

Changes to RTFT Mineral Resources

28 February 2020

Rio Tinto's 2019 Annual report, released to the market today, includes an increase in titanium dioxide feedstock Mineral Resources at Rio Tinto's RTFT mine in Havre St Pierre, Québec, Canada.

The updated Mineral Resources are reported in accordance with the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves, 2012 (JORC Code) and the ASX Listing Rules. ASX Listing Rule 5.8 sets out the supporting information that must be included in a release to the exchange when reporting a Mineral Resource estimate in relation to a material mining project that has materially changed from when it was last reported. That supporting information for the increase in Mineral Resources at Rio Tinto's RTFT mine in Havre St Pierre is set out in this release and its appendix.

Mineral Resources are quoted in this release on a 100 per cent basis as dry in-situ tonnes in addition to Ore Reserves. Rio Tinto's Ore Reserves and Mineral Resources as at 31 December 2019, and Rio Tinto's interests, are set out in full in its 2019 Annual report.

Technical work conducted from 2002 to 2018 on the Beaver deposit adjoining the Lac Tio hemo-ilmenite deposit with over 4,500 m drilled, supports the reporting of a maiden Inferred Resource. In addition Mineral Resources contained within phase 4 of the Tio mine design were removed due to economic constraints. This has contributed to overall changes in the EoY 2019 Mineral Resource declaration.

Changes in RTFT's titanium dioxide feedstock Mineral Resources between 31 December 2018 and 31 December 2019 are shown in Table A.

**Table A - Aggregate changes to RTFT's titanium dioxide feedstock Mineral Resource estimates¹
between 31 Dec 2018 and 31 Dec 2019 (100% basis)**

	Dry in-situ product (Mt)	Grade
2018 Mineral Resources	19	84.6%
Mineral Resources decrease	(8)	84.1%
Beaver maiden Resources	16	79.2%
2019 Mineral Resources	27	81.6%

¹ Rio Tinto RTFT's titanium dioxide feedstock Mineral Resource estimates are reported in Rio Tinto's 2019 Annual report dated 26 February 2020 and released to the market on 28 February 2020. The Competent Persons responsible for that Mineral Resource reporting were F A Consuegra, J Dumouchel and D Gallant. Rio Tinto is not aware of any new information or data that materially affects these resource estimates, and confirms that all material assumptions and technical parameters underpinning the estimates continue to apply and have not materially changed. The form and context in which the competent persons' findings are presented have not been materially modified.

The locations of the deposits involved are shown in Figure 1.

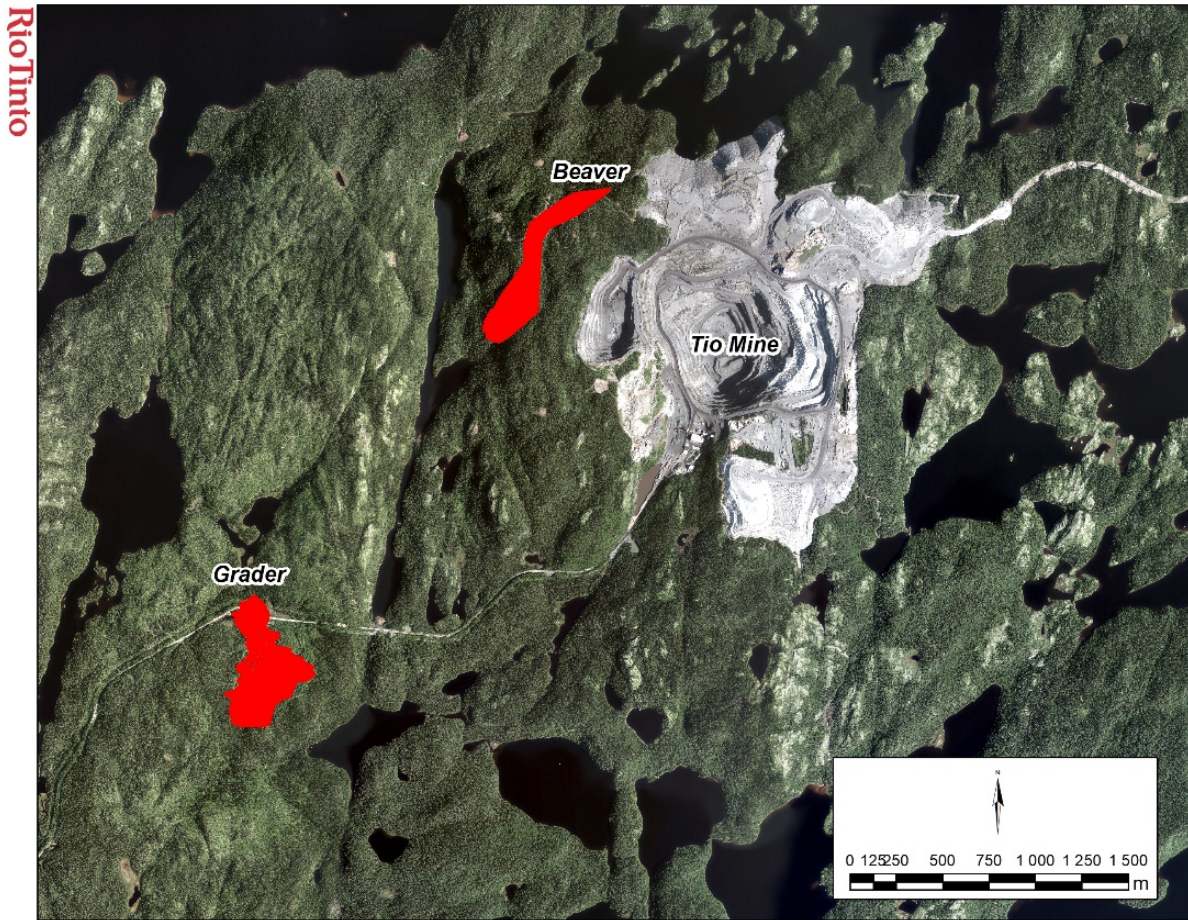


Figure 1 – RTFT Havre St Pierre Deposit Location

Summary of information to support the Mineral Resource estimates

Beaver deposit maiden Resources

Initial Mineral Resource estimate for the Beaver deposit is supported by the information set out in the appendix to this release and located on our website at riotinto.com/invest/financial-news-performance/resources-and-reserves in accordance with the Table 1 checklist in the JORC Code. The following summary information is provided in accordance with rule 5.8 of the ASX Listing Rules.

