP geological domains.

The estimation for the six oxide variables (P_2O_5, CaO, Al_2O_3, $Fe2O_3$, MgO, and SiO_2) and specific gravity were done using ordinary kriging interpolation for all the domains: MCBT, WMCBT, MAMP, CBTSAP and AMPSAP. All estimations are based on 1.0m composites on a homogeneous block model with unitary dimensions of 12m N, by 6m E, and 10m in elevation rotated 40° in a clock-wise direction.

Three estimation passes were used with progressively relaxed search ellipsoids and data requirements based on the Variography:

- **Pass 1:** Blocks estimated in the first pass using half the distance of variogram range and based on composites from a minimum of three boreholes;
- **Pass 2:** Blocks estimated in the first two passes within the full range of the variogram and based on composites from a minimum of two boreholes; and
- **Pass 3:** All remaining blocks within the wireframe limits in an unconfined search not classified in the first two estimation passes.

The Grade estimate was validated by visual verification on adherence and consistency of drilling intercepts and wireframe and block model domains adherence. Validation on grade estimate was performed by statistical comparations over kriged grades and composited samples grades. Grade averages, standard deviations and swath plot graphs were checked. According to Millcreek Mining Group, the adherence, smoothing on grade estimate, and global and local biases are inside acceptance limits.

The resource classification involved a two-stage process.

Stage 1: Relevant mathematical parameters were saved in the block model and the blocks.

Stage 2: The above variables were used as supporting mathematical variables for finalization of the resource classification process. At this stage, the resource blocks were coded manually for achieving the following:

- Most of Measured category blocks were supported by three or more holes and nearly 20 composites;

- Measured category blocks have at least one drill hole within half of the variogram range (major axis);
- Most of indicated category blocks are supported by at least two drill holes and nearly 15 composites;
- Measured category blocks have at least one drill hole within half of the variogram range (major axis);
- Remaining blocks with a P_2O_5 grade estimation were coded as an Inferred Resource.

The phosphate mineralization at the Tres Estradas phosphate deposit is considered to be amenable to extraction using conventional open-pit mining and minerals processing methods. The Table 32 below presents the pit optimization parameters used to define Mineral Resources.

Table 32: Pit Optimization parameters - Mineral Resources

Parameters	Value
Cut-off Grade P_2O_5	3.0%
Mining Recovery/Mining Dilution	100 / 0
Process Recovery P_2O_5 Saprolite	87%
Process Recovery P_2O_5 Fresh	80%
Process Recovery Calcite as Aglime	100%
Concentrate Grade Saprolite	35.0%
Concentrate Grade Fresh Rock	32.0%
Overall Pit Slope Angle Saprolite/Fresh Rock	34/51 & 55 Degrees
Mining Cost (USD/tonne Mined)	1.32
Process Cost (USD/tonne ROM)	4.06
G&A (USD/tonne of ROM)	0.79
Aglime Production Cost (USD/tonne of concentrate)	$4.00
Selling Price (US$/tonne of concentrate at 30.2% P_2O_5)	$215.00
Selling Price of Aglime (USD/tonne)	$47.00
Royalties (CFEM Tax) – Gross	2%
Marketing Costs – Gross	2%
Exchange Rate (US$ to R$)	3.2

The estimated in-situ resource identified 87.03Mt of Measured plus Indicated material with an average grade of 4.05% P_2O_5, using a minimum cut-off of 3.0% P_2O_5. The in-situ estimate also identifies a further 26.58Mt of Inferred resource, with an average grade of 3.64% P_2O_5. Approximately 5% of the deposit (4.8Mt) is hosted in the saprolite ore which overlies the meta-carbonatite and amphibolite ores (for the purpose of this report, the term ‘carbonatite’ is inclusive of the relatively minor quantity of amphibolite ore, unless specifically stated otherwise).

The mineral resource is defined here as the portion of the in-situ geologic resource for which there is a reasonable expectation of economic extraction. Using the Lerchs-Grossman algorithm, a mineable pit shell was developed using the above parameters. The pit shell captures the resources estimated in the block model that have reasonable prospects for economic extraction. Optimization parameters are derived from previous geologic studies and preliminary economic assessments of Tres Estradas.

The Mineral Resource identified 83.21 Mt of Measured and Indicated material with an average grade of 4.11% P_2O_5 using a minimum cut-off of 3.0% P_2O_5 (Table 33). The estimate also identifies 21.85Mt of Inferred material with an average grade of 3.67% P_2O_5. By classification, 79% of the resources contained within the mineable resource pit shell are Measured and Indicated with the remaining 21% of the resource classified as Inferred resource.

Table 33: Summary of Mineral Resource Estimate

Audited Mineral Resource Estimate Table* - Tres Estradas Phosphate Project Effective Date September 8, 2017 - Block Model: 12 m x 6 m x 10 m						
Resource Classification	**Domain**	**Tonnage (t x 1000)**	**P_2O_5 (%)**	**CaO (%)**	**P_2O_5 as Apatite (%)**	**CaO as Calcite (%)**
Measured	AMSAP	55	6.63	10.75	15.7	19.19
	CBTSAP	796	10.18	18.2	24.11	32.49
	WMCBT	1,686	4.24	34.07	10.03	60.82
	MCBT	33,004	3.85	34.26	9.12	61.15
	MAMP	655	3.72	19.09	8.81	34.08
Total Measured		**36,196**	**4.01**	**33.59**	**9.5**	**59.95**
Indicated	AMSAP	653	5	11.49	11.85	20.5
	CBTSAP	3,834	9.21	16.24	21.82	28.99
	WMCBT	1,026	4.38	34.57	10.39	61.71
	MCBT	36,984	3.67	35.08	8.69	62.62
	MAMP	4,517	3.98	19.63	9.43	35.04
Total Indicated		**47,014**	**4.18**	**31.72**	**9.91**	**56.63**
Total Measured + Indicated Resources		**83,210**	**4.11**	**32.53**	**9.73**	**58.07**
Inferred	CBTSAP	45	5.41	20.17	12.82	36.01
	WMCBT	45	3.93	33.86	9.32	60.44
	MCBT	20,247	3.65	34.72	8.64	61.98
	MAMP	1,508	3.89	19.21	9.22	34.3
Total Inferred		**21,845**	**3.67**	**33.62**	**8.69**	**60.01**

- Mineral resources are not mineral reserves and do not have demonstrated economic viability.
- All numbers have been rounded to reflect relative accuracy of the estimates.
- Mineral resources are reported within a conceptual pit shell at a cut-off grade of 3% P_2O_5
- Mineral Resource classification of the Tres Estradas Project was performed by Millcreek Mining Group March 13, 2018, as verified by GE21 on NI43-101 Technical Report format named “Tres Estradas Phosphate Project, Rio Grande do Sul, Brazil dated on April 4th,2018”.
- Mr. Steven B. Kerr, C.P.G., Principal (Geology), Millcreek Mining Group is responsable

The accuracy of resource and reserve estimates is, in part, a function of the quality and quantity of available data and of engineering and geological interpretation and judgment. Given the data available at the time this BFS was prepared, the estimates presented herein are considered reasonable. However, they should be accepted with the understanding that additional data and analysis available subsequent to the date of the estimates may necessitate revision. These revisions may be material. There is no guarantee that all or any part of the estimated resources or reserves will be recoverable.

The Geology CP is not aware of or perceives any environmental, permitting, legal, title, taxation, socio-economic, marketing, political, or other relevant factors having any material impact on the resource estimates other than what has already been discussed in this report

15. MINERAL RESERVE ESTIMATES

Aguia Resources Limited (Aguia) contracted GE21 Consultoria Mineral Ltda (GE21) to undertake the Bankable Feasibility Study (BFS), based on the resource estimate prepared by Millcreek, as reported above. This report, compliant with JORC (2012), is the update for the declaration of Phase 1 of Tres Estradas Phosphate Project (TEPP), to procuce DANF from the carbonatite and amphibolite saprolite material, AMSAP, CBTSAP resources, as declared above.

GE21 received data related to the mineral resource and verified that there are no flaws in the mineral resources model. GE21 agrees with the Mineral Resource classification from Millcreek.

15.1. Mining Methods

The TEPP will be a traditional open pit operation utilizing an outsourcing mining fleet with a hydraulic excavator 2.0m^3 of capacity and 36t haul trucks, associated with correspondent ancillary equipment. The mine planning model adopted is a “diluted” model, adding approximately 2% dilution and 98% of recovery to the source model.

The waste rock will be deposited on an area close to the pit. The site shall be adequately prepared to include drainage at its base and channels to direct the flow of water with the aim of aiding geotechnical stability and mitigating the erosion of the stockpiled material. The operation of this phase, in accordance with the ascending method, shall begin during the construction of the heap at the base of this area. Waste rock will be disposed by truck, which will then be uniformly distributed and levelled by an operator using a tractor. The procedure is then repeated, stacking another bank above the original one, while maintaining a ramp for the trucks to be able to access the area.

15.1.1. Geotechinics

Table 34 presents the geotechnical parameters that were adopted in pit optimization. The data was provided by Aguia Resources (WBH115-16-AGUI-RTE-0002_REV_A_eng_summary document developed by Walm Engenharia e Tecnologia Ambiental) and validated by Itaaçu Geologia e Engenharia LTDA.

Table 34: Geotechnical Slopes

Lithotype	Face angle (º)	Bench width (m)	Bench height (m)	Inter-ramp general slope (º)
Soil/Saprolite	45	7.2	15	34
Others	75	13.5	30	55

*In Project Phase 1, only the saprolite lithotype data was considered.

15.1.2. Pit Optimization

The determination of the optimal pit was based on:

- The definition of both economic and geometric parameters in order to produce the economic function added by legal and proprietary restrictions;
- A calculation of the nested optimal pits using Geovia Whittle 4.3 software;
- The selection of the minimum optimal pit with enough mineralized material to supply a production of 300 ktpa (after year 3) during the Life of Mine (LOM) of Phase 1.

The economic and geometric parameters were defined from a combination of first principles and GE21's database of projects of similar scale and characteristics.

The sequence of optimal pits was obtained by varying the revenue factor from 10% to 100% with respect to the product selling price. To determine the evolution of the pits over time, an annual production scale of 300 ktpa of ROM was established after year 3, at an Annual Discount Rate of 8%. Table 35 presents the pit optimization first principle parameters used to definition the sequence of pits, and Table 36 Presents the pit optimization results of the Tres Estradas Project. This section was not updated from previous report.

Table 35: Optimization Parameters

	Item		Unit	Value
	Economic Parameters	Sell Price	Exchange rate (Australian Dollar)	2.85
			AUD $/t com P_2O_5 CBTSAP	72.0
			AUD $/t com P_2O_5 AMPSAP	43.2
	Resources	Class	Measured	
			Indicated	
			Inferred	
Physical	ROM	Density	g/cm³	model
		Grade	%	model
	Mining	Recovery	%	98
		Dilution		2
	Block Model		**Unit**	**Value**
		X	m	12
		Y		6
		Z		10
	Slope Angle	Degree	º	34
	Mass Recovery		%	95
	Cut-off Grade	**Grade**	**Unit**	**Value**
		P_2O_5	%	3
Costs		Ore	AUD $/t mov.	2.32
		Waste		2.32
		Process	AUD $/t.fed	4.81
		Selling Cost and G&A	AUD$/t DANF	3.34

Table 36 show the pit optimization results and the chosen pit is highlighted.

Table 36: Pit Optimization Results

Pit	Rev Factor	Rock (Mt)	Ore (Mt)	Strip Ratio	P_2O_5 (%)
1	0.3	6.89	5.39	0.28	8.31
2	0.33	7.16	5.46	0.31	8.29
3	0.36	7.34	5.50	0.33	8.28
4	0.39	7.39	5.51	0.34	8.28
5	0.42	7.43	5.52	0.35	8.28
6	0.45	7.53	5.54	0.36	8.27
7	0.51	7.54	5.54	0.36	8.27
8	0.54	7.60	5.55	0.37	8.27
9	0.60	7.61	5.55	0.37	8.27
10	0.63	7.63	5.55	0.37	8.27
11	0.80	7.64	5.55	0.38	8.27
12	1.00	7.66	5.55	0.38	8.27

15.1.3. Pit Design

The Mine Design or Pit Design, consists of projecting, based on an optimal pit, an operational pit that allows for the safe and efficient development of mining operations.

The methodology consists of establishing an outline of the toes and crests of the benches, safety berms, work sites and mining site access ramps while adhering to the geometric and geotechnical parameters that were defined. The assumptions that were adopted for the operationalization of the final pit shells for each period of mining were:

- Minimize the loss of mineralized material;

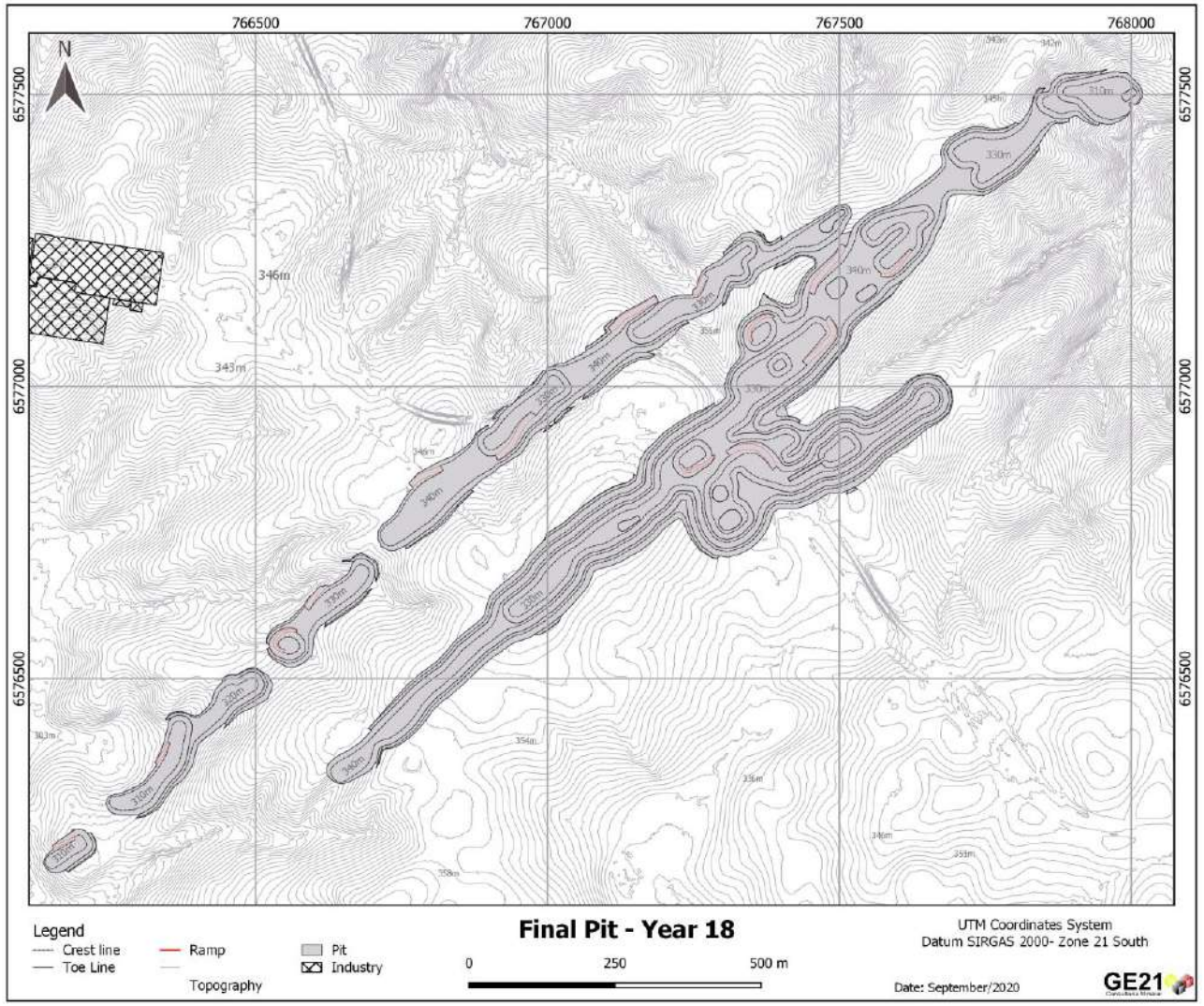
- Define the access routes to attain shorter average transport distances.

Table 37 presents the geometric parameters that were adopted to develop the mine design for each end of period. The data was the same as used on the Tres Estradas BFS report provided by Aguia and validated by the GE21 technical team. Figure 20 presents the Final Pit Design results.

Table 37: Final Pit Design results

Description	Unit	Value
Road Ramp width	m	10
Ramp maximum grade	%	10
Face Angle	degree	45
Slope Angle	degree	34
Bench height	m	10
Berm width	m	5

Figure 20: Final Pit Design



The Mineral Reserves result is shown in Table 38.

Table 38: Proven and Probable Reserves

Block dimensions 12x6x10 (m) Mine Recovery 98%, Dilution 2% (Effective date 08/01/2020)										
Litho	Class	Mass	P_2O_5	CaO	MgO	SiO_2	K_2O	Fe_2O_3	MnO_2	Al_2O_3
		Mt	%							
CBTSAP	Proved	0.64	10.2	18.1	5.2	28.5	0.45	19.1	0.89	4.7
	Probable	3.67	9.2	16.2	4.6	31.8	0.39	18.4	0.87	5.9
AMPSAP	Proved	0.04	6.7	10.9	9.5	37.3	0.71	15.3	0.68	7.3
	Probable	0.67	4.9	11.4	7.6	39.9	1.07	15.4	0.47	8.6
	Total Proved	0.68	10.0	17.7	5.5	29.0	0.5	18.9	0.9	4.9
	Total Probable	4.34	8.5	15.5	5.1	33.1	0.5	17.9	0.8	6.3
Total Proved and Probable		**5.02**	**8.8**	**15.7**	**5.1**	**32.5**	**0.49**	**18.1**	**0.82**	**6.1**

Mineral Reserves were estimated using the Geovia Whittle 4.3 software and following the economic parameters: Sale price for DANF@9%P_2O_5 = AUD$72.00 and for DANF@5%$P_2O_5$ = AUD$43.20 Exchange rate AUD$ 1.00 = R$ 2.85.

Mining costs: AUD$2.32/t mined, processing costs: AUD$4.81 /t milled and G$A:AUD$3.34/t DANF. Mineral reserves are the economic portion of the Measured and Indicated mineral resources.

Dilution 2% and Recovery 98%

Final slope angle: 34º

Waste = 2.50Mt

Inferred = 0.03Mt @ 5.2%P_2O_5 Inferred Resources were not included in the Mineral Reserves. The inferred is not a Mineral Reserve.It needs confirmation to become Mineral Rerserves.

Strip Ratio = 0.5 t/t - (Waste+inferred)/Ore

The Competent Person for the estimate is Guilherme Gomides Ferreira, BSc. (MEng), MAIG, an employee of GE21

15.1.4. Mine Scheduling

The mine production scheduling was generated in GEOVIA Minesched™ 9.1.0, where the following assumptions used were:

- Production rate: 300kt of ROM after 3 years of ramp up;
- P_2O_5 grade stabilization for Carbonate;
- Increasing Stripping Ratio

The mine scheduling results are presented in Figure 21 and in the Table 39. Table 40 are presented the percentage of Mineral Reserve (Proven and Probable) mined during mine life. Figure 22 to Figure 38 presents the final pit design for years 1 to 10, 15 and 18.

Figure 21: – Mining Schedule

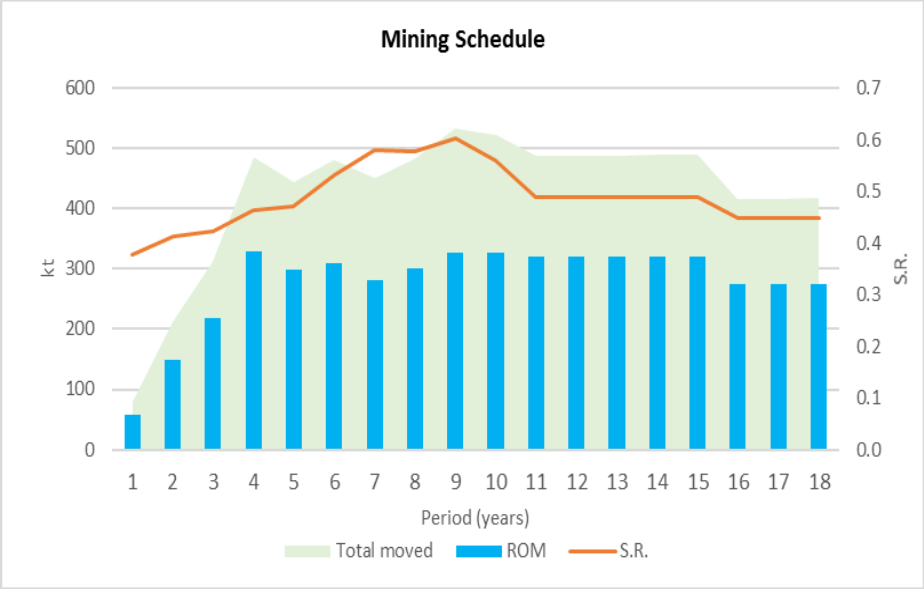


Table 39: Mine Scheduling Results

Period	ROM (t*1000)	Waste (t*1000)	REM	Product (t*1000)	CBTSAP (%)									AMPSAP (%)								
					Mass (t*1000)	P_2O_5 (%)	CaO (%)	MgO (%)	K_2O (%)	SiO_2 (%)	MnO_2 (%)	Fe_2O_3 (%)	Al_2O_3 (%)	Massa (t*1000)	P_2O_5 (%)	CaO (%)	MgO (%)	K_2O (%)	SiO_2 (%)	MnO_2 (%)	Fe_2O_3 (%)	Al_2O_3 (%)
Y1 - Q1	13.4	7.6	0.6	12.8	12.8	10.8	12.7	2.2	0.1	31.8	1.0	24.80	5.7	-	-	-	-	-	-	-	-	-
Y1 - Q2	13.2	6.2	0.5	12.6	10.3	12.0	14.9	1.4	0.1	30.5	0.9	26.40	4.8	2.3	5.0	10.5	5.7	1.20	39.0	0.50	18.7	9.0
Y1 - Q3	14.4	2.3	0.2	13.6	13.5	12.3	14.9	1.6	0.1	32.3	0.9	24.30	4.6	0.1	5.0	10.9	6.0	1.10	39.2	0.50	18.3	8.5
Y1 - Q4	15.9	5.4	0.3	15.1	13	11.1	15.0	2.2	0.1	33.1	0.8	21.90	5.4	2.0	5.0	10.7	5.8	1.10	39.4	0.50	17.9	8.9
Y2 - S1	76.1	31.7	0.4	72.3	59	9.3	13.6	1.8	0.5	37.7	0.9	18.90	6.9	13.3	5.0	9.8	4.8	1.20	41.8	0.50	16.6	9.2
Y2 - S2	73.0	29.9	0.4	69.4	57.2	11.1	16.3	2.1	0.2	30.8	0.9	20.80	6.5	12.2	5.0	10.5	5.6	1.30	39.2	0.50	17.4	9.3
Y3 - S1	110.7	48.5	0.4	105.1	95.1	8.3	11.3	2.6	0.2	38.6	1.0	21.10	6.7	10.1	5.0	11.4	5.9	0.80	40.1	0.60	18.2	7.4
Y3 - S2	106.8	43.5	0.4	101.5	89.5	9.3	11.9	1.7	0.2	30.4	1.1	27.10	6.5	12.0	5.0	12.6	6.8	0.70	38.0	0.60	19.4	6.7
Y4	328.1	152.5	0.5	311.7	219.7	10.7	18.3	4.4	0.2	31.0	0.8	16.70	5.5	92.0	5.0	12	7.4	1.00	39.6	0.40	15.8	8.4
Y5	298.5	141	0.5	283.6	220.7	10.9	15.0	3.4	0.3	34.3	1.2	19.50	5.7	62.9	5.0	7.7	3.7	1.20	43.9	0.50	15.7	11.2
Y6	309.4	164.6	0.5	293.9	230.8	10.9	18.5	4.1	0.2	27.2	0.9	20.70	5.1	63.1	5.0	11.1	5.9	1.10	38.9	0.60	16.5	8.9
Y7	280.6	162.6	0.6	266.6	230.2	9.7	18.8	4.6	0.5	27.8	0.8	19.20	5.7	36.4	5.0	12.4	7.7	1.30	37.4	0.50	17.0	7.7
Y8	300.6	173.9	0.6	285.5	247.6	10.2	14.7	4	0.3	29.0	0.9	23.20	5.8	38.0	6.6	11	8.8	0.40	36.3	0.60	16.4	7.0
Y9	326.8	197.2	0.6	310.5	265.1	10.4	15.6	4.6	0.5	31.5	0.9	19.50	6.3	45.4	6.7	11.1	6.4	0.90	38.2	0.60	16.2	8.3
Y10	327.9	183.4	0.6	311.5	253.9	10.8	17.1	4.3	0.4	30.1	1.0	18.60	5.8	57.6	5.0	13.6	7.4	1.00	38.5	0.50	16.2	7.6
Y11 to Y15	1,596.7	780.1	0.5	1,516.90	1,409.90	9.7	16.9	5.5	0.4	30.5	0.9	18.20	5.1	107.0	7.3	11.6	9.0	0.60	36.5	0.70	15.8	7.1
Y16 to Y18	827.4	371.2	0.4	786.1	-	-	-	-	-	-	-	-	-	786.1	4.7	14.4	7.3	1.00	37.8	0.50	14.0	7.7
Total	**5,019.60**	**2,501.70**	**0.5**	**4,768.60**	**3,428.10**	**10.1**	**16.5**	**4.7**	**0.4**	**31.3**	**0.9**	**18.50**	**5.7**	**1,340.5**	**5.1**	**13.1**	**7.2**	**0.90**	**38.2**	**0.50**	**14.9**	**7.9**

Y = year; Q = quarter , S = half

Table 40: Distribution of the Mineral Reserves by category in the mine life

Year	1	2	3	4	5	6	7	8	9	10	11 -15	16-18
Proved (%)	-	-	-	-	-	-	16.31	2.97	19.53	-	33.07	93.14
Probable (%)	100	100	100	100	100	100	83.69	97.03	80.47	100	66.93	6.86

