

Drilling at La Paz delivers Indicated resource estimate increase of 117% to 35.2 million tonnes (MT)

This result demonstrates the potential for La Paz to be one of the largest rare earths projects in North America, making our asset significant in the development of the US domestic rare earths supply chain.

Highlights

- JORC 2012 compliant total resource tonnage increased 33.1% to 170.6 MT
- Indicated resource estimates increased to 35.2MT from 16.2MT, an increase of 117%
- Resource estimation report demonstrates approximately 66.6 million kilograms TREE, approximately 80.0 million kilograms TREO
- The overall TREE grade increased 5.2% to 391ppm from 372ppm
- New Resource Estimates include 4.4 million kg of Scandium Oxide (Sc_2O_3)
- Opportunities exist to extend the Maiden Resource laterally and vertically where mineralisation is not closed off by drilling
- Discovery of a new potential resource in the Southwest area where one diamond core hole terminated in mineralisation material below 75 metres. New claims are being staked
- Assay results demonstrate La Paz is an environmentally sustainable resource with low Thorium and Uranium compared to most other projects in the market
- PEA Planning and Design underway
- Scale and grade consistency support the economics of the project

American Rare Earths Limited (ASX: ARR) ("the Company") is pleased to announce an updated JORC 2012 Resource estimate at the La Paz Rare Earths project (La Paz REE) in Arizona. The Company has seen a significant upgrade in both the quality and quantity of the JORC resources at La Paz. The Report's findings confirm that La Paz is an Environmentally Sustainable resource with low Uranium and Thorium grades, compared to most other projects in the market.

This announcement supports the development of the US domestic rare earths supply chain and highlights the strategic value of our assets to the US Government as it identifies risks in the supply chain for critical minerals including rare earth elements. (Executive Order on America's supply chains February 24 2021 Presidential Actions)

Mr. Keith Middleton, Managing Director of ARR adds, "ARR is extremely pleased with the results of the La Paz Resource Update. Seeing a 117% increase in Indicated resource tonnage and a 5.2% increase in TREE grade demonstrates the value of our assets at La Paz. Our upcoming exploration plans will allow us to grow the project and continue defining the resource while returning value to shareholders."

American Rare Earths Limited (ASX:ARR)

Capital Structure: Ordinary Shares on Issue 344,308,326

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Resource Update Summary

ARR commissioned Mr Alfred Gillman of Odessa Resources, Pty Ltd (Odessa) to update the JORC 2012 resources for the La Paz Project area in La Paz County, Arizona, USA, refer to Figure 1. The Mineral Resource estimates are classified in accordance with the 2012 edition of The Australian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (JORC Code 2012). An updated JORC Table 1 for the updated REE Resources at La Paz resides in **Appendix A** below.

The Report estimated that the in-place Total Rare Earth Elements (TREE) resource at La Paz comprises **170.6 million tonnes with an average grade of 391ppm TREE**, refer to Table 1. Table 4 shows a 33.1% increase in both the JORC resource tonnage and the amount of TREE in the ground. Further drilling will be planned to help define the resource area.

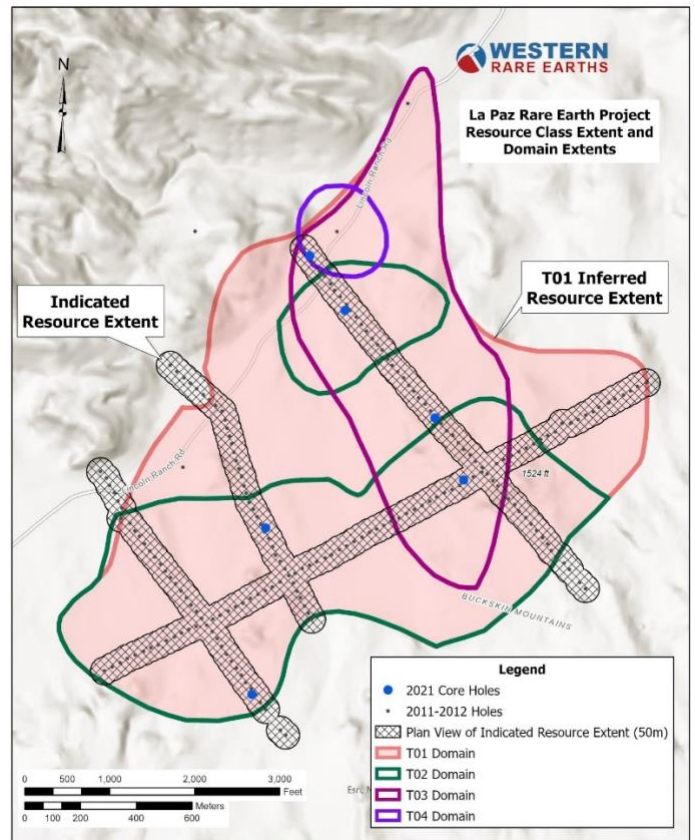
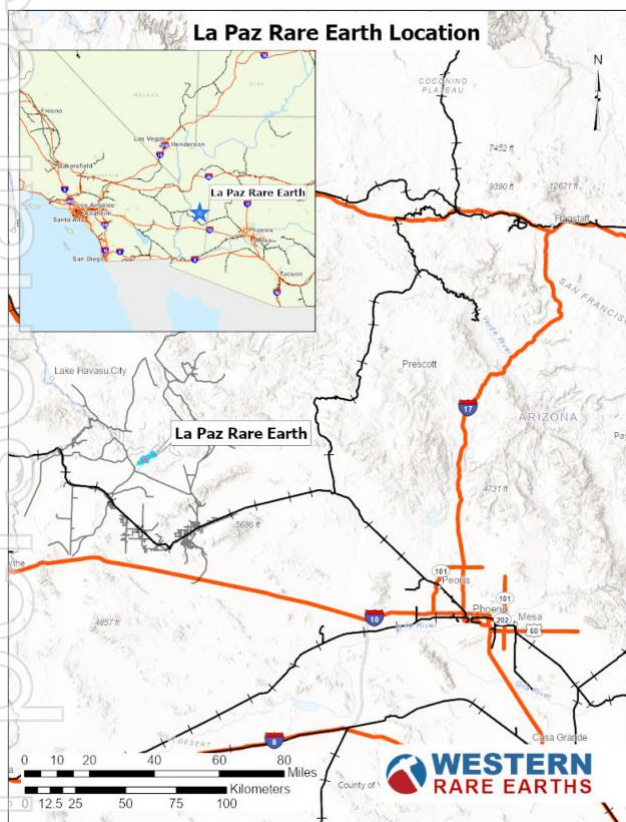


Figure 1 - La Paz Project Location

JORC 2012 Resource Upgrade

The JORC Resource estimation has exceeded the expectations of the Company and the results are shown from Tables 1 to 4. **A full version of the Methodology and Resource Estimation Report can be seen in Appendix B.**

Table 1 - Estimated Total Rare Earth Element Oxide (TREO) Resources of the La Paz Model Area

Classification	Tonnage (tonnes)	TREE (ppm)	TREE (kg)	TREO Factor	TREO (ppm)	TREO (kg)
Indicated	35,161,600	382	13,448,019	1.2005	459	16,144,347
Inferred	135,433,800	393	53,198,803	1.2005	472	63,865,163
Total	170,595,400	391	66,646,822	1.2005	469	80,009,510

Table 2 - Estimated In-Place Scandium Oxide Resources of the La Paz Model Area

Classification	Tonnage (tonnes)	Sc (ppm)	Sc (kg)	Sc Oxide Factor	Sc Oxide (ppm)	Sc Oxide (kg)
Indicated	35,161,600	17	592,653	1.5334	26	908,770
Inferred	135,433,800	17	2,280,914	1.5334	26	3,497,537
Total	170,595,400	17	2,873,567	1.5334	26	4,406,306

Table 3 - Comparison between 2021 Resource Estimates and 2011 Resource Estimates

Resource Class	2021 Resource Estimate			2011 Resource Estimate		
	Tonnage	TREE	TREE	Tonnage	TREE	TREE
	million tonnes	ppm	million kg	million tonnes	ppm	million kg
Indicated	35.2	382.0	13.4	16.2	373.4	6.0
Inferred	135.4	393.0	53.2	112.0	371.5	41.6
Total	170.6	391.0	66.6	128.2	371.7	47.7

Table 4 - Differences between 2021 Resource Estimates and 2011 Resource Estimates

Resource Class	Difference (2021 - 2011)			Percentage Difference		
	Tonnage	TREE	TREE	Tonnage	TREE	TREE
	million tonnes	ppm	million kg	million tonnes	ppm	million kg
Indicated	19.0	8.6	7.4	117.0%	2.3%	122.3%
Inferred	23.4	21.5	11.6	20.9%	5.8%	27.9%
Total	42.4	19.3	19.0	33.1%	5.2%	39.8%

Table 3 and Table 4 show an estimated increase in Inferred resources of 23.4 million tonnes (20.9%), with an increase in estimated grade of 21.5ppm TREE (5.8%). The total increase in estimated in-place resources is approximately 42.4 million tonnes (33.1%), increasing the estimated grade of 19.9ppm TREE (5.2%).

Refer to full tables in Appendix B.

Report Recommendations and Opportunities to Increase Resources

The Report noted that approximately 112 (57%) of the 195 drill holes intersected material with TREE grades >300ppm. Drilling deeper at La Paz could provide an opportunity to increase the resources.

ARR is developing phased exploration plans across the La Paz resource area. The objectives of the exploration plans are:

- Increase the overall depth of the resource by drilling holes to approximately 150m to 200m.
- Delineate the planimetric spatial extent of the resource by drill hole holes around the perimeter.
- Increase indicated resources by drilling uniformly spaced drill holes in a systematic method.
- Exploration plans will also include both geotechnical and metallurgical core holes together with monitoring wells deemed necessary from a gap analysis study currently being performed by Stantec Consulting Services, Inc.
- ARR is developing exploration targets for the La Paz Southwest area based on favourable results observed in several 2021 drill holes. The South West area is five times larger than the original resource area.

Summary of Technical Findings

Data and Correlations

The Leapfrog/Edge geological modelling system was used to correlate assays, analyse assay data, perform geostatistics, build block models of grade and finally, determine in-situ resource tonnage and grade estimates.

ARR supplied Odessa with locations and assays for 673 surface samples and 206 drill holes. ARR also provided 42 relative density (apparent specific gravity) samples.

Geologic Model and Domain Model

A geological (rock) model was constructed using the 2,961 lithology logging codes in the drill hole data. Figure 2 shows the average TREE grade for the three main lithology codes. These codes comprised:

- Qal: Quaternary cover - Upper Plate
- Tc: Tertiary sediments - Upper Plate
- Tsp: Proterozoic crystalline basement - Lower Plate

At La Paz, the mineralisation is almost entirely contained within the Lower Plate rocks that comprise mainly quartz-feldspar gneiss.

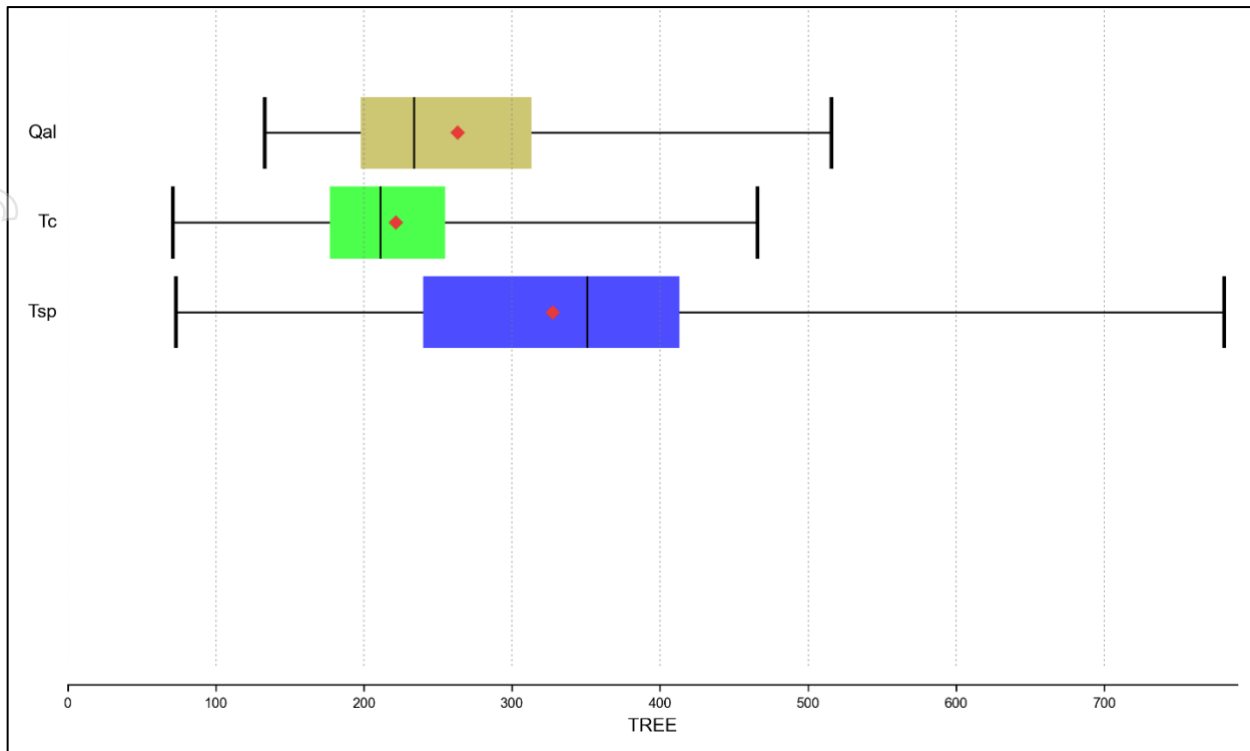


Figure 2 - Box Plot of TREE Grade Distribution According to Lithologic Unit

The La Paz assay data was correlated into four mineralised zones to better quantify TREE greater than 300ppm. Mineralised domains are defined by a TREE cut-off grade of 300ppm using uncomposited intervals with a nominal internal dilution of 2m. However, some additional internal dilution was included in a few instances in order to maintain geological continuity. The overriding strategy was to exclude as much <300ppm TREE material as possible from the mineralised domains. For the most part, this material was considered to be either low-grade or possibly, waste material, up to 8m thick in places, that could be effectively separated during mining.

The mineralised domains were then modelled as wireframe objects using the Vein Modeling System functions in the Leapfrog/Edge software, see Figure 3.

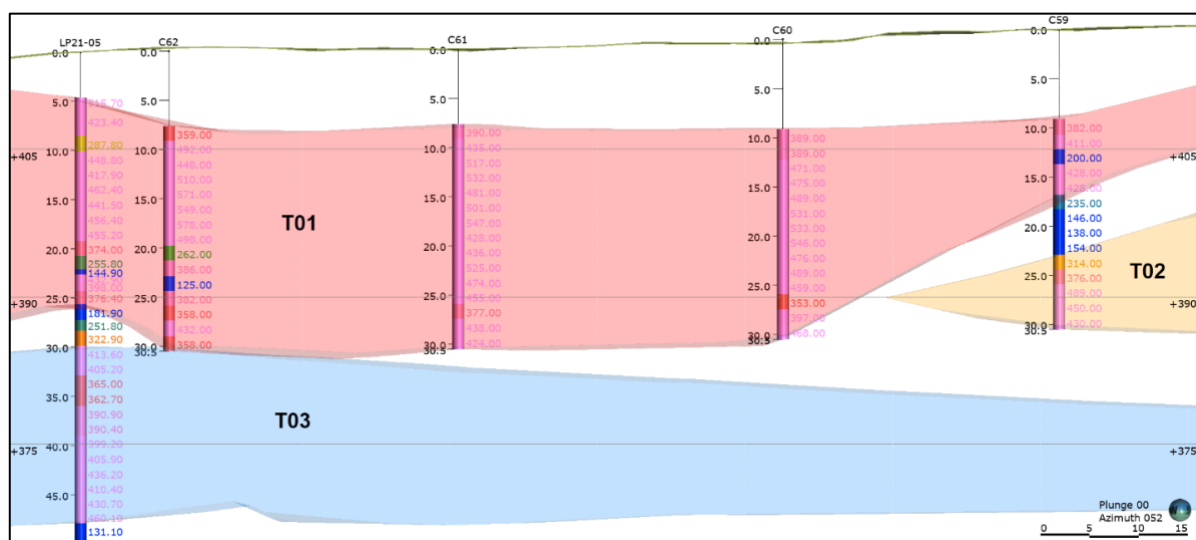


Figure 3 - Cross-Section Example of Mineralised Domains

The drilling limits on each section defined the spatial (planform) extents. A manually interpreted boundary string was applied to the main T01 domain and the drilling, informed by surface geochemical sampling data together with a minimum radius extrapolation between drill sections. The surface sample results were used only to define the resource's outer limits, confirm continuity of mineralisation between drill sections, and were excluded from the grade estimation. The outer limits of the underlying domains, T02 and T03, were restricted to the T01 boundary string. Domain T04, is defined by an area of influence around a single drill hole, refer to Figure 4.

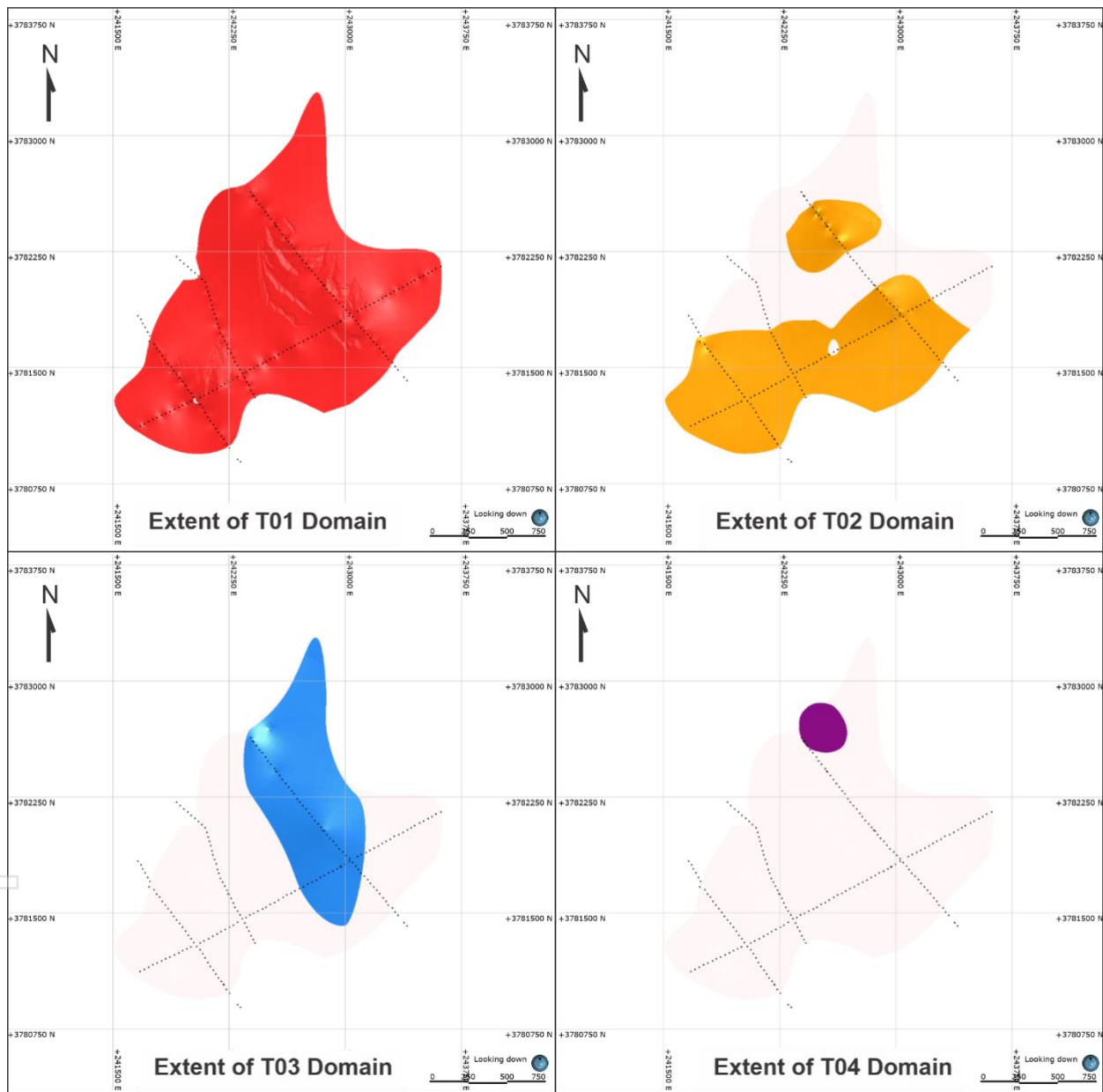


Figure 4 - Plan View of Mineralised Domains

Grade Estimation and Block Modeling

A comprehensive statistical review of the La Paz assay data was completed from the drill hole data. Assay data was composited using 2m intervals within the hard-boundaries of the mineralised domains (T01, T02, T03 and T04). Figure 5 illustrates the general compositing statistics for the mineralised domains.

The statistical review included an extensive evaluation of search radii, interpolators and variography. The details of these evaluations are described in Odessa's Report, located in Appendix B.

A block model with 20m x 20m x 2.5m blocks in the X, Y, and Z dimensions covers the La Paz Model area. The blocks were sub-celled to provide higher resolution blocks along mineralised domain boundaries, refer to Figure 6.