Geology and geological interpretation

The Grenville province is noted for its concentration in anorthosite bodies with an associated ilmenite/titanomagnetite mineralization

The Lac Tio deposits are tabular shaped massive hemo-ilmenite intrusive bodies that formed along the eastern edge of the large Havre-Saint-Pierre Anorthositic Complex. The hemo-ilmenite has been formed by early immature magmatic segregation of Grenville age (1060 My).

The Beaver deposit located 200 m West from the edge of the Tio deposit presents itself as a narrow sill or dyke plunging to the northeast. Faulting may have caused dislocations between the southern and northern portion of the deposit.

Drilling techniques

The Beaver Mineral Resources are defined using diamond core drilling only. Approximately 4,500m distributed over 39 boreholes have been drilled on the deposits between 2002 and 2018. Except for the initial seven boreholes drilled in 2002 in BQ size, all the remaining drilling has used NQ sized core. Boreholes are distributed more or less in a linear fashion across the orebody at an average spacing of 100 metres.

Downhole surveys were conducted in all drill holes with a Gyro or Reflex instrument. Drill hole sites were surveyed with Differential Global Positioning System (DGPS) survey equipment with an accuracy of 2-4 cm in the X, Y, Z orientations. Drill holes spacing varies along the deposit with spacing of 100 m over the main mineralized zone.

All drill core is logged according to standardized procedures for both geological and geotechnical features by company geologist.

Sampling, sub-sampling method and sample analysis method

Drill core is logged, and sampled by splitting in half (1/2), by diamond saw. The samples are collected in 3 m length unless cut by the presence of a clear lithological contact. The minimum length is 1 metre. A one-quarter (1/4) core duplicate is taken at a rate of 1 in 20 samples.

Since 2015, all sampling and sample preparation is conducted at the Actlab facility in Ancaster, Ontario. After receipt and validation with sample list, density measurement using a water immersion method is performed on each sample. The entire core (5-8Kg) is crushed at 80 % < 2mm. A sub-sample of 1 Kg is split by rotary splitter and pulverized at 95% < 105um. A sub-sample is split and submitted for ICP analyses and a 250 gm pulp sub-sample sent to RTFT technological centre for XRF validation and sample archive.

The core samples are chemically analysed at Actlab. The analysis technique is ICP for 26 elements and LECO for S. Standards (CRM provided by external laboratory consultant) are inserted at a rate of one in every twenty samples. Blanks (certified by external laboratory) are inserted at a rate of 1 in every 20 samples.

The analytical laboratory performs its own internal control. Every 10th pulp sample is prepared and analyzed in duplicate; a blank is prepared every 30 samples and analyzed. Samples are analyzed using a Varian 735ES ICP and internal standards are used as part of the standard operating procedure.

Estimation Methodology

Consultant CSA Global conducted the Mineral Resource Estimate for the Beaver deposit. The geological interpretation of the Beaver deposit was completed using ilmenite grades to define estimation domain contact points in drill holes and using the drone magnetic survey results to define limits.

All grade variables were interpolated using ordinary kriging with dynamic anisotropy search ellipsoids. Ordinary kriging estimates of Ilmenites in mineralized and disseminated domains were the basis of a Uniform Conditioning (UC) estimation. Uniform conditioning panel estimates were post-processed with Local Uniform Conditioning (LUC) to obtain grades at SMU support.

Mineral resources are reported based on Ilmenite grades estimated using Local Uniform Conditioning (LUC) and density deduced from LUC estimate.

Criteria used for classification

The resource classification was carried out using relatively regular polygons and wireframes digitized by hand, in section or in plan view, to select blocks within the resource model. The key drivers for the design of resource classification wireframes were the DDH density, and knowledge and experience gained by the competent persons at our Lac Tio hemo-ilmenite deposit.

In the Beaver deposit, resource blocks were first classified in two categories using the following criteria:

- Indicated Resources: block to drill hole distance of 60 metres to 100 metres, and drill hole to drill hole distance of 120 metres to 200 metres;
- Inferred Resources: block to drill hole distance of 100 metres to 200 metres, and drill hole to drill hole distance of more than 200 metres;

However, given the location of most diamond drill holes along a narrow strip, and the uncertainty on the lateral continuity of the grade and mineralization, all the Beaver Mineral Resources are classified as Inferred.

Cut-off grades

The cut-off grade used is 60% ilmenite, as per the cut-off applied in the Tio operation. Grade is calculated as sum of oxides ($\text{TiO}_2 + \text{FeO} + \text{Fe}_2\text{O}_3 + \text{Cr}_2\text{O}_3 + \text{V}_2\text{O}_5$). The cut-off has been determined to return a production grade suitable for the Ore Preparation Plant.