Figure 22: Year 01 – 1st Quarter

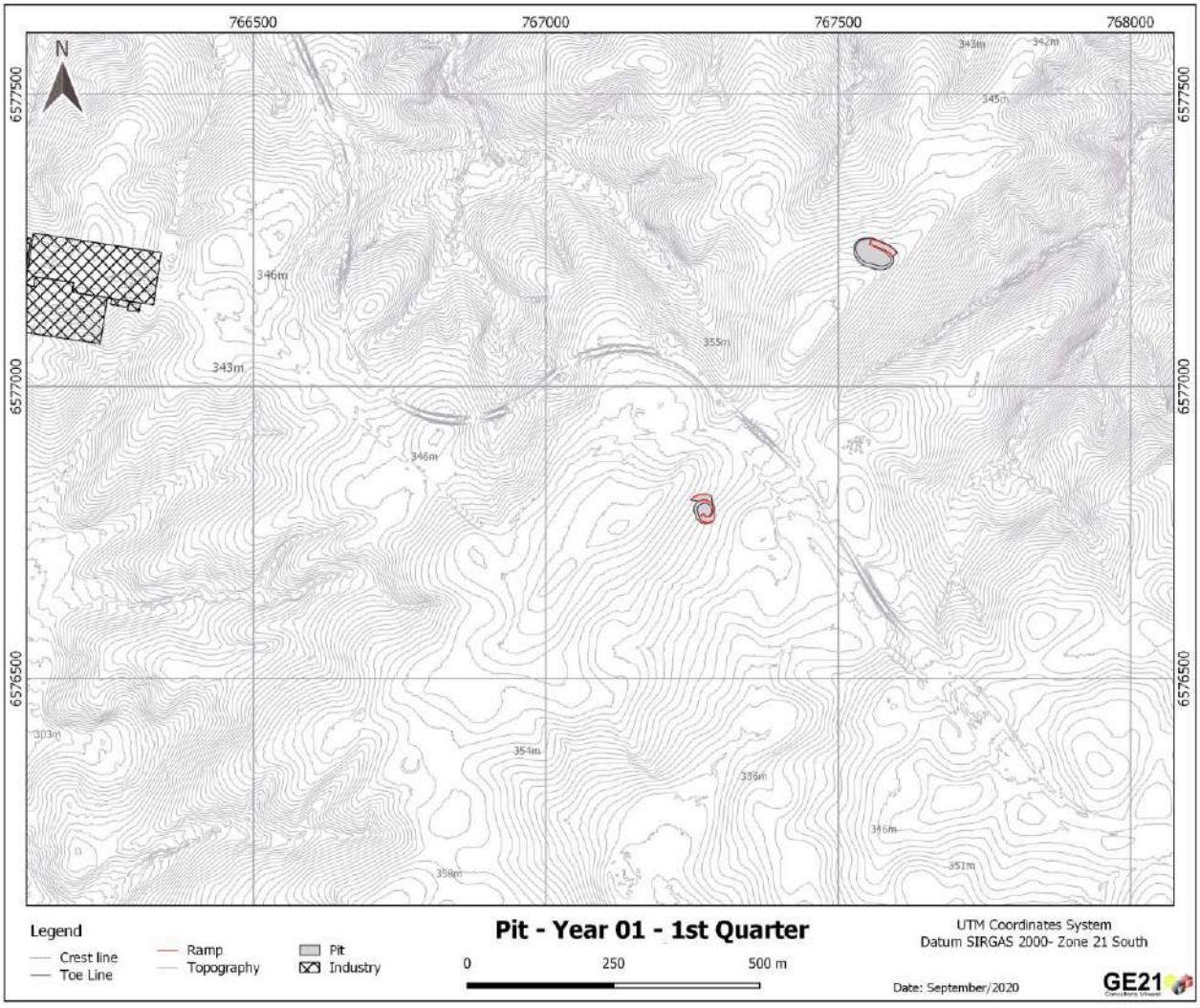


Figure 23: Year 01 – 2nd Quarter

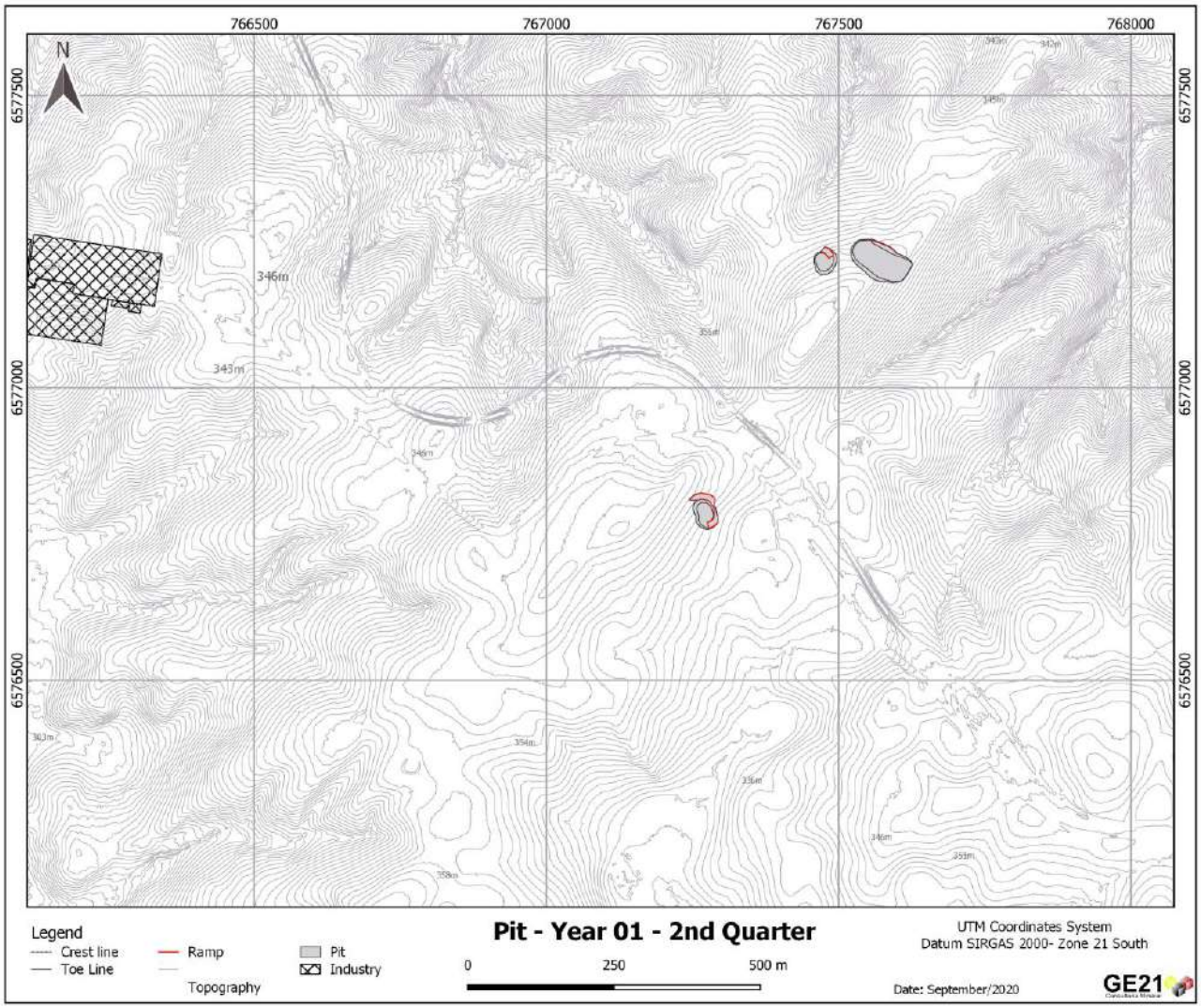


Figure 24: Year 01 – 3rd Quarter

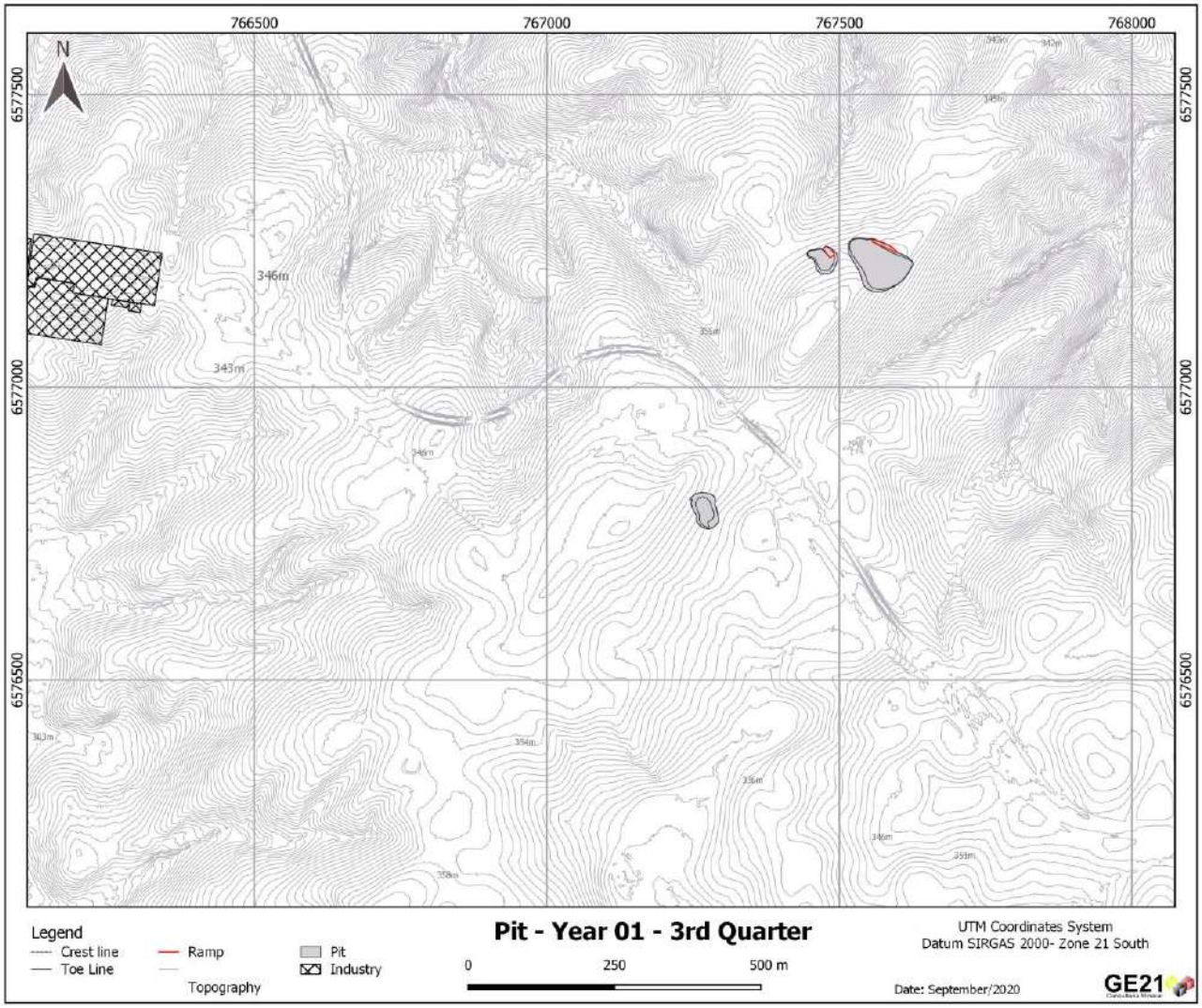


Figure 25: Year 01 – 4th Quarter

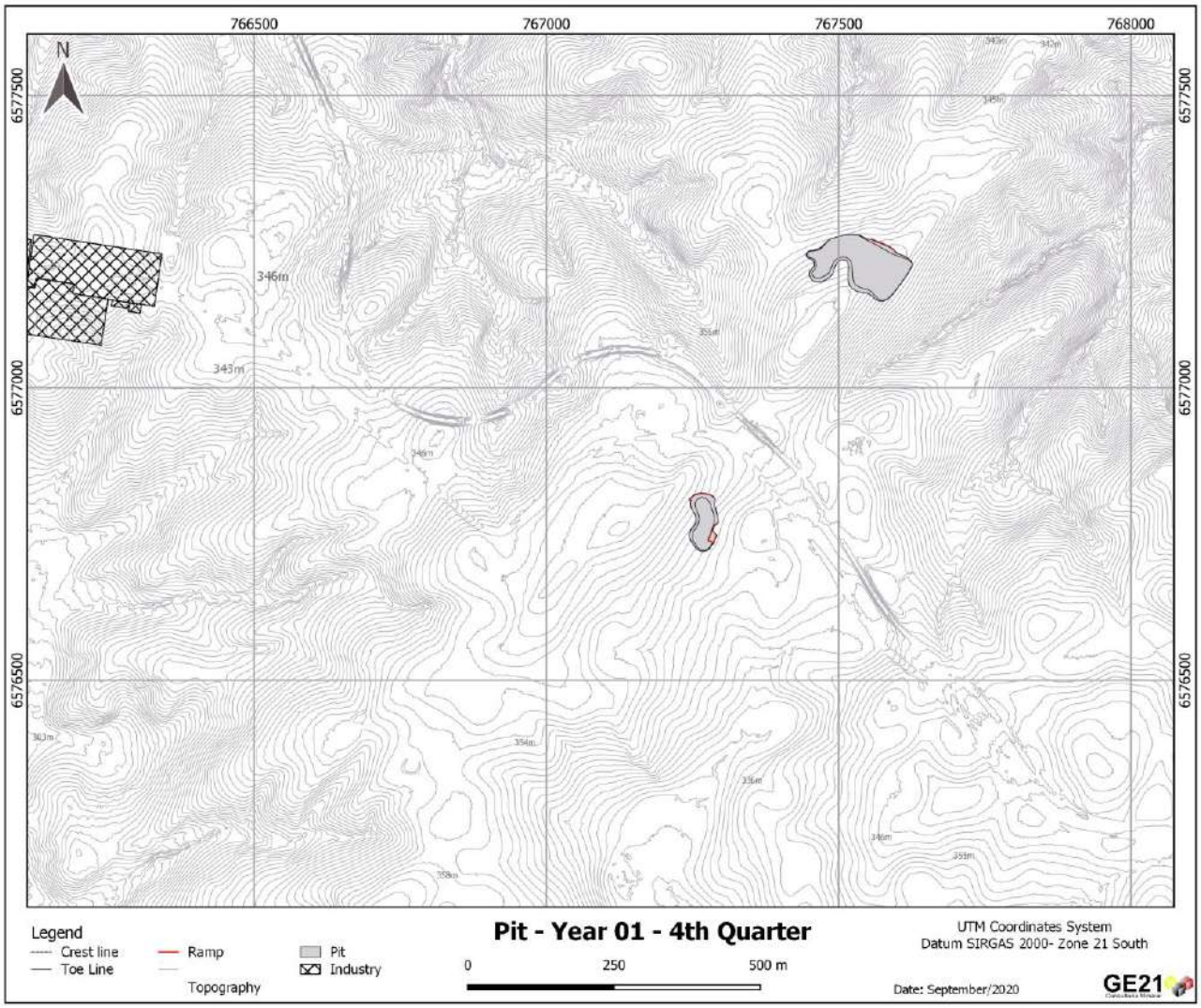


Figure 26: Year 02 – 1st Half

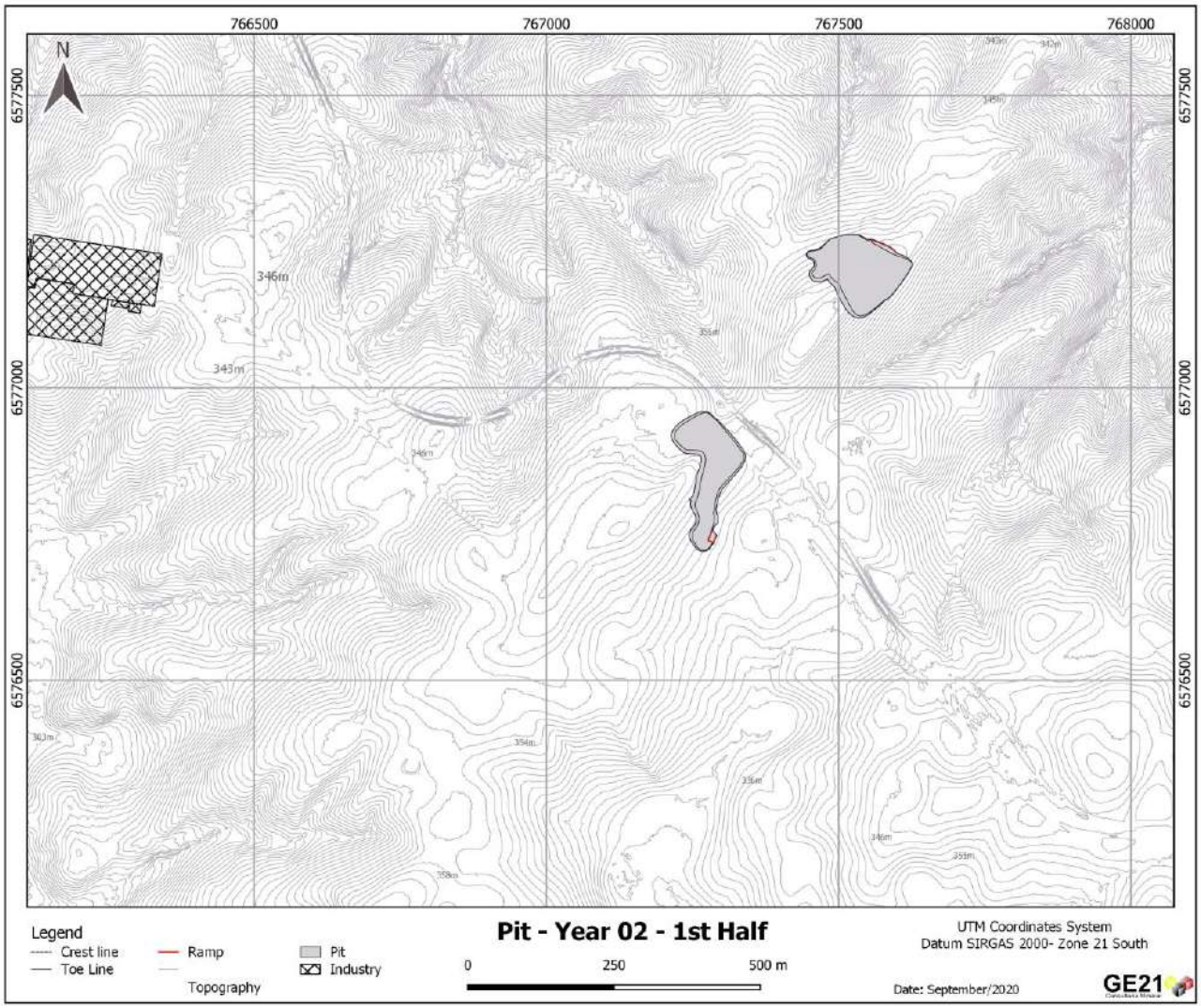


Figure 27: Year 02 – 2nd Half

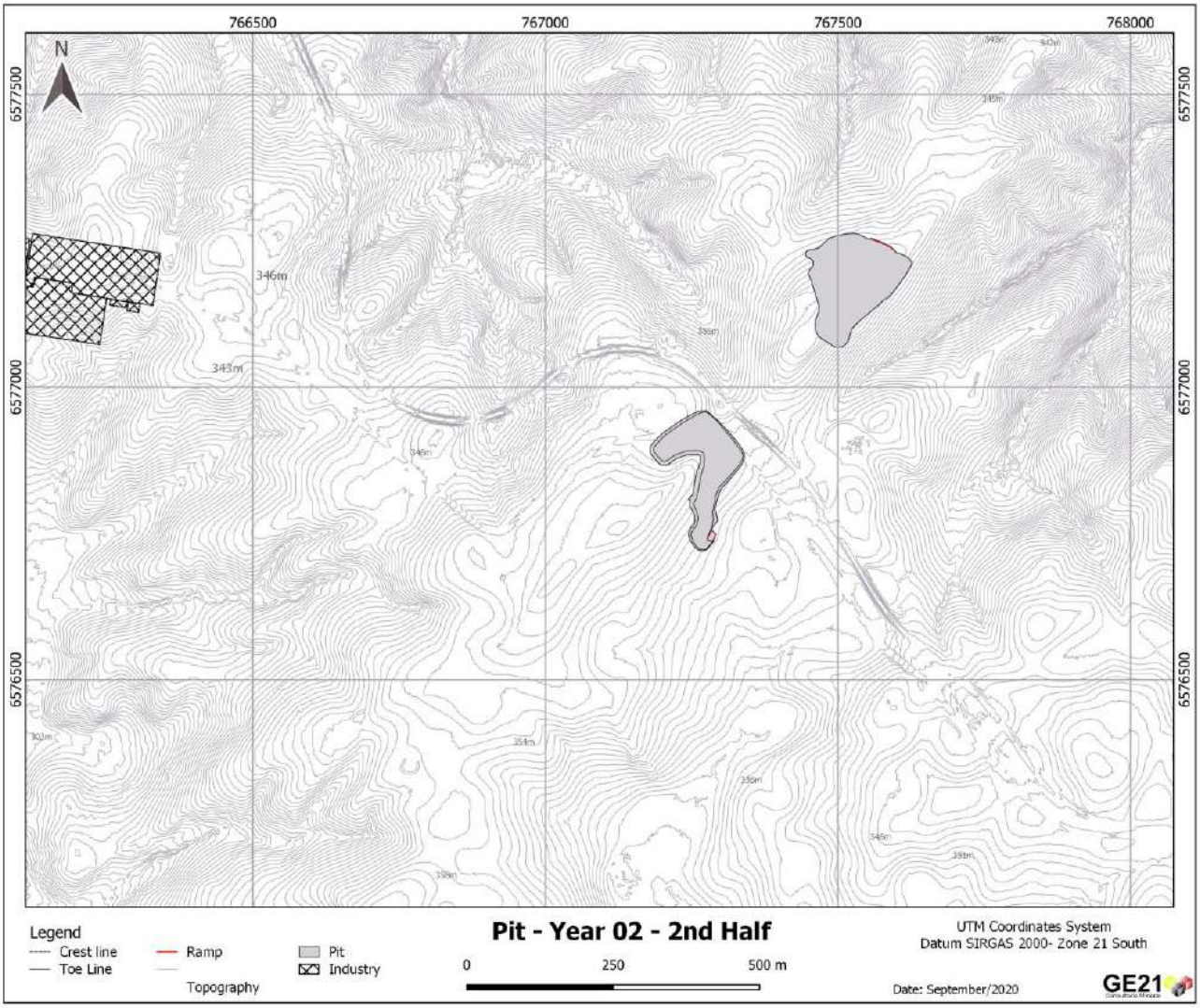


Figure 28: Year 03 – 1st Half

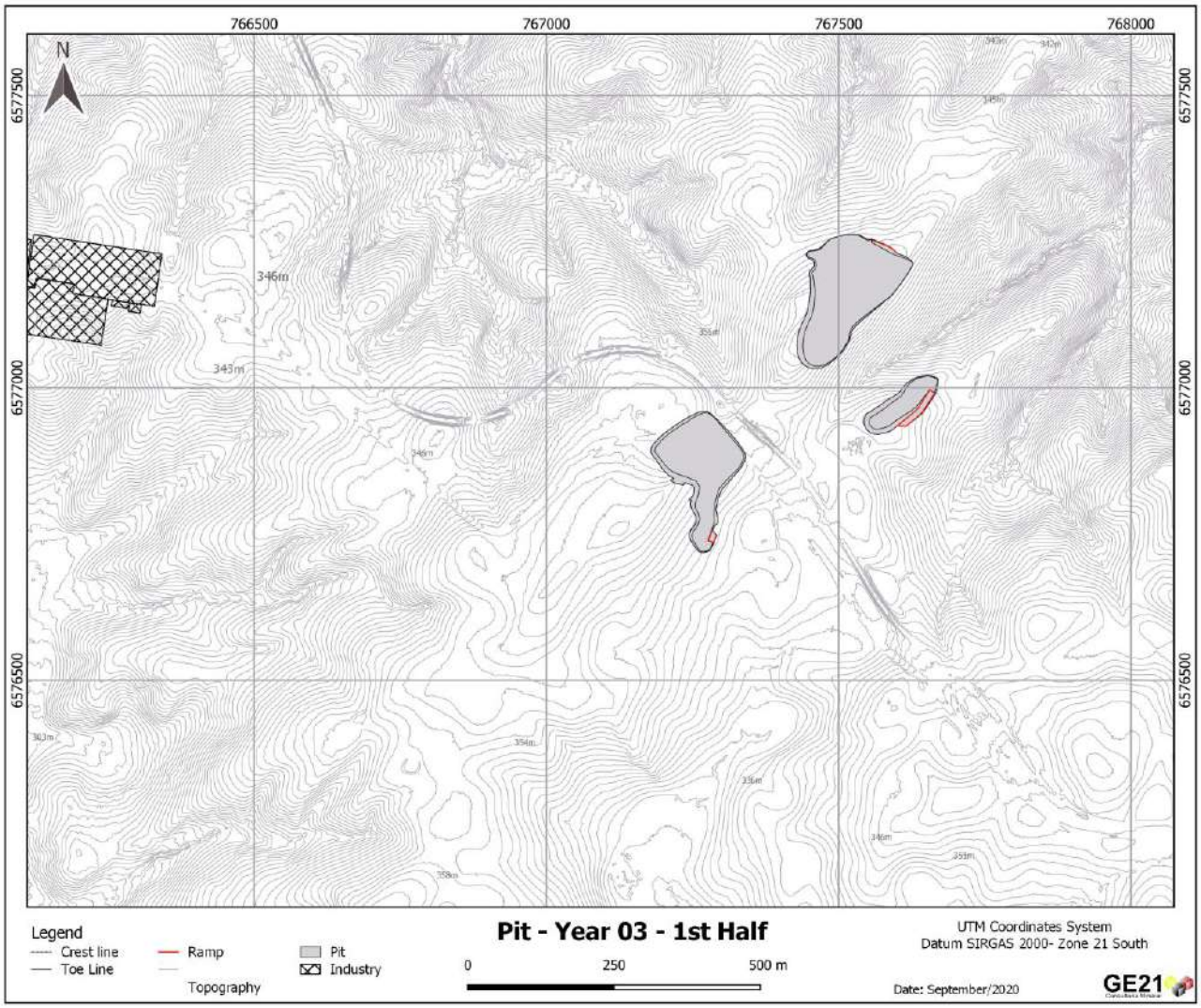


Figure 29: Year 03 - 2nd Half

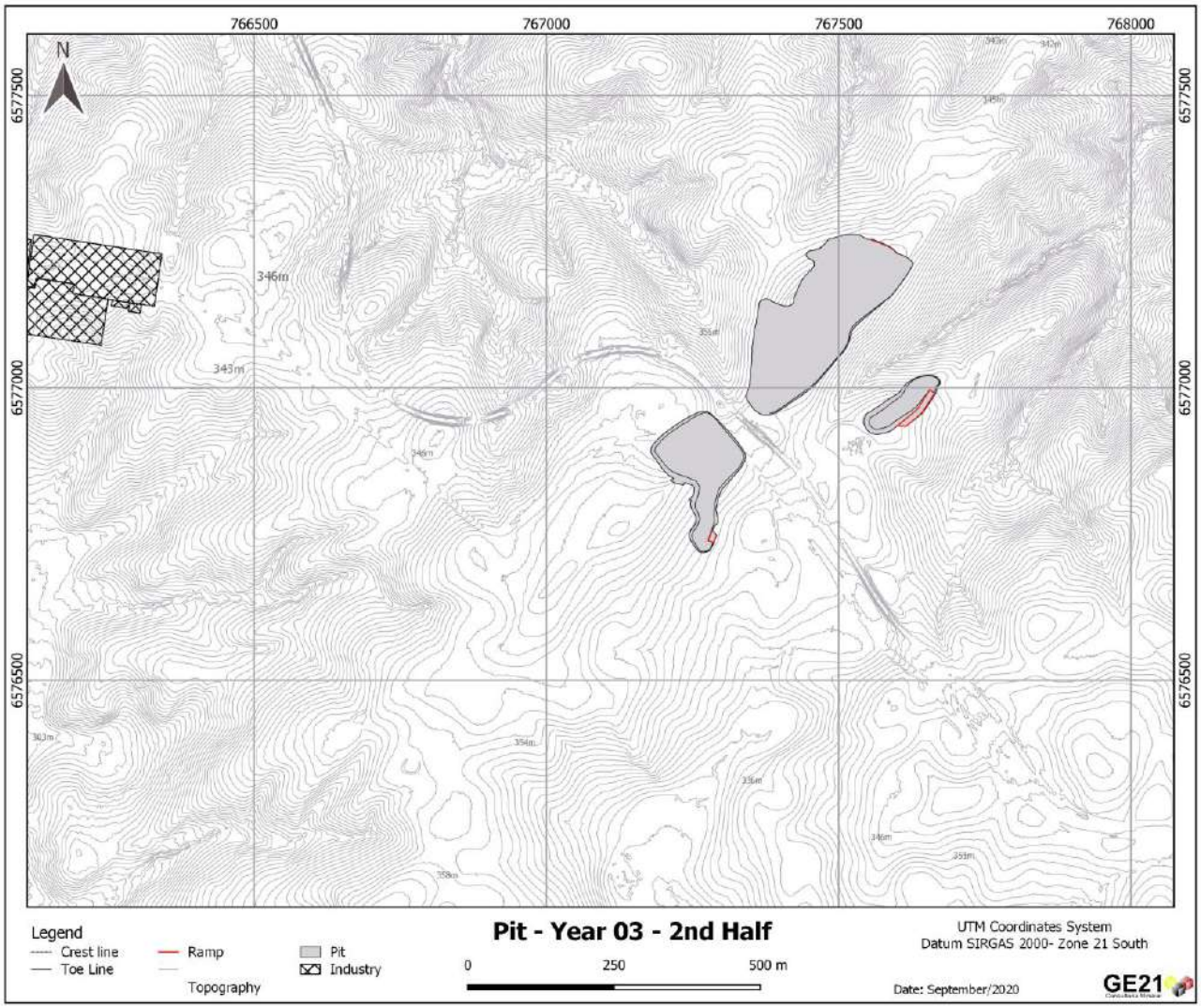


Figure 30: Year 4

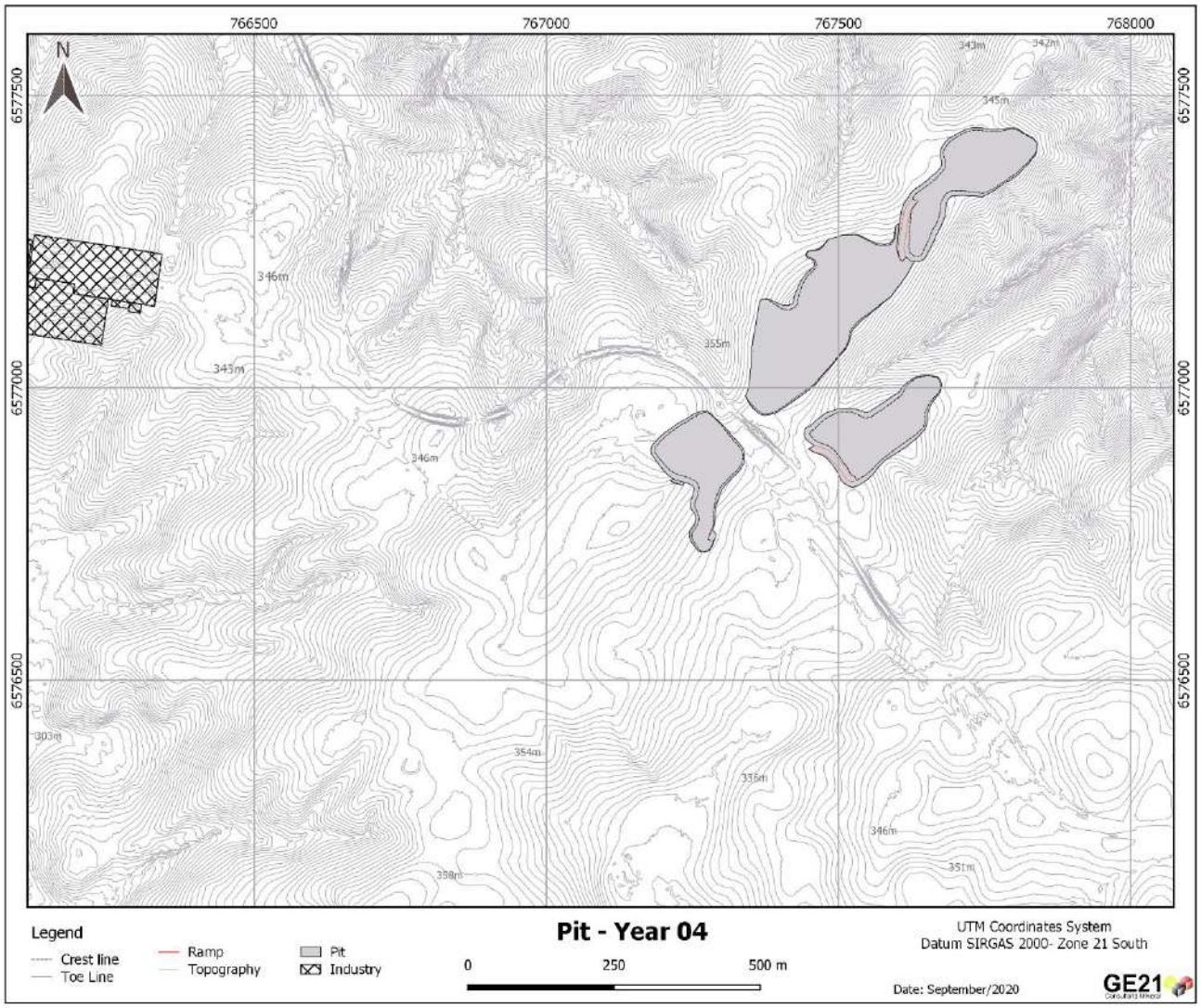


Figure 31: Year 5

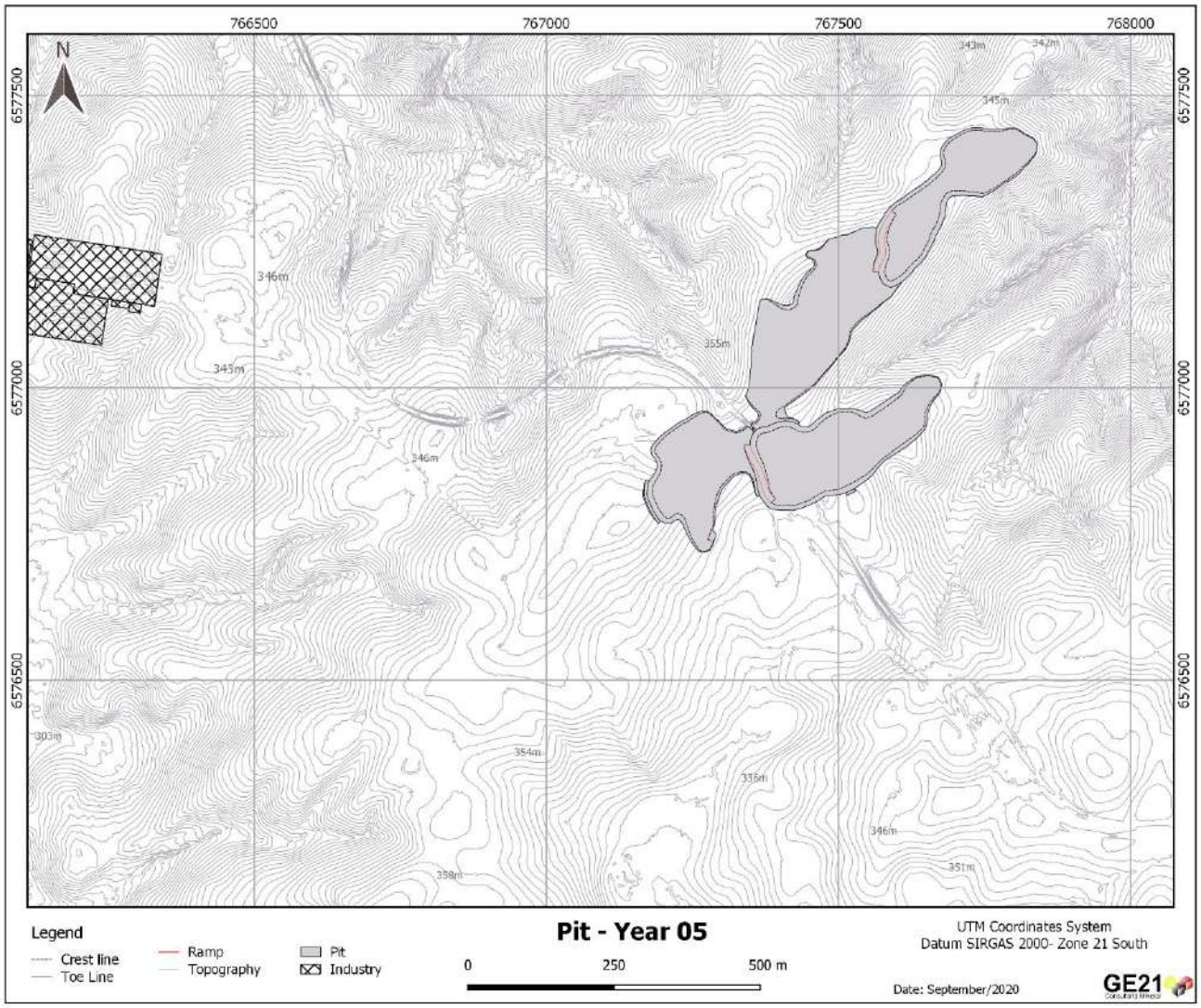


Figure 32: Year 6

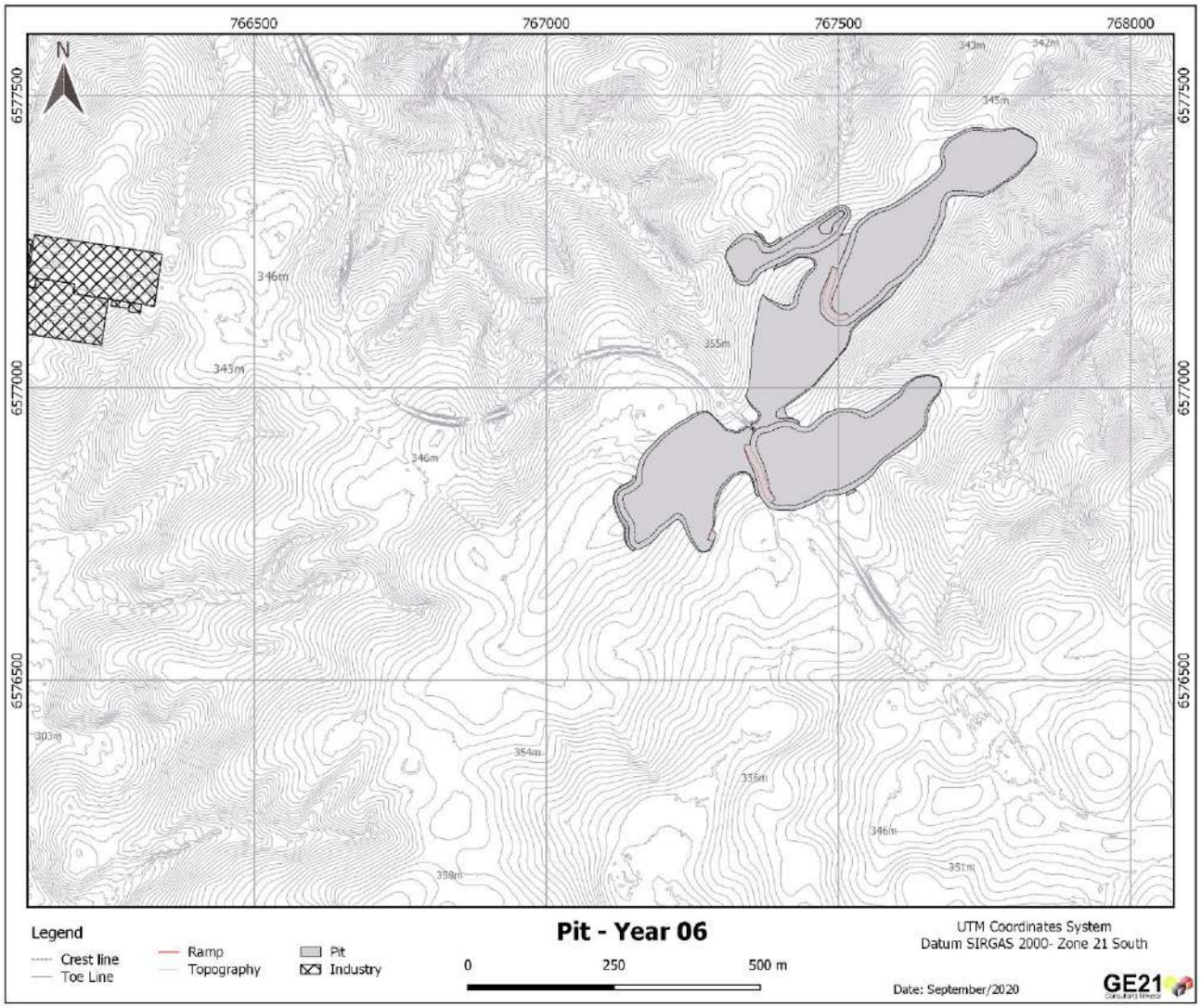


Figure 33: Year 7

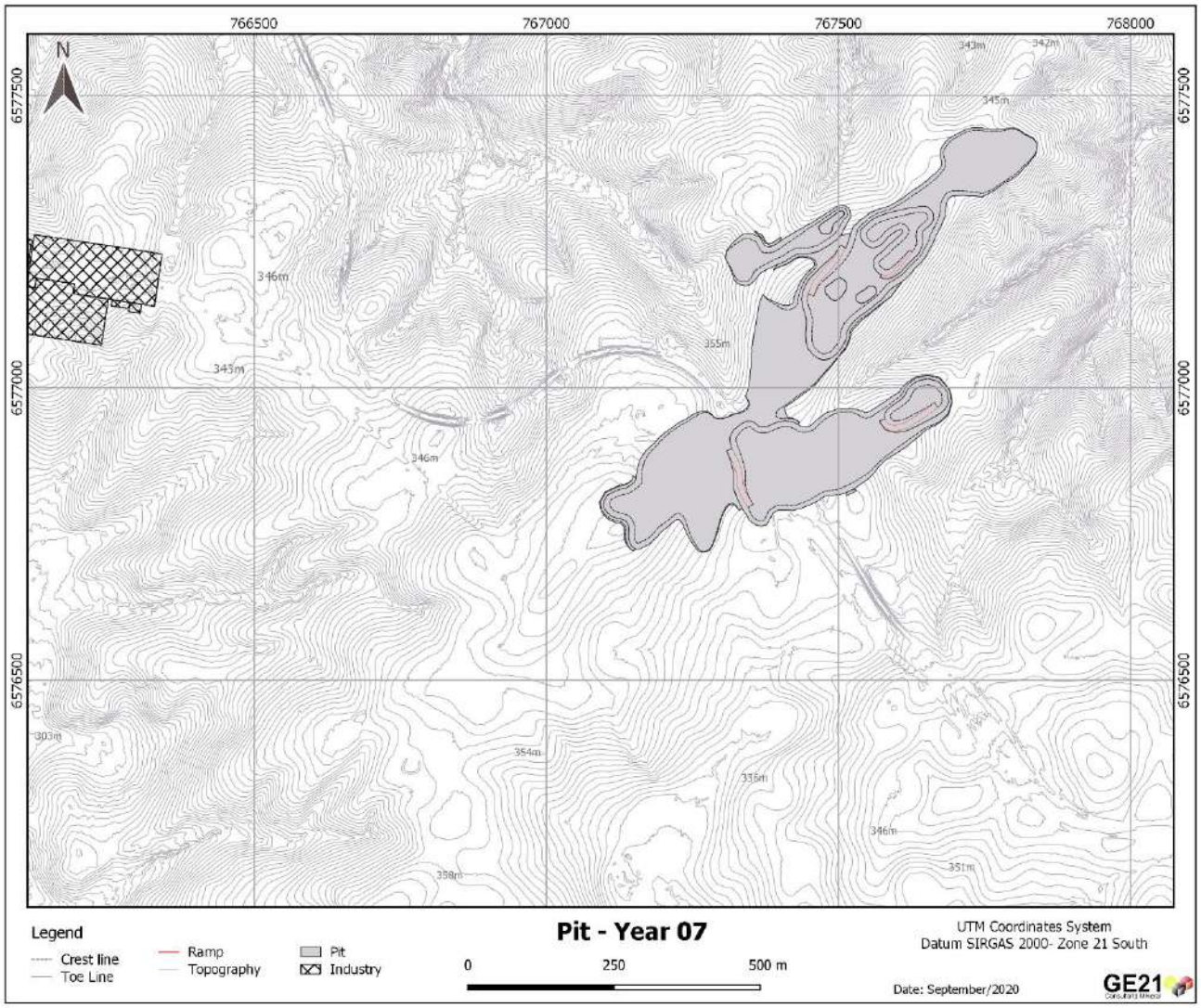


Figure 34:Year 8

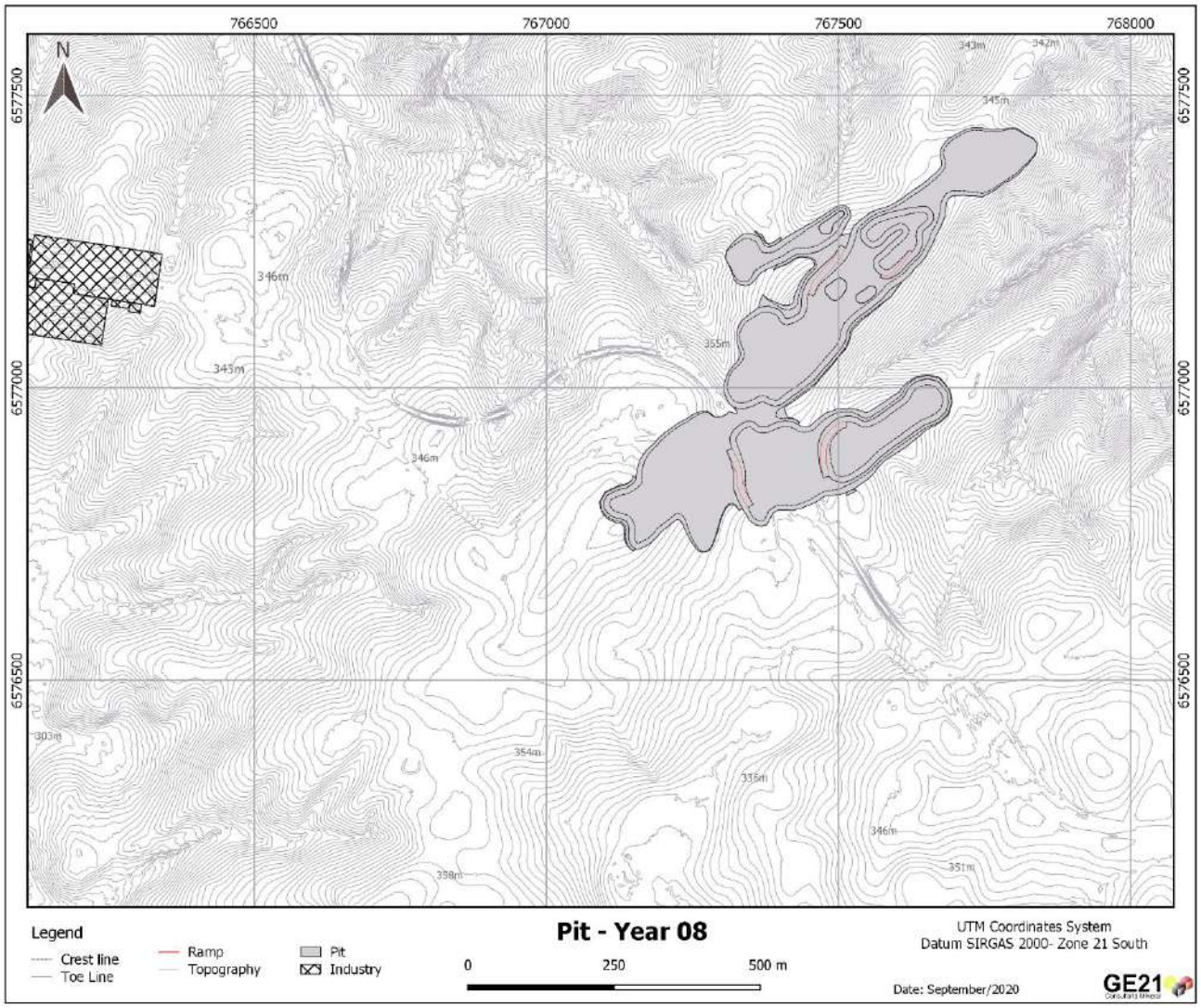


Figure 35: Year 9

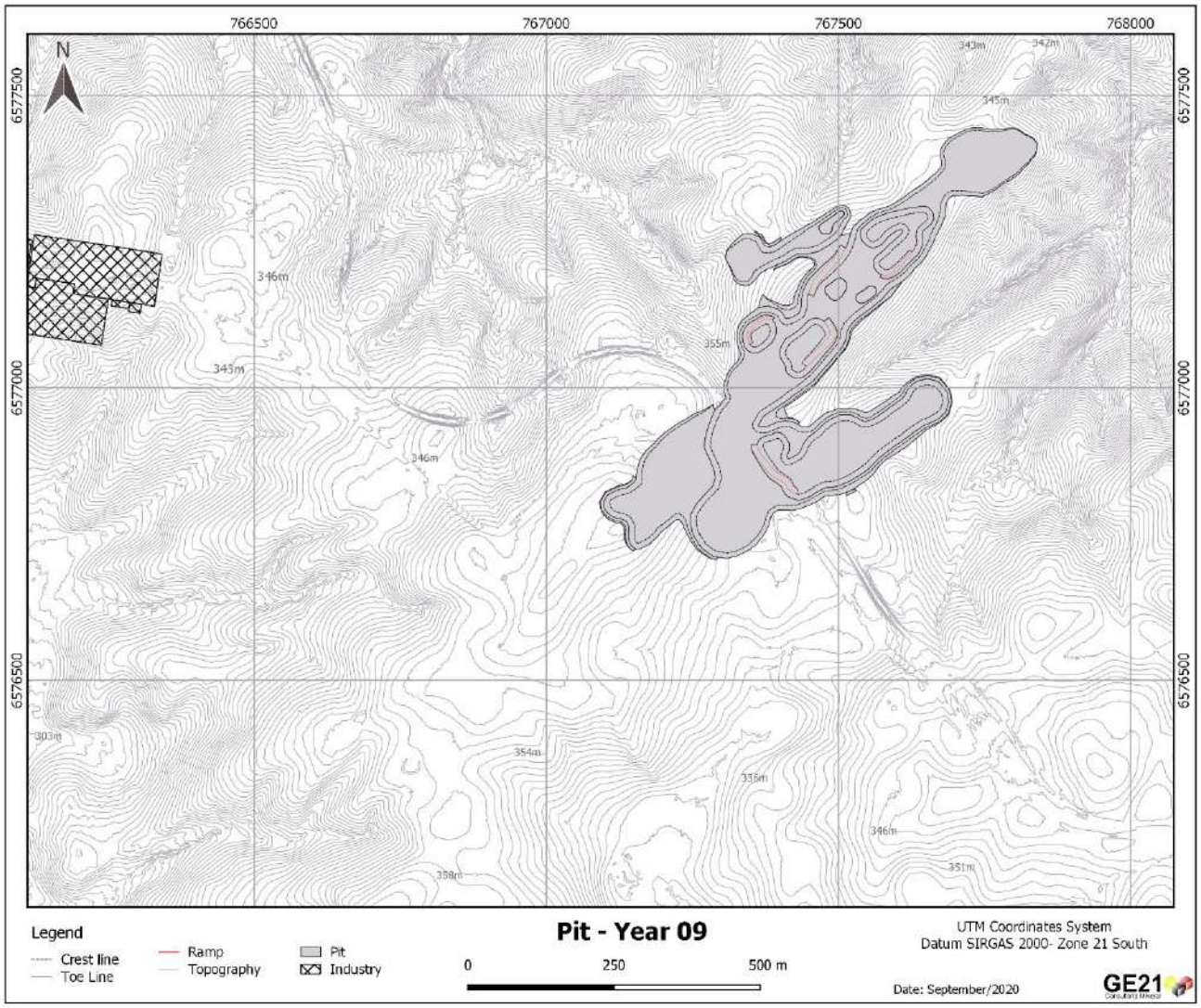


Figure 36: Year 10

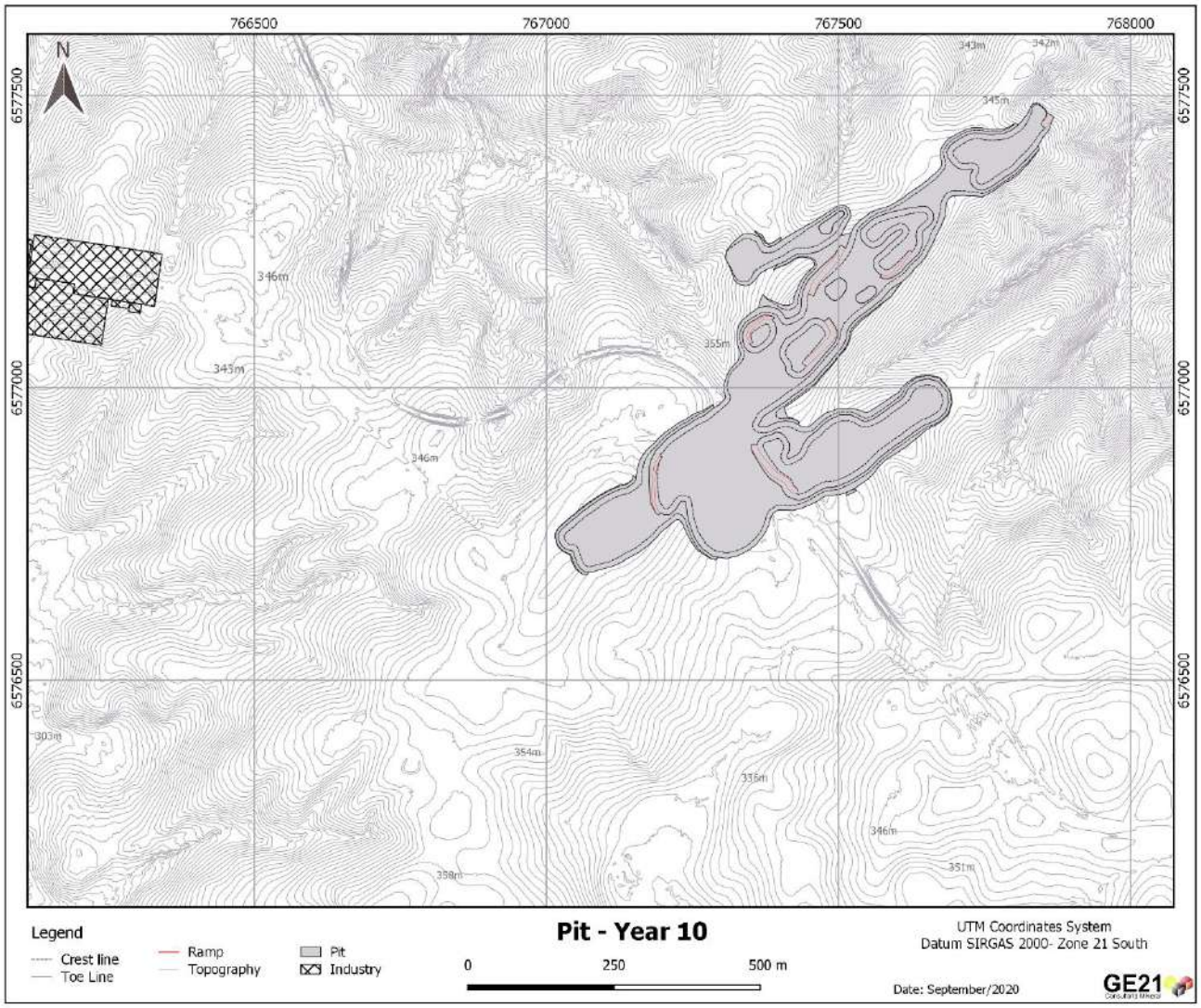


Figure 37: Year 15

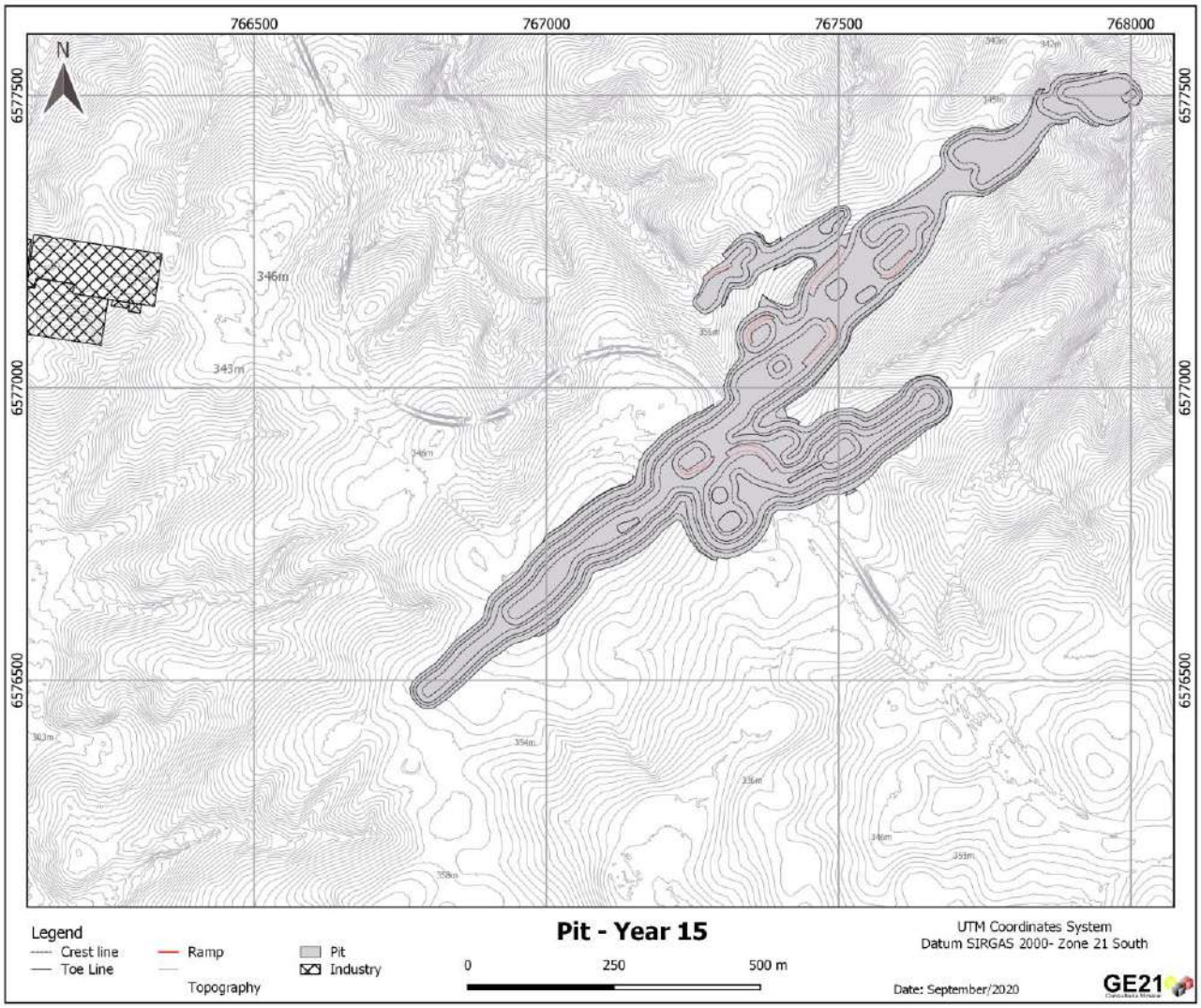
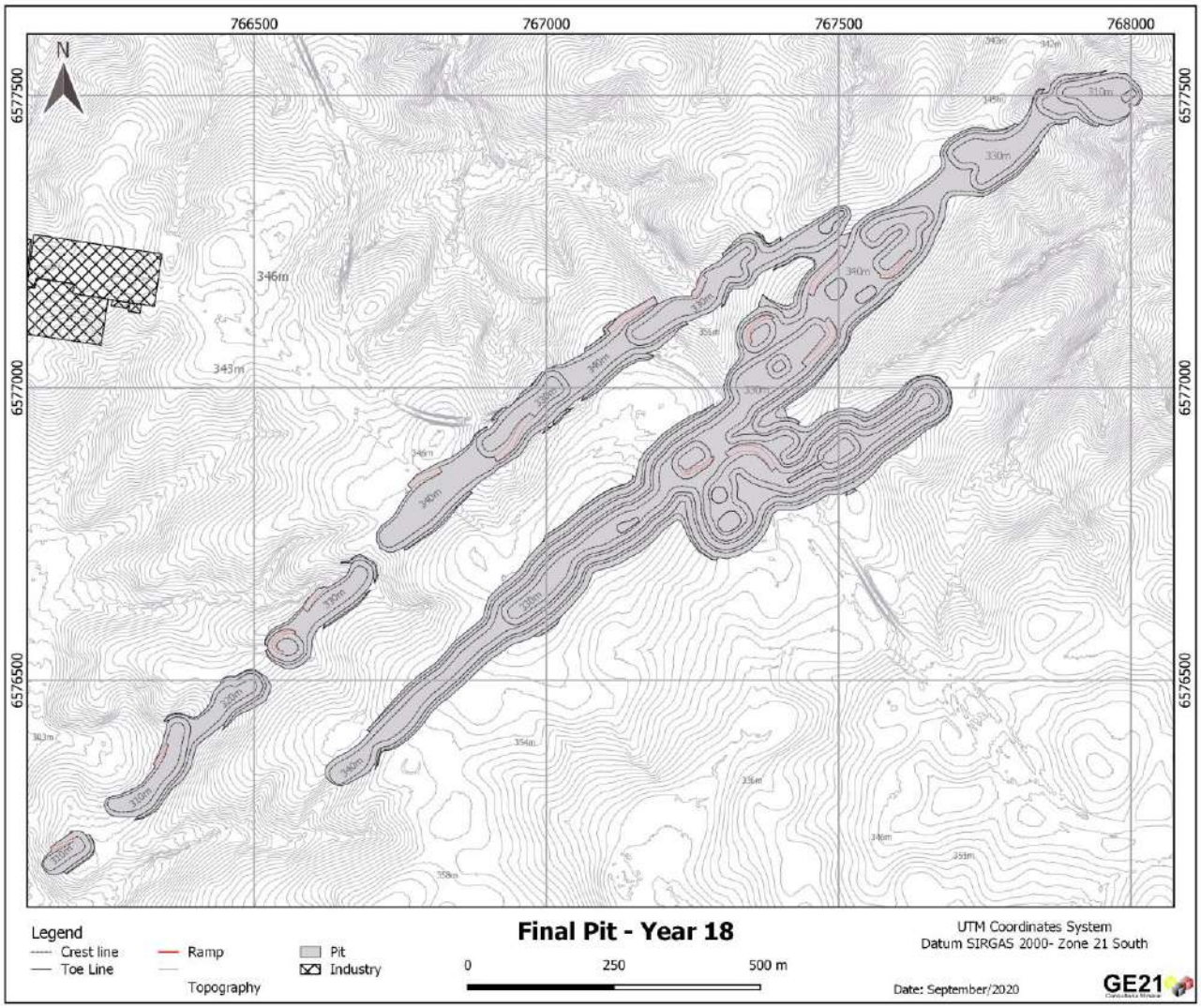


Figure 38: Final Pit – Year 18



15.2. Grade Control

Grade control is a system that measures and monitors production grades and mined material to appropriate destination. Grade control is essential for efficient mine operation, with key performance indicators including definition of ore and waste, minimal dilution and optimal recovery.

Usually, the decision to develop a mine is based on a resource estimate. A set of wide-spaced samples, larger than the Selective Mining Units, is applied on the estimation process and its spacing is not suitable for short-term decisions, as it considers larger blocks.

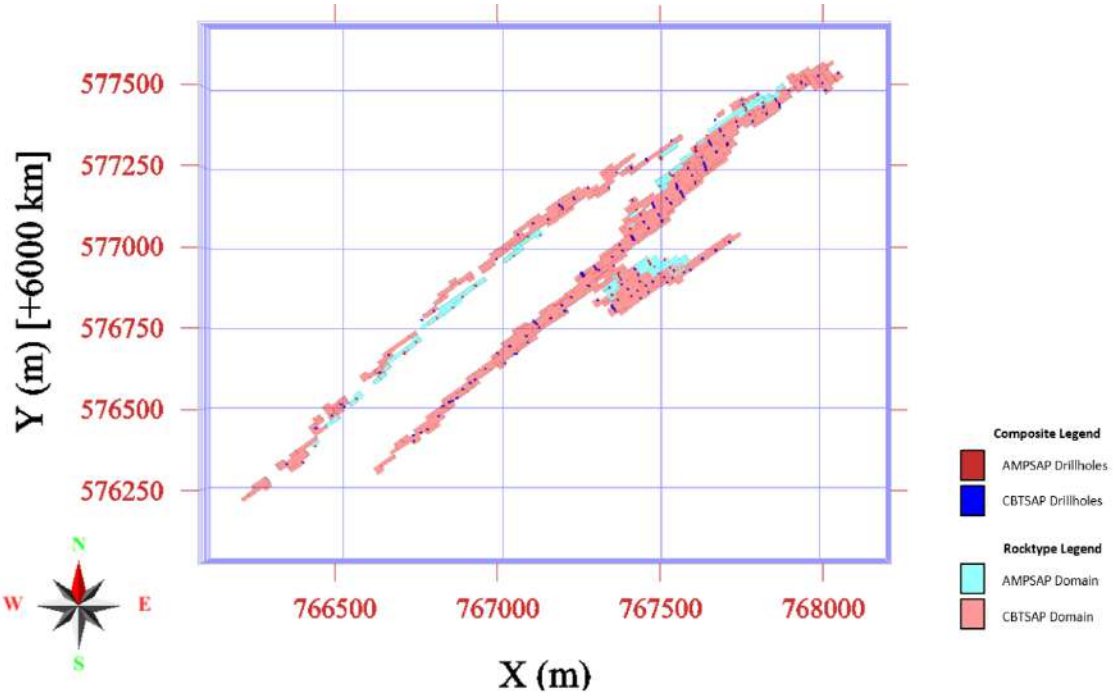
Planned variance is smaller than the variability that will be reached during mining, as the mining plan is developed over long-term estimates. A mine plan based on the arithmetic average of well samples extracted from the mine itself will improperly smooth variability, as grade estimated for the block dimension can be confused with the grade associated with the dimension of the mined area. Therefore, an implementation of a control system of ROM grade variability is of paramount importance. Wide-spaced sampling should be infilled with grade control sampling to support short-term mine planning, considering a reliable Selective Mining Unit dimension to determine an effective sampling spacing.

