



Tim Callaghan – Resource and Exploration Geology



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3 Main Rd Penguin 7318 ph. 0428 888 896 email: timcallaghan@netspace.net.au
ABN 50886857181

RL1/2012

KARA NO 2 SOUTH

ANNUAL REPORT

NW TASMANIA

Prepared for: Tasmania Mines Limited

Tim Callaghan, July 2015



EXECUTIVE SUMMARY

The Kara No2 South deposit is a high grade magnetite skarn held by Tasmania Mines Ltd on RL1/2012. The RL was converted from previous Mine Lease 20M/1991 which expired on 30 April 2012. An ML application (5M/2015) covering the entire RL was submitted in June 2015 and is waiting to be granted.

The high grade (>60% Fe) magnetite skarn deposit strikes north for over 500m, dips 60-70 degrees west. The deposit was delineated by a ground magnetic survey, geological mapping and a series of shallow auger holes in 1991 and 1992. Several bulk samples were taken for metallurgical testwork for various potential off take partners. The high iron magnetite mineralisation and low silica content makes it suitable for iron ore production and for specialist uses.

During the mid 1990's a narrow pit was opened up on the skarn an estimated 60-100 000t of ore had been produced. Low iron ore prices forced the cessation of operations in the late 1990's and the site was rehabilitated.

Work completed in 2014-15 included the drilling of 9 diamond drillholes for 555m of delineation drilling. Drilling was completed by Spaulding's Drilling between May and July 2014. All drillholes intersected magnetite skarn confirming the down dip and along strike extension of the skarn beneath a thin cover of Tertiary basalt. High grade magnetite skarn was intercepted in all drillholes.

A resource estimation was completed in October 2014. The Kara No2 skarn contains an Indicated Resource of 1.29Mt @ 55.6% FeO reported in accordance with the 2012 edition of the JORC Code.

The resource is amenable to open cut mining. Magnetite mineralisation is proposed to be transported to the Kara Mine Site for treatment. An ML application has been submitted and is waiting to be granted.

Work proposed for 2015-2016 includes detailed pit design, reserve estimation financial analysis and the completion of a Development Proposal and Environmental Management Plan (DPEMP).



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MAP CONVENTIONS

Coordinates in this report and in digital data associated with this report are recorded as GDA 94 Zone 55



EXECUTIVE SUMMARY

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1 INTRODUCTION

Tasmania Mines Limited hold RL1/2013 located approximately 5km east of Hampshire, 30km South of Burnie in NW Tasmania (Figure 1 and 2). Access to the RL is via all weather unsealed forestry roads Rogetta Road or the Blythe River Road of the sealed Upper Natone Road. The RL lies east of the Kara Mine Site. The Magnetite deposits on the Kara Mine site are referred to as the Kara No 1 deposits and those in the Blythe River area are the Kara No 2 Deposits.

The magnetite deposits in the Upper Blythe River have been known for many years e.g. Reid (1924). Modern exploration began in the 1970's by McIntyre Mines Ltd who delineated the skarns through a program of aero-magnetics, ground magnetics and geological mapping. Three separate magnetite deposits were identified including the Kara No 2 Main, Kara No 2 East and Kara No 2 South.

The deposit was originally operated by Tasmania Mines in the 1990's. Mine Lease 20M/1991, consisting of 38 hectares was excised from former EL39/1989 held by Tasmania Mines Limited in 1991 and was granted for a 5 year term effective from the 1st April 1992.

An application for license to operate scheduled premises (LOSP) was submitted to the environment department in 1992 along with a proposed mine plan and an environmental impact statement. The LOSP was not granted but a notice of registration No 1206 was granted on the 27th April 1992 allowing for the 1 off extraction of a 2000t bulk sample. Permission was provided by the department of Environment and planning was granted in December 1992 to extract a further 5000t.

1.1 TENURE

RL1/2013 was acquired after the previous ML 20M/1991 expired in May 2012. The RL was granted for a period of 2 years and renewed on the 3/8/2014. An ML application (5M/2015) was submitted to Mineral Resources Tasmania and is waiting to be granted.

The area around 20M/1991 is currently held as EL18/2007 and EL53/2007 by Iron Mountain Mining Ltd.



2 GEOLOGY

2.1 REGIONAL GEOLOGY

The Kara Mine is located on the western margin of the Dial Range Trough and is underlain by lithologies of the Late Proterozoic Oonah Formation, Owen Group Siliciclastics, Gordon Group Limestone, Devonian Granites and Tertiary Basalt (Figure 1). The Dial Trough is a structurally interesting basin that includes a possible Northern Extension of the Hellyer Fault, and significant basin bounding faults on the western and eastern sides. The Devonian post orogenic Husetop Granite dominates the geology to the south of the project area and is considered to underlie much of the southern dial trough. The Dial Trough has been poorly mapped and stratigraphic correlations are uncertain for many units.

Oonah Formation

The oldest rocks in the district are the Proterozoic Oonah formation, consisting of poly-deformed quartzwacke, siltstone and pelite with lesser dolerite intrusives. These are overlain by a sequence of pelite-carbonate with minor mafic volcanics and conglomerate. This association is host to replacement deposits at Mt Bischoff and near Zeehan and consequently represents a potential host for similar styles of skarn mineralisation.

Mt Read Volcanics

Mt Read Volcanic associations have been correlated with the felsic volcanoclastics of the Western Volcano-sedimentary sequence and the Tyndall Group quartz-feldspar phytic volcanoclastics.

Owen Group

The Late Cambrian to Ordovician Owen Group overlies the Mt Read Volcanics and is comprised dominantly of siliciclastic conglomerate and sandstone. Locally volcanic derived conglomerates are associated with basal members. The Moina Sandstone, comprised of coarse to fine siliciclastic sandstone with minor intercalated conglomerate is the uppermost siliciclastic unit of the Owen Group and has a gradational contact with the overlying Gordon Group.

Gordon Group Limestone

Conformably overlying the Owen Group is the Gordon Group limestone and dolomite sequence which is the host of the Kara district magnetite skarns. The stratigraphic thickness of the limestone is regionally variable ranging between 50-1000m.

Husetop Granite



The Housetop granite outcrops in much of the Kara District and is believed to extend below much of the area (Leaman, 1993). Leaman concludes that the Housetop granite is anomalously dense and highly magnetic, which may explain the abundance of iron metasomatism in the district. The granite is responsible for massive Magnetite-Sn-WO₃ mineralisation of the Kara District. The association of Tasmanian Devonian granites with Magnetite, Sn-WO₃, Pb-Zn-Ag and Au mineralisation is well documented.

Tertiary Basalt

Basaltic flows are widespread throughout the area, flooding Tertiary palaeo-topographic lows. The basalts vary widely in thickness and frequently have a high magnetic susceptibility creating difficulties for magnetite exploration below basaltic cover. Resource and exploration drilling at the Kara Mine indicates that the magnetite skarn extends below basalt cover at Eastern Ridge, Location 5 and the Northern Magnetite Anomaly.