Mining and Metallurgical Methods and Parameters

It is assumed that the Beaver deposit will be mined as a conventional open pit truck and shovel operation, applying a similar bench height (11 m), pit slope and ramp width to the Tio mine. A conceptual pit design was developed to mine to level 154 m from a topo high of 328 m, with a waste to ore ratio of 1.2 to 1. Mineral Resources are reported using the constraint of the conceptual design. As the Beaver mineralization retains the same physical, textural and chemical characteristics to the Tio deposit it is assumed the ore will be processed with the same equipment and process flowsheet.

2019 Annual report Mineral Resources table, showing line items relating to the RTFT changes

Table		Total resources 2019 compared with 2018										Rio Tinto
Likely mining method (a)	Measured resources		Indicated resources		Inferred resources						Interest %	
	at end 2019		at end 2019		at end 2019		Tonnage		Grade			
	Tonnage	Grade	Tonnage	Grade	Tonnage	Grade	2019	2018	2019	2018		
	millions of tonnes	% Ti Minerals	millions of tonnes	% Ti Minerals	millions of tonnes	% Ti Minerals	millions of tonnes	millions of tonnes	% Ti Minerals	% Ti Minerals	millions of tonnes	
TITANIUM DIOXIDE FEEDSTOCK							of tonnes	of tonnes	% Ti Minerals	% Ti Minerals	of tonnes	
RTFT (Canada) (b)	O/P		11	84.9	16	79.2	27	19	81.6	84.6	100.0	

Notes

(a) Likely mining method: O/P = open pit; O/C = open cut; U/G = underground; D/O = dredging operation.
 (b) RTFT Resources tonnes increased following the addition of a new deposit, reported for the first time. A JORC Table 1 in support of this change will be released to the market contemporaneously with the release of this Annual report and can be viewed at riotinto.com/invest/financial-news-performance/resources-and-reserves.

Competent Persons' Statement

The material in this report that relates to the Mineral Resource estimate for the Beaver deposit is based on information prepared by Jacques Dumouchel and David Gallant, who are Competent Persons and respectively Members of the Ordre des geologues du Quebec and Ordre des ingenieurs du Quebec.

Mr. Dumouchel is a contract employee of Rio Tinto and Mr. Gallant is a full-time employee of Rio Tinto.

Mr. Dumouchel and Mr. Gallant have sufficient experience relevant to the style of mineralisation and type of deposit under consideration and to the activity being undertaken to qualify as Competent Persons as defined in the 2012 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'.

Each of Mr. Dumouchel and Mr. Gallant consent to the inclusion in the report of the material based on the information that he has prepared in the form and context in which it appears.

Contacts

media.enquiries@riotinto.com
riotinto.com



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Media Relations, United Kingdom

Illtud Harri
M +44 7920 503 600

David Outhwaite
T +44 20 7781 1623
M +44 7787 597 493

Media Relations, Americas

Matthew Klar
T +1 514 608 4429

Media Relations, Asia

Grant Donald
T +65 6679 9290
M +65 9722 6028

Media Relations, Australia

Jonathan Rose
T +61 3 9283 3088
M +61 447 028 913

Matt Chambers
T +61 3 9283 3087
M +61 433 525 739

Jesse Riseborough
T +61 8 6211 6013
M +61 436 653 412

Investor Relations, United Kingdom

Menno Sanderse
T: +44 20 7781 1517
M: +44 7825 195 178

David Ovington
T +44 20 7781 2051
M +44 7920 010 978

Investor Relations, Australia

Natalie Worley
T +61 3 9283 3063
M +61 409 210 462

Amar Jambaa
T +61 3 9283 3627
M +61 472 865 948

Group Company Secretary

Steve Allen

Rio Tinto plc

6 St James's Square
London SW1Y 4AD
United Kingdom
T +44 20 7781 2000
Registered in England
No. 719885

Joint Company Secretary

Tim Paine

Rio Tinto Limited

Level 7, 360 Collins Street
Melbourne 3000
Australia
T +61 3 9283 3333
Registered in Australia
ABN 96 004 458 404

This announcement is authorised for release to the market by Rio Tinto's Group Company Secretary.

Beaver deposit - Table 1

The following table provides a summary of important assessment and reporting criteria used at Rio Tinto Fer et Titane Inc (RTFT) for the reporting of Mineral Resources and Ore Reserves in accordance with the Table 1 checklist in *The Australasian Code for the Reporting of Exploration Results, Mineral Resources and Ore Reserves (The JORC Code, 2012 Edition)*. Criteria in each section apply to all preceding and succeeding sections.