15.2.1. Methodology

A geostatistical method known as Uniform Conditioning can be applied to define the adequate SMU. UC is a non-linear geostatistical technique that estimates grade distribution of a mineral considering the support of a SMU within the Technological Blocks (Parent Blocks), associated with the long-term grid.

Initially, GE21 defined three SMU sizes to conduct grade control analysis: 25 m x 12.5 m x 5 m, 12.5 m x 12.5 m x 5 m and 12.5 m x 6.25 m x 5 m. SMU sizes were defined based on an adequate adjustment of its dimensions with respect to the sample spacing of 50 m x 25 m. The main goal was to test the selectivity based on these block sizes. Figure 39 presents both domains from the long-term block model inside drilling grid to perform SMU testing.

Figure 39: Saprolite Mineralized Domains of the Tres Estradas Phosphate Project



Isatis.neo Mining Edition Software was used to perform Uniform Conditioning varying the SMU sizes, as presented in Figure 40 to Figure 45

Figure 40: SMU size of 25 m x 12.5 m x 5 m for the CBTSAP domain

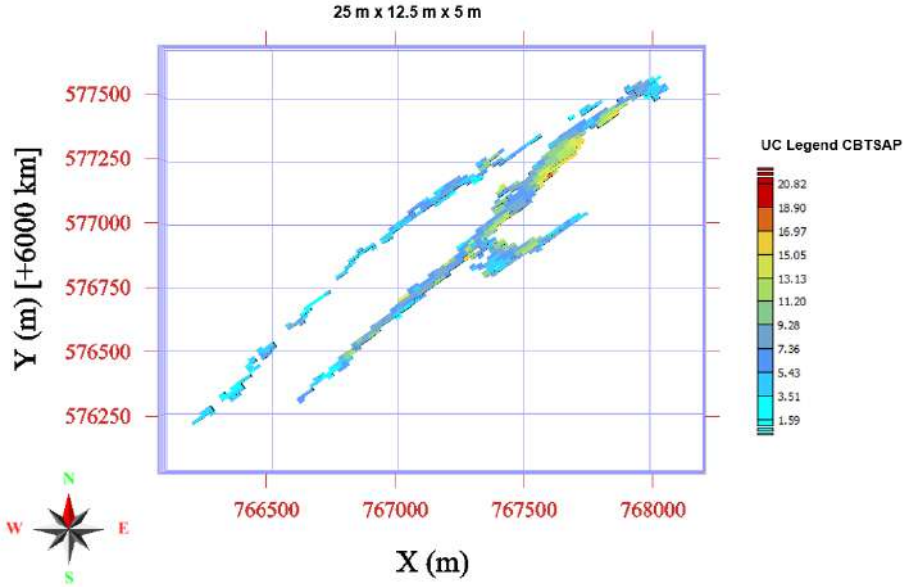


Figure 41: SMU size of 12.5 m x 12.5 m x 5 m for the CBTSAP domain

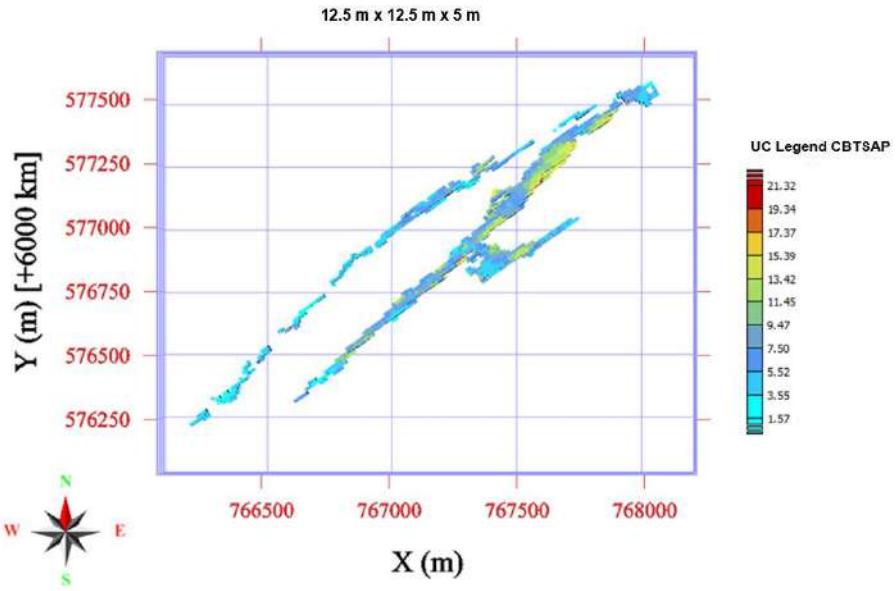


Figure 42: SMU size of 12.5 m x 6.25 m x 5 m for the CBTSAP domain

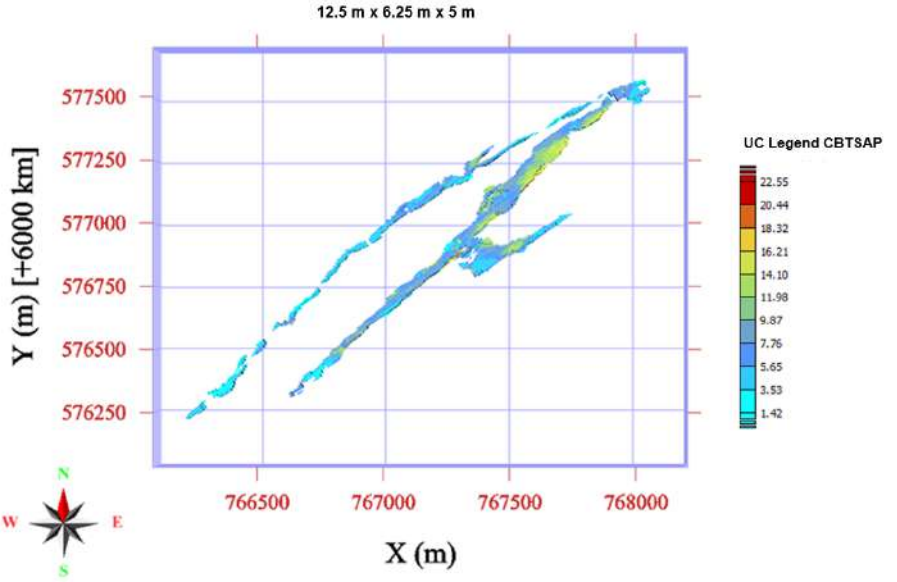


Figure 43: SMU size of 25 m x 12.5 m x 5 m for the AMPSAP domain

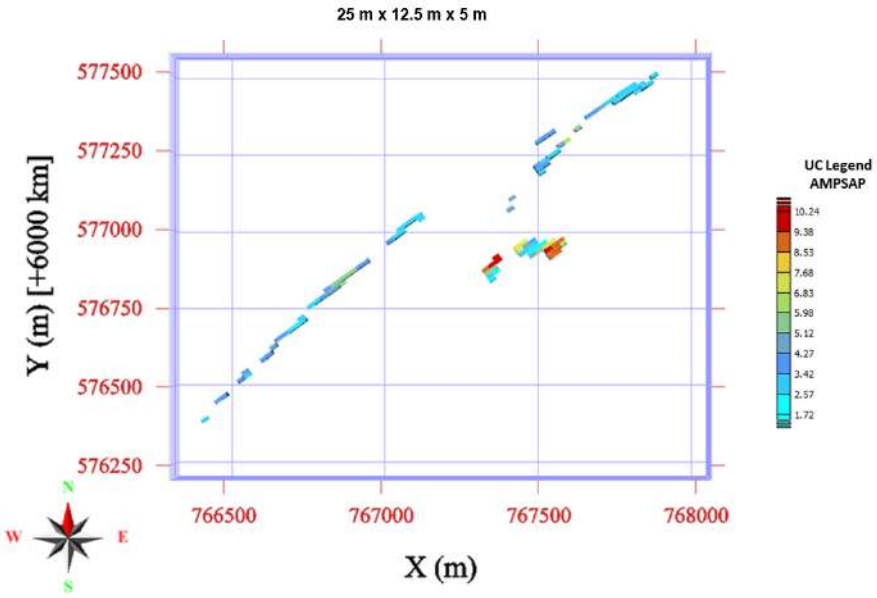


Figure 44: SMU size of 12.5 m x 12.5 m x 5 m for the AMPSAP domain

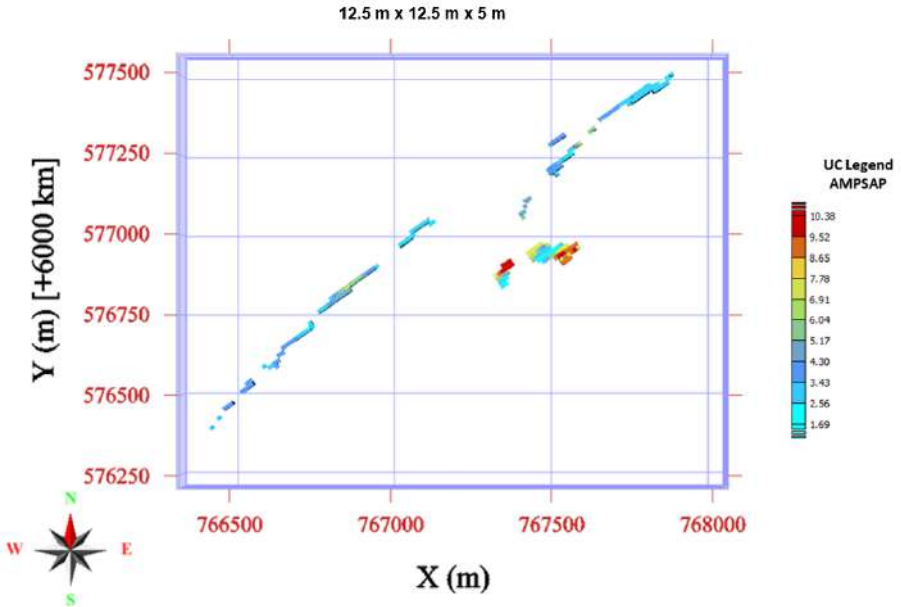
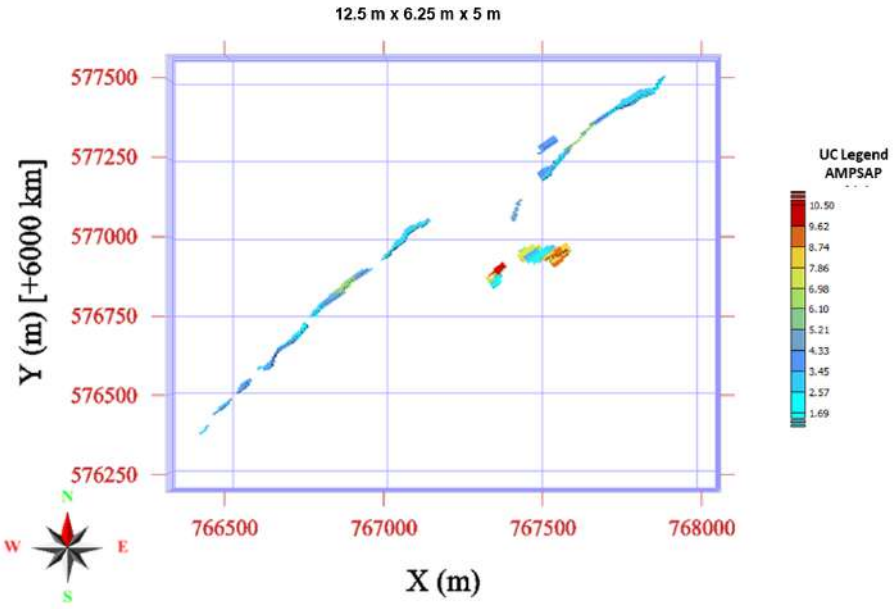


Figure 45: SMU size of 12.5 m x 6.25 m x 5 m for the AMPSAP domain



15.2.2. Analysis of Selectivity in Mine Plan based on SMU Size

UC results are presented in Table 41 and Table 42 for each SMU size and mineralized domain. The estimated variable was the percentage of P_2O_5 of two domains: Saprolite of Carbonatite and Saprolite of Amphibolite.

Table 41: UC Results for CBTSAP domain for each SMU size

CBTSAP Domain						
%P_2O_5 Cutoff Grade	Grid Size - 25m x 12.5m x 5m		Grid Size - 12.5m x 12.5m x 5m		Grid Size - 12.5m x 6.25m x 5m	
	Tonnage (%)	Mean Grade	Tonnage (%)	Mean Grade	Tonnage (%)	Mean Grade (%)
0.00	100.00	8.54	100.00	8.53	100.00	8.52
1.00	100.00	8.54	100.00	8.53	100.00	8.52
2.00	99.64	8.54	99.62	8.53	99.50	8.52
3.00	98.42	8.61	98.07	8.62	97.82	8.55
4.00	93.55	8.80	93.10	8.83	92.49	8.69
5.00	83.24	9.02	83.06	9.08	81.92	8.90
6.00	73.53	9.35	73.30	9.47	71.27	9.20
7.00	62.43	9.75	62.24	9.87	60.41	9.59
8.00	51.17	10.20	50.80	10.31	50.09	10.07
9.00	41.28	10.73	41.17	10.88	40.71	10.64
10.00	32.22	11.38	32.11	11.56	32.16	11.28
11.00	23.43	12.11	23.63	12.28	24.50	11.99
12.00	16.68	12.89	16.91	13.03	17.98	12.76
13.00	11.55	13.70	11.52	13.86	12.65	13.58
14.00	7.65	14.58	7.77	14.73	8.45	14.45
15.00	4.71	15.47	4.75	15.59	5.32	15.35
16.00	2.65	16.37	2.83	16.48	3.17	16.29
17.00	1.38	17.29	1.51	17.40	1.79	17.24
18.00	0.69	18.23	0.76	18.34	0.97	18.20
19.00	0.31	19.19	0.40	19.26	0.47	19.17
20.00	0.19	20.14	0.15	20.21	0.20	20.15
21.00	0.02	21.08	0.07	21.10	0.08	21.14
22.00	-	22.07	-	22.06	0.04	22.14
23.00	-	23.04	-	23.04	0.01	23.14

Table 42: UC Results for AMPSAP domain for each SMU size

AMPSAP Domain						
%P_2O_5 Cutoff Grade	Grid Size - 25m x 12.5m x 5m		Grid Size - 12.5m x 12.5m x 5m		Grid Size - 12.5m x 6.25m x 5m	
	Tonnage (%)	Mean Grade	Tonnage (%)	Mean Grade	Tonnage (%)	Mean Grade
0.00	100.00	5.08	100.00	4.90	100.00	5.08
1.00	100.00	5.08	100.00	4.90	100.00	5.08
2.00	99.08	5.08	99.06	4.90	99.10	5.08
3.00	80.52	5.29	79.78	5.01	80.39	5.22
4.00	52.23	6.43	52.68	5.92	51.50	6.23
5.00	40.72	7.11	41.33	6.60	39.89	6.93
6.00	31.61	7.53	32.06	7.38	31.67	7.45
7.00	25.80	8.01	26.15	7.95	25.55	7.98
8.00	17.72	8.53	18.39	8.52	17.67	8.60
9.00	7.43	9.25	7.84	9.20	8.49	9.36
10.00	1.18	10.12	1.55	10.10	2.31	10.24
11.00	0.02	11.08	0.04	11.07	0.27	11.17
12.00	-	12.06	-	12.05	0.01	12.13
13.00	-	13.05	-		-	13.11
14.00					-	14.09
15.00					-	15.08
16.00					-	16.05

The highlighted line in Table 41 and Table 42 represents the percentage P_2O_5 cutoff grade defined for the Tres Estradas Phosphate Project. Average grade and total tonnage results are the same for all presented models. Results for the initial three defined SMU sizes shows a similar grade-tonnage distribution for cutoff grades of the percentage P_2O_5 variable, as variography may suffer from an information effect related to the undersized structures range for the given sample spacing. Results can be seen on grade-tonnage curves of Figure 46 and Figure 47 for each domain.

Figure 46: Grade-tonnage curve for UC Results of CBTSAP Domain

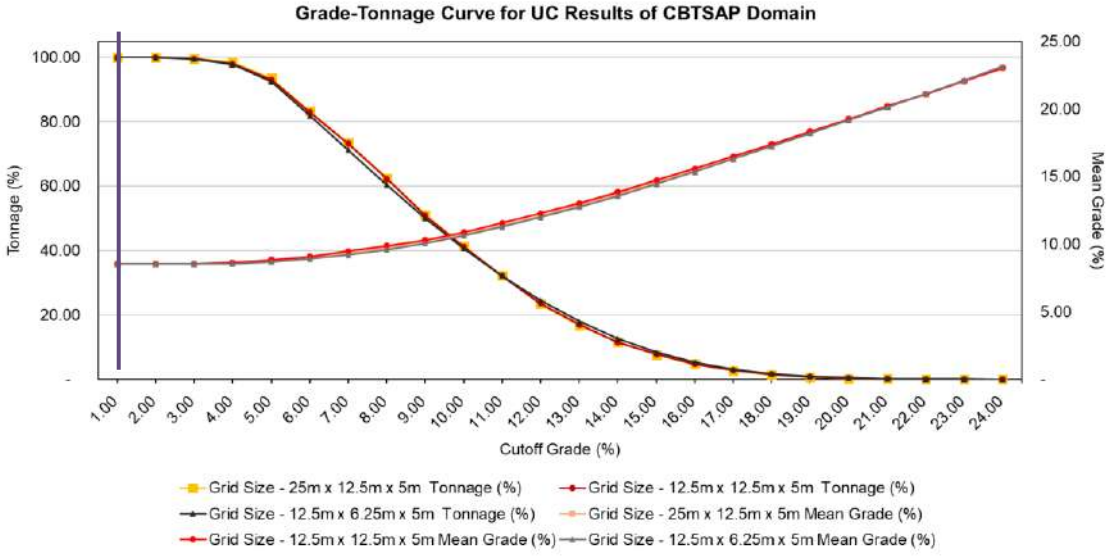
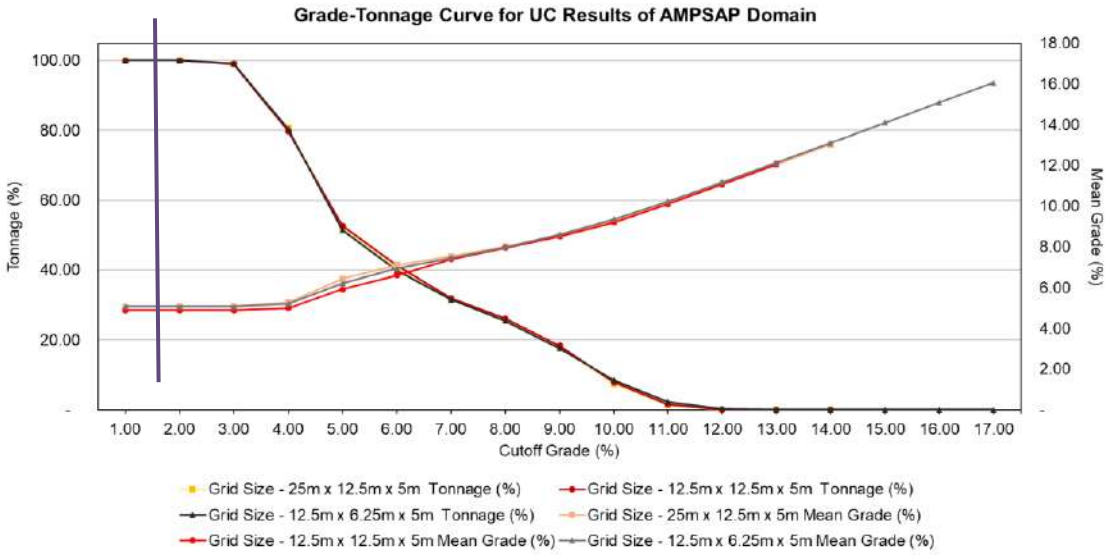


Figure 47: Grade-tonnage curve for UC Results of AMPSAP Domain



In order to validate the efficiency of support correction applied on Uniform Conditioning method, as block sizes smaller than utilized sample spacing showed similar results, GE21 analyzed larger blocks to check SMU definition. Another three block sizes were tested: 150 m x 75 m x 30 m, 100 m x 50 m x 20 m and 50 m x 25 m x 10 m. Figure 48 and Figure 49 present grade-tonnage results for the defined cutoff grade of 3.00% P_2O_5 for each of the block sizes.

Figure 48: CBTSAP for %P_2O_5 Cutoff grade

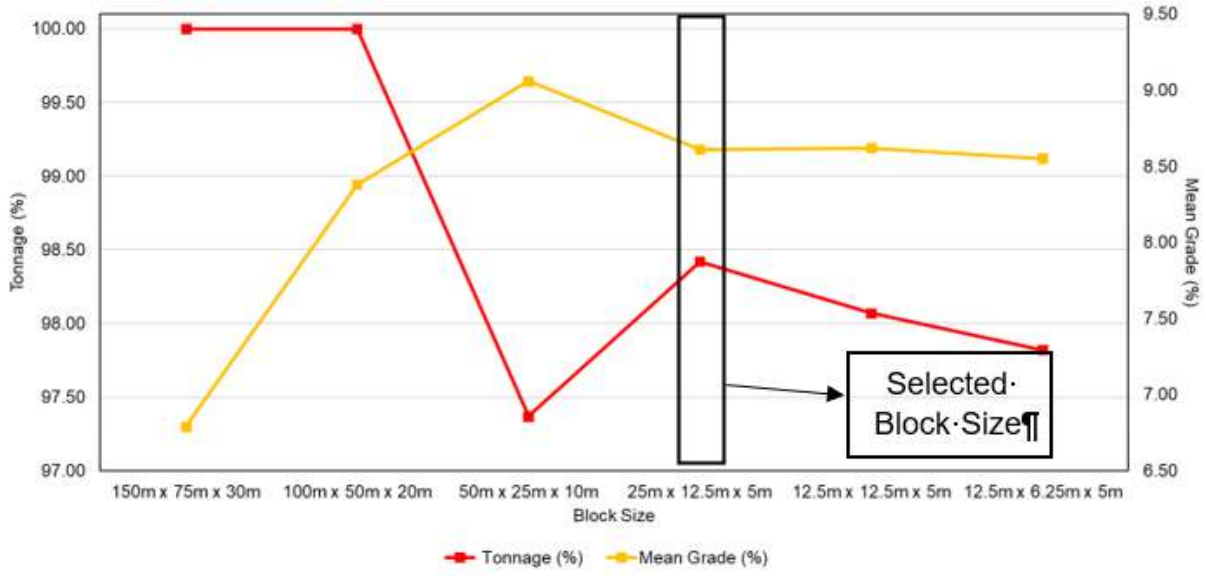
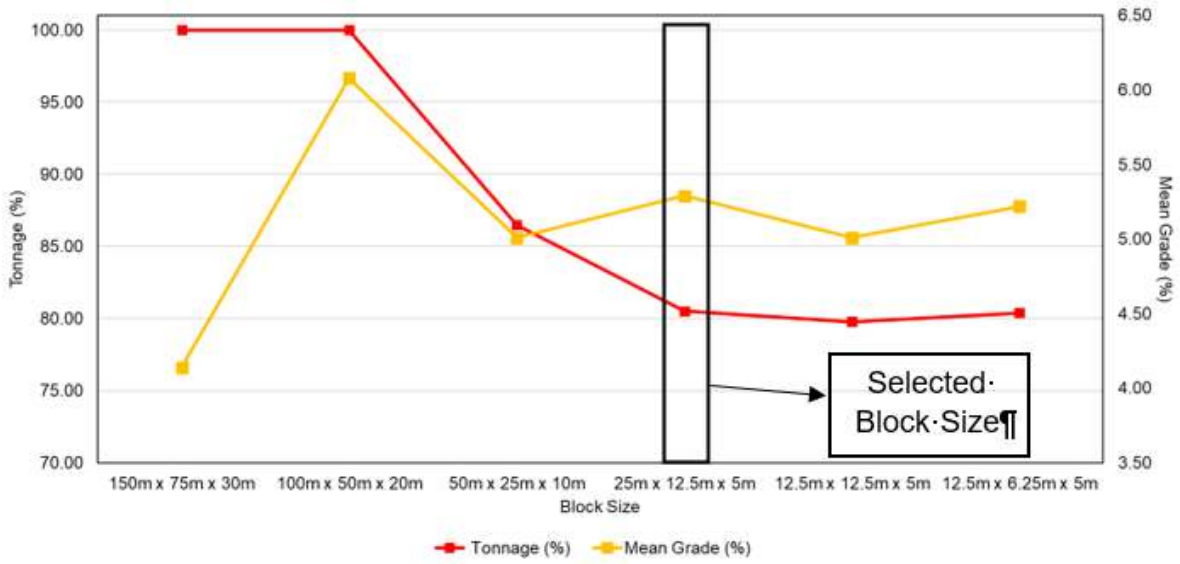


Figure 49: AMPSAP for %P_2O_5 Cutoff grade



It is noted that for SMU sizes smaller than the average sample spacing of 50 m x 25 m, a high selectivity for the defined cutoff grade is presented, demonstrating that the 25 m x 12.5 m x 5 m SMU size is appropriated for the short-term model. It means that 25 m x 12.5 m x 5 m SMU size is sufficiently selective for the short-term planning and the use of smaller SMU block sizes will result in the increase of the sampling cost without significant decrease of planned dilution. Based on this information, the short-term drilling grid can be selected as 25 m x 12.5 m size.

GE21 understands that a new study regarding resource block size should be conducted as its dimensions may be undersized if compared to sample spacing and recommends its execution for the Tres Estradas Phosphate Project. A rectangular grid representing one rock drillhole in the center of the SMU block was recommended to be used as the standard grid pattern for the grade control sample collecting system.

15.3. Waste Dump

The Waste Dump Project was developed by Itaaçu Geologia e Engenharia and followed the guidelines contained in Brazilan Technical Guideline ABNT NBR 13029 of July 2017 and ABNT NBR 13028 of November 2017.

The waste dump project aimed to dispose in a controlled and orderly way, the waste materials coming from the mine. Therefore, the waste dump must remain stable, ensuring the safety of people, equipment and the environment, becoming a safe and environmentally integrated structure.

The waste to be generated during the operation, is inert, and composed of granular material disaggregated and rockfill, from the phosphate mine. The site chosen to dispose of the material is located to the north of the pit, at an average distance of 750 meters, respecting the limits defined in the Licenced Directly Affected Area (ADA), the environmental criteria adopted during the stages of the study described in the EIA-RIMA (Environmental and Social impacts report), favouring the shortest distance of transportation and local topography.

The waste generated in this first phase of the project is about 2.4 Mt. Of this total, approximately 2.0 Mt will be deposited in a waste dump with a capacity of 1.24 Mm^3, while approximately 0.4 Mt of this material

will be used as material for landfills in the industrial area, accesses, and recovery of access roads. The main geometric parameters considered for the project are shown in Table 43 below.

Table 43: Waste Dump Geometric Parameters

Maximum height (m)	43
Elevation of the crest base (m)	307/350
Maximum bench height (m)	20
Minimum berm width (m)	10
Face angle	1V:2H –26.6º
Overall slope angle	1V:2.5H –21.8º
Longitudinal slope	1%
Transverse slope	5%
Area	8.09ha
Available volume	1,240,000.00m^3

15.3.1. Internal Drainage and Surface Drainage

For internal drainage (bottom drains) even without springs in the valleys where the waste dump will be located, bottom drains were designed (Figure 50), with the purpose of collecting and conducting excess water infiltration in the dump and intermittent springs out of the foundation area, as well as to avoid raising the water level inside the dump, which can generate additional poropressures, besides those caused by loading the foundation. This drain should be discharged about 2m beyond the bottom of the dump. The surface drainage devices of the berms are shown in Figure 51.

Figure 50: Internal drainage device

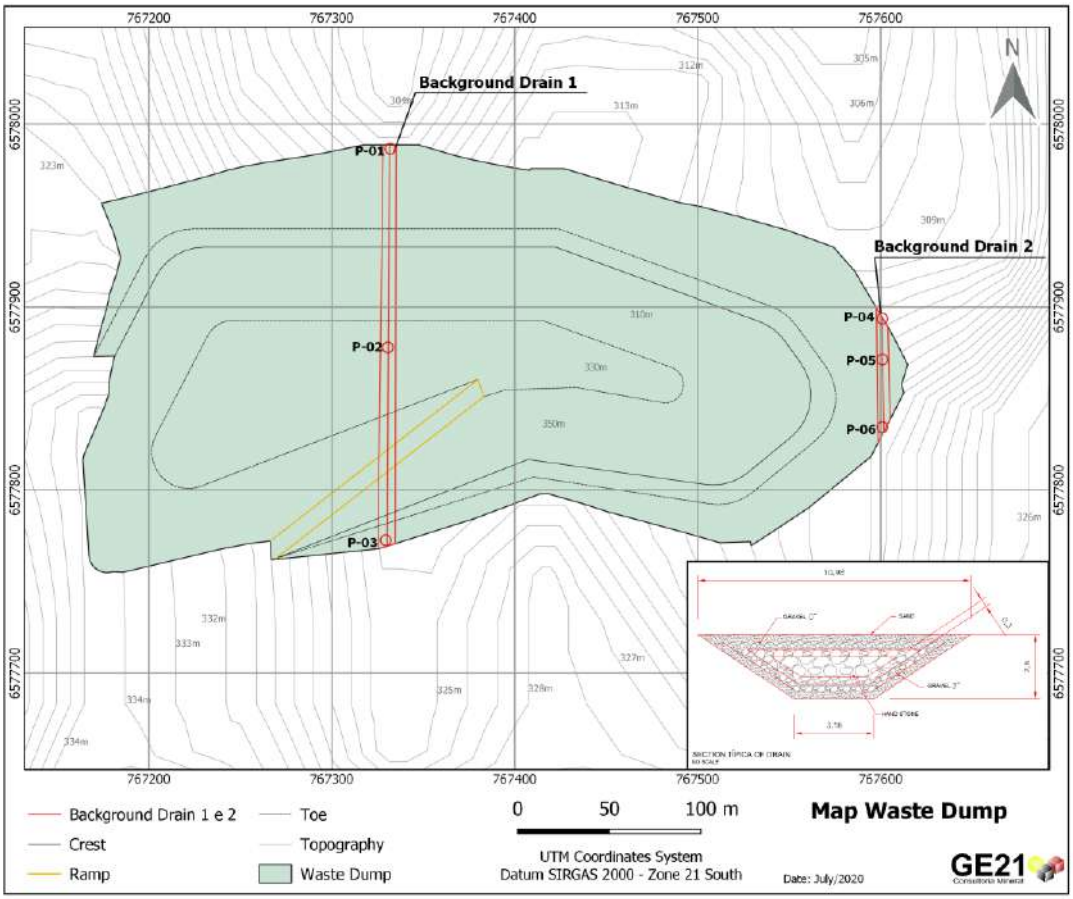
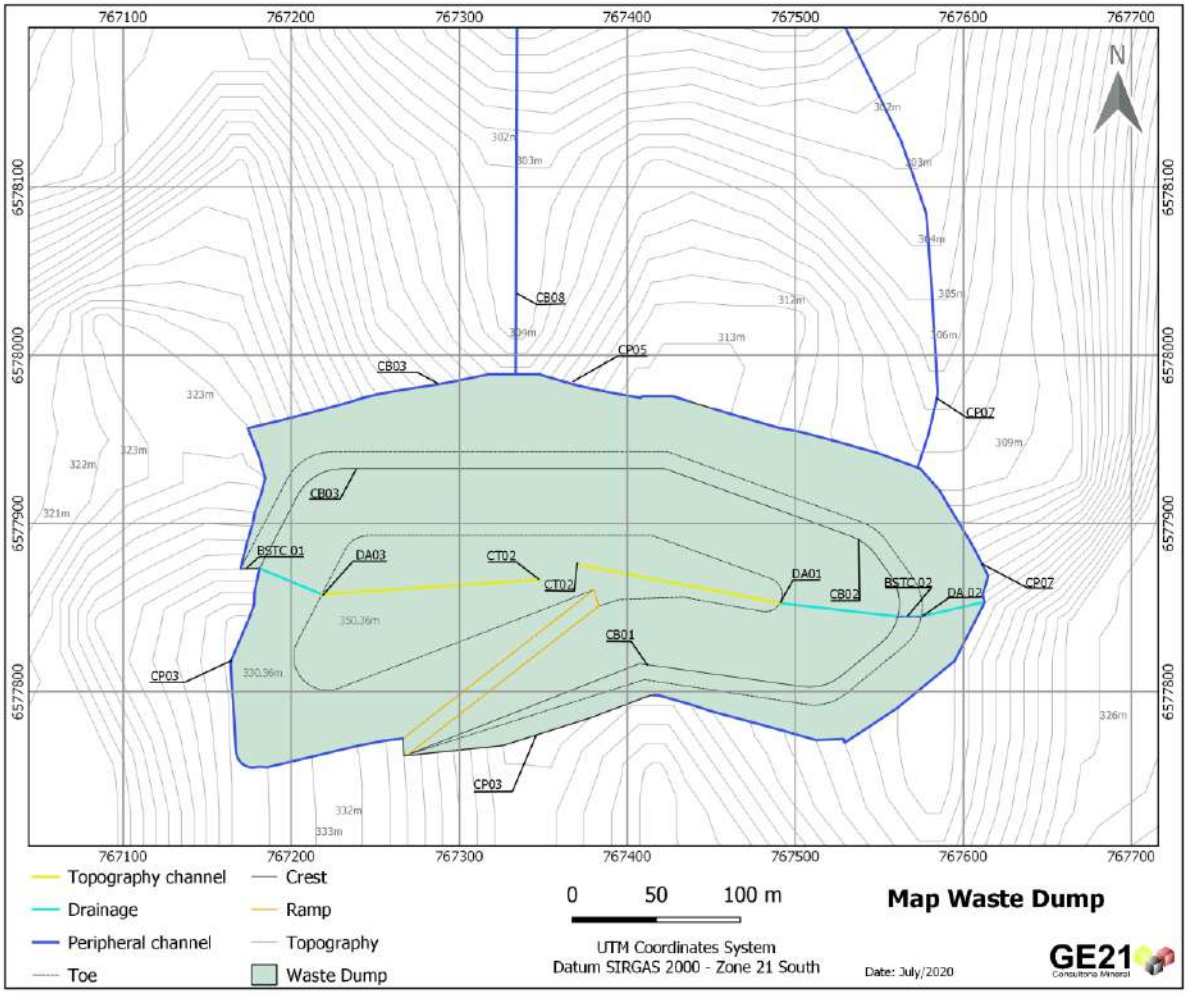


Figure 51: Surface drainage device



15.4. Waste Dump Formation Scheduling

The waste dump should be built upwards, according to the indicated sequencing to the volumes made available month by month in the mining operation.

The first stage of the work:

- Removal of all vegetation;
- Removal of low consistency materials such as vegetable soils, organic and plastic clays (if any);
- Sump construction;
- Bottom drains construction.

The second stage is:

- Construction of peripheral drainage channels;
- Waste disposal.

The third stage is:

- End of waste disposal;
- Completion of construction of the central channels;
- Revegetation;
- Installation of instrumentation.

The waste naturally forms an angle of slope 33.7º or 1V:1.5H, it will be necessary to change this angle to 26.6º (1V:2H), which is done using the bulldozer; after this operation, the slope will be ready to be revegetated by hydroseeding or any other method that is considered more convenient.

The constructive sequence of the benches must be carried out in accordance with the procedures described in Figure 52 to Figure 55

Figure 52: Start of bench formation on El. 330m

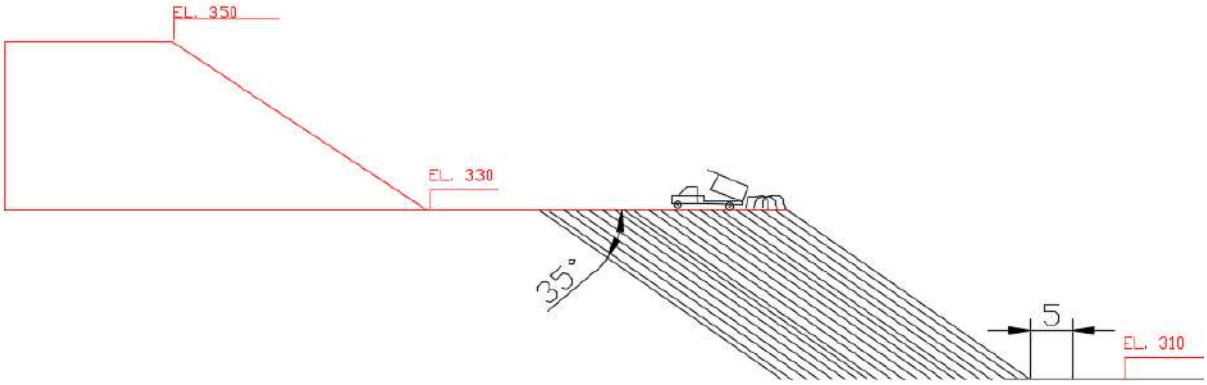


Figure 53: Formation of bench El. 330m with face slope 1V:2H

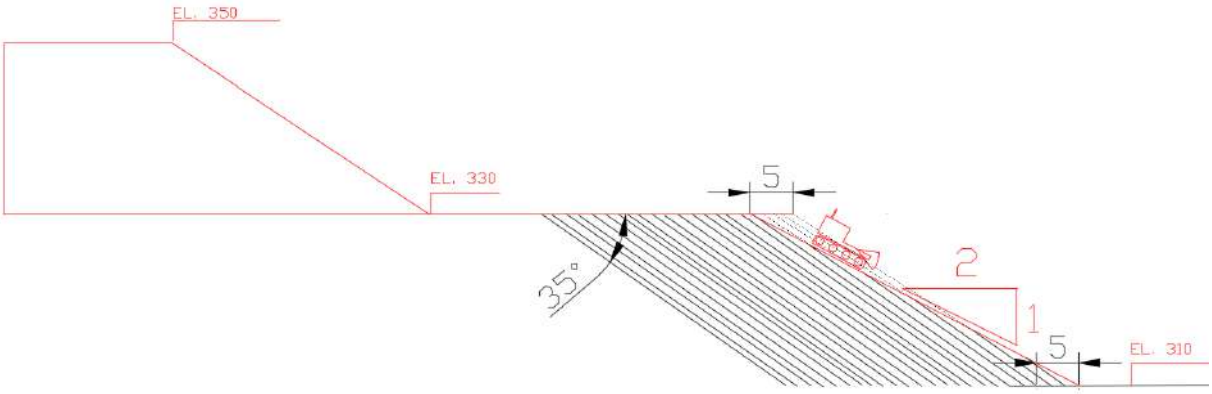


Figure 54: Completion of bench El. 330m and start of bench El. 350m

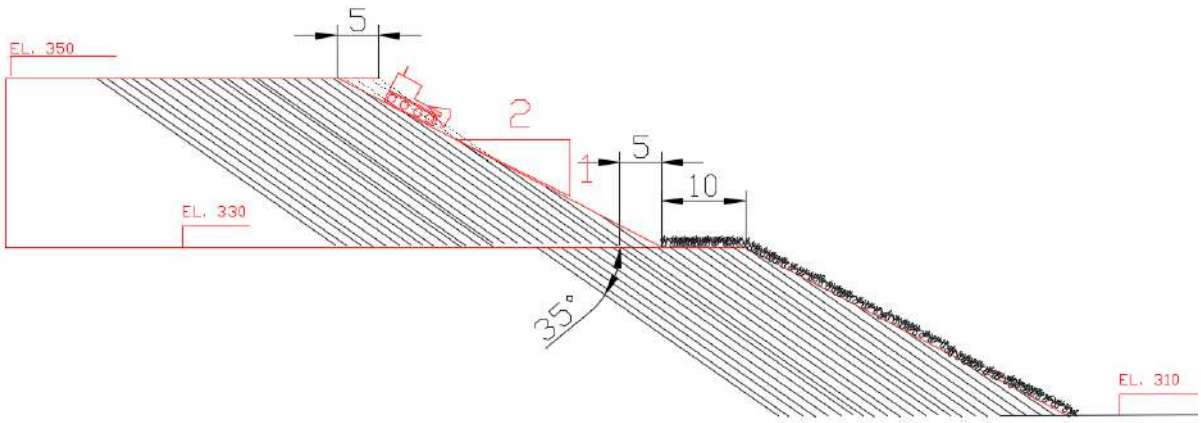
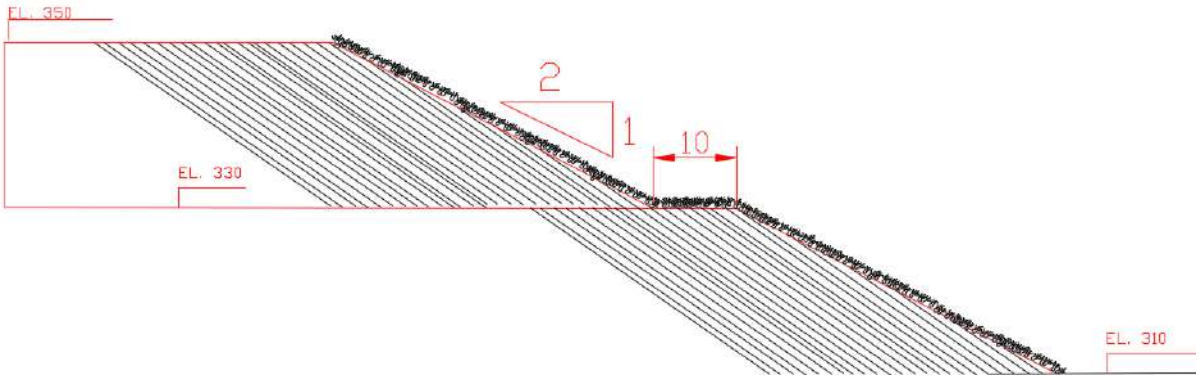


Figure 55: Completion of El. 350m bench and waste dump

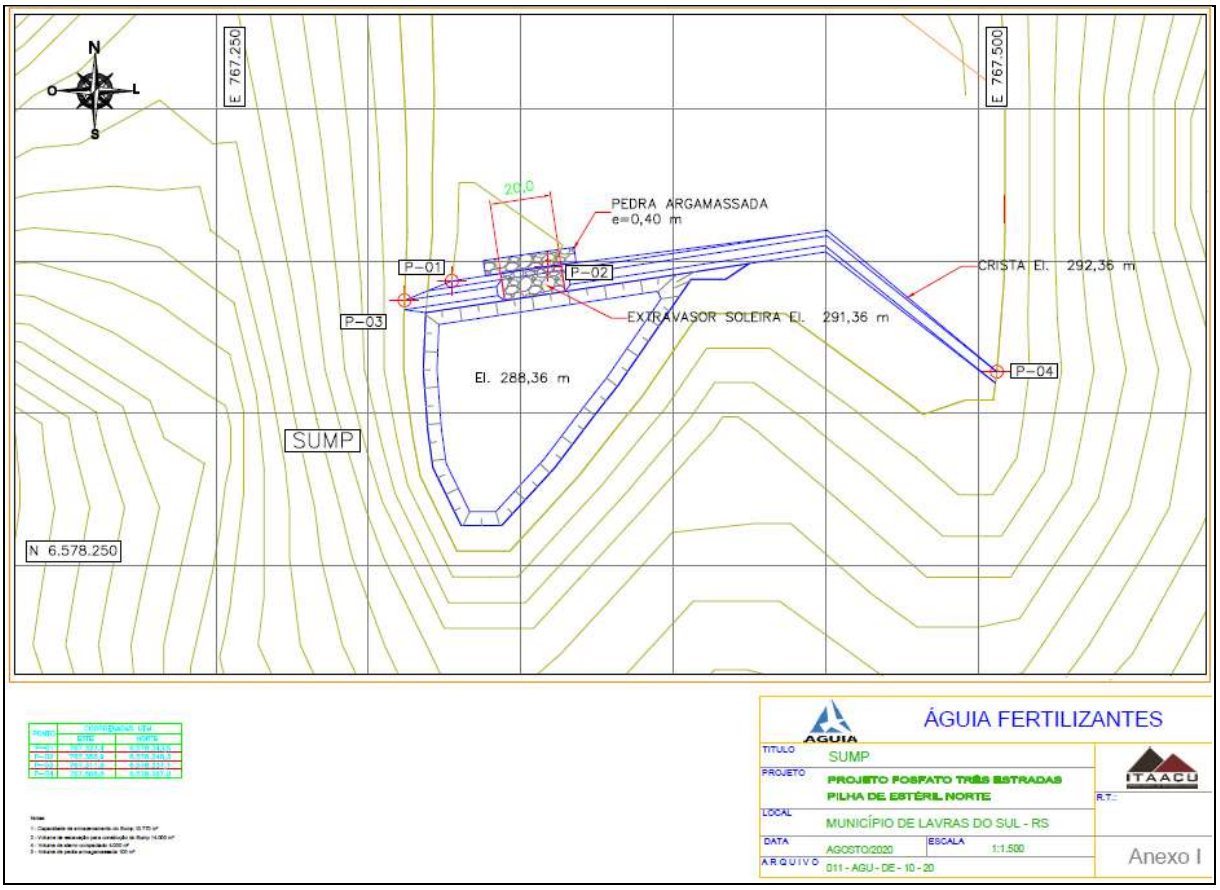


15.4.1. Sump

As a complementary structure for waste dump implementation, cuts and excavations will be carried out to implement the drainage structures specified above, as well as the implantation of a sediment containment box, called a Sump, in order to clarify the tailings before launching them back to the environment. Materials from excavations could be used as a landfill material for earthwork in the industrial area.