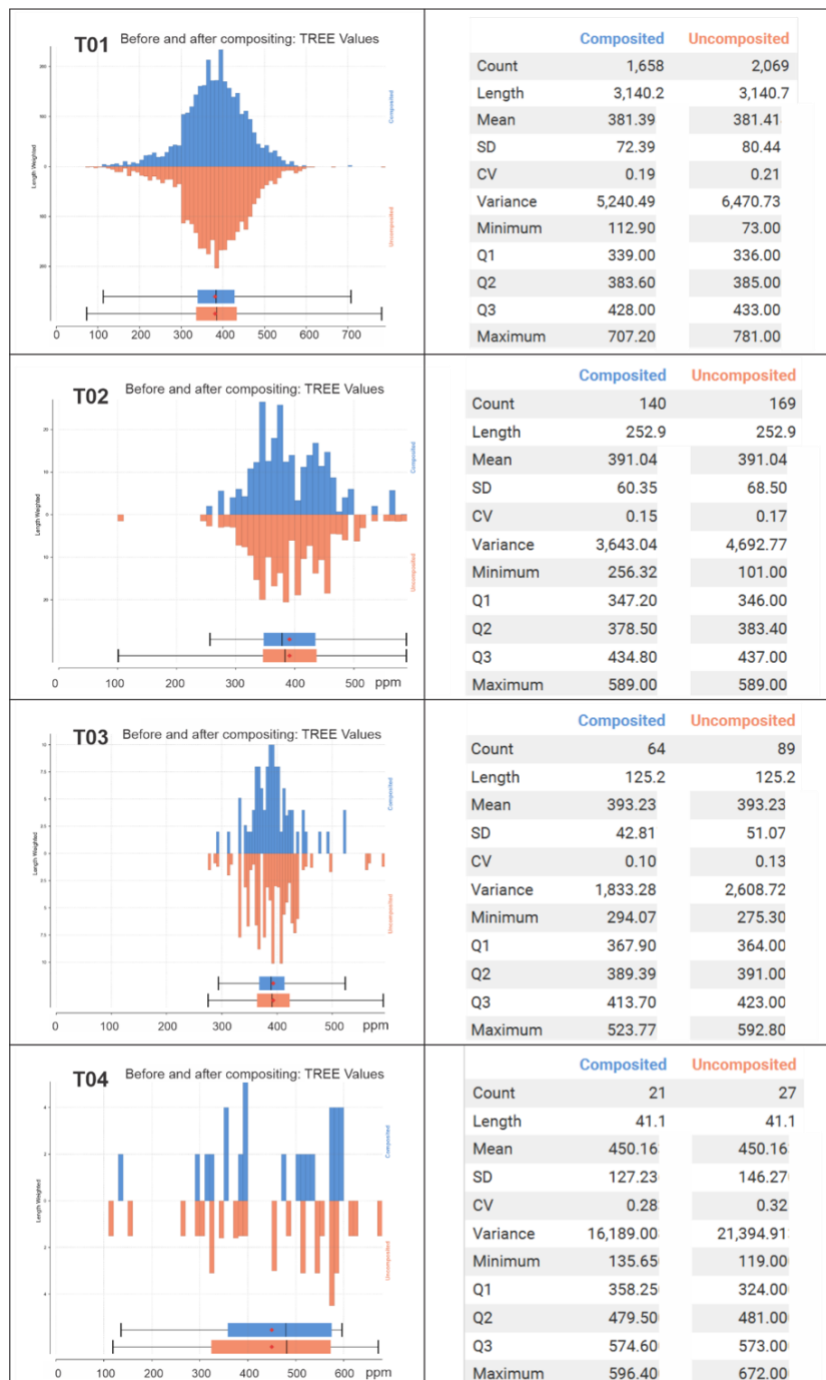


Figure 5 - Sample Compositing Statistical Summary (TREE)

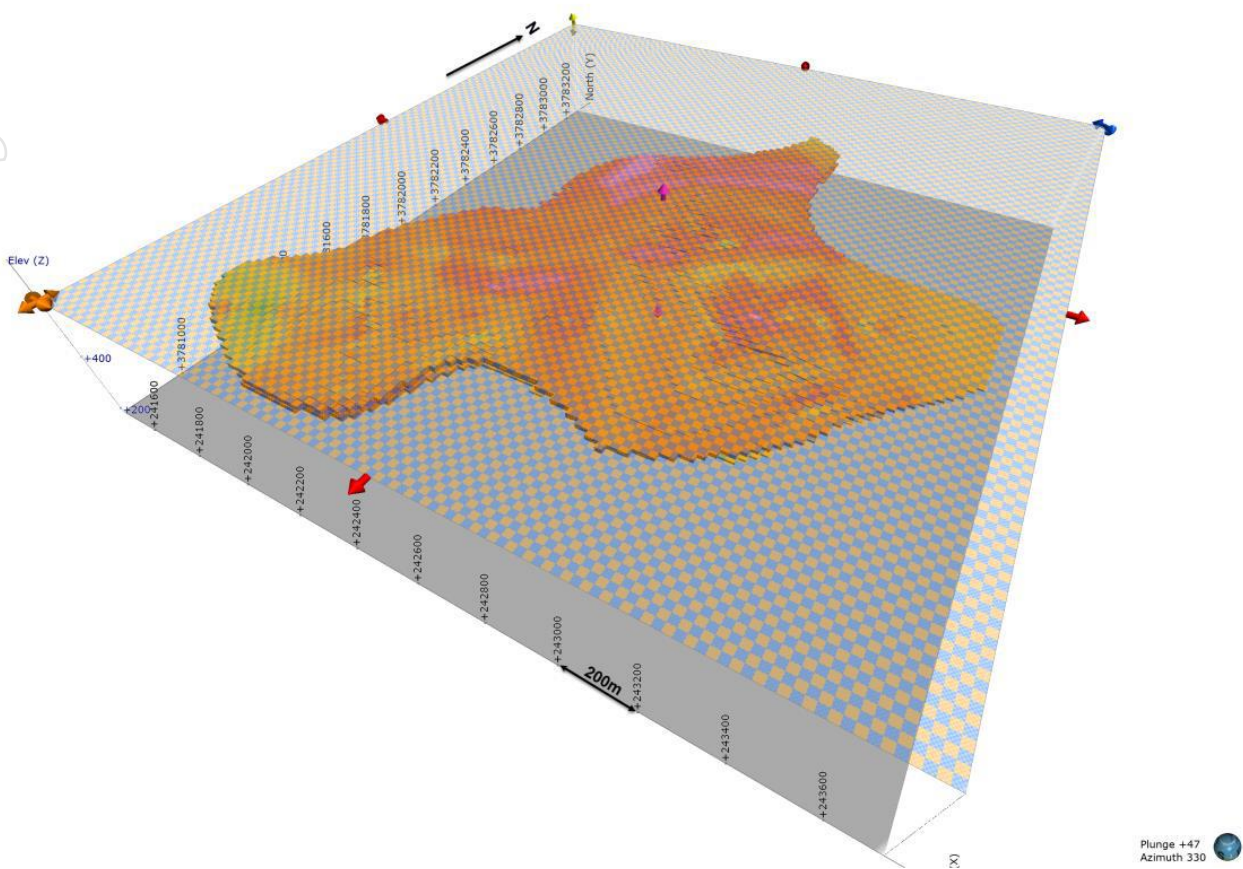


Figure 6 - 3D View of La Paz Block Model

The Block model contains descriptive attributes of Mineralised Domain, Resource Class, Lithological Unit. Grade attributes of the block model include TREE, LREE, HREE, CREE, MREE. Table 5 shows which rare earth elements are below common REE reporting classes.

Table 5 - Elements of Common REE Reporting Classes

Total REE (TREE)	Light REE (LREE)	Heavy REE (HREE)	Critical REE (CREE)	Magnetic REE (MREE)
La	La			
Ce	Ce			
Pr	Pr		Pr	Pr
Nd	Nd		Nd	Nd
Sm	Sm			
Y		Y	Y	
Eu		Eu	Eu	
Gd		Gd		
Tb		Tb	Tb	Tb
Dy		Dy	Dy	Dy
Ho		Ho		
Er		Er		
Tm		Tm		
Yb		Yb		
Lu		Lu		

Resource Classification

Resources at La Paz are classified as either Indicated or Inferred. Based on the statistical data review, a distance of up to 50m from each drill hole was used to determine Indicated resources; see hatched area in Figure 7. Inferred resources extend from 50m to the boundary of each mineralised domain.

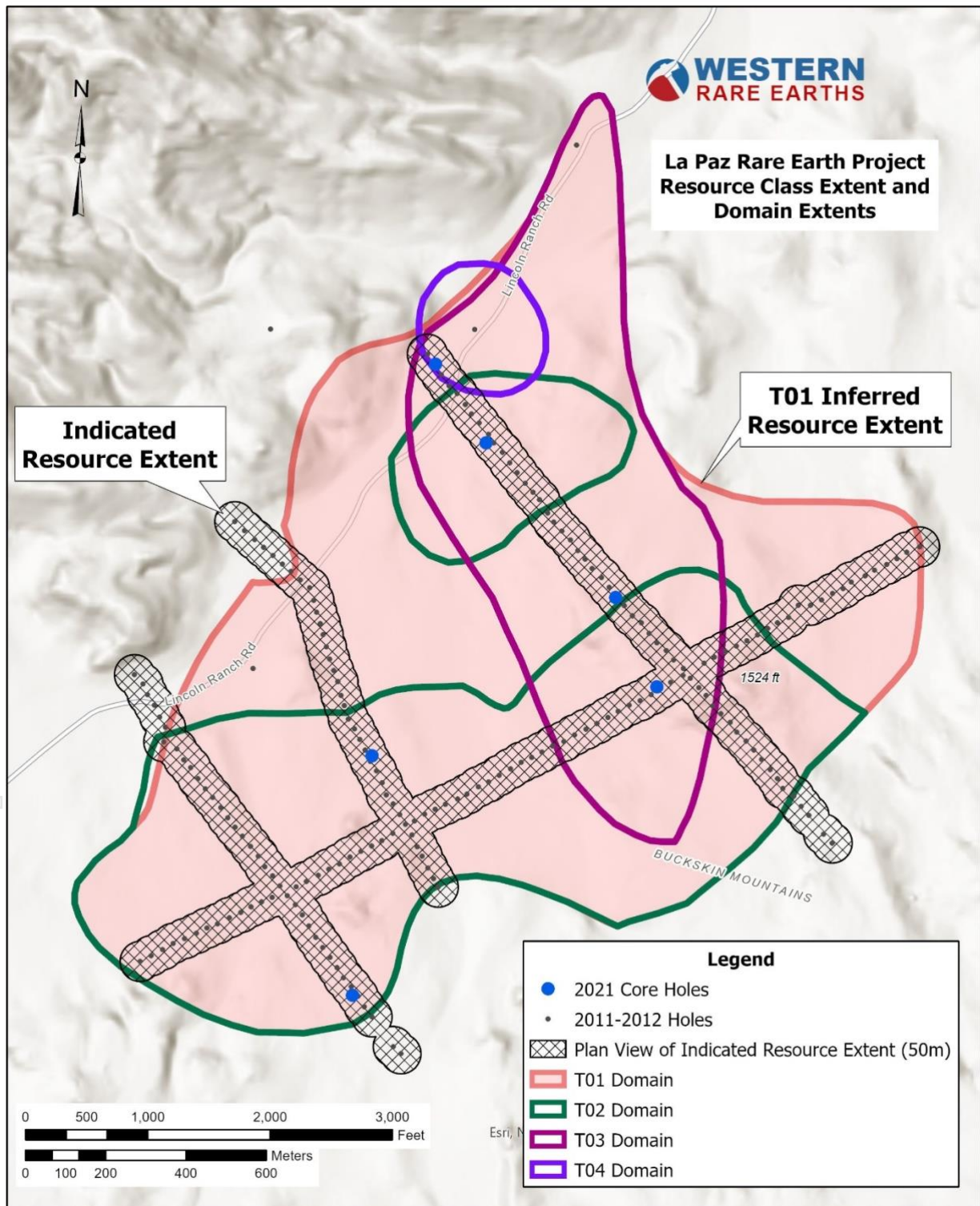


Figure 7 - Plan view of Resource Classes

Resource Estimates

Resource estimates were compiled for each mineralised domain and resource class, see Table 6 and Table 7. An average rock density of 2.68 g/cm³ was determined using the 42 relative density samples. The 2.68 g/cm³ density was applied to the in-situ volumes to determine in-situ tonnage across the La Paz model area.

Table 6 - La Paz Classified Resource Estimate

Resource Class	Volume Mm ³	Density g/cm ³	Tonnage Mt	TREE ppm	CREE ppm	HREE ppm	LREE ppm	MREE ppm	TREE million kg	HREE million kg	LREE million kg	MREE million kg	CREE million kg
Indicated	13.1	2.68	35.2	382	82	301	96	143	13.4	10.6	3.4	5.0	2.9
Inferred	50.5	2.68	135.4	393	84	310	99	147	53.2	42.0	13.5	19.9	11.3
Total	63.7	2.68	170.6	391	83	308	99	146	66.6	52.6	16.8	24.9	14.2

Table 7 - La Paz Classified Resource Estimate by Domain and Resource Class

Domain	Resource Class	Volume Mm ³	Density g/cm ³	Tonnage Mt	TREE ppm	HREE ppm	LREE ppm	MREE ppm	CREE ppm	TREE million kg	HREE million kg	LREE million kg	MREE million kg	CREE million kg
T01+T02	Indicated	10.8	2.68	28.8	380	79	301	93	140	11.0	2.3	8.7	2.7	4.0
T01+T02	Inferred	30.6	2.68	82.1	386	80	306	95	142	31.7	6.6	25.1	7.8	11.6
T03	Inferred	19.0	2.68	50.9	394	91	304	106	154	20.0	4.6	15.5	5.4	7.9
T04	Inferred	3.4	2.68	9.0	450	81	369	107	154	4.1	0.7	3.3	1.0	1.4
Total		63.7	2.68	170.8	391	83	308	99	146	66.7	14.2	52.6	16.8	24.9

Table 6 shows estimated Indicated in-situ resources of 35.2 million tonnes with an average TREE grade of 382ppm. Table 6 shows estimated Inferred in-situ resources of 135.4 million tonnes with an average TREE grade of 393ppm. The total in-situ resource for the La Paz Model area is approximately 170.6 million tonnes with an average TREE grade of 391ppm.

Recommendations and Opportunities to Increase Resources

Approximately 112 (57%) of the 195 drill holes, from 2011, terminated in material with TREE grades >300ppm, refer to Figure 8. This provides an opportunity to increase the depth of REE resources by drilling deeper exploration holes across the La Paz area. Figure 9 shows that existing exploration drilling has not closed off resource extents in all directions. Therefore, an opportunity exists to increase the La Paz resource area laterally.

ARR is developing phased exploration plans across the La Paz resource area. The objectives of the exploration plans are:

- Increase the overall depth of the resource by drilling holes to approximately 150m to 200m.
- Delineate the planimetric extent of the resource by drill hole holes around the perimeter.
- Increase indicated resources by drilling uniformly spaced drill holes in a systematic method.
- Exploration plans will also include geotechnical core holes and monitor wells as deemed necessary from the gap analysis study currently being performed by Stantec Consulting Services, Inc.
- ARR is developing exploration targets for the La Paz Southwest area based on favourable results observed in drill holes LP21-04 and LP21-03, refer to Figure 10.

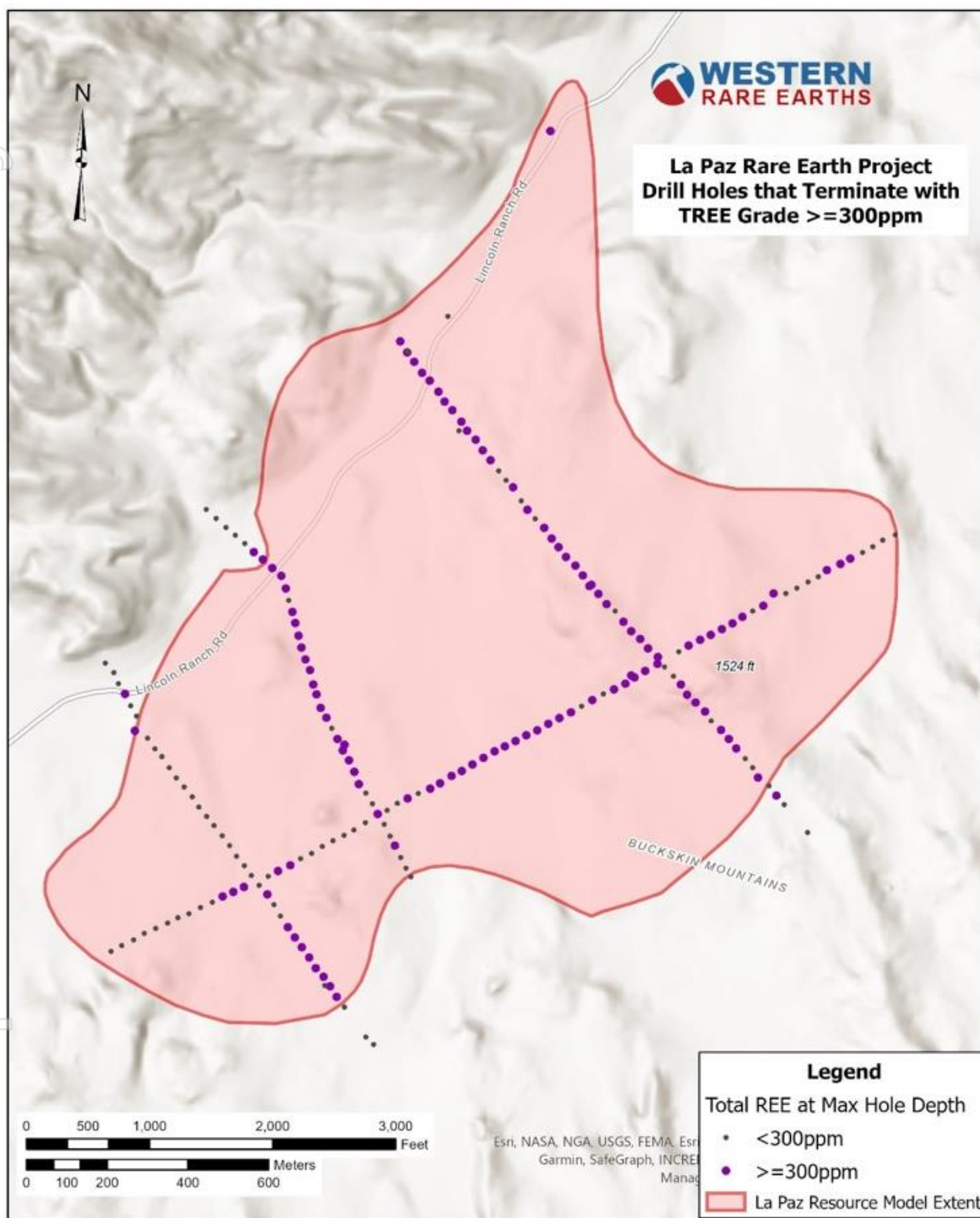


Figure 8 - Plan view of holes terminating in TREE grades $\geq 300\text{ppm}$

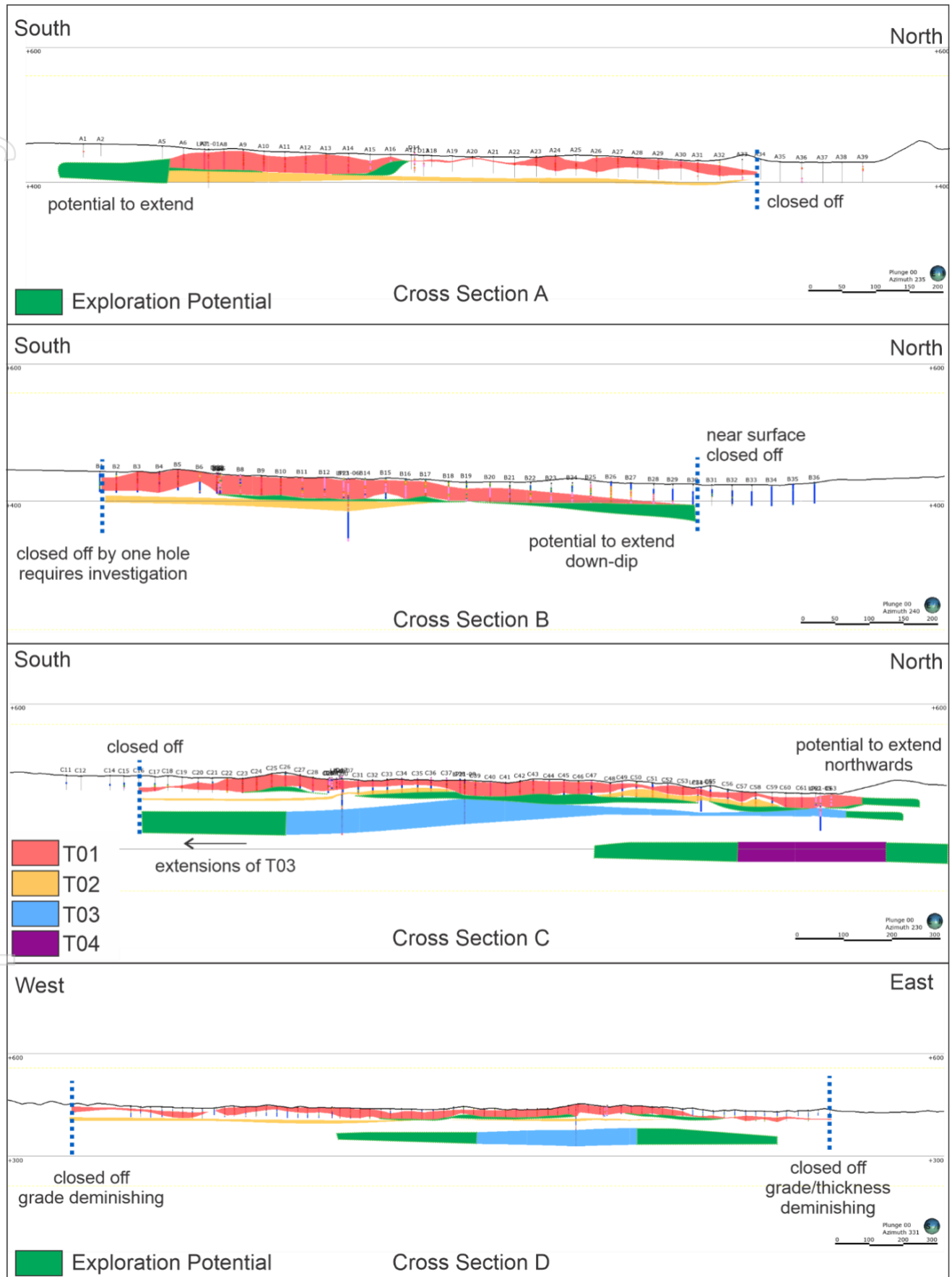


Figure 9 - Interpreted Cross-Sectional Zones of Merged Domains and Lateral Extensional Potential

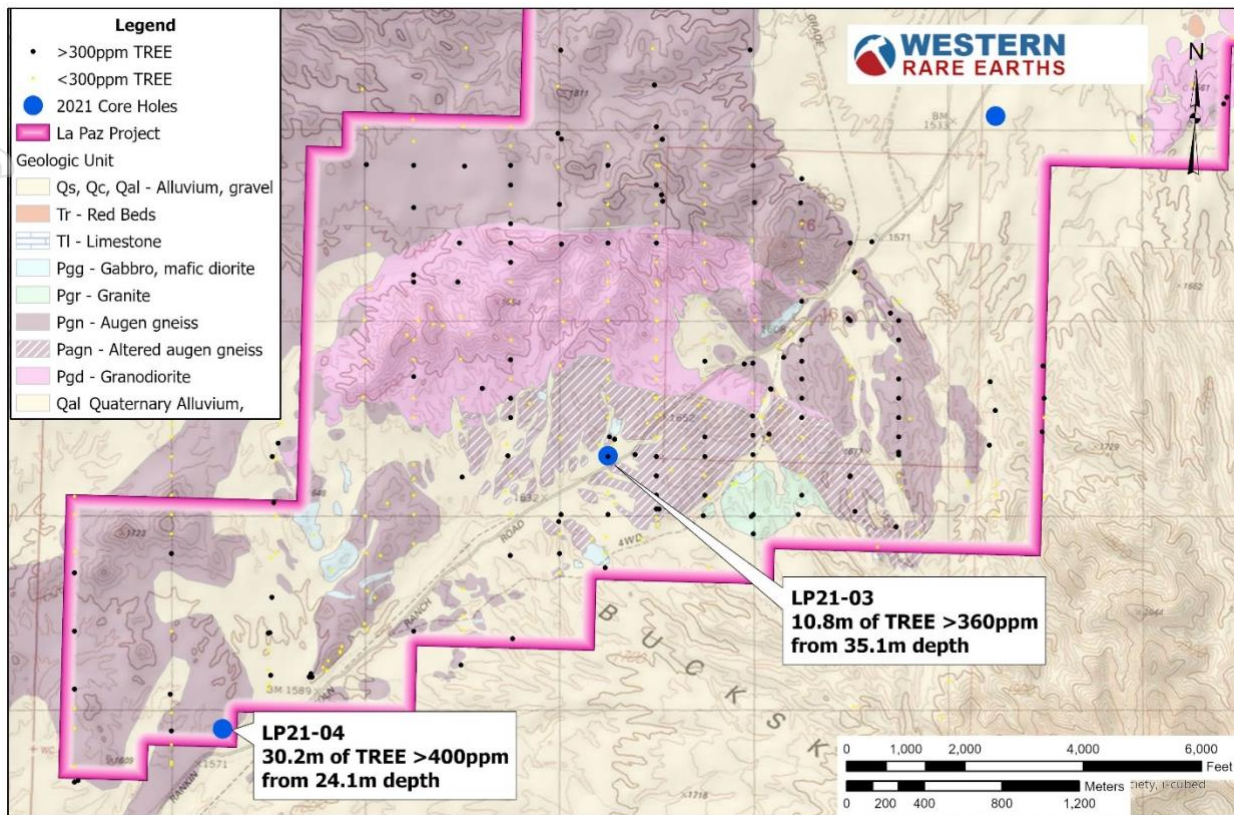


Figure 10 - Exploration Potential in La Paz Southwest area

This market announcement has been authorised for release to the market by the Board of American Rare Earths Limited.

Keith Middleton
 Managing Director

This ASX announcement refers to information extracted from market announcements available on ARR's website <https://americanrareearths.com.au>. ARR confirms it is not aware of any new information or data that materially affects the information included in the original market announcements. In the case of Mineral Resources estimates, all material assumptions and technical parameters underpinning the estimates in the relevant market announcements continue to apply and have not materially changed. ARR confirms that the form and context in which the Person's findings presented have not been materially modified from the original market announcements.

Competent Persons Statement: The information in this document that relates to Mineral Resource Estimate is based on information provided by Mr Alfred Gillman. Mr. Gillman is Principal of the independent consultant firm Odessa Resources Pty Ltd. Mr. Gillman is a Fellow and Chartered Professional of the Australian Institute of Mining and Metallurgy (AUSIMM) and has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which he is undertaking to qualify as a Competent Person as defined in the 2012 JORC Code. Mr. Gillman consents to the inclusion in the report of the matters based upon the information in the form and context in which it appears.

Competent Persons Statement: The information in this Report related to Exploration Results is based on the information compiled by Mr Jim Guiling. Mr Guiling is a Member of a Recognised Overseas Professional Organisation included in a list promulgated by the ASX (SME Registered Member of the Society of Mining, Metallurgy and Exploration Inc). Mr Guiling is Principal of independent consultants World Industrial Minerals LLC. Mr Guiling has sufficient experience relevant to the style of mineralisation and type of deposit under consideration. The activity they are undertaking as a Competent Person as defined in the 2012 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'. Mr Guiling consents the matters in the Report are based on the information in the form and context in which it appears.

About American Rare Earths

American Rare Earths Limited (ASX: ARR) is the only Australian company listed on the ASX with assets in the growing rare earth metals sector of the United States of America, itself emerging as an alternative international supply chain to China's market dominance of a global rare earth market expected to balloon to US\$20 billion by the mid-2020s. ARR owns 100% of the world-class La Paz rare earth project, located 170km northwest of Phoenix, Arizona. As a large tonnage, bulk deposit, La Paz is also potentially the largest rare earth deposit in the USA and benefits from containing exceptionally low penalty elements such as radioactive thorium and uranium. ARR plans to deliver its first Preliminary Economic Assessment for La Paz by 2022 and is working with leading USA research institutions La Paz's mineral profile incorporated into emerging US advanced rare earth processing technologies. ARR acquired a second USA REE asset in the Searchlight Rare Earths project in the first half of 2021. ARR has also acquired a third USA REE asset, the Halleck Creek project in Wyoming, in June 2021.