SECTION 1 SAMPLING TECHNIQUES AND DATA

Criteria	Commentary
Sampling techniques	<ul style="list-style-type: none"> Diamond drilling techniques are used with NQ core except for first six boreholes in BQ size. The samples are usually 3 m long unless cut by the presence of a clear lithological contact. The minimum length is 1 m. No sample compositing is done. Diamond drill core is halved along the core axis with a diamond cutting saw. The entire core half is collected for the main sample resulting in a sample of weighting 5 to 8 kg which is appropriate for the material being samples. One-quarter core duplicates are taken at a rate of 1 in 20 samples.
Drilling techniques	<ul style="list-style-type: none"> Diamond Drilling with 3 m core barrel in NQ size.
Drill sample recovery	<ul style="list-style-type: none"> Core recovery is measured and registered by logging geologist. Close to 100% core recovery is achieved as rock is competent and rarely fractured
Logging	<ul style="list-style-type: none"> The diamond drill core is logged by company geologists according to three main rock types namely anorthosite, gabbro norite and ilmenitite, together with % oxide minerals. The diamond drill core is also logged for geotechnical purpose according to industry standardized parameters (RQD, etc) All the length of the core is logged. Data is secured in an acQuire™ database.
Sub-sampling techniques and sample preparation	<ul style="list-style-type: none"> Since 2015 all sampling and sample preparation is conducted at the Actlab facility in Ancaster, Ontario. Upon receipt and validation with sample list, the entire core is crushed at 80 %<2mm. A sub-sample of 1 Kg is split by rotary splitter and pulverized at 95% <105um. A sub-sample is split and submitted for ICP analyses A 250 gm pulp was split by rotary splitter and sent to RTFT Technology Centre for XRF validation and archives.
Quality of assay data and laboratory tests	<ul style="list-style-type: none"> The core samples are chemically analysed. The analysis technique is ICP for 26 elements and LECO for S. Standards (CRM provided by external laboratory consultant) are inserted at a rate of one in every twenty samples. Blanks (certified by external laboratory) are inserted at a rate of 1 in every 20 samples. Field Duplicates are inserted at a rate of 1 in every 20 samples. The analytical laboratory performs its own internal control. Every 10th pulp sample is prepared and analyzed in duplicate; a blank is prepared every 30 samples and analyzed. Samples are analyzed using a Varian 735ES ICP and internal standards are used as part of the standard operating procedure. Analyses were performed at Actlab in Ancaster, Ontario. The lab has been audited and performance validated through round robin studies. 100% of all pulps ICP analyses were duplicated with XRF analyses at RTFT Technology Centre.

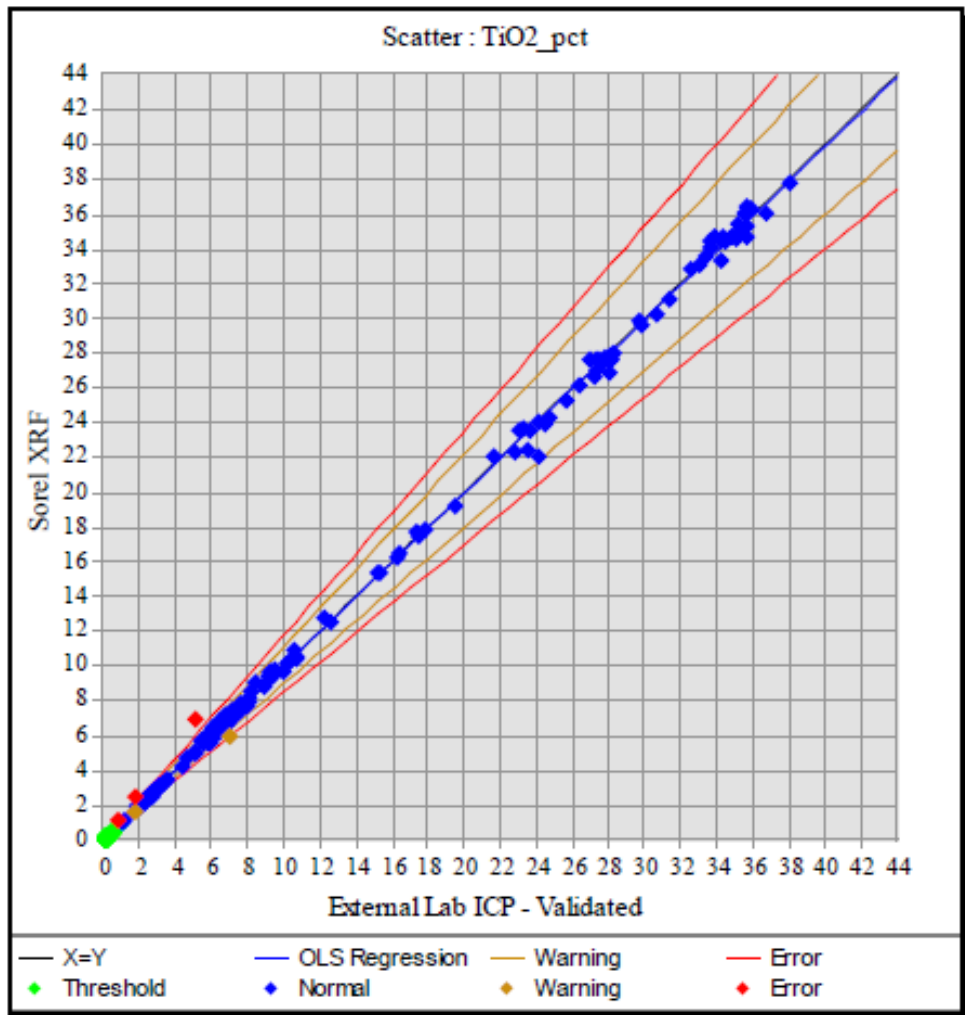


Figure 1: QA/QC report on Beaver DDH core ICP/XRF duplicates

Verification of sampling and assaying	<ul style="list-style-type: none"> All logging and sampling was supervised by company geologists. Each analytical report is checked as each batch of results is received and a batch quality assurance and quality control (QA/QC) report is generated. No twinned holes are used. All the data entry, data verification and data storage are performed in acQuire™ database under supervision of a data manager.
Location of data points	<ul style="list-style-type: none"> Drill hole sites were surveyed with Differential Global Positioning System (DGPS) survey equipment with an accuracy of 2-4 cm in the X, Y, Z orientations. All points are validated with airborne Light Detection and Ranging (LIDAR) surveys. The grid system used is the MTM Zone 5 grid, NAD 83 (EPSG:32185). Downhole surveys were conducted in all drill holes with a Gyro or Reflex instrument.
Data spacing and distribution	<ul style="list-style-type: none"> The drilling campaigns have been performed in different periods (2002, 2013, 2014, 2015 and 2018) for infill drilling and delimitation of mineralization. The resulting diamond drill hole spacing is 100 m over the main mineralized zone. Drill hole spacing is sufficient for the Mineral Resource classification used. However, more drilling is required to increase the classification category of the Mineral Resources.

