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MEDCALF PROJECT UPDATED MINERAL RESOURCE ESTIMATE

HIGHLIGHTS

- Mineral Resource estimate of 25.7M of 9.98% TiO₂, 0.52% V₂O₅ and 50.9% Fe₂O₃.
- Mineral Resource estimate updated using 6% titanium cut-off grade
- Updated prefeasibility study on DSO type product near completion
- Ore Reserve estimation to commence using updated mineral resource estimate.

Abstract

Audalia Resources Limited (ASX:ACP) (**Audalia** or the **Company**) is pleased to report an update on the Company's JORC (2012) compliant Mineral Resource estimate for the Medcalf Project using a 6% TiO₂ grade cut off to be line with Company's updated pre-feasibility study (**PFS**) study currently underway on a direct shipping ore (**DSO**) type product (ASX release on 24 November 2021).

The updated PFS information that will include this latest mineral resource estimate will be provided to a mining consultant for reporting a JORC compliant Ore Reserve estimate.

Audalia recently identified the possibility of producing a lump ore product to be used for blast furnace refractory liner protection. The proposed product is a DSO type product only requiring crushing and screening to specified size range.

A preliminary review of the 2018 resource model has indicated through a series of optimisations, that high grade TiO2 ore could be mined from the existing mineral resource.

Cube Consulting, the Company's independent geologist, who estimated the 2018 mineral resource using a $0.2\%~V_2O_5$ cut off were appointed again to revisit the block model focussing on titanium as a cut-off grade and demonstrate reasonable prospects for economic extraction via assessment against an optimisation shell.

Grade tonnage curves were developed for the reported Mineral Resources within each prospect area. A review of the grade tonnage curves demonstrates that the resource is sensitive to the applicable reporting cut-off, with resource tonnes consistently reducing at a material rate with increasing cut-off grades. The 6% cut-off titanium grade was found to be the optimal cut-off grade for tonnage and grade suitable for upgrading to an Ore Reserve.



Mineral Resource Estimation Summary

The geological interpretation has divided the Medcalf Project into three broad, spatially unique areas (Figure 1):

- Egmont located to the west of the project area.
- Kilimanjaro located to the southeast.
- Vesuvius in the central part of the project, which has been further sub-divided based on modelled fault boundaries.
 - Vesuvius West
 - Vesuvius Central (including the Fuji prospect)
 - Vesuvius East (including the Pinatubo prospect).

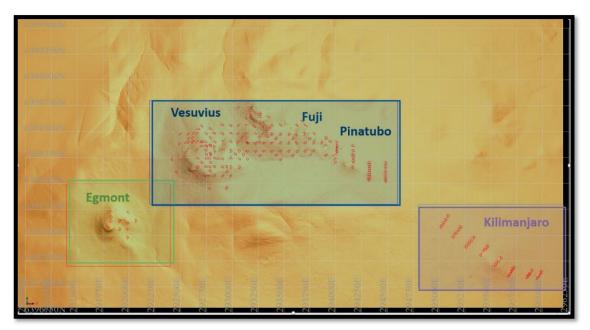


Figure 1 - Prospect location plan

Cube Consulting re-ran the 2018 resource block model using a 6% TiO₂ grade cut off. Reasonable prospects for eventual economic extraction were determined with reference to the results of Whittle optimisation resource limiting shells. The extents of the selected open pit shell were used as an analogy to help limit the extents for reporting of the Mineral Resources associated with the Vesuvius, Egmont and Kilimanjaro prospect. Figure 2 provides an oblique view of the resource classification categories for the Vesuvius prospect area.



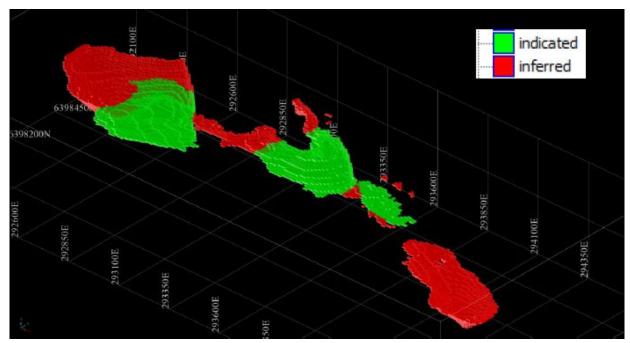


Figure 2 – Oblique view looking northwest

Within each prospect area the block model grades were reviewed sectionally against the corresponding drill hole information. Overall, this showed good alignment between estimated block grades and reported drill hole assays. Examples for the V_2O_5 and TiO_2 estimates area presented below for Vesuvius (Figure 3), Egmont (Figure 4) and Kilimanjaro (Figure 5).