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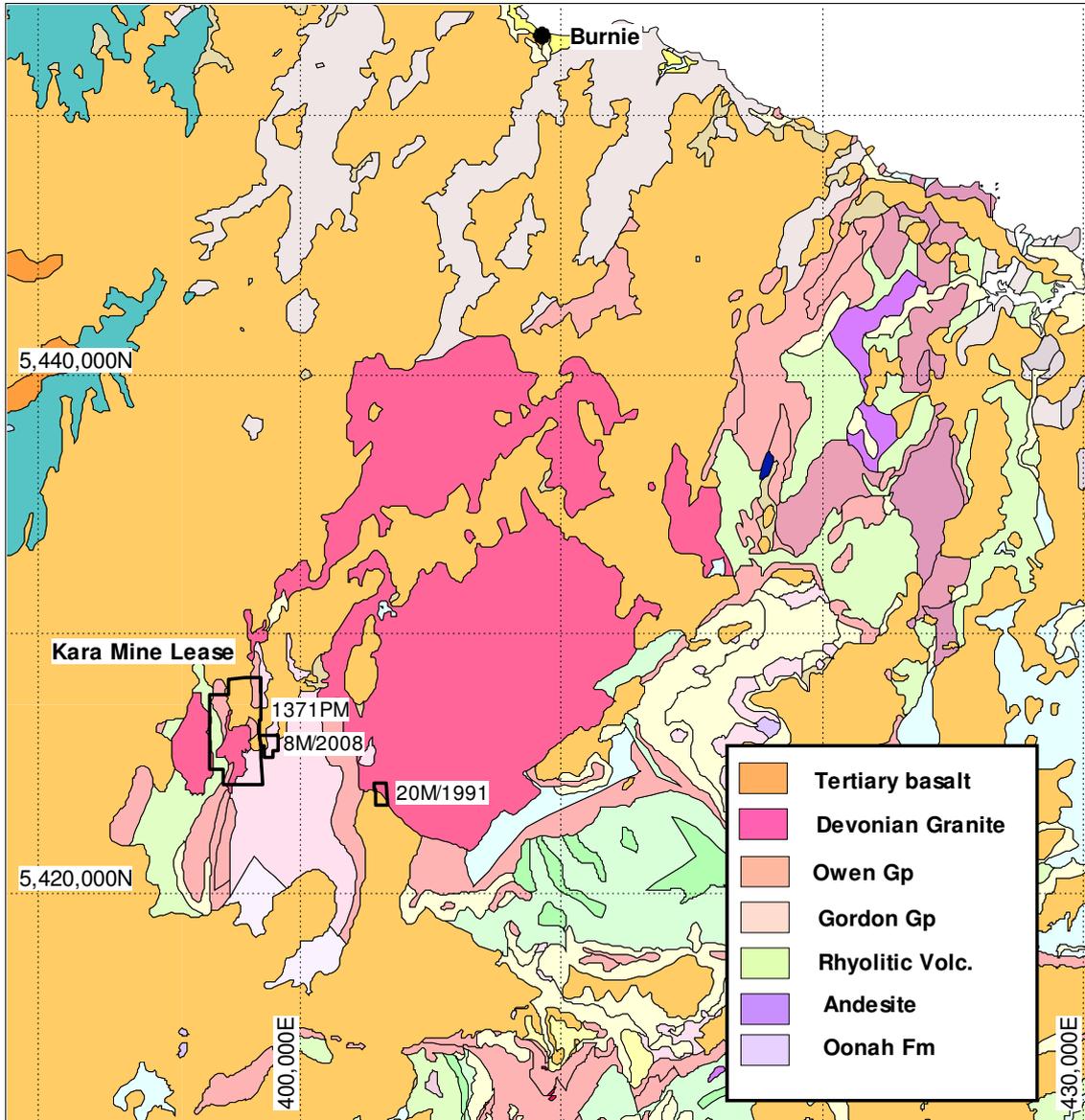


Figure 1. Kara Mine Lease location and MRT 250k Geology.

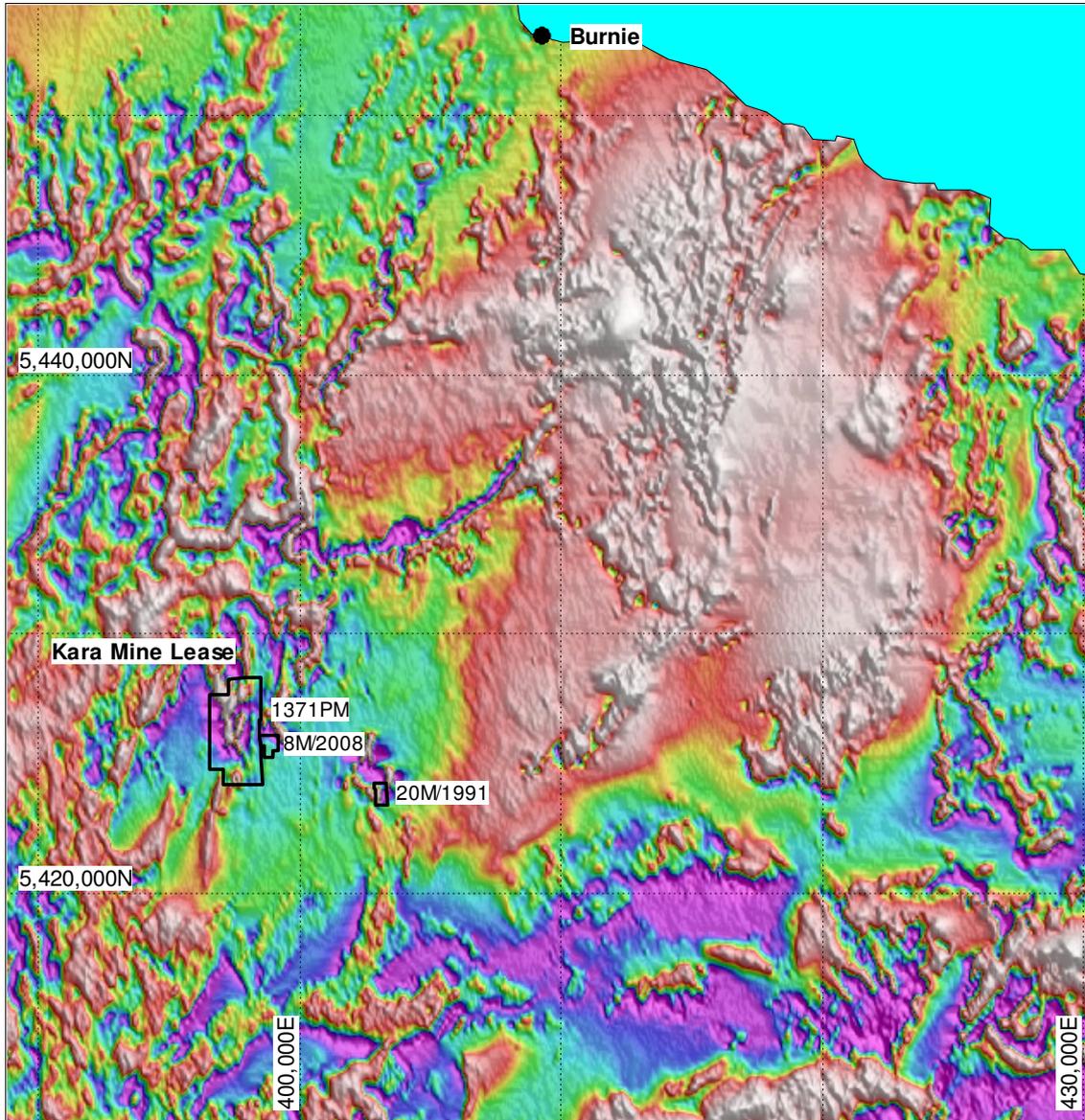


Figure 2. Kara Mine Lease location and TMI image.



2.2 LOCAL GEOLOGY

The Kara No 2 South deposit is one of a cluster of magnetite-calc-silicate skarns on the western margin of the Husetop Granite known as the Kara No 2 Deposits. The Kara No 2 skarns are hosted in folded roof pendants of Gordon Limestone and Moina Sandstone inliers within the Husetop Granite batholith.

Geological mapping consists of company 1:10 000 and 1:1000 map sheets completed by MacIntyre Mines in 1982 (Whitehead, 1982) and modified by field observations made by the author.

The deposit has been delineated at shallow levels by percussion drill holes with a mean depth of 6m over a strike length of over 300m and has been opened up in a 250m long box cut type pit (now rehabilitated).

The deposit consists of high grade (>60% Fe) magnetite skarn of 5 to 20m width, striking north for approximately 500m and dipping at 60-70 degrees to the west. The skarn is bound to the east by the Husetop Granite and the western contact is masked by Tertiary basalt (Figures 3 and 5). Gangue lithologies include calc-silicate skarn assemblages, typically garnet, diopside, wollastonite and actinolite. No significant scheelite or tin is associated with the skarn.

Magnetite skarns obviously have a very high magnetic susceptibility and form prominent aeromagnetic highs (Figure 4). The magnetic anomaly associated with the deposit extends northwards beneath the basalt cover suggesting the deposit extends northwards for up to 200m. A prominent western ground and aeromagnetic anomaly also suggests there may be a second western magnetite skarn under basalt cover to the west. Most of this anomaly is hosted on EL 18/2007 held by Iron Mountain Mining Ltd.

Mineralogical studies confirm the magnetite skarn to consist of 70% magnetite, 15-20% hematite and 15-20% goethite with very low silica (<3%).

Several bulk samples were taken for metallurgical testwork for various potential off take partners in the 1990's. The high iron magnetite mineralisation and low silica content makes it suitable for iron ore production and for specialist uses.

During the mid 1990's a narrow pit was opened up on the skarn an estimated 60-100 000t of ore had been produced. Low iron ore prices forced the cessation of operations in the late 1990's and the site was rehabilitated.