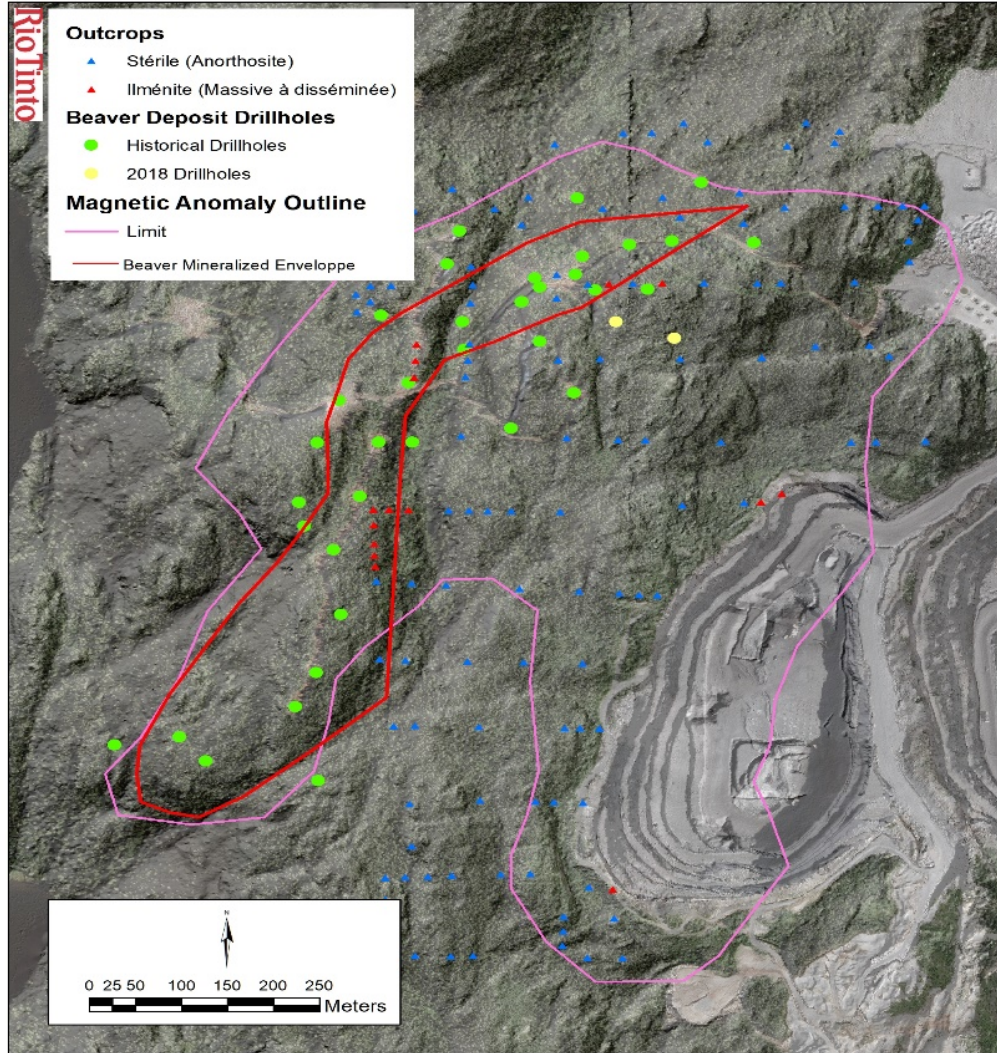


Figure 2: DDH and surface sample with surface trace of 2018 magnetic low and Beaver deposit outline.

Orientation of data in relation to geological structure

- The type of mineralization encountered is a massive intrusive sill, with a structural imprint causing a change from sub-horizontal in the southern end to an inclined structure in the northern section. This supports the selection of both vertical and angle drilling orientations.

Sample security

- In 2015, the core storage and processing facility at the mine site was dismantled and the core shipped to a consulting firm in 2017 for re-conditioning and photography. Cores have now been returned and stored in a new facility at the Havre Saint Pierre administrative site.
- Logs are captured electronically and uploaded in an acQuire™ database, stored securely in two locations.
- All new geologists or contractors are supervised and inducted by senior personnel to keep logging consistent across the deposit.

Audits or reviews

- RTFT's Mineral Resources were audited by Rio Tinto Group Internal Audit in 2010, 2011 and 2013, through external consultant Snowden Mining and Technology Consultants and in October 2015 by Xstract Mining Consultants. The audit included a review of standard operating procedures for drilling, sampling and sample dispatch and no issues with current practice were noted.
- The current geological model and Mineral Resource model have been peer reviewed by Rio Tinto Iron Ore.

SECTION 2 REPORTING OF EXPLORATION RESULTS

Criteria	Commentary
Mineral tenement and land tenure status	<ul style="list-style-type: none"> The deposit is located mostly on the RTFT mining concession and partly on adjoining RTFT claims. The mining tenements are managed by Quebec government Department of Mine through a secured computerized system known as Système d'information géominière (SIGEOM). The internal management is secured by a GIS professional within Rio Tinto Iron and Titanium Resource Development Group with a weekly report of the tenements status delivered to key managers. All properties are in good standing.
Exploration done by other parties	<ul style="list-style-type: none"> RTFT has held current claims and concessions since the initial discovery in 1948 to which it has exclusive exploration rights.