The Sump is located approximately 280m downstream from the waste dump in the north direction. The planned structure must occupy an area equivalent to 0.58 ha and will have a capacity for 10,770m³ of storage. Figure 56 shows a representation of the Sump.

Figure 56: PDE Sediment Containment Sump



15.5. Mine Fleet Sizing

Mine equipment will be provided by a contractor. The mining equipment is based on a small-scale mining projection to meet the selectivity requirements of the proposed mining. A JCB JS220LC hydraulic excavator, or similar, equipped with a 2.0m³ bucket, as well as Scania trucks, or similar, with 10m³ (36t) capacity was selected

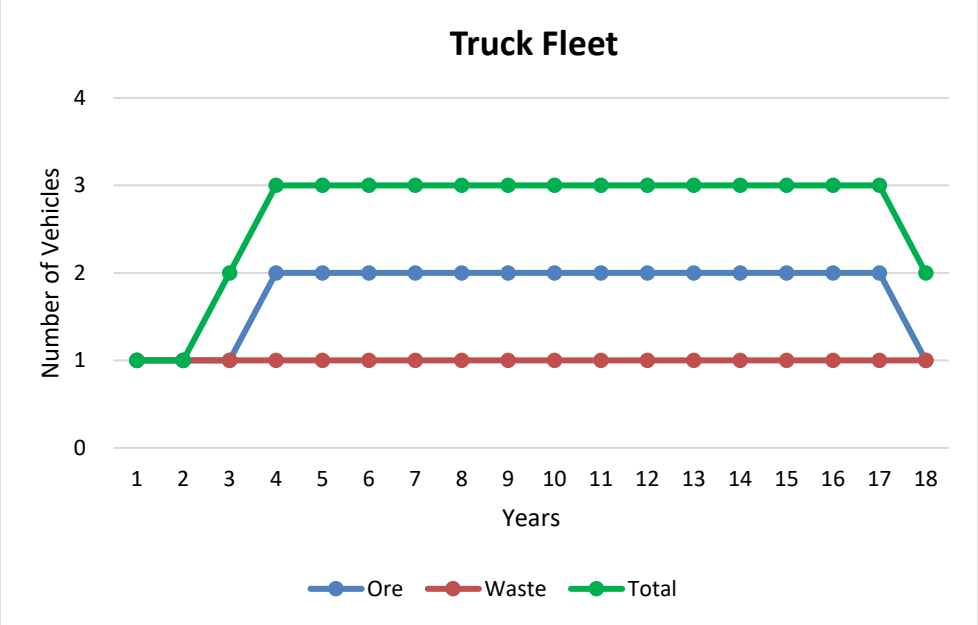
Table 44 shows the characteristics of the equipment that will be required on the Tres Estradas project.

Table 44: Mine Equipment Characteristics

Mine Equipment Summary				
EQUIPMENT	SUPPLIER	MODEL	CAPACITY	Nº OF EQUIPMENT
Hydraulic Excavator	JCB	JS220LC	2.0 m³	1
Dump Truck	Scania	G480 CB8X4NZ - HT	36 t	4
Wheel Loader	CASE	271E	2.0 m³	1
Tractor	LS Tractor	R65	65 HP	1
Bulldozer	CASE	1650L	156 HP	1
Motor Grader	CASE	865B	220 HP	1
Top Hammer Drill	Sandvik	DP 1100i	5"	1
Pickup Vehicle	Mitsubishi	L 200 - 4x4	1,800 kg	1
Forklift	Komatsu	-	4 t	1
Welding	Vonder	-	250A / 500A	2
Car 01	Renault	Oroch 1.6	4 pax – 1.200 kg	2
Car 02	Fiat	Uno 1.0	4 pax	1
Excavator	JCB	JS220LC	1,800 kg	1
TOTAL				**18**

GE21 estimated the annual fleet needed to meet the mine's schedule. For excavation, one Hydraulic Excavator is required for ore and waste, and for transportation the fleet required is presented in Figure 57 below.

Figure 57: Loading and Transportation Equipment



16. RECOVERY METHODS

The mineral processing facilities for the TEPP were designed considering Project Phase 1 where only the saprolite ore (CBTSAP and AMPSAP) will be mined and processed to produce a DANF product. The ROM in Project Phase 1 is composed of two types of oxidized material, being the carbonatite saprolite (CBTSAP)

and amphibolite saprolite (AMPSAP). The ROM will be transported by dump truck from the mine to the natural drying storage area to be dryed by the natural drying process. The dryied ROM will be recovered with a front loader and a dump truck to feed the processing plant. The operating regime will be 16 hours per day, six days per week.

Considering a production of DANF during Project Phase 1, the installation will consist of a simple processing plant with the following flow: Drying >> Grinding >> Sieving >> Storage.

16.1. Product Characteristics

Table 45 and Table 46 show the chemical and physical characteristics of the DANF produced from both CBTSAP and AMPSAP ores.

Table 45: Chemical characteristics of DANF products

Item	Unit	CBTSAP	AMPSAP
P_2O_5	%	9.0	5.0
CaO	%	16.0	10.5
MgO	%	4.5	7.5
K_2O	%	0.4	1.0
MnO	%	0.8	0.4
Fe_2O_3	%	18.0	15.0
SiO_2	%	31.0	39.0
Al_2O_3	%	5.7	8.0
P_2O_5 Solubility in Citric Acid	%	22.9	51.9

Table 46: Physical characteristics of DANF products

Sieve size	Unit	CBTSAP Passed particles	AMPSAP Passed particles
2.0 mm	%	100	100
0.84 mm	%	≥ 70	≥ 70
0.3 mm	%	≥ 50	≥ 50
Grain Size Classification	-	Powder	Powder

16.2. Process Description

16.2.1. Drying - Moisture Reduction

The drying process for moisture reduction of phosphate rock saprolite in the open air is simple and requires a minor investment. Also known as natural convection, the procedure consists of handling the ROM in stockpiles at open places and the ore drying out due to the forces of nature, causing the moisture reduction until the hygroscopic equilibrium point.

Natural drying consists of arranging the ROM in pad areas allowing it to air dry naturally until it reaches the equilibrium humidity of the environment. The speed with which the ore dries depends mainly on temperature, relative air humidity, and wind speed.

The natural drying process that will be implemented on the TEPP, consists of the construction of covered warehouses with open sides and capacity for storage of ROM ore with humidity ranging from 15% (critical) to 10% (average). The ore will remain in piles in the warehouses until reaching a humidity of 5% and will subsequently be driven for comminution (grinding).

The calculation of the required area was based on the demand for annual production and on the operational conditions defined, using experimental data, on natural drying of material with the same

characteristics as the ROM. Table 47 shows the material demands and the area needed for the natural drying process.

Table 47: Operational data for natural ore drying

Natural Drying	Specification
Feed moisture	18%
ROM (t/year)	350,000 – 640,000
Final moisture	8%
Final product (t/year)	300,000 – 550,000
Daily consumption of ROM piles (t/day)	1500 - 1800
Required area (m²)	21,000

The required area was based on the formation of piles considering the slope angle of the material, forming piles with a width of 25 m, with a maximum length of 170 m and a height of 2.5 m. The piles will be in a trapeze shape.

The ROM from the mine will be stockpiled with a dump truck and a front loader. The moisture control will be done during the operation shifts with the collection of samples daily to monitor the drying and identify when the ROM reaches the final humidity of 5% and is considered ready to feed the comminution process.

16.2.2. Comminution Circuit

During Project Phase 1 (Saprolite), ROM will be transported by 10m^3 trucks from the mine to the processing plant. After natural drying process the ROM will be dumped into a hopper and passed through a vibrating feeder with nameplate capacity of 120tph. The material is then dumped directly in a primary hammer mill circuit using mills as the model MMB-6560 or similar, without screen, coupled with a 75hp electric motor, with a nominal capacity of 80tph each.

The milled product (size less than 10 mm) will be transported by a conveyor belt to a high frequency sieve circuit. The sieve circuit will classify the material below 2 mm as the final product, and the particles above 2 mm in size will return to the milling circuit to be processed again. All moves of the materials will be proceeded by conveyors belt.

After the sieving step, the product will go to the bagging system and break bulk storage, which will be available for customer delivery. Another delivery possibility is in bulk by the bulk loading system.

Figure 58 shows the simplified flowchart of the granulometric comminution process and storage of product and Figure 59 illustrates the processing plant configuration for Project Phase 1.

Figure 58: Simplified flowchart of the granulometric comminution process

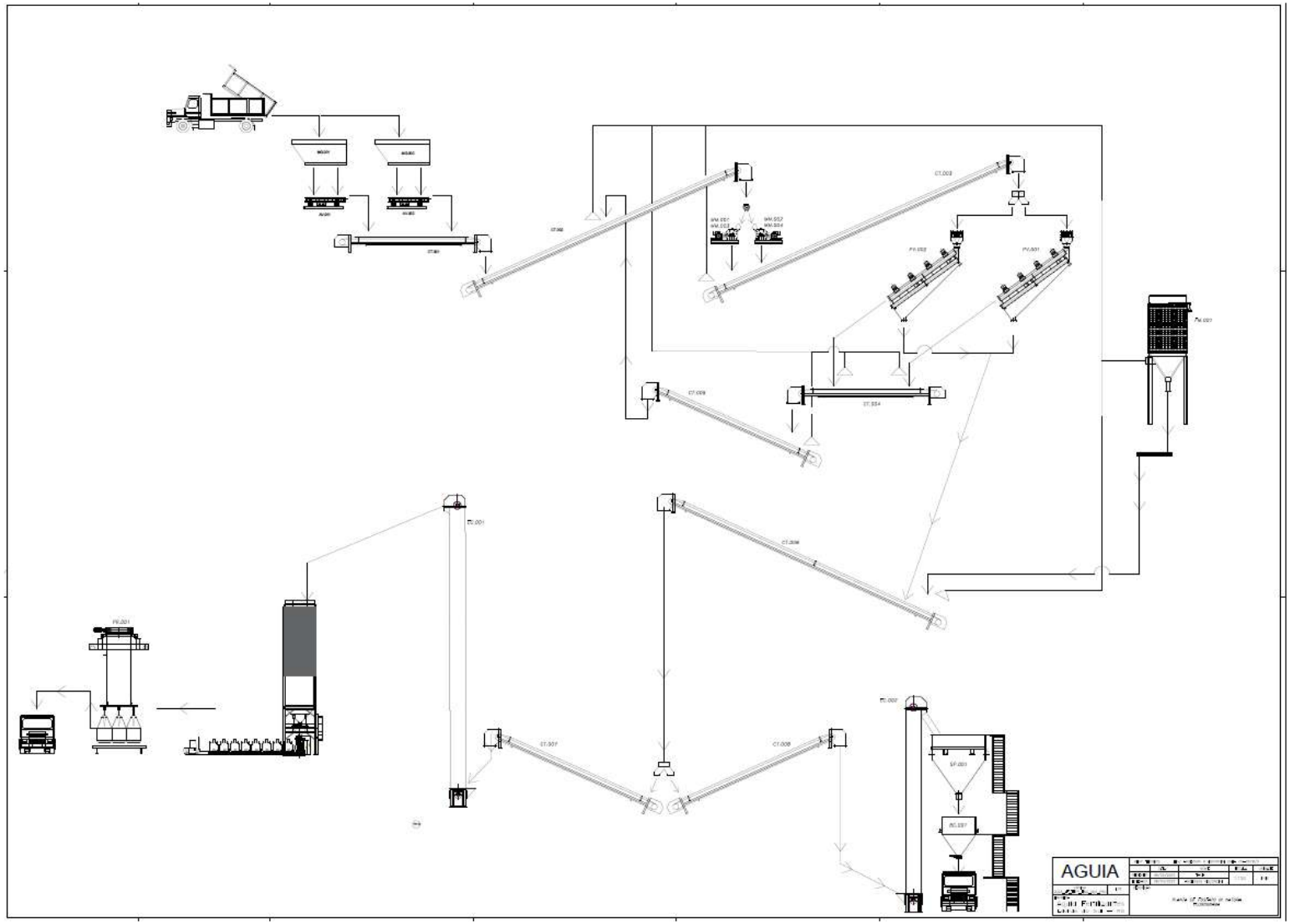
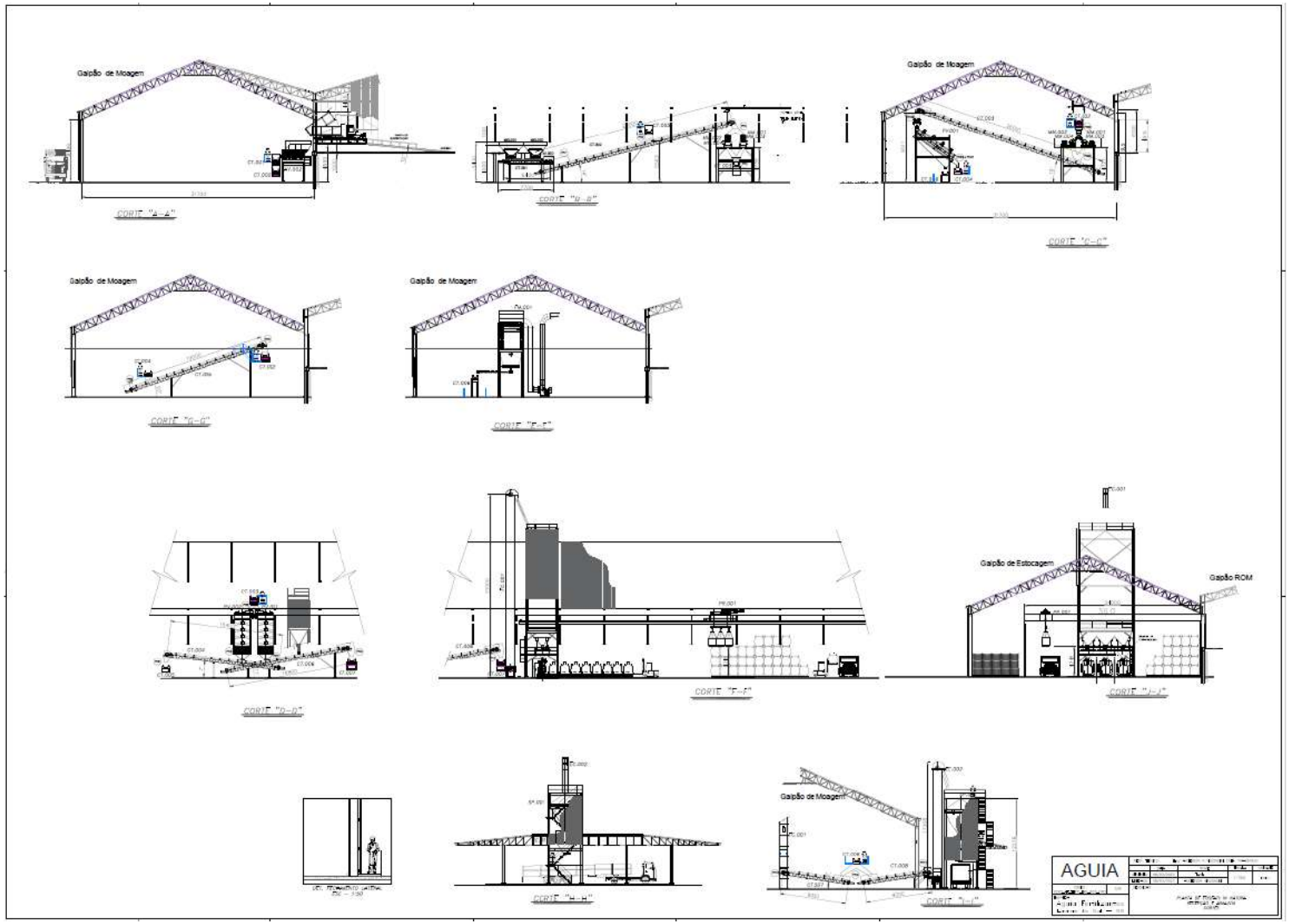


Figure 59: Processing plant configuration for Project Phase 1.



All material fed into the plant will become a product as there are no previous concentration steps, and the mass balance is not applicable in this process. The recovery considered is 95%.

As it is a dry process, no waste will be generated.

Table 48 shows the equipment to be installed in the processing plant unit.

Table 48: Processing plant equipment

Equipment	Quantity	Capacity	Power
Vibrating feeder	2	100 tph	10 hp
Conveyor Belt 6,4mx36"	1	100 tph	5 hp
Metal Extractor	1		10 hp
Conveyor Belt 27mx36"	1	100 tph	5 hp
Metal Detector	2		2 hp
Hammer Mill	4	80 tph	300 hp
Conveyor Belt 26mx36" (CT.003)	1		15 hp
High Frequency Screen	2	100 tph	20 hp
Conveyor Belt 15,4mx30" (CT.004)	1	100 tph	5 hp
Conveyor Belt 19mx30" (CT.005)	1	100 tph	10 hp
Conveyor Belt 17mx30" (CT.006)	1	100 tph	5 hp
Conveyor Belt 9mx30" (CT.007)	1	100 tph	5 hp
Conveyor Belt 9mx30" (CT.008)	1	100 tph	5 hp
Dedusting system	1		30 hp
Air Compressor	1		20 hp
Bucket Elevator	2	120 tph	40 hp
Bulk Loading System	1	120 tph	5 hp
Bagging System	3	90 tph	90 hp
Bridge Crane	1	90 tph	15 hp

17. PROJECT INFRASTRUCTURE

Safe and efficient production at the Tres Estradas Phosphate Project will rely on effective project infrastructure covering mine access, processing plant support, and administrative facilities. Engineering for plant, facilities and infrastructure has been done to an AACE Class 3 level, suitable for a Bankable Feasibility Study, and for post-study budgetary work.

The Project implementation strategy considers a phased approach, targeting the relatively low capital investment required for the initial phase of mining the saprolite ore (Phase 1). The establishment of the infrastructure is planned to guarantee a safe construction, with minimum interference to the operations.

The Master Plan prepared for the TEPP considered:

- The environmental aspects;
- Minimum transport distance between Mine / Plant / Mine;
- Final pit, waste pile, processing plant and access layout;
- ANM mineral tenure limits;
- Minor interference with rural properties.

Figure 60 shows the master plan with the main project areas, highlighting the mine pit, waste dump, sump accesses and industrial unit.

Figure 61 shows the industrial area of the project with the identification of the ROM pad area, production unit, administrative and support areas.

Figure 60: Project Infrastructure

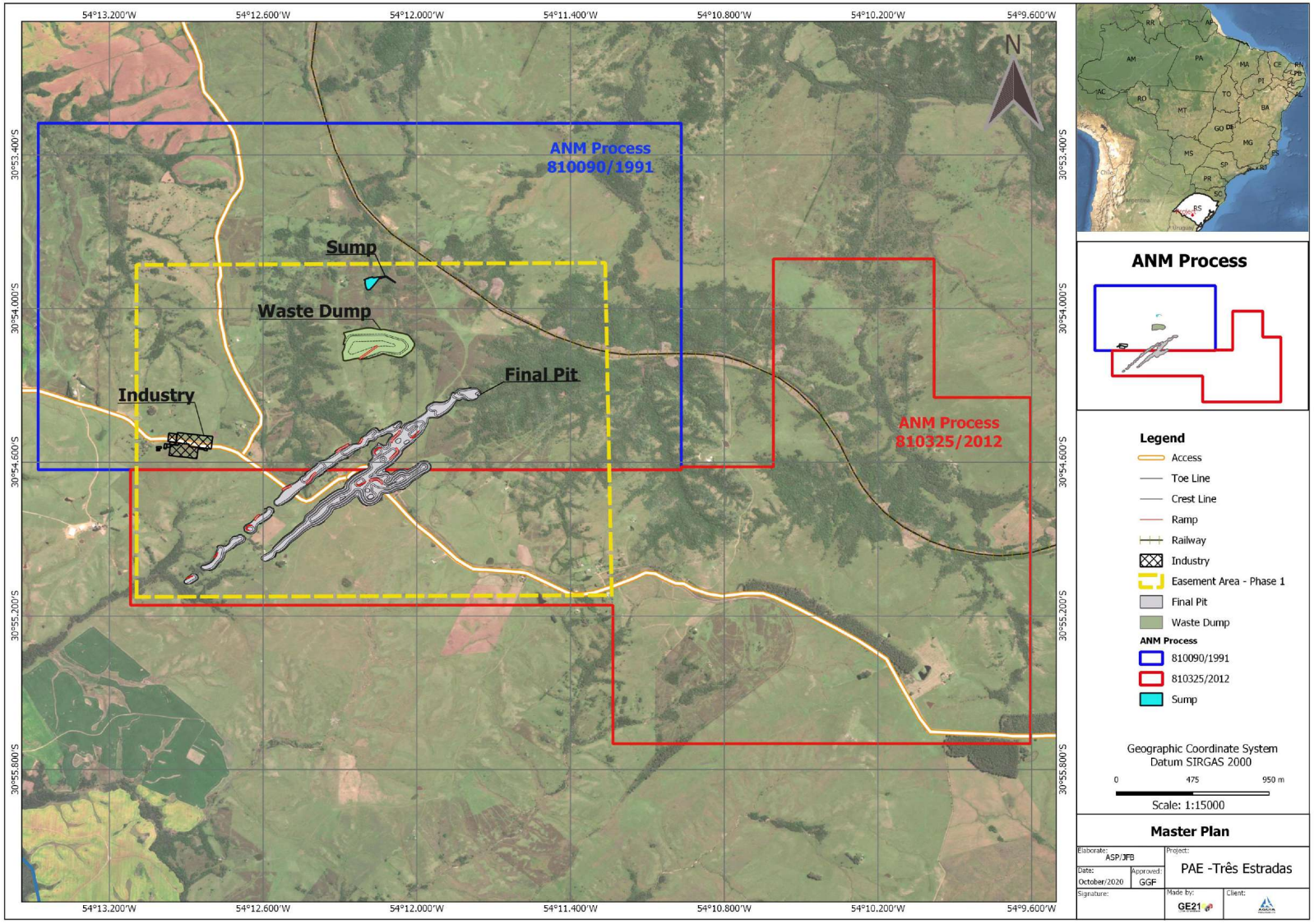


Figure 61: Industrial unit general arrangement

17.1. External Access

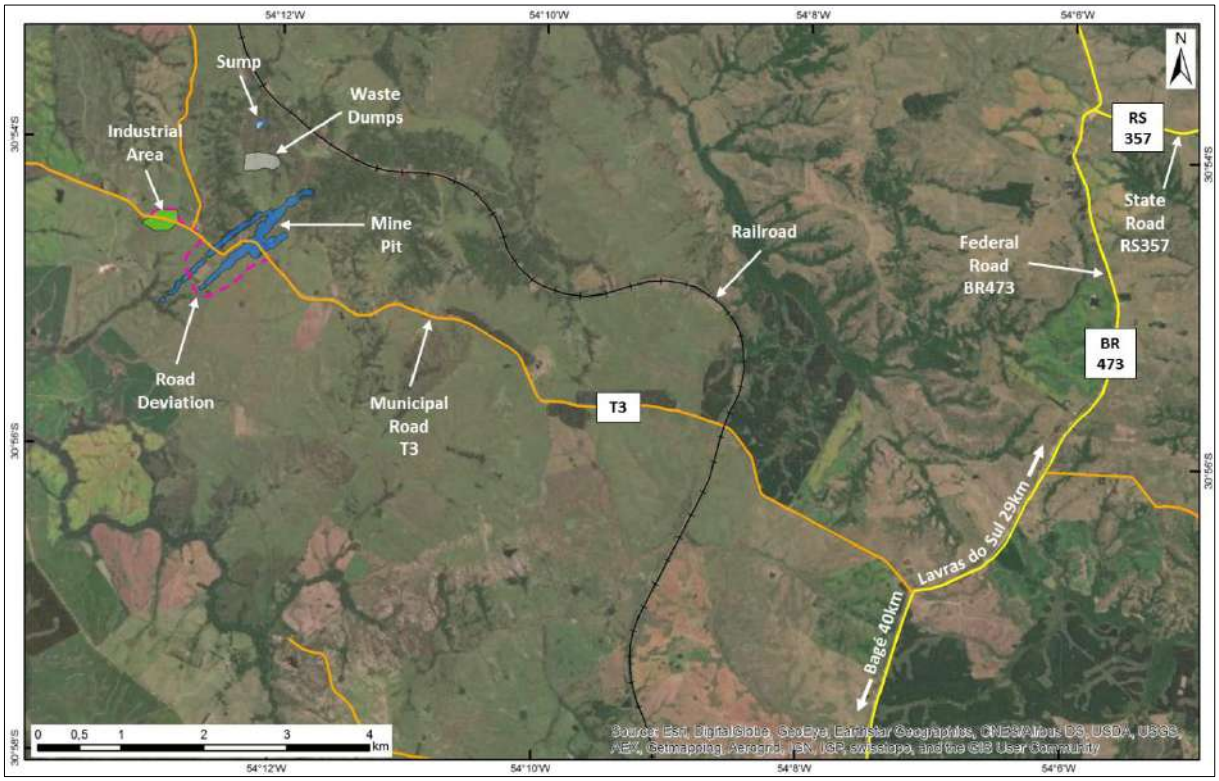
The main access to the project site will be via RS-357 and BR-473, state and federal roads, respectively, connecting Bagé city to Lavras do Sul city and a 9.0km long municipal road, nominated T3 (Figure 62). These roads are non-paved but well-maintained, that will handle the expected traffic increase during the construction and operation phases. It is assumed that maintenance would be performed by the DAER - Autonomous Roads National Department of Brazil. The use of 'over the road' trucks on Brazil´s existing extensive road system will be the primary means for incoming delivery of materials, supplies and equipment, as well for distribution of products.

In order to improve safety conditions, especially considering the expected heavier traffic during construction and operation, the intersections will need to be upgraded.

In addition, the 'T3' municipal road will require improvements at some points, including regrading and widening from the existing 4m to 8m. The drainage and paving surfaces will be restored and upgraded.

At Kilometer 3 of the T3 access road, there is a 35 m long viaduct over the railroad, which is only 4.6 m wide. At this point, a signaling system will be added, for traffic control and safety, while crossing the viaduct.

Figure 62: External Access



17.2. Internal Access

The internal project accesses and roads are highlighted in Figure 63. During Phase 1 (Saprolite), the following accesses will be established:

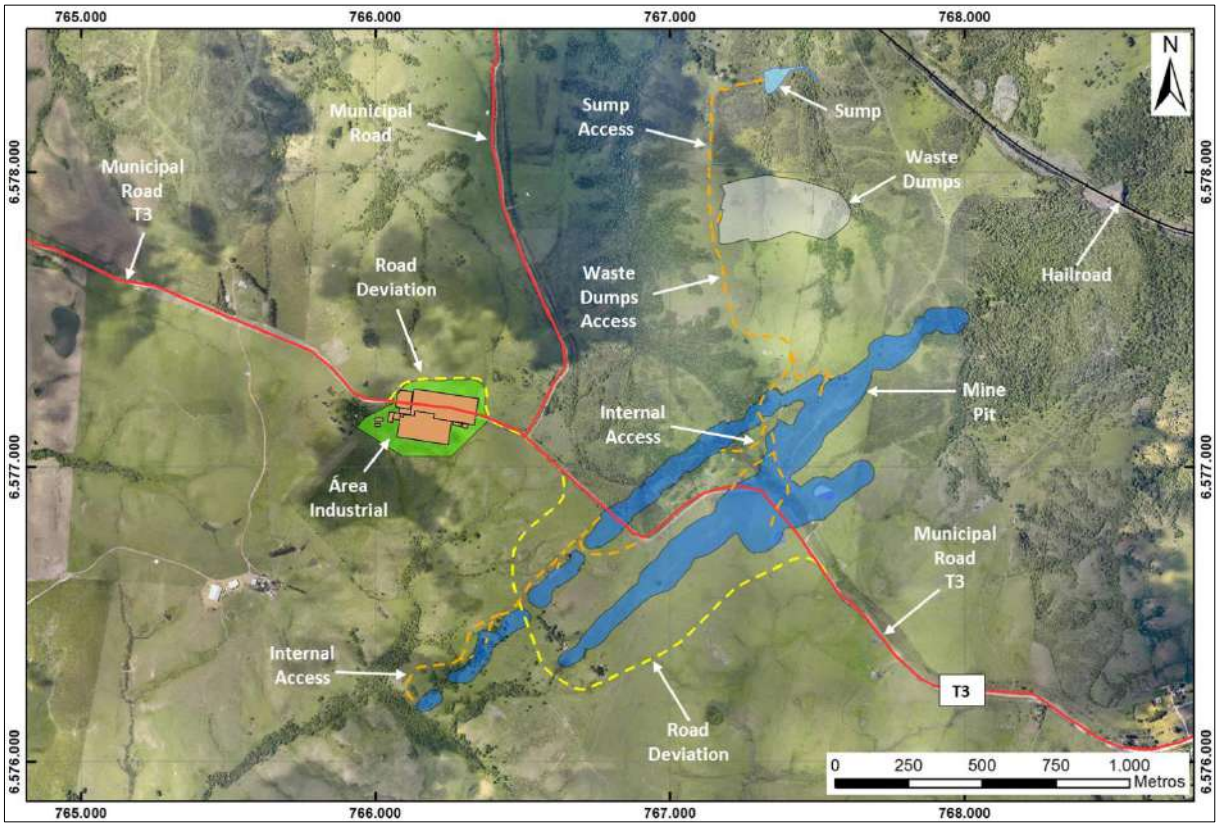
1. Deviation of the existing municipal road at south of the mine pit, between years 1 and 16 of Phase 1 (extension: 1,840m);

2. Deviation of the existing municipal road to the north of the Phase 1 industrial area (extension: 530m);
3. Haul road (extension: 2,730m);
4. Waste dump access (extension: 800m);
5. Sump access (extension: 640m).

The basic design characteristics for the internal mine accesses are as follows:

- Maximum ramp (longitudinal): 10%;
- Platform width: 8m;
- Type of paving: Primary coating.

Figure 63: Internal Access



17.3. Drainage System

The water from the bottom of the pit will be partly pumped into reservoirs where it will be used to supply water trucks for spraying roads, mining fronts and administrative area. The excess of this water will be sent to the sump at the north of the waste dump then released into the natural drainage system.

For the internal drainage of the waste dump, bottom drains will be built where the pile will be laid (see Figure 50, with the purpose of collecting and driving the excess infiltrated water in the pile, out of the foundation area, as well as to avoid raising the water level inside the structure, which can increase the poropressures, in addition to those caused by the foundation loading. This drain should have its discharge point about 2m beyond the foot of the pile where all the flow will be directed to the sump.

17.4. Water Supply

All water used for human consumption will come from the water treatment station that will collect and treat the rainwater from the roofs of sheds. The water used for sprinkling access roads, toilet flushes, among others, will come from rainwater storage and pumping water from the bottom of the pit.

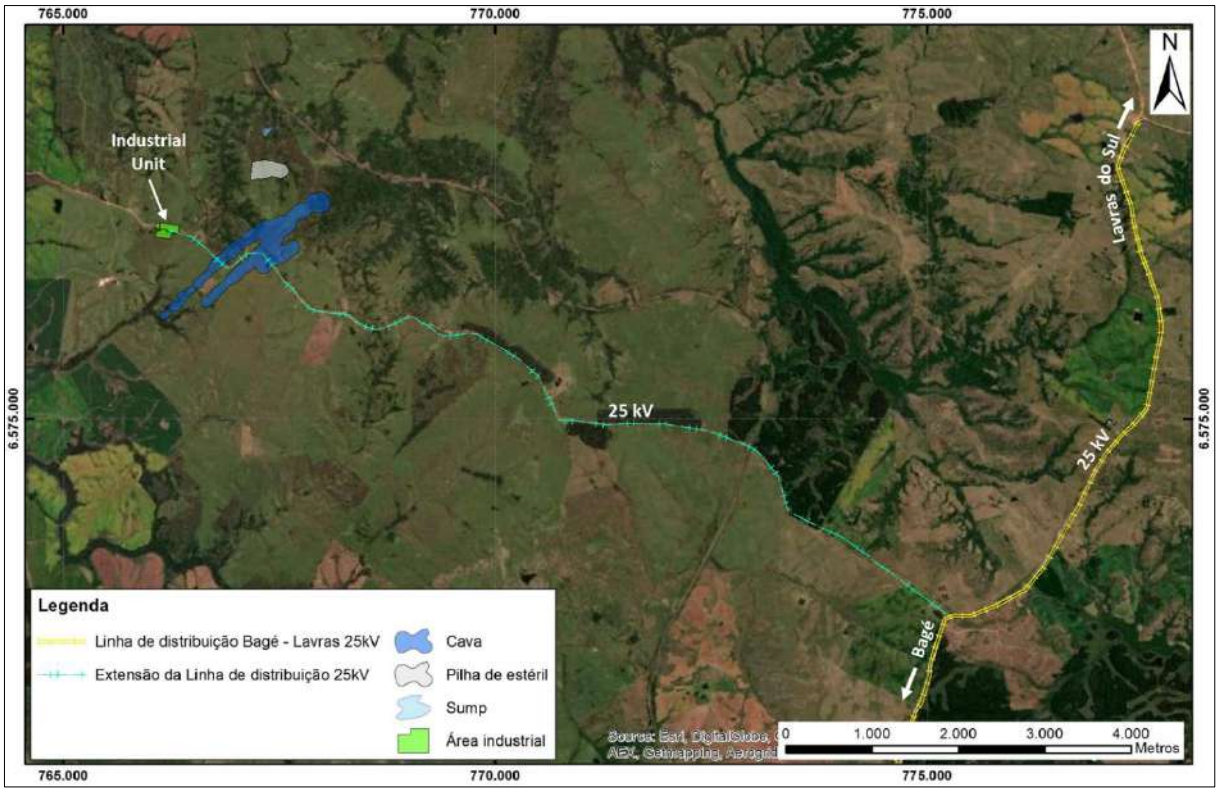
17.5. Power Supply

The power in the TEPP region is supplied by CEEE (Companhia Estadual de Energia Elétrica – RS – local power supplier). CEEE has 62 power substations in Rio Grande do Sul with a total capacity of 8,237.4MVA and 6,056 km of transmission lines which are supported by 15,058 structures and operate voltages of 230, 138 and 69 kilovolts.

The power demand for Project Phase 1 during the operation stage will be 750 kVA, equivalent to approximately 600 kW, which must be supplied by CEEE.

Based on the project, installed power and demand, a 25 kV line extension line should be built that will be about 10 km long, connecting the project area to the Bagé - Lavras distribution owned by CEEE (Figure 64). The connection to the processing plant facilities should be done through a lowering power substation, from 25 kV to 380 / 220V.

Figure 64: Medium voltage distribution line (25 kV) Bagé - Lavras do Sul andthe planned 25kV line extension



Aguia officially consulted CEEE, which confirmed the operational capacity to supply the project's demand. On June 17th, 2020 the Company presented CEEE with the technical project for the construction of the 25-kV extension.

In addition, the project also will have a photovoltaic electricity system with a nominal capacity of 600 kW with 933,321.8 kWh of energy produced in the first year. The system will consist of six Tie-Grid type inverters with a power capacity of 100kW each, certified by INMETRO, together with 1,836 photovoltaic

modules of 400W, arranged and connected in series, totaling a peak power capacity of 734.4kWp. Each module is certified by the Brazilian A-lable, covering an area of 1.94m². The inverters will be installed next to the product warehouse in a building protected from the weather. The photovoltaic modules will be installed on the roof of the production shed and product warehouse (Figure 65) facing north at an angle of 24°, covering a total area of 3,598.56m².

Considering the average consumption of 1,880,000 kWh/year during the project, the photovoltaic system will have the capacity to supply 870,000 kWh/year, about 46% of the energy consumed by the processing plant (Figure 66).

The photovoltaic system should allow for a reduction of 15,640,738kWh of energy being taken from the power grid over the 18 years of Project Phase 1, equivalent to consumption savings of AUD$2.85 million.

Figure 65: Arrangement of photovoltaic modules on the roofs of processing and storage units

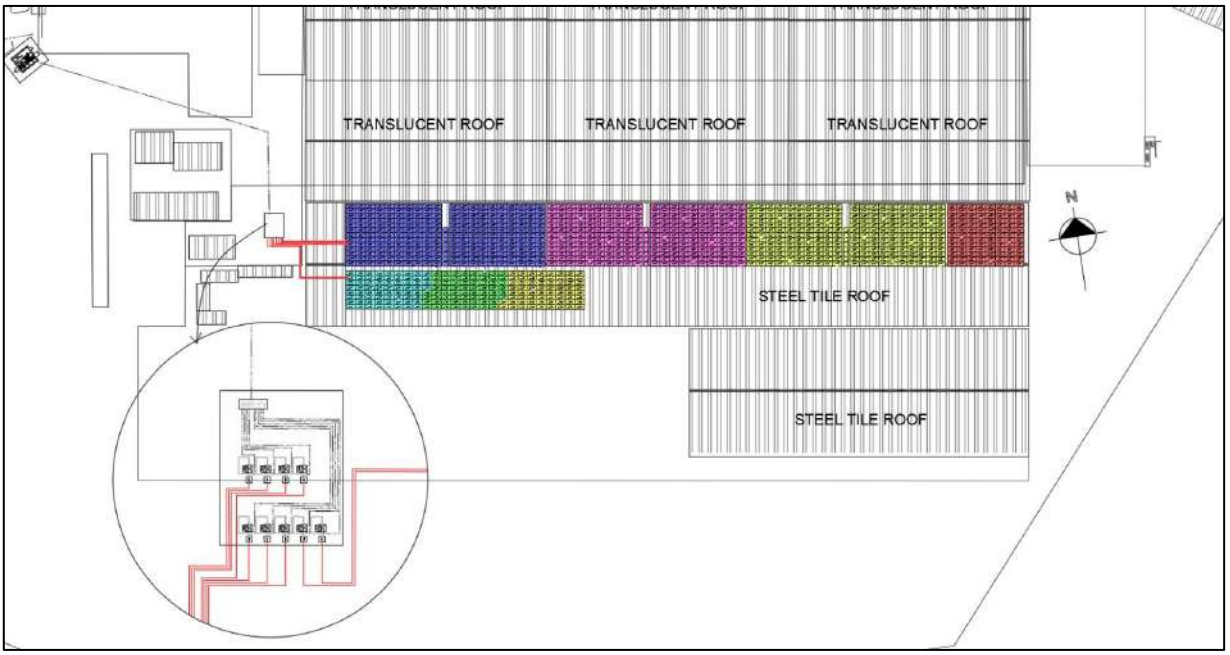
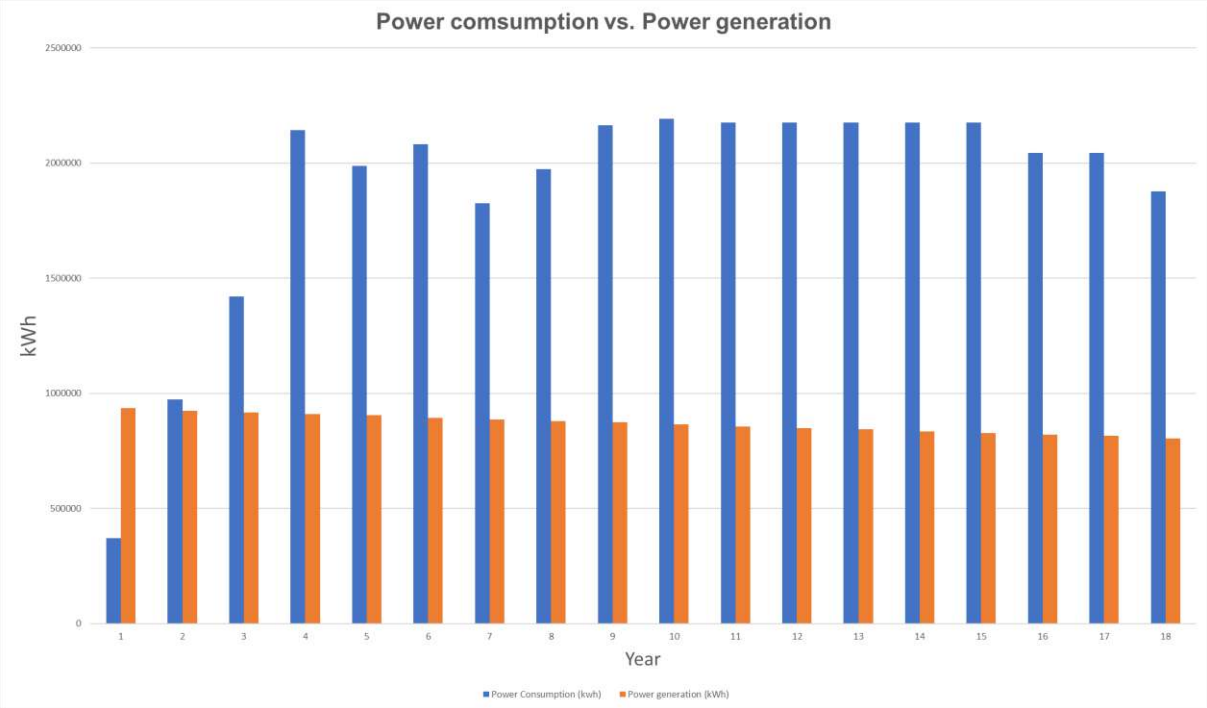


Figure 66: Power generated by the photovoltaic system vs. annual consumption



17.6. Communication System

A portable radio system should be installed to integrate communication between the various sectors of the mine, enabling speed and security in services.

External antennas will cover the radio and its range of approximately 10km and will be installed at the required height, with grounding in order to avoid damage to the equipment from lightning.

In the administrative area, a radio telephone system will be installed, interconnected with the mine and all operational, maintenance, administrative, and surveillance and property security services sectors. The project's internet will be via satellite.

17.7. Administrative and Support Facilities

The project's administrative facility area requirement is small in relation to the other processing buildings. However, they are indispensable units for the operation of the project, as well as the quality of local work. The surrounding area is rural, which requires full attention to the needs of the operation within the project's perimeter.

Considering the physiographic and environmental nature of the project area, with relatively leveled and competent terrain, the construction project considered the use of semi-permanent constructions for the administrative facilities.

The proposed system, which will be used in the building and operation phase, is based on modular architecture with standardized size container structures. Such structures can be installed directly on the ground, requiring relatively little preparation (only leveling and eventual slab construction). This type of structure can provide adequate facilities with a faster implementation schedule, less environmental impact, and less cost.

The required area for each installation was calculated based on the workforce schedule and in accordance with labor legislation and common practice in the Brazilian mining industry.

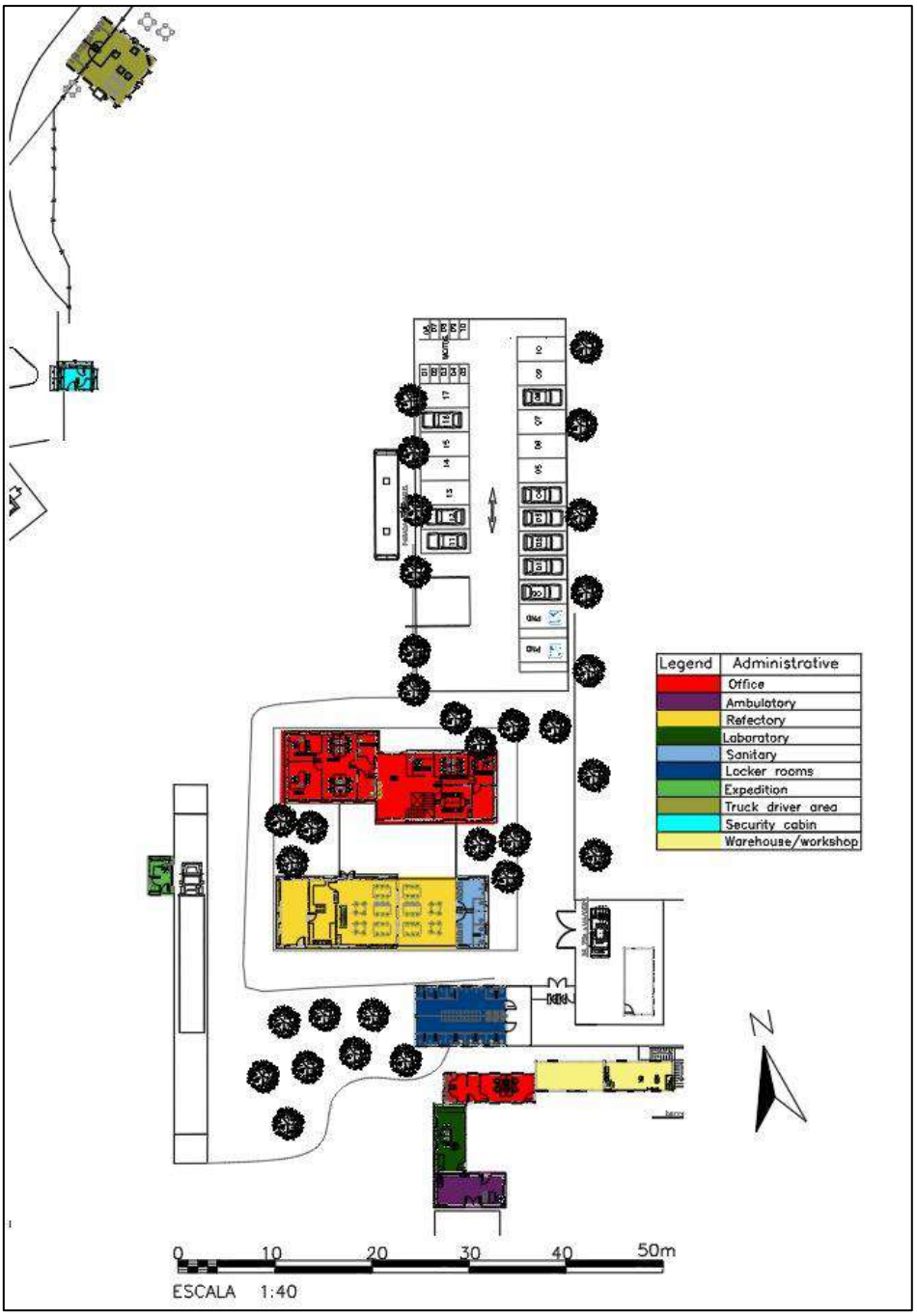
Table 49 shows the planned facilities for Project Phase 1 and the corresponding area required.