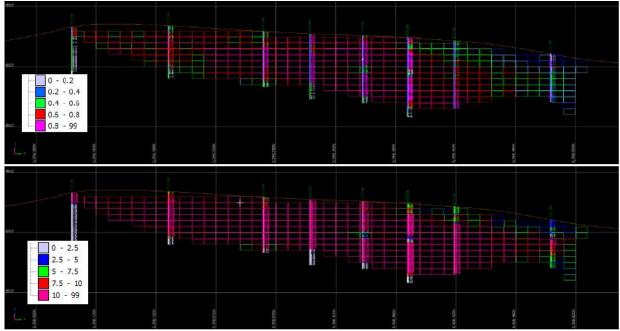


Figure 3 - Vesuvius Visual Validation at 292,740mE - V2O5 % (top), TiO2 % (bottom)



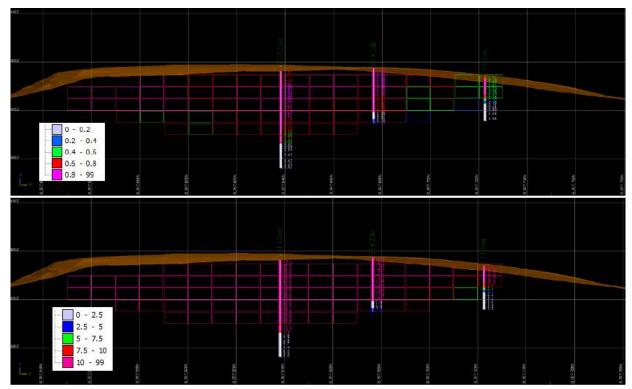


Figure 4 - Egmont Visual Validation at 291,820mE - V2O5 % (top), TiO2 % (bottom)



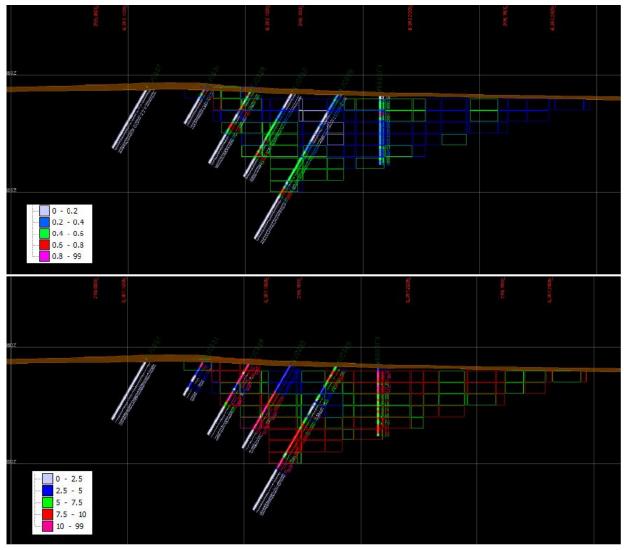


Figure 5 - Kilimanjaro Visual Validation, oblique section centred ~295,700mE - V2O5 % (top), TiO2 % (bottom)

The Medcalf resource has demonstrated sufficient geological and grade continuity to support the definition of a Mineral Resource and enable classification in accordance with the JORC Code (2012 edition) guidelines.

The input drill data is considered representative of the V2O5 and TiO2 grade distribution and does not misrepresent the mineralisation. Knowledge of the geological controls on mineralisation has been used to develop the overall resource estimate.

The Mineral Resource in Table 1 is reported above a lower cut-off grade of 6 % TiO₂ based on preliminary economic considerations. The preliminary mining studies are based on open cut mining methods using conventional drill and blast mining. These studies have assisted with definition of an appropriate cut-off grade above which mineralisation has reasonable prospects for economic extraction.



Resource Classification	Prospect	Tonnes (Mt)	V ₂ O ₅ %	TiO ₂ %	Fe ₂ O ₃ %	Al ₂ O ₃ %	SiO ₂ %
	Vesuvius	14.2	0.60	10.95	56.1	8.6	15.6
Indicated	Egmont	0.8	0.66	12.04	62.1	7.9	9.9
DI DEGREDA DE LO	Kilimanjaro	= /	(1)	-	-	-	%
Sub-Total Indica	Sub-Total Indicated		0.60	11.01	56.4	8.5	15.3
	Vesuvius	8.1	0.40	8.78	42.2	9.7	27.3
Inferred	Egmont	-	-	-	=	-	-
	Kilimanjaro	2.6	0.40	7.76	45.6	9.1	27.1
Sub-Total Inferred		10.6	0.40	8.54	43.0	9.6	27.3
Total Resource		25.7	0.52	9.98	50.9	9.0	20.2

Table 1 – Resource Estimate (N.B – Pinatubo and Fuji are combined with Vesuvius)

The Company last reported an update to the mineral resource estimate in accordance with the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves 2012 Edition (JORC 2012) on 31 August 2018).

Medcalf Project Mineral Resource Estimate

The following is a summary provided by Cube Consulting of material information used to estimate the Mineral Resource, as required by Listing Rule 5.8.1 and JORC 2012 Reporting Guidelines

Mineral Tenement and Land Tenure Status

The Medcalf Project granted tenements comprises one mining lease, three exploration licences, two miscellaneous licences and one General Purpose licence. All licences are owned 100% by Audalia Resources and all licences are in good standing.

A portion of the Mineral Resource exists in proximity to vegetation listed as critically endangered, and in proximity to several identified troglofauna sites. Audalia has initiated a number of investigations with the aim of providing sufficient evidence to applicable authorities to support future mining. Given the early stage of these investigations it is unclear whether approval will be given to disturb part or all of the areas in question.