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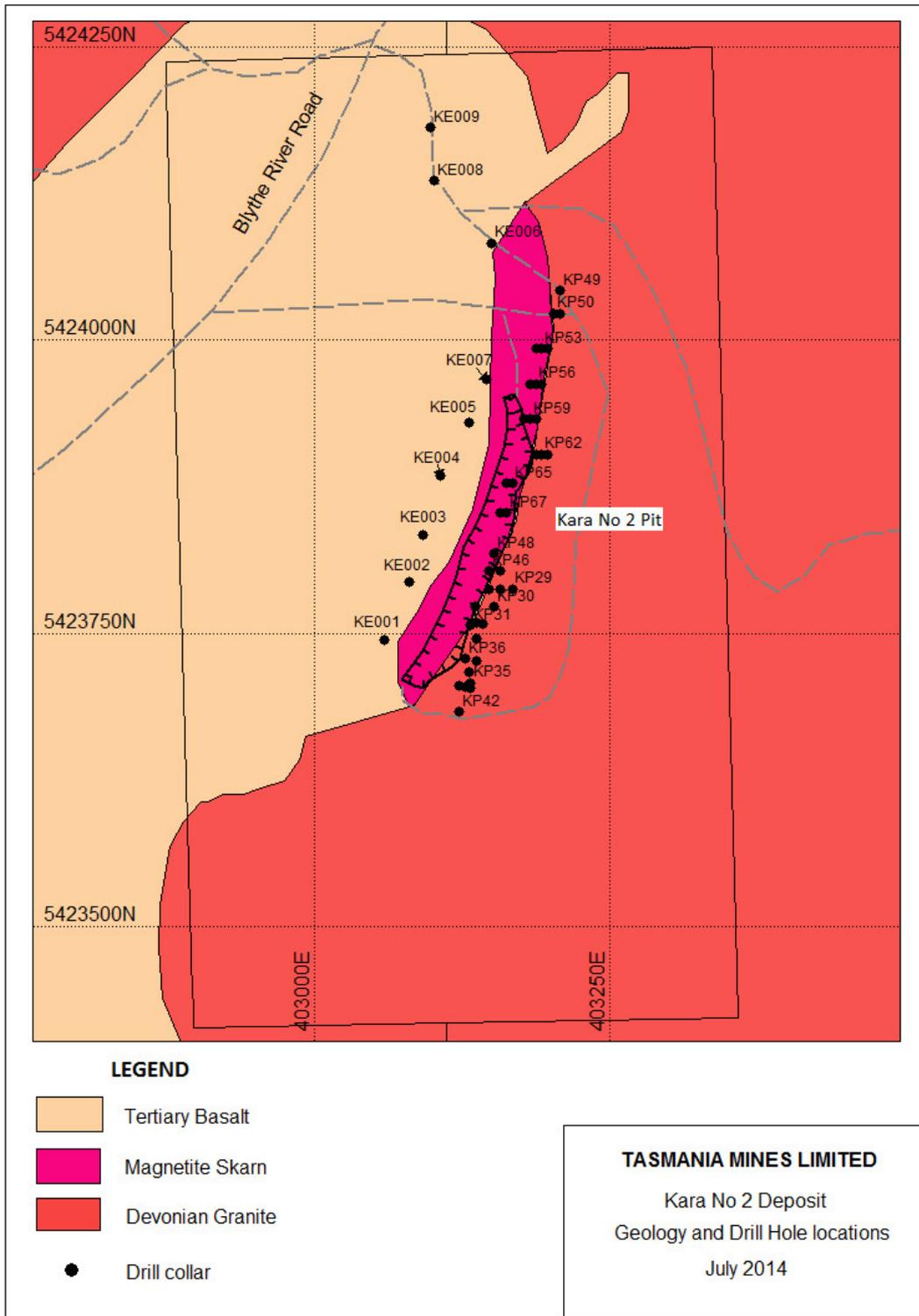


Figure 3. Kara No 2 South Geology and Pit Location.



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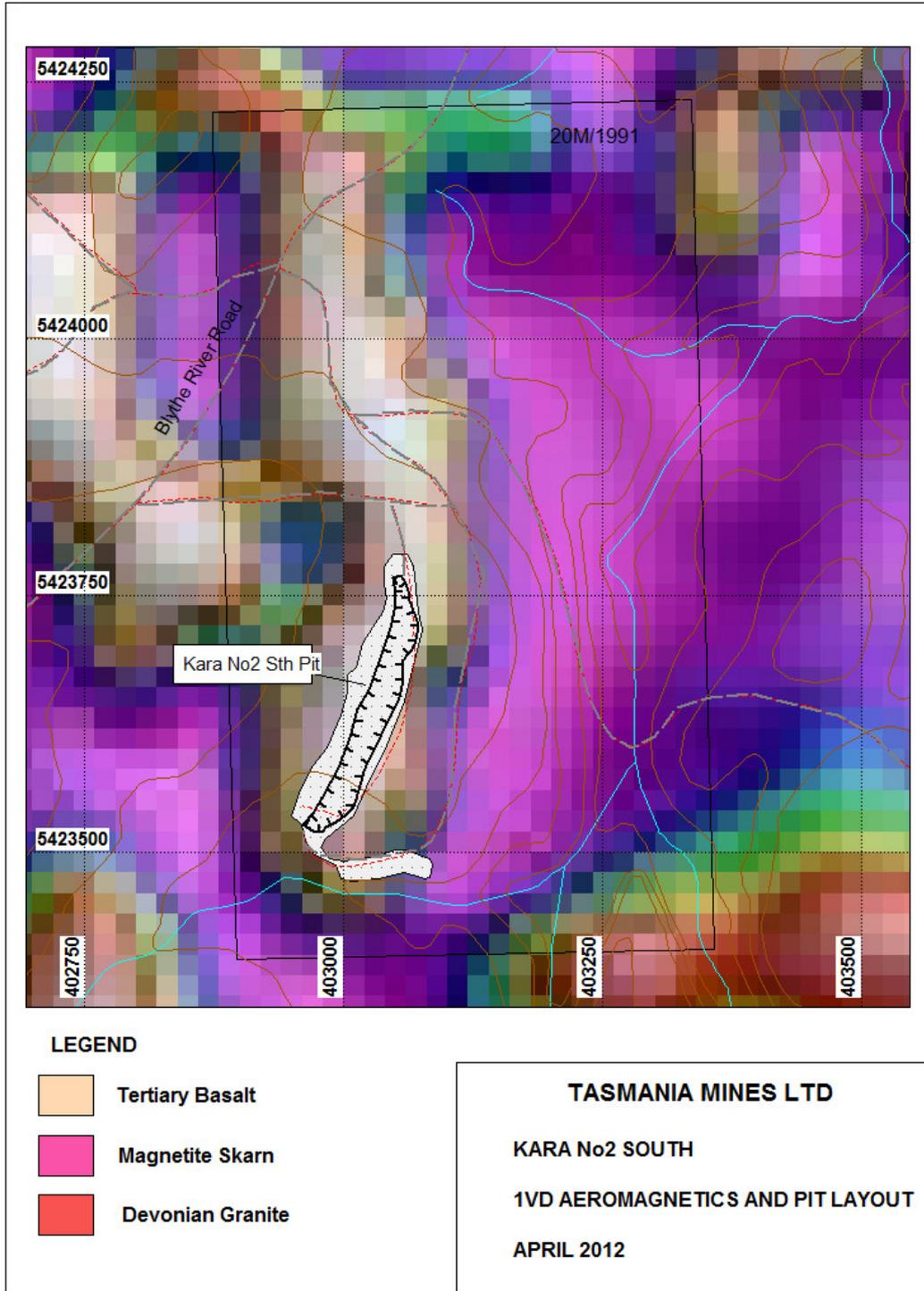


Figure 4. Kara No 2 South Pit Location and TMI.



3 WORK COMPLETED BY TASMINES, 2014

Work Completed between July 2014 and July 2015 includes collation of diamond drilling results, site survey, resource estimation and ML application.

3.1 DIAMOND DRILLING

A series of 9 diamond drillholes for 555m were completed on the RL between May and July 2014. Preliminary drill logs were presented in last years annual report. Collar surveys and assay results were completed after the previous report and are updated in this report.