Table 49: Administrative and support facilities planned for Project Phase 1

	Unit	Terrain Level (m)	Area (m^2)
1	Warehouse	341.00	43.60
2	Truck parking area	344.50	2,917.23
3	Parking area	344.50	640.00
4	Administrative 1	345.00	528.43
5	Weighing and shipping	342.50	400.00
6	Core shed	344.00	360.00
7	Seedling nursery	343.50	200.00
8	Administrative 2	345.00	110.50
9	Truck driver area	344.50	36.00
10	Security cabin 1	344.00	9.12
11	Security cabin 2	344.50	9.12

Figure 67 shows the layout of the administrative buildings for Project Phase 1.

Figure 67: Administrative buildings



The Core Shed and Warehouse, with areas of 360m^2 and 180m^2, respectively, will be build with prefabricated metallic structures which allow for faster construction and less labor on site. These structures can be mounted directly on level ground, requiring relatively little preparation.

The Warehouse will serve as an area for the storage of spare parts and support for the processing plant maintenance equipment. This workshop will be responsible for the emergency, preventive and corrective maintenance of the main and auxiliary processing unit equipment.

There will be no generation of waste from the maintenance of vehicles and machinery in the mine area (oil containers, tow, disposable parts, scraps, drums, plastic bags, cardboard bags, etc.), as this maintenance will be carried out by a contracted workshop located outside the unit.

17.8. Logístics

The DANF product can be sold in the FOB (Free on Board) or CIF (Cost, Insurance and Freight) modalities.

In FOB modality, the final product is sold in the production unit itself and the seller's responsibility ends when the goods are dispatched. In this modality, the buyer is responsible for payments, risks, transportation and cargo withdrawal, as well as for taxes linked to freight.

In the CIF modality, the seller is responsible for the cost, insurance and freight. This modality offers more convenience to the buyer, since the selling company assumes the responsibility for delivery, that is, for the risks and costs, until the goods reach the recipient.

17.9. Signalization

The entire project area will have signs applicable to each situation and appropriate according to Brazilian standards for labor and mining industries. The roads and haul roads of the mine will have signs indicating direction, preference and maximum speeds. Also, risk areas, such as deposits of potential toxic or combustible materials, will be signaled with warning and prohibition signs applicable to each case.

18. MARKET STUDY

The Mineral Commodity Summaries 2023, produced by the United States Geological Survey (USGS), indicate that the Brazilian measured reserves of phosphate rock reached 1.6 billion tons, the worldwide reserves are estimated in 72 billion tonnes (Table 50).

Table 50: Ranking of countries with phosphate reserves and production in 2022. Source: USGS - Mineral Commodity Summaries 2023

Country	Mine Production (10^3t)		Reserves (10^3t)
	2021	2022	
Morocco	38,100	40,000	50,000,000
Egypt	5,000	5,000	2,800,000
Other countries	1,950	1,600	2,600,000
Tunisia	3,730	4,000	2,500,000
Algeria	1,400	1,800	2,200,000
China	90,000	85,000	1,900,000
Brazil	**6,000**	**5,500**	**1,600,000**
South Africa	2,130	1,600	1,600,000
Saudi Arabia	9,200	9,000	1,400,000
Australia	2,500	2,500	1,100,000
United States	21,600	21,000	1,000,000
Finland	990	1,000	1,000,000
Jordan	10,000	10,000	1,000,000
Russia	14,000	13,000	600,000
Kazakhstan	1,500	1,500	260,000
Peru	4,200	4,200	210,000
Uzbekistan	900	900	100,000
Israel	2,430	3,000	60,000
Senegal	2,100	2,600	50,000
Turkey	600	800	50,000
India	1.400	1,400	46,000
Mexico	488	450	30,000
Togo	1,000	1,500	30,000
Vietnam	4,500	4,500	30,000
World total(rounded)	**226,000**	**220,000**	**72,000,000**

According to the United States Geological Survey (USGS), the world phosphate production in 2022 was 220 million tonnes, with China accounting for 85 million tonnes, which corresponds to 38.6% of total production. Morocco appears as the second largest producer with 40 million tonnes in 2022 and being responsible for 18.2% of world production. In the same year, the United States produced 21 million tonnes, representing a share of approximately 9.5% of world production.

Within this context, Brazil has a modest participation. In 2022, the country was responsible for approximately 2.5% of the world production, with 5.5 million tonnes produced.

Sections 18.1 to 18.3 were based on a Market Survey prepared by Integrar Gestão e Inovação Agropecuária ('Integrar'), led by Dr Felipe Carmona.

18.1. Phosphate Production and Demand in Brazil

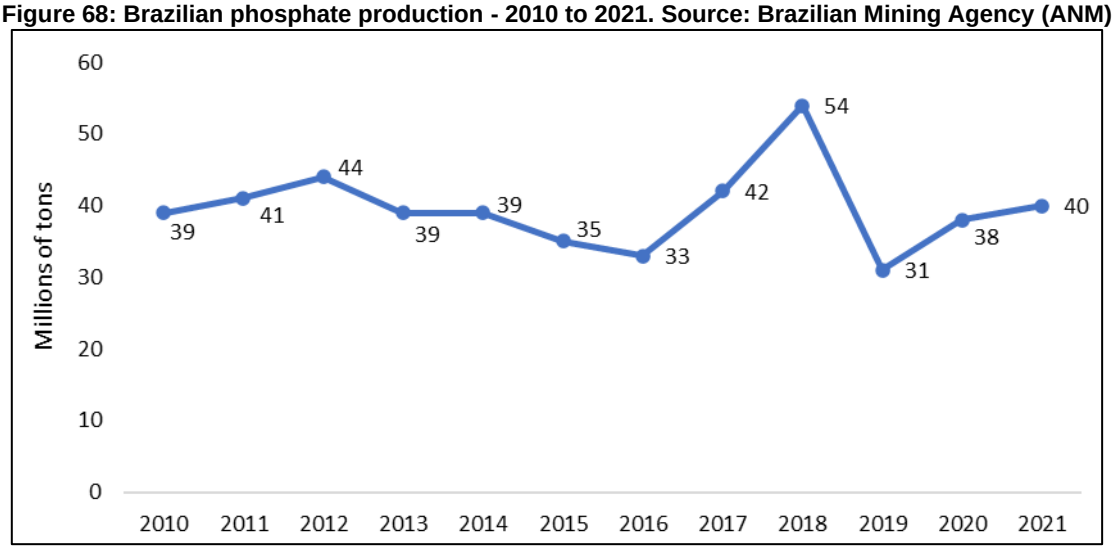
The fertiliser market has been facing several challenges over the last two years, such as the interruption of the supply chain due to a lack of products (because of covid-19), the natural gas price rise, the economic embargo imposed by the European Union and the United States on Belarus (since 2021) and the war between Ukraine and Russia (OSAKI, 2023).

Those factors resulted in the price rise of important intermediary fertilisers in many regions of the world. Therefore, the first semester of 2022 was incredibly challenging for Brazilian agents that wanted to purchase fertilisers due to the significant role played by Russia in this market, logistical bottlenecks and payment systems, and uncertainties about the global economic embargo on Russia. As a result, price averages of intermediary fertilisers skyrocketed in the first semester of 2022 compared to the same period in 2021; however, as the fertilizer supply has been a fertiliser price moved down at the end of the last year, returning to levels in 2021 (OSAKI, 2023).

Domestic phosphate production, based on the Brazilian mineral yearbook 2022 from the National Mining Agency, mainly originated from mines located in the states of Minas Gerais (MG), Tocantins (TO), Bahia (BA), São Paulo (SP), Goiás (GO) and Mato Grosso do Sul (MS). In 2021, 89% of the national production came from the states of MG and GO, mainly from the e Tapira, Serra the Salitre, Patos the Minas and Araxá (MG) and Catalão e Ouvidor (GO) mines, through the exploitation of carbonatites grading 11% P_2O_5 on average. (ANM, 2023).

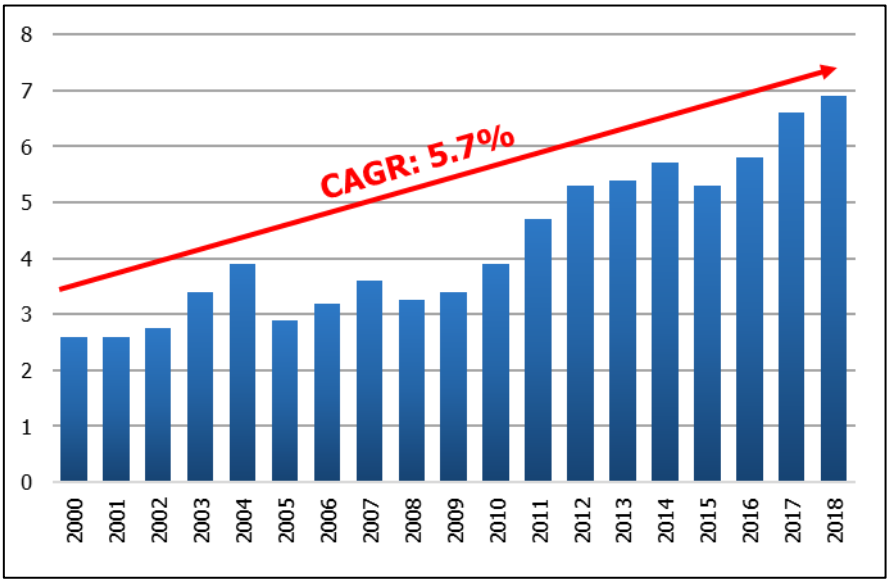
The official data of the ANM indicate that the national phosphate production between 2010 and 2021 remained stable between 39,0 and 40,0 million tons. However, after a brief period of fall in 2009 (39,0 million/ton) to 2016 (33,0 million/ton) in subsequent years, 2017 and 2018 showed the highest production within the 11-year period, where production was around 42,0 and 54,0 million tons.

Figure 68: Brazilian phosphate production - 2010 to 2021. Source: Brazilian Mining Agency (ANM)



Brazil is the world's largest exporter of agricultural products and should double its exports by 2024, but it needs domestic fertilisers. Between 2000 and 2018, the demand for phosphate nutrients more than doubled, from 2.6 million tonnes of P2O5 to nearly 6.9 million tonnes of P2O5 nutrients in 2018, resulting in a compound annual growth rate (CAGR) of 5.7%, as shown in Figure 69.

Figure 69: Brazilian phosphate demand in millions of tons of P_2O_5 nutrient



The global phosphate rock market is expected to grow from U$22.52 billion in 2021 to U$23.86 billion in 2022 at a compound annual growth rate (CAGR) of 6.0%. Furthermore, the phosphate rock market is expected to grow to $30.31 billion in 2026 at a compound annual growth rate (CAGR) of 6.2% (RESEARCH AND MARKETS, 2022). At the same time, the Brazil Fertilizers Market is projected to register a CAGR of 7.94% (MORDOR INTELLIGENCE, 2023).

According to Anda, in 2021, Brazilian fertiliser consumption totalled 45.85 million tons, and 85% of these fertilisers were imported. The primary origin of Brazilian phosphate is Marroco, with 28.5%, with the remainder coming from China (17.7%), Russia (17.6%), and Egypt (14.2%). Other countries include Saudi Arabia and Israel (13.8%). (GLOBAL FERT, 2022).

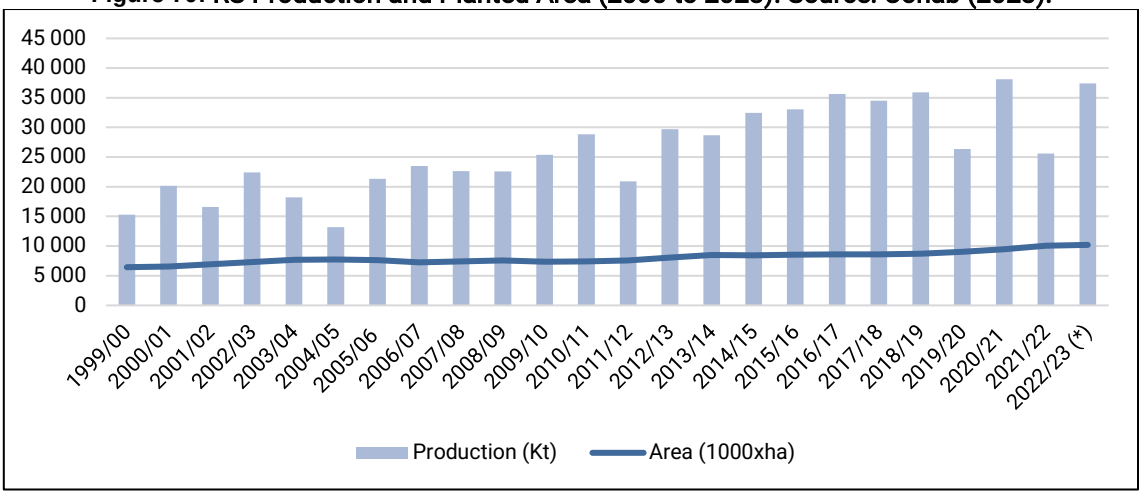
Taking growth in demand in the last two decades as a guide, driven by agricultural expansion in the country and the consequent increase in the consumption of fertilisers, which includes phosphates, it is observed that national production was unable to keep up with growth. While the national demand for P2O5 nutrients increased by around 165% between 2000 and 2018, national production grew slower in the same period. Despite the increase between 2004 and 2015, production decreased in the following years. In 2019, the national output registered was lower than in 2004. On the other hand, imports kept increasing to supply the demand.

18.2. Local Market

The TEPP is situated in the State of Rio Grande do Sul (RS) in Southern Brazil - where there is a high demand for phosphate fertilisers. Around 80% of all fertiliser used in RS is applied to two crops (soybean and rice) close to the TEPP.

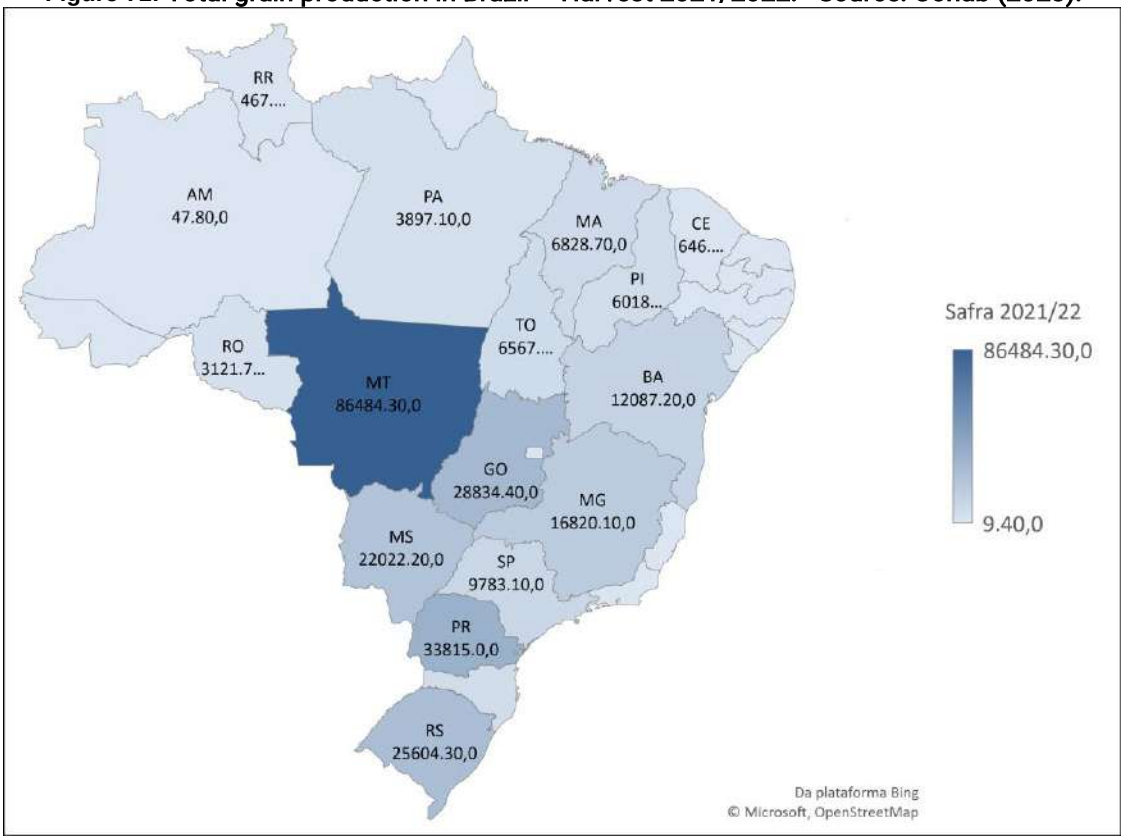
The planted area has a low growth rate (2.1% average per year), resulting in an increase of 58% in the last two decades (1999/2000 to 2022/23 crop). In the same period, the total production went from 20,172 thousand tonnes of grains to 37,430 thousand tonnes (an increase of 145%). Figure 70 shows these numbers' behaviour through time.

Figure 70: RS Production and Planted Area (2000 to 2023). Source: Conab (2023).



In the 2021/2022 harvest, RS occupied the fourth position among the most producing states in Brazil. According to the National Supply Company (Conab), in the 2021/2022 harvest, RS accounted for about 9.43% of Brazilian grain production, with a total production of approximately 25.6 million tons. However, these yields differ for agriculture in RS due to the severe drought in 2021 (Figure 71).

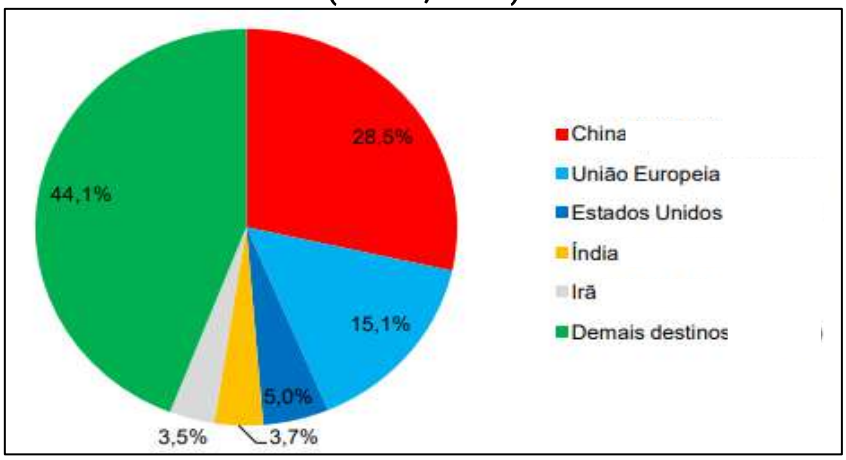
Figure 71: Total grain production in Brazil – Harvest 2021/2022. Source: Conab (2023).



In 2022, agribusiness exports from Rio Grande do Sul totalled U$S 16.0 billion, accounting for 71.5% of total exports from Rio Grande do Sul (Figure 3). The five main export sectors in 2022 were: soybeans (US$ 5.5 billion), meats (US$ 2.7 billion), tobacco and its products (US$ 2.2 billion), cereals, flour and preparations (US$ 1 .8 billion) and forest products (US$ 1.7 billion) and their main destinations, China (28.5%), European

Union (15.1%), United States (5.0%), India (3.7%) and Iran (3.5%) responsible for 55.9% of the value exported in 2022. (DEE, 2022)

Figure 72: Main export destinations for agribusiness products from RS in 2022. Source: Ministry of Industry, Foreign Trade and Services (BRAZIL, 2023a)



The area of RS is approximately 28.2 million ha, and about 10 million ha are currently used in grain crops. Data from Conab indicate that the grain cultivation area in RS grew around 30.5% between the 1979/1977 and 2021/2022 crops. As a result, grain production grew 122,1% in the same period, jumping from 11.5 million tonnes to 25.6 million tonnes. (CONAB, 2023).

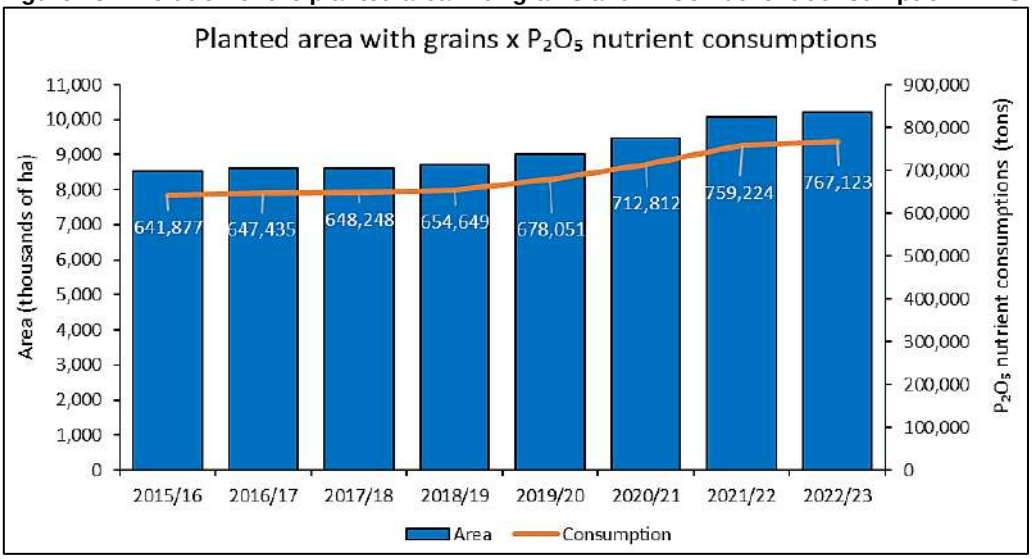
The projections for the next decade of the four main grains produced in RS (soybean, rice, maise and wheat) - seasons 2018/2019 to 2028/2029 - indicate an expansion of 5.6% in the planted area, increasing from 8.2 to 8.6 million ha. The projection for grain production in the same period is an increase from 34.3 to 43.1 million tonnes, resulting in a rise of 25.8% in production, as shown in Table 51 (MAPA, 2019).

Table 51: Grain Production and Planted Area Projections in RS. Source: MAPA (2019).

Crop	Grain Production (Thousand tonnes)			Planted Area (Thousand hectares)		
	2021/2022	2031/2032	Variation (%)	2021/2022	2028/2029	Variation (%)
Soy	9,330	13,011	42,8	6,210	7,420	19,5
Rice	7,771	8,260	6,3	927	1,032	3.1
Maise	3,000	3,969	32,3	772	319	-58,6
Wheat	3,540	4,659	31,6	1,230	788	15.5
Total	**23,641**	**29,899**	**26,5**	**8,215**	**8,679**	**5.6**

The planted area with grains in RS has advanced significantly in the last eight years, mainly due to the conversion of native fields in the southern half of the state into soybean crop areas. As a result, this region is currently one of Brazil's main agricultural frontiers undergoing expansion. Consequently, the estimate of phosphate consumption increased from about 642,000 tonnes of P2O5 nutrients in the 2015/16 harvest to 767,000 tonnes of P_2O_5 nutrients in the 2022/23 harvest (Figure 73).

Figure 73: Evolution of the planted area with grains and P2O5 nutrient consumption in RS.



Currently, RS imports 100% of phosphate needs, indicating a target market with high potential consumer demand.

18.3. Reference Price

18.3.1. Historical prices

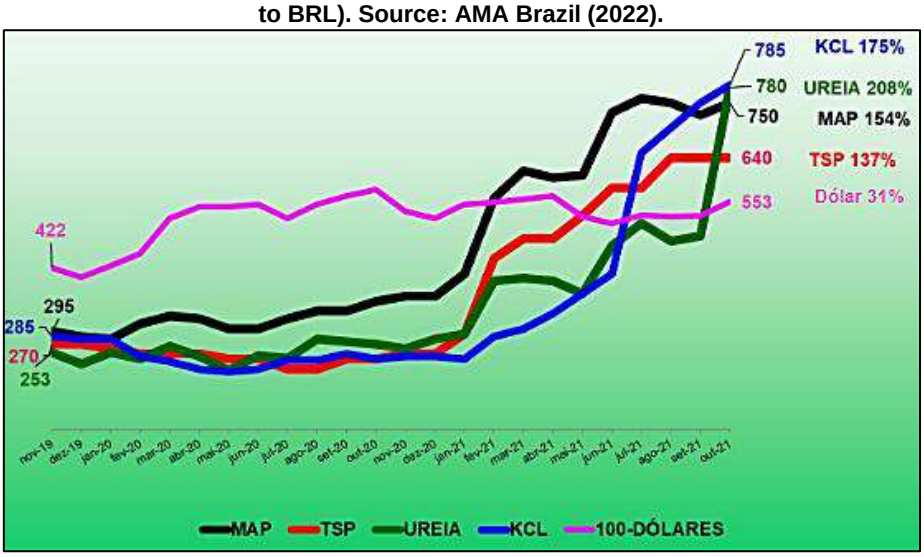
The study by Integrar shows that from November 2019 to October 2021, Brazil's leading fertiliser price increased by more than 100%. The year 2021 was marked by the high production costs of phosphates. Inputs such as sulphur, sulfuric acid, phosphoric acid and ammonia show price increases, consequently impacting the production of fertilisers. (GLOBAL FERT, 2022).

In 2018, fertilisers price increased due to the BRL devaluation, especially in the second half. Additionally, trade conflicts between China and the United States and political instability in the domestic environment were affected.

In the second half of 2021, China imposed restrictions on fertiliser exports. The lower availability of Chinese fertilisers on the market directly impacted price increases in Brazil. Furthermore, in 2022 with the war in Ukraine and Russia, raw material costs and availability were affected since 30% of the MAP origin in 2021 came from Russia. (GLOBAL FERT, 2022)

The potassium chloride (KCl) price went from US$ 285/t to US$ 785/t, an increase of 175%. The cost of MAP (mono ammonium phosphate) went from US$ 295/t to US$ 750/t, an almost 154% increase. The price of TSP (triple superphosphate) went from US$ 270/t to US$ 640/t, a nearly 137% increase.

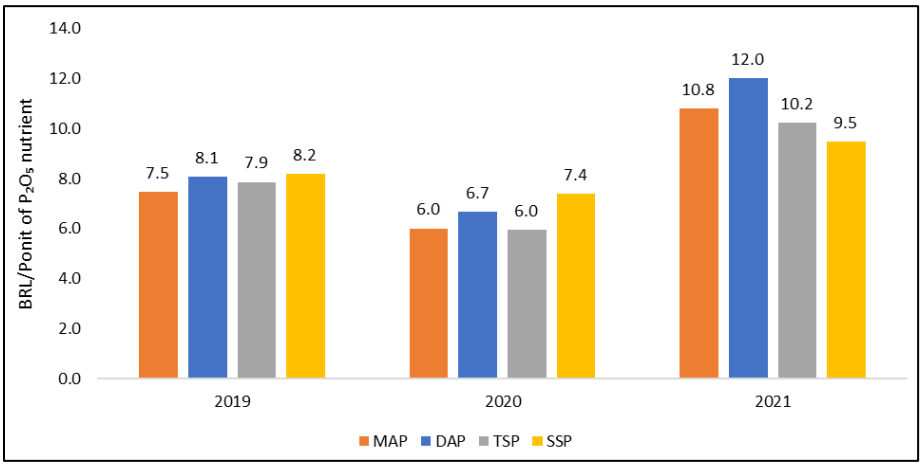
Figure 74: Fertilizer prices from 2019 to 2021 (US Dollars, except the US Dollar to BRL). Source: AMA Brazil (2022).



Considering the price of P_2O_5 nutrient point in BRL, the study conducted by Integrar shows that the main phosphate fertilisers used in Brazilian agriculture are MAP, with 52% P_2O_5 content, simple superphosphate (SSP), with 19 to 21% P_2O_5content, triple superphosphate (SSP), with 42% P_2O_5 content and diammonium phosphate (DAP), with 46% P_2O_5 content.

The study shows that the price of P_2O_5 nutrient point is variable between sources (products), with the highest cost per P2O5 point from diammonium phosphate, with an increase from US$ 8,1/ P_2O_5point in 2019 to almost US$ 12,0/ P_2O_5point in 2021. In the same period, the MAP variation went from US$ 7,5/P2O5 point to US$ 10,8/ P_2O_5 point, and the TSP went from US$ 7,9/ P_2O_5 point to US$ 10,2/ P_2O_5 point (Figure 75).

Figure 75: Price evolution of P_2O_5 nutrient point in the main phosphate fertilisers for last three years in Brazil – US Dollars. Source: Outlook Global Fert 2020,2021, and 2022.



18.3.2. Competitors and prices

Currently, the State farmers have access to P_2O_5 from chemical sources such as MAP (the most used), TSP and SSP. In addition, the natural phosphate fertilisers sold in the State are from Peru, Marroco via the mixer companies in the Rio Grande Port or from Minas Gerais (Brazil Southeast).

Farmers were consulted on the prices at that they bought their latest orders of phosphate fertilisers, so based on the quotations they presented, the analysis was conducted.

The analysis comprehends four sections:

a) From: the product, supplier, source (where it is mined) and “price at” means where the product is available at the mentioned price (FOB from there).
b) Gross price: the price that the product is being sold (including customs), its % of P_2O_5 and the price for each percentage point (p.p.) of P_2O_5.
c) Additional costs: refer to the extra volume of Pampafos necessary to deliver the same quantity of P_2O_5 and its associated costs with freight and application.
d) Equivalent price: means the price that Pampafos should be sold if we try to be even with the analysed competitor.

Taking the abovementioned factors into account, it was applied a discount for the additional costs the producer would incur for the extra volume due to ore grade (shipping and handling), the average price of competitors and/or substitute products adjusted to a similar grade was AUD 129.00 (lowest AUD 94.80, and highest AUD 174.80).

Aguia has conducted an early bird sales campaign of products to be delivered after the commissioning of the plant and has signed non-binding memorandums of understanding (MOU) for the sale of 20,000 tonnes of Pampafos at AUD 120.00. Integrar believes that based on the market research and the scarcity of phosphate sources in the Brazilian South region and the agronomic performance of the product, the prices proposed by Aguia are feasible. Aguia also counts with commercial advantages such as prompt availability, low volumes, lower exchanged exposition, etc.

Besides that, Aguia has also a non-binding MOU of 30,000 with a key fertiliser and agroproducts distributor, Tuch Solucoes Comerciais LTDA (Tuch), as announced on 26 October 2021. Tuch has an extensive customer portfolio with approximately 500 producers covering 50,000 hectares of ground over some of the most productive agricultural regions in Southern Brazil. Tuch is a progressive agronomical organisation with a keen interest in sustainable agriculture and the sourcing of organic products for their clients. Tuch approached Aguia because, having heard of our outstanding agricultural testing results they recognised a unique business opportunity as they already have clients who pay to transport natural fertiliser from some 1,500 kilometres north of farming lands in RS due to it not being available locally. The price applied to this agreement was AUD 74.00 back in October 2021, there were provisions to updade the price over time and negotiations to update it are taking place.

18.4. CP Opinion

GE21 relies on Market Study prepared by Integrar Gestão e Inovação Agropecuária (‘Integrar’).

GE21 understands that the product price and other market assumptions and projections, presented in the Market Survey prepared by Integrar by (Sections 18.1 to 18.3 above), can change over short periods of time, as the current price is influenced by external factors causing temporal volatility.

19. ENVIRONMENTAL STUDIES, PERMITTING AND SOCIAL OR COMMUNITY IMPACTS

Environmental licensing for mineral extraction activity is mandatory in Brazil and must be carried out in accordance with Federal Decree No. 99.274 / 90, which regulates Federal Law No. 6.938 / 81, which in turn instituted the National Environment Policy.

The environmental agency responsible for the environmental licenses of the Tres Estradas Phosphate Project is the Fundação Estadual de Proteção Ambiental - FEPAM. This is the institution responsible for environmental licensing in Rio Grande do Sul State, subordinate to the Secretaria Estadual do Meio Ambiente – SEMA. FEPAM is one of executive secretaries of the Sistema Estadual de Proteção Ambiental - SISEPRA, instituted by State Law No. 10,330 / 94

One of SISEPRA's environmental policies is to promote integrated action by the State's environmental agencies. As a result, to submit an Environmental License application, the enterprise must first obtain a License from the City Hall, through which it expresses its agreement regarding the installation of the enterprise in its geo-political territory. Specifically, for mining activities, FEPAM also requires from the company, consent from the Agência Nacional de Mineração - ANM, regarding the use of the ore, given that the Union is the holder of rights over mineral resources in Brazil. Both agencies agreed to the Tres Estradas Phosphate Project.

Also, according to CONAMA Resolution No. 237/97, which defines concepts, procedures and criteria used in environmental licensing, the three-phase model is the rule for Brazilian environmental licensing, which is divided into the stages of the Preliminary license (LP), Installation license (LI) and Operating License (LO). Thus, in three-phase licensing, the company must first obtain the Preliminary License (LP), which attests to the viability of the activities in terms of their design and location, as provided by CONAMA Resolution No. 09/90.

In this regard, also in compliance with State Law No. 11,520 / 00, which establishes the State Environmental Code of the State of Rio Grande do Sul, the Preliminary license for the Fosfato Tres Estradas Project was requested from FEPAM, which is the first license to be requested in the preliminary planning phase of the project and which will assess the environmental feasibility of the project.

In this stage of the Environmental Licensing and in compliance with CONAMA Resolution No. 01/86, the EIA / RIMA was presented to support the stage of analysis of the technical, environmental and location feasibility of the project. It is important to point out that the EIA is a constitutional instrument of the National Environment Policy - PNMA, whose previous main auxiliary is, as a source of technical information, the full and total achievement of the objectives set by the National Environment Policy, according to Law no. 6,938 / 81.

The Environmental Licensing of the Fosfato Tres Estradas Project was processed by FEPAM under number 007404-0567 / 18-8 and, after the technical and legal analysis of the project, the environmental agency decided to grant the LP No. 00355/2019 on October 15th 2019. The LP is the environmental document which assure the environmental viability of the proposed area for the Tres Estradas Phosphate Project.

As noted, the Tres Estradas Phosphate Project is expected to be installed in three distinct phases and, after long studies, it was concluded that Phase 1 should be implemented for the production of DANF.

Thus, for the continuation of the project's licensing, with a focus on obtaining the Installation License (LI) for Phase 1, a report was presented to FEPAM, which demonstrates the environmental impact reductions resulting from the adaptations of this phase of the project, such as the elimination of structures including tailings dam, dam to capture water and pipelines, reduction of energy consumption and volume of waste material, among others.

Through this report, FEPAM was asked to review the conditions imposed by LP No. 00355/2019, as well as part of the environmental plans and programs previously proposed for the purpose of making them compatible with the scope of reduced impact intended for Phase 1.

It is noteworthy that, through FEPAM / DMIN-OFDSOL nº 00976/2020, FEPAM manifested itself in favor of the claim, clarifying that the reduction of the scope of the Project approved in the LP does not alter the conditions of validity of the LP 355 / 2019 and also pointed out that there are no objections to changing the environmental programs for the next phases of environmental licensing so that they become compatible with the reduced scope of the project.

FEPAM granted the Installation License (LI) No. 00243/2022 for the so-called Phase 1 in November 31st, 2023. Nevertheless, the FEPAM subdivided the installation stage in Installation Step 1 and Installation Step 2. According to Technical Report DECONT nº 62/2022, the so-called Phase 1 – Step 1 excludes one of the properties (property 8), due to the lack of effective conclusion in the land acquisition negotiations with the land owner. However, once Aguia presents to FEPAM a proof of ownership or possession of the land property 8, based on an acquisition or leasing agreements, there are no impediments to the future reinclusion of the property currently excluded from Phase 1 – Installation Step 1.

Based on the analyzed documents, considering the characteristics of the Três Estradas Phosphate Project and the applicable legal regulations, regarding the environmental licensing process with FEPAM, the environmental viability of the intended mining activity has been proven, attested by the issuance of the Preliminary License and Installation License issued by FEPAM.

Worthy to be mentioned, even with the Installation License (LI) granted by FEAPM, which allows the Project construction, the Company has decided not to start construction because of the Public Civil Action (PCA) in progress, ruled against Aguia by the Federal Public Prosecutor's Office (FPPO), in benefit of possible settlement negotiations. The proceedings brought against Aguia and FEPAM alleges flaws in the Environmental Impact Assessment (EIA). The grounds of the PCA were:

a) that Traditional Community of family ranchers present on the land affected by the TEPP was not consulted and did not provide prior, free and informed consent.

b) a second public hearing should have been held to encompass those people in the Municipality of Dom Pedrito and in the Torquato Servero district (locations that would be affected by environmental impacts of the TEPP), in addition to the public hearing held in Lavras do Sul.

c) Technical discrepancies in the EIA that was presented to FEPAM.

There was a first favourable decision, which had been appealed and granted, there is still an injunction request pending of decision that could prevent the Company from starting construction until the court makes a decision. Both the federal prosecutor currently representing the FPPO in the PCA and the federal trial court judge in charge of the case responded positively to Aguia's attempt to negotiate with all parties involved to resolve the matters under dispute as soon as possible. Between December 2022 and February 2023, a couple of meetings were held between the parties to discuss a possible settlement. The Company is confident that it should come to an end in a near future, however depending on the FPP, associations and Court.

20. CAPITAL AND OPERATING COSTS

20.1. Accuracy of the Estimates

The American Association Cost Engineering (International) (AACE) has established a well-recognized system for cost engineering classification; the International Recommended Practice No. 47R-11 - Cost Estimate Classification System - As Applied in the Mining and Ore Processing Industries. The No. 47R-11 establishes level of development of key feasibility study documents that are used to develop the estimate as shown in Table 52.

Table 52: Cost Estimate Classification Matrix (AACEi – 47R-11)

	Primary Characteristic	*Secondary Characteristic*		
ESTIMATE CLASS	**MATURITY LEVEL OF PROJECT DEFINITION DELIVERABLES** Expressed as % of complete definition	**END USAGE** Typical purpose of estimate	**METHODOLOGY** Typical estimating method	**EXPECTED ACCURACY RANGE** Typical variation in low (L) and high(H) ranges[a]
Class 5	0% to 2%	Conceptual planning	Capacity factored, parametric models, judgment or analogy	L: -20% to -50% H: +30% to +100%
Class 4	1% to 15%	Screening options	Equipment factored or parametric models	L: -15% to -30% H: +20% to +50%
Class 3	10% to 40%	Funding authorization	Semi-detailed unit costs with assembly level line items	L: -10% to -20% H: +10% to +30%
Class 2	30% to 75%	Project control	Detailed unit cost with forced detailed take-off	L: -5% to -15% H: +5% to +20%
Class 1	65% to 100%	Fixed price bid check estimate	Detailed unit cost with detailed take-off	L: -3% to -10% H: +3% to +15%

Notes: [a] The state of technology, availiability of applicable reference cost data and many other risks affect the range markedly. The +/- values represent typical percentage variation of actual costs from the cost estimate after application of contingency (typically at a 50% level of confidence) for given scope.

Capital and operating costs for the project have been completed according to a cost estimation classification system, as proposed by the American Association of Cost Engineers (AACE). The majority of costs have been estimated to a standard appropriate for post-feasibility study budgeting ('Class 3'). Typical accuracy ranges for Class 3 estimates are -10% to -20% on the low side, and +10% to +30% on the high side, depending on the technological, geographical and geological complexity of the project, appropriate reference information, and other risks (after inclusion of an appropriate contingency determination). The uncertainty varies by work type with moderate ranges applying to structures and plant commodities, wider ranges applying to earthworks and infrastructure and narrower ranges applying to equipment installation. An exchange rate of BRL 2.85 : AUD 1.00 for the Australian Dollar (AUD) to the Brazil Real (BRL) was assumed; costs are reported on a constant AUD basis, as of March, 2020. Table 53 presents the level of accuracy of the project.

Table 53: Cost Estimate Classification for Item

47R-11 - COST ESTIMATE CLASSIFICATION SYSTEM AS APPLIED IN THE MINING AND MINERAL PROCESSING INDUSTRIES	**ESTIMATE CLASSIFICATION CLASS 3**
MATURITY LEVEL OF PROJECT DEFINITION DELIVERABLES	**10% to 40%**
Project Scope Description	Defined
Operational Costs	Defined
Mine and Plant Production/Facility Capacity	Defined
Plant Location	Specific
Soils & Hydrology	Defined
Resource Determination	Measured
Reserve Determination	Proven
Geology	Defined
Geotechnical and Rock Mechanics	Defined
Metallurgical Test Work	Defined
Integrated Project Plan	Defined
Mine Life Plan/Schedule	Preliminary

Initial Mine/Ore Access (Roads, Pre-stripping, Tunnels, Shafts, Water Management, Waste Management, etc.)	Defined
Mine Operations Layout (Pit Design, Dumps, Roads, Water Management, Waste Management, etc.)	Preliminary
Escalation Strategy	Defined
Work Breakdown Structure	Defined

20.2. Initial Parameters

The initial parameters for cash flow are:

- ROM feed rate of 300ktpa (after year 3).
- Selling Price:
  - DANF @9% P_2O_5: AUD$120.00/t;
- Weighted Average Cost of Capital (WACC) 8% per annum.

20.3. CAPEX and OPEX

The CAPEX was estimated based on quotation, as well as the use of industry guidelines and databases. The total CAPEX is shown in Table 54.

Table 54: Project CAPEX

	Value AUD$(Mi)				
ITEM	**Year 0**	**Year 01**	**Year 02**	**Year 03**	**TOTAL**
INFRASTRUCTURE	**3.671**			**0.886**	**4.557**
Terrain Preparation	0.857				0.857
Civil Work	0.286				0.286
Paving area	0.600				0.600
Fences	0.086				0.086
Plant Road Desviation	0.714				0.714
Mine Road Desviation				0.600	0.600
Power - Grid construction				0.286	0.286
Power - Fotovoltaic Panels	0.857				0.857
Electrical installations	0.271				0.271
FACILITIES	**4.823**		**0.191**	**1.000**	**6.015**
Fuel Area	0.089		0.029		0.117
Waste center	0.037				0.037
Truck Parking Area	0.048				0.048
Drying Shed (3.600m²)	0.857				0.857
Plant Shed	1.009				1.009
Product Warehouse 1	1.560				1.560
Product Warehouse 2				1.000	1.000
Core Shed			0.163		0.163
Dispacht Area	0.021				0.021
Lab	0.050				0.050
Warehouse	0.023				0.023
Workshop	0.023				0.023
Office	0.061				0.061
First aid post	0.143				0.143
Refectory	0.050				0.050
Sanitary	0.028				0.028

Dresser + toilets	0.049				0.049
Plant office	0.037				0.037
Plant process control room	0.041				0.041
security cabin (x2)	0.032				0.032
Furniture	0.086				0.086
Seedling nursery	0.014				0.014
Civil Work	0.057				0.057
Freight	0.051				0.051
Elect Instalation	0.314				0.314
General offices	0.143				0.143
PLANT	**2.860**	**0.839**	**1.326**		**5.025**
Vibrating feeder	0.103				0.103
Vibrating feeder			0.103		0.103
Conveyor Belt 6,4mx36"	0.066				0.066
Metal Extractor	0.043				0.043
Conveyor Belt 27mx36"	0.160				0.160
Metal Detector	0.006				0.006
Hammer Mill	0.090				0.090
Hammer Mill	0.090				0.090
Hammer Mill			0.090		0.090
Hammer Mill			0.090		0.090
Conveyor Belt 26mx36" (CT.003)	0.103				0.103
Metal Detector	0.006				0.006
High Frequency Screen	0.102				0.102
High Frequency Screen			0.102		0.102
Conveyor Belt 15,4mx30" (CT.004)	0.059				0.059
Conveyor Belt 19mx30" (CT.005)	0.063				0.063
Conveyor Belt 17mx30" (CT.006)	0.071				0.071
Conveyor Belt 9mx30" (CT.007)	0.043				0.043
Conveyor Belt 9mx30" (CT.008)	0.043				0.043
Dedusting system	0.157				0.157
Air Compressor	0.040				0.040
Bucket Elevator (120 ton/h)		0.085			0.085
Bulk Loading System		0.270			0.270
Bucket Elevator (120 ton/h)	0.086				0.086
Silo	0.060				0.060
Bagging System	0.167				0.167
Silo		0.060			0.060
Bagging System		0.167			0.167
Silo			0.060		0.060
Bagging System			0.167		0.167
Bridge Crane			0.714		0.714
Forklift (3ton 6m) (4x)	0.114	0.114			0.229
Water treatment station	0.057				0.057
Weight scale 120ton capacity)		0.143			0.143
Mec Instalation + Freight	0.143				0.143
Elect Instalation	0.989				0.989
MINING	**0.200**				**0.200**
Truck (L200 Triton 4x4)	0.086				0.086
Car 1	0.057				0.057
Car 2	0.057				0.057
ENGINEERING	**0.471**				**0.471**
GENERAL EXPENSES	**0.263**				**0.263**
NATURAL DRYING	**1.429**	**1.714**	**2.057**	**1.714**	**6.914**
Front Loader (WA320 2,7m³) (2x)	0.286		0.286		0.571

Dump truck (1x)	0.229				0.229
Drying Shed (18.000m²)		1.714	0.857	1.714	4.286
Windrow side turner (Willibald TBU 3P)(x2)	0.429		0.429		0.857
Tractor 300CV (x2)	0.486		0.486		0.971
CONTINGENCY	**0.857**	**0.286**			**1,143**
ENVIRONMENTAL PERMITTING	**1.343**	**0.086**	**0.086**	**0.114**	**1.629**
Environmental program	1.343				1.343
Others		0.086	0.086	0.114	0.286

GRAND TOTAL	**15.917**	**2.925**	**3.660**	**3.714**	**26.217**

Operating expenditure (OPEX) was estimated based on quotation, as well as the use of industry guidelines and databases. The total operating cost for the Tres Estradas Phosphate Project is estimated to be AUD$19.55/t of DANF after ramp-up (year 4). The estimated project OPEX after ramp up (year 4) is presented in Table 55 . Besides of the operating costs, to sell and pack the product there will be an extra AUD 7.20 for sales and Marketing and AUD 8.57 relating to big bag costs.