Geology

The Medcalf Project lies in the southern end of the Archaean Lake Johnston greenstone belt: a narrow, north-northwest trending belt approximately 110 km in length. It is located near the southern margin of the Yilgarn Craton, midway between the southern ends of the Norseman-Wiluna and the Forrestania-Southern Cross greenstone belts. The area of interest is the Medcalf sill located in the hinge zone of a gently north-west plunging regional anticline and is emplaced within a predominately tholeiitic basalt sequence low in the greenstone succession. Rocks in this area belong to the almandine amphibolite facies of regional metamorphism.

In the mineralised area the magnetite-rich sequence is deeply weathered, with +60 m of saprolite showing vertical zonation of weathering minerals due to progressive weathering. Primary mineralisation is the result of gravity accumulations of oxide phases within the pyroxenite zone of the sill. Extensive weathering over time has resulted in removal of much of the silica, calcium and magnesium resulting in residual concentration of iron, titanium and vanadium oxides.



Vanadium is present in the samples as microscopic and sub-microscopic constituents of hematite, goethite, and several other iron minerals.

Drilling Techniques and Hole Spacing

Drilling completed at the Medcalf project and used to support the mineral resource includes 212 reverse circulation (RC) holes for a total of 7,340 m and 19 diamond core (DDH) holes for a total of 839.2 m.

RC drilling has been completed in three phases from 2012 to 2018. Drilling utilised a 140 mm diameter face sampling bit with sample shroud, attached to a pneumatic piston hammer used to penetrate the ground and deliver sample up 3 m or 6 m drill rod inner tubes through to the cyclone and either rotary cone splitter or riffle splitter with the aid of rig and auxiliary booster compressed air.

DDH drilling has been completed in two phases (2013 and 2015). Geological logging was completed on intervals aligned with observed changes in the logged core. Diamond drilling is completed using a PQ core size generating core with a diameter of approximately 83 mm. All diamond holes are drilled from surface.

The majority of all drilling is oriented vertically.

Sampling

All samples collected from RC drilling were collected at 1m downhole intervals and split into prenumbered calico bags at the rig using a rotary cone splitter (2012 and 2013 programs), or three-stage riffle splitter (2018 program). The remaining sample is collected in a plastic bag for retention on-site. In addition to the 1m sample, one of either a field duplicate, certified reference standard, or a blank was inserted at a rate of 1:20 samples.

Sampling of the DDH core was targeted at one-metre intervals, however adjusted to allow for geological boundaries where observed. Drill core is sawn in half length-wise, with half submitted for analysis and the other half retained in the core tray for future reference.

Sample Analysis

All RC samples and the 2015 DDH samples were analysed at Intertek (formerly Genalysis) in Perth by XRF using lithium borate fused discs. The laboratory has achieved NATA certification and has robust internal procedures to ensure accuracy and precision of reported results.

Results for the 2012-2013 RC drilling programs provide values for V2O5 and TiO2 only. For the 2018 RC drilling and 2015 diamond core an 18-element suite was reported and included: TiO2, V2O5, Fe2O3, Al2O3, CaO, Cl, Co, Cu, Cr2O3, K2O, MgO, MnO, Na2O, Ni, P2O5, SO3, SiO2, and Zn. Loss on ignition (LOI) was determined using industry standard Thermo-Gravimetric Analyser (TGA) and reported as single LOI at 1000 degrees Celsius.

Estimation Methodology

The geological interpretation utilised surface geological mapping, lithological logging data, and assay data to guide and control the Mineral Resource estimation. Implicit modelling software was utilised to generate three-dimensional wireframes of the major lithological units and



weathering horizons. These solids were imported into Surpac and used to code the geological model.

Drill hole sample data was flagged using domain codes generated from three-dimensional mineralisation domains. Sample data was composited to one-metre downhole lengths using a best fit-method. No residuals were generated. Statistical analysis was carried out on data from all estimated domains, with hard boundary techniques employed, with blocks estimated only from samples within the same domain.

Outlier analysis of the composite data indicated application of a top-cut value for TiO2 within a single estimation domain was appropriate. This affected ~1% of the domain population. No other grade cutting was employed for other variables or domains.

Five grade attributes (V_2O_5 , TiO_2 , Fe_2O_3 , SiO_2 , and Al_2O_3) were estimated for input into mine planning and processing assessments. The grade estimation process was completed using GeovariancesTM IsatisTM software, with estimated grades exported for compilation into the SurpacTM block model.

Interpolation of grades was via Localised Uniform Conditioning (LUC) for V2O5 and TiO2, and via Ordinary Kriging (OK) for the remaining grade variables. OK estimates for V_2O_5 and TiO2 were completed as internal checks. A local recoverable model was considered appropriate for the level of mining studies. Interpolation parameters were set to a minimum number of six composites and a maximum number of 12 composites, with a restriction on the number of composites per drill hole set to four. Blocks were estimated in a single pass strategy with a maximum search distance of 400m.

The model has a block size of 10 m (X) \times 10 m (Y) \times 5 m (Z) representing the nominal selective mining unit (SMU) expected for the deposit based on preliminary mining assumptions relevant to the nature of mineralisation. OK estimates were completed on a block size of 20 m (X) \times 20 m (Y) \times 5 m (Z) and grades assigned to the co-incident SMU block sizes.

The block model was validated using a combination of visual and statistical, techniques including global statistics comparisons, and trend plots.