Hole details are listed in Table 1. Drill logs are located in Appendix 1. A plan of drill collar locations is displayed in Figure 3 and 4.

| BHID | Easting | Northing | RL | Depth m | Azm | Dip | From m | To m | Length m | FeO% |
|-------|----------|-----------|-------|---------|-----|-----|--------|------|----------|------|
| KE001 | 403060.3 | 5423748.1 | 545.9 | 59.7 | 90 | -55 | 40.0 | 51.0 | 11.0 | 66.1 |
| KE002 | 403081.4 | 5423796.0 | 549.6 | 67.3 | 90 | -55 | 42.0 | 64.0 | 22.0 | 56.2 |
| KE003 | 403094.3 | 5423835.8 | 552.4 | 73.8 | 90 | -55 | 17.0 | 20.0 | 3.0 | 55.3 |
| | | | | | | | 49.0 | 71.0 | 22.0 | 58.4 |
| KE004 | 403105.9 | 5423887.8 | 554.4 | 80.6 | 90 | -55 | 24.0 | 27.0 | 3.0 | 74.6 |
| | | | | | | | 66.0 | 79.0 | 13.0 | 52.3 |
| KE005 | 403123.4 | 5423933.1 | 556.1 | 67.5 | 90 | -55 | 23.0 | 33.0 | 10.0 | 61.8 |
| | | | | | | | 48.0 | 62.0 | 14.0 | 54.8 |
| KE006 | 403145.1 | 5424080.1 | 550.6 | 49.0 | 90 | -55 | 39.0 | 44.0 | 5.0 | 33.2 |
| KE007 | 403146.4 | 5423971.4 | 555.5 | 41.5 | 90 | -55 | 22.0 | 40.0 | 18.0 | 55.2 |
| KE008 | 403098.0 | 5424138.5 | 549.5 | 72.3 | 90 | -55 | 13.0 | 18.0 | 5.0 | 43.1 |
| KE009 | 403104.8 | 5424174.6 | 550.1 | 45.5 | 90 | -55 | 11.0 | 17.0 | 6.0 | 43.0 |

Assay results were returned from ALS laboratories in Burnie and included FeO, SiO₂, CaO, WO₃, Sn, Zn and Pb by XRF and Bulk Density measurements. Significant ore grade intercepts are listed in Table 1.

All drillholes intersected magnetite mineralisation with the thickest and best quality intercepts to the south. Depth of weathering was variable generally to about 30-40m from surface.

3.2 SITE SURVEY

Drill collars and basic topographic features around the Kara No 2 rehabilitated mine workings were surveyed by Peacock Darcy and Anderson (PDA) licensed surveyors August 2014. Drill collar surveys have been updated and are included in drill logs. A digital DTM file of the topography is included with the resource estimation report.



3.3 RESOURCE ESTIMATION

Resource Estimation of the Kara Mine Lease was completed in October 2014. The full resource Estimation report is included in the Appendices. A summary of the procedure and results of the Resource estimation is included below.

The Kara No2 South Magnetite Deposit is a carbonate hosted metasomatic skarn located in Ordovician sedimentary rocks on the south edge of the Devonian Housetop Granite in North Western Tasmania. Numerous magnetite skarns are located within the district with two main clusters, the Kara No1 and the Kara No2 skarns hosting most of the known resources. The Kara No2 South skarn strikes north-south and dips steeply east. It is composed of stratabound lenses of magnetite-calc-silicate-skarn located in what is interpreted to be a roof pendant on top of the southern margin of the Housetop Granite. Weathered granite and lesser calc-silicate skarn forms the hangingwall and footwall to the host sequence. The skarn extends approximately north-south for 500m in strike length and has been drilled to approximately 80m depth. The mineralised lenses vary from 5 to 15m in thickness.

The deposit was first drilled by Tasminex in early 1990. Small scale production for magnetite uses occurred on Mine Lease 20M/1990 during the early to mid 1990's. Production records are sparse. The ML lapsed in 2012 and has been retained as an RL.

A further nine diamond drillholes for 557.2m were drilled by Tasmania Mines in 2014 which forms the basis of the current resource estimation. All data for this estimation was captured electronically and uploaded to an access database. All recent drill collars used for the estimation were surveyed by licensed surveyors. Drill collar details and significant intersections are listed in Table 1.

Mineralised domains were modeled with Surpac^(TM) software from cross sectional interpretations, drillhole data and 1m composited assay data using a 30% FeO boundary and a minimum width of 3m. Internal dilution was kept to a minimum of 3m with some allowances for continuity. Only 3 mineralised domains were present, a large southern lens with a sub parallel subsidiary lens and a northern lens of thinner magnetite skarn offset by an interpreted sinistral strike slip fault with of 50m displacement.

Drillhole data was composited on 1m intervals. Univariate statistical analysis was completed on all domains. Variogram modeling was completed on the largest Magnetite Lens only as the other lenses contained insufficient data. Variogram models had typical low nugget effects and moderate ranges typical of this style of mineralisation.

FeO was interpolated into a block modeled resource estimation using an Inverse Distance Squared algorithm. Potential penalty elements S were estimated using an Inverse Distance Squared algorithm (ID²). The resource is reported in accordance with the 2012 edition of the JORC Code above a block cutoff of 30% FeO (Table 2).

Table 2. Kara No 2 Sth Mineral Resource Estimation FeO > 30% cut off

| Classification | MTonnes | FeO % | WO3 ppm | S % | CaO % |
|-----------------------|----------------|--------------|----------------|------------|--------------|
| Indicated Resource | 1.29 | 55.6 | 454 | 0.02 | 11.4 |



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Bulk density measurements were completed by ALS Laboratories using the Archimedes method. A weak grade-density relationship is apparent. Bulk density of mineralised domains has been estimated from 1m composited data using ID².

No metallurgical testwork was completed for this phase of the program. Previous production and visual assessment suggests it is likely to be similar to the Kara No 1 magnetite mineralisation.

The resource has been classified as Indicated Resource as the simple geological model is well constrained by the 50m spaced drilling. The resource has not been classified as measured due to the uncertainty of the base of the mineralisation and the lack of detail on the depth of previous operations.

There is a high degree of confidence in the simple geological model. There is moderate confidence in the grade and bulk density estimation.

The outcropping resource is amenable to conventional drill blast load haul open cut mining similar to that at Tasmania Mines Kara operation.

There is limited potential for additional resources through continued exploration and infill drilling along strike and down dip of the Kara No 2 South. The main limitations are the small size of the RL. Numerous and larger Magnetite skarns are known and drill defined in the immediate Kara No2 locality.



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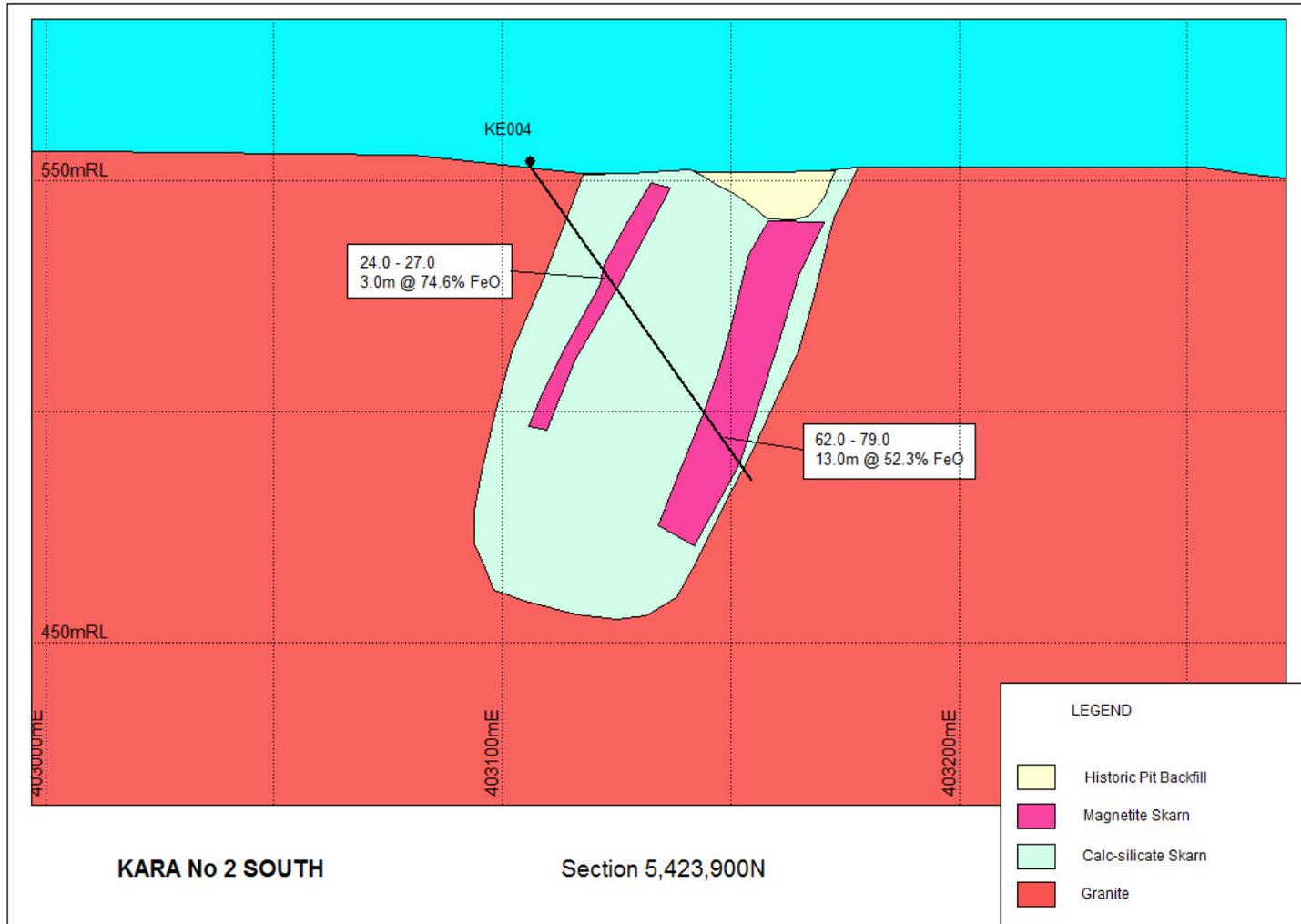