Appendix A

JORC Code, 2012 Edition – Table 1 La Paz Rare Earth Project		
Section 1 Sampling Techniques and Data		
(Criteria in this section apply to all succeeding sections.)		
Criteria	JORC Code explanation	Commentary
Sampling techniques	<i>Nature and quality of sampling (e.g. cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as downhole gamma sondes, handheld XRF instruments, etc.). These examples should not be taken as limiting the broad meaning of sampling.</i>	Historical drilling: In 2011, the prospect was drill tested by 195 percussion drill holes ranging from 40' (13m) to 100' (30m depth) for a total of 18,805' (5,731)m. Drilling was completed on three parallel section lines across strike and 1 section line along strike, with holes spaced 100' along section lines.
		March 2021 Core Drilling: WRE drilled nine diamond core holes of HQ size ranging from 168 feet to 403 feet in depth with a total length of 2,238 feet (682 meters), 6 Holes core were twins of select percussion holes drilled in 2011.
	<i>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</i>	Representative 1kg samples were collected from each 5' (1.52m) interval of drilling
	<i>Aspects of the determination of mineralisation that are Material to the Public Report.</i>	
	<i>In cases where 'industry standard' work has been done, this would be relatively simple (e.g. '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 (e.g. submarine nodules) may warrant disclosure of detailed information.</i>	A 250g sub-sample was pulverised to -75 microns and a 0.5g charge was assayed for REEO by ICP-MS using standard industry procedures at ALS Chemex, Reno, Nevada.

Drilling techniques	Drill type (e.g. core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc.) and details (e.g. core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or another type, whether the core is oriented and if so, by what method, etc.).	Historical drilling: A track-mounted percussion rig supplied by Dynamic Rock Solutions LLC, Salome, Arizona, was used to drill 195 3.5" diameter percussion holes. Drilling began on April 20th, 2011 and was completed on May 31st 2011. Hole depths varied from 40-100', with 142 out of 195 holes drilled to 100' depth. A total of 18,805' (5,731m) was drilled.
		March 2021 Core Drilling: Timberline Drilling, Inc. from Elko, Nevada, used a track-mounted core rig to drill HQ diameter core holes. Six holes were in the La Paz Resource area and three additional holes were drilled on the remainder of the property. See the Drill Hole Location Map. Drilling commenced on 11 March 2021, and concluded on 31 March 2021. Drill hole depths varied between 168 feet and 403 feet for a total length of 2,238 feet (682 meters).
Drill sample recovery	Method of recording and assessing core and chip sample recoveries and results assessed.	A sampling of ~200g per foot drilled to produce a composite~1kg sample for every 5' drill interval which is considered representative of each interval.
	Measures are taken to maximise sample recovery and ensure the representative nature of the samples.	March 2021 Core Drilling: Core recovery was 98% ±. The core material was sent to America Assay Labs in Sparks, Nevada for assay.
	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.	All drilling was carried out above the water table to minimize possible contamination
Logging	Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.	A representative sample of each 5' interval was retained in chip trays for logging. Geological logging is considered to have been logged to a level of detail appropriate to support Mineral Resource Estimates.
	Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc.) photography.	Chip sample logging is qualitative in nature
	The total length and percentage of the relevant intersections logged.	Drill holes were logged in full based on representative samples from every 5' interval. March 2021 Core Drilling: All Core was logged and photographed on-site by qualified geologists.

Sub-sampling techniques and sample preparation	<i>If core, whether cut or sawn and whether quarter, half or all core taken.</i>	No core samples were collected in the 2011 drilling.
		March 2021 Core Drilling: All Core was shipped to American Assay Labs for further logging and testing. Additional samples were selected for metallurgical testing.
	<i>If non-core, whether riffled, tube sampled, rotary split, etc. and whether sampled wet or dry.</i>	Percussion chips were collected in a bucket for every 5' interval. The site geologist prepared a representative 1kg sample from each 5' interval.
	<i>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</i>	All samples were dry. Sample preparation: 1kg samples split to 250g for pulverising to -75 microns. Sample analysis: 0.5g charge assayed by ICP-MS technique
	<i>Quality control procedures adopted for all sub-sampling stages to maximise the representivity of samples.</i>	The 1kg samples were delivered to an accredited laboratory for sample preparation and analysis
	<i>Measures are taken to ensure that the sampling is representative of the in situ material collected, including, for instance, results for field duplicate/second-half sampling.</i>	Sample preparation techniques are considered industry practice and are conducted at the accredited external laboratory; all deemed appropriate to the style of mineralization and suitable for determining Mineral Resource Estimates
	<i>Whether sample sizes are appropriate to the grain size of the material being sampled.</i>	March 2021 Core Drilling: After logging, photographing, samples were boxed and securely banded for shipping to American Assay Labs. The lab performed assays, additional photography and cutting in preparation for studies and mineral processing and metallurgy. Chans of custody were always maintained.
Quality of assay data and laboratory tests	<i>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</i>	Sample analysis: A 250g split from each sample was pulverised to - 75 micron and a 0.5g subsample fused with lithium borate, then subjected to a 4-acid digest and then assayed by ICP-MS for 38 elements.

	<i>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.</i>	No geophysical tools, spectrometers, handheld XRF instruments, etc were used.
	<i>Nature of quality control procedures adopted (e.g. standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (i.e. lack of bias) and precision have been established.</i>	The laboratory used standard quality control procedures incorporating duplicate samples, standards and blanks.
Verification of sampling and assaying	<i>The verification of significant intersections by either independent or alternative company personnel.</i>	An independent consultant geologist verified significant intercepts as part of the resource estimation.
	<i>The use of twinned holes.</i>	No twinned holes were used.
	<i>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</i>	Initially, all chip trays for each hole interval were stored in a secure facility in Bouse, Arizona. All drill hole logs, associated interval assay results were stored electronically within the company. All geologic data was entered onto log sheets manually then subsequently entered into the computer. Data always was secure
		WRE collected QAQC samples during sample preparation. WRE is in the process of statistically analysing the sample QAQC sample results.
	<i>Discuss any adjustment to assay data.</i>	None
Location of data points	<i>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.</i>	Downhole surveyed were not used due to the short length (max 30m depth). Hole collars were surveyed using a handheld GPS.
		March 2021 Core Drilling: Locations were determined using Handheld GPS units. Downhole surveys were not performed due to relatively shallow depths.
	<i>Specification of the grid system used.</i>	Historic 2011 Drilling: UTM grid system NAD 1927 Zone 12
		March 2021 Core Drilling: UTM grid system NAD 1983 Zone 12. (The entire project was updated to use NAD 1983 UTM Zone 12 projections.
	<i>Quality and adequacy of topographic control.</i>	Drill hole elevations were estimated using existing USGS topographic base maps as control.

Data spacing and distribution	Data spacing for reporting of Exploration Results.	
	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.	The data spacing and distribution are considered sufficient for the current level of early exploration of the areas of interest
	Whether sample compositing has been applied.	Samples have not been composited as all sample intervals were equal (5').
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.	Close-spaced vertical drill holes were used to overcome any structural bias of the fine-grained disseminated REEO mineralisation.
		March 2021 Core Drilling: New diamond core from 6 twinned holes completed in the resource area to confirm the reserve and acquire a detailed geological understanding of the mineralized zones. See Drill Hole Location Map.
		March 2021 Core Drilling: Three exploration core holes were drilled in the southwest portion of the claim area to follow up on surface samples and to explore additional mineralized zones at depth. See Drill Hole Location Map.
	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.	
Sample security	The measures are taken to ensure sample security.	Drill samples were kept in a secure storage locker before dispatch by bonded courier to the laboratory.
		March 2021 Core Drilling: All Core was collected from the drill rig daily and stored in a secure, locked facility until bonded courier dispatched the core to America Assay Labs. Chains of custody were always maintained.

Audits or reviews	<i>The results of any audits or reviews of sampling techniques and data.</i>	No audits or reviews have been conducted. An extensive review of the data has been undertaken to update the historical and current planned exploration activity.
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Section 2 Reporting of Exploration Results

(Criteria listed in the preceding section also apply to this section.)

Criteria	JORC Code explanation	Commentary
Mineral tenement and land tenure status	<i>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.</i>	<p>The tenement schedule is included in the appendix of this report. The tenements are in the form of 20-acre United States Bureau of Land Management lode mining claims. The total land package controlled by the Company in the La Paz Project Area consists of 261 unpatented lode mining claims totalling 5392.26 acres (2178.47 has). The State Exploration Permit totals 640 acres (259 has). The mining claims are 100% owned by the Company with no royalties. All claims are outside of any wilderness or national park and environmental settings. A historic railroad line crosses a portion of the claims outside of any historical or planned exploration programs. The State leased land is subject to a State royalty (yet undetermined) once the exploration activity has advanced to the exploitation level. At this point, the State engineers and geologists will evaluation any defined mineral deposit and determine an appropriate royalty.</p> <p>The QP is unaware of any environmental liabilities attached to the La Paz claims and is not a Qualified Person to environmental issues. An archaeological survey of the La Paz claims conducted by Professional Archaeological Services of Tucson, Arizona, dated March 20, 2011, was submitted to the Arizona State Land Department. The survey found no substantial areas of archaeological significance (P.A.S.T., 2011). The author is not a Qualified Person to archaeological issues.</p>

	<i>The security of the tenure held at the time of reporting and any known impediments to obtaining a licence to operate in the area.</i>	As long as annual Arizona State lease holding fees and annual claim holding fees are paid to both the BLM and the County (La Paz) in which the claims reside, tenure is secure.
<i>Exploration done by other parties</i>	<i>Acknowledgment and appraisal of exploration by other parties.</i>	<p>REEs were first recognised in June 2010 by John Petersen, a geologist. He submitted for analysis a reconnaissance sample from the Swansea and Bill Williams River areas that analysed 459.98 ppm Total Rare Earth Elements (TREE). A further 119 samples returned TREE values of 20.6 to 674.21 ppm. Scandium varied from 1.1 to 30.2 ppm. AusAmerican then conducted a confirmation sampling exercise of 22 samples that returned values of 6 to 588 ppm TREE, followed in February 2011 by a sample grid of 199 samples that returned 49 to 714 ppm TREE. 195 percussion drill holes were drilled in early 2011, with additional sampling was conducted in 2019 and 2020.</p> <p>AusAmerican Mining Corporation carried out all drilling, and the company was listed on the ASX.</p>
<i>Geology</i>	<i>Deposit type, geological setting and style of mineralisation.</i>	The project lies within the Harcuvar metamorphic core complex within the Basin and Range Province of Arizona. Mineralisation is hosted in alkali granitic gneiss and, to a lesser extent, a structurally superimposed suite of continental red beds. REEOs occur in Allanite (epidote), which appears as fine-grained disseminations and micro-fracture fillings.
<i>Drill hole Information</i>	<i>A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes:</i>	AusAmerican in 2011 contracted Dynamic Rock Solutions LLC of Salome, Arizona, to conduct exploratory drilling using a track-mounted percussion drill. Drilling began on April 20, 2011, and was completed on May 31, 2011. One hundred and ninety-five 3.5" diameter holes were complete to obtain samples of the rock types present. Holes varied in depth from 40 to 100 feet: most holes (142 of 195) were drilled to 100 feet, and total drilling totalled 18,805 feet. Distances between holes were 100 feet, and holes were situated along four lines: Lines A, B, and C were oriented NW-SE, and one, Line D, was oriented in the NE direction and crossed the other lines. The map below illustrates the La Paz percussion drill hole locations and the sample lines.

		March 2021 Core Drilling: Timberline Drilling, Inc. from Elko, Nevada, used a track-mounted core rig to drill HQ diameter Core six holes were in the La Paz resource area and three additional holes were drilled on the remainder of the property. See the Drill Hole Location Map. Drilling commenced on 11 March 2021 and concluded on 31 March 2021. Drill hole depths varied between 168 feet and 403 feet for a total depth of 2,238 feet (682 meters).
	<i>easting and northing of the drill hole collar</i>	March 2021 Core Drilling: Locations of the March 2021 Core Hole data are in Appendix B of the ASX Release Technical Report 29 June 2021.
	<i>elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar</i>	
	<i>dip and azimuth of the hole</i>	
	<i>downhole length and interception depth</i>	
	<i>Hole length.</i>	
	<i>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.</i>	
<i>Data aggregation methods</i>	<i>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.</i>	Drill holes cuttings were collected at five-foot intervals. An approximate 2 lb. (1.36 kg) sample was submitted to ALS Chemex laboratory in Reno, Nevada, for geochemical analysis. A total of 3269 samples were submitted: all were analysed for 60 elements, including REE, Y and Sc. REE assay results from the percussion drilling program are summarised in an Appendix at the back of the report
	<i>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.</i>	March 2021 Core Drilling: All core was packaged in 10-foot long sections in core boxes. No aggregations of the Core were performed.
	<i>The assumptions used for any reporting of metal equivalent values should be clearly stated.</i>	
<i>Relationship between mineralisation widths and</i>	<i>These relationships are particularly important in the reporting of Exploration Results.</i>	
	<i>If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</i>	The vertical drill hole orientations, 5' sample lengths are considered appropriate to the style of flat-lying bulk tonnage mineralisation

<i>intercept lengths</i>	<i>If it is unknown and only the downhole lengths are reported, there should be a clear statement to this effect (eg 'down hole length, true width not known').</i>	
<i>Diagrams</i>	<i>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.</i>	Drill hole Locations reside in the ARR report "2021 core hole analysis summary La paz rare earth deposit La Paz county, Arizona, Appendix B" released in June 2021.
<i>Balanced reporting</i>	<i>Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practised to avoid misleading reporting of Exploration Results.</i>	Drill hole Locations reside in the ARR report "2021 core hole analysis summary La paz rare earth deposit La Paz county, Arizona, Appendix C and Appendix D" released in June 2021.
<i>Other substantive exploration data</i>	<i>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.</i>	Metallurgical test work was completed following the 2011 drilling program. Drillhole LP-B7 was twinned, and 16 samples were submitted to Saskatchewan Research Council, Saskatoon, Saskatchewan, Canada for pre-concentration and preliminary leaching tests.
		Representative rock specimens were submitted to SGS Canadian Laboratories, Vancouver, Canada, from within the resource areas to determine overall mineral assemblages and liberations/associations of REEs carriers.
		March 2021 Core Drilling: Approximately 500 kg of Core has been shipped to Nagrom Labs, in Perth Australia, for additional mineral processing and metallurgical testing.
<i>Further work</i>	<i>The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).</i>	March 2021 Core Drilling: Approximately 500 kg of Core has been shipped to Nagrom Labs, in Perth Australia, for additional mineral processing and metallurgical testing.
	<i>Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.</i>	

Section 3 Estimation and Reporting of Mineral Resources

(Criteria listed in section 1, and where relevant in section 2, also apply to this section.)

Criteria	JORC Code explanation	
Database integrity	<i>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.</i>	Drill hole logs are captured in the DHDB database with built-in validation for imports. Drill Hole Data was exported from DHDB and imported into Leapfrog Geo/Edge v2021.1/
	<i>Data validation procedures used.</i>	
Site visits	<i>Comment on any site visits undertaken by the Competent Person and the outcome of those visits.</i>	Competent Person visited the La Paz project site in 2011 to review drill chips, verify drill hole collar locations and critical geological observations. An additional CP (author of this current updated report visited the field in 2020 to review geology and drill sites for the upcoming core drilling program
		March 2021 Core Drilling: The Competent Person visited the site during the drilling campaign.
	<i>If no site visits have been undertaken indicate why this is the case.</i>	
Geological interpretation	<i>Confidence in (or conversely, the uncertainty of) the geological interpretation of the mineral deposit.</i>	The La Paz project area lies within the Reid Valley Basin, adjacent to the Buckskin Mountains, in the west central part of the Basin and Range Physiographic and Structural province of southwestern United States. The Buckskin Mountains are part of the Harcuvar metamorphic core complex that features exposures of a detachment fault and its mylonitic footwall. Hanging wall rocks, collectively referred to as the Upper Plate, consist of a variety of complexly normal-faulted and tilted rocks that include syntectonic, mid-Tertiary sedimentary and volcanic rocks. The footwall block, commonly referred to as the Lower Plate, is composed of variably mylonitic crystalline and meta-sedimentary rocks
		The geology at the La Paz project is not well understood at the project level and has not been mapped in detail, however principal rock units identified in chips included Tertiary red beds, gneiss and felsic intrusives
	<i>Nature of the data used and of any assumptions made.</i>	

	<i>The effect, if any, of alternative interpretations on Mineral Resource estimation.</i>	
	<i>The use of geology in guiding and controlling Mineral Resource estimation.</i>	Modelling of geological units was completed by delineating two domains conforming to the unconformable character of regional geology: Upper Plate, comprising Quaternary alluvium (Qal) and Tertiary-aged red bed conglomerate (Tc), and Lower Plate, comprising Proterozoic gneiss and Tertiary-Cretaceous felsic intrusive sills.
	<i>The factors affecting continuity both of grade and geology.</i>	Geological continuity between drill holes has been assumed and no detailed structural complexity has been incorporated.
<i>Dimensions</i>	<i>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.</i>	The REE mineralized zones extend 900m N-S and 1200m E-W along strike and to a depth of 60m
<i>Estimation and modelling techniques</i>	<i>The nature and appropriateness of the estimation technique(s) applied and key assumptions, including treatment of extreme grade values, domaining, interpolation parameters and maximum distance of extrapolation from data points. If a computer assisted estimation method was chosen include a description of computer software and parameters used.</i>	Four (4) mineralized domains were determined using a cutoff grade of 300ppm TREE. Up to 2m of dilution material, below 300ppm TREE was included in a mineralized domain.
	<i>The availability of check estimates, previous estimates and/or mine production records and whether the Mineral Resource estimate takes appropriate account of such data.</i>	The resource estimate was checked against previous resource estimates. However, the previous resource estimate was an unconfined model with large lithological units.
	<i>The assumptions made regarding recovery of by-products.</i>	n/a
	<i>Estimation of deleterious elements or other non-grade variables of economic significance (eg sulphur for acid mine drainage characterisation).</i>	No such elements are known at this time. The La Paz project has very low levels of Thorium and Uranium that will probably not need special handling or mitigation
	<i>In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed.</i>	Block model size: 20m x 20m x 2.5m; no rotation; total 2,260,000 blocks. Blocks could be sub-celled up to 5-times in each direction based on modeling domain. Resource estimate was based on an isotropic Inverse Distance Weighting (IDW) interpolation based on TREE >300ppm The minimum number of sample used to populate each block was three. A maximum

search radius of 20m and 400m was used to populate blocks for indicated and inferred resources respectively.

Search Parameters:

Purpose	General			Ellipsoid Ranges			Ellipsoid Directions			Number of Samples		Drillhole Limit Max Samples per Hole
	Interpolant Name	Domain	Numeric Values	Maximum	Intermediate	Minimum	Dip	Dip Azimuth	Pitch	Minimum	Maximum	
Estimation	ID, TREE	T01	TREE	500	500	20	0	0	0	4	20	4
Estimation	ID, TREE	T02	TREE	530	320	110	1	325	88	4	20	4
Estimation	ID, TREE	T03	TREE	500	500	10	1	106	37	4	20	4
Estimation	ID, TREE	T04	TREE	200	200	30	1	106	37	4	20	4
Validation	ID, TREE raw	T01	TREE	10	10	10	0	0	90	4	5	
Validation	Kr, TREE	T01	TREE	50	28	28	0	0	90	4	20	
Validation	NN, TREE	T01	TREE	50	28	28	0	0	90			

Any assumptions behind modelling of selective mining units.

Any assumptions about correlation between variables.

Variogram Parameters:

General Variogram Name	Direction			Nugget	Sill	Normalised sill	Structure1			
	Dip	Dip Azimuth	Pitch				Structure	Major	Semi- major	Minor
T01: Variogram Model	2	0	0	517	3,877	1	Spherical	50	50	30
T02: Variogram Model	2	0	0	382	2,870	1	Spherical	70	100	110
T03: Variogram Model	1	0	0	1,905	90	1	Spherical	275	450	10
T04: Variogram Model	1	1	106	0	15,894	1	Spherical	8	5	2
TREE raw dataT01: Variogram Model	0	0	90	0	6,558	1	Spherical	5	5	5
TREE: Variogram Model	0	0	90	0	4,257	1	Spherical	50	28	28

Description of how the geological interpretation was used to control the resource estimates.

Resource estimation was constrained by modelled mineralised domains and each domain was reported independently.

Discussion of basis for using or not using grade cutting or capping.

The grade was cut using a minimum value of 300ppm TREE. The data was not capped because of the good distribution of data. Large spikes in grade are not observed.

The process of validation, the checking process used, the comparison of model data to drill hole data, and use of reconciliation data if available.

Moisture	<i>Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content.</i>	Tonnage was estimated on a dry basis
Cut-off parameters	<i>The basis of the adopted cut-off grade(s) or quality parameters applied.</i>	A cut-off grade of 300ppm TREE was used for reporting mineral resources.
Mining factors or assumptions	<i>Assumptions made regarding possible mining methods, minimum mining dimensions and internal (or, if applicable, external) mining dilution. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential mining methods, but the assumptions made 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.</i>	No mine plan or design has been prepared at this stage however the shallow nature of the deposit assumes extraction by open pit mining methods.
Metallurgical factors or assumptions	<i>The basis for assumptions or predictions regarding metallurgical amenability. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential metallurgical methods, but the assumptions regarding metallurgical treatment processes and parameters made 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.</i>	Preliminary metallurgical test work on RC chips from drill holes has indicated the mineralisation is amenable to concentration by a series of gravity separation, magnetic separation and flotation processes.
		Overall total rare earth oxides (TREO) recoveries are 68.1% at an average grade of 1,248ppm TREO and a total mass yield of 26.9%
		Total recovery is a combination of 5.2% recovery by gravity separation and 62.9% by flotation

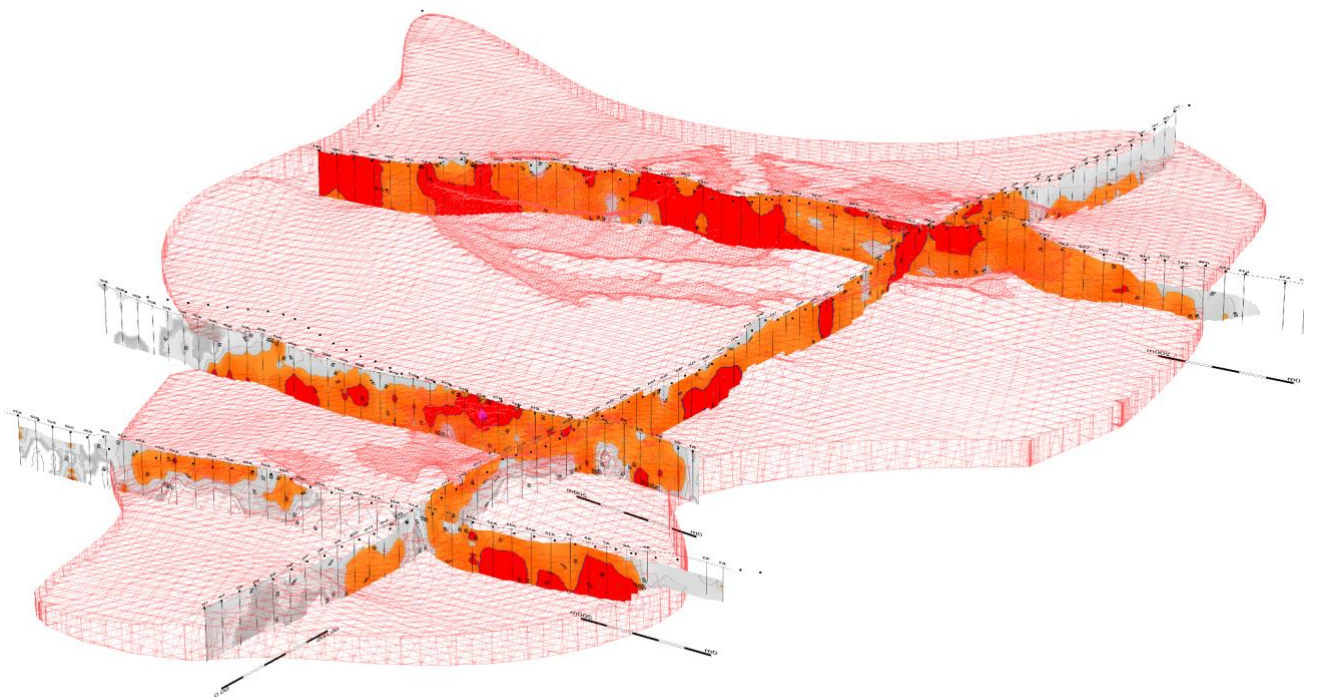
Environmental factors or assumptions	Assumptions made regarding possible waste and process residue disposal options. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider the potential environmental impacts of the mining and processing 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.	No baseline environmental studies have been completed at this stage, however no environmental liabilities are known																																								
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.	<p>42 core samples were collected and analysed for specific gravity using displacement. An average density of 2.68 was applied to the resource.</p> <table><tr><th colspan="2"></th><th colspan="2">Density Data</th></tr><tr><th>Lith Type Code</th><th>Lithology Type</th><th>Average of g/cm3</th><th>Count of g/cm3</th></tr><tr><td>go</td><td>Granodiorite</td><td>2.59</td><td>3</td></tr><tr><td>gn</td><td>Gneiss</td><td>2.63</td><td>5</td></tr><tr><td>pd</td><td>porphyry dike</td><td>2.65</td><td>1</td></tr><tr><td>ct</td><td>cataclasite</td><td>2.66</td><td>5</td></tr><tr><td>gm</td><td>mylonite gneiss</td><td>2.70</td><td>26</td></tr><tr><td>dk</td><td>dike</td><td>2.72</td><td>1</td></tr><tr><td>ga</td><td>gabbro/ultramafic</td><td>2.85</td><td>1</td></tr><tr><td colspan="2">Total</td><td>2.68</td><td>42</td></tr></table>			Density Data		Lith Type Code	Lithology Type	Average of g/cm3	Count of g/cm3	go	Granodiorite	2.59	3	gn	Gneiss	2.63	5	pd	porphyry dike	2.65	1	ct	cataclasite	2.66	5	gm	mylonite gneiss	2.70	26	dk	dike	2.72	1	ga	gabbro/ultramafic	2.85	1	Total		2.68	42
			Density Data																																							
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ga	gabbro/ultramafic	2.85	1																																							
Total		2.68	42																																							
	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.	The deposit contains few voids, is relatively dry and alteration is generally not extensive enough to affect density. The samples etsted for density are representative and the resource material.																																								
	Discuss assumptions for bulk density estimates used in the evaluation process of the different materials.																																									