Resource Classification

A range of criteria was considered by Cube when addressing the suitability of the classification boundaries. These criteria include:

- Geological continuity and volume;
- Drill spacing and drill data quality;
- Modelling technique; and
- Estimation properties, including search strategy, number of informing composites, average distance of composites from blocks and kriging quality parameters.

Blocks have been classified as Indicated or Inferred, mostly based on drill data spacing in combination with other model estimate quality parameters.



Cut-off Grade

The Mineral Resource has been reported above a 6 % TiO₂ cut-off. Mineralisation above this cut-off has, in the opinion of the Competent Person, demonstrated reasonable prospects for economic extraction via assessment against an optimisation shell. Input parameters utilised for the optimisation are based on a combination of previously reported test work, open market price assumptions, and factors applicable to comparable mineralisation styles.

Mining and Metallurgy

Development of this Mineral Resource assumes mining using standard equipment and methods similar to other operations in the area. The assumed mining method is conventional truck and shovel, open pit mining at an appropriate bench height.

An indicative SMU of 10 m (X) \times 10 m (Y) \times 5 m (Z) has been proposed. This has yet to be tested completely through detailed mining studies although is considered reasonable for the nature of mineralisation and the proposed mining methods.

Detailed metallurgical test work on mineralisation at the project has been completed and previously reported (ASX releases dated 26 October 2017, 31 October 2017, and 28 September 2020). Results of beneficiation test work indicate metallurgical recoveries of vanadium, titanium and iron in the order of 85% using magnetic separation, with an associated mass recovery of approximately 75%. Subsequent processing of the developed concentrate via pyrometallurgical processes has been demonstrated to develop market acceptable products with excellent recovery of vanadium and iron. The vanadium bearing iron concentrate meets the feedstock requirement for blast furnace ironmaking, and vanadium can be recovered in the steelmaking process. These results are considered adequate to achieve reasonable expectations of economic metallurgical processing of the project mineralisation.

This announcement was authorised to be given to ASX by the Board of Directors of Audalia Resources Limited.

Authorised by:

Brent Butler
CEO and Executive Director

Competent Person's Statement

The information is this report that relates to Mineral Resources is based on information compiled by Patrick Adams who is a Fellow of the Australasian Institute of Mining and Metallurgy and a Member of the Australian Institute of Geoscientists. Patrick Adams is an employee of Cube Consulting Ltd 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 edition of the "Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves". Mr Adams has given his consent to the inclusion in this report of the matters based on the information in the form and context in which it appears.



Forward Looking Statements

This announcement contains forward looking statements that are based on the Company's current expectations, intentions or strategies regarding future events and results.

Where the Company expresses or implies an expectation or belief as to future events or results, such expectation or belief is expressed in good faith and believed to have a reasonable basis. However, forward looking statements are subject to risks, uncertainties, assumptions, and other factors, which could cause actual results to differ materially to future results expressed, projected, or implied by such forward looking statements.

The Company does not undertake any obligation to release publicly any revisions to any "forward looking statements" to reflect events or circumstances after the date of this announcement or to reflect the occurrence of unanticipated events, except as may be required under the applicable securities laws.

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JORC Code, 2012 Edition – Table 1 report

Section 1 Sampling Techniques and Data

(Criteria in this section apply to all succeeding sections.)

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. 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. 	 Drilling completed at the Medcalf project and used to support the mineral resource includes 212 reverse circulation (RC) holes for a total of 7,340 m and 19 diamond core (DDH) holes for a total of 839.2 m. RC drilling has been completed in three phases from 2012 to 2018. Geological logging and assay samples were collected from RC drilling at one-metre intervals down hole. RC samples are collected at one-metre intervals downhole at the drill rig by riffle splitter attached to the drill to obtain a sub-sample which is placed into a pre-numbered sample bag for dispatch to the analytical laboratory. The remaining sample is collected in a plastic bag for retention on-site. DDH drilling has been completed in two phases (2013 and 2015). Geological logging was completed on intervals aligned with observed changes in the logged core. Sampling of the DDH core was targeted at one-metre intervals, however adjusted to allow for geological boundaries where observed. Drill core is sawn in half length-wise, with half submitted for analysis and the other half retained in the core tray for future reference.
Drilling techniques	 Drill type (eg core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, 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). 	 The resource estimate is largely developed from RC samples (~93%) with the remainder from DDH samples. A total of five DDH holes were excluded from use in the resource estimate as they were either twinned with RC holes (2 holes) or duplicated existing DDH holes (3 holes). Reverse circulation drilling utilised a 140 mm diameter face sampling bit with sample shroud, attached to a pneumatic piston hammer used to penetrate the ground and deliver sample up 3 m or 6 m drill rod inner tubes through to the cyclone and either rotary cone splitter or riffle splitter with the aid of rig and auxiliary booster compressed air.