Figure 5. Kara No 2 South Magnetite Skarn, Section 5,426,900N



JORC (2012) Table 1 Report

| Section 1. Sampling Techniques and Data | | |
|--|---|--|
| Criteria | JORC Code Explanation | Commentary |
| Sampling Techniques | <ul style="list-style-type: none"> Nature and Quality of sampling (eg cut channels, random chips or specific specialized industry standard measurement tools appropriate to the minerals under investigation, such as downhole gamma sondes, or hand held XRF instruments etc). 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 1m samples from which 3kg was pulverized to produce 30g 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 sampling types (eg submarine nodules) may warrant disclosure of detailed information. | <ul style="list-style-type: none"> The Kara No2 South deposit has been sampled through 1 recent and 1 historic diamond drilling campaigns in 2014, and 1992. The historic data was not used for resource estimation due to its poor quality. 9 wire-line HQ, NQ diamond core for 557.2m Approximately 1m samples of 2-3kg were taken from diamond saw cut drill core whilst respecting geological boundaries. Broken core was sampled on between core blocks. |
| Drilling Techniques | <ul style="list-style-type: none"> 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, where core is oriented and if so by what method | <ul style="list-style-type: none"> 9 wire-line HQ, NQ diamond core for 557.2m. Core not oriented. |
| Sample recovery | <ul style="list-style-type: none"> Method of recording and assessing core and chip sample recoveries and results assessed. Measures taken to maximize sample recovery and ensure representative nature of the | <ul style="list-style-type: none"> Core reconstituted, marked up and measured in all drilling campaigns Recovery generally excellent (100%) with three, poor to good (17-87%) in weathered broken zones |



| | | |
|--|--|--|
| | <p>samples.</p> <ul style="list-style-type: none"> • Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred. | <ul style="list-style-type: none"> • No relationship between recovery and grade was observed |
| Logging | <ul style="list-style-type: none"> • 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. | <ul style="list-style-type: none"> • Core geologically logged by experienced geologists over all campaigns. • Standard lithology codes used for interpretation. • RQD and recoveries logged • Logs loaded into customised spreadsheets and uploaded into access database. |
| Sub-Sample techniques and sample preparation | <ul style="list-style-type: none"> • If core, whether cut or sawn and whether quarter or half taken. • If non core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry • For all sample types, the nature, quality and appropriateness of the sample preparation technique. • Quality control procedures adopted for all sub sampling stages to maximize representivity of samples. • Measures taken to ensure that the sampling is representative of the insitu material collected, including for instance results of field duplicate/second half sampling. • Whether sample sizes are appropriate to the grain size of the material being sampled | <ul style="list-style-type: none"> • Half core split by diamond saw on 1.0m samples while respecting geological contacts. Broken core bagged between core blocks • Bagged core delivered to ALS Laboratories in Burnie • Whole core crushed then a 250g subsample riffle split and pulverized to >85% passing 75micron |
| Quality of assay data and laboratory tests | <ul style="list-style-type: none"> • The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total. • For geophysics tools, spectrometers, hand held XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibration | <ul style="list-style-type: none"> • All samples analysed by fusion disc XRF at ALS Laboratories Burnie. • QAQC analysis by independent laboratory tests at SGS Perth. • Good correlation between original and independent laboratories. |



| | | |
|---------------------------------------|---|--|
| | <p>factors applied and their derivation etc.</p> <ul style="list-style-type: none"> • 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. | |
| Verification of sampling and assaying | <ul style="list-style-type: none"> • The verification of significant intersections by either independent or alternative company personnel • The use of twinned holes • Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols • Discuss any adjustment to assay data | <ul style="list-style-type: none"> • Independent laboratory analyses completed with good repeatability observed. • No twinned holes were completed • Primary assay data was received electronically and stored by consultant geologist. • All electronic data uploaded to access database • Historic data loaded onto spreadsheets and uploaded to Access database. • Data validation with Surpac software, basic statistical analysis and comparison with historic plans and sections. • Negative results for below detection limit assay data has been entered as detection limit |
| Location of data points | <ul style="list-style-type: none"> • Accuracy and quality of surveys used to locate drill holes (collar and downhole surveys) trenches, mine workings and other locations used in mineral resource estimation • Specification of grid system used • Quality and accuracy of topographic control. | <ul style="list-style-type: none"> • All hole collar surveys used in this estimation located by licensed surveyor. • All coordinates in local grid and GDA94 • RL's as MSL • No down hole surveys completed. Short hole lengths should not provide any material error through lack of downhole surveys. • Topographic dtm created by licensed surveyor and extended with lands department 10m contour maps adjusted for known survey points (eg. drill collars) |
| Data Spacing and distribution | <ul style="list-style-type: none"> • Data spacing for exploration results • Whether data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for Mineral Resource and Ore Reserve estimation procedures and classifications applied. | <ul style="list-style-type: none"> • Drillhole spacing approximately 50 x 50m across resource area. • Sample spacing not clustered. • Drill spacing is considered to be appropriate for the estimation of Indicated to Inferred Mineral resources. |



| | | |
|---|--|--|
| | <ul style="list-style-type: none"> • Whether sample compositing has been applied | <ul style="list-style-type: none"> • Samples have been composited on 1m intervals for the resource estimation. |
| Orientation of data in relation to geological structure | <ul style="list-style-type: none"> • 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 drilling orientation and the orientation of key mineralised structures is considered to have introduced sampling bias, this should be assessed and reported if material. | <ul style="list-style-type: none"> • All of DDH have been drilled west-east sub-perpendicular to vein strike. • Drill hole orientation is not considered to have introduced any material sampling bias. |
| Sample Security | <ul style="list-style-type: none"> • The measures taken to ensure sample security | <ul style="list-style-type: none"> • Samples ticketed and bagged on site. • Delivered to ALS or AGS laboratories in Burnie by staff. • All historic data captured and stored in customised access database • Data integrity validated with Surpac Software for EOH depth and sample overlaps. • Manual check by reviewing cross sections with the historic drafted sections and plans. • Basic statistical analysis supports data validation |
| Audits or Reviews | <ul style="list-style-type: none"> • The results of any audits or reviews of sampling techniques and data | <ul style="list-style-type: none"> • No audits or reviews of sampling data and techniques completed. |