Classification	<i>The basis for the classification of the Mineral Resources into varying confidence categories.</i>	Drilling data from 2011 and 2021 was separated into four mineralised domains using 300ppm TREE as the defining parameter. In the block model, the indicated class is limited to a distance of 50m from a drill hole. Inferred resources extent from 50m to the boundaries of the model.
	<i>Whether appropriate account has been taken of all relevant factors (i.e. relative confidence in tonnage/grade estimations, reliability of input data, confidence in continuity of geology and metal values, quality, quantity and distribution of the data).</i>	This arbitrarily assigned classification is considered to be fair and reasonable. Proportionally, the indicated resource amounts to 21% of the total resource.
	<i>Whether the result appropriately reflects the Competent Person's view of the deposit.</i>	The results represent the Competent Person's view of the deposit.
Audits or reviews	<i>The results of any audits or reviews of Mineral Resource estimates.</i>	The resource estimate was developed Odessa Resources Pty Ltd in July 2021. No audits or reviews, outside of Western Rare Earths personnel have been performed.
Discussion of relative accuracy/ confidence	<i>Where appropriate a statement of the relative accuracy and confidence level 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 that could affect the relative accuracy and confidence of the estimate.</i>	Odessa Resources Pty performed classical and geostatistical analysis of the data. The results of these examinations reside in the text of the attached report.
	<i>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.</i>	At this time the resource model has not been used for any economic assessment.
	<i>These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.</i>	

Appendix B

**Methodology and Resource Estimation Report
Undertaken for American Rare Earths at
La Paz Rare Earths Project, (La Paz REE) in Arizona
ASX:ARR**

1 August 2021



Alfred Gillman
B.Sc (Honours), F.AusIMM (CP Geol)
Odessa Resources Pty Ltd

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**CERTIFICATION OF QUALIFICATIONS
ALFRED J. GILLMAN
CONSULTING GEOLOGIST
ODESSA RESOURCES PTY LTD**

I, Alfred J. Gillman, hereby certify that:

1. I am currently the Principal of the independent resource consulting firm Odessa Resources Pty Ltd (ABN 16 133 543 727) and have been engaged by American Rare Earths to undertake resource estimation work for the La Paz Project.
2. I am a graduate of the University of Western Australia (1980) and hold a Bachelor of Science Degree with Honours in Geology and I have been practicing in my profession since 1980.
3. I am a Chartered Professional (Geology) and Fellow of The Australasian Institute of Mining and Metallurgy or the Australian Institute (AusIMM), number 107303
4. From 1980 to present I have been actively employed in various capacities in the mining industry in numerous locations around the world.
5. I have read and understood the requirements of the 2012 Edition of the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (JORC Code, 2012 Edition).
6. I am a Competent Person as defined by the JORC Code 2012 Edition, having sufficient experience that is relevant to the style of mineralisation and type of deposit described in the Report, and to the activity for which I am accepting responsibility.
7. I verify that the Report is based on and fairly and accurately reflects in the form and context in which it appears, the information in my supporting documentation relating to Mineral Resources.
8. As of the effective date of the report, to the best of my knowledge, information and belief, the technical report contains all scientific and technical information that is required to be disclosed to make the report not misleading.
9. I consent to the filing of this report with any stock exchange and other regulatory authority and publication by them, including publication of the report in the public company files on their websites accessible by the public.

Dated in Perth, Western Australia this 1st day of August 2021

Alfred J. Gillman
BSc(Hons), FAusIMM (CP Geol) 107303



Introduction

The La Paz REE Project is located in western Arizona and comprises a large, essentially horizontal, series of stacked mineralised layers within the upper, near-surface, levels of a Proterozoic gneissic complex.

The resource has been previously reported by Aus American Mining as comprising 112Mt grading 371.5ppm TREE inferred above 300ppm TREE cut off (Boyer and Ostensoe, Dec 2011, NI43-101).

In 2020 American Rare Earth's (project owner) updated the resource estimate to 16.2Mt grading 373.4ppm TREE indicated and 112Mt grading 371.5 Inferred. This estimate was reported in compliance with both NI43-101 and JORC2012.

Both estimates were constrained by an envelope defined by broad domains defined by lithological boundaries.

By contrast, this study has used a grade cut-off to define the estimation constraints. This was done to exclude as much below-cutoff material as possible from the mineralised domains as, for the most part, this material was considered to be internal waste material, up to 8m thick in places, that could be effectively separated during mining. The tighter estimation constraints together with the exclusion of internal waste has resulted in a roughly 5% increase in overall grade.

Scandium is pervasive throughout the resource and subject to extractive metallurgical test work, may form an important by-product to potential rare earth element production. An initial scandium tonnage and grade estimate is reported.

Classification	Tonnage	TREE (ppm)	Sc (ppm)	TREE (kg)	Sc (kg)
Indicated	35,161,600	382	17	13,448,019	592,653
Inferred	135,433,800	393	17	53,198,803	2,280,914
Total	170,595,400	391	17	66,646,822	2,873,567

Table 1: La Paz Mineral Resource Estimate (Odessa Resources, July 2021)

Scope of Work

The scope of this report is to document the procedures and methodology used to report a grade tonnage estimate of the La Paz REE Project based on data provided by WRE.

Data Provided and Modifications

Drillhole data were provided in the form of Excel spreadsheets containing the following:

- Drillhole collar locations
- Interval analyses (supplied compiled for A,B,C,D and L2011 series)
- Interval analyses (supplied in original laboratory format for L21 series)
- Interval logged lithology (inconsistencies in logging codes and style noted)
- No downhole surveys

Data Modification

- NAD1983 Zone 12 co-ordinate system adopted
- Collar elevations pressed to DTM
- Downhole trajectories all assigned as vertical
- Compilation of L21 series assay sheets

Additional Data

- photo-interpreted topographic point cloud at 1m spatial resolution
<https://libguides.library.arizona.edu/GIS/ImageryandLidar#>
- topographic digital elevation model created from point cloud

Various spatial datasets and map overlays are shown in Figure1.

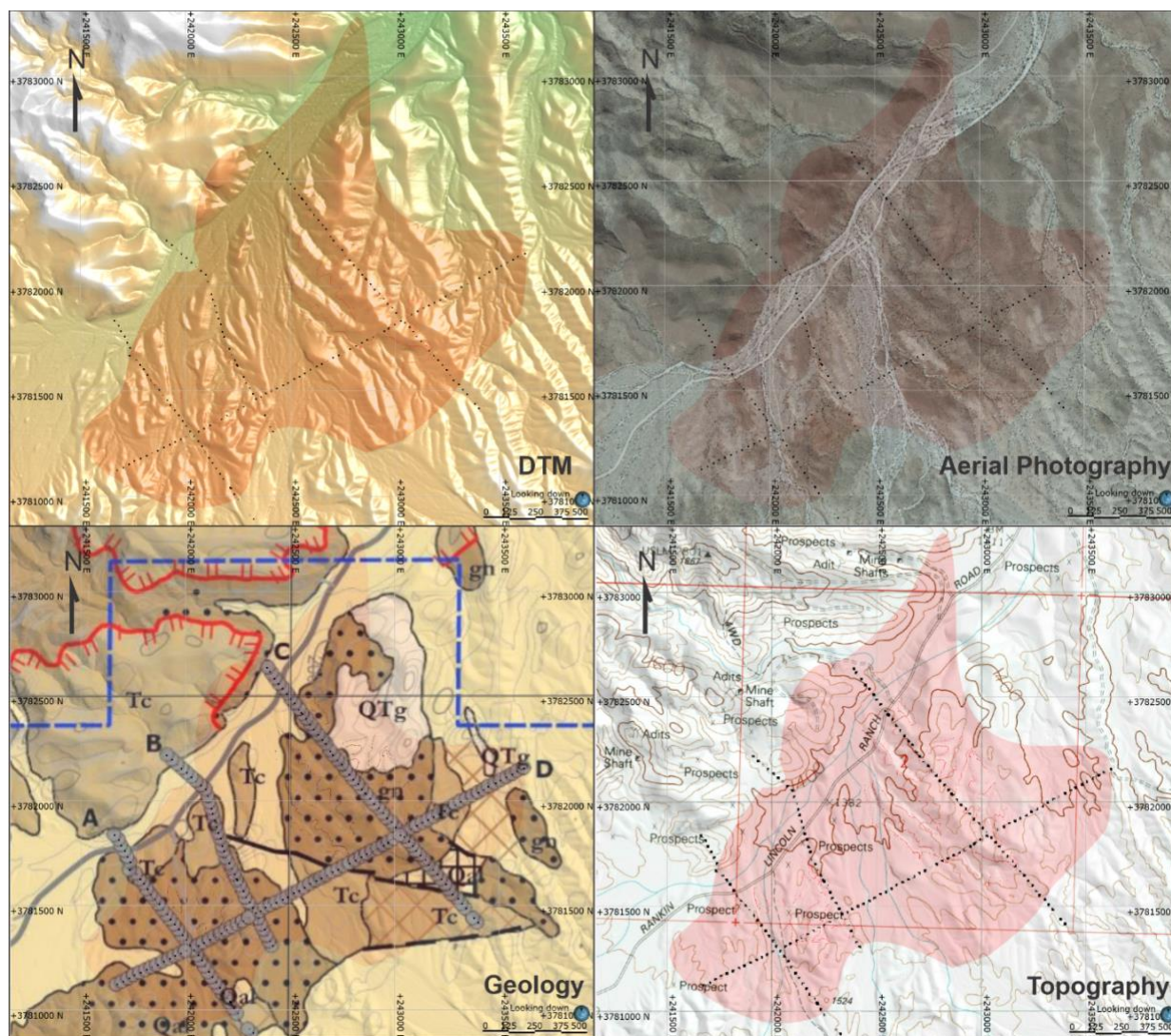


Figure 1: Plan Views spatial datasets in the resource area (shaded red)

Data Compilation

All data were merged, error corrected and validated using Leapfrog Geo/Edge v.2021.1

Analytical information included the full suite of rare earth elements together with several associated elements such as uranium and thorium. A total of 60 elements were reported. Assays for the L21-series of holes were carried out by American Assay Laboratories in Sparks, Nevada. Laboratory QAQC data including standards and blanks reporting is provided in the recent analytical sheets. The QAQC data was not reviewed by this author.

Rare Earth Assemblages (using only elemental values) were calculated as shown in Table 2.

TREE	CREE	HREE	LREE	MREE
Total	Critical	Heavy	Light	Magnetic
Ce	Dy	Dy	Ce	Pr
Dy	Eu	Er	La	Nd
Er	Nd	Eu	Nd	Tb
Eu	Pr	Gd	Pr	Dy
Gd	Tb	Ho	Sm	
Ho	Y	Lu		
La		Tb		
Lu		Tm		
Nd		Yb		
Pr		Y		
Sm				
Tb				
Tm				
Y				
Yb				

Table 2: La Paz Rare Earth Assemblages

A statistical summary of the combined REE elements and individual elements is listed in Table 3.

Element/s	Count	Length	Mean	Variance	Minimum	Median	Maximum
TREE	3,965	5,982	313	14,028	71	331	781
HREE	3,965	5,982	62	724	-	68	158
LREE	3,965	5,982	244	10,151	-	259	676
CREE	3,965	5,982	111	2,199	-	120	247
Magnetic REE	3,863	5,846	76	907	15	80	180
Ce	3,862	5,845	117	2,002	17	123	339
Dy	3,863	5,846	7	8	1	8	18
Dy_Tb	3,965	5,982	8	17	-	9	31
Er	3,863	5,846	4	2	0	4	10
Eu	3,863	5,846	2	1	1	3	7
Gd	3,863	5,846	9	14	1	10	22
Ho	3,863	5,846	1	0	0	2	4
La	3,863	5,846	55	400	9	57	156
Lu	3,863	5,846	0	0	0	1	1
Nd	3,863	5,846	53	460	11	56	131
Pr	3,863	5,846	14	28	3	14	37
Pr_Nd	3,965	5,982	66	799	-	70	167
Sc	3,965	5,982	14	29	2	15	35
Sm	3,863	5,846	10	17	2	11	24
Tb	3,863	5,846	2	3	0	1	17
Th	3,733	5,662	6	14	1	5	38
Tm	3,863	5,846	0	0	0	1	1
Interval Length	3,965		1.5	0.0	0.2	1.5	3.7

Table 3: La Paz Length-weighted Sampling and Analysis Statistics

Drilling

Drilling is mostly confined to four corridors that extend both roughly east-west and north-south across the know resource area (Table 4). Three reconnaissance holes are located further to the south west and are not included in this study.

Hole Prefix	No. Holes	Metres	Average Depth (m)	Shallowest (m)	Deepest (m)
A, B, C, D	195	5,638.7	28.9	11.6	30.5
LP_2011	2	390.8	195.4		
LP21	9	682.2	75.8	49.7	122.8
Total	206	6,711.7	32.6		

Table 4: La Paz Drilling Statistics

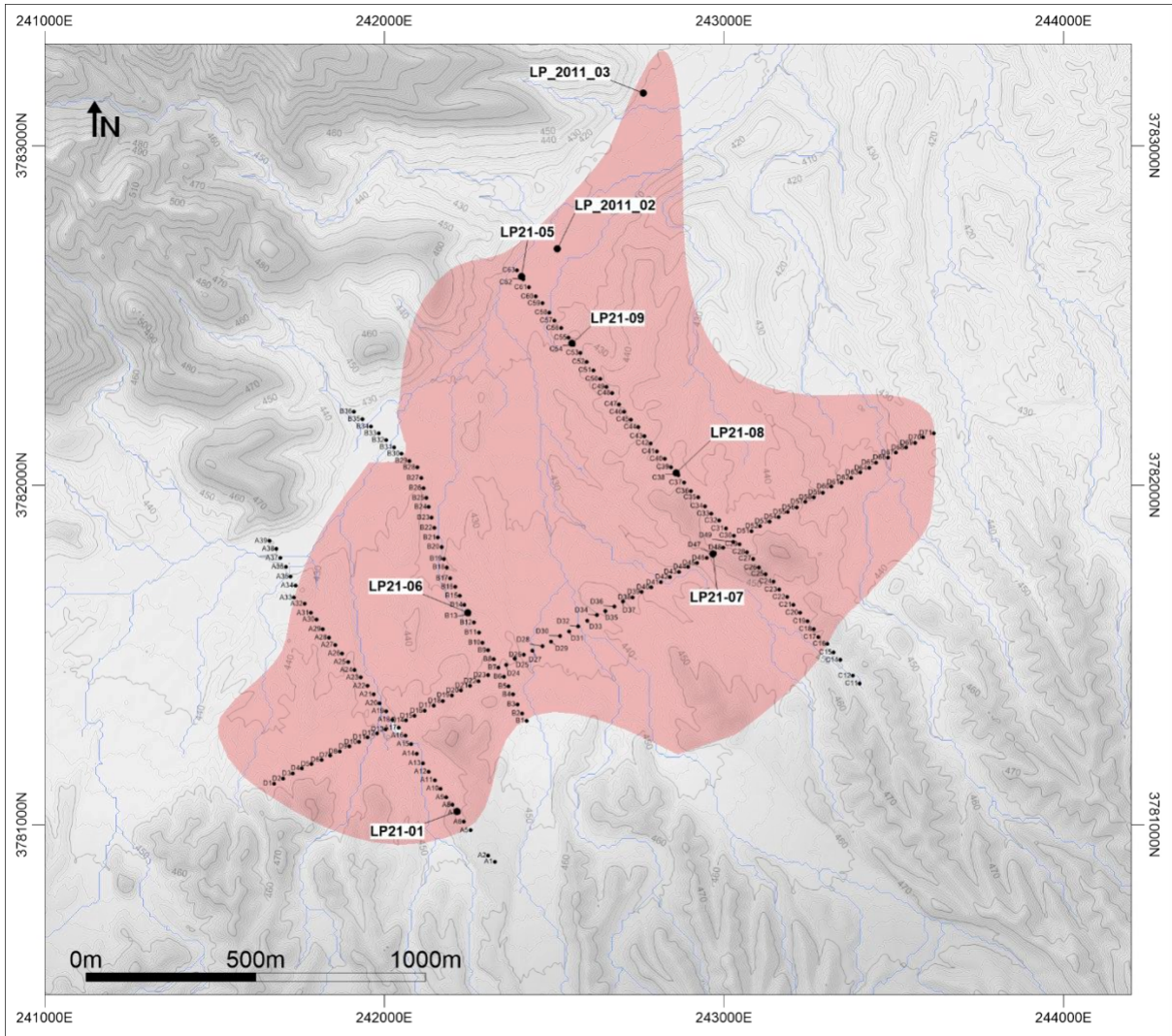


Figure 2 : Drillhole Location in the resource area (shaded red)

Geological Model

A geological (rock) model was constructed using the 2,961 lithology logging codes in the supplied “*Jorc Modified 9-22 shallow drill logs geology and analyses-w-elevations.xls*” spreadsheet. These data related to the A,B,C and D series of holes. Logging codes for these holes, which differed from the lithology codes used in the later LP2011 and LP21 series of holes, were used as they formed the dominant dataset.

Three main lithology codes comprised:

- Qal: Quaternary cover -Upper Plate
- Tc: Tertiary sediments - Upper Plate
- Tsp: Proterozoic crystalline basement - Lower Plate

Mineralisation is almost entirely contained within the Lower Plate rocks that comprise mostly quartz feldspar gneiss.

The model was constructed using Leapfrog’s stratigraphic modelling function resulting in a seamless non-intersection stratigraphic model that is clipped to topography.

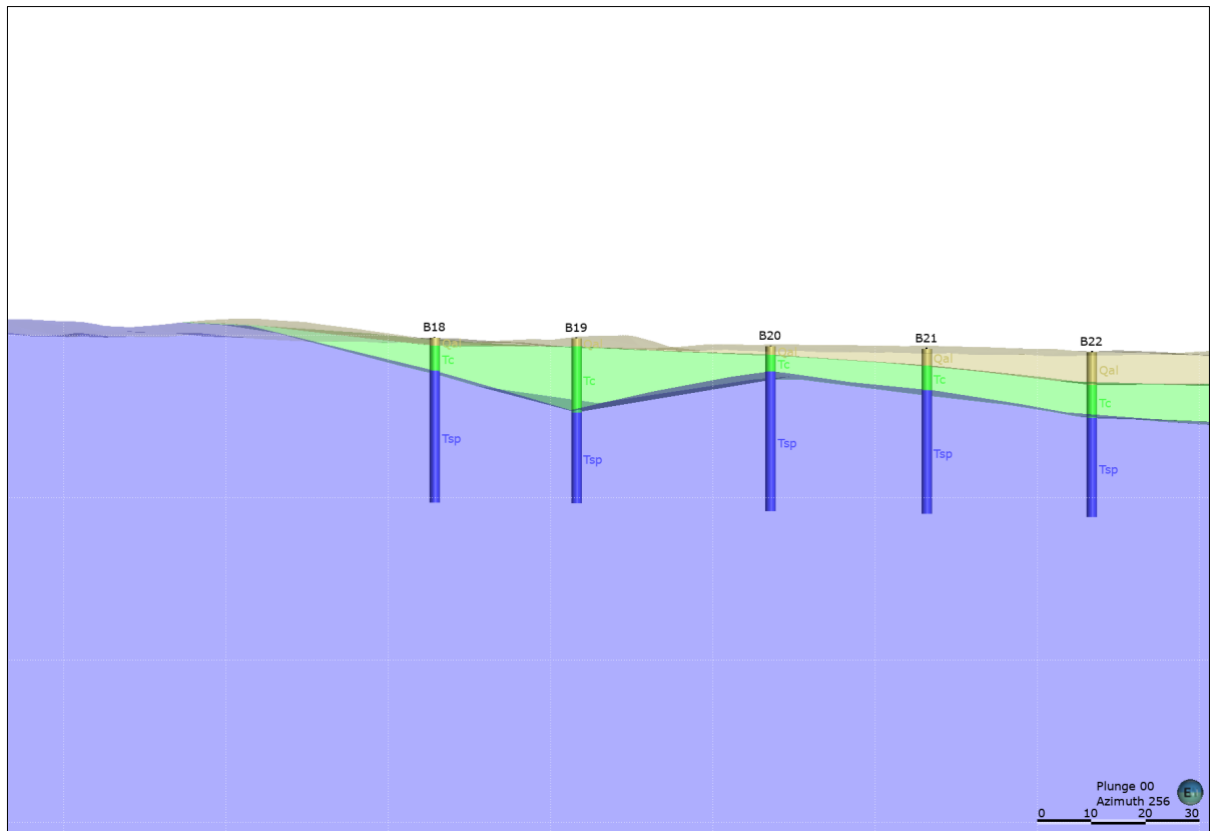


Figure 3: Sectional view showing rock model (yellow Qal, green Tc, blue Tsp)

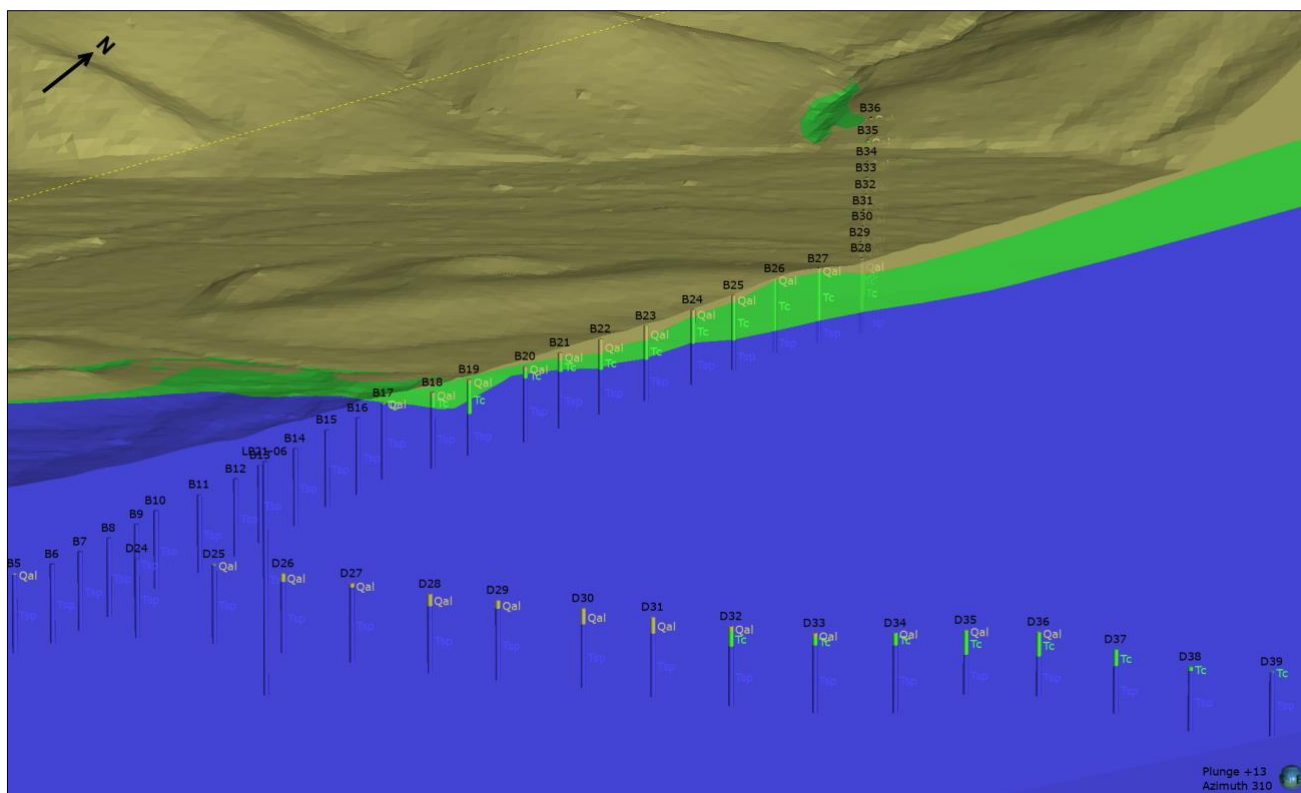


Figure 4: 3D view showing rock model (yellow Qal, green Tc, blue Tsp)

Analysis of TREE grades according to rock type showed that the mean average grade of raw data is only above the 300ppm threshold in Tsp (Lower Plate) (Figure 5).