Criteria	JORC Code explanation	Commentary
		 Diamond drilling completed using PQ core size for the entire hole length generating core with a diameter of ~83mm. The majority of drilling is oriented vertically. Refer to Section 2, Drill Hole Information, for a detailed breakdown of drilling by method and year.
Drill sample recovery	Method of recording and assessing core and chip sample recoveries and results assessed. Meanure taken to maximize complements and ensure.	No direct recovery measurements of reverse circulation samples were performed; however, a qualitative estimate of sample recovery at the rig was made and generally considered good. All DC drilling was above water table and generated dry complete.
	 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. 	 All RC drilling was above water table and generated dry samples. Samples are visually checked for contamination during drilling. Measurements of core recovery for the 2013 drilling program are reported as greater than 98%. Analysis of core recovery for the 2015 program shows slightly lower recoveries on average in the first two metres (~80%). Overall, average recoveries of approximately 98% are achieved. Core recovery is reported as a percentage of the stated drilling interval and is calculated as the length of core recovered divided by the stated drilling interval multiplied by 100. Variations in sample recovery are unlikely to have a material impact on the reported assays for those intervals. Diamond core depths are checked against the depths presented on core blocks.
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. Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography. The total length and percentage of the relevant intersections logged. 	 Geological logging was performed on 1 m intervals for all RC drilling, and at 1 m intervals for diamond holes, although adjusted for lithological contacts. The RC drill cuttings have been sieved and each individual metre placed into a chip tray for a geological log of the hole and photographed. All diamond drill core was photographed digitally. All holes have been completed logged for lithology. Diamond core holes have been additionally logged for geotechnical (RQD, weathering), structural, and geometallurgical characterisation.
Sub- sampling techniques	 If core, whether cut or sawn and whether quarter, half or all core taken. If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry. 	 2012-2013 RC Samples were collected on one-metre intervals into calico bags from a rig mounted rotary cone splitter. No details of the QAQC procedures applicable to this drilling are



Criteria	JORC Code explanation	Commentary
and sample preparation	 For all sample types, the nature, quality and appropriateness of the sample preparation technique. Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples. Measures taken to ensure that the sampling is representative of the in situ material collected, including for instance results for field duplicate/second-half sampling. Whether sample sizes are appropriate to the grain size of the material being sampled. 	 A certified reference standard, field duplicate, or blank was submitted at a rate of 1 in 20 samples.
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. 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. Nature of quality control procedures adopted (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established. 	 All RC samples and the 2015 DDH samples were analysed at Intertek (formerly Genalysis) by XRF using lithium borate fused discs. The laboratory has achieved NATA certification and has robust internal procedures to ensure accuracy and precision of reported results. 2012-2013 RC Results for V₂O₅ and TiO₂ are recorded in the resource database. No details of the sampling QAQC results applicable to this drilling have been provided. 2018 RC and 2015 DDH A 18-element suite was reported and included: TiO₂, V₂O₅, Fe₂O₃, Al₂O₃, CaO, Cl, Co, Cu, Cr₂O₃, K₂O, MgO, MnO, Na₂O, Ni, P₂O₅, SO₃, SiO₂, and Zn. Loss on ignition (LOI) was determined using industry standard Thermo-Gravimetric Analyser (TGA) and reported as single LOI at 1000 degrees Celsius.



Criteria	JORC Code explanation	Commentary
Verification	The verification of significant intersections by either independent or	 A certified reference standard, field duplicate, or blank was submitted at a rate of 1 in 20 samples. Results show acceptable precision and accuracy. A selection of samples has been submitted for analysis at an umpire laboratory however results are not available to date. The reported assay results are considered of suitable quality to support estimation of mineral resources. Ravensgate consultants visually verified significant intersections in
of sampling and	alternative company personnel.	RC and DDH holes as part of the 2014 mineral resource estimate.
assaying	The use of twinned holes.Documentation of primary data, data entry procedures, data	 Cube consultants visited the project and observed RC drilling and DDH core while on-site.
	 verification, data storage (physical and electronic) protocols. Discuss any adjustment to assay data. 	 Two PQ holes were twinned by RC drilling. Population comparisons show acceptable repeatability for both grade and geological boundaries.
		 Primary data was completed using paper logs in the field. Details were transferred to Excel and checked.
		MS Excel files for the collar, survey, assay and geology details were provided to Cube and compiled into an MS Access database. Independent verification of the 2018 assay data against raw reported laboratory job numbers was completed by Cube and identified a minor number of transcription errors. These were corrected prior to use in the resource estimate.
		 No adjustments have been made to any assay data used in the mineral resource estimate.
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. 	 Drill collars have been surveyed by appropriately qualified contractors using high precision Differential Global Positing System (DGPS) methods.
	Specification of the grid system used. Ovality and adaptively of tanggraphic control.	 Collar data is recorded in the Map Grid of Australia 1994 (MGA94) Zone 51 coordinate system.
	Quality and adequacy of topographic control.	 Downhole survey data was not collected for any drill holes utilised in the mineral resource estimate. Given that the majority of holes are drilled vertically, and drill depths are typically less than 60 m, drill hole deviation is unlikely to have a material impact on the estimate. No adjustments have been made to any assay data used in the mineral resource estimate.