Table 55: Project OPEX

Group	Sub-Area	(AUD/t mov)	(AUD/t ROM)	(AUD/t Prod)
Mining	Outsourced	3.85	5.77	6.09
	Topography	0.08	0.11	0.12
	Others	0.28	0.43	0.45
Total Mining		4.21	6.31	6.66
Processing	Electrical power	0.68	1.02	1.05
	Power demand	0.10	0.15	0.16
	Photovoltaic power	-0.33	-0.49	-0.51
	Drying	0.64	0.97	1.00
	Maintenance Items	0.55	0.83	0.86
	Miscellaneous and Others	1.23	1.85	1.91
	Labor	2.5	3.75	3.88
	Laboratory	0.01	0.02	0.02
Total Processing		5.39	8.09	8.37
G&A		2.88	4.30	4.52
Total Plant Operation		**12.42**	**18.61**	**19.55**
Marketing & Sales		4.58	6.85	7.20
Big bag		5.45	8.16	8.57
Grand Total		**22.45**	**33.62**	**35.32**

21. ECONOMIC ANALYSIS

21.1. Tax

Table 56 below summarizes the taxes that are considered in this project economic evaluation.

Table 56: Taxes

Tax	Value
IRPJ (15% until R$240.000,00 of Net profit before taxes)	15
IRPJ (10% over R$240.000,00 of Net profit before taxes)	10
CSLL (9% of Net profit before taxes)	9
CFEM (2% of gross revenue)	2
Royalties - Free Cash Flow after payback	2

The tax due for the Project was estimated taking into consideration the existing tax laws applied to revenues forecasted for the project.

CFEM – Financial Compensation for the Exploitation of Mineral Resources

Financial Compensation for the Exploration of Mineral Resources (CFEM) is the consideration paid to the Government of Brazil for the extraction and economic exploration of Brazilian mineral resources.

CFEM focuses on gross sales of the raw mineral product, or on the intermediate cost of production when the mineral product is consumed or transformed in an industrial process

The CFEM rate for this project is 2.0%.

IR – Income Tax:

A 15% tax rate on pre-tax profit, based on real profit, is applied if the profit is less than R$240,000/ year. A rate of 25% on pre-tax profit is applied if the profit is greater than R$240,000/ year.

Social Contribution:

The Social Contribution on profits is a federal tax charged at 9% of the net profit before taxes.

Royalties:

Under the terms of the Option Agreement, executed by and between CBC and Aguia Metais Ltda on July 1st, 2011 and amended on December 13th, 2011 and March 27th, 2014, CBC is entitled to receive royalties levied at the rate of 2% (two percent) of the net revenue (royalties capped at USD 10 million) that results from mineral rights #810.080/1991 and #810.325/2012.

Depreciation:

Depreciation of plant, infrastructure and equipments was calculated in a simplified way, depreciating the investment in annual values over the mine life, 100% in five years, for tax and cash flow purposes.

21.2. Discounted Cash Flow

A Discounted Cash Flow – DCF – base case scenario was developed to assess the project based on economic-financial parameters, on the results of the mine scheduling and on CAPEX and OPEX estimates.

Table 57 presents the Dicounted Cash Flow for the Tres Estradas Project, based on the scenario that the financing would be fully paid for by issuing shares.

Table 57: Discounted Cash Flow

Periodo	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	Total
Mina	61.9	83.4	223.7	328.5	509.1	465.5	500.9	467.7	500.6	552.4	539.8	503.1	503.1	503.1	503.1	503.1	460.7	460.7	349.2	8,020
ROM (kt)		61.9	162.0	236.4	356.6	324.5	336.3	305.0	326.7	355.3	356.4	347.1	347.1	347.1	347.1	347.1	326.1	326.1	247.2	5,456
Waste	-	21.6	61.6	92.1	152.5	141.0	164.6	162.6	173.9	197.2	183.4	156.0	156.0	156.0	156.0	156.0	134.6	134.6	102.0	2,502
Feed Plant (kt)		58.8	153.9	224.6	338.8	308.2	319.5	289.8	310.4	337.5	338.6	329.8	329.8	329.8	329.8	329.8	309.8	309.8	234.9	5,183
Mass Recovery (%)	-	95.0	95.0	95.0	95.0	95.0	95.0	95.0	95.0	95.0	95.0	95.0	95.0	95.0	95.0	95.0	95.0	95.0	95.0	1,710
Product (t*1000)		58.8	153.9	224.6	338.8	308.2	319.5	289.8	310.4	337.5	338.6	329.8	329.8	329.8	329.8	329.8	309.8	309.8	234.9	5,183
Selling Price (AUD$/t)	-	120	120	120	120	120	120	120	120	120	120	120	120	120	120	120	72	72	72	$ 112.09
Gross Revenue (AUD$ x1000)	-	7,051	18,473	26,955	40,656	36,990	38,336	34,774	37,244	40,499	40,627	39,571	39,571	39,571	39,571	39,571	22,304	22,304	16,910	580,982
OPEX (AUD$ x1000)		(2,672)	(6,853)	(8,633)	(11,796)	(10,743)	(11,221)	(10,241)	(10,967)	(11,964)	(11,934)	(11,517)	(11,517)	(11,517)	(11,517)	(11,517)	(10,019)	(10,019)	(7,596)	(182,244)
Mine	-	(468.9)	(1,081.8)	(1,498.8)	(2,262.4)	(2,069.0)	(2,231.2)	(2,086.5)	(2,233.5)	(2,466.6)	(2,406.7)	(2,237.7)	(2,237.7)	(2,237.7)	(2,237.7)	(2,237.7)	(2,045.7)	(2,045.7)	(1,550.9)	(35,636)
Loading and tranportation - Total AUD$x1000	-	(468.9)	(1,081.8)	(1,498.8)	(2,262.4)	(2,069.0)	(2,231.2)	(2,086.5)	(2,233.5)	(2,466.6)	(2,406.7)	(2,237.7)	(2,237.7)	(2,237.7)	(2,237.7)	(2,237.7)	(2,045.7)	(2,045.7)	(1,550.9)	(35,636)
Process	-	(1,279)	(3,352)	(4,287)	(5,889)	(5,358)	(5,553)	(5,037)	(5,395)	(5,866)	(5,885)	(5,732)	(5,732)	(5,732)	(5,732)	(5,732)	(5,385)	(5,385)	(4,082)	(91,412)
Process Cost- Phosphate Rock AUD$x1000	-	(1,279)	(3,352)	(4,287)	(5,889)	(5,358)	(5,553)	(5,037)	(5,395)	(5,866)	(5,885)	(5,732)	(5,732)	(5,732)	(5,732)	(5,732)	(5,385)	(5,385)	(4,082)	(91,412)
G&A (AUD$x1000)	-	(571)	(1,496)	(1,499)	(1,612)	(1,467)	(1,520)	(1,379)	(1,477)	(1,606)	(1,611)	(1,569)	(1,569)	(1,569)	(1,569)	(1,569)	(1,474)	(1,474)	(1,117)	(26,146)
Sales & marketing (AUD$x1000)		(353)	(924)	(1,348)	(2,033)	(1,849)	(1,917)	(1,739)	(1,862)	(2,025)	(2,031)	(1,979)	(1,979)	(1,979)	(1,979)	(1,979)	(1,115)	(1,115)	(845)	(29,049)
EBITDA (AUD$ x1000)	-	4,380	11,620	18,322	28,860	26,247	27,115	24,533	26,277	28,536	28,693	28,054	28,054	28,054	28,054	28,054	12,285	12,285	9,314	398,738
Depreciation (AUD$ x1000)	-	(3,183)	(3,768)	(4,501)	(5,243)	(5,243)	(2,060)	(1,475)	(743)	-	-	-	-	-	-	-	-	-	-	(26,217)
Amortization (AUD$ x1000)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EBIT (AUD$ x1000)	-	1,196	7,852	13,821	23,617	21,003	25,055	23,058	25,534	28,536	28,693	28,054	28,054	28,054	28,054	28,054	12,285	12,285	9,314	372,521
Bank interest fees	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
IRPJ (15% de R$ 240 000/ano do EBIT)	-	(14)	(94)	(166)	(283)	(252)	(301)	(277)	(306)	(342)	(344)	(337)	(337)	(337)	(337)	(337)	(147)	(147)	(112)	(4,470)
AIR (10% sobre Exc R$ 0.24 mi/ano do EBIT)	-	(96)	(761)	(1,358)	(2,338)	(2,076)	(2,482)	(2,282)	(2,529)	(2,830)	(2,845)	(2,781)	(2,781)	(2,781)	(2,781)	(2,781)	(1,204)	(1,204)	(907)	(36,820)
CSLL (9% do EBIT)	-	(108)	(707)	(1,244)	(2,126)	(1,890)	(2,255)	(2,075)	(2,298)	(2,568)	(2,582)	(2,525)	(2,525)	(2,525)	(2,525)	(2,525)	(1,106)	(1,106)	(838)	(33,527)
CFEM (2% sobre Receita Bruta)	-	(141)	(369)	(539)	(813)	(740)	(767)	(695)	(745)	(810)	(813)	(791)	(791)	(791)	(791)	(791)	(446)	(446)	(338)	(11,620)
Net Profit (AUD$ x1000)	-	838	5,920	10,514	18,057	16,045	19,251	17,729	19,655	21,986	22,109	21,620	21,620	21,620	21,620	21,620	9,381	9,381	7,118	286,084
Depreciation (AUD$ x1000)	-	(3,183)	(3,768)	(4,501)	(5,243)	(5,243)	(2,060)	(1,475)	(743)	-	-	-	-	-	-	-	-	-	-	(26,217)
Amortization (AUD$ x1000)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bank interest fees	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Free Operating Cash Flow (AUD$ x1000)	-	4,021	9,689	15,015	23,300	21,288	21,311	19,204	20,398	21,986	22,109	21,620	21,620	21,620	21,620	21,620	9,381	9,381	7,118	312,301
Net cash flow from financial leverage (BRDE Financing)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bank interest fees	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
CAPEX (AUD$ x1000)	(15,917)	(2,925)	(3,660)	(3,714)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	(26,217)
INFRAESTRUCTURE	(3,671)	-	-	(886)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	(4,557)
FACILITIES	(4,823)	-	(191)	(1,000)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	(6,015)
PLANT	(2,860)	(839)	(1,326)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	(5,025)
MINING EQUIPMENT	(200)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
ENGINEERING	(471)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
GENERAL EXPENSES	(263)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
NATURAL DRYING	(1,429)	(1,714)	(2,057)	(1,714)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	(6,914)
CONTINGENCY	(857)	(286)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	(1,143)
ENVIRONMENTAL PERMITING	(1,343)	(86)	(86)	(114)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	(1,629)
Working Capital		(1,336)																	1,336	
Cash Flow (AUD$ x1000)	(15,917)	(240)	6,029	11,300	23,300	21,288	21,311	19,204	20,398	21,986	22,109	21,620	21,620	21,620	21,620	21,620	9,381	9,381	8,454	286,084
Royalties after Free Cash flow 2%	-	-	(90)	(170)	(350)	(319)	(320)	(288)	(306)	(330)	(332)	(324)	(324)	(324)	(324)	(324)	(141)	(141)	(127)	(4,534)
Cash Flow (AUD$ x1000) after Royalties	(15,917)	(240)	5,938	11,131	22,951	20,969	20,992	18,916	20,092	21,656	21,777	21,296	21,296	21,296	21,296	21,296	9,241	9,241	8,327	281,550
NPV (AUD$ x1000)	110,801	WACC (%)	10%																	

21.3. Results

The Discounted Cash Flow – Actual Profit results are presented in Table 58 below.

Table 58: DCF

CAPEX (AUD$M)	26.2
NPV (AUD$M) @ 10%	110.8
OPEX (AUD$/t of ROM)	33.62
IRR (%)	54.7%
Payback (Years)	2.9 Years

A sensitivity analysis was undertaken to evaluate the impact of the resulting economic indicators for the following attributes, within the cash flow:

- WACC
- Sell price.
- Mine OPEX
- Plant OPEX
- Exchange rate

The WACC, OPEX and NPV, was evaluated by varying its value from -15% to +15%. Figure 76 and Figure 77 show the sensitivity analysis developed by GE21 for DCF base on actual profit.

Figure 76: Sensitivity Analysis – Cost Variation

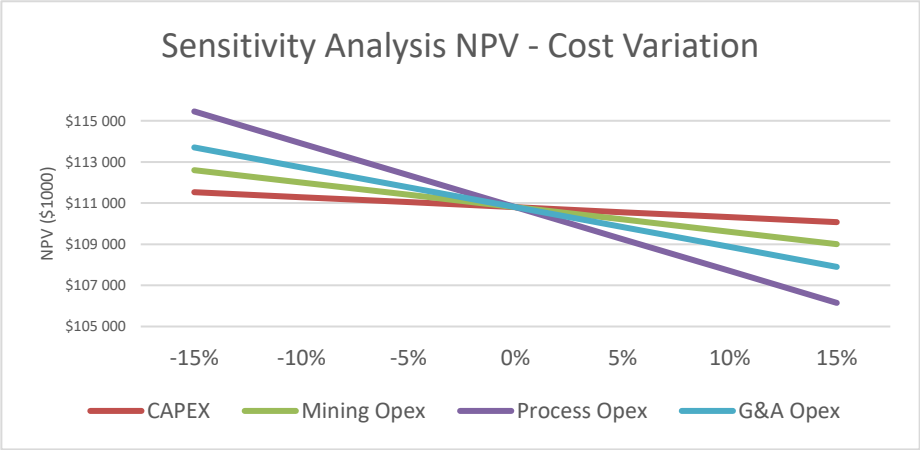
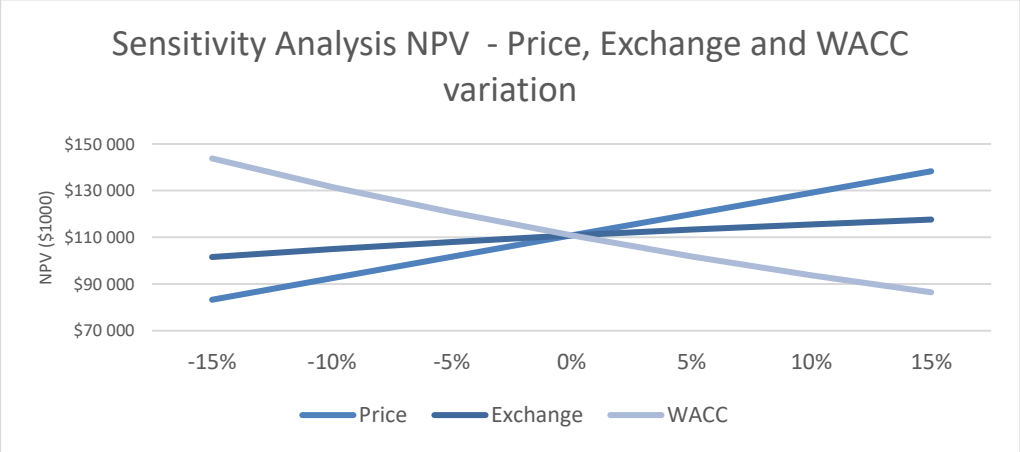


Figure 77: Sensitivity Analysis – Price, Exchange and WACC variation



GE21 concluded based on the Sensitivity Analysis that project profitability is most affected by the concentrate price and WACC.

22. OTHER RELEVANT INFORMATION

22.1. Land Acquisition

The Tres Estradas Phosphate Project is located in a rural, low population density area comprising a large number of farms in which beef cattle and soybean crops are the main activities. The implementation of the Project structures will cause direct interference in rural properties, some of which will be acquired in the whole, while others will be purchased partially.

The Project interfere on 11 properties totalling 449 hectares, from which Aguia planned is to acquire 345 hectares. The Company has successfully completed the acquisition of 10 properties covering 312.6 hectares (90.6%). Those cover most of the mine and entirely the plant site. At 23FY Half Year Report freehold land had a balance of AUD 1.8M relating to the fully paid properties for the implantation of the Project.

Aguia intends to advance the negotiations to the landowner of the last property (property 8) and expects to invest AUD 196,000 in that. The non-immediately acquisition does not prevent Aguia from building the plant, neither mining in the already acquired properties. Still, the whole area has servitude and is subject to the law provisions explained in Section 4.4.

This cost isn't included in the financial analysis as it is a deferred cost.

23. CONCLUSIONS AND RECOMMENDATION

23.1. Conclusions

The Mineral Resource classification of the Tres Estradas Phosphate Project was performed by Millcreek Mining Group March 13th, 2018, as verified by GE21 on NI43-101 Technical Report format titled "Tres Estradas Phosphate Project, Rio Grande do Sul, Brazil dated on April 4th, 2018. GE21 received data related to the mineral resource estimates and verified that there are no flaws in the mineral resources model. GE21 agrees with Mineral Resource classification from Millcreek.

According to Millcreek Mining Group, results from quality assurance and quality control of analyses program are considered inside acceptance limits for the purpose of Mineral Resource classification. GE21 evaluated the procedures and results related to QA/QC during the site visit. GE21 did not detect flaws or inconsistencies in the QA/QC procedures. Results are inside acceptance limits for mineral industry.

The Mineral Resource identifies 83.21 Mt of Measured and Indicated material with an average grade of 4.11% P_2O_5 using a minimum cut-off of 3.0% P_2O_5. The estimate also identifies 21.85Mt of Inferred material with an average grade of 3.67% P_2O_5. By classification, 79% of the resources contained within the mineable resource pit shell are Measured and Indicated with the remaining 21% of the resource classified as Inferred resource.

The project is planned to be developed and explored in three phases:

- Phase 1 – Production of Direct Application of Natural Fertilizer – DANF, based on the saprolite of carbonatite and amphibolite material;
- Phase 2 – Production of Phosphate Rock concentrate from carbonatite;
- Phase 3 (Aglime): Following mining operations, recovery the remaining aglime from the tailings dam.

The Mineral Reserves for Phase 1 were estimated based on Measured and Indicated Mineral Resources and using the following the parameters: Sale price for DANF from CBTSAP (@9% P_2O_5) = AUD$72.00 and DANF from AMPSAP (@5% P_2O_5) = AUD$43.20, mining costs: AUD$2.32/t mined, processing costs: AUD$4.81/t milled and G&A:AUD$3.34/t DANF. The declared Reserve for Phase 1 is presented in Table 59 below.

Table 59: Proven and Probable Reserves

Block dimensions 12x6x10 (m) Mine Recovery 98%, Dilution 2% (Effective date 08/01/2020)										
Litho	Class	Mass	P_2O_5	CaO	MgO	SiO_2	K_2O	Fe_2O_3	MnO_2	Al_2O_3
		Mt	%							
CBTSAP	Proved	0.64	10.2	18.1	5.2	28.5	0.45	19.1	0.89	4.7
	Probable	3.67	9.2	16.2	4.6	31.8	0.39	18.4	0.87	5.9
AMPSAP	Proved	0.04	6.7	10.9	9.5	37.3	0.71	15.3	0.68	7.3
	Probable	0.67	4.9	11.4	7.6	39.9	1.07	15.4	0.47	8.6
	Total Proved	0.68	10.0	17.7	5.5	29.0	0.5	18.9	0.9	4.9
	Total Probable	4.34	8.5	15.5	5.1	33.1	0.5	17.9	0.8	6.3
Total Proved and Probable		**5.02**	**8.8**	**15.7**	**5.1**	**32.5**	**0.49**	**18.1**	**0.82**	**6.1**

Mineral Reserves were estimated using the Geovia Whittle 4.3 software and following the economic parameters: Sale price for DANF@9%P_2O_5 = AUD$72.00 and for DANF@5%$P_2O_5$ = AUD$43.20 Exchange rate AUD$ 1.00 = R$ 2.85.
Mining costs: AUD$2.32/t mined, processing costs: AUD$4.81 /t milled and G$A:AUD$3.34/t DANF. Mineral reserves are the economic portion of the Measured and Indicated mineral resources.
Dilution 2% and Recovery 98%
Final slope angle: 34º
Waste = 2.50Mt
Inferred = 0.03Mt @ 5.2%P_2O_5 Inferred Resources were not included in the Mineral Reserves. The inferred is not a Mineral Reserve.It needs confirmation to become Mineral Rerserves.
Strip Ratio = 0.5 t/t - (Waste+inferred)/Ore
The Competent Person for the estimate is Guilherme Gomides Ferreira, BSc. (MEng), MAIG, an employee of GE21

During Phase 1, the Tres Estradas Phosphate Project will be a traditional open pit operation utilizing an owned mining fleet with a hydraulic excavator 2.0m^3 of capacity and 36t haul trucks, associated with corresponding ancillary equipment. The mine planning model adopted is a “diluted” model, adding approximately 2% dilution and 98% of recovery to the source model.

Due the characteristics of the Tres Estradas Phosphate Project and the applicable legal regulation, the environmental feasibility of the intended mining activity was proven, attested by the issuance of the Preliminary License issued by FEPAM, including with respect to the project review for the Installation License phase.

This Bankable Feasibility Study confirms the Project's technical and economic viability potential to produce DANF. According to economic analysis, the project's NPV is AUD$70.4 million @WACC of 8% and an internal rate of return of 61%, for sales prices of AUD$73.67/t for CBTSAP DANF @9% P_2O_5 and AUD$42.00/t for AMPSAP DANF 5% P_2O_5.

23.2. Recommendations

GE21 recommends that Aguia Resources:

- Receive a quotation for third party company mine operation in the first three years, to improve the mining costs;
- Develop a grade control pratice in the future mine in order to guarantee product quality;
- Complete the environmental studies to obtain the Operational License;
- Develop the regional market for the DANF;
- Develop a detailed geotechnical study, including Phase 2 of the project, to guarantee the continuity of activities with safety and economicity;
- Develop studies to better define the time to implement Phase 2, using conclusions and the confirmation that the regional market is demanding more fertilizer options;
- Develop agricultural tests using amphibolite saprolite to improve the economicity of the project.
- Continue to develop agricultural tests with DANF product

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ATTACHMENT 1 – Master Plan

54°13.200'W 54°12.600'W 54°12.000'W 54°11.400'W 54°10.800'W 54°10.200'W 54°9.600'W

30°53.400'S
30°54.000'S
30°54.600'S
30°55.200'S
30°55.800'S

N

ANM Process
810090/1991

ANM Process
810325/2012

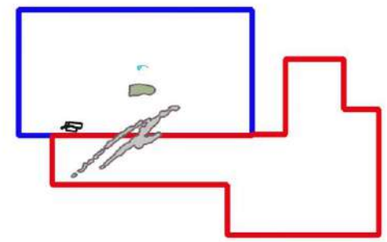
Sump

Waste Dump

Final Pit

Industry

ANM Process



Legend

- Access
- Toe Line
- Crest Line
- Ramp
- Railway
- Industry
- Easement Area - Phase 1
- Final Pit
- Waste Dump

ANM Process

- 810090/1991
- 810325/2012
- Sump

Geographic Coordinate System
Datum SIRGAS 2000

0 475 950 m

Scale: 1:15000

Master Plan

Elaborate: ASP/JFB		Project: PAE -Três Estradas
Date: October/2020	Approved: GGF	
Signature:	Made by: GE21	Client: AGUIA

ATTACHMENT 2 – Cartographic Plan

54°12.000'W
54°6.000'W
54°0.000'W
53°54.000'W
30°48.000'S
30°54.000'S
31°0.000'S
N
Ibaré
Lavras do Sul
Torquato Severo
BR473
RS357
RS
Lavras do Sul
Dom Pedrito
Bagé
Paraguay
Argentina
Brasil
Uruguay
SC
RS
Porto Alegre
Projeto
Lavras do Sul
RR
AP
AM
PA
MA
CE
RN
PB
PE
AL
PI
AC
RO
TO
MT
BA
GO
DF
MG
MS
ES
SP
RJ
PR
SC
Chile
Bolivia
Peru
Venezuela
Colombia
Guyana
Suriname
Legenda
Cities
Villas
Access
States Roads
Federal Highways
Railway
Counties
ANM Process
810090/1991
810325/2012
Easement Area - Phase 1
Final Pit
Industry
Waste Dump
Sump
Geographic Coordinate System
Datum SIRGAS 2000
0
2500
5000 m
Scale: 1:90000
Cartographic Plan
Elaborate: ASP/JFB
Project: PAE -Três Estradas
Date: October:
Approved: GGF
Signature:
Made by: GE21
Client: AGUIA

ATTACHMENT 3 – Landowners Plan

54°13.200'W 54°12.600'W 54°12.000'W 54°11.400'W 54°10.800'W 54°10.200'W 54°9.600'W

30°53.400'S 30°54.000'S 30°54.600'S 30°55.200'S 30°55.800'S

ANM Process 810090/1991

ANM Process 810325/2012

Sump

Waste Dump

Industry

Final Pit

1 2 3 4 5 6 7 8 9 10 11

Property	Landowners	Total Area (ha)	Acquire Area (ha)	Area Under Acquisition (ha)
1	Adão Camargo	114.74		55.87
2	Claudio Trindade Machado	61.29		61.29
3	Colotildes Goulart e Outros A2	16.89		16.89
4	Colotildes Goulart e Outros	2.82		2.82
5	Gualter Azambuja	7.43		7.43
6	Jerônimo Machado	8.83		8.83
7	José Salvador Machado Trindade	36.23		36.09
8	Leonardo Krieger Remedi	77.46		32.33
9	Marcia Goulart Machado	17.73	17.73	
10	Nery Camargo	90.19		90.19
11	Vainer Parodes	11.16		11.16
Total		444.77	17.73	322.90

Legend

- Internal Access
- Road Detour- Phase 01
- Final Pit
- Toe Line
- Crest line
- Ramp
- Waste Dump
- Sump
- Industrial Area
- Industrial Area Perimeter
- Property Boundaries
- Areas Under Acquisition
- Acquired Area

ANM Process

- 810090/1991
- 810325/2012

N

Geographic Coordinate System
Datum SIRGAS 2000

0 475 950 m

Scale: 1:15000

Surface Plan

Elaborated: ASP/JFB		Project: BFS -Três Estradas
Date: November/2020	Approved: GGF	
Signature:	Developed by: GE21	Client: AGUIA

JORC Code, 2012 Edition – Table 1

Aguia ResourcesLimited (Aguia) in September 2020 contracted GE21 Consultoria Ltda (GE21) to prepare a Bankable Feasibility Study of Ore Reserves of the Três Estradas Phosphate Project (Três Estradas Project that in compliant with JORC Code (2012)

Mineral Resource classification of Três Estradas Project was performed by Millcreek Mining Group March 13, 2018, as verified by GE21 on NI43-101 Technical Report format named “Três Estradas Phosphate Project, Rio Grande do Sul, Brazil dated on April 4,2018. GE21 received data related to the mineral resource certification and verified that there are no flaws in the mineral resources model. GE21 agrees with Mineral Resource classification from Millcreek.

The Company’s mineral property is considered to represent an Advanced Exploration Project which is inherently speculative in nature. The property is also considered to be sufficiently prospective in general, subject to varying exploration risk degrees.

Section 1 Sampling techniques and data
(Criteria in this group apply to all succeeding groups)

Criteria	JORC Code Explanation	Commentary
Sampling techniques	• Nature and quality of sampling (eg cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling.	• In the Três Estradas Project area procedures for soil sampling, rock chip samples and drilling samples (auger drilling, reverse circulation and diamond drilling) were compliant with mineral industry standards. • Samples were sent to laboratories that are commercial fee-for-service testing facilities and are independent of Aguia
	• Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used. Aspects of the determination of mineralisation that are Material to the Public Report. In cases where 'industry standard' work has been done this would be relatively simple (eg 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (eg submarine nodules) may warrant disclosure of detailed information.	• Aguia has followed standard practices in their geochemical surveys, core, RC and auger drilling programs. They have followed a set of standard procedures in collecting cuttings and core samples, logging and data acquisition for the project. Their procedures are well documented and meet generally recognized industry standards and practices. • All core logging is completed by Aguia geologists and directly entered into a comprehensive database program. Aguia's geologists are responsible for identifying and marking core intervals for sampling. Sample intervals range in length from 0.15m to 6.20m with 90% of all core samples falling within the range of 0.8m to 1.2m. Digital and hard copies of all sampling and shipment documentation are stored in the project office at Lavras do Sul. Documentation includes geological logs, core photographs, core recovery records, portable XRF readings and down-hole surveys.
Drilling techniques	• Drill type (eg. core, reverse circulation, open-hole hammer,	• Aguia has completed five drilling campaigns on the Tres Estradas area between 2011 and 2017. Drilling has included 139 core holes (20,509.5m), 244 reverse circulation (RC) holes

Criteria	JORC Code Explanation	Commentary
	rotary air blast, auger, Bangka etc.) and details (eg. core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc.).	(7,800.0m) and 487 auger holes (2,481.65m). • All core holes were drilled using wireline coring methods. HQ size (63.5mm diameter core) core tools were used for drilling through weathered material and NQ size (47.6mm diameter core) tools were used for drilling through fresh rock. Core recovery has exceeded 90% in 97% of all core holes. RC drilling was used to complete 244 holes with a cumulative length of 7,800.0m. All RC holes were drilled vertically (-90°) using 140mm button hammer bit. Holes were primarily drilled dry.
Drill sample recovery	• Whether core and chip sample recoveries have been properly recorded and results assessed. • Measures taken to maximise sample recovery and ensure representative nature of the samples. • Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.	• Digital and hard copies of all sampling and shipment documentation are stored in the project office at Lavras do Sul. Documentation includes geological logs, core photographs and core recovery records. • Aguia has followed standard practices in their core, RC, and auger drilling programs. They have followed a set of standard procedures in collecting cuttings and core samples, logging, and data acquisition for the project. Their procedures are well documented and meet generally recognized industry standards and practices. Millcreek considers the exploration data collected by Aguia to be of sufficient quality to support mineral resource evaluation. • There was no investigation about relationship between sample recovery and grade.
Logging	• Whether core and chip samples have been logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies. • Whether logging is qualitative or quantitative in nature. Core (or costean, channel etc.) photography. • The total length and percentage of the relevant intersections logged.	• Digital and hard copies of all sampling and shipment documentation are stored in the project office at Lavras do Sul. Documentation includes geological logs, core photographs, core recovery records, portable XRF readings and down-hole surveys. Detailed geological logs are completed for every core hole using an appropriate logging form. Sampling intervals in the amphibolite and the carbonatite are typically targeted for a 1.0m length but may fall within a range of 0.50m to 1.50m. Samples in the unmineralized gneiss host rock may have considerably longer lengths of up to 6.2m. • The logging is qualitative in nature. A photographic record is maintained for all core boxes with each photograph recording three boxes: • 100% diamond drillholes was logged. The portable XRF is used for RC Drilling samples to screen samples for further testing at the analytical laboratory.
Sub-sampling techniques and sample preparation	• If core, whether cut or sawn and whether quarter, half or all core taken.	• Fresh core is split lengthwise using a core saw. Samples are systematically taken using the right half of the core, returning the left half of the core to the core box for archival storage.

Criteria	JORC Code Explanation	Commentary
	• If non-core, whether riffled, tube sampled, rotary split etc. and whether sampled wet or dry.	• Dry RC samples are split using a Jones riffle splitter
	• For all sample types, the nature, quality and appropriateness of the sample preparation technique.	• The ALS laboratory in Vespasiano is primarily an intake and preparation facility. Samples are crushed and pulverized into rejects and pulps.
	• Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.	• Lab management system is consistent with ISO 9001:2008 requirements for sampling preparation.
	• Measures taken to ensure that the sampling is representative of the in-situ material collected.	• 90% of all core samples falling within the range of 0.8m to 1.2m.
Sub-sampling techniques and sample preparation	• Whether sample sizes are appropriate to the grainsize of the material being sampled.	• Sampling intervals in the amphibolite and the carbonatite are typically targeted for a 1.0m length but may fall within a range of 0.50m to 1.50m. Samples in the unmineralized gneiss host rock may have considerably longer lengths of up to 6.2m
Quality of assay data and laboratory tests	• The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.	• Chemical analyses were conducted in the laboratories ALS laboratory and SGS Geosol, both labs located in Vespasiano-MG. Sample pulps from the Reverse Circulation and Diamond Drill programs are assayed by X-Ray fluorescence for the following elements and oxides: The assaying regime is the standard for the determination of phosphate mineralization. The technique is considered to be total. • The CBTSAP bulk sample was tested in ALS laboratory in Vespasiano-MG • Regarding the P_2O_5 solubility tests, the CBTSAP bulk sample was tested in the Agronomic Lab of the Instituto Brasileiro de Analises (IBRA) in accordance with Brazilian Ministry of Agriculture, Livestock and Supply (MAPA) guidelines for testing fertilizers
	• For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.	• The portable XRF is used for Drilling samples to screen samples for further testing at the analytical laboratory
	• Nature of quality control procedures adopted (eg. standards, blanks, duplicates, external laboratory	• For quality assurance and quality control of analyses (QA/QC), Aguia uses a combination of reference samples, blanks, duplicate samples and umpire check assays. Aguia follows a protocol for accepting/refusing each batch of assays returned from the analytical laboratory.

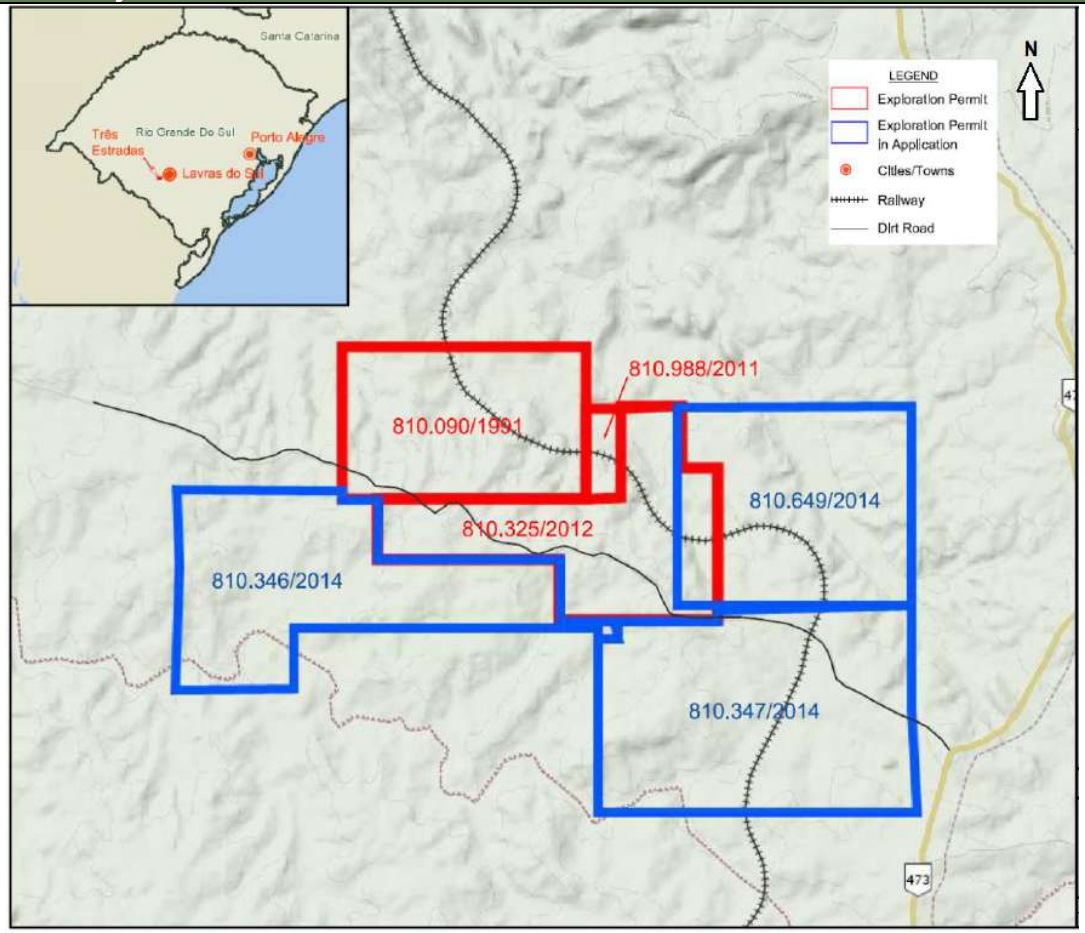
Criteria	JORC Code Explanation	Commentary
	checks) and whether acceptable levels of accuracy (ie. lack of bias) and precision have been established.	Reference, blanks and duplicate samples were inserted into the stream of drill samples such that one in 20 samples was a reference sample, one in every 30 samples was a blank sample, and one in every 30 samples was a duplicate sample.
Verification of sampling and assaying	• The verification of significant intersections by either independent or alternative company personnel. • The use of twinned holes. • Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols. • Discuss any adjustment to assay data.	• In 2012, SRK Consulting (Canada) Inc., was engaged by Aguia to prepare a geological model and mineral resource estimate for the project, in accordance with the JORC code. The results of additional drilling were incorporated in an updated resource estimate released by Aguia in January 2013. In early 2016, Millcreek was engaged by Aguia to complete a new PEA for the Tres Estradas Phosphate Project. In accordance with accepted standards and best-practices for certification of resources, Millcreek personnel have completed two site visits to the Tres Estradas Phosphate Project. The first site visit took place between March 17, 2016, and March 19, 2016. • Twin holes were not performed in Tres Estradas Project. • Digital and hard copies of all sampling and shipment documentation are stored in the project office at Lavras do Sul. Documentation includes geological logs, core photographs, core recovery records, portable XRF readings and down-hole surveys. • There were no adjustments on assay data.
Location of data points	• Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation. • Specification of the grid system used. • Quality and adequacy of topographic control.	• All drill collars are surveyed using differential GPS both before and after drill hole completion. Três Estradas, down hole surveys were completed on core holes using a Maxibore II down-hole survey tool. Readings are collected on three-meter intervals. • Coordinates are recorded in Universal Transverse Mercator (UTM) using the SAD69 Datum, Zone 21S. • Differential GPS is considered a precise topographic survey methodology.
Data spacing and distribution	• Data spacing for reporting of Exploration Results.	• Diamonds drillholes and RC drillholes were arranged in a regular grid varying from 25 x 50m to 100 x 50m grid.
Data spacing and distribution	• Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied. • Whether sample compositing has	• Millcreek considered the exploration data collected by Aguia to be of sufficient quality to support mineral resource evaluation. • Sample compositing was applied.

Criteria	JORC Code Explanation	Commentary
	been applied.	
Orientation of data in relation to geological structure	• Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type • If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.	• In general terms, the geological unit contacts are sub-vertical, and the holes are dipping 60°. Intercepts were produced at 45° average angle which isn't the best condition, but it's considered acceptable for mineral resource estimate purpose. • The relationship between the drilling orientation and the orientation of key mineralized structures don't indicate necessarily sampling bias.
Sample Security	• The measures taken to ensure sample security.	• The core and chips were transported by the company's personnel from the drill site to the core storage facilities. Drill boxes are labelled with hole number and depth interval and the core is photographed prior to logging.
Audits or reviews	• The results of any audits or reviews of sampling techniques and data.	• In 2012, SRK Consulting (Canada) Inc., was engaged by Aguia to prepare a geological model and mineral resource estimate for the project, in accordance with the JORC code. In early 2016, Millcreek was engaged by Aguia to complete a new PEA for the Tres Estradas. Phosphate Project. Audits and reviews of sampling techniques were performed in these works.

Section 2 Reporting of Exploration Results

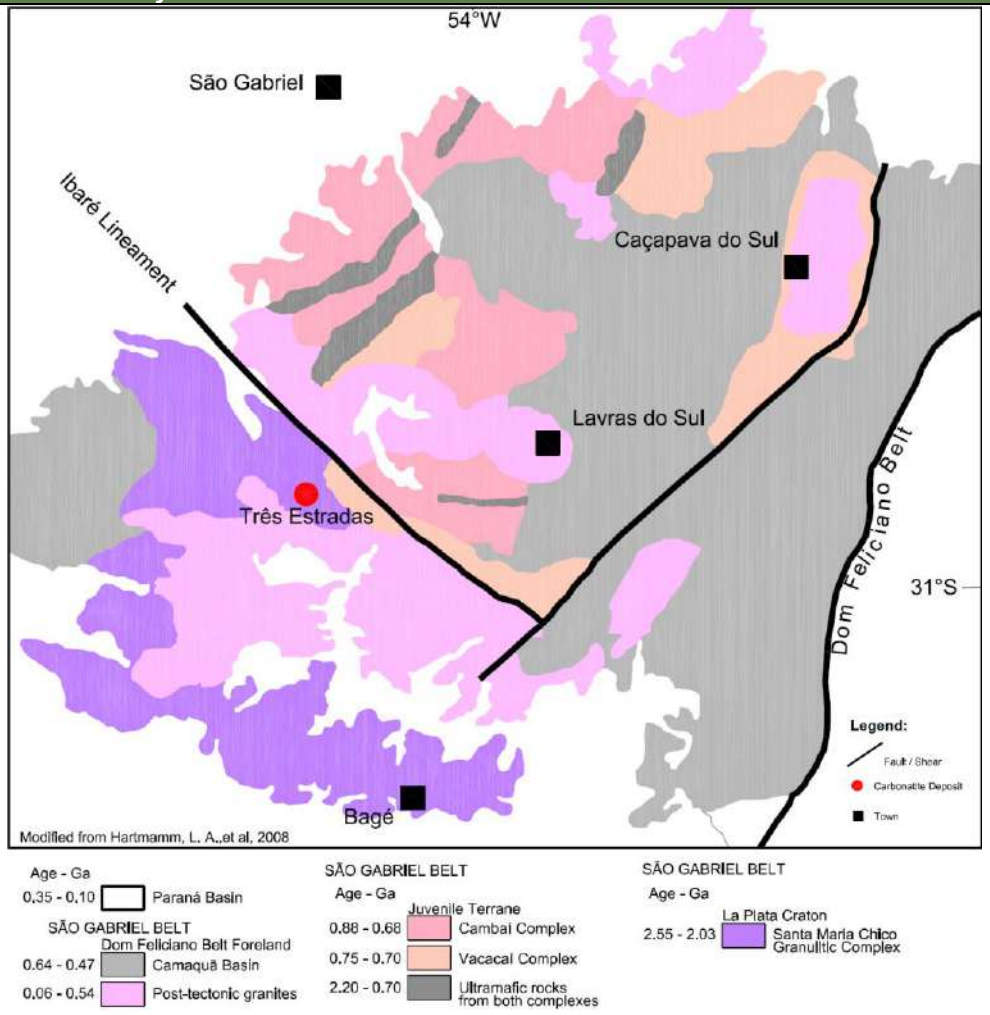
(Criteria listed in the preceding group apply also to this group)

<table>
<tr><th>Criteria</th><th>JORC Code Explanation</th><th>Commentary</th></tr>
<tr><td>Mineral tenement and land tenure status</td><td>• Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.
• The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area.</td><td>• . The three mineral rights combined cover a total area of 1,985.34ha. Aguia holds 100% interest in the three mineral rights permits covering the Tres Estradas Phosphate Project area.
•
<table>
<tr><th>ANM Permit</th><th>Issuing Date</th><th>Period</th><th>Expiry Date</th><th>Area (ha)</th><th>Status</th><th>Municipality/State</th><th>Title Holder</th></tr>
<tr><td>810.090/1991</td><td>8/16/2010</td><td>2</td><td>8/17/2021</td><td>1,000.00</td><td>PAE applied</td><td>Lavras do Sul/RS</td><td>Aguia Fertilizantes S.A.</td></tr>
<tr><td>810.325/2012</td><td>5/03/2017</td><td>3</td><td>8/17/2021</td><td>900.95</td><td>PAE applied</td><td>Lavras do Sul/RS</td><td>Aguia Fertilizantes S.A.</td></tr>
<tr><td>810.988/2011</td><td>4/15/2015</td><td>3</td><td>4/15/2018</td><td>84.39</td><td>Extension Submitted</td><td>Lavras do Sul/RS</td><td>Falcon Petróleo S.A.</td></tr>
<tr><td colspan="3"></td><td>Total Area</td><td>1,985.34</td><td colspan="3"></td></tr>
</table>
•</td></tr>
</table>

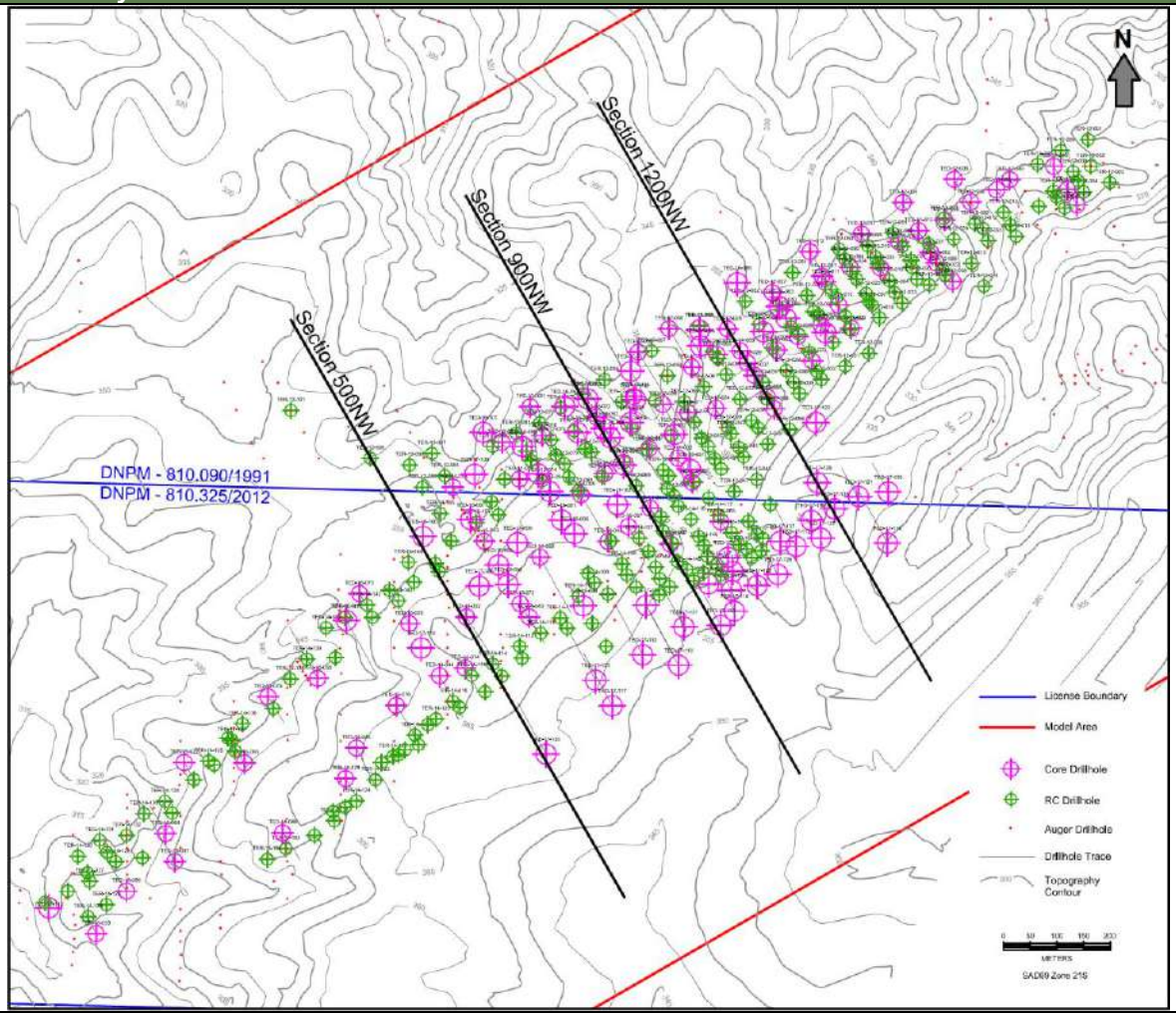
Criteria	JORC Code Explanation	Commentary
		 • The permits #810.090/1991 and #810.325/2012 had the Final Exploration Report approved by ANM on August 17th, 2020. Aguia filed the Economic Assessment Plan (PAE) on October 26th, 2020, which is currently under ANM's review. • Falcon has requested for an extension of the permit 810.988/2011 which is currently under ANM's review. The transfer request of the mineral rights, from Falcon to Aguia, regarding the permit #810.988/2011 is under ANM´s review.