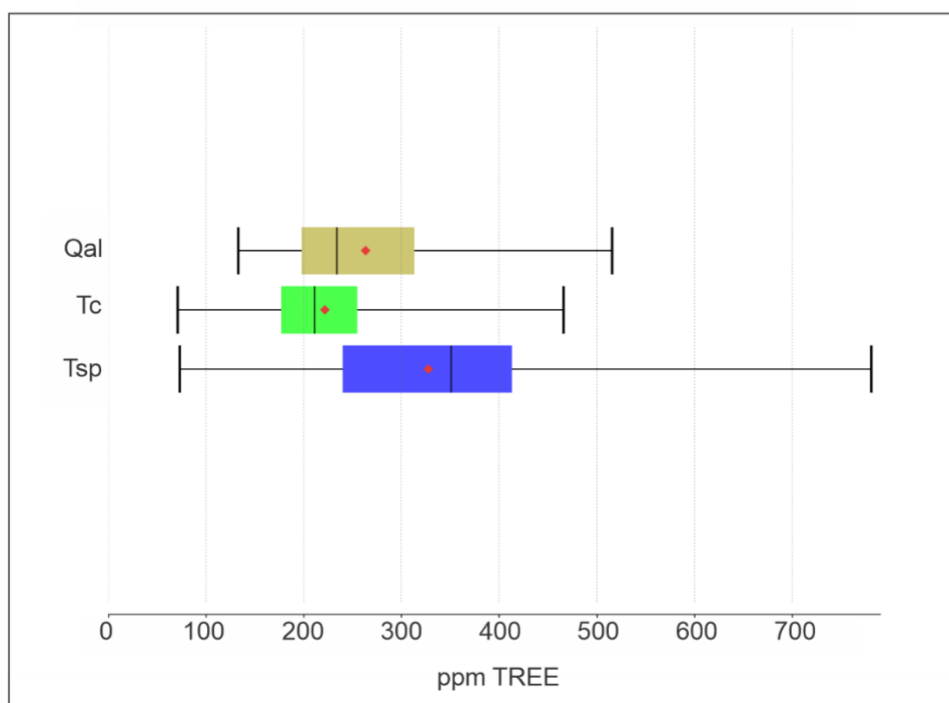


Figure 5: Box plot of TREE grade distribution according to lithological unit

Modelling of Mineralised Domains

Mineralised domains are defined by a TREE cut off grade of 300ppm using uncomposited intervals with a nominal internal dilution of 2m. To maintain geological continuity some additional internal dilution was included in a few

instances. However, the overriding strategy was to exclude as much <300ppm TREE material as possible from the mineralised domains as, for the most part, this material was considered to be waste material, up to 8m thick in places, that could be effectively separated during mining.

Grade domaining is independent to lithological coding (ie., the grade boundary was allowed to cross lithological boundaries) with the allocation of tonnage and grade to the various rock types occurring at the reporting stage. As is illustrated in Figure 5 (above) and Figure 6, essentially all the material above 300ppm TREE is hosted by Tsp (Lower Plate).

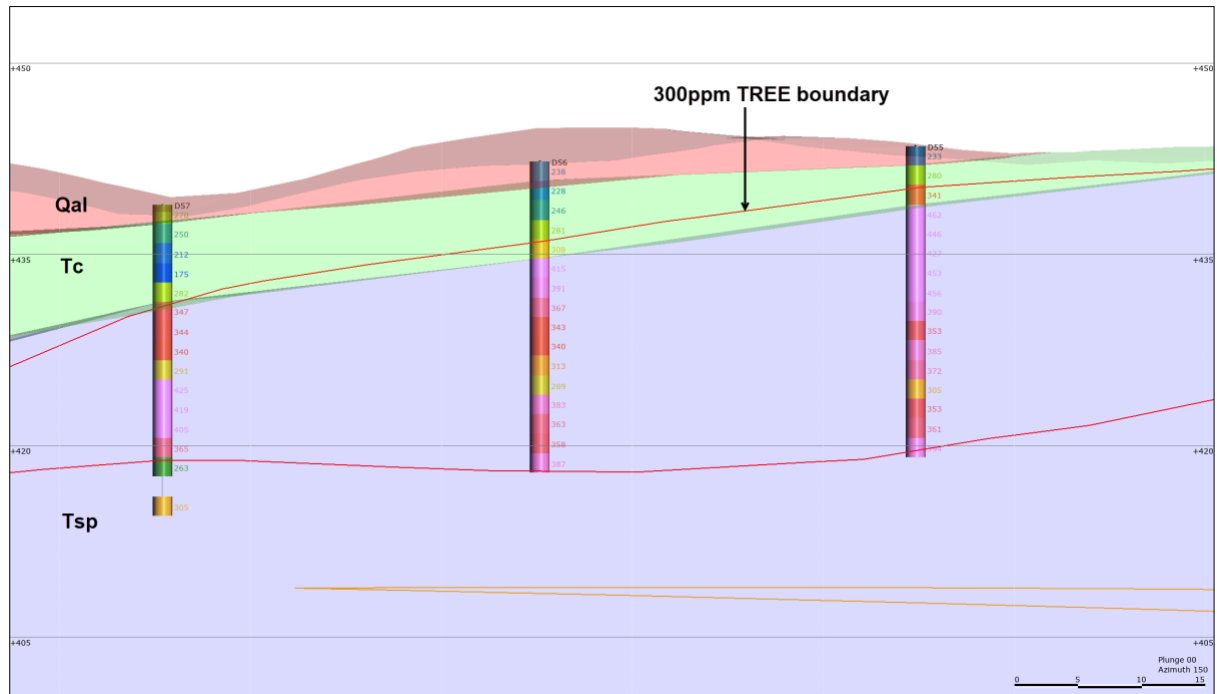


Figure 6: Cross section illustrating 300ppm TREE boundary crossing lithological boundary

The wireframing methodology comprised tagging each unit through a process of manual "tagging" or assignment of a domain identifier (eg., T01, T02, etc) to a numeric value (Figure 7). Wireframe construction was done using Leapfrog's Vein System modelling function. Four separate (non-intersecting) horizontal domains were modelled.

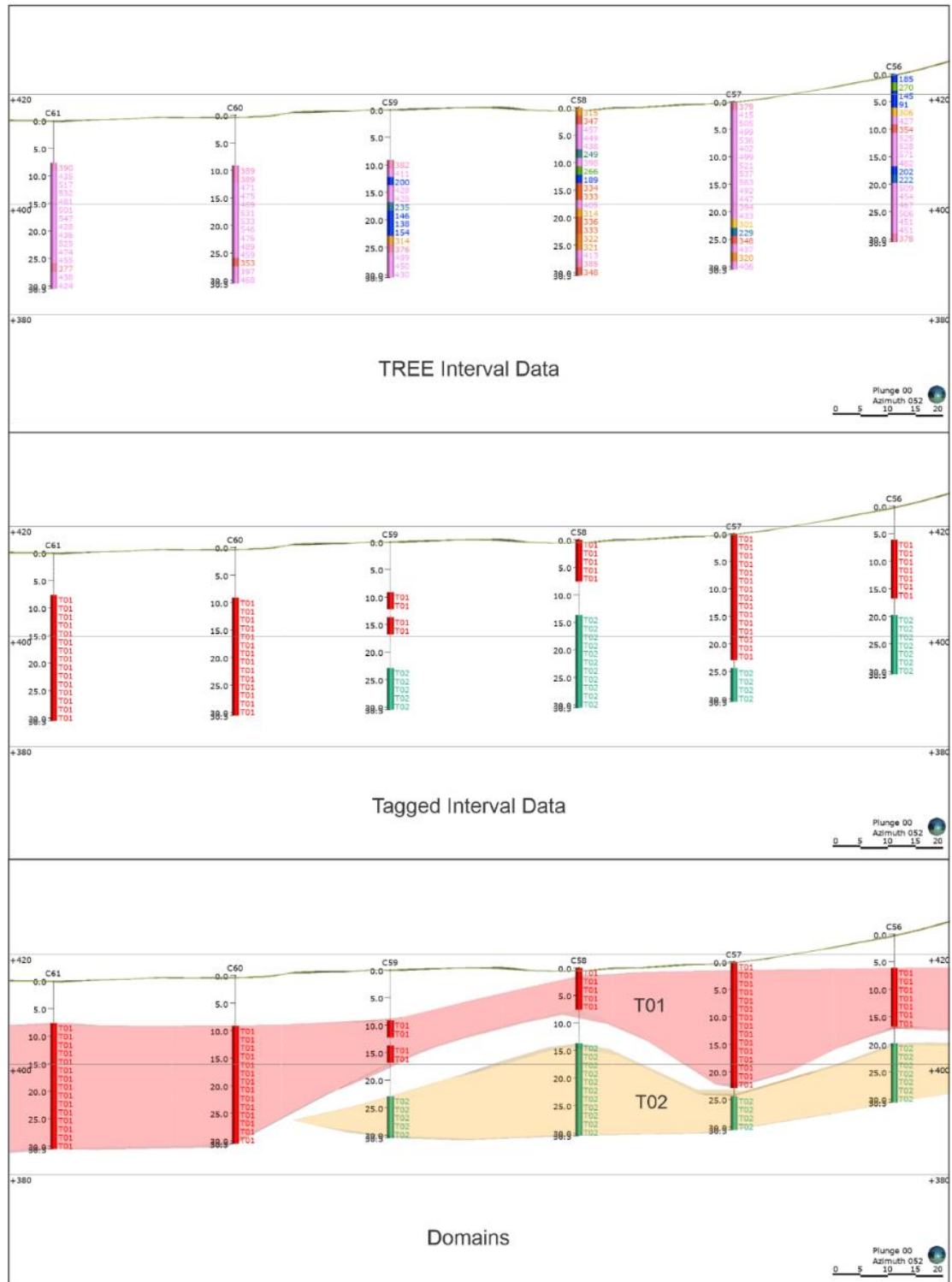


Figure 7: Cross sections showing modelling technique

The main domains, T01 and T02, were only extended to the depth of the last interval in each hole in the A,B,C and D series holes which all had a maximum depth of 30.5m (the limit of the drilling rig). Most of the holes ended in mineralisation. Subsequent deeper holes demonstrate that mineralisation extends beyond the depth limit of 30.5m (Figure 8).

Due to the relatively few intersections at depth, the deeper zone was modelled as separate domain (T03) and limited in spatial extent although in all likelihood it is the downward continuation of the T01 and T02 domains.

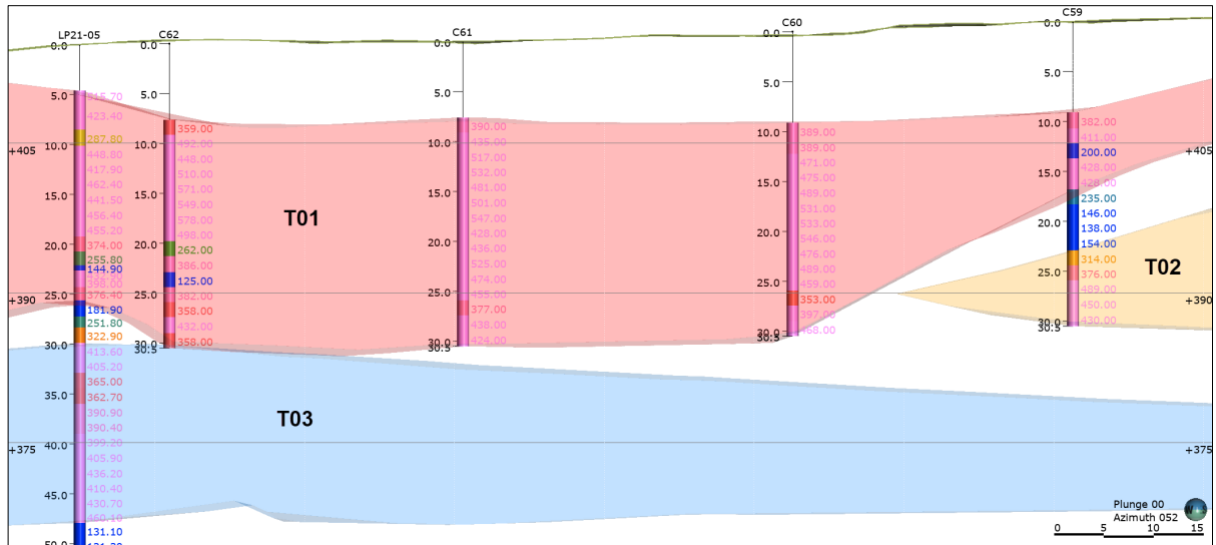


Figure 8: Cross section example of mineral domains

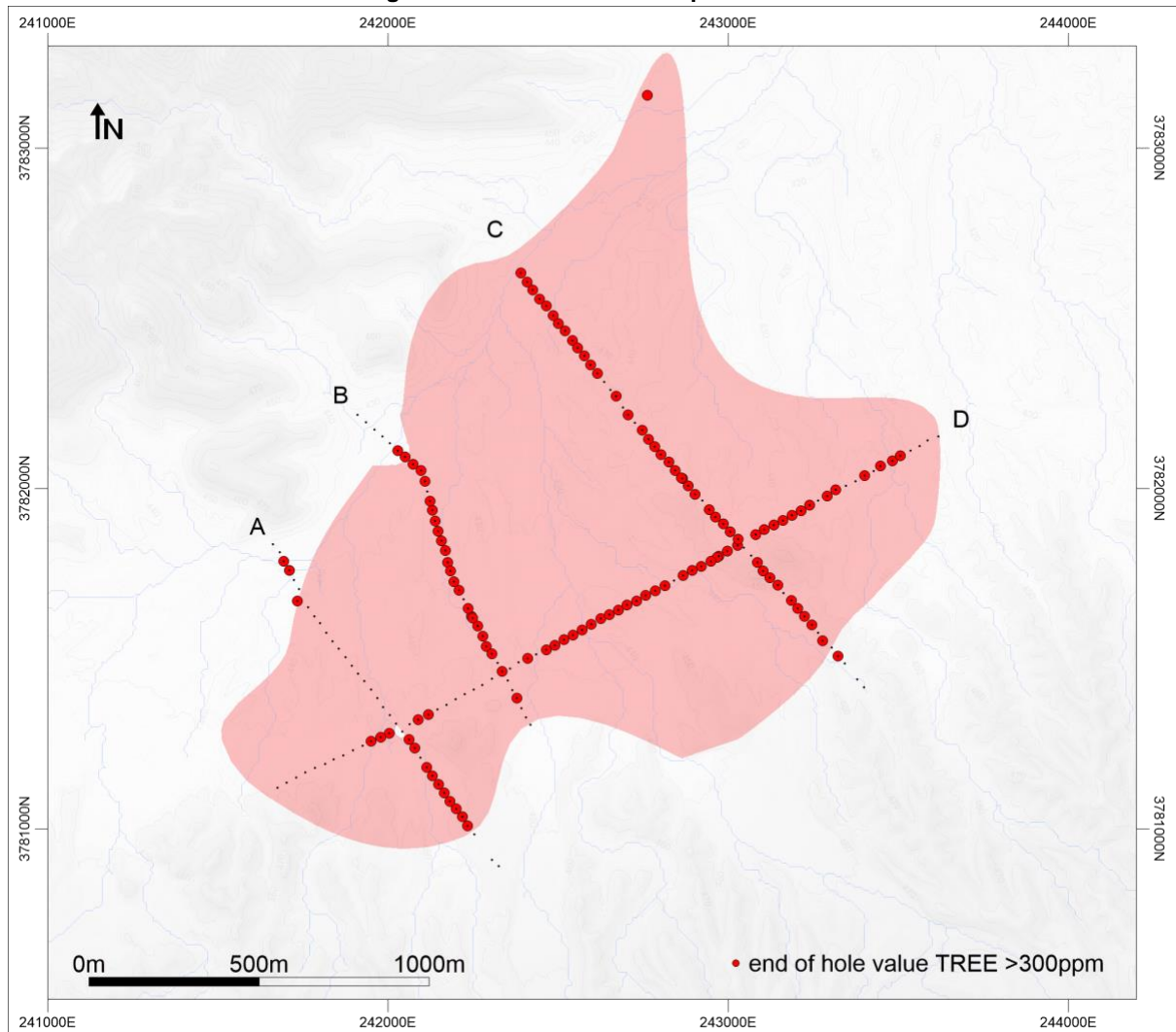


Figure 9: Plan view showing drillholes with bottom of hole grading >300ppm TREE

Of the 195 A,B,C and D series of holes, 112 (57%) end in mineralisation >300ppm TREE (Figure 9). The spatial (planform) extents were defined by the limits of the drilling on each section and a manually interpreted boundary string applied to the main T01 domain which was, in addition to the drilling, informed by surface geochemical sampling data together a minimum radius extrapolation between drill sections (Figure 10).

The surface sample results were used only to define the outer limits of the resource and to confirm continuity of mineralisation between drill sections and were excluded from the grade estimation. The outer limits of the underlying domains, T02 and T03, were restricted to the T01 boundary string. Domain T04, is defined by an area of influence around a single drillhole (Figure 11).

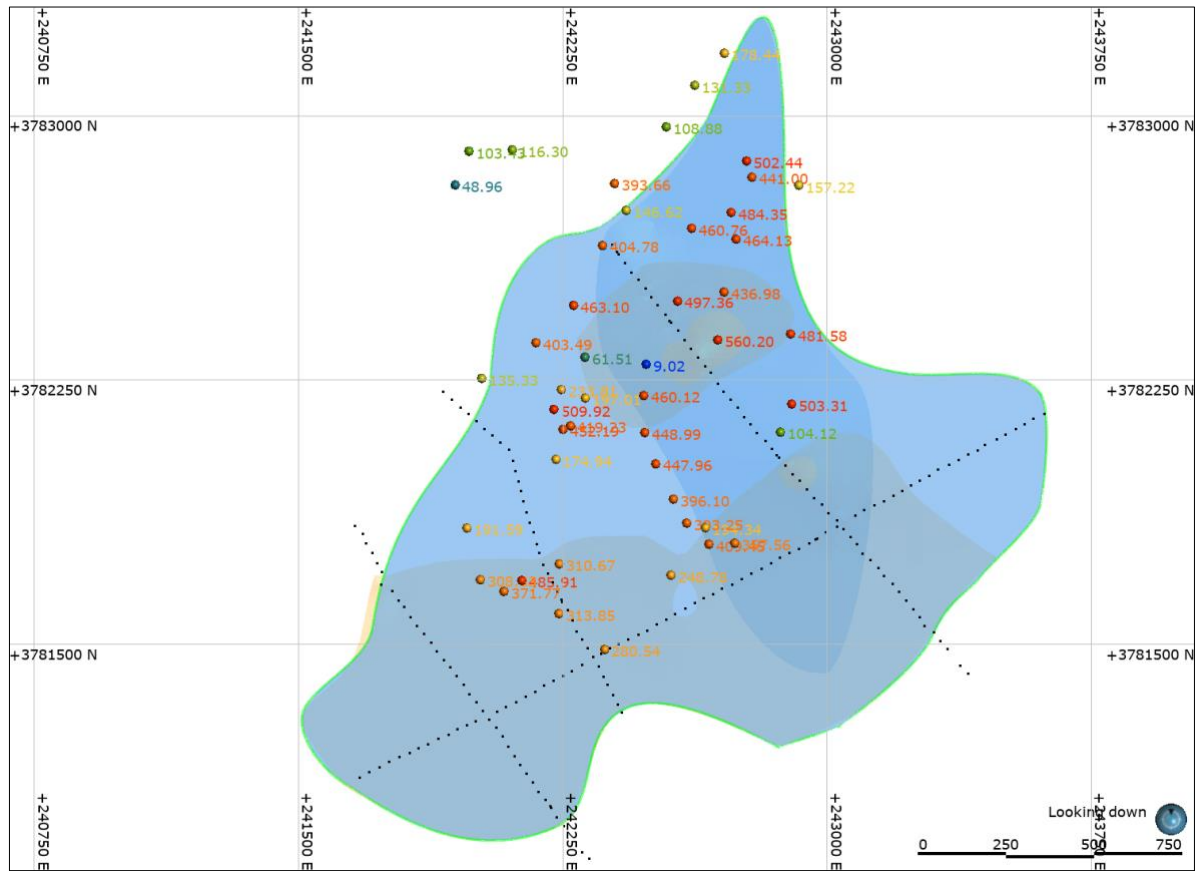


Figure 10: Plan Views of boundary string and surface sampling

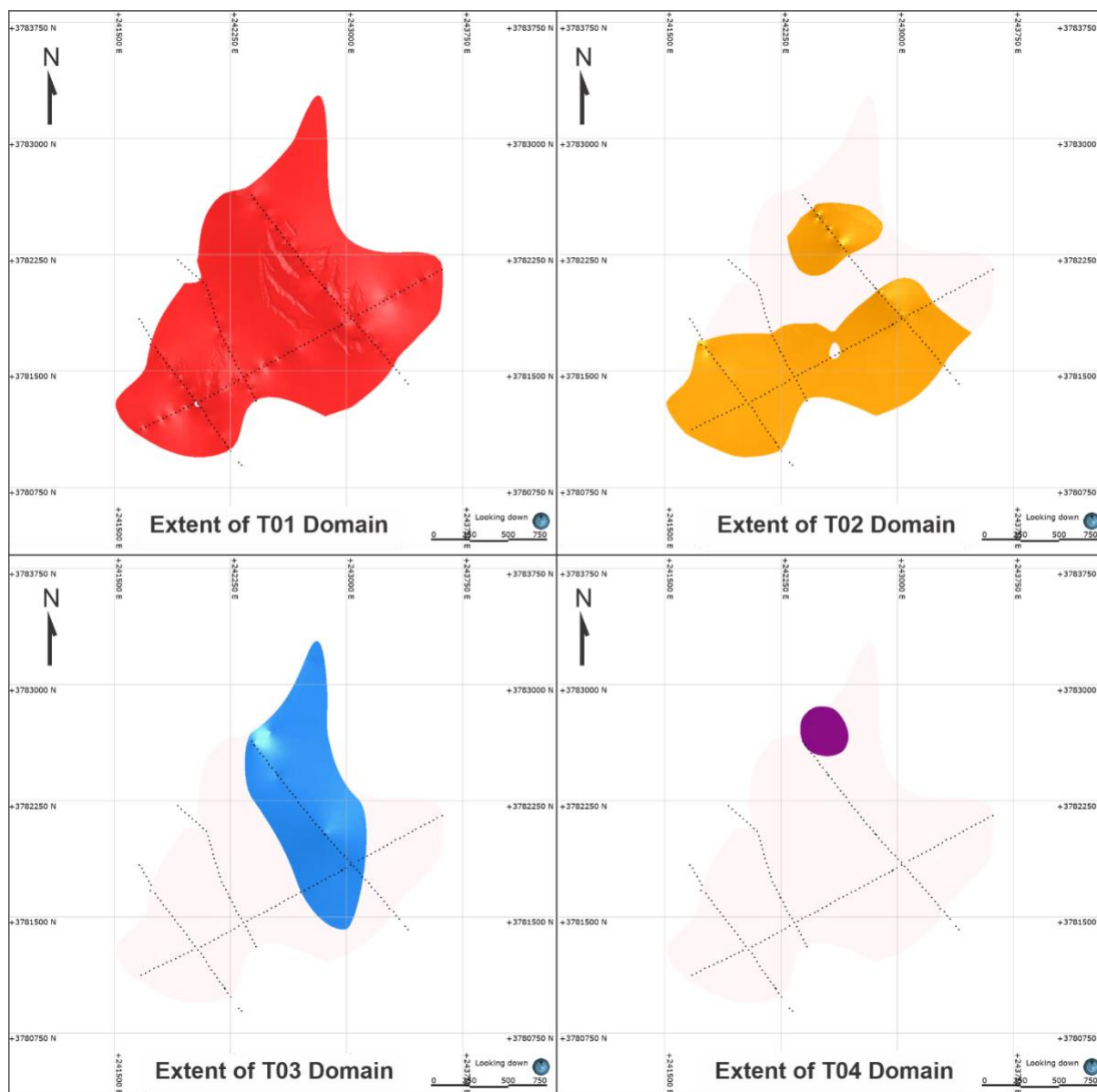


Figure 11: Plan Views of mineral domains

Analytical volume and area of each domain is listed in Table 5 and true thickness characteristics are illustrated in Figure 12 (planview) and Figure 13 (cross section).