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Criteria	JORC Code explanation	Commentary
		 Topographic control is defined by one-metre contours extracted from aerial photography. Topography extents are sufficient to cover the areas of interest.
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. Whether sample compositing has been applied. 	 Drill spacing varies across the project area. Within the Vesuvius-Fuji area drilling ranges from 40 m X x 40 m Y, out to 80 m X x 80 m Y, while the eastern extension of the prospect has been drilled to approximately 160 m X x 20 m Y. Drilling at Egmont is on an irregular pattern but averages approximately 80 m X x 80 m Y. Drilling at Kilimanjaro has been completed on a nominal 160 m spacing along strike and 40 m across strike. Details Refer to Section 2, Drill Hole Information, for details. The drill spacing was deemed appropriate for sufficient deposit knowledge by the Competent Person for the Mineral Resource classification applied. The mineralised domains have demonstrated sufficient continuity in both geology and grade to support the definition of Mineral Resources, and the classifications applied under the 2012 JORC Code guidelines. Samples were composited to one-metre intervals with a minimum accepted length of 0.5 m. No residuals were produced.
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. 	 The majority of drilling at the project is oriented vertically to intersect the horizontal mineralisation at close to right angles. The Kilimanjaro area is an exception with both vertical and inclined drill holes, oriented to an azimuth of 215 degrees and dipping -60 degrees. This orientation has been selected to intersect approximately perpendicular to the dipping mineralisation in the Kilimanjaro prospect. The orientation of drilling is not considered a source of bias in reported results.
Sample security	The measures taken to ensure sample security.	Samples are stored on-site in designated location until transport to the analytical facility by Company personnel or contractors.
Audits or reviews	The results of any audits or reviews of sampling techniques and data.	 Cube completed a site visit and report during April 2018 for the purpose of reviewing drilling procedures in place and associated factors which may affect the quality of the Mineral Resource. No



Criteria	JORC Code explanation	Commentary
		 major findings were identified. Cube completed an independent review of available QAQC results including standards, field duplicates and blanks relevant to the 2018 drilling program. Performance was considered suitable to support estimation of Mineral Resources.



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	 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. 	 Audalia owns the Medcalf project 100% that comprises of M63/656, E63/1855, L63/75, E63/1133 and E63/1134. All are in good standing. No security or legal issues have been noted. Cube have not independently verified the status of tenure and have relied on information provided by Audalia. Cube are aware that a portion of the mineralisation exists in proximity to vegetation listed as critically endangered. Given the early stage of these investigations it is unclear whether approval will be given to disturb part or all of the areas in question. Cube are aware that a series of troglofauna sites exist within the resource footprint. Given the early stage of these investigations it is unclear whether approval will be given to disturb part or all of the areas in question.
Exploration done by other parties	Acknowledgment and appraisal of exploration by other parties.	The Medcalf layered intrusion was identified by Union Miniere in the 1960's during which they completed gridding, geological mapping, soil sampling, geophysical surveys, and drilling. Amoco completed detailed geological mapping, geochemical sampling, and ground magnetic surveys during 1978. Drilling broadly delineated the mineralisation with drill samples submitted for mineralogical and petrographic analysis. Mineralised samples were submitted for metallurgical test work. In 1986 Cypres drilled a deep diamond hole to the west of the current resource area to test for down dip extensions. Arimco drilled diamond core to obtain samples for metallurgical testing in 1996, on which separation test work was completed. During 2005 and 2006 LionOre explored the area primarily for base metals and completed a geophysical survey and drilling. Norilsk briefly explored the area for nickel in 2010. A total of 44 historical holes have been drilled. None of these holes have been included in estimation of the Mineral Resource.



Criteria	JORC Code explanation	Commentary	
Geology	Deposit type, geological setting and style of mineralisation.	 The Medcalf Project lies in the southern end of the Archaean Lake Johnston greenstone belt: a narrow, north-northwest trending belt approximately 110 km in length. It is located near the southern margin of the Yilgarn Craton, midway between the southern ends the Norseman-Wiluna and the Forrestania-Southern Cross greenstone belts. The area of interest is the Medcalf sill located in the hinge zone of a gently north-west plunging regional anticline a is emplaced within a predominately tholeiitic basalt sequence low the greenstone succession. Rocks in this area belong to the almandine amphibolite facies of regional metamorphism. In the mineralised area the magnetite-rich sequence is deeply weathered, with +60 m of saprolite showing vertical zonation of weathering minerals due to progressive weathering. Primary mineralisation is the result of gravity accumulations of oxide phase within the pyroxenite zone of the sill. Extensive weathering over tir has resulted in removal of much of the silica, calcium and magnesium resulting in residual concentration of iron, titanium and vanadium oxides. Vanadium is present in the samples as microscopic and sub-microscopic constituents of hematite, goethit and several other iron minerals. 	
Drill hole Information	 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: 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. 	Summary of drilling data used for the Mineral Resource estimate for the Vesuvius/Fuji prospect area. Year Diamond Holes Reverse Circulation # Holes Metres # Holes Metres 2012 28 1,305 2013 - 82 1,981 2015 12 510.5 2018 - 52 2,325	



Criteria	JORC Code explanation	Commentary
		Summary of drilling data used for the Mineral Resource estimate for the Egmont prospect area Year Diamond Holes Reverse Circulation # Holes Metres # Holes Metres 2013 - 13 270 2015 2 58.6 Total 2 58.6 13 270
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. 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. 	Summary of drilling data used for the Mineral Resource estimate for the Kilimanjaro prospect area Vear Diamond Holes Reverse Circulation # Holes Metres # Holes Metres 2018 - 37 1,459 Total - 37 1,459 An additional five diamond holes were used for the geological interpretation however were excluded from the estimation. No aggregation of assay results has been performed. No top-cutting of reported assays has been completed. No metal equivalents have been used. Individual grades for estimated elements are 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. If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (eg 'down hole length, true width not known'). 	 Down-hole sample lengths reported are essentially true width due to vertical drilling and simple undulating mineralised horizons. Drilling in the Kilimanjaro area consists of vertical and angled drilling designed to intersect the gently dipping mineralisation approximately perpendicular.