Criteria	JORC Code Explanation	Commentary
Exploration done by other parties	• Acknowledgment and appraisal of exploration by other parties.	• Lavras do Sul was originally developed in the 1880's as a gold mining camp on the Camaquã of Lavras River. In 1959, more detailed studies were organized by the ANM, which were followed in the 1970s by major survey and sampling programs of all mineral occurrences by the Companhia de Pesquisa e Recursos Minerais (CPRM – The Geological Survey of Brazil). In recent years there have been renewed exploration activities for gold and base metals in the region by Companhia Brasileira do Cobre (CBC), Amarillo Mining, Companhia Riograndense de Mineração (CRM) and Votorantim Metais Zinco SA. • Phosphate mineralization was first observed at Três Estradas in a gold exploration program being conducted jointly by Santa Elina and CBC. Santa Elina was prospecting for gold in ANM #810.090/1991, conducting soil, stream sediment and rock geochemistry, ground geophysical surveys (magnetrometry and induced polarization) and a limited drilling program. • Exploration results for gold were not encouraging and Santa Elina pulled out of the joint venture with CBC. However, the phosphate chemical analysis from two core boreholes in the ANM #810.090/1991 area yielded results of 6.41% P2O5 from soil and 6.64% P_2O_5 from core. This information was communicated to CPRM. • Following petrographic studies, apatite mineralization occurring in carbonatite was confirmed. In July 2011, CBC entered into a partnership with Aguia Metais Ltda, a subsidiary of Aguia Resources Ltd., to explore and develop phosphate deposits in Rio Grande do Sul State.

Geology	• Deposit type, geological setting and style of mineralisation.	• The Três Estradas Phosphate Project is situated in the Santa Maria Chico Granulitic Complex (SMCGC), part of the Taquarembó domain (Figure below). The SMCGC exposes the deepest structural levels within Brazil and may represent the western edge of the Precambrian Rio de la Plata Craton. The Três Estradas deposit consists of an elongated carbonatite intrusion (meta-carbonatite and amphibolite) with a strike of 50° to 60°. The meta-carbonatite and amphibolite form a tightly folded sequence with limbs dipping steeply from 70° to vertical (90°). The surface expression of the intrusion is approximately 2.5 km along strike with a width of approximately 300m. The Late Archean to Early Proterozoic intrusion is intensely recrystallized and metamorphosed to amphibolite assemblages. The carbonatite intrusion is bound mostly by biotite gneiss along with meta-syenite along its northeast and southeast boundaries. • Phosphate mineralization, occurring as the mineral apatite ($Ca_5(PO_4)_3(F,Cl,OH)$), is the primary mineralization of economic interest at Três Estradas. Apatite is the only phosphate-bearing mineral occurring in the carbonatites. At Três Estradas phosphate mineralization occurs in both fresh and weathered meta-carbonatite and amphibolite. Phosphate also becomes highly enriched as secondary mineralization in the overlying saprolite.

Criteria	JORC Code Explanation	Commentary
		
Drill Hole Information	• A summary of all information material to the understanding of the exploration results including a tabulation of	• Tres Estradas project have 383 drillholes including diamond drillholes and RC drillholes. Tables and map below present the location and average grades by intercept domain type.

<table>
<tr><th>Criteria</th><th>JORC Code Explanation</th><th>Commentary</th></tr>
<tr><td></td><td>the following information for all Material drill holes:
• easting and northing of the drill hole collar
• elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar
• dip and azimuth of the hole
• down hole length and interception depth
• hole length.
• If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case.</td><td><table>
<tr><th>Drilling</th><th>Count</th><th>Cumulative Meters</th><th>Assay Intervals</th></tr>
<tr><td>Core Holes</td><td>139</td><td>20,509.5</td><td>16,046</td></tr>
<tr><td>RC Holes</td><td>244</td><td>7,800.0</td><td>7,800</td></tr>
<tr><td>Total</td><td>383</td><td>28,309.5</td><td>23,846</td></tr>
</table></td></tr>
</table>

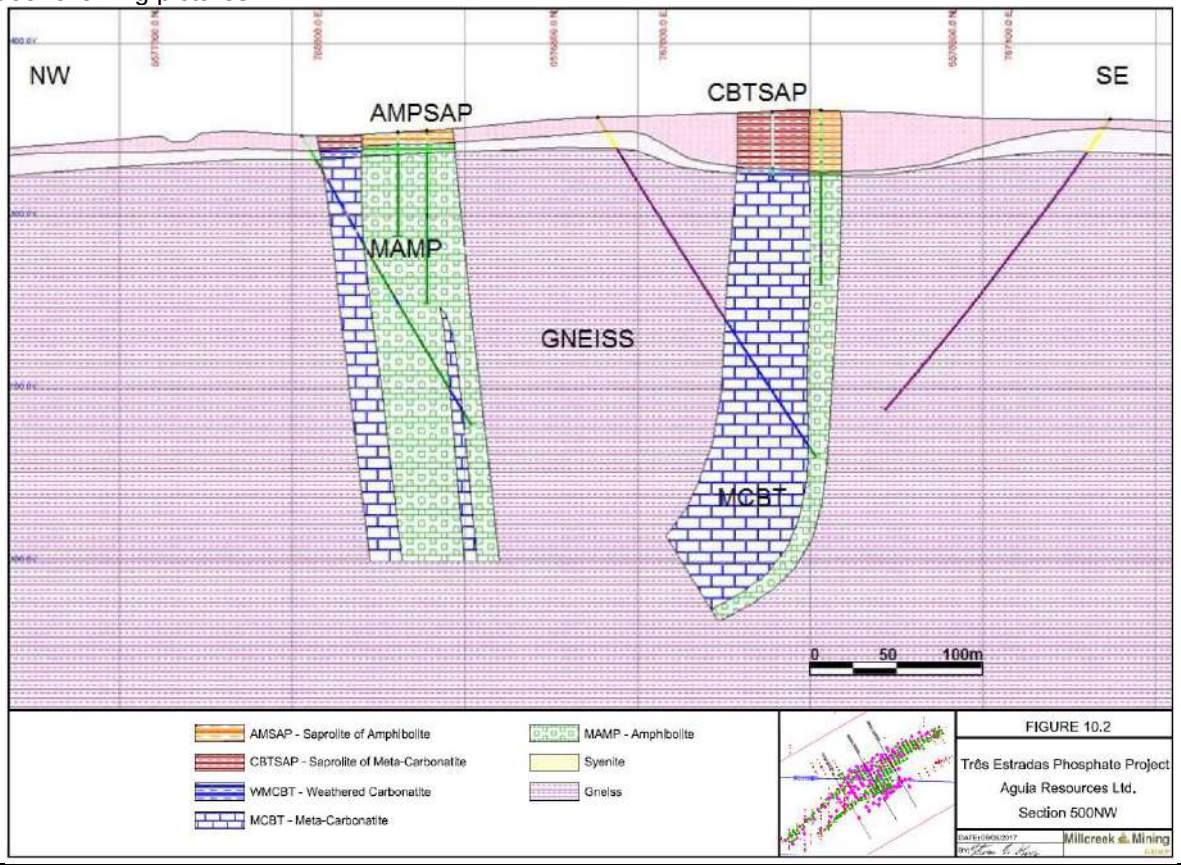
Criteria	JORC Code Explanation	Commentary
		

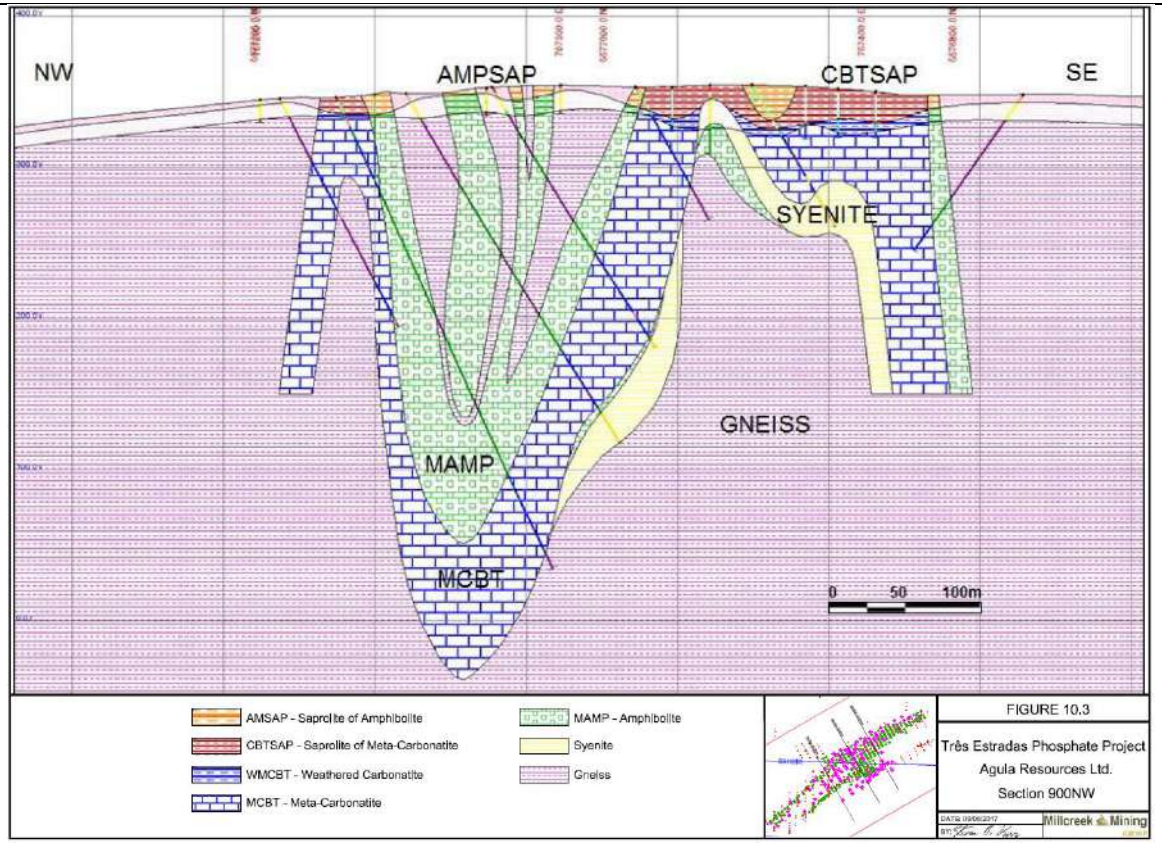
Criteria	JORC Code Explanation	Commentary

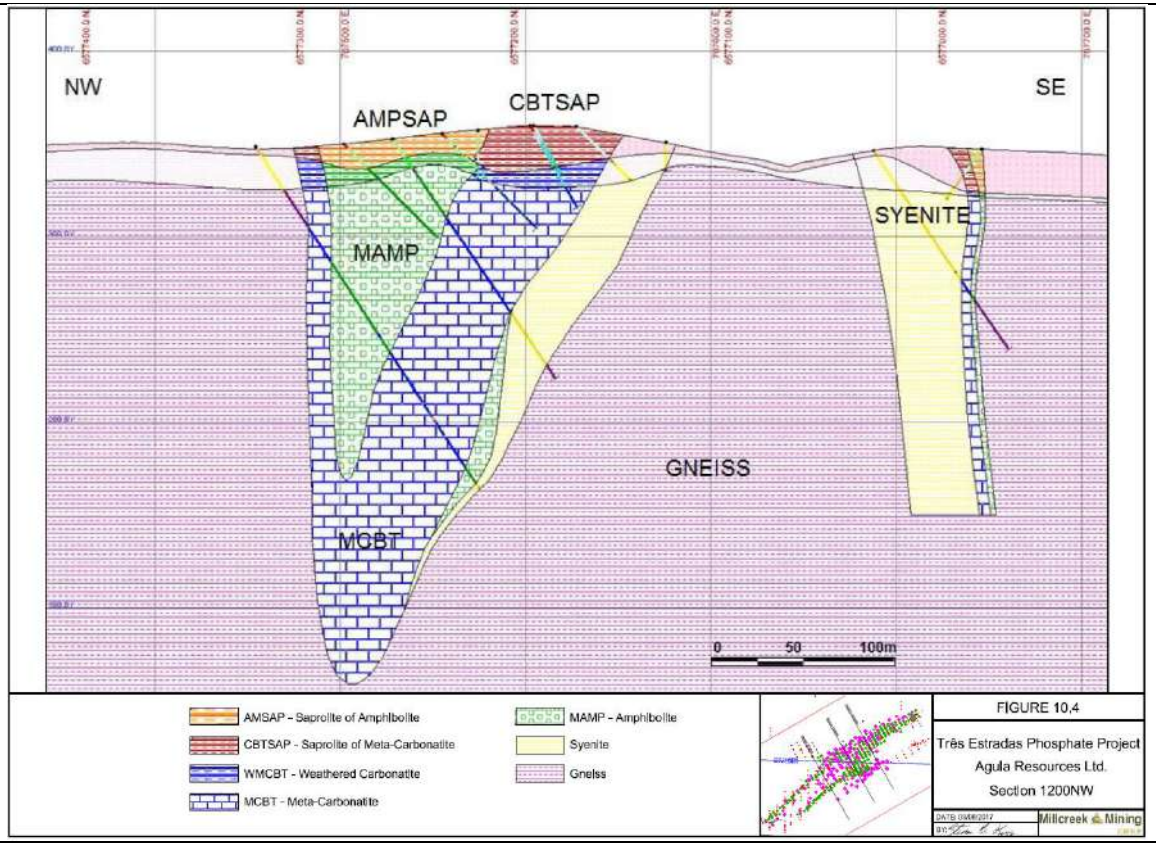
Domain	Rock Code	Stats*	P_2O_5	CaO	Al_2O_3	Fe_2O_3	MgO	SiO_2
AMPSAP	210	Average	5.22	10.75	8.44	15.21	7.42	40.67
		Std. Dev.	2.99	4.48	3.18	2.90	3.28	8.87
		Minimum	0.16	0.44	2.24	6.28	0.24	22.60
		Maximum	15.10	24.50	21.20	24.90	14.60	81.30
		Count	447					
CBTSAP	110	Average	9.67	16.57	5.60	18.45	4.80	31.32
		Std. Dev.	5.29	8.36	3.17	6.66	3.43	11.77
		Minimum	0.00	0.00	0.00	0.00	0.00	0.00
		Maximum	36.90	49.30	19.70	73.40	15.50	96.60
		Count	2122					
WMCBT	120	Average	4.49	34.82	2.26	9.02	5.89	13.87
		Std. Dev.	2.08	8.74	2.00	3.75	2.86	8.80
		Minimum	0.99	5.17	0.09	2.57	0.76	1.34
		Maximum	19.00	50.90	14.74	39.80	16.60	79.10
		Count	993					
MCBT	100	Average	3.79	34.31	2.10	7.95	7.71	11.94
		Std. Dev.	1.33	7.85	2.12	2.81	3.20	8.65
		Minimum	0.00	0.00	0.00	0.00	0.00	0.00
		Maximum	19.00	52.40	20.20	67.10	17.50	98.50
		Count	8743					
MAMP	200	Average	3.81	19.49	6.75	12.60	9.04	33.31
		Std. Dev.	1.55	4.25	1.62	2.57	1.52	6.94
		Minimum	0.03	0.14	0.00	1.45	0.10	2.44
		Maximum	11.77	43.00	13.40	22.10	16.70	97.60
		Count	670					

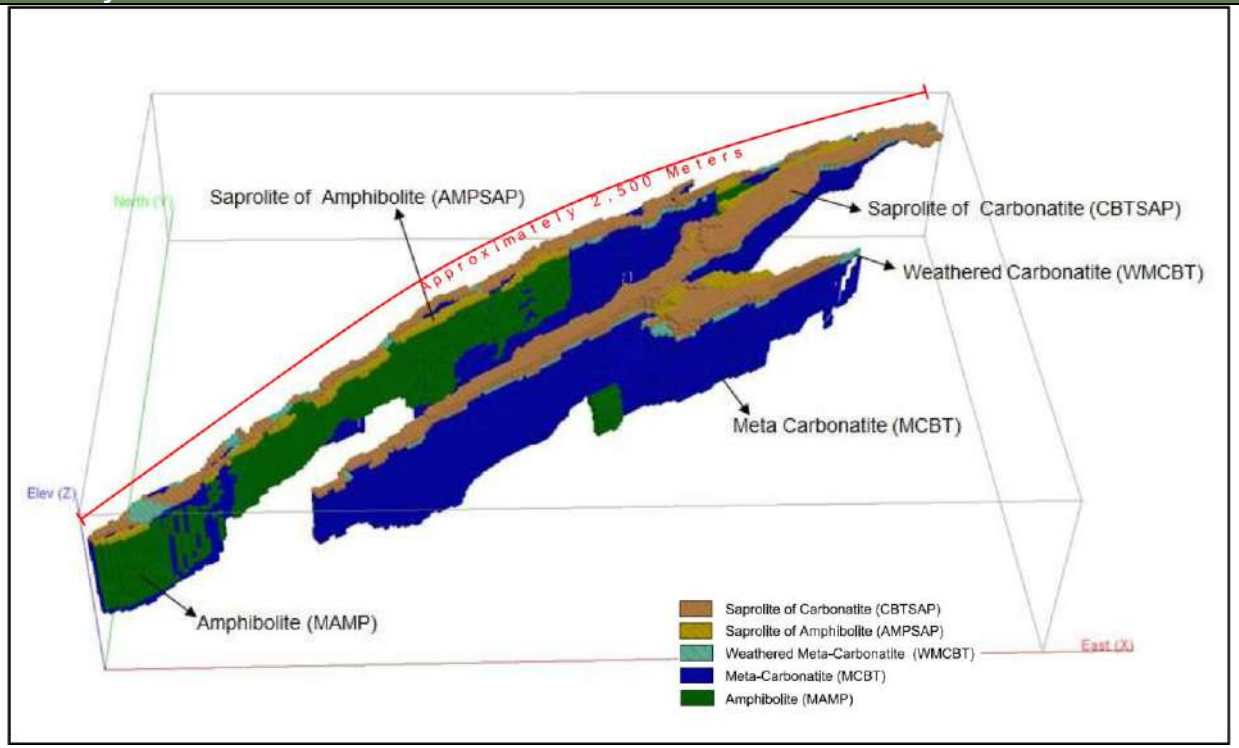
Criteria	JORC Code Explanation	Commentary
Data aggregation methods	• In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (eg. cutting of high grades) and cut-off grades are usually material and should be stated.	• Mineralization intervals intersected by drilling was aggregated by weighted average length.
Data aggregation methods	• Where aggregate intercepts incorporate short lengths of high grade results and longer lengths of low grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail. • The assumptions used for any reporting of metal equivalent values should be clearly stated.	• Intercept limits was guided by lithological interpretations during core-logging. • Metal equivalents were not reported.
Relationship between mineralisation widths and intercept lengths	• These relationships are particularly important in the reporting of Exploration Results. • If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.	• Intercepts were produced at 45° average angle which isn't the best condition, but it's considered acceptable for mineral resource estimate purpose. • In general terms, the geological unit contacts are sub-vertical, and the holes are dipping 60°.

Criteria	JORC Code Explanation	Commentary
	• If it is not known and only the down-hole lengths are reported, there should be a clear statement to this effect (eg. 'downhole length, true width not known').	• Intercepts were produced at 45° average angle.

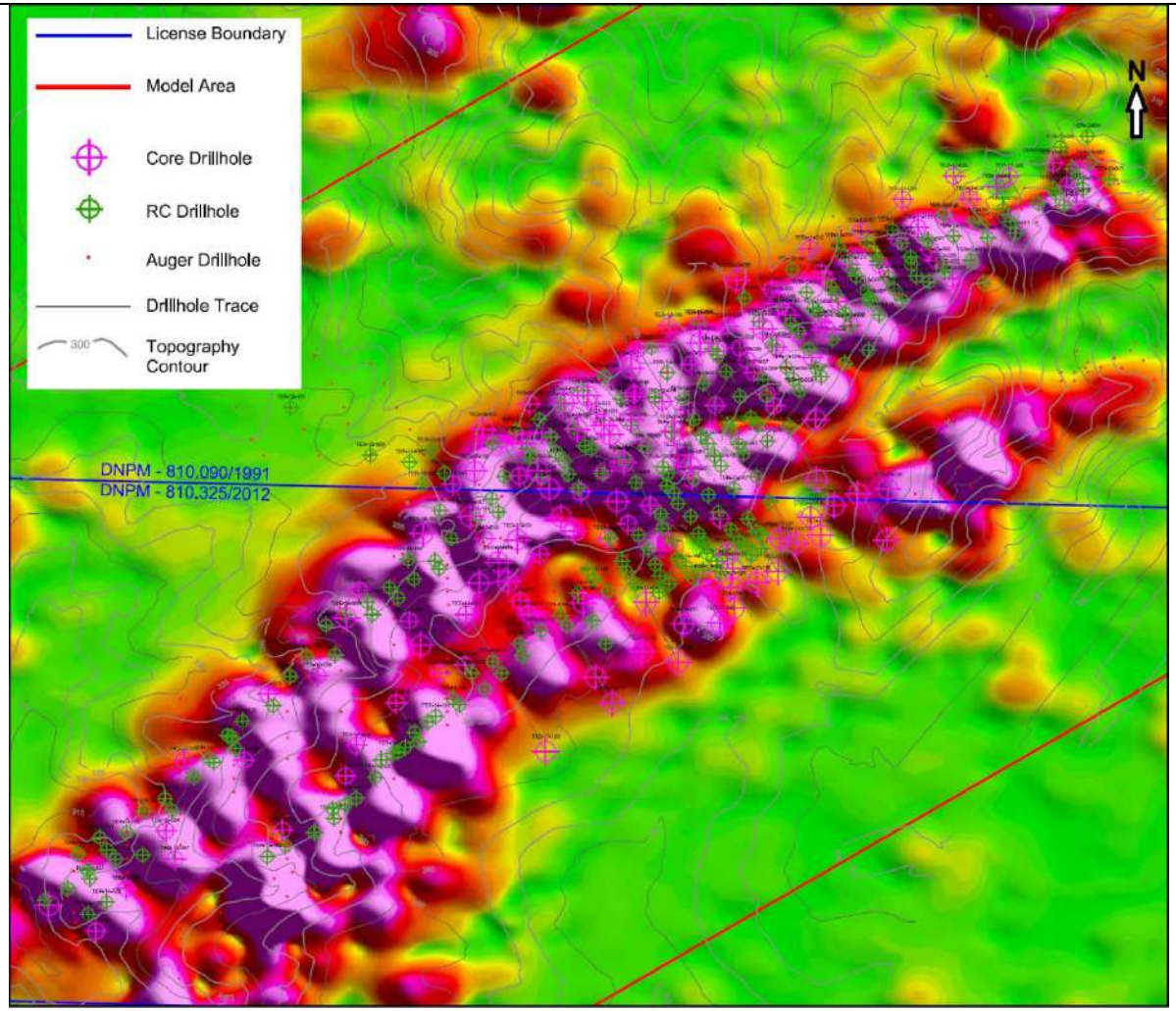
Diagrams	• Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views.	• See following pictures: 


NW
AMPSAP
CBTSAP
SE
SYENITE
GNEISS
MAMP
MCBT
0
50
100m
AMSAP - Saprolite of Amphibolite
CBTSAP - Saprolite of Meta-Carbonatite
WMCBT - Weathered Carbonatite
MCBT - Meta-Carbonatite
MAMP - Amphibolite
Syenite
Gneiss
FIGURE 10.3
Três Estradas Phosphate Project
Agula Resources Ltd.
Section 900NW
Millcreek Mining


NW
SE
AMPSAP
CBTSAP
SYENITE
MAMP
GNEISS
MCBT
0
50
100m
AMSAP - Saprolite of Amphibolite
CBTSAP - Saprolite of Meta-Carbonatite
WMCBT - Weathered Carbonatite
MCBT - Meta-Carbonatite
MAMP - Amphibolite
Syenite
Gneiss
FIGURE 10,4
Três Estradas Phosphate Project
Agua Resources Ltd.
Section 1200NW
Millcreek Mining

Criteria	JORC Code Explanation	Commentary
		
Balanced reporting	• Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.	• The drilling databases are highly organized with drilling Intercepts and it's grade x length reports are properly stored and readily available within on the drillhole database.

Other substantive exploration data	• Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples - size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.	• One historical trench exists on the tenement, cut perpendicular to the meta-carbonatite. According to Aguia, this trench was dug over 10 years ago by Santa Elina while prospecting for gold in the area. Within the trench Aguia sampled three vertical channels. Within each channel, two samples were collected from bottom to top. The P_2O_5 results from these samples vary from 24.10% to 28.80%. • Aguia made use of data from an airborne geophysical survey completed by CPRM, using rectified imagery for Total Magnetic Field (TMF), signal amplitude of TMF, First Derivative of the TMF, Uranium Concentration and Total Count of Gamma spectrometry. The magnetic anomalies identified in the airborne survey assisted in delineating areas of interest and led to Aguia completing a ground-based magnetic survey over the entire northern tenement area in March 2012. The survey was carried out by AFC Geofisica, Ltda. from Porto Alegre, Brazil. The survey comprised 104 line kilometers oriented northsouth. Survey lines and control lines were spaced at 25m and 100m apart respectively.



- Drillhole location map and total magnetic field geophysical survey map
- Mineral processing and metallurgical testing for the Tres Estradas Phosphate project has been ongoing since 2012. Over that time the understanding of the metallurgical properties and characteristics of the ore and its response to various processes to concentrate and recover phosphate has gradually improved as a series of studies have steadily increased their relevance and level of detail. The most current level of work reflects a well-developed and considered approach to phosphate recovery that is optimized and verified to

Criteria	JORC Code Explanation	Commentary
		a level suitable to support a selection of a process route as well as the basis for preliminary • equipment sizing. • In 2015 a beneficiation bench-scale study was conducted on carbonatite and saprolite ore samples by SGS. This study confirmed phosphate recoveries of the previous study. Additionally, the slimes (-20µm) fraction were very significant, with similar chemical composition to the coarse fractions, which if discarded would result in high losses of P_2O_5. • Eriez began their engagement with a program in 2016 that produced concentrates from various ore types at a commercially viable level of performance using column flotation. Preliminary bench-scale testing was performed using mechanical test cells in order to optimize the process approach, which was then tested using columns. • Metallurgical and process testing has culminated in Eriez's most recent pilot-plant testing for flotation (2017), supported with a recent comminution study. A study, using bulk samples and performed at Eriez Flotation Division's pilot-plant facilities in Pennsylvania, USA, has confirmed the earlier bench-scale work as well as further improvements in the process design to improve grade - recovery projections
Further work	• The nature and scale of planned further work (eg. tests for lateral extensions or depth extensions or large-scale step-out drilling). • Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.	• According to the Technical Report "Três Estradas Phosphate Project, Rio Grande do Sul, Brazil", prepared for Millcreek Mining Group, with effective date of March 13, 2018, the authors considered the exploration data collected by Aguia to be of sufficient quality to support mineral resource evaluation.

Section 3 Estimation and reporting of Mineral Resources

(Criteria listed in the first group, and where relevant in the second group, apply also to this group)

<table>
<tr><th>Criteria</th><th>JORC Code Explanation</th><th>Commentary</th></tr>
<tr><td>Database integrity</td><td>• Measures taken to ensure that data has not been corrupted by, for example, transcription or keying errors, between its initial collection and its use for Mineral Resource estimation purposes.

• Data validation procedures used.</td><td>• The database used for mineral resource evaluation includes 139 core holes (20,509.5m) and 244 RC holes (7,800m) for the Tres Estradas deposit (table below). The database was provided to Millcreek in a digital format and represents the Tres Estradas Project exploration dataset as of August 8, 2017.
<table>
<tr><th>Drilling</th><th>Count</th><th>Cumulative Meters</th><th>Assay Intervals</th></tr>
<tr><td>Core Holes</td><td>139</td><td>20,509.5</td><td>16,046</td></tr>
<tr><td>RC Holes</td><td>244</td><td>7,800.0</td><td>7,800</td></tr>
<tr><td>Total</td><td>383</td><td>28,309.5</td><td>23,846</td></tr>
</table>
• Millcreek checked about errors, as gaps or overlapping data, or other material inconsistencies in collar, survey and interval data tables.</td></tr>
<tr><td>Site Visits</td><td>• Comment on any site visits undertaken by the Competent Person and the outcome of those visits.
• If no site visits have been undertaken indicate why this is the case.</td><td>• . Millcreek has completed a thorough review and verification of the drilling database and found the database to be sufficient for resource modeling.
• The first site visit took place between March 17, 2016 and March 19, 2016. Millcreek’s representatives included Mr. Steven Kerr (C.P.G.-10352) and Mr. Alister Horn (MMSAQP-01369), who are considered Qualified Persons (QPs) under the NI 43-101 Standards of Disclosure for Mineral Projects. Mr. Kerr made a second site visit to the project on March 8 and 9, 2017, during the most recent drilling program. No material work has been done on the property since Mr. Kerr’s most recent visit, and the QPs consider their personal inspections to be considered current, for their respective fields.</td></tr>
<tr><td>Geological interpretation</td><td>• Confidence in (or conversely, the uncertainty of) the geological interpretation of the mineral deposit.

• Nature of the data used and of any assumptions made.
• The effect, if any, of alternative interpretations on Mineral Resource estimation.</td><td>• Aguia has developed a geologic block model of the Três Estradas Property phosphate deposit using GEMSTM software. Modeling was constructed by developing a series of vertical sections spaced at 50m intervals. Three-dimensional shells were developed by linking the vertical sections together with tie lines. Mineralization has an approximate strike length of 2,400m and extends to a depth of 370m below surface. Confidence of geological model is directly associated to drillhole data adherence.
• The outer mineralized envelopes were modeled into wireframe solids using a 3.00% P_2O_5 cut-off grade.
• Modeling was constructed by developing a series of interpreted vertical sections spaced at 50m intervals.</td></tr>
</table>

<table>
<tr><th>Criteria</th><th>JORC Code Explanation</th><th>Commentary</th></tr>
<tr><td></td><td>• The use of geology in guiding and controlling Mineral Resource estimation. The factors affecting continuity both of grade and geology.</td><td>• The model recognizes five mineralized, lithologic domains and nine non-mineralized domains as listed in table below:
<table>
<tr><th>Typology</th><th>Domain</th><th>Average Ordinary Kriging Density</th><th>Block Model Code</th><th>Description</th></tr>
<tr><td rowspan="5">MINERALIZED</td><td>CBTSAP</td><td>1.60</td><td>120</td><td>Saprolite of Carbonatite</td></tr>
<tr><td>WMCBT</td><td>2.80</td><td>110</td><td>Weathered Carbonatite</td></tr>
<tr><td>MCBT</td><td>2.85</td><td>100</td><td>Meta-Carbonatite</td></tr>
<tr><td>AMPSAP</td><td>1.65</td><td>220</td><td>Saprolite of Amphibolite</td></tr>
<tr><td>MAMP</td><td>2.87</td><td>200</td><td>Amphibolite</td></tr>
<tr><td rowspan="9">WASTE</td><td>AMPSAP-WASTE</td><td>1.77</td><td>22</td><td>Saprolite of Amphibolite Waste</td></tr>
<tr><td>WMAMP-WASTE</td><td>2.83</td><td>21</td><td>Weathered Amphibolite Waste</td></tr>
<tr><td>MAMP-WASTE</td><td>2.91</td><td>20</td><td>Amphibolite Waste</td></tr>
<tr><td>W-SAP</td><td>1.81</td><td>32</td><td>Saprolite Waste (Meta-Syenite, Gneiss)</td></tr>
<tr><td>W-WEATH</td><td>2.59</td><td>31</td><td>Weathered Waste (Meta-Syenite, Gneiss)</td></tr>
<tr><td>W-ROCK</td><td>2.68</td><td>30</td><td>Fresh Rock Waste (Meta-Syenite, Gneiss)</td></tr>
<tr><td>CBTSAP-WASTE</td><td>1.63</td><td>42</td><td>Saprolite of Carbonatite Waste</td></tr>
<tr><td>WMCBT-WASTE</td><td>2.76</td><td>41</td><td>Weathered Carbonatite Waste</td></tr>
<tr><td>MCBT-WASTE</td><td>2.80</td><td>40</td><td>Meta-Carbonatite Waste</td></tr>
</table>
• Aguia constructed wireframes of the meta-carbonatite and the amphibolite. Metacarbonatite is differentiated by weathering into three domains: saprolite, weathered carbonatite, and fresh meta-carbonatite. Amphibolite is separated into two domains: saprolite and fresh amphibolite.</td></tr>
<tr><td>Dimensions</td><td>• The extent and variability of the Mineral Resource expressed as length (along strike or otherwise), plan width, and depth below surface to the upper and lower limits of the Mineral Resource.</td><td>• Three-dimensional shells were developed by linking the vertical sections together with tie lines. Mineralization has an approximate strike length of 2,400m and extends to a depth of 370m below surface. Mineralized zones range in thickness from 5m to 100m.</td></tr>
</table>

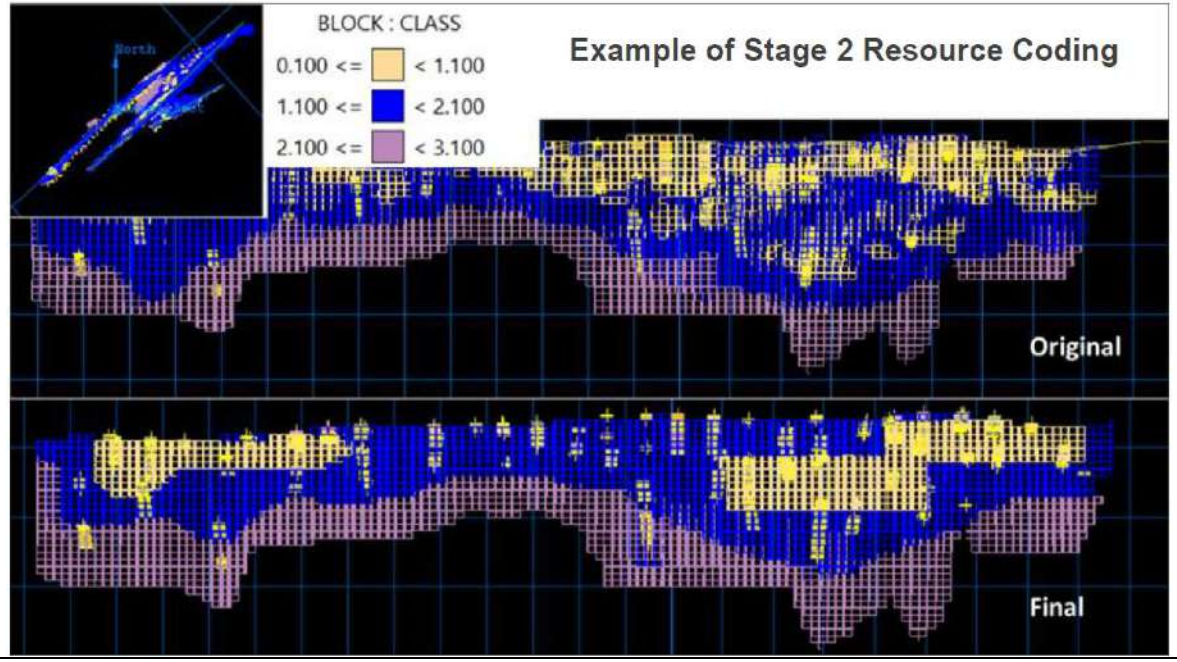
Criteria	JORC Code Explanation	Commentary
Estimation and modelling techniques	• The nature and appropriateness of the estimation technique(s) applied and key assumptions, including treatment of extreme grade values, domaining, interpolation parameters, maximum distance of extrapolation from data points.	• All assays were composited to 1.0m lengths. A high-grade limit was identified for each mineral domain and shows 9% P_2O_5 was selected as the high-grade limit. Therefore, in the grade estimation process of P_2O_5, when the composite grade reaches 9% or more the size of search ellipsoids reduces to half of its original size. • Three estimation passes were used with progressively relaxed search ellipsoids and data requirements based on the Variography: · **Pass 1:** Blocks estimated in the first pass using half the distance of variogram range and based on composites from a minimum of three boreholes. · **Pass 2:** Blocks estimated in the first two passes within the full range of the variogram and based on composites from a minimum of two boreholes; and · **Pass 3:** All remaining blocks within the wireframe limits in an unconfined search not classified in the first two estimation passes.
	• The availability of check estimates, previous estimates and/or mine production records and whether the Mineral Resource estimate takes appropriate account of such data.	• No checks with previous estimates or mine production records have been made.
	• The assumptions made regarding recovery of by-products.	• No estimation of recovery factors has been made.
	• Estimation of deleterious elements or other non-grade variables of economic significance (e.g. sulphur for acid mine drainage characterisation).	• The estimation for the six oxide variables (P_2O_5, CaO, Al_2O_3, Fe_2O_3, MgO, and SiO_2) and specific gravity were done using ordinary kriging interpolation for all the domains: MCBT, WMCBT, MAMP, CBTSAP and AMPSAP.
	• In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed.	• The block dimensions were defined as 12m x 6m x 10m, and drilling grid dimensions can be considered as 25m x 50m x 1m. Millcreek considers block sizes appropriate for mineral resource estimates.
	• Any assumptions behind modelling of selective mining units.	• None made.
	• Any assumptions about correlation between variables.	• No assumptions were made by Millcreek regarding the correlation between variables

Criteria	JORC Code Explanation	Commentary
	• Description of how the geological interpretation was used to control the resource estimates.	• Aguia performed a series of variograms and variogram maps in GEMS mining software to model the spatial continuity of the six oxides (P_2O_5, CaO, Al_2O_3, Fe_2O_3, MgO, and SiO_2) and for specific gravity of MCBT and MAMP.Grade estimations were made using ordinary kriging interpolation for all of the mineralized domains
Estimation and modelling techniques (cont.)	• Discussion of basis for using or not using grade cutting or capping. • The process of validation, the checking process used, the comparison of model data to drillhole data, and use of reconciliation data if available.	• Under supervision of Millcreek, Aguia conducted a top-cut analysis. Through visual inspection of the gradual changes of the mean values, a high-grade limit was identified for each mineral domain. 9% P_2O_5 was selected as the high-grade limit. Therefore, in the grade estimation process of P_2O_5, when the composite grade reaches 9% or more the size of search ellipsoids reduces to half of its original size. • Millcreek has conducted an audit of the block model prepared by Aguia and of the resources estimated from the model. Millcreek loaded the Tres Estradas block model into the Maptek Vulcan software system, a geology and mine planning software that competes directly with GEMS. The Millcreek audit and validation of the Tres Estradas block model consisted of the following steps: • 1. Visual Validation: The drill hole composited drilling data was loaded into Vulcan software to compare the grade estimation block/drill hole grade relationships in cross section view. A visual inspection of vertical cross sections spaced at 50m spacing along the strike of the mineralization showed strong correlation between drill hole assays and composited values in the model. • 2. Statistical Validation: Two types of statistical validations were carried out: general statistical comparisons and statistical structures: General statistics and comparison of histograms • 3. Spatial Validation (Swath plots): The block model was evaluated using a series of swath plots. A swath plot is a graphical display of the grade distribution derived from a series of bands, or swaths, generated as sections through the deposit. • 4. Specific Gravity (SG) Model Validation: The SG composited data was used to create a kriged model that represents the variability of SG in the deposit.
Moisture	• Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content.	• Sample weighting and assay analysis were performed on dry basis.
Cut-off parameters	• The basis of the adopted cut-off grade(s) or quality parameters applied.	• Mineral resources are reported within a conceptual pit shell at a cutoff grade of 3% P_2O_5.

Criteria	JORC Code Explanation	Commentary
Mining factors or assumptions.	• Assumptions made regarding possible mining methods, minimum mining dimensions and internal (or, if applicable, external) mining dilution. It may not always be possible to make assumptions regarding mining methods and parameters when estimating Mineral Resources. may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the mining assumptions made.	• Using the Lerchs-Grossman algorithm, Millcreek has developed a mineable pit shell using the above parameters. The pit shell captures the resources estimated in the block model that have reasonable prospects for economic extraction. • The pit optimization results are used solely for the purpose of testing the “reasonable prospects for economic extraction” and do not represent an attempt to estimate mineral reserves, simply what portion of the resource is considered ‘mineable’. Further work has been performed to propose the portion of the ‘mineable’ resource that is economically optimized.
Metallurgical factors or assumptions.	• The basis for assumptions or predictions regarding metallurgical amenability. It may not always be possible to make assumptions regarding metallurgical treatment processes and parameters when reporting Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the metallurgical assumptions made.	• The pit optimization also considers the recovery of calcite as a by-product to mining and processing of the meta-carbonatite. Calcite recovery through column flotation is further addressed in subsequent sections of the report.

Criteria	JORC Code Explanation	Commentary
• Environmental factors or assumptions	• Assumptions made regarding possible waste and process residue disposal options. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider the potential environmental impacts of the mining and processing operation. While at this stage the determination of potential environmental impacts, particularly for a greenfields project, may not always be well advanced, the status of early consideration of these potential environmental impacts should be reported. Where these aspects have not been considered this should be reported with an explanation of the environmental assumptions made.	• The environmental impact and permitting review relies on work completed by Golder Associates in 2015, 2016 and 2017. Golder Associates has been instrumental in collecting and analyzing environmental field data to develop the necessary regulatory material submitted to the Rio Grande do Sul's Government. • A comprehensive Environmental and Social Impact Assessment (EIA / RIMA), that meets national and international standards, was undertaken in 2015 and 2016 by Golder Associates based on over 14 months of field data collection and subsequent interpretation. • FEPAM has granted the Installation License (LI) No. 00243/2022 for the so-called Phase 1 subdivided into Step 1 and Step 2.

Criteria	JORC Code Explanation	Commentary
Bulk density	• Whether assumed or determined. If assumed, the basis for the assumptions. If determined, the method used, whether wet or dry, the frequency of the measurements, the nature, size and representativeness of the samples. • The bulk density for bulk material must have been measured by methods that adequately account for void spaces (vugs, porosity, etc), moisture and differences between rock and alteration zones within the deposit. • Discuss assumptions for bulk density estimates used in the evaluation process of the different materials.	• During the first drilling campaign in 2011, the specific gravity of 48 core samples were measured by SGS Geosol using a standard weight in water and weight in air methodology. • Uncut core segments of approximately 15 to 20 centimeter lengths were wrapped in PVC film and submerged in water. Aguia took over this testing with all subsequent drilling following the same procedures used by SGS Geosol. To date, 4,216 specific gravity measurements have been determined for Três Estradas. • Density values were estimated on block model by ordinary kriging interpolation for each mineralization domain separately.

Criteria	JORC Code Explanation	Commentary
Classification	• The basis for the classification of the Mineral Resources into varying confidence categories. • Whether appropriate account has been taken of all relevant factors. i.e. relative confidence in tonnage/grade computations, confidence in continuity of geology and metal values, quality, quantity and distribution of the data. • Whether the result appropriately reflects the Competent Person(s)' view of the deposit.	• The resource classification involved a two-stage process. • Stage 1: Relevant mathematical parameters were saved in the block model and the blocks. These variables are Interpolation pass; Distance of the closest sample from the block; Average distance of samples used in estimating any; Number of drill holes used for estimating any; The kriging variance of grade estimation. • Stage 2: The above variables were used as supporting mathematical variables for finalization of the resource classification process. At this stage, the resource blocks • were coded manually. • The two-stage process of classifying resources follows a 'best practices' approach allowing the QP to ensure that unreasonable conditions of: 1) measured blocks and inferred category blocks occurring side-by-side and 2) the measured and indicated blocks are not dominated by blocks with low sample support. 