Geology	<ul style="list-style-type: none"> The hemo-ilmenite deposits in the area are of intrusive type into a large anorthositic complex (Havre-Saint-Pierre Anorthositic Complex). The Beaver deposit presents itself as a narrow sill or dyke plunging to the northeast. Faulting may have caused dislocations between the southern and northern portion of the deposit.
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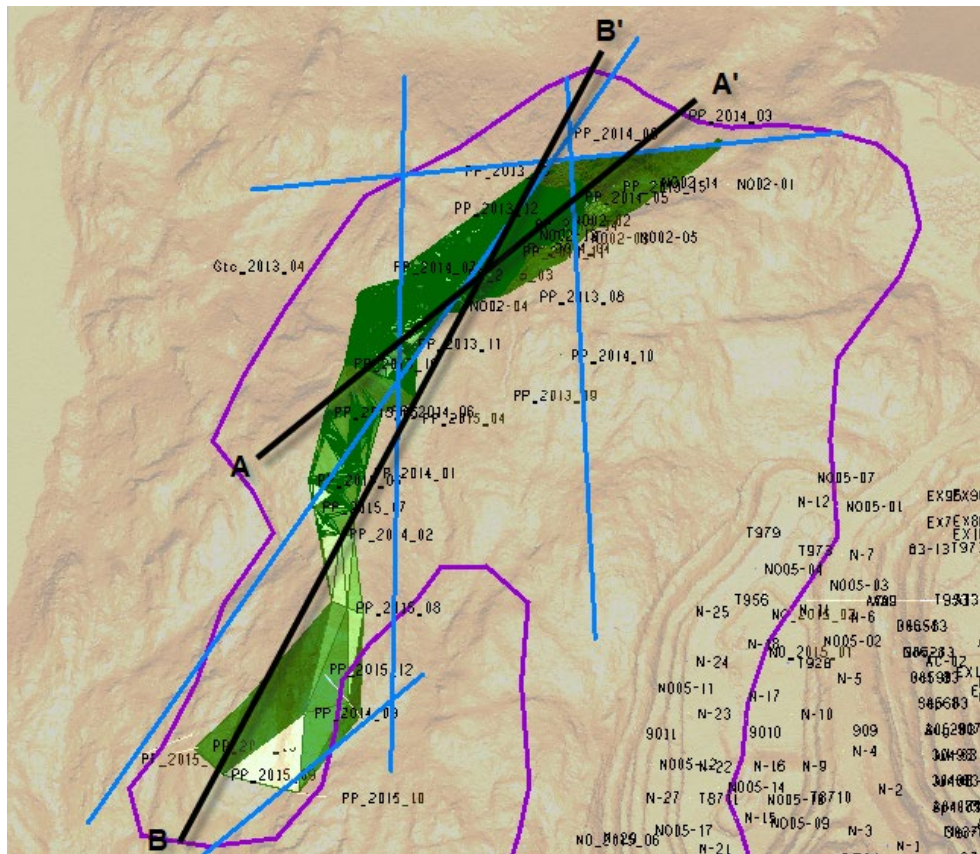
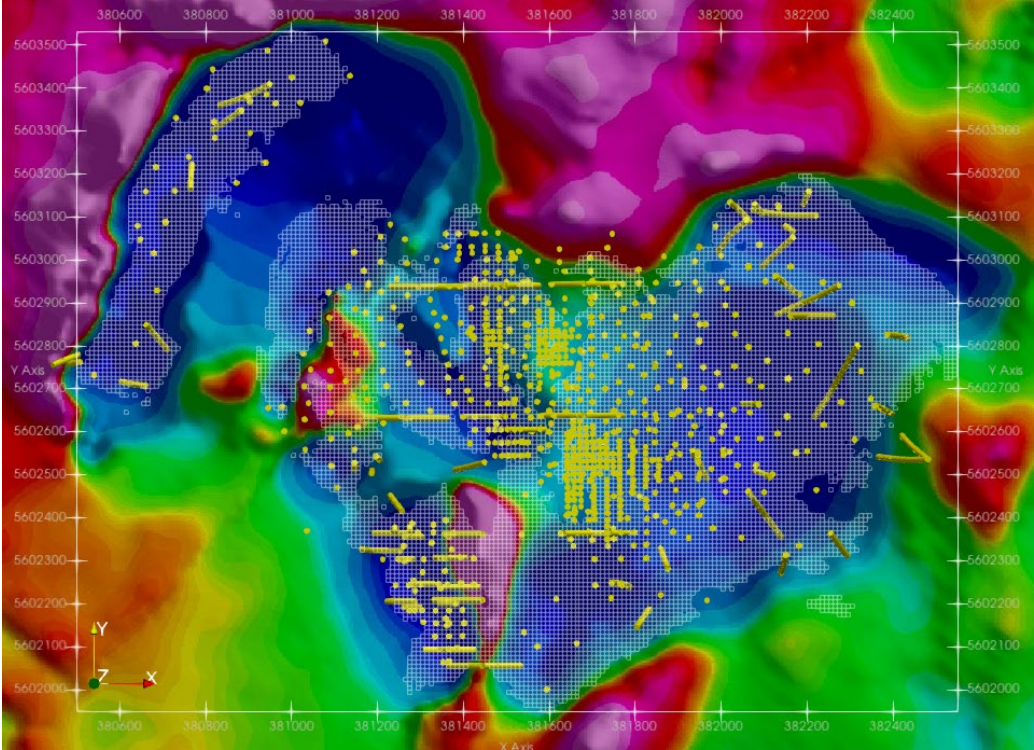
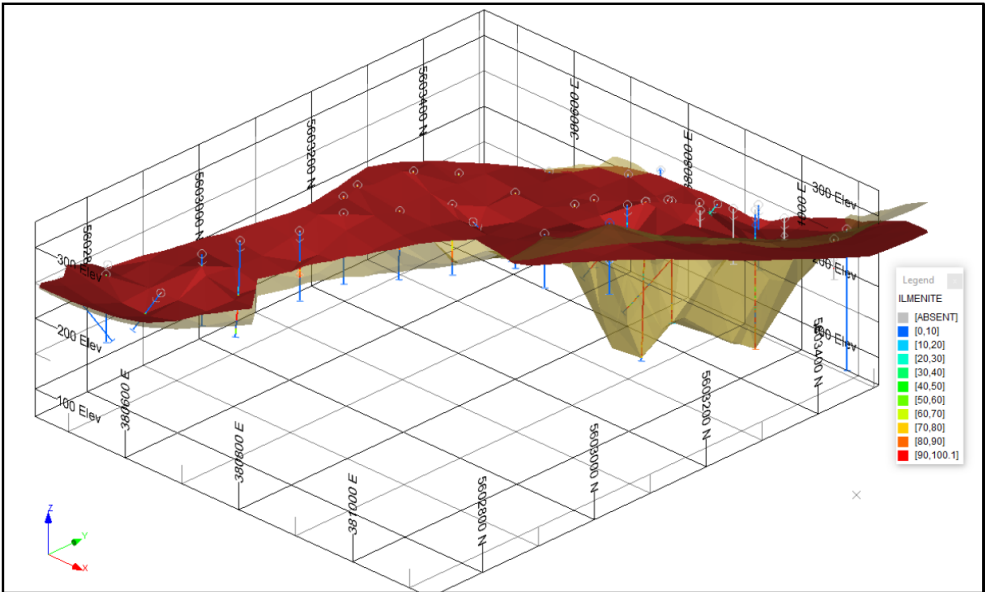