Criteria	JORC Code explanation	Commentary
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. 	Relevant information has been provided in previous ASX releases.
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. 	Relevant information has been provided in previous ASX releases.
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.	 Audalia have completed a range of metallurgical tests of mineralisation sourced for the Medcalf Project: Mineralogical characterisation – Investigation of the distribution of vanadium, titanium and iron in different minerals. Beneficiation testwork – Investigations on the suitability of various concentration processes including gravity separation, magnetic separation, and flotation. Results indicate magnetic separation as the most suitable process Metallurgical testwork – To investigate the extraction and separation of vanadium, titanium and iron from beneficiated concentrate by pyrometallurgical processes. Full details of this work have been previously reported in an ASX release dated 26 October 2017 and as an Addendum released on 31 October 2017, and more recently on 28 September 2020.
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. 	 Audalia plan to complete further infill drilling across the Vesuvius/Fuji and Kilimanjaro prospects to increase resource confidence. Further exploration work aimed at delineating potential extensions or new prospects is ongoing.



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	Commentary
Database integrity	 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. 	 Audalia provided drill hole information to Cube in the form of MS Excel spreadsheets. This data was loaded into MS Access and independently validated within both MS Access and Surpac software. Validation assessed the data for overlapping sample intervals, incorrect survey dips, missing collar information, alignment of collar with topographic surface, and visual validation in three dimensions. Minor issues were identified and corrected. All raw assay lab jobs forming the 2018 RC drilling campaign were independently imported and compared against the MS Excel assay data provided by Audalia. This identified a minor number of instances of transcription errors which were highlighted to Audalia and corrected in the estimation database.
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. 	 Cube completed a site visit during April 2018 for the purpose of reviewing drilling procedures in place and associated factors which may affect the quality of the Mineral Resource. No major findings were identified.
Geological interpretatio n	 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. The use of geology in guiding and controlling Mineral Resource estimation. The factors affecting continuity both of grade and geology. 	 Overall the Competent Person's confidence in the geological interpretation of the area is good, based on the quantity and quality of data available, and the continuity and nature of the mineralisation. Geological modelling was performed by Cube consultants. The interpretation utilised surface geological mapping, lithological logging data, and assay data to guide and control the Mineral Resource estimation. Implicit modelling software was utilised to generate three-dimensional wireframes of the major lithological units and weathering horizons. These solids were imported into Surpac and used to code the geological model. The deposit is generally flat and tabular in geometry, with geochemical boundaries defining the mineralised domains within a host intrusive body. A number of faults are identified across the project area. Surface



Criteria	JORC Code explanation	Commentary
		mapping provides the surface projection of these features however they are rarely intersected in drilling. They have been modelled as vertical features. Further drilling may identify alternate orientations of these structures, or the presence of other structures within the project area.
Dimensions	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.	 Vesuvius/Fuji prospect The mineralisation strikes broadly east-west and covers approximately 2.2 km along strike, a maximum across strike width of approximately 500 m, and a maximum depth of 100 m below surface, averaging approximately 50 m. Mineralisation is separated into three broad zones by the presence of mapped faults. Egmont prospect The mineralisation is locally confined to a topographic high with dimensions approximately 200 m north to south, and 150 m east to west extending to a maximum depth below surface of approximately 50 m. Kilimanjaro prospect Mineralisation strikes broadly north east-south west and covers approximately 700 m along strike, a maximum across strike width of approximately 300 m, and a maximum depth of 50 m below surface. Mineralisation dips approximately 30 degrees to the north east.
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 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. The availability of check estimates, previous estimates and/or mine production records and whether the Mineral Resource estimate takes appropriate account of such data. The assumptions made regarding recovery of by-products. Estimation of deleterious elements or other non-grade variables of economic significance (e.g. sulphur for acid mine drainage 	 Five grade attributes (V₂O₅, TiO₂, Fe₂O₃, SiO₂, and Al₂O₃) were estimated for input into mine planning and processing assessments. The grade estimation process was completed using Geovariances™ Isatis™ software, with estimated grades exported for compilation into the Surpac™ block model. Statistical analysis was carried out on data from all estimated domains. Interpolation of grades was via Localised Uniform Conditioning (LUC) for V₂O₅ and TiO₂, and via Ordinary Kriging (OK) for the remaining grade variables. OK estimates for V₂O₅ and TiO₂ were completed as internal checks. A local recoverable model was considered appropriate for the level of mining studies.