Domain	Volume (m ³)	Area (m ²)
T01	35,575,000	4,783,400
T02	8,429,000	2,734,100
T03	19,712,000	1,665,600
T04	3,276,000	200,760
Total	66,992,000	

Table 5: La Paz Domains Analytical Volumes

Note: The TREE domains are the governing domains. All elements and element combinations are estimated, modelled and reported only within the TREE domains.

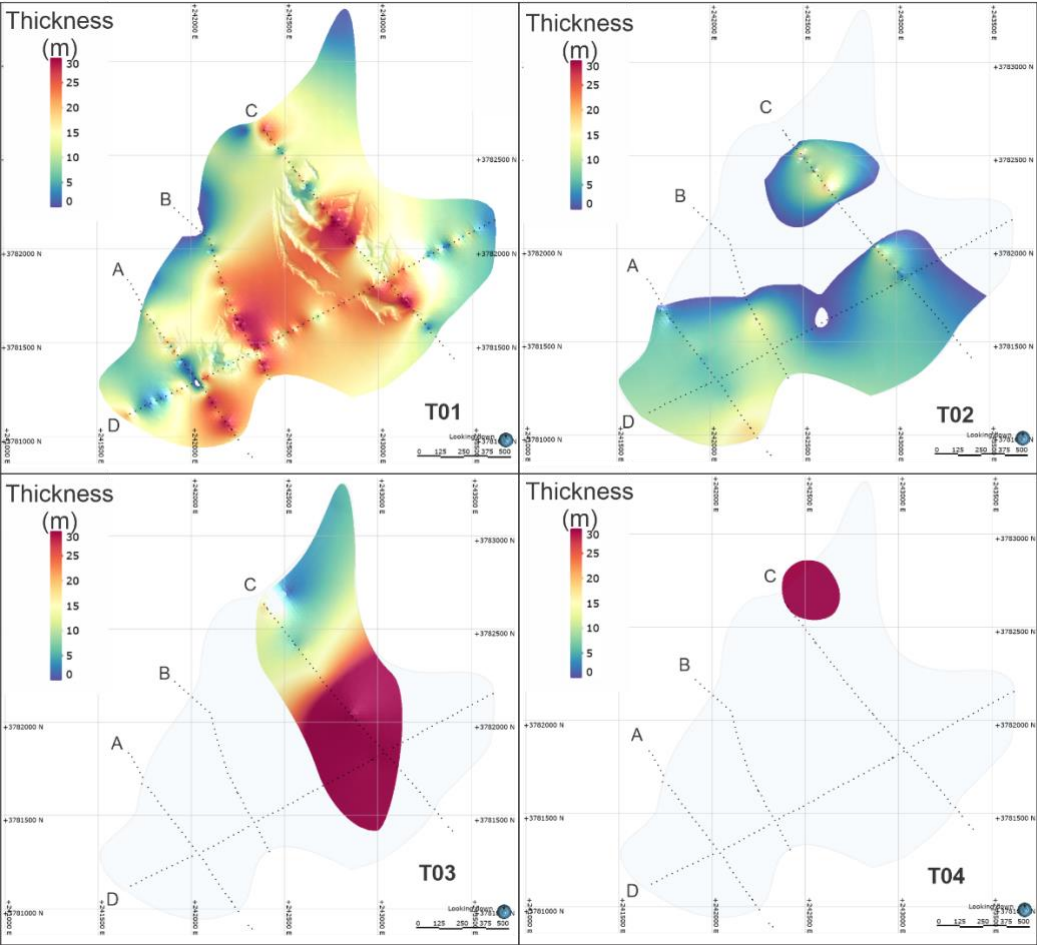


Figure 12: Plan views showing true thickness

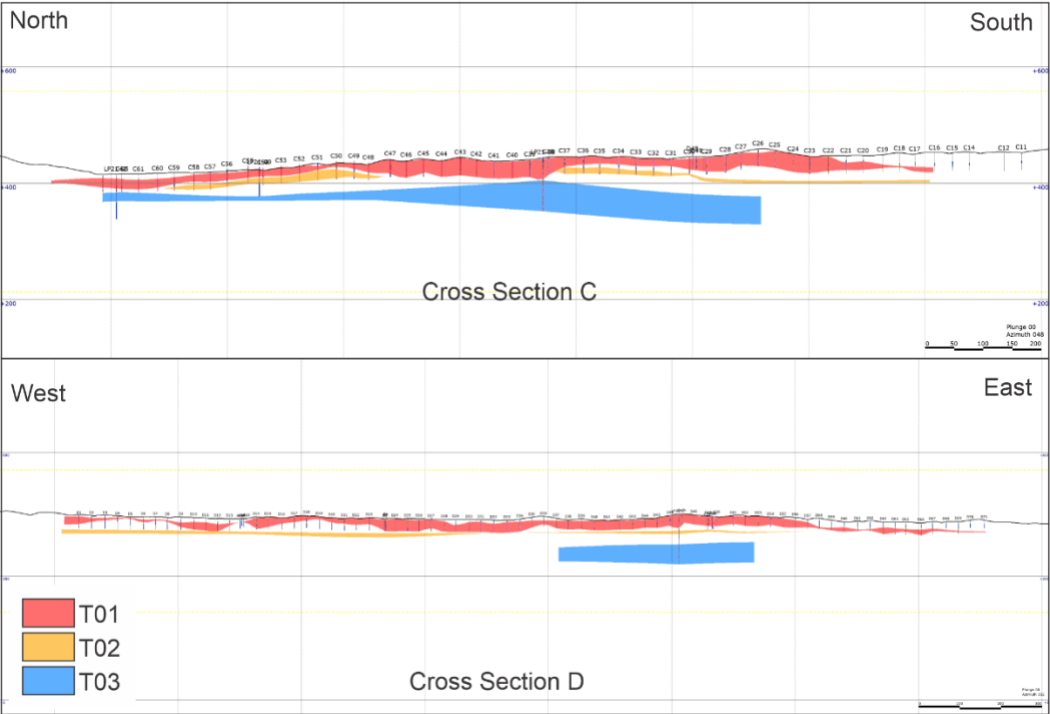


Figure 13: Cross sections C and D

Density

A total of 42 specific gravity measurements were obtained from the LP21 series of holes. All measurements related to the Lower Plate (Tsp) rocks. The average density of 2.68 is applied to the resource to derive tonnage.

Grade Estimation

Sample Compositing

Grades intervals were composited 2m within the hard-boundary domains.

Figure 14 shows comparisons between samples included within each domain versus samples rejected. Comparisons between composited and uncomposited samples are shown in Figure 15.

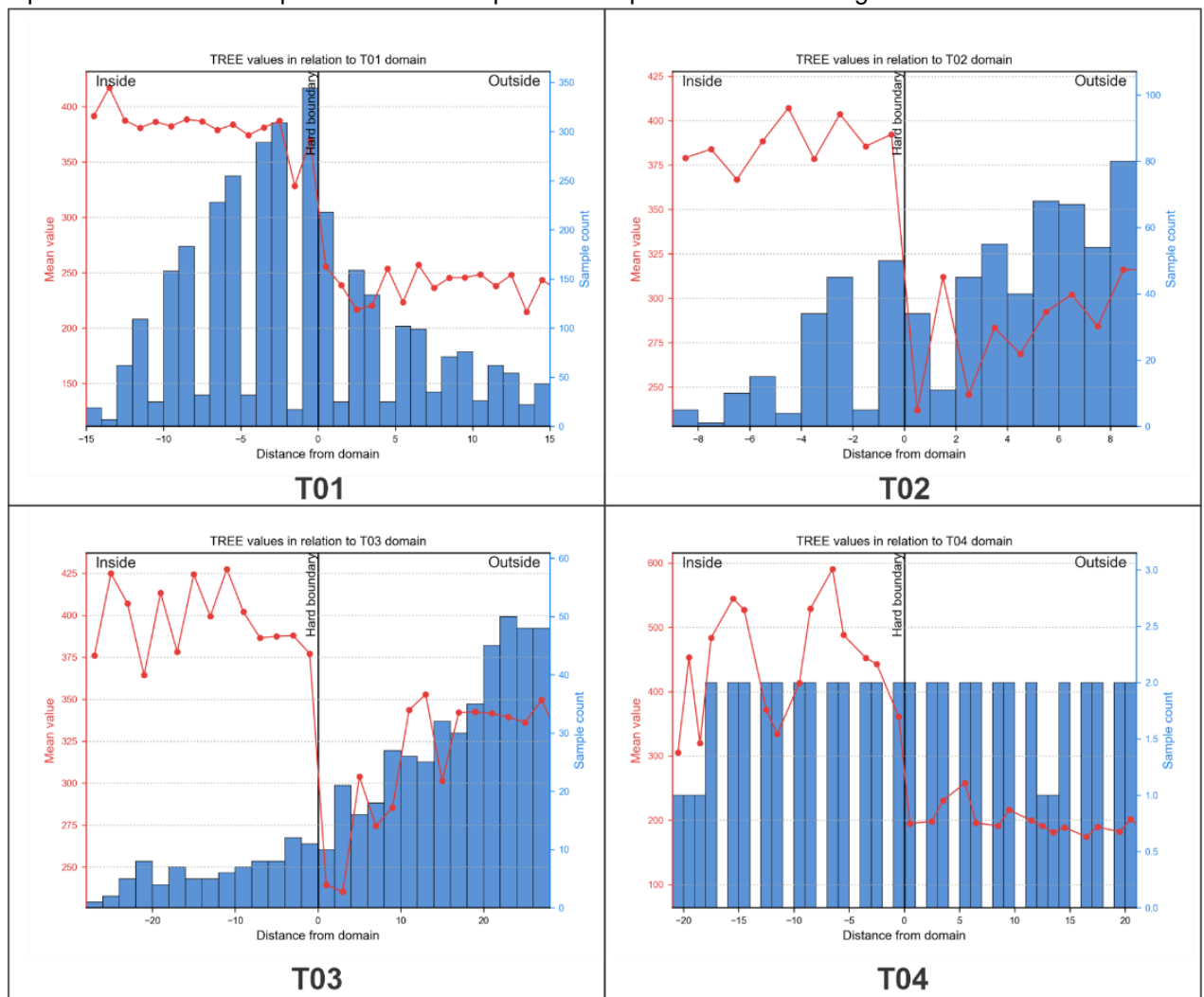


Figure 14: Compositing domain statistics

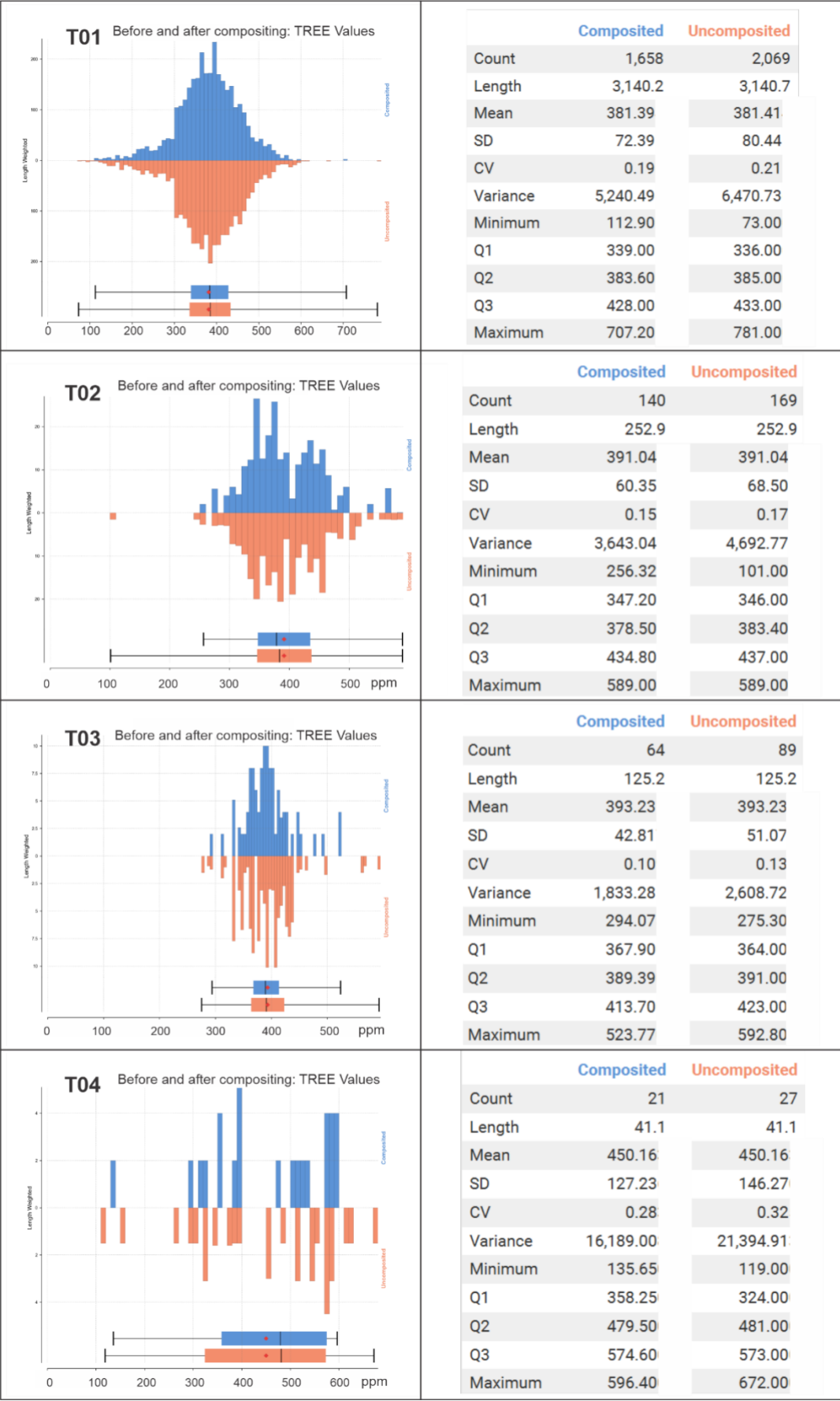


Figure 15: Sample Compositing Statistical Summary (TREE)

Composite Statistics

Grade distribution and log probability graphs of the extracted TREE composites are shown in Figure 16.

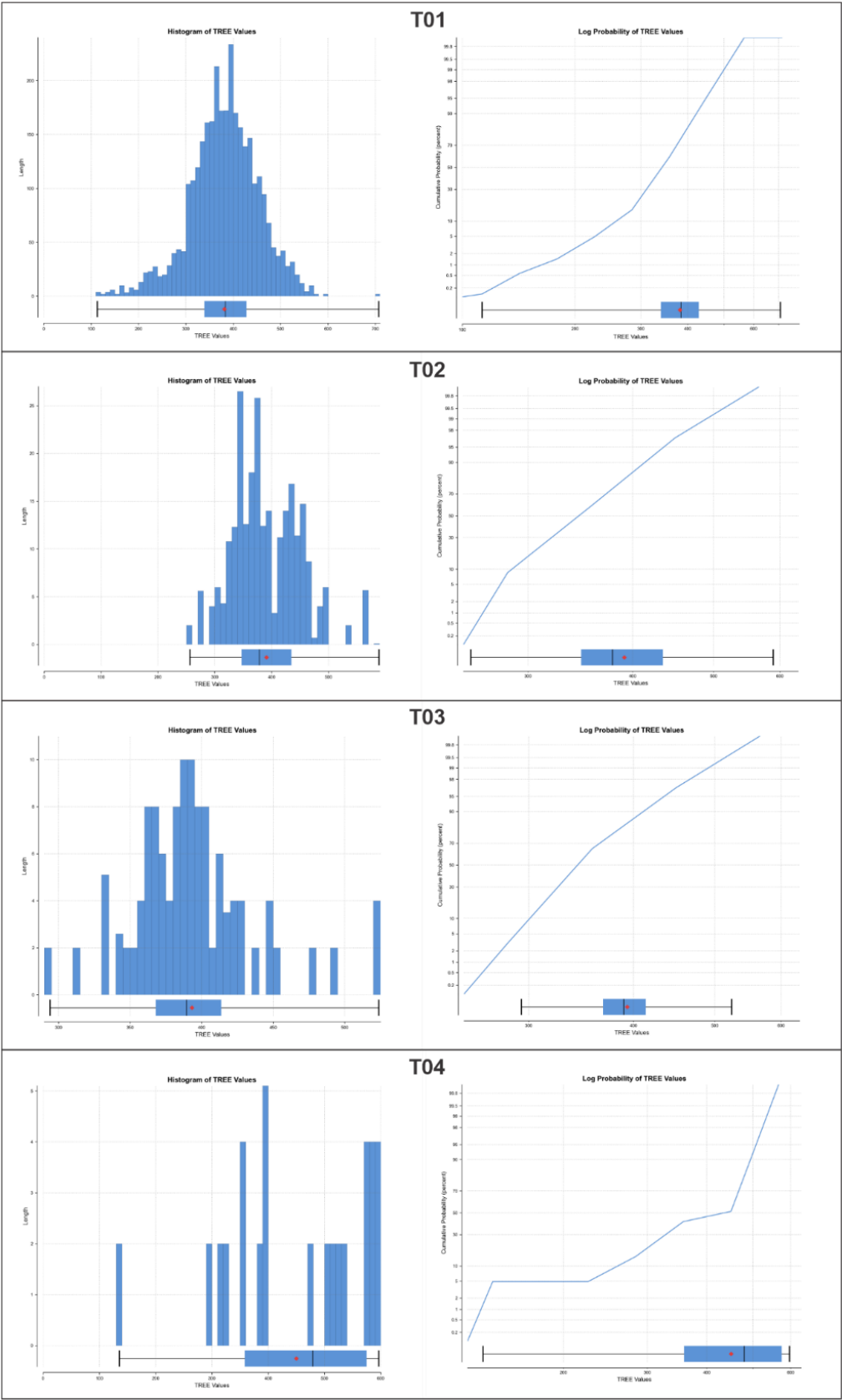


Figure 16: Histogram and Log Probability Plots (TREE)

Interpolant Parameters

Grade estimation was carried using an inversed distance squared (ID2) interpolant. Additional kriging and nearest

neighbour estimates were carried out to compare with the ID2 estimated grades. These interpolants were further compared to the raw data. The model for the raw data required a small isotropic search to determine, as close as practicable, the grades at associated directly with the drillholes at any given point along the drill sections.

Inverse Distance Estimator (ID)

The basic inverse distance estimator makes an estimate by an average of nearby samples weighted by their distance to the estimation point. The further a data point is from the estimate location, the less it will be relevant to the estimate and a lower weight is used when calculating the weighted mean.

Kriging Estimators (Kr)

Kriging is a method of interpolating estimates for unknown points between measured data. Instead of the inverse distance and nearest neighbour estimates, covariances and a Gaussian process are used to produce the prediction.

Nearest Neighbour Estimators (NN)

Nearest neighbour produces an estimate for each point by using the nearest value as a proxy for the location being estimated. There is a higher probability that the estimate for a location will be the same as the closest measured data point, than it will be for some more distance measured data point.

Key points:

- Drill data is confined to four drill sections that transect the large planform (pancake-like) resource.
- A large search radius was required to completely populate all the blocks in the model (Figure 17). This has created artifacts in the model such as grade smoothing (Figures 22 and 23) and “search rings” (Figure 25). Neither artifact has a material detrimental effect on the estimate.
- Validation search ellipses are relatively small in order to compare with raw data. Hence, as expected, more localised grade variations are apparent.

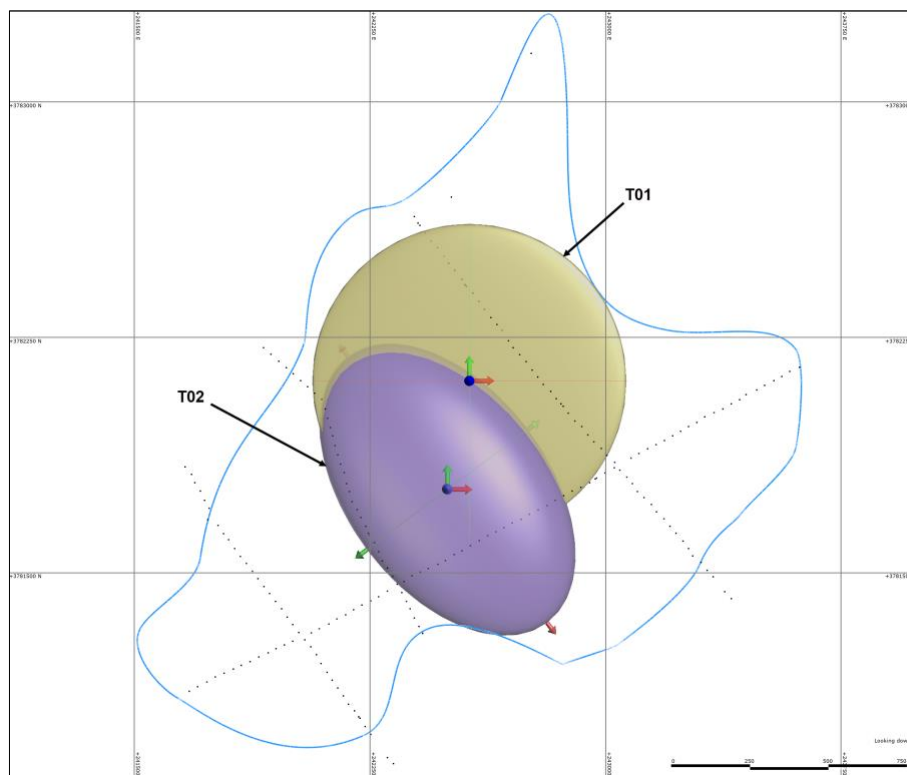


Figure 17: Plan view showing search ellipses.

The estimation parameters are detailed in Tables 6, 7 and 8.

Purpose	General			Value clipping	Estimate Type	Discretisation			IDW Options
	Interpolant Name	Domain	Numeric Values	Upper bound		X	Y	Z	Exponent
Estimation	ID, TREE	T01	TREE	700	IDW				2
Estimation	ID, TREE	T02	TREE	510	IDW				2

Estimation	ID, TREE	T03	TREE	500	IDW				2
Estimation	ID, TREE	T04	TREE		IDW				2
Validation	ID, TREE raw data	T01	TREE		IDW				2
Validation	Kr, TREE	T01	TREE		K	5	5	2	
Validation	NN, TREE	T01	TREE		NN				

Table 6: Estimation Types and Top Cuts

	General			Ellipsoid Ranges			Ellipsoid Directions			Number of Samples		Drillhole Limit
Purpose	Interpolant Name	Domain	Numeric Values	Maximum	Intermediate	Minimum	Dip	Dip Azimuth	Pitch	Minimum	Maximum	Max Samples per Hole
Estimation	ID, TREE	T01	TREE	500	500	20	0	0	0	4	20	4
Estimation	ID, TREE	T02	TREE	530	320	110	1	325	88	4	20	4
Estimation	ID, TREE	T03	TREE	500	500	10	1	106	37	4	20	4
Estimation	ID, TREE	T04	TREE	200	200	30	1	106	37	4	20	4
Validation	ID, TREE raw data	T01	TREE	10	10	10	0	0	90	4	5	
Validation	Kr, TREE	T01	TREE	50	28	28	0	0	90	4	20	
Validation	NN, TREE	T01	TREE	50	28	28	0	0	90			

Table 7: Search Parameters

General		Direction				Structure 1					
Variogram Name		Dip	Dip Azimuth	Pitch	Nugget	Sill	Normalised sill	Structure	Major	Semi-major	Minor
T01: Variogram Model		2	0	0	517	3,877	1	Spherical	50	50	30
T02: Variogram Model		2	0	0	382	2,870	1	Spherical	70	100	110
T03: Variogram Model		1	0	0	0	1,905	1	Spherical	275	450	10
T04: Variogram Model		1	1	106	0	15,894	1	Spherical	8	5	2
TREE raw data T01: Variogram Model		0	0	90	0	6,558	1	Spherical	5	5	5
TREE: Variogram Model		0	0	90	0	4,257	1	Spherical	50	28	28

Table 8: Variogram Parameters

Block Model

An orthogonal block model was set up using the parameters described in Figure 15. Several runs were made using various block sizes. However, due to the almost imperceptible differences in the resultant estimations a 20mx20mx2.5m blocks was selected for faster processing and reporting. No SMU consideration was made. The small bench height of 2.5m was selected to fit the flat “pancake-like” geometry of the mineralised domains (Figures 18 and 19).