Figure 3: Beaver deposit, surface projection of probable faults

Drill hole Information	<ul style="list-style-type: none"> 39 Diamond drill holes drilled from 2002 to 2018. 																		
	<table border="1" style="width: 100%; text-align: center;"> <thead> <tr> <th>Year</th> <th>No of DH</th> <th>Total drilled</th> </tr> </thead> <tbody> <tr> <td>2002</td> <td>7</td> <td>337m</td> </tr> <tr> <td>2013</td> <td>8</td> <td>856m</td> </tr> <tr> <td>2014</td> <td>11</td> <td>1476m</td> </tr> <tr> <td>2015</td> <td>11</td> <td>923m</td> </tr> <tr> <td>2018</td> <td>2</td> <td>943m</td> </tr> </tbody> </table>	Year	No of DH	Total drilled	2002	7	337m	2013	8	856m	2014	11	1476m	2015	11	923m	2018	2	943m
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2002	7	337m																	
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Criteria	Commentary
Data aggregation methods	<ul style="list-style-type: none"> No Exploration results are being reported
Relationship between mineralisation widths and intercept lengths	<ul style="list-style-type: none"> The geometry of the deposit is sub-vertical thus vertical boreholes define the dip extension of mineralization. Angled holes and the signature of the magnetic survey define the deposit width. The presence of at least 20 m of pure waste lithology at the bottom of the holes is necessary to define base of the deposit.
Diagrams	<ul style="list-style-type: none"> See previous sections for plan view of drill holes and structure.
Balanced reporting	<ul style="list-style-type: none"> No Exploration Results being reported.
Other substantive exploration data	<ul style="list-style-type: none"> Surface geological mapping and sampling was also performed. Ground and airborne geophysical surveys (magnetic, EM) have been performed over the area and used to define the extent of the mineralized envelope.
	
	<p>Figure 4: Beaver and Tio 2018 magnetic survey and drill hole traces.</p>
Further work	<ul style="list-style-type: none"> Additional drilling will be required to increase the estimate confidence and upgrade the Mineral Resource classification. No further drilling is planned for 2020.

SECTION 3 ESTIMATION AND REPORTING OF MINERAL RESOURCES

Criteria	Commentary
Database integrity	<ul style="list-style-type: none"> The chemical analyses are transmitted electronically directly from the lab. Upon receipt of a batch of data, QA/QC is performed on a timely manner and action is taken if necessary. The geological and production databases are built in the acQuire™ database, including all the security features (e.g. restricted access for data modification).
Site visits	<ul style="list-style-type: none"> The Competent Person (Mineral Resources) has worked with RTFT for 30 years as Resource Development Manager and has overseen the planning and execution of exploration work on the deposit. The Competent Person has visited the project site on numerous occasions.
Geological interpretation	<ul style="list-style-type: none"> The deposit forms a sill-like shaped orebody plunging to the northeast. Mineralization is of the same type as the Tio orebody with alternating massive ilmenite lenses and intercalated anorthosite-ilmenitite bands. Geophysical signature suggests a deep extension linking to the NW Tio deposit. Faulting has likely caused lateral discontinuities but requires more drilling to define. The Mineral Resource model considers one mineralized domain with similar characteristics to the massive ilmenite domain of Tio and a separate anorthosite envelop. <div style="text-align: center; margin-top: 20px;">  </div> <p style="text-align: center; margin-top: 10px;">Figure 5: Contact surfaces of estimation domains and drill holes with ilmenite grades at the Beaver zone.</p>
Dimensions	<ul style="list-style-type: none"> The Beaver deposit extends over a 1000 m NE trend, is 100-200 m in width and ranges in thickness from 20 m to 200 m thick extending in places from surface to a depth of 250 metres below surface