| Section 2 Reporting of Exploration Results | | |
|---|--|--|
| Criteria | JORC Code Explanation | Commentary |
| Mineral tenement and land tenure status | <ul style="list-style-type: none"> 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 tenure held at the time of reporting along with known impediments to obtaining a license to operate the area | <ul style="list-style-type: none"> RL1/2013 is 100% owned by Tasmania Mines Ltd. The area is a historic magnetite/scheelite mining district and there are no known or experienced impediments to operating a license in this area RL1/2013 requires bi-annual renewal. |
| Exploration done by other parties | <ul style="list-style-type: none"> Acknowledgement and appraisal of exploration by other parties | <ul style="list-style-type: none"> The Kara No2 South deposit operated intermittently as a small scale open cut during the mid 1990's by Tasmania Mines Ltd. Early exploration by Tasminex and Tasmania Mines. |
| Geology | <ul style="list-style-type: none"> Deposit type, geological setting and style of mineralisation | <ul style="list-style-type: none"> The Kara No2 South Deposit is a carbonate hosted metasomatic magnetite skarn hosted in hornfelsed Ordovician sedimentary rocks on the eastern edge of the Housetop Granite. The deposit forms a roof pendant located on the surface of the granite. The skarn consists of layered magnetite skarn, garnet skarn and pyroxene-garnet skarn replacing two principal carbonate horizons. Magnetite occurs as coarse grained massive skarn . |
| Drill Hole Information | <ul style="list-style-type: none"> 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 of the drill hole collar dip and azimuth of the hole downhole length and interception depth hole length | <ul style="list-style-type: none"> See Table 2 in this report. |



| Section 2 Reporting of Exploration Results | | |
|--|---|--|
| Criteria | JORC Code Explanation | Commentary |
| | <ul style="list-style-type: none"> 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 | |
| Data aggregation methods | <ul style="list-style-type: none"> In reporting of Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (e.g. cutting of high grades) and cutoff grades are usually material and should be stated. Where aggregate intercepts include short lengths of high grade results and longer lengths of low grade results, the procedure used for aggregation should be stated and some examples of such aggregations should be shown in detail The assumptions used for any reporting of metal equivalent values should be clearly stated. | <ul style="list-style-type: none"> Mineralised zones are reported as length weighted intercepts. |
| Relationship between mineralisation widths and intercept lengths | <ul style="list-style-type: none"> These relationships are particularly important in the reporting of Exploration Results with respect to the drill hole angle is known, its nature should be reported. If it is not known and only the downhole lengths are reported, there should be a clear statement to this effect (e.g. down hole length, true width not known) | <ul style="list-style-type: none"> Intercept lengths have been reported as downhole lengths. Most holes have been drilled to intercept the deposit at high angles to best represent true widths. Refer to the section included in the body of the announcement to view the relationship between downhole lengths and mineralisation orientations. |
| Diagrams | <ul style="list-style-type: none"> Appropriate maps and sections (with scales) and tabulated intercepts should be included for any significant discovery being reported. These should include, but not be limited to a plan view of drill collar locations and appropriate sectional views. | <ul style="list-style-type: none"> See body of the announcement for relevant plan and sectional views and tabulated intercepts. |



| Section 2 Reporting of Exploration Results | | |
|---|---|--|
| Criteria | JORC Code Explanation | Commentary |
| Balanced reporting | <ul style="list-style-type: none"> 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 | <ul style="list-style-type: none"> Not applicable |
| Other substantive exploration data | <ul style="list-style-type: none"> 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 results, bulk density, groundwater, geochemical and rock characteristics, potential deleterious or contaminating substances. | <ul style="list-style-type: none"> Aeromagnetic image defining magnetic highs associated with massive magnetite skarns (see body of the announcement for relevant plan) |
| Further work | <ul style="list-style-type: none"> The nature and scale of planned further work (e.g. test 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. | <ul style="list-style-type: none"> Further resource extension drilling west and south east of Indicated Resource. |



| SECTION 3. REPORTING OF MINERAL RESOURCE ESTIMATIONS | | |
|---|---|---|
| Criteria | Explanation | Status |
| Database Integrity | <ul style="list-style-type: none"> Measures to ensure the data has not been corrupted by, for example transcription or keying errors, between its initial collection and its use for Mineral Resource estimation. Data Validation and procedures used. | <ul style="list-style-type: none"> All data captured and stored in customised Access database. Drop down menu validation in customised software. Digital data uploaded from laboratory reports to Access database. Data integrity validated with Surpac Software for EOH depth and sample overlaps and transcription errors. Data validated against plans and sections Negatives in database converted to half the detection limit. |
| Site Visits | <ul style="list-style-type: none"> Comment on any site visits by the competent person and the outcome of any of those visits. If no site visits have been undertaken indicate why this is the case. | <ul style="list-style-type: none"> REG completed drilling program and supervised all exploration activities. |
| Geological Interpretation | <ul style="list-style-type: none"> Confidence in (or conversely the uncertainty of) the geological interpretation of the mineral deposit. Nature of the data used and any assumptions made. The effect if any of alternative interpretations on Mineral Resource estimation The use of geology in guiding and controlling the Mineral Resource estimation The factors effecting continuity of both grade and geology | <ul style="list-style-type: none"> High confidence in the simple geological model. No alternative geological interpretations were attempted. Geology model used for mineralised domain modeling. Brittle faulting and facies changes effect grade and location of mineralisation. Lack of drilling and the aeromagnetic image constrain the resource down dip and along strike. |
| Dimensions | <ul style="list-style-type: none"> 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 | <ul style="list-style-type: none"> The deposit consists of A main lenses and 2 subsidiary stratabound lenses extending 300m by 20m with a N-S strike and with steep west dip (70°). Mineralised width between 5 and 12m. South Lens extends 500m strike by 90m depth with a WNW strike and steep 70o north dip. Mineralised |



| | | |
|--|--|---|
| <p>Estimation and Modelling techniques</p> | <ul style="list-style-type: none"> • 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 (eg sulphur for acid mine drainage characterization). • In the case of blockmodel interpolation the block size in relation to the average sample spacing and search employed. • Any assumptions behind modeling of selected mining units • Any assumptions about correlation between variables • Description of how the geological interpretation was used to control the resource estimates. • Discussion of the 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 the use of reconciliation data if | <p>width between 1 and 12m.</p> <ul style="list-style-type: none"> • Northwest Lens 100m strike by 60m depth with 7m average width. • Block modeled estimation completed with Surpac™ software licensed to Tim Callaghan. • Wire-framed solid models created from surface geology, sectional interpretation and composited sample data • Solid models snapped to drill holes • minimum mining width of 3m x 30% FeO whilst respecting geological continuity • Internal dilution restricted to <1m while respecting geological continuity • Data composited on 1m composites • No top cutting based on CV and grade histograms • Good correlation between FeO WO3 and SG. Poor correlation between FeO and S and CaO. • Block Model extent of 5,423,600 to 5,424,250N, 403,000 to 403,250E and 400 to 600m. Block dimensions of 5mE x 10mN x 10mRL block size with sub-celling to 1.25m in the x and 2.5m in the y and z directions. • Variogram models constructed y direction only due to insufficient data. Well constructed model with zero nugget effect and moderate range of 75m to sill. • Search ellipse set at 100m spherical range to ensure all blocks populated with no anisotropy • Ellipse strike 0°, dip -70° west, plunge 0° • ID² estimated model constrained by geology solid model • Block grades validated visually against input data |
|--|--|---|



| | | |
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| | available. | |
| Moisture | <ul style="list-style-type: none"> Whether the tonnages were estimated on a dry basis or with natural moisture, and the method of determination of moisture content. | <ul style="list-style-type: none"> The estimate based on a dry tonnage |
| Cut-off Parameters | <ul style="list-style-type: none"> The basis of the adopted cutoff grades or cutoff parameters | <ul style="list-style-type: none"> Results are reported on a 30% FeO cut off which is the cutoff used for the similar Kara No1 deposit operated by Tasmania Mines Ltd. |
| Mining Assumptions | <ul style="list-style-type: none"> 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 made when estimating Mineral Resources may not always be rigorous. When this is the case, this should be reported with an explanation of the basis of the mining assumptions made. | <ul style="list-style-type: none"> Conventional open cut mining techniques assumed. |
| Metallurgical assumptions | <ul style="list-style-type: none"> 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 methods, but the assumptions made regarding metallurgical treatment processes and parameters made when estimating Mineral Resources may not always be rigorous. When this is the case, this should be reported with an explanation of the basis of the metallurgical assumptions made. | <ul style="list-style-type: none"> Previous testwork completed on the ore processed in the mid 1990's. Test work demonstrates that the liberation of magnetite is excellent. Conventional crushing and grinding followed by a single roughing, cleaning and scavenging circuit with low intensity magnetic separation. |
| Environmental assumptions | <ul style="list-style-type: none"> 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 | <ul style="list-style-type: none"> No formal environmental studies have been conducted since the site was rehabilitated in the late 1990's. Previous permitting allowed production of magnetite |