Criteria	JORC Code explanation	Commentary
	 characterisation). In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed. Any assumptions behind modelling of selective mining units. Any assumptions about correlation between variables. Description of how the geological interpretation was used to control the resource estimates. 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 drill hole data, and use of reconciliation data if available. 	 Drill hole sample data was flagged using domain codes generated from three-dimensional mineralisation domains. Sample data was composited to one-metre downhole lengths using a best fit-method. No residuals were generated. Outlier analysis of the composite data indicated application of a top-cut value for TiO₂ within a single estimation domain was appropriate. This affected ~1% of the domain population. No other grade cutting was employed for other variables or domains. Interpolation parameters were set to a minimum number of six composites and a maximum number of 12 composites, with a restriction on the number of composites per drill hole set to four. Blocks were estimated in a single pass strategy with a maximum search distance of 400m. The model has a block size of 10 m (X) × 10 m (Y) × 5 m (Z) representing the nominal selective mining unit (SMU) expected for the deposit based on preliminary mining assumptions relevant to the nature of mineralisation. OK estimates were completed on a block size of 20 m (X) × 20 m (Y) × 5 m (Z) and grades assigned to the coincident SMU block sizes. Hard boundary techniques were employed, with blocks estimated only from samples within the same domain. The block model was validated using a combination of visual and statistical, techniques including global statistics comparisons, and trend plots. No mining has taken place at the project, so reconciliation data is not available The reported Mineral Resource produces comparable tonnes and grades above nominated reporting cut-off grades as produced in the 2014 Mineral Resource completed by Ravensgate.
Moisture	 Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content. 	Tonnages are estimated on a dry basis.
Cut-off parameters	 The basis of the adopted cut-off grade(s) or quality parameters applied. 	 The Mineral Resource has been reported above a 6 % TiO₂ cut-off. Mineralisation above this cut-off has, in the opinion of the Competent Person, demonstrated reasonable prospects for economic extraction via assessment against an optimisation shell. Input parameters



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 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.	 utilised for the optimisation are based on a combination of previously reported test work, open market price assumptions, and factors applicable to comparable mineralisation styles. Development of this Mineral Resource assumes mining using standard equipment and methods similar to other operations in the area. The assumed mining method is conventional truck and shovel, open pit mining at an appropriate bench height. An indicative SMU of 10 m (X) × 10 m (Y) × 5 m (Z) has been proposed. This has yet to be tested completely through detailed mining studies although is considered reasonable for the nature of mineralisation and the proposed mining methods.
Metallurgical factors or assumptions	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.	 Detailed metallurgical test work on mineralisation at the project has been completed and previously reported (ASX releases dated 26 October, 31 October 2017, and 28 September 2020). Results of beneficiation test work indicate metallurgical recoveries of vanadium, titanium and iron in the order of 85% using magnetic separation, with an associated mass recovery of approximately 75%. Subsequent processing of the developed concentrate via pyrometallurgical processes has been demonstrated to develop market acceptable products with excellent recovery of vanadium and iron. The vanadium bearing iron concentrate meets the feedstock requirement for blast furnace ironmaking, and vanadium can be recovered in the steelmaking process. These results are considered adequate to achieve reasonable expectations of economic metallurgical processing of the project mineralisation.
Environment al 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 	 criteria will be implemented aligned with other Western Australian mining operations. Cube are aware that a portion of the mineralisation exists in proximity



Criteria	JORC Code explanation	Commentary
	these aspects have not been considered this should be reported with an explanation of the environmental assumptions made.	initiated a number of investigations with the aim of providing sufficient evidence to applicable authorities to support future mining. Given the early stage of these investigations it is unclear whether approval will be given to disturb part or all of the areas in question.
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. 	 Average bulk densities have been assigned to the mineralisation based on results of density measurements carried out on PQ drill core. Density measurements were calculated on a whole-of-tray basis. Average core intervals within the core trays were approximately 3 m. Tray intervals were differentiated by logged weathering horizon and average density values assigned to the block model. This approach has been employed to better account for the unconsolidated material recovered during drilling. Surficial cover was assigned a nominal density value applicable to sand/gravel material.
Classificatio n	 The basis for the classification of the Mineral Resources into varying confidence categories. Whether appropriate account has been taken of all relevant factors (ie 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). Whether the result appropriately reflects the Competent Person's view of the deposit. 	 The Mineral Resource has been classified into the categories of Indicated (59%) and Inferred (41%). The determination of the applicable resource category has considered the relevant factors (geology, mineralisation continuity, sample spacing, data quality, geostatistical parameters, and others). The Competent Person is satisfied that the stated Mineral Resource classification reflects the relevant factors of the deposit.
Audits or reviews	The results of any audits or reviews of Mineral Resource estimates.	 This Mineral Resource has been internally peer reviewed by Cube consultants focusing on factors which may materially affect the reported resources. Cube completed an independent review of available QAQC results including standards, field duplicates and blanks relevant to the 2018 drilling program. Performance was considered suitable to support estimation of Mineral Resources. The Mineral Resource tonnage and grade is broadly comparable to that reported by Ravensgate in 2014.
Discussion of relative	 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 	 The relative accuracy of the Mineral Resource estimate is reflected in the reporting of the Mineral Resource in accordance with the guidelines of the 2012 JORC Code.

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Criteria	JORC Code explanation	Commentary
accuracy/ confidence	 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. 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. These statements of relative accuracy and confidence of the estimate should be compared with production data, where available. 	 A total of 59% of the Mineral Resource is reported in the Indicated category, with 41% in the Inferred category. The statement relates to a local estimation of tonnes and grade. No mining has been undertaken at the project.