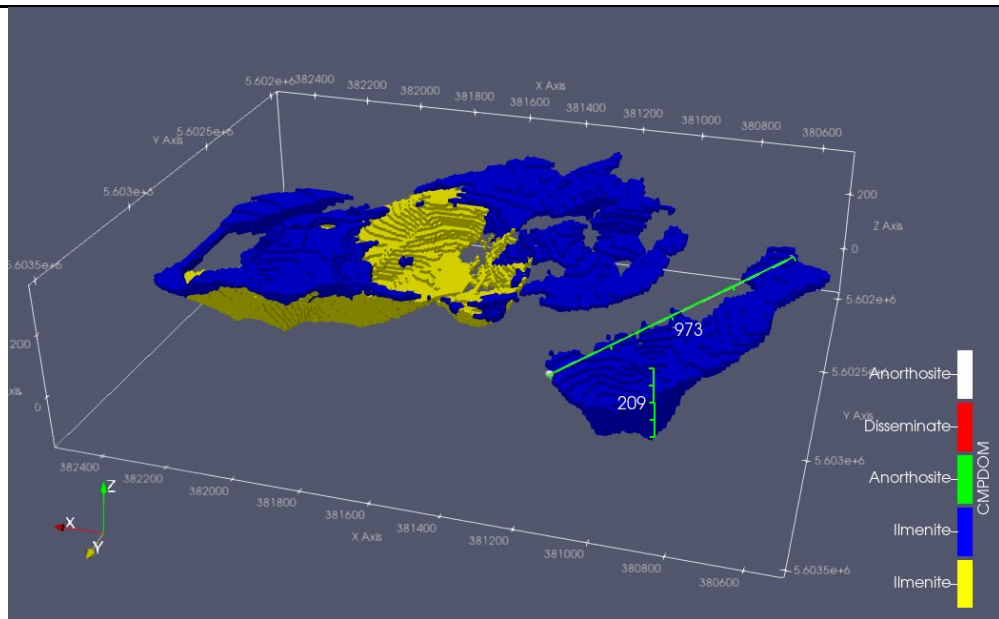
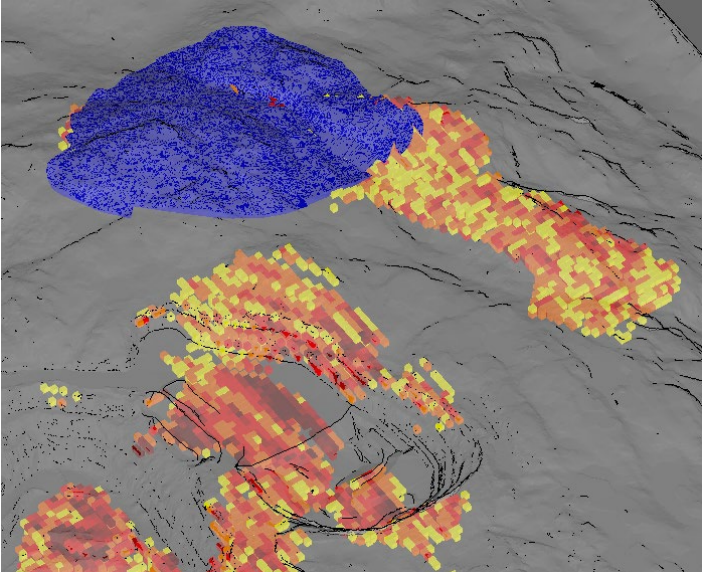


Figure 6: 3D view of the mineralized domains showing Beaver annotated dimensions.

Estimation and modelling techniques

- Rio Tinto completed the new geological interpretation at drill hole level. The geostatistic consultant CSA Global slightly modified the interpretation of drill holes and subsequently generated the 3D geological interpretation. The geological interpretation of Beaver was also based on the magnetic survey completed in 2017.
- The compositing was done by finding the most frequent sampling length, which is approximately 3 m, without merging intervals from different estimation domains. Composites were used to undertake univariate and multivariate statistical analyses.
- Capping of extreme low and high values was completed before estimating. Cumulative distribution plots were used to select the capping values of ilmenite grades and the other chemical elements assayed (Al₂O₃, CaO, Co, Cr, Ni, Mn, P₂O₅, V, S, and Mg). Less than 1% capping for bottom grade was applied and none for upper limits.
- Variograms were developed for each estimation domain. Variograms were calculated using a normal score transformation and fitted to a model. Variogram models were back transformed to raw model with real variance and used for interpolations. Additionally, indicator variograms were calculated for the mineralized domain, fitted to variogram models and used to produce sequential indicator simulations.
- Estimation domains were populated with 10 m x 10 m x 11 m Selective Mining Unit (SMU) blocks and 40 m x 40 m x 11 m panels. A small point grid of 5 m x 5 m x 5.5 m was used to simulate at point support and then re-blocked back to SMU support.
- Angles of maximum continuity were defined using a smooth surface manually digitized. These angles were used to interpolate with variable search ellipse orientations (dynamic anisotropy). Dynamic anisotropies were not used for simulations due to software limitations.
- Ilmenite grade (oxides) and ancillary variables (Co, Cr, Ni, Mn, P₂O₅, V, S, and Mg as chemical elements) were interpolated with ordinary block kriging at SMU and panel support for all domains. Some sample intervals with no assay for ancillary variables were calculated at composite support using a regression formula to ensure that correlation with ilmenite grades are captured in interpolated blocks. The variables were then interpolated with univariate kriging using the same set of interpolation parameters to reproduce correlations.
- Ordinary kriging estimates of Ilmenites in mineralized and disseminated domains were the basis of a Uniform Conditioning (UC) estimation. Uniform conditioning panel estimates were post-processed with Local Uniform Conditioning (LUC) to obtain grades at SMU support. LUC estimates of ilmenites were used for reporting the Mineral Resource.