<table>
<tr><th>Criteria</th><th>JORC Code Explanation</th><th>Commentary</th></tr>
<tr><td>Classification (cont.)</td><td colspan="2">
Audited Mineral Resource Estimate Table*, Três Estradas Phosphate Project, Millcreek Mining Group, September 8, 2017
<table>
<tr><th>Resource Classification</th><th>Domain</th><th>Volume (m^3 X 1000)</th><th>Tonnage (T X 1000)</th><th>Density (T/m^3)</th><th>P_2O_5%</th><th>CaO%</th><th>P_2O_5 as Apatite (%)</th><th>CaO as Calcite (%)</th></tr>
<tr><td rowspan="5">Measured</td><td>AMSAP</td><td>36</td><td>55</td><td>1.54</td><td>6.63</td><td>10.75</td><td>15.70</td><td>19.19</td></tr>
<tr><td>CBTSAP</td><td>491</td><td>796</td><td>1.63</td><td>10.18</td><td>18.20</td><td>24.11</td><td>32.49</td></tr>
<tr><td>WMCBT</td><td>602</td><td>1,686</td><td>2.81</td><td>4.24</td><td>34.07</td><td>10.03</td><td>60.82</td></tr>
<tr><td>MCBT</td><td>11,619</td><td>33,004</td><td>2.85</td><td>3.85</td><td>34.26</td><td>9.12</td><td>61.15</td></tr>
<tr><td>MAMP</td><td>227</td><td>655</td><td>2.89</td><td>3.72</td><td>19.09</td><td>8.81</td><td>34.08</td></tr>
<tr><td colspan="2">Total Measured</td><td>12,975</td><td>36,196</td><td>2.82</td><td>4.01</td><td>33.59</td><td>9.50</td><td>59.95</td></tr>
<tr><td rowspan="5">Indicated</td><td>AMSAP</td><td>400</td><td>653</td><td>1.65</td><td>5.00</td><td>11.49</td><td>11.85</td><td>20.50</td></tr>
<tr><td>CBTSAP</td><td>2,330</td><td>3,834</td><td>1.66</td><td>9.21</td><td>16.24</td><td>21.82</td><td>28.99</td></tr>
<tr><td>WMCBT</td><td>370</td><td>1,026</td><td>2.78</td><td>4.38</td><td>34.57</td><td>10.39</td><td>61.71</td></tr>
<tr><td>MCBT</td><td>13,000</td><td>36,984</td><td>2.85</td><td>3.67</td><td>35.08</td><td>8.69</td><td>62.62</td></tr>
<tr><td>MAMP</td><td>1,571</td><td>4,517</td><td>2.88</td><td>3.98</td><td>19.63</td><td>9.43</td><td>35.04</td></tr>
<tr><td colspan="2">Total Indicated</td><td>17,671</td><td>47,014</td><td>2.74</td><td>4.18</td><td>31.72</td><td>9.91</td><td>56.63</td></tr>
<tr><td colspan="2">Total Measured + Indicated Resources</td><td>30,646</td><td>83,210</td><td>2.77</td><td>4.11</td><td>32.53</td><td>9.73</td><td>58.07</td></tr>
<tr><td rowspan="4">Inferred</td><td>CBTSAP</td><td>27</td><td>45</td><td>1.64</td><td>5.41</td><td>20.17</td><td>12.82</td><td>36.01</td></tr>
<tr><td>WMCBT</td><td>16</td><td>45</td><td>2.83</td><td>3.93</td><td>33.86</td><td>9.32</td><td>60.44</td></tr>
<tr><td>MCBT</td><td>7,034</td><td>20,247</td><td>2.88</td><td>3.65</td><td>34.72</td><td>8.64</td><td>61.98</td></tr>
<tr><td>MAMP</td><td>528</td><td>1,508</td><td>2.87</td><td>3.89</td><td>19.21</td><td>9.22</td><td>34.30</td></tr>
<tr><td colspan="2">Total Inferred</td><td>7,605</td><td>21,845</td><td>2.88</td><td>3.67</td><td>33.62</td><td>8.69</td><td>60.01</td></tr>
</table>
*Mineral resources are not mineral reserves and do not have demonstrated economic viability. All numbers have been rounded to reflect relative accuracy of the estimates. Mineral resources are reported within a conceptual pit shell at a cut-off grade of 3% P2O5. Mineral Resource classification of Três Estradas Project was performed by Millcreek Mining Group March 13, 2018, as verified by GE21 on NI43-101 Technical Report format named “Três Estradas Phosphate Project, Rio Grande do Sul, Brazil dated on April 4, 2018”.
Mr. Steven B. Kerr, C.P.G., Principal (Geology), Millcreek Mining Group is responsible
</td></tr>
<tr><td>Audits or reviews</td><td>• The results of any audits or reviews of Mineral Resource estimates.</td><td>• No additional audits were performed.</td></tr>
</table>

Criteria	JORC Code Explanation	Commentary
Discussion of relative accuracy/ confidence	• Where appropriate a statement of the relative accuracy and/or confidence in the Mineral Resource estimate using an approach or procedure deemed appropriate by the Competent Person. For example, the application of statistical or geostatistical procedures to quantify the relative accuracy of the resource within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors which could affect the relative accuracy and confidence of the estimate. • The statement should specify whether it relates to global or local estimates, and, if local, state the relevant tonnages or volumes, which should be relevant to technical and economic evaluation. Documentation should include assumptions made and the procedures used. • These statements of relative accuracy and confidence of the estimate should be compared with production data, where available	• The Geology QP is not aware of or perceives any environmental, permitting, legal, title, taxation, socio-economic, marketing, political, or other relevant factors having any material impact on the resource estimates other than what has already been discussed in this report. • The accuracy of resource and reserve estimates is, in part, a function of the quality and quantity of available data and of engineering and geological interpretation and judgment. Given the data available at the time this report was prepared, the estimates presented herein are considered reasonable. However, they should be accepted with the understanding that additional data and analysis available subsequent to the date of the estimates may necessitate revision. These revisions may be material. There is no guarantee that all or any part of the estimated resources or reserves will be recoverable. • No production data comparation was performed.

Tres Estradas Project – Reserves Update

Section 4 Estimation and Reporting of Ore Reserves

Criteria	JORC Code explanation	Commentary
Mineral Resource estimate for conversion to Ore Reserves	• Description of the Mineral Resource estimate used as a basis for the conversion to an Ore Reserve. • Clear statement as to whether the Mineral Resources are reported additional to, or inclusive of, the Ore Reserves.	• GE21 received from Aguia Resources the Resource database certified by the Millcreek Mining Group. GE21 performed the import and validated the database information. For this Bankable Feasibility Study (BFS), GE21 is not responsible for the estimation and certification of the Mineral Resource.
Site visits	• Comment on any site visits undertaken by the Competent Person and the outcome of those visits. • If no site visits have been undertaken indicate why this is the case.	• The Competent Persons, Porfirio Cabaleiro Rodriguez, and Bernardo Horta Cerqueira Viana undertaken a site visit in December 2019, during three days, when was possible to check fields works, and local infrastructure. • The Competent Persons Guilherme Gomides Ferreira, and Bernardo Horta Cerqueira Viana undertaken a second site visit in October 2020, during three days, when was possible to check fields works, and local infrastructure.
Study status	• The type and level of study	• Engineering for plant, facilities and infrastructure has been done to an AACE Class 3 level, suitable for a Bankable Feasibility Study, and for post-study budgetary work.

<table>
<tr><td></td><td>undertaken to enable Mineral Resources to be converted to Ore Reserves.
• The Code requires that a study to at least Pre-Feasibility Study level has been undertaken to convert Mineral Resources to Ore Reserves. Such studies will have been carried out and will have determined a mine plan that is technically achievable and economically viable, and that material Modifying Factors have been considered.</td><td>• This Bankable Feasibility Study is related to Phase 1 of the Três Estradas Phosphate Project, where only saprolite rock will be mined, considering the production of DANF.</td></tr>
<tr><td>Cut-off parameters</td><td>• The basis of the cut-off grade(s) or quality parameters applied.</td><td>• 3% P_2O_5 based on BFS report: Três Estradas Fosfate Project, Rio Grande do Sul, Brazil</td></tr>
<tr><td>Mining factors or assumptions</td><td>• The method and assumptions used as reported in the Pre-Feasibility or Feasibility Study to convert the Mineral Resource</td><td>• GE21 assumed the following parameters for Pit optimization.
<table>
<tr><th colspan="2">Item</th><th>Unit</th><th>Value</th></tr>
<tr><td rowspan="4">Economic Parameters</td><td rowspan="3">Sell Price</td><td>Exchange rate (Australian Dollar)</td><td>2.85</td></tr>
<tr><td>AUD $/t com P_2O_5 CBTSAP</td><td>72.0</td></tr>
<tr><td>AUD $/t com P_2O_5 AMPSAP</td><td>43.2</td></tr>
<tr><td rowspan="2">Resources</td><td rowspan="2">Class</td><td colspan="2">Measured</td></tr>
<tr><td colspan="2">Indicated</td></tr>
</table></td></tr>
</table>

to an Ore Reserve (i.e. either by application of appropriate factors by optimisation or by preliminary or detailed design).

- A conventional oThe choice, nature and appropriateness of the selected mining method(s) and other mining parameters including associated design issues such as pre-strip, access, etc.
- The assumptions made regarding geotechnical parameters (eg pit slopes, stope sizes, etc), grade control and pre-production drilling.
- The major assumptions made, and Mineral Resource model used for pit and stope optimisation (if appropriate).

Physical			Inferred	
	ROM	Density	g/cm³	model
		Grade	%	model
	Mining	Recovery	%	98
		Dilution		2
	Block Model		**Unit**	**Value**
		X	m	12
		Y		6
		Z		10
	Slope Angle	Degree	º	34
	Mass Recovery		%	95
	Cut-off Grade	**Grade**	**Unit**	**Value**
		P_2O_5	%	3
Costs		Ore	AUD $/t mov.	2.32
		Waste		2.32
		Process	AUD $/t.fed	4.81
		Selling Cost and G&A	AUD$/t DANF	3.34

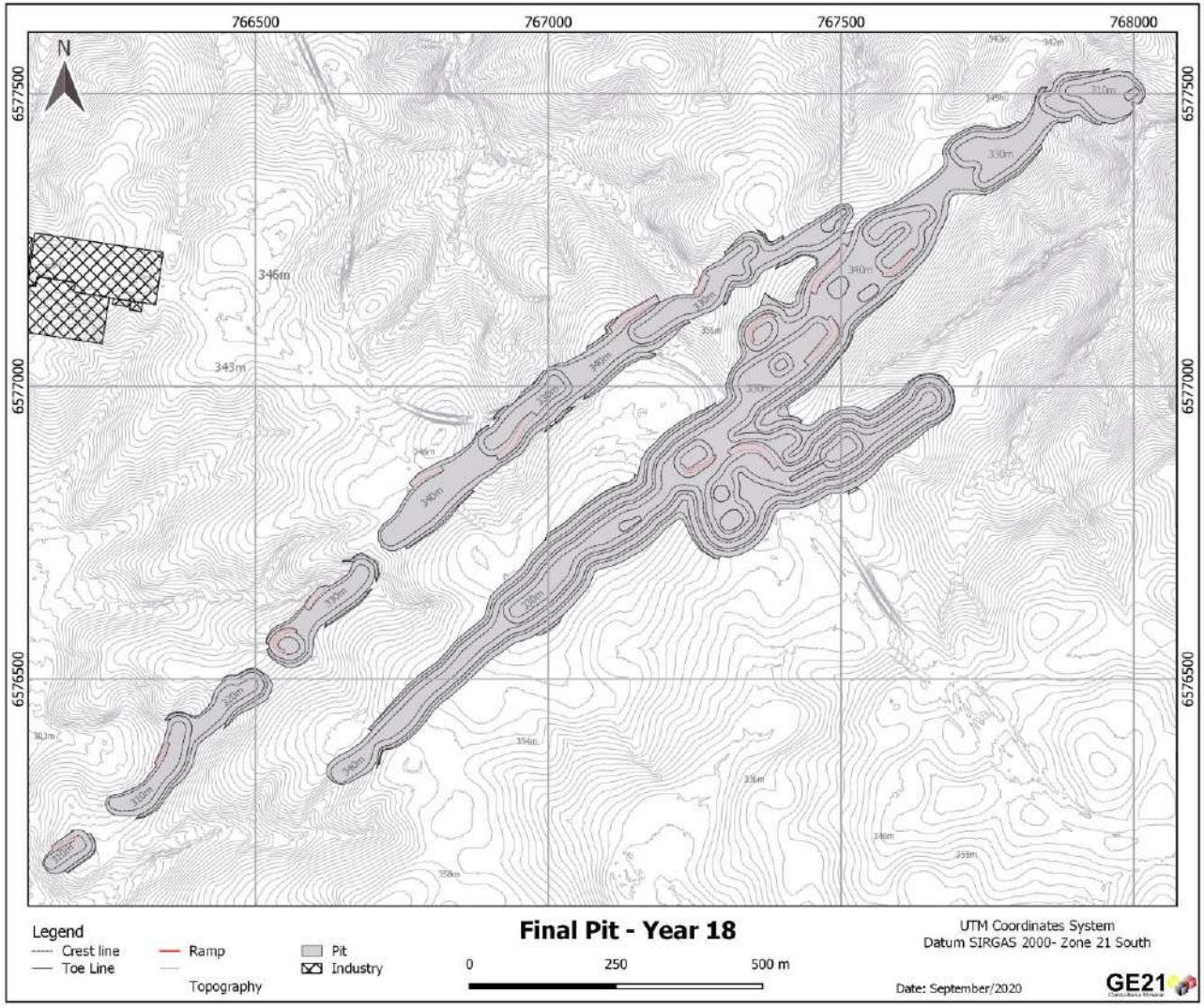
- The ore will be mined at a conventional open pit operation, with excavators with a bucket capacity of 2.0 m³ and trucks with a volume capacity of 36t.
- A Geotechnical study recommended the following geometry for final slopes angles.

Lithotype	Face angle (º)	Bench width (m)	Bench height (m)	Inter-ramp general slope (º)
Soil/Saprolite	45	7.2	15	34
Others	75	13.5	30	55

- The following below the operational design parameters.

Description	***Units***	***Value***
Road Ramp width	m	10
Ramp maximum grade	%	10
Face Angle	degree	45
Slope Angle	degree	34
Bench height	m	10
Berm width	m	5

- Mine equipment will be provided by a contractor for the first 3 years and from year 4 onwards, all mine equipment will be bought. The mining equipment is based on a small-scale mining projection to meet the selectivity requirements of the proposed mining. A JCB JS220LC hydraulic excavator, or similar, equipped with a 2.0m³ bucket, as well as Scania trucks, or similar, with 10m³ (36t) capacity was selected.
- The final pit design is presented below.

	• The mining dilution factors used. • The mining recovery factors used. • Any minimum mining widths used. • The manner in which Inferred Mineral Resources are utilised in mining studies and the sensitivity of the outcome to their inclusion. • The infrastructure requirements of the selected mining methods.	
Metallurgical factors or assumptions	• The metallurgical process proposed and the	ROM will be transported by 36t trucks from the mine to the stockpile area to natural drying process. After the natural drying process, the ROM will be reclaimed from the stockpile with a front-end loader and a truck to feed the processing plant.

	appropriateness of that process to the style of mineralisation. • Whether the metallurgical process is well-tested technology or novel in nature. • The nature, amount and representativeness of metallurgical test work undertaken, the nature of the metallurgical domaining applied and the corresponding metallurgical recovery factors applied. • Any assumptions or allowances made for deleterious elements. • The existence of any bulk sample or pilot scale test work and the degree to which such samples are considered representative of the orebody as a whole.	Considering the production of a DANF product during the Project Phase 1 the facility will consist of simple processing plant with the following flow: • The transported material is dumped into a vibrating feeder with capacity of 120 tph. • Closed Milling Circuit – Consisting of a hammer mill system and conveyance to the High-Frequency Sieve system with conveyance of coarse fraction back to the mills and fine fraction conveyance to the storage silo. • Bagging and bulk Circuit – Consisting of a bagging system and a bulk system working in parallel, bag filter and conveyance to the product warehouse.

	• For minerals that are defined by a specification, has the ore reserve estimation been based on the appropriate mineralogy to meet the specifications?	
Environmental	• *The status of studies of potential environmental impacts of the mining and processing operation. Details of waste rock characterisation and the consideration of potential sites, status of design options considered and, where applicable, the status of approvals for process residue storage and waste dumps should be reported.*	A comprehensive Environmental and Social Impact Assessment (EIA/RIMA), that meets national and international standards, was undertaken in 2015 and 2016 by Golder Associates based on over 14 months of field data collection and subsequent interpretation. The EIA/RIMA was submitted to State Government Agency (FEPAM) in October/2016. Aguia produced an updated version of the EIA / RIMA in September/2017. FEPAM requested additional information regarding the EIA/RIMA in October/2018, Abril/2019 and July/2019, which were respectively answered by Aguia in December/2018, May/2019 and August/2019. The Public consultation for the Três Estradas Phosphate Project held in Lavras do Sul in March 20th ,2019. The EIA/RIMA was approved with the Preliminary License (LP) grating by FEPAM on October 15th, 2019. FEPAM granted the Installation License (LI) No. 00243/2022 for the so-called Phase 1 on November 31st, 2023. Nevertheless, the FEPAM subdivided the installation stage in Installation Step 1 and Installation Step 2. According to Technical Report DECONT nº 62/2022, the so-called Phase 1 – Step 1 excludes one of the properties (property 8), due to the lack of effective conclusion in the land acquisition negotiations with the landowner. However, once Aguia presents to FEPAM a proof of ownership or possession of the land property 8, based on an acquisition or leasing agreements, there are no impediments to the future reinclusion of the property currently excluded from Phase 1 – Installation Step 1. Based on the analysed documents, considering the characteristics of the Três Estradas Phosphate Project and the applicable legal regulations, the environmental viability of the intended mining activity has been proven, attested by the issuance of the Preliminary License and Installation License issued by FEPAM.

Infrastructure	• *The existence of appropriate infrastructure: availability of land for plant development, power, water, transportation (particularly for bulk commodities), labour, accommodation; or the ease with which the infrastructure can be provided, or accessed.*	• The project site has good road access to within 9 km, and municipal road access to the site. It is nearby (27km) to Lavras do Sul city which will provide as well as house employees and provide basic services. The region has several other mines, and a well-established local coal industry, so equipment vendors and contractors are available to support the operations, as needed. Water will be impounded from a river at the property, and line power is available from transmission line 9 km away. A system of well-maintained roads links the mine to Porto Alegre (the capital city of the state) as well as to the markets in the north, east and west of the Rio Grande do Sul (RS) state. • The terrain at the project site is reasonably level and has been shown by geotechnical analysis to provide competent foundations for the process plant, mine infrastructure, waste dumps, tailings storage, dykes, etc.

Costs

- *The derivation of, or assumptions made, regarding projected capital costs in the study.*
- *The methodology used to estimate operating costs.*
- *Allowances made for the content of deleterious elements.*
- *The source of exchange rates used in the study.*
- *Derivation of transportation charges.*
- *The basis for forecasting or source of treatment and refining charges, penalties for failure to meet specification, etc.*
- *The allowances made for royalties payable, both Government and private.*

- The ROM (Run of Mine) loaded, transported by trucks and discharged directly into the receiving hopper of ROM at an average feed rate of 120 tons per hour. A mining fleet was dimensioned to allow estimate possible mining Capex an Opex.
- The operation was considered contract mining.
- CAPEX and OPEX information were estimated based on similar projects and GE21 data base.
- The table below presents the mining costs.

The CAPEX was estimated based on quotation, as well as the use of industry guidelines and databases. The total CAPEX is shown in the table below.

ITEM	Value AUD$(Mi)				
	Year 0	Year 01	Year 02	Year 03	TOTAL
INFRASTRUCTURE	**3.671**			**0.886**	**4.557**
Terrain Preparation	0.857				0.857
Civil Work	0.286				0.286
Paving area	0.600				0.600
Fences	0.086				0.086
Plant Road Desviation	0.714				0.714
Mine Road Desviation				0.600	0.600
Power - Grid construction				0.286	0.286
Power - Fotovoltaic Panels	0.857				0.857
Electrical instalations	0.271				0.271
FACILITIES	**4.823**		**0.191**	**1.000**	**6.015**
Fuel Area	0.089		0.029		0.117
Waste center	0.037				0.037
Truck Parking Area	0.048				0.048
Drying Shed (3.600m²)	0.857				0.857
Plant Shed	1.009				1.009
Product Warehouse 1	1.560				1.560
Product Warehouse 2				1.000	1.000
Core Shed			0.163		0.163
Dispatch Area	0.021				0.021
Lab	0.050				0.050
Warehouse	0.023				0.023
Workshop	0.023				0.023
Office	0.061				0.061
First aid post	0.143				0.143
Refectory	0.050				0.050
Sanitary	0.028				0.028
Dresser + toilets	0.049				0.049
Plant office	0.037				0.037

			Plant process control room	0.041				0.041
			security cabin (x2)	0.032				0.032
			Furniture	0.086				0.086
			Seedling nursery	0.014				0.014
			Civil Work	0.057				0.057
			Freight	0.051				0.051
			Elect Installation	0.314				0.314
			General offices	0.143				0.143
			PLANT	**2.860**	**0.839**	**1.326**		**5.025**
			Vibrating feeder	0.103				0.103
			Vibrating feeder			0.103		0.103
			Conveyor Belt 6,4mx36"	0.066				0.066
			Metal Extractor	0.043				0.043
			Conveyor Belt 27mx36"	0.160				0.160
			Metal Detector	0.006				0.006
			Hammer Mill	0.090				0.090
			Hammer Mill	0.090				0.090
			Hammer Mill			0.090		0.090
			Hammer Mill			0.090		0.090
			Conveyor Belt 26mx36" (CT.003)	0.103				0.103
			Metal Detector	0.006				0.006
			High Frequency Screen	0.102				0.102
			High Frequency Screen			0.102		0.102
			Conveyor Belt 15,4mx30" (CT.004)	0.059				0.059
			Conveyor Belt 19mx30" (CT.005)	0.063				0.063
			Conveyor Belt 17mx30" (CT.006)	0.071				0.071
			Conveyor Belt 9mx30" (CT.007)	0.043				0.043
			Conveyor Belt 9mx30" (CT.008)	0.043				0.043
			Dedusting system	0.157				0.157
			Air Compressor	0.040				0.040
			Bucket Elevator (120 ton/h)		0.085			0.085
			Bulk Loading System		0.270			0.270
			Bucket Elevator (120 ton/h)	0.086				0.086
			Silo	0.060				0.060
			Bagging System	0.167				0.167
			Silo		0.060			0.060
			Bagging System		0.167			0.167
			Silo			0.060		0.060
			Bagging System			0.167		0.167

Bridge Crane			0.714		0.714
Forklift (3ton 6m) (4x)	0.114	0.114			0.229
Water treatment station	0.057				0.057
Weight scale 120ton capacity)		0.143			0.143
Mec Installation + Freight	0.143				0.143
Elect Installation	0.989				0.989
MINING	**0.200**				**0.200**
Truck (L200 Triton 4x4)	0.086				0.086
Car 1	0.057				0.057
Car 2	0.057				0.057
ENGINEERING	**0.471**				**0.471**
GENERAL EXPENSES	**0.263**				**0.263**
NATURAL DRYING	**1.429**	**1.714**	**2.057**	**1.714**	**6.914**
Front Loader (WA320 2,7m³) (2x)	0.286		0.286		0.571
Dump truck (1x)	0.229				0.229
Drying Shed (18.000m²)		1.714	0.857	1.714	4.286
Windrow side turner (Willibald TBU 3P) (x2)	0.429		0.429		0.857
Tractor 300CV (x2)	0.486		0.486		0.971
CONTINGENCY	**0.857**	**0.286**			**1,143**
ENVIRONMENTAL PERMITTING	**1.343**	**0.086**	**0.086**	**0.114**	**1.629**
Environmental program	1.343				1.343
Others		0.086	0.086	0.114	0.286
GRAND TOTAL	**15.917**	**2.925**	**3.660**	**3.714**	**26.217**

- The table below presents the mining costs.

Summarized Project OPEX are presented in the table below.

Group	**Sub-Area**	**(AUD/t mov)**	**(AUD/t ROM)**	**(AUD/t Prod)**
Mining	Outsourced	3.85	5.77	6.09
	Topography	0.08	0.11	0.12
	Others	0.28	0.43	0.45
Total Mining		4.21	6.31	6.66
Processing	Electrical power	0.68	1.02	1.05

		Power demand	0.10	0.15	0.16
		Photovoltaic power	-0.33	-0.49	-0.51
		Drying	0.64	0.97	1.00
		Maintenance Items	0.55	0.83	0.86
		Miscellaneous and Others	1.23	1.85	1.91
		Labor	2.5	3.75	3.88
		Laboratory	0.01	0.02	0.02
		Total Processing	5.39	8.09	8.37
		G&A	2.88	4.30	4.52
		Total Plant Operation	**12.42**	**18.61**	**19.55**
		Marketing & Sales	4.58	6.85	7.20
		Big bag	5.45	8.16	8.57
		Grand Total	**22.45**	**33.62**	**35.32**
Revenue factors	• *The derivation of, or assumptions made regarding revenue factors including head grade, metal or commodity price(s) exchange rates, transportation and treatment charges, penalties, net smelter returns, etc.*	For this work, GE21 considered the price of the DANF from year 1 to 15 at A$ 120.00/t and A$ 72.00/t in the years 16 to 18 due to the available ore grade.			

	• *The derivation of assumptions made of metal or commodity price(s), for the principal metals, minerals and co-products.*	
Market assessment	• *The demand, supply and stock situation for the particular commodity, consumption trends and factors likely to affect supply and demand into the future.* • *A customer and competitor analysis along with the identification of likely market windows for the product.* • *Price and volume forecasts and the basis for these forecasts.* • *For industrial minerals the customer specification, testing and acceptance requirements prior*	• Phosphate is the primary nutrient for agriculture and a fundamental ingredient in many fertilizer products. Brazil has evolved into one of the world's major exporters of food, and that position looks to strengthen given the projected increases in world population, in meat consumption by the growing middle-class, and in the use of biofuels. There is no local phosphate producer in the RS state which is currently 100% reliant on phosphate imports. • Aguia intends to use its logistical competitive position to capture a market share in the RS state by suppling initially 50 ktpy and reaching a production rate of approximately 300 ktpy of DANF product from year 4 to year 18 of the Três Estradas Phosphate Project – Phase I. • Lab results confirm that the DANF product it's suitability to meet customer's product specifications. Currently specific agronomic trials are in course to define the agronomic efficiency regarding distinct crops and types of soil. • For this work, GE21 considered the price of the DANF from year 1 to 15 at A$ 120.00/t and A$ 72.00/t in the years 16 to 18 due to the available ore grade.

	to a supply contract.	

Economic	• *The inputs to the economic analysis to produce the net present value (NPV) in the study, the source and confidence of these economic inputs including estimated inflation, discount rate, etc.* • *NPV ranges and sensitivity to variations in the significant assumptions and inputs.*	• The below summarizes the taxes that are taken into account in this project economic evaluation. • Taxes

Tax Rates	
Item	%
IRPJ (15% until R$240.000,00 of Net profit before taxes)	15
IRPJ (10% over R$240.000,00 of Net profit before taxes)	10
CSLL (9% of Net profit before taxes)	9
CFEM (2% of gross revenue)	2
Royalties - Free Cash Flow after payback	2

- The Project estimates a Net Present Value of AUD$ 110.800million, at a Discount Rate of 10% per year post tax, as presented in below.

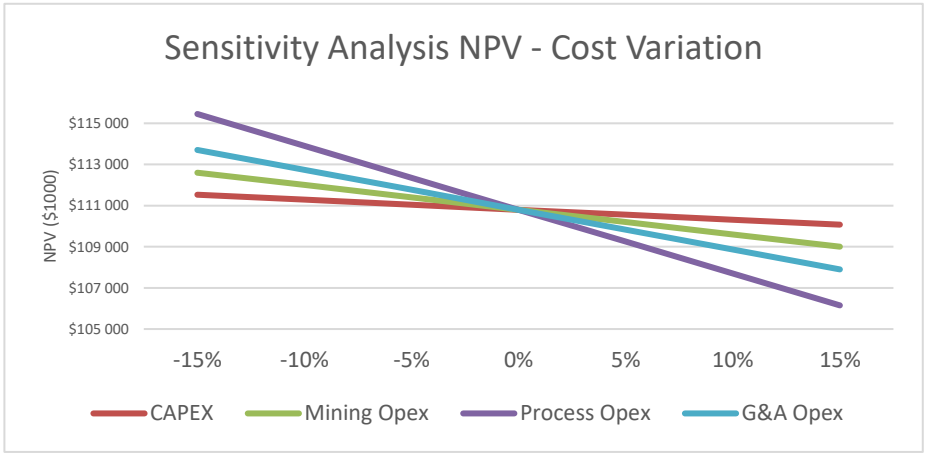
Periodo	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	Total
Mina	61.9	83.4	223.7	328.5	509.1	485.5	500.9	467.7	500.8	552.4	539.8	503.1	503.1	503.1	503.1	503.1	503.1	400.7	400.7	349.2	8,620
ROM (kt)		61.9	162.0	236.4	358.6	324.5	336.3	305.0	326.7	355.3	356.4	347.1	347.1	347.1	347.1	347.1	347.1	326.1	326.1	247.2	5,456
Waste	-	21.6	61.6	92.1	152.5	141.0	164.6	162.6	173.9	197.2	183.4	156.0	156.0	156.0	156.0	156.0	156.0	134.6	134.6	102.0	2,502
Feed Plant (kt)		58.8	153.9	224.6	338.8	308.2	319.5	289.8	310.4	337.5	338.6	329.8	329.8	329.8	329.8	329.8	329.8	309.8	309.8	234.9	5,183
Mass Recovery (%)	-	95.0	95.0	95.0	95.0	95.0	95.0	95.0	95.0	95.0	95.0	95.0	95.0	95.0	95.0	95.0	95.0	95.0	95.0	95.0	1,710
Product (t*1000)		58.8	153.9	224.6	338.8	308.2	319.5	289.8	310.4	337.5	338.6	329.8	329.8	329.8	329.8	329.8	329.8	309.8	309.8	234.9	5,183
Selling Price (AUD$/t)	-	120	120	120	120	120	120	120	120	120	120	120	120	120	120	120	120	72	72	72	$ 112.09
Gross Revenue (AUD$ x1000)	-	7,051	18,473	26,955	40,656	36,990	38,336	34,774	37,244	40,499	40,627	39,571	39,571	39,571	39,571	39,571	22,304	22,304	16,910	580,982
CPEX (AUD$ x1000)		(2,572)	(6,302)	(4,653)	(11,796)	(10,743)	(11,221)	(10,241)	(10,967)	(11,964)	(11,934)	(11,517)	(11,517)	(11,517)	(11,517)	(11,517)	(10,519)	(10,519)	(7,566)	(132,944)
Mine	-	(468.9)	(1,081.8)	(1,498.8)	(2,262.4)	(2,069.0)	(2,231.2)	(2,086.5)	(2,233.5)	(2,466.6)	(2,406.7)	(2,237.7)	(2,237.7)	(2,237.7)	(2,237.7)	(2,237.7)	(2,045.7)	(2,045.7)	(1,550.9)	(35,636)
Loading and trasportation - Total AUD$x1000	-	(468.9)	(1,081.8)	(1,498.8)	(2,262.4)	(2,069.0)	(2,231.2)	(2,086.5)	(2,233.5)	(2,466.6)	(2,406.7)	(2,237.7)	(2,237.7)	(2,237.7)	(2,237.7)	(2,237.7)	(2,045.7)	(2,045.7)	(1,550.9)	(35,636)
Process	-	(1,279)	(3,352)	(4,287)	(5,889)	(5,358)	(5,553)	(5,037)	(5,395)	(5,866)	(5,885)	(5,732)	(5,732)	(5,732)	(5,732)	(5,732)	(5,385)	(5,385)	(4,082)	(91,412)
Process Cost- Phosphate Rock AUD$x1000	-	(1,279)	(3,352)	(4,287)	(5,889)	(5,358)	(5,553)	(5,037)	(5,395)	(5,866)	(5,885)	(5,732)	(5,732)	(5,732)	(5,732)	(5,732)	(5,385)	(5,385)	(4,082)	(91,412)
G&A (AUD$x1000)	-	(571)	(1,496)	(1,499)	(1,612)	(1,467)	(1,520)	(1,379)	(1,477)	(1,606)	(1,611)	(1,569)	(1,569)	(1,569)	(1,569)	(1,569)	(1,474)	(1,474)	(1,117)	(26,146)
Sales & marketing (AUD$x1000)		(353)	(924)	(1,348)	(2,033)	(1,849)	(1,917)	(1,739)	(1,862)	(2,025)	(2,031)	(1,979)	(1,979)	(1,979)	(1,979)	(1,979)	(1,115)	(1,115)	(845)	(29,049)
EBITDA (AUD$ x1000)	-	4,380	11,620	18,322	28,860	26,247	27,115	24,533	26,277	28,536	28,693	28,054	28,054	28,054	28,054	28,054	12,285	12,285	9,314	398,738
Depreciation (AUD$ x1000)	-	(3,183)	(3,768)	(4,501)	(5,243)	(5,243)	(2,060)	(1,475)	(743)	-	-	-	-	-	-	-	-	-	-	(26,217)
Amortization (AUD$ x1000)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
EBIT (AUD$ x1000)	-	1,196	7,852	13,821	23,617	21,003	25,055	23,058	25,534	28,536	28,693	28,054	28,054	28,054	28,054	28,054	12,285	12,285	9,314	372,521
Bank interest fees	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
IRPJ (15% de R$ 240 000/ano do EBIT)	-	(14)	(94)	(166)	(283)	(252)	(301)	(277)	(306)	(342)	(344)	(337)	(337)	(337)	(337)	(337)	(147)	(147)	(112)	(4,470)
AIR (10% sobre Exc R$ 0.24 mi/ano do EBIT)	-	(96)	(761)	(1,358)	(2,338)	(2,076)	(2,482)	(2,282)	(2,529)	(2,830)	(2,845)	(2,781)	(2,781)	(2,781)	(2,781)	(2,781)	(1,204)	(1,204)	(907)	(36,820)
CSLL (9% do EBIT)	-	(108)	(707)	(1,244)	(2,126)	(1,890)	(2,255)	(2,075)	(2,298)	(2,568)	(2,582)	(2,525)	(2,525)	(2,525)	(2,525)	(2,525)	(1,106)	(1,106)	(838)	(33,527)
CFEM (2% sobre Receita Bruta)	-	(141)	(369)	(539)	(813)	(740)	(767)	(695)	(745)	(810)	(813)	(791)	(791)	(791)	(791)	(791)	(446)	(446)	(338)	(11,620)
Net Profit (AUD$ x1000)	-	833	5,920	10,514	18,057	16,045	19,251	17,729	19,655	21,986	22,109	21,620	21,620	21,620	21,620	21,620	9,381	9,381	7,118	286,084
Depreciation (AUD$ x1000)	-	(3,183)	(3,768)	(4,501)	(5,243)	(5,243)	(2,060)	(1,475)	(743)	-	-	-	-	-	-	-	-	-	-	(26,217)
Amortization (AUD$ x1000)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bank interest fees	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Free Operating Cash Flow (AUD$ x1000)	-	4,021	9,689	15,015	23,300	21,288	21,311	19,204	20,398	21,986	22,109	21,620	21,620	21,620	21,620	21,620	9,381	9,381	7,118	312,301
Net cash flow from financial leverage (BRDE Financing)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bank interest fees	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
CAPEX (AUD$ x1000)	(15,917)	(2,925)	(3,660)	(3,714)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	(26,217)
INFRAESTRUCTURE	(3,671)	-	-	(886)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	(4,557)
FACILITIES	(4,823)	-	(191)	(1,000)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	(6,015)
PLANT	(2,860)	(839)	(1,326)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	(5,025)
MINING EQUIPMENT	(200)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
ENGINEERING	(471)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
GENERAL EXPENSES	(263)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
NATURAL DRYING	(1,429)	(1,714)	(2,057)	(1,714)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	(6,914)
CONTINGENCY	(857)	(286)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	(1,143)
ENVIRONMENTAL PERMITING	(1,343)	(86)	(86)	(114)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	(1,629)
Working Capital		(1,336)																	1,336	
Cash Flow (AUD$ x1000)	(15,917)	(240)	6,029	11,300	23,300	21,288	21,311	19,204	20,398	21,986	22,109	21,620	21,620	21,620	21,620	21,620	9,381	9,381	8,454	286,084
Royalties after Free Cash flow 2%	-	-	(90)	(170)	(350)	(319)	(320)	(288)	(306)	(330)	(332)	(324)	(324)	(324)	(324)	(324)	(141)	(141)	(127)	(4,534)
Cash Flow (AUD$ x1000) after Royalties	(15,917)	(240)	5,938	11,131	22,951	20,969	20,992	18,916	20,092	21,658	21,777	21,296	21,296	21,296	21,296	21,296	9,241	9,241	8,327	281,550
NPV (AUD$ x1000)	110,881 WACC (%) 10%																			

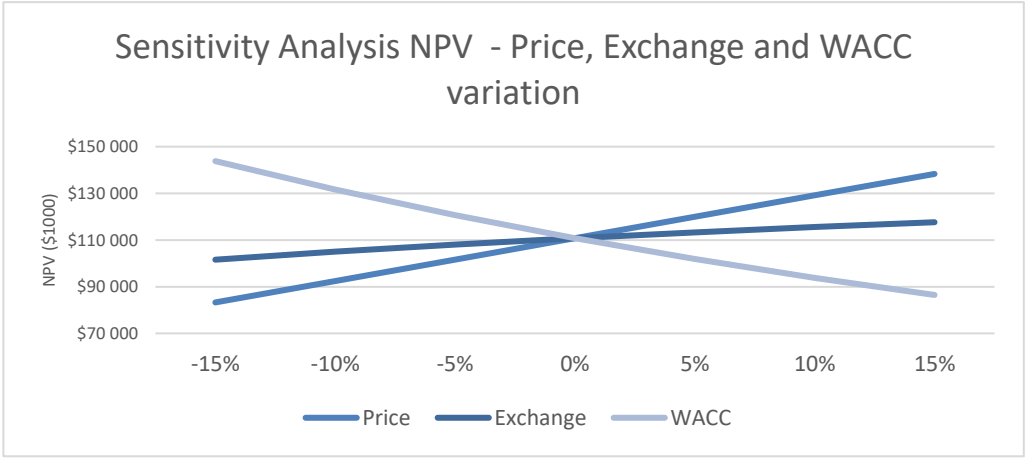
A sensitivity analysis was undertaken to evaluate the impact of the resulting economic indicators for the following attributes, within the cash flow:

- WACC
- Sell price.
- Mine OPEX

- Plant OPEX
- Exchange rate

The WACC, OPEX, NPV, was evaluated by varying its value from -15% to +15%. Figure below shows the sensitivity analysis developed by GE21.





The Discounted Cash Flow – Actual Profit results are presented in table below.

CAPEX (AUD$M)	26.2
NPV (AUD$M) @ 10%	110.8
OPEX (AUD$/t of ROM)	33.62
IRR (%)	54.7%
Payback (Years)	2.9 Years

Social	• *The status of agreements with key stakeholders and matters leading to social licence to operate.*	• As part of the baseline work, impacts on the social-economic and cultural components were identified in the area in which the Tres Estradas Phosphate Project will be implemented. Each of these impacts have been ranked in significance and environmental plans and programs have been identified and proposed in the EIA approved by FEPAM on October 15th, 2019.
Other	• *To the extent relevant, the impact of the following on the project and/or on*	• There are no known naturally occurring risks to which the project would be subject that have been identified. The region is seismically stabled and not known to be subject to usually inclement weather. Any identified material naturally occurring risks.

	the estimation and classification of the Ore Reserves: • *Any identified material naturally occurring risks.* • *The status of material legal agreements and marketing arrangements.* • *The status of governmental agreements and approvals critical to the viability of the project, such as mineral tenement status, and government and statutory approvals. There must be reasonable grounds to expect that all necessary Government approvals will be received within the timeframes anticipated in the Pre-Feasibility or Feasibility study. Highlight and discuss the materiality of any unresolved matter that is dependent*	• Aguia holds 100% interest in the three mineral rights permits covering the Tres Estradas Phosphate Project. • Aguia has started the process of land acquisition. • Aguia is currently in the phase of requirement for Installation Permit (LI). According to Brazilian law the LI is granted under the fulfillment of the LP conditions, approval of the mine development plan (PAE) by the National Mining Agency and it demonstrates economic feasibility and approval of an environmental control plan called the Basic Environmental Plan (PBA). • The Três Estradas Phosphate Project is located in a rural, low population density area comprising a large number of farms in which beef cattle and soybean crops are the main activities. The implementation of the Project structures will cause direct interference in rural properties, some of which will be acquired in the whole, while others will be purchased partially. The Project interfere on 11 properties totalling 449 hectares, Aguia plan is to acquire 345 hectares. The Company has successfully completed the acquisition of 10 properties covering 312.6 hectares (90.6%). Those cover most of the mine and entirely the plant site. At 23FY Half Year Report freehold land had a balance of AUD 1.8M relating to the fully paid properties for the implantation of the Project. Aguia intends to advance the negotiations to the landowner of the last property and expects to invest AUD 196,000 in that. The non-immediately acquisition does not prevent Aguia from building the plant, neither mining in the already acquired properties. This cost isn't included in the financial analysis as it is a deferred cost.

<table>
<tr><td></td><td>on a third party on which extraction of the reserve is contingent.</td><td></td></tr>
<tr><td>Classification</td><td>• The basis for the classification of the Ore Reserves into varying confidence categories.
• Whether the result appropriately reflects the Competent Person’s view of the deposit.
• The proportion of Probable Ore Reserves that have been derived from Measured Mineral Resources (if any).</td><td>Mineral Reserves
<table>
<tr><th colspan="11">Block dimensions 12x6x10 (m)
Mine Recovery 98%, Dilution 2%
(Effective date 08/01/2020)</th></tr>
<tr><td rowspan="2">Litho</td><td rowspan="2">Class</td><td>Mass</td><td>P_2O_5</td><td>CaO</td><td>MgO</td><td>SiO_2</td><td>K_2O</td><td>Fe_2O_3</td><td>MnO_2</td><td>Al_2O_3</td></tr>
<tr><td>Mt</td><td colspan="9">%</td></tr>
<tr><td rowspan="2">CBTSAP</td><td>Proved</td><td>0.64</td><td>10.2</td><td>18.1</td><td>5.2</td><td>28.5</td><td>0.45</td><td>19.1</td><td>0.89</td><td>4.7</td></tr>
<tr><td>Probable</td><td>3.67</td><td>9.2</td><td>16.2</td><td>4.6</td><td>31.8</td><td>0.39</td><td>18.4</td><td>0.87</td><td>5.9</td></tr>
<tr><td rowspan="2">AMPSAP</td><td>Proved</td><td>0.04</td><td>6.7</td><td>10.9</td><td>9.5</td><td>37.3</td><td>0.71</td><td>15.3</td><td>0.68</td><td>7.3</td></tr>
<tr><td>Probable</td><td>0.67</td><td>4.9</td><td>11.4</td><td>7.6</td><td>39.9</td><td>1.07</td><td>15.4</td><td>0.47</td><td>8.6</td></tr>
<tr><td rowspan="2"></td><td>Total Pproved</td><td>0.68</td><td>10.0</td><td>17.7</td><td>5.5</td><td>29.0</td><td>0.5</td><td>18.9</td><td>0.9</td><td>4.9</td></tr>
<tr><td>Total Probable</td><td>4.34</td><td>8.5</td><td>15.5</td><td>5.1</td><td>33.1</td><td>0.5</td><td>17.9</td><td>0.8</td><td>6.3</td></tr>
<tr><td colspan="2">Total Proved and Probable</td><td>5.02</td><td>8.8</td><td>15.7</td><td>5.1</td><td>32.5</td><td>0.49</td><td>18.1</td><td>0.82</td><td>6.1</td></tr>
</table>
Mineral Reserves were estimated using the Geovia Whittle 4.3 software and following the economic parameters: Sale price for DANF@9%P_2O_5 = AUD$72.00 and for DANF@5%$P_2O_5$ = AUD$43.20 Exchange rate AUD$ 1.00 = R$ 2.85.
Mining costs: AUD$2.32/t mined, processing costs: AUD$4.81 /t milled and G$A:AUD$3.34/t DANF. Mineral reserves are the economic portion of the Measured and Indicated mineral resources.
Dilution 2% and Recovery 98%
Final slope angle: 34º
Waste = 2.50Mt
Inferred = 0.03Mt @ 5.2%P_2O_5 Inferred Resources were not included in the Mineral Reserves. The inferred is not a Mineral Reserve. It needs confirmation to become Mineral Reserves.
Strip Ratio = 0.5 t/t - (Waste+inferred)/Ore
The Competent Person for the estimate is Guilherme Gomides Ferreira, BSc. (MEng), MAIG, an employee of GE21</td></tr>
<tr><td>Audits or reviews</td><td>• The results of any audits or reviews of Ore Reserve estimates.</td><td>The BFS have been independently reviewed by
• Porfirio Cabaleiro Rodriguez – Mining Engineer MAIG of GE21 Mining Consulting and</td></tr>
<tr><td>Discussion of relative</td><td>• Where appropriate a statement of the relative accuracy and confidence</td><td>• Engineering for plant, facilities and infrastructure has been done to an AACE Class 3 level, suitable for a Bankable Feasibility Study, and for post-study budgetary work.</td></tr>
</table>

accuracy/ confidence	*level in the Ore Reserve estimate using an approach or procedure deemed appropriate by the Competent Person. For example, the application of statistical or geostatistical procedures to quantify the relative accuracy of the reserve within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors which could affect the relative accuracy and confidence of the estimate.* • *The statement should specify whether it relates to global or local estimates, and, if local, state the relevant tonnages, which should be relevant to technical and economic evaluation.*	

	Documentation should include assumptions made and the procedures used. • *Accuracy and confidence discussions should extend to specific discussions of any applied Modifying Factors that may have a material impact on Ore Reserve viability, or for which there are remaining areas of uncertainty at the current study stage.* • *It is recognised that this may not be possible or appropriate in all circumstances. These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.*	