| | | |
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| | <p>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 for 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.</p> | <p>for direct sale and processing at Tasmania Mines Kara Mill.</p> <ul style="list-style-type: none"> Processing is envisaged to occur on the permitted facilities located on the Kara Mine Site. |
| Bulk Density | <ul style="list-style-type: none"> Whether assumed or determined. If assumed the basis for the assumptions. If determined the methods used, whether wet or dry, the frequency of measurements, the nature size and representativeness of the samples. The bulk density for bulk materials must have been measured by methods that adequately account for void spaces (vugs, porosity etc), moisture and difference between rock and alteration zones within the deposit. Discuss assumptions for bulk density estimates used in the evaluation process of the different materials. | <ul style="list-style-type: none"> Bulk density determinations made by ALS using the Archimedes Method for all mineralised samples. Determinations made of un-weathered core with no appreciable voids or porosity. Waste assigned Mean SG of 2.9 Mineralised domains bulk density interpolated from 1m composites using ID² weighting. |
| Classification | <ul style="list-style-type: none"> The basis for the classification of the Mineral Resource into varying confidence categories. Whether appropriate account has been taken of all relevant factors (ie relative confidence in continuity of Geology and metal values, quality, quantity and distribution of the data). Whether the result appropriately reflects the Competent Persons view of the deposit. | <ul style="list-style-type: none"> Confidence in the geological model and data quality is considered to be sufficient for drill defined Mineral Resource to be classified as Indicated Resource. The Resource Classification appropriately reflects the views of the Competent Person |
| Audits or Reviews | <ul style="list-style-type: none"> The results of any Audits or Reviews of the Mineral Resource estimates. | <ul style="list-style-type: none"> No audits or reviews have been completed for this estimation |
| Discussion of relative accuracy/confidence | <ul style="list-style-type: none"> Where appropriate a statement of the relative accuracy and confidence level in the Mineral | <ul style="list-style-type: none"> The geological model and data quality within 60m of drill data is well understood and modeled. The |



| | | |
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| | <p>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 of the estimate.</p> <ul style="list-style-type: none">• These statements of relative accuracy and confidence of the estimate should be compared with production data, where available. | <p>effects of localised brittle faulting is difficult to predict but given the proposed mining method should not affect resource recovery.</p> <ul style="list-style-type: none">• There is reasonable confidence in the global tonnage estimation as the geology is reasonable well constrained and simple.• Limitations on the resource include the uncertainty of the depth extent and the depth of previous mining activities. |
|--|--|---|



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3.4 ML APPLICATION

An ML application covering the entire 1km² of the RL was submitted on 5th June 2015. Details of the MLA are waiting to be received from Mineral Resources Tasmania.

The deposit is proposed to be operated as a small open cut deposit. Magnetite ore is potentially going to be hauled to the Kara Mine Site for treatment.



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4 PROPOSED WORK 2016

The following work program is recommended for 2014/2016:

- Resource delineation drilling.
- Mine design and Reserve Estimation
- Investigation of potential off take partners
- Financial modeling
- Baseline environmental studies
- Development Proposal and Environmental Management Plan



ADDITIONAL NOTES

LIMITATIONS AND CONSENT

This report is provided to Tasmania Mines Ltd in the context of a Geological Review and should not be used or relied upon for any other purpose.

This report has been prepared using information available to the Author at the time of writing. The opinions stated herein are given in good faith and with the belief that the basic assumptions are factual and correct and the interpretations reasonable.

This report is not intended for use as a public document nor, in whole or in part, in a public document without written consent to the form and context in which it appears.

COMPETENT PERSON'S STATEMENT

This Mineral Resource Estimation report was prepared in accordance with the 2012 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves' ("JORC Code") by Tim Callaghan. *Mr. Callaghan has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and to the activity being undertaken to qualify as a Competent Person as defined in the 2012 Edition of the Australian Code for Reporting Exploration Results, Mineral Resources and Ore Reserve. Mr. Callaghan consents to the inclusion in the report of matters based on his information in the form and context it appears.*

STATEMENT OF INDEPENDENCE

Tim Callaghan has no material interest or entitlement in the securities or assets of Tasmania Mines Ltd or any associated companies.



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Appendix 1.

Drill Logs



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TASMANIA MINES LTD KARA MINE : DRILL HOLE LOGGING CODES

STRATIGRAPHY

Mineral Resources Tasmania Digital Geological Atlas
1:25,000 Series Parrawe Sheet 3842

| | |
|------|---|
| Qha | Quaternary : alluvium and colluvium |
| Qptb | Quaternary : basalt-derived scree |
| Tb | Tertiary : basalt |
| Ts | Tertiary : sand/gravel (including sub-basaltic gravel) |
| Dsk | Devonian - skarn |
| Dgah | Devonian : Housetop granite |
| OI | Ordovician : fossiliferous limestone, impure limestone (Gordon Group correlate) |
| Osm | Ordovician : sandstone, minor conglomerate (Moina Sandstone correlate) |
| COc | Cambrian-Ordovician : siliciclastic conglomerate (Owen Group correlate) |

LITHOLOGY

Volcanic rock types are assigned a four character code. Description hierarchy is as follows :

STYLE (intrusive, volcanoclastic etc); **COMPOSITION** (basaltic, rhyolitic etc);

MAJOR COMPONENT (quartz phyrlic, lithic rich etc); **TEXTURE** (fine-grained, brecciated etc).

Example : **IUPC** describes an intrusive, pyroxene phyrlic, coarse grained ultramafic rock.

Style codes

| | |
|---|----------------|
| I | Intrusive |
| L | Lava |
| V | Volcanoclastic |
| E | Epiclastic |

Composition codes

| | |
|---|------------------|
| U | Ultramafic |
| B | Basaltic (mafic) |
| A | Andesitic |
| D | Dacitic |
| R | Rhyolitic |

Component codes

| | |
|---|---|
| Q | Quartz phyrlic (ie quartz crystal rich) |
| F | Feldspar phyrlic |
| H | Hornblende phyrlic |
| P | Pyroxene phyrlic |
| L | Lithic rich |
| X | Crystal rich |
| V | Vitric (ie glassy) |

Texture codes

| | |
|---|----------------|
| F | Fine-grained |
| M | Medium-grained |
| C | Coarse-grained |
| B | Breccia |

Other rock type codes

| | |
|------|---|
| ARKS | Arkose |
| CAVE | Cavity (caving ground) |
| CHRT | Chert |
| CLAY | Clay |
| CONG | Conglomerate |
| GABB | Gabbro |
| GRAD | Granodiorite |
| GRAN | Granite |
| GRAV | Gravel (unconsolidated/poorly consolidated) |
| GWAC | Greywacke |
| HEVC | Hematitic volcanoclastic |
| HORN | Hornfels |
| LMST | Limestone |
| LOSS | No core recovery |
| MMAG | Massive magnetite |
| MDST | Mudstone |
| QZIT | Quartzite |
| RUBB | Rubble |
| SAND | Sandstone |
| SHAL | Shale |
| SKRN | Skarn |
| SKCS | Skarn : calc-silicate facies |
| SKGT | Skarn : garnet facies |
| SKMG | Skarn : magnetite facies |
| SKPX | Skarn : pyroxene facies |
| SSLT | Siltstone |
| SMSX | Semi-massive sulphide |



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TASMANIA MINES LTD KARA MINE : DRILL HOLE LOGGING CODES

| ALTERATION | | GRAINSIZE | | Weathering | |
|-------------------|-----------------------|------------------|---------------------|-------------------|--------------|
| Ac | Actinolite | UF | Ultra fine-grained | X | Extreme W |
| Ax | Axinite | VF | Very fine-grained | W | Weathered |
| Cb | Carbonate | FG | Fine-grained | Y | Partially we |
| Ch | Chlorite | MG | Medium-grained | F | Fresh |
| Di | Diopside | CG | Coarse-grained | | |
| Ep | Epidote | VC | Very coarse-grained | | |
| Ht | Hematitic | | | | |
| Ka | Kaolinite | | | | |
| Mg | Magnetite | | | | |
| Ph | Phlogopite | | | | |
| Po | Pyrrhotitic | | | | |
| Py | Pyritic | | | | |
| Qz | Quartz | | | | |
| Sc | Serpentine-chrysotile | | | | |
| Se | Sericite | | | | |
| Si | Silica | | | | |
| So | Schorl | | | | |
| Sp | Serpentine | | | | |
| Sx | Sulphidic | | | | |
| To | Tourmaline | | | | |

COLOUR/SHADE

Colours can be further qualified by shade, using a 1 to 5 (lightest to darkest) scale.