Parent blocks:	X	Y	Z
Parent block size:	20	20	2.5
Sub-blocks			
<input type="checkbox"/> Variable height	Minimum height: 0.000		
Sub-block count:	5	5	5
Extents			
Base point:	241454.00	3780803.25	585.013
Boundary size:	2260.00	2500.00	400.00
Dip:	0.00	degrees	Enclose Object
Azimuth:	0.00	degrees	Set Angles From
Size in blocks:	113 x 125 x 160 = 2,260,000		

Figure 18: Block Model Extents

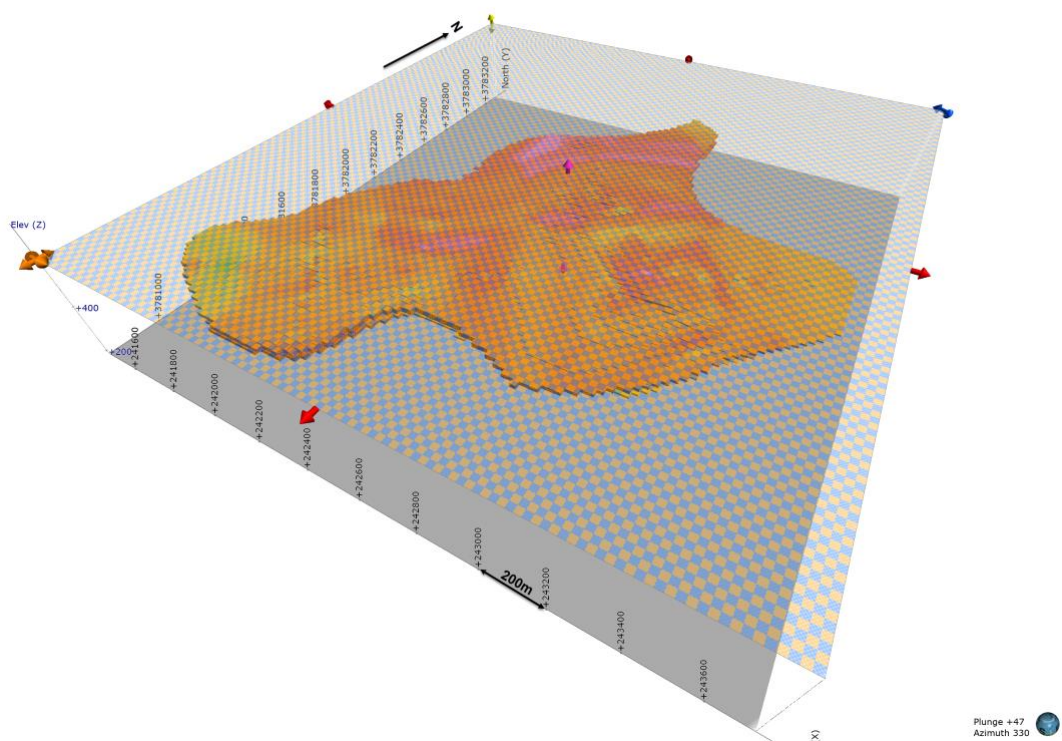


Figure 19: 3D View of Block Model

Classification

The La Paz grade tonnage estimate is classified as either indicated or inferred

Indicated classification applies to a 50m buffer around the drillholes that intersects domains T01 and T02 (Figure 20). Considering the vast size of the deposit and continuity of grade a 50m indicated corridors is considered suitable if not, arguably, conservative.

The results from surface rock chip geochemistry (not used in the estimation) supported the classification of inferred between the drill sections.

Model Validation

Several estimation runs were carried out on the best-informed domain T01 to check for variance between estimated grades and the input data.

The additional estimators comprised:

- Ordinary kriging
- Nearest neighbour

Refer to Tables (above) for search and interpolation parameters.

These validation runs, together with the inverse distance squared estimator, were compared against the raw composite data in east-west and north-south swath plots (Figures 18 and 19).

The data indicate that the inverse distance estimator has done a reasonable job in estimating a global resource grade with no systematic bias towards over estimating the grades. The smoothing effects of the ID2 interpolant is consistent with the large search ellipses used.

At a smaller scale there is more variability (due to the smaller search ellipses) shown in the comparative data. However, the percentage variance from the ID2 estimator is small and not considered to be material.

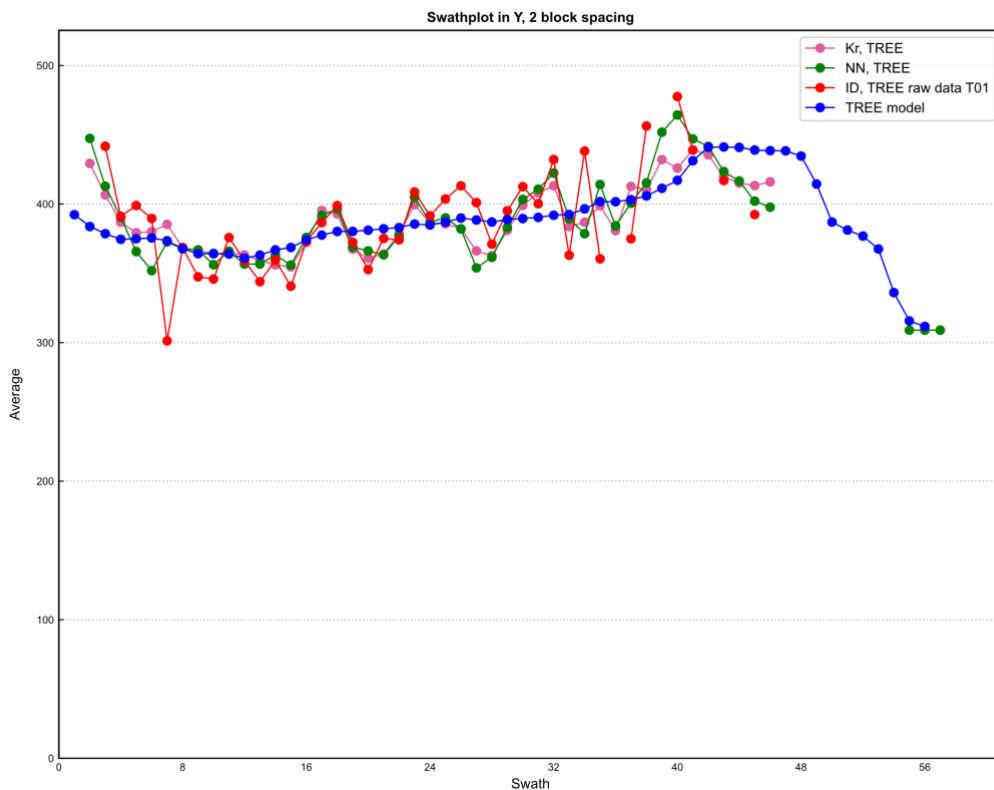


Figure 22: Swath Plot in Y Axis (2m swath size)

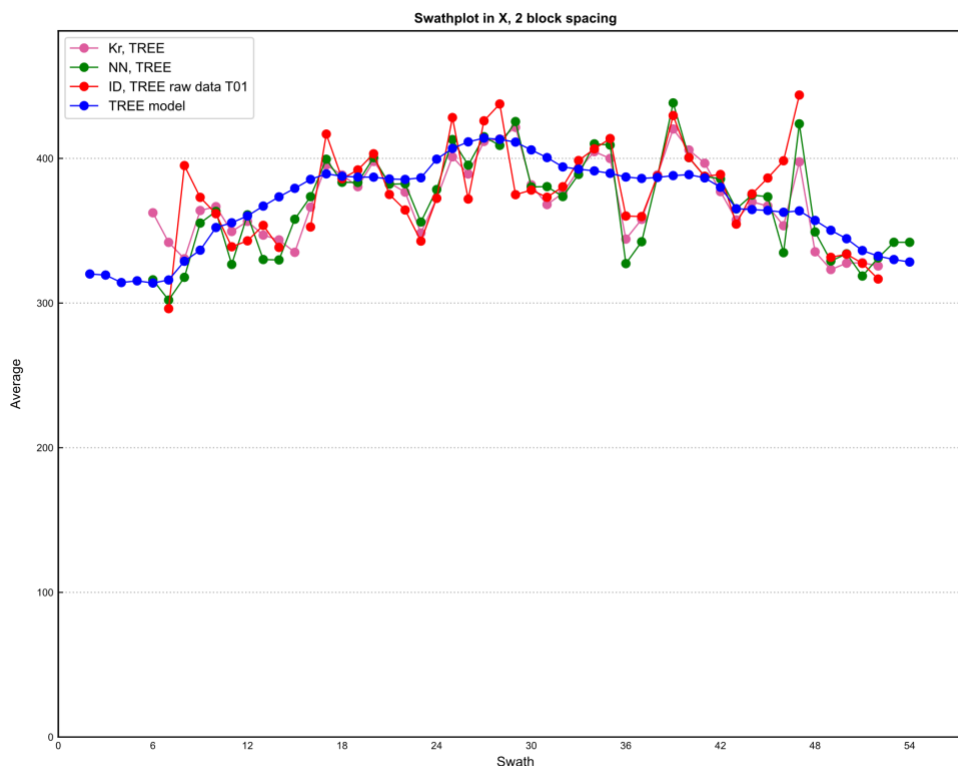


Figure 23: Swath Plot in X Axis (2m swath size)

Resource Estimate

TREE

No open pit optimisation work has been carried and the grade-tonnage estimate (Figure 24) is reported as a global in-situ resource above a cut off of 300ppm TREE.

Domain	Classification	Volume m ³	Density g/cm ³	Tonnage t	Average Grade					Material Content				
					TREE ppm	CREE ppm	HREE ppm	LREE ppm	MREE ppm	TREE kg	CREE kg	HREE kg	LREE kg	MREE kg
Total	Indicated	13,120,000	2.68	35,161,600	382	82	301	96	143	13,448,019	2,867,567	10,600,246	3,367,719	5,011,560
	Inferred	50,535,000	2.68	135,433,800	393	84	310	99	147	53,198,803	11,316,186	41,970,349	13,460,764	19,850,825
	Total	63,655,000	2.68	170,595,400	391	83	308	99	146	66,646,822	14,183,753	52,570,595	16,828,483	24,862,385

Table 9: La Paz Classified Resource Estimate (differences may occur in totals due to rounding)

Domain	Classification	Volume m ³	Density g/cm ³	Tonnage t	Average Value					Material Content				
					TREE ppm	HREE ppm	LREE ppm	MREE ppm	CREE ppm	TREE kg	HREE kg	LREE kg	MREE kg	CREE kg
T01+T02	Indicated	10,753,000	2.68	28,818,040	380	79	301	93	140	10,952,763	2,280,934	8,685,495	2,693,039	4,025,964
T01+T02	Inferred	30,628,000	2.68	82,083,040	386	80	306	95	142	31,668,674	6,583,035	25,129,614	7,773,763	11,626,758
T03	Inferred	18,984,000	2.68	50,877,120	394	91	304	106	154	20,045,816	4,605,949	15,489,056	5,415,464	7,853,801
T04	Inferred	3,365,000	2.68	9,018,200	450	81	369	107	154	4,059,922	728,963	3,331,667	966,108	1,384,736
Total		63,730,000	2.68	170,796,400	391	83	308	99	146	66,727,175	14,198,881	52,635,832	16,848,374	24,891,259

Table 10: La Paz Classified Resource Estimate by Lode (differences may occur in totals due to rounding)

Geological Domain	Lithology	Classification	Tonnage t	Average Grade		Material Content		%	%	%
				TREE ppm	Sc ppm	TREE kg	Sc kg			

Upper Plate	Qal	Indicated	37,520	427	16.7	16,013	628			
		Inferred	0	0	0.0	0	0			
		Total	37,520	427	16.7	16,013	628			
	Tc	Indicated	88,440	384	15.9	33,968	1,410			
		Inferred	26,800	376	16.3	10,089	438			
		Total	115,240	382	16.0	44,056	1,848			
	Total	Indicated	125,960	397	16.2	49,981	2,039			
	Total	Inferred	26,800	376	16.3	10,089	438			
	Total		152,760	393	16.2	60,069	2,476	0.1%	0.1%	0.1%
Lower Plate	Tsp	Indicated	35,035,640	382	16.9	13,398,038	590,615			
		Inferred	135,407,000	393	16.8	53,188,715	2,280,476			
	Total		170,442,640	391	16.8	66,586,753	2,871,091			
Total		Indicated	35,161,600	382	16.9	13,448,019	592,653			
		Inferred	135,433,800	393	16.8	53,198,803	2,280,914	99.9%	99.9%	99.9%
	Total		170,595,400	391	16.8	66,646,822	2,873,567			

Table 11: La Paz Classified Resource Estimate by Geological Domain (differences may occur in totals due to rounding)

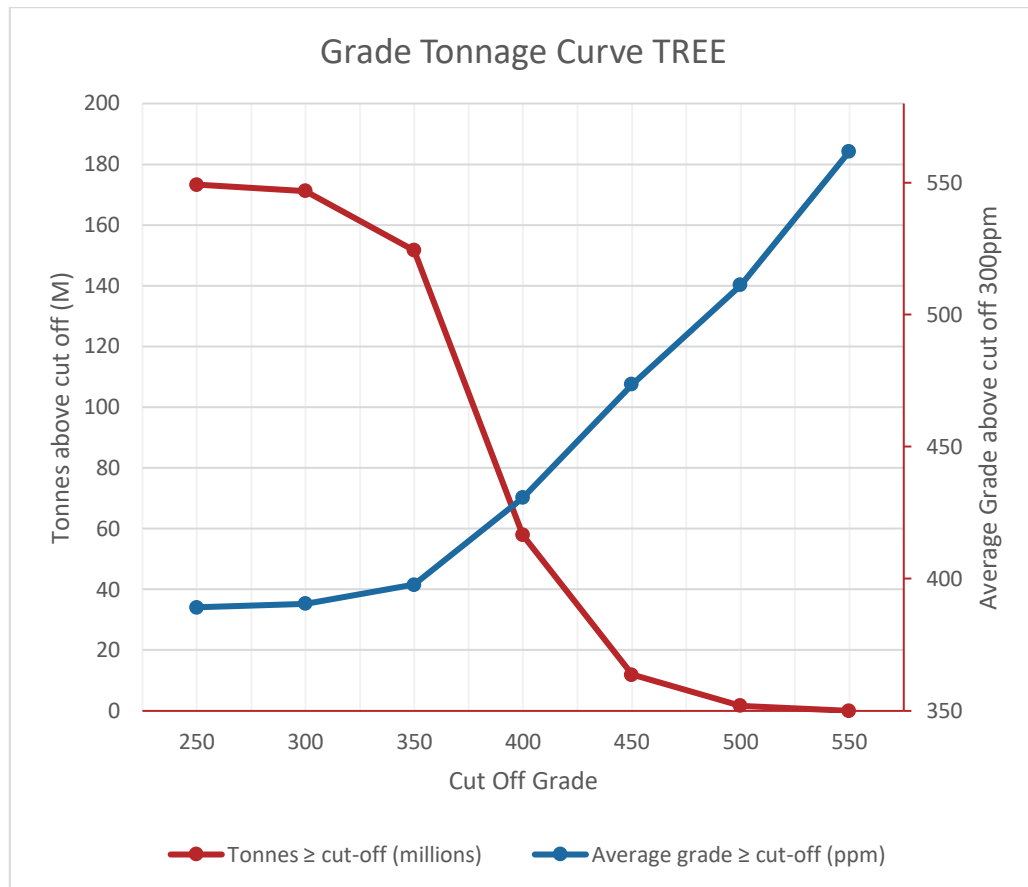


Figure 24: La Paz Grade Tonnage Curve (TREE, >300ppm)

Figure 25 shows the effect on the resource when applying increasing cut offs. Even at higher cut offs the remaining blocks form reasonably large contiguous areas as opposed to a less optimal scattering of blocks throughout the model.

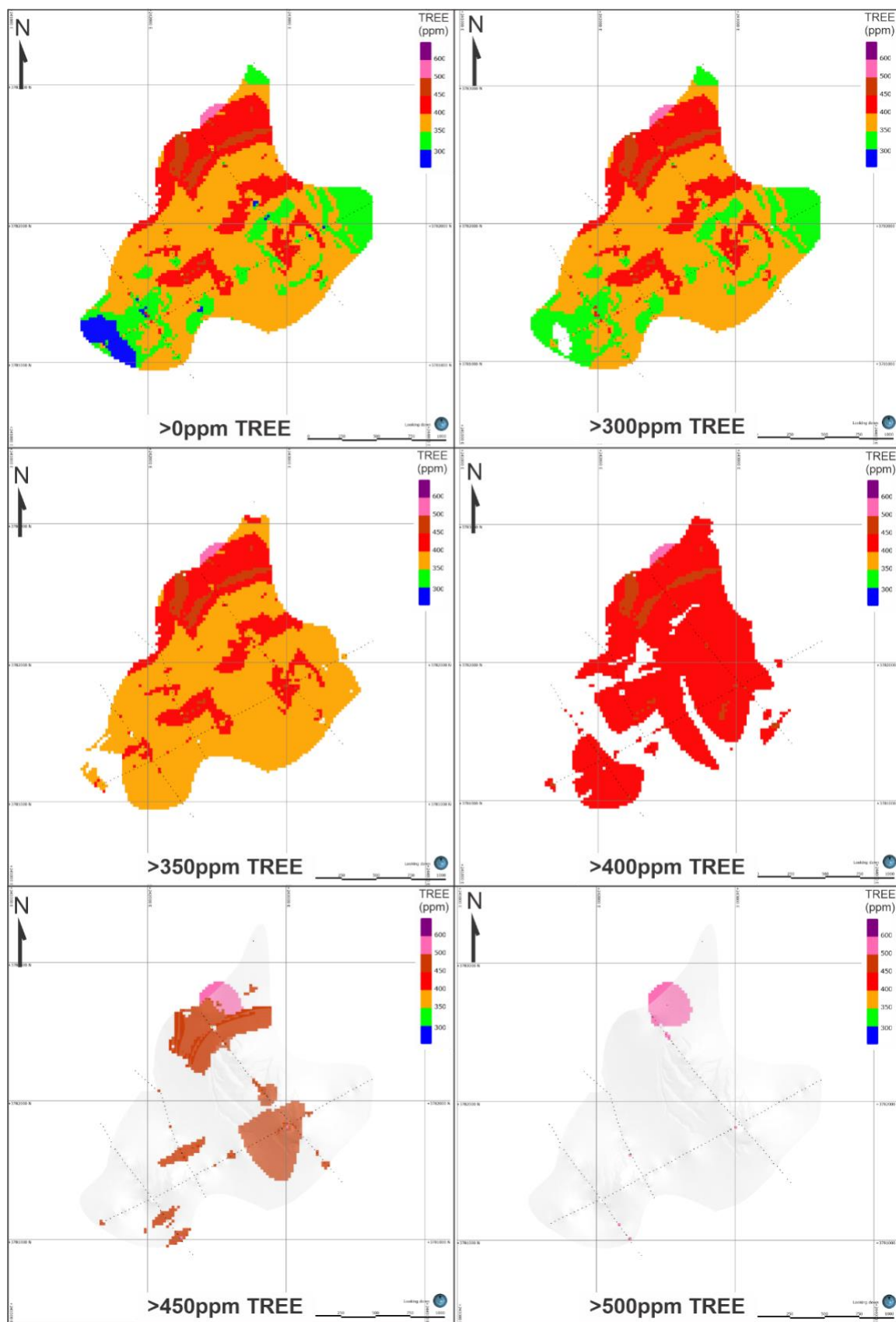


Figure 25: Plan views showing effect of applying cut offs

Scandium

An estimate for the contained scandium is shown in Table 9. This estimate reports scandium that falls within the TREE domain boundaries at a TREE cut off of 300ppm as illustrated in Figure 26.

A statistical summary of scandium values is shown in Figure 27. An increase in Sc grade is evident in the domained data, ie., constrained by the TREE model.

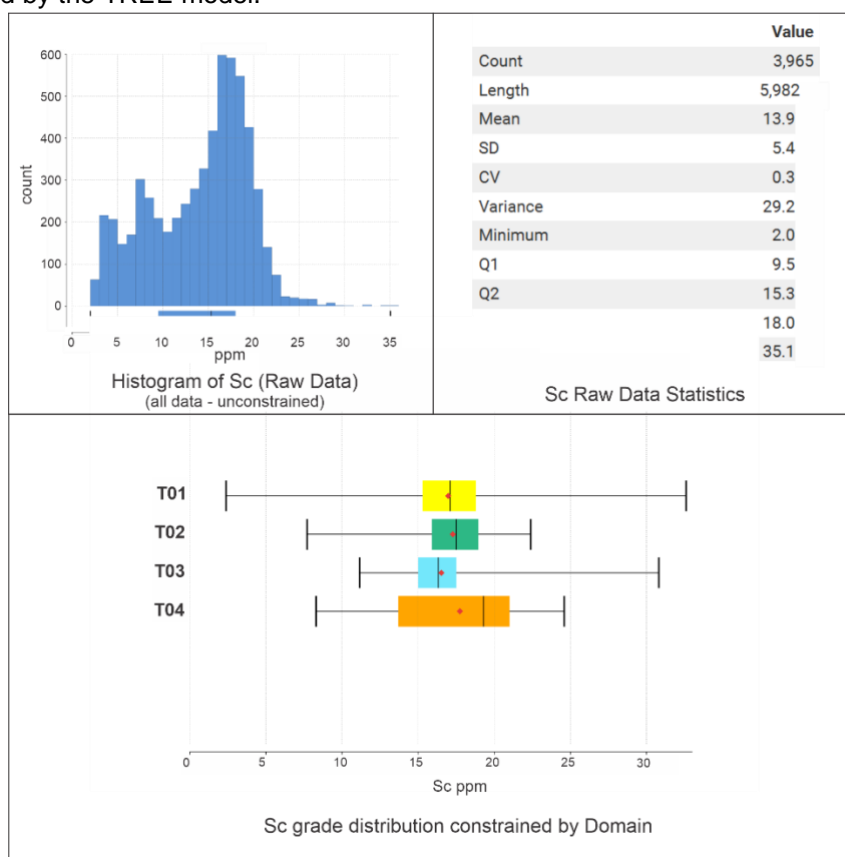


Figure 27: Scandium Grade Distribution Characteristics

Domain	Classification	Volume m ³	Density g/cm ³	Tonnage t	Average Grade Sc ppm	Material Content Sc kg
T01+T02	Indicated	10,753,000	2.68	28,818,040	17	486,720
T01+T02	Inferred	30,628,000	2.68	82,083,040	17	1,391,521
T03	Inferred	18,984,000	2.68	50,877,120	16	839,122
T04	Inferred	3,365,000	2.68	9,018,200	18	160,298
Total		63,730,000	2.68	170,796,400	17	2,877,661

Table 12: La Paz Scandium Estimate at TREE >300ppm

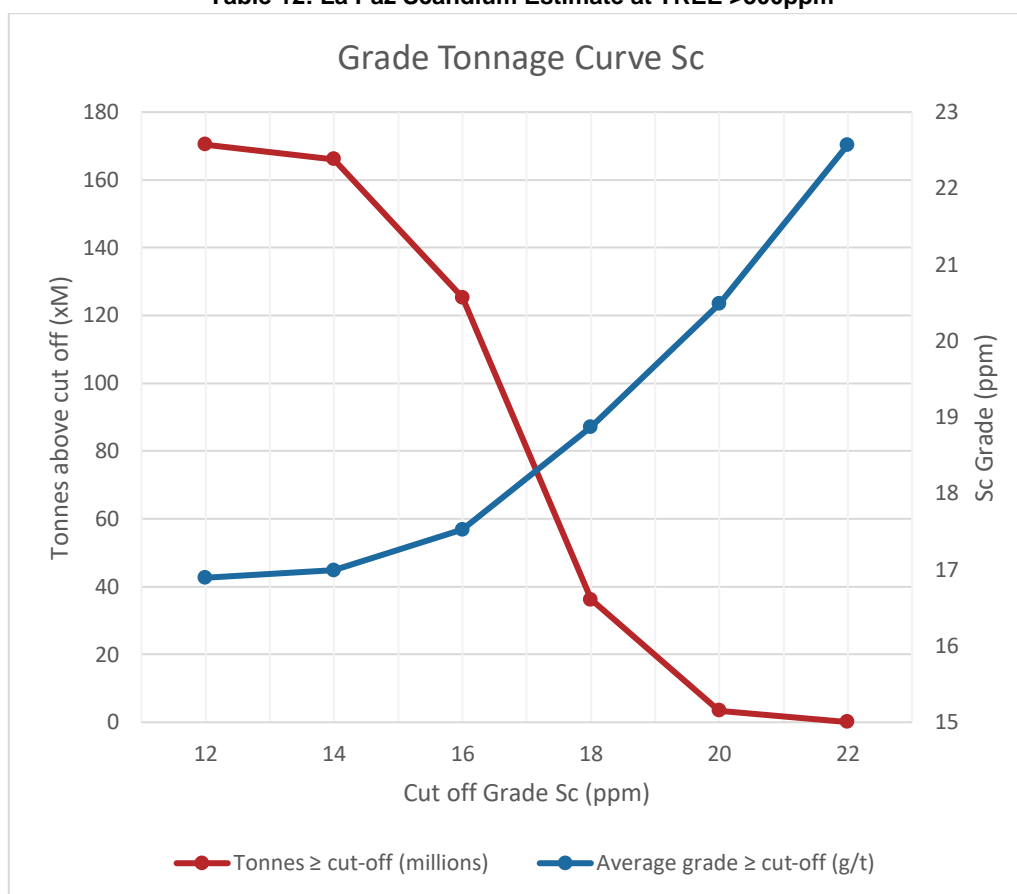


Figure 28: La Paz Scandium Grade Tonnage Curve (reported within TREE >300ppm)

An interrogation of the model shows that >20ppmSc occurs at lower levels of the resource (Figure 29). From this diagram it is also apparent the there are numerous pockets of shallower >20ppmSc that have been diluted out by the estimation process an thus do not report (but drillhole intersections are visible). This suggests that the Scandium grade could be increased (ie., from 17ppm to 20ppm) by domaining and modelling separately.