Example : B1 = lightest brown; B5 = very dark brown

| | | | | | | |
|---|---------|---|--------|----------|---|--------|
| B | Brown | R | Red | Metallic | K | Gold |
| C | Cream | T | Tan | | S | Silver |
| G | Green | W | White | | X | Brass |
| M | Mottled | Y | Yellow | | Z | Bronze |
| N | Black | | | | | |
| O | Orange | | | | | |
| P | Purple | | | | | |

DOWN HOLE CONTACT

Nature of down hole contact of geological unit

| | |
|----|---------------------------------|
| BD | Brecciated |
| BR | Broken |
| CM | Chilled margin |
| DF | Diffuse |
| FT | Faulted |
| GC | Gradational colour change |
| GD | Gradational |
| GL | Gradational lithological change |
| IN | Intrusive |
| NR | Not recovered (core loss zone) |
| SI | Sharp irregular |
| SP | Sharp planar |
| UN | Unconformity |

CRYSTAL FORM

Crystal form of dominant minerals

| | |
|----|---|
| AM | Amorphous (no crystalline structure) |
| XD | Crystallised (well developed crystals) |
| XL | Crystalline (imperfect crystal grain aggregates) |
| CX | Crypto-crystalline (traces of crystal structure only) |
| PX | Partly crystalline |



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TASMANIA MINES LTD
KARA MINE : DRILL HOLE LOGGING CODES

GEOTECHNICAL LOGGING

Physical state of core logged for calculation of rock mass quality classification indices
(**Q and Q-PRIME indices**)

| Intact rock strength | Code | UCS | Strength Test |
|-----------------------------|-------------|------------|---|
| Extremely weak | EW | 0.5 Mpa | Core can be indented by thumbnail |
| Very weak | VW | | Core crumbles |
| Weak | W | 2.5 Mpa | Core can be cut with knife |
| Moderately strong | MS | 37.5 Mpa | Core indents when struck with hammer |
| Strong | S | 75 Mpa | Core breaks from single blow with hammer |
| Very strong | VS | 100 Mpa | Core breaks from multiple blows with hammer |
| Extremely strong | ES | 150 Mpa | Core only chips from multiple blows with hammer |

| Roughness type | Code | Jr |
|-----------------------|-------------|-----------|
| Stepped smooth | SS | 3.5 |
| Discontinuous | DC | 4 |
| Planar smooth | PS | 1 |
| Stepped rough | SR | 3 |
| Planar rough | PR | 1.5 |
| Undulating smooth | US | 2 |
| Undulating rough | UR | 3 |

| No. of defect sets | Code | Jn |
|---------------------------|-------------|-----------|
| Default | 0 | 1 |
| One set | 1 | 2 |
| One set + random | 1.5 | 3 |
| Two sets | 2 | 4 |
| Two sets + random | 2.5 | 6 |
| Three sets | 3 | 9 |
| Three sets + random | 3.5 | 12 |
| Four sets | 4 | 15 |

| Joint alteration/infill | Code | Ja |
|--------------------------------|-------------|-----------|
| Default | 0 | 1 |
| Carbonate | CB | 2 |
| Chlorite | CH | 3 |
| Clay | CY | 5 |
| Clean | X | 1 |
| Hematite | HE | 2 |
| Iron oxides | FE | 1.5 |
| Quartz | QZ | 1 |
| Sericite | SE | 3 |
| Serpentine | SP | 5 |



Tim Callaghan – Resource and Exploration Geology

Tasmania Mines Ltd - Drill Hole Log

| Project | Prospect | BHID | From | To | Stratigraphy | Lithology | Alteration | Weathering | Crystal form | Grainsize | Colour | Visual S% | DH Contact | Structure | BCA | geocode | Vis_mag | Description/comments |
|----------|--------------|-------|------|------|--------------|-----------|------------|------------|--------------|-----------|--------|-----------|------------|-----------|-----|---------|---------|--|
| Kara No2 | Kara No2 Sth | KE004 | 0.0 | 1.6 | | FILL | Cy | X | | | B5 | | Bk | | | | | Waste dump fill. |
| Kara No2 | Kara No2 Sth | KE004 | 1.6 | 18.2 | Tg | BASL | Cy | X | | MG | O | | Bk | | | | | Intensely weathered basalt and basaltic lithic breccia. Orange-yellow clay. |
| | | | | | | | | | | | | | | | | | | Significant core loss. |
| Kara No2 | Kara No2 Sth | KE004 | 18.2 | 21.0 | Dg | GRAN | Cy | X | XL | CG | P | | Bk | | | | | Massive, medium grained quartz-feldspar-kfeldspar-biotite granite. Intensely weathered to pink and yellow clay with quartz augen. Core loss. |
| Kara No2 | Kara No2 Sth | KE004 | 21.0 | 22.6 | Dsk | SKCS | Cy | X | XL | MG | O | | Bk | | | | | Massive calc-silicate skarn. Orange clay alteration from weathering |
| Kara No2 | Kara No2 Sth | KE004 | 22.6 | 24.1 | | LOSS | | | | | | | | | | | | No core recovery |
| Kara No2 | Kara No2 Sth | KE004 | 24.1 | 27.3 | Dsk | SKMG | MtCy | X | XL | CG | N | | Bk | | | | 60 | Massive, black and orange magnetite skarn. Deeply weathered with coarse crystalline magnetite in clay altered matrix. |
| Kara No2 | Kara No2 Sth | KE004 | 27.3 | 45.1 | Dsk | SKCS | Cy | X | XL | MG | O | | Bk | | | | | Massive calc-silicate skarn. Orange clay alteration from weathering |
| Kara No2 | Kara No2 Sth | KE004 | 45.1 | 49.6 | Dg | GRAN | Cy | X | XL | CG | P | | Bk | | | | | Massive, medium grained quartz-feldspar-kfeldspar-biotite granite. Partially weathered to pink and yellow clay. Some silicified aplite. |
| Kara No2 | Kara No2 Sth | KE004 | 49.6 | 51.2 | Dsk | SKCS | Cy | X | XL | MG | O | | Bk | | | | | Massive calc-silicate skarn. Orange clay alteration from weathering |
| Kara No2 | Kara No2 Sth | KE004 | 51.2 | 53.0 | Dg | GRAN | Cy | X | XL | CG | P | | Bk | | | | | Massive, medium grained quartz-feldspar-kfeldspar-biotite granite. Partially weathered to pink and yellow clay. Some silicified aplite. |
| Kara No2 | Kara No2 Sth | KE004 | 53.0 | 54.6 | Dsk | SKCS | Cy | X | XL | MG | O | | Bk | | | | | Massive calc-silicate skarn. Orange clay alteration from weathering |
| Kara No2 | Kara No2 Sth | KE004 | 54.6 | 55.6 | Dg | GRAN | Cy | X | XL | CG | P | | Bk | | | | | Massive, medium grained quartz-feldspar-kfeldspar-biotite granite. Partially weathered to pink and yellow clay. Some silicified aplite. |
| Kara No2 | Kara No2 Sth | KE004 | 55.6 | 57.8 | Dsk | SKCS | Cy | X | XL | MG | O | | Bk | | | | | Massive calc-silicate skarn. Orange clay alteration from weathering |
| Kara No2 | Kara No2 Sth | KE004 | 57.8 | 59.9 | Dg | GRAN | Cy | X | XL | CG | P | | Bk | | | | | Massive, medium grained quartz-feldspar-kfeldspar-biotite granite. Partially weathered to pink and yellow clay. Some silicified aplite. |
| Kara No2 | Kara No2 Sth | KE004 | 59.9 | 65.8 | Dsk | SKCS | Cy | X | XL | MG | O | | Bk | | | | 10 | Massive calc-silicate skarn. Orange clay alteration from weathering Minor bands of coarse crystalline magnetite. |
| Kara No2 | Kara No2 Sth | KE004 | 65.8 | 72.1 | Dsk | SKMG | Mt | Y | XL | CG | N | | Sp | | | | 60 | Massive, black and orange magnetite skarn. Deeply weathered with coarse crystalline magnetite in clay altered matrix. |
| Kara No2 | Kara No2 Sth | KE004 | 72.1 | 79.3 | Dsk | SKMG | Mt | F | XL | CG | N | | Sp | | | | 40 | Massive magnetite skarn. Coarse magnetite blebs and crystals in diopside-actinolite matrix. |
| Kara No2 | Kara No2 Sth | KE004 | 79.3 | 80.6 | Dg | GRAN | Kf | F | XL | XD | R | | | | | | | Massive coarse grained quartz-plagioclase-kfeldspar-biotite granite. EOH |