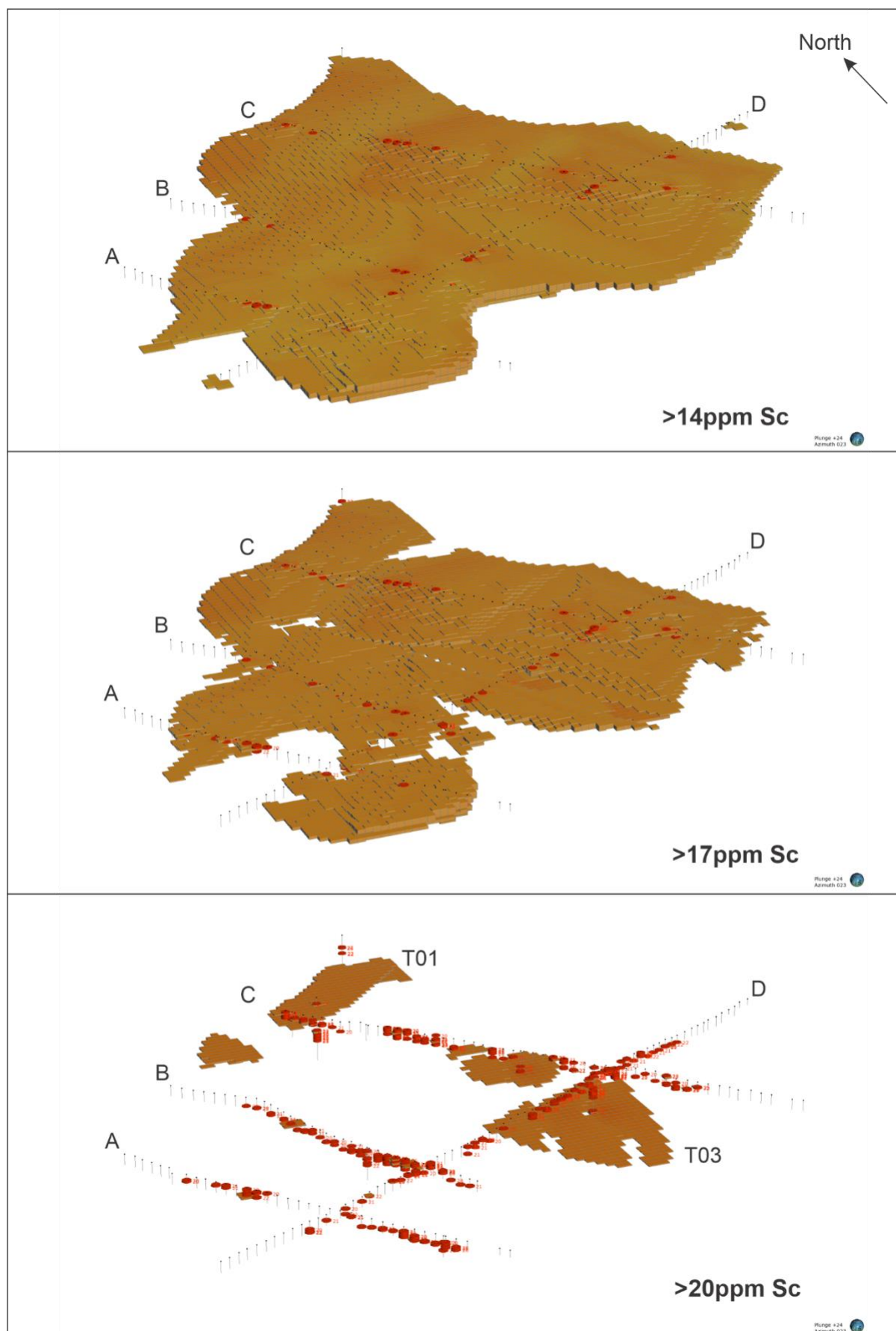


Figure 29: Scandium distribution at various Sc cut offs

Exploration Potential

The spatial limits of the resource are defined by drilling along four sections that cross the area in a north-westerly and north-easterly direction.

The main domains, T01 and T02, were only extended to the depth of the last interval in each hole in the A,B,C and D series holes which all had a maximum depth of 30.5m (the limit of the drilling rig) refer Figure 30.

Of the 195 A,B,C and D series of holes, 112 (57%) end in mineralisation >300ppm TREE (Figure 31).

Subsequent deeper holes (LP21 series) demonstrate that mineralisation extends beyond the depth limit of 30.5m

There are two main opportunities for additional mineralisation to be tested:

- Vertical extensions: where domains can be either merged or extended vertically (Figure 31)
- Lateral extensions: where mineralisation is not closed off along drill sections (Figure 32)
-

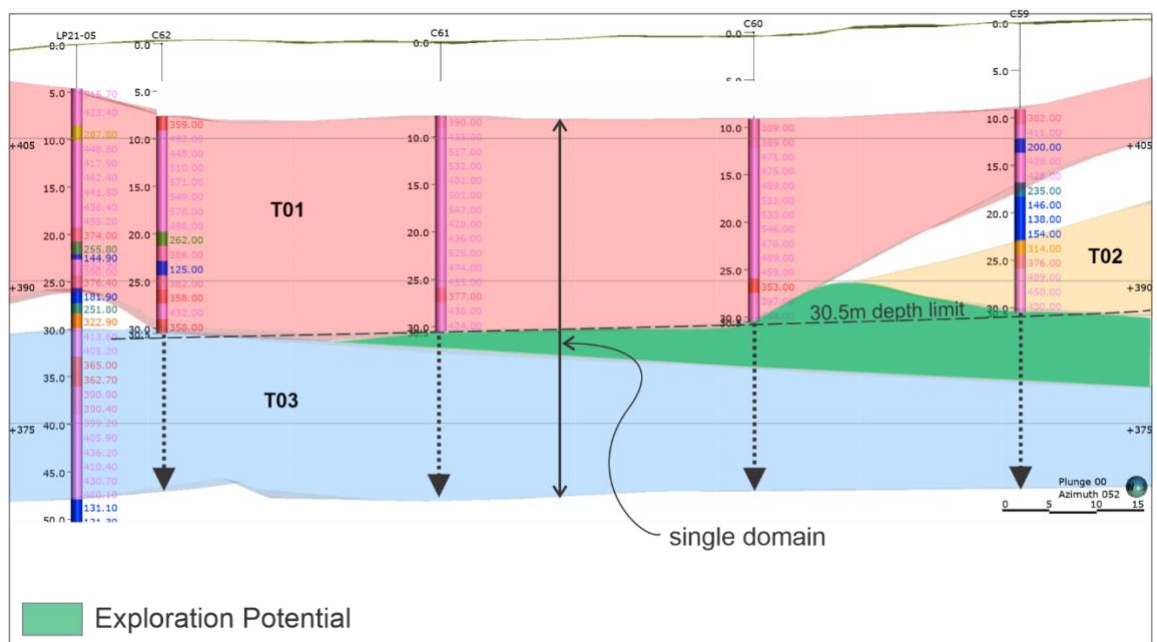


Figure 30: Example of merged domains and vertical extensional potential

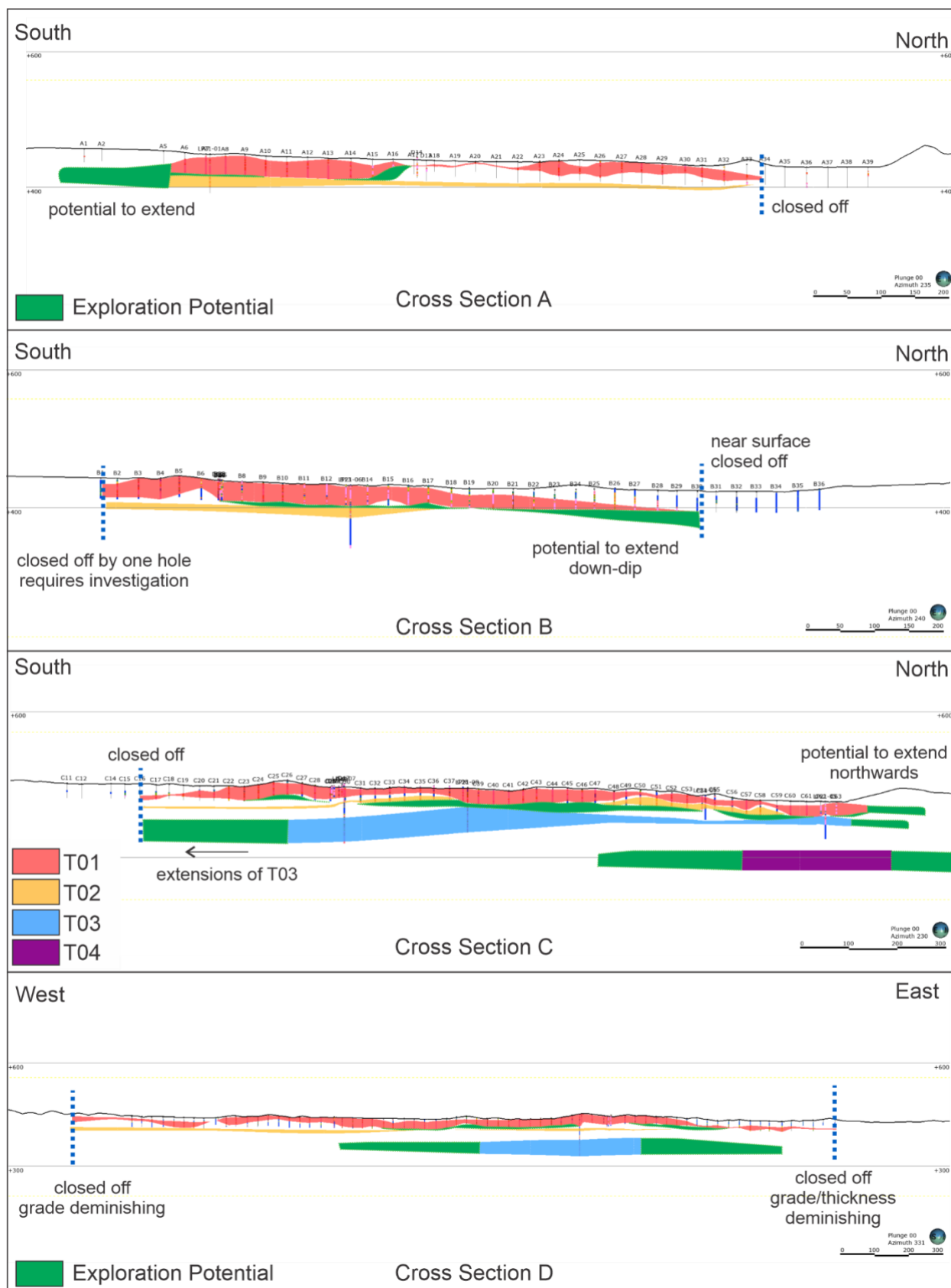


Figure 31 : Interpreted cross sectional zones of merged domains and lateral extensional potential.

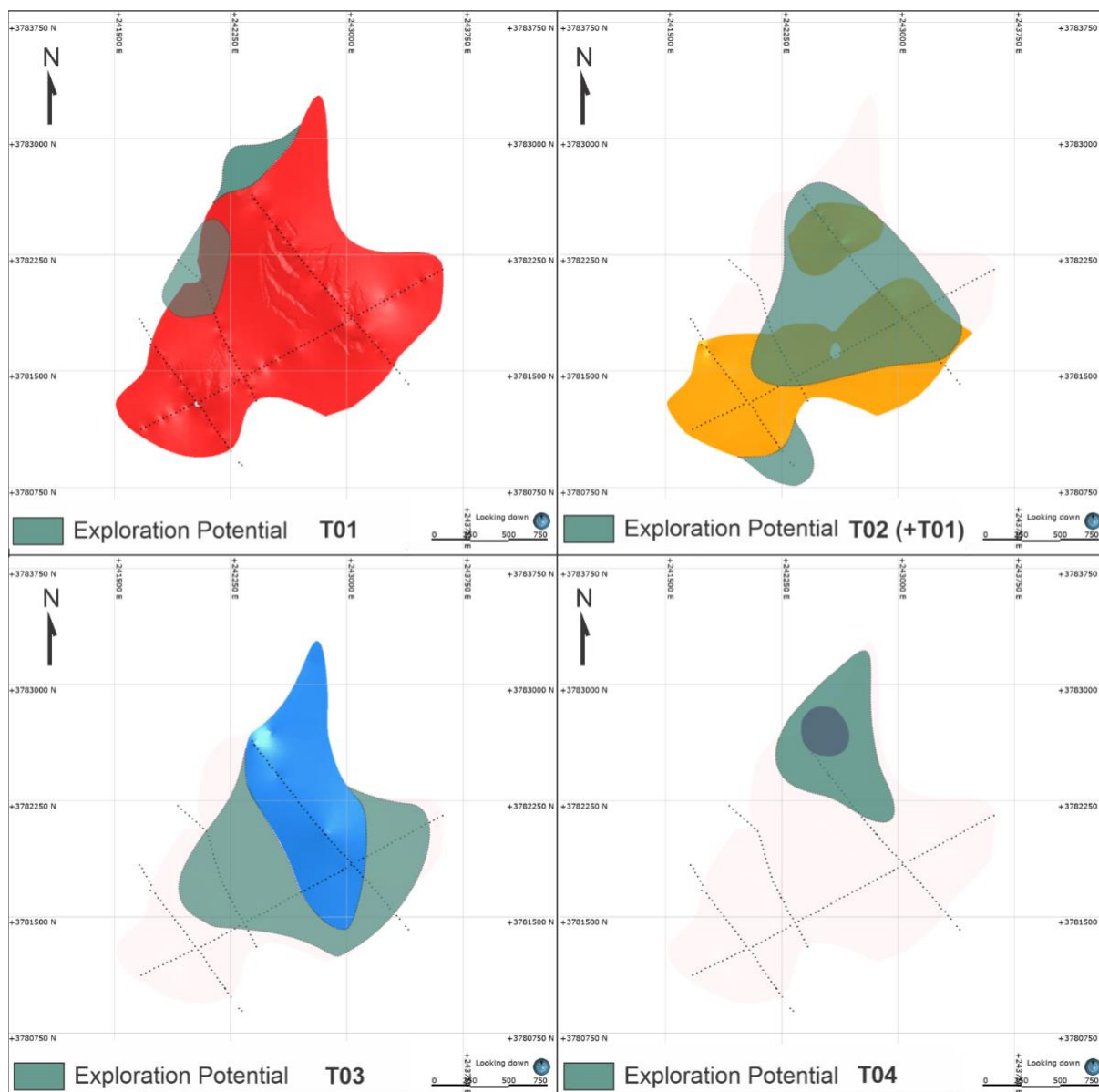


Figure 32: Interpreted zones of exploration potential in the main resource area

Three vertical reconnaissance holes were drilled in 2021 (Figure 33) with the most remote hole located 6,800m to the south west of the resource area. REE mineralisation was intersected in both holes sampled (LP21-03 and LP21-04).

LP21-04 intersected 30.2m grading 400ppm TREE from 24.1m downhole (using 300ppm cut off, minimum 3m internal dilution) together with two additional zones (Figure 34). Two narrow bands of mineralisation were intersected in LP21-03 including 10.8m at 360ppm TREE from 35.1m.

These results confirm that further exploration potential exists outside of the main La Paz resource area.

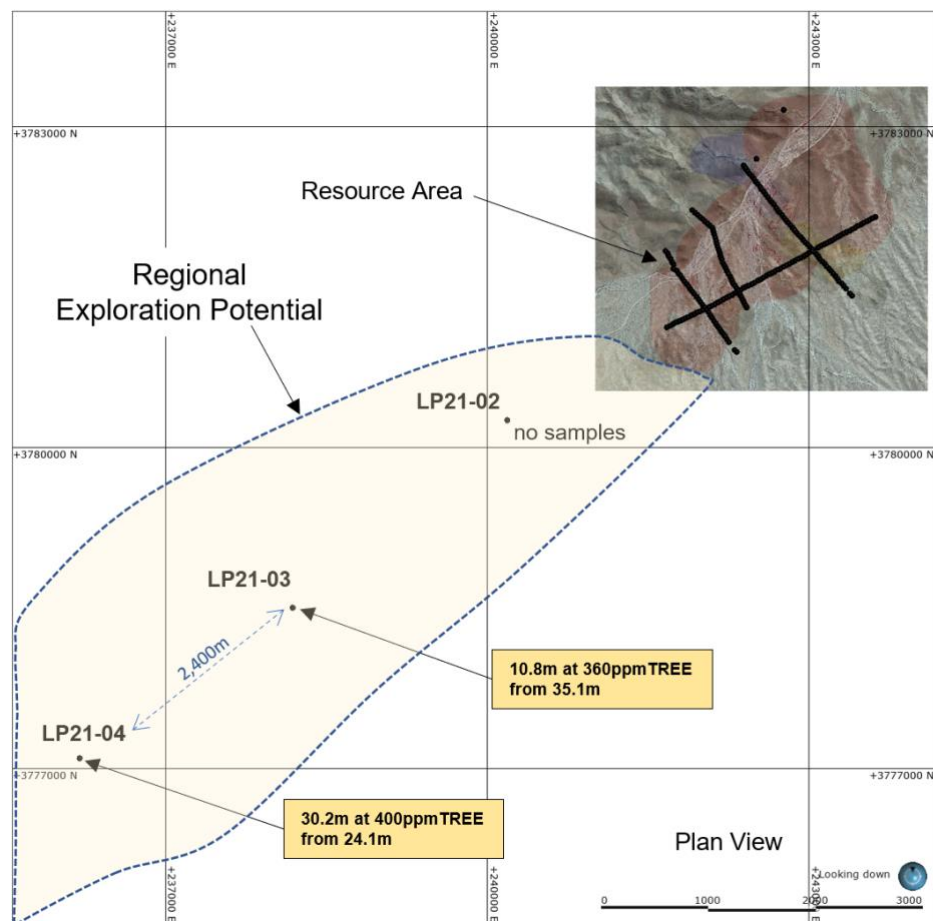


Figure 33: Location plan showing location of reconnaissance holes

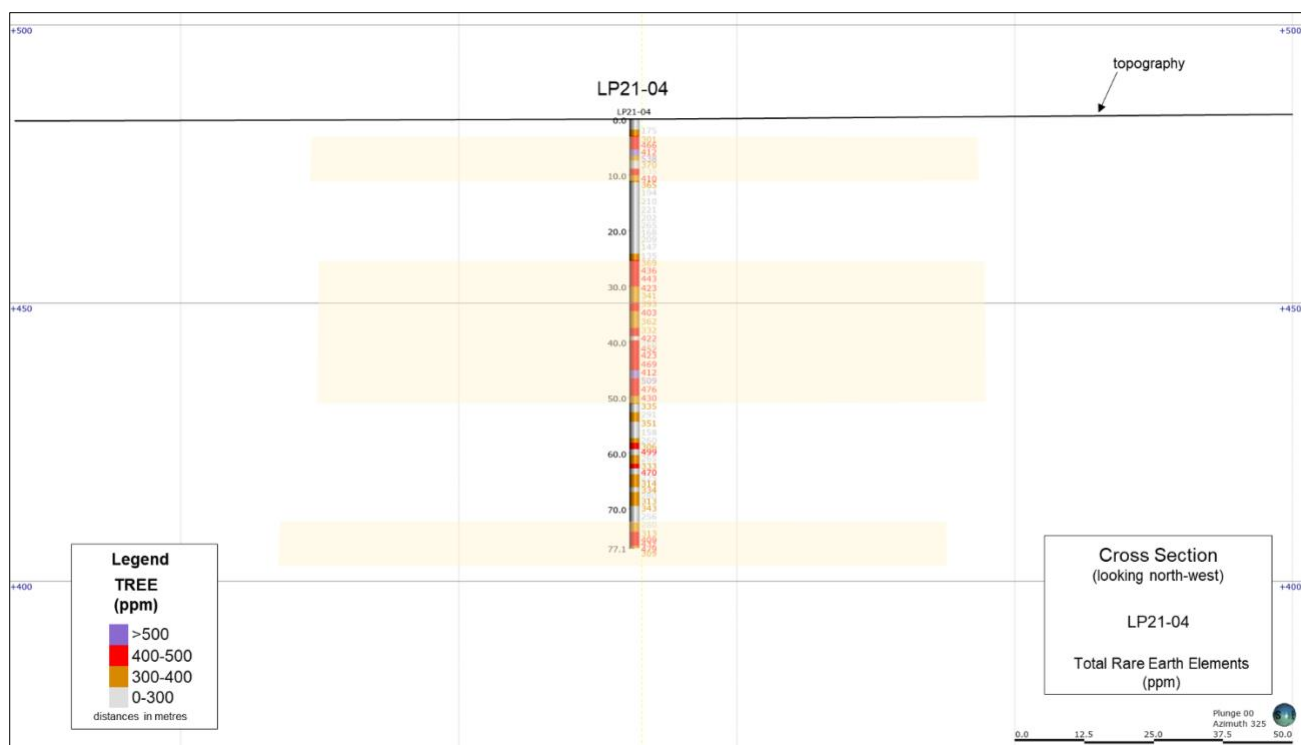


Figure 34: Cross section of hole LP21-04

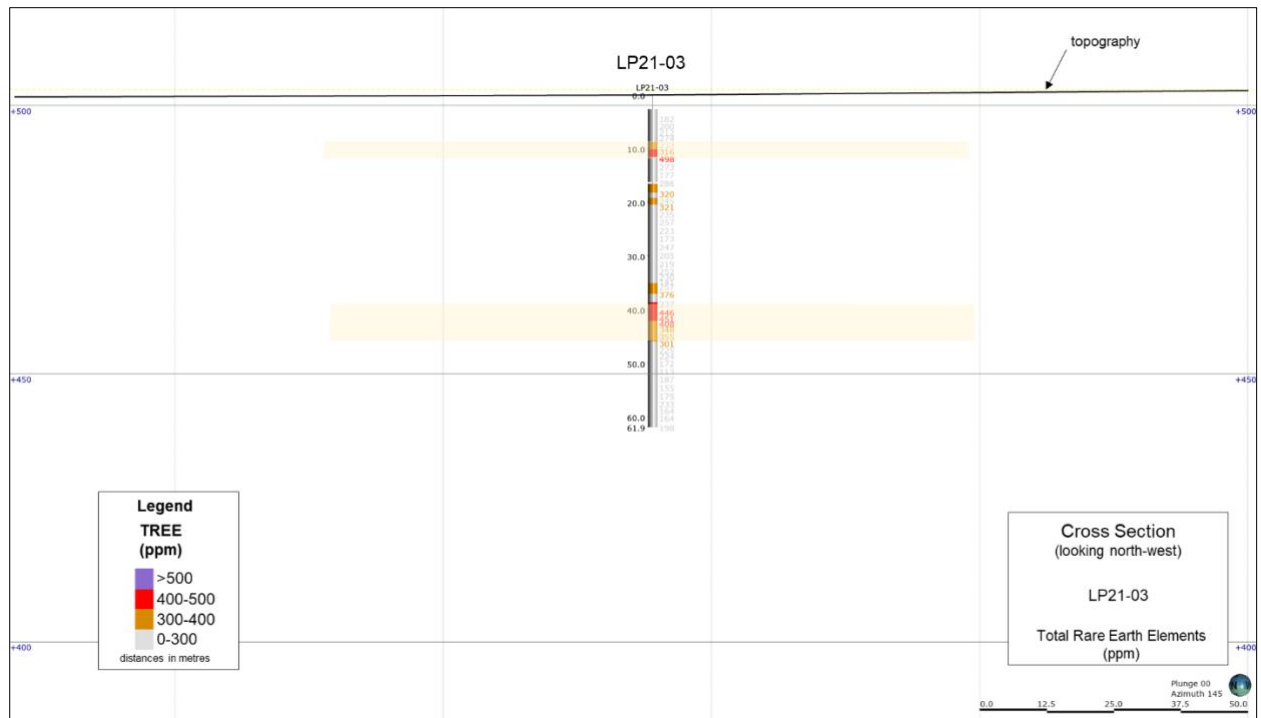


Figure 35: Cross section of hole LP21-03

Conclusions

The estimated total resource estimate for La Paz comprises 170 million tonnes with an average grade of 391ppm TREE reported above a cut off of 300ppm TREE.

The resource is classified as an indicated resources comprising approximately 35 million tonnes at an average grade of 382ppm, and inferred resources of 135 million tonnes at an average grade of 393ppm TREE.

The data indicate that:

- there is sufficient data of adequate quality to support a classified mineral resource estimate that satisfies the requirements of the JORC 2012 reporting code.
- Within the current resource area there is potential to both significantly increase and upgrade the overall resource to a depth of at least 50m with additional drilling.
- there is demonstrated potential to grow the resource base further by further step out drilling beyond the current limits of the main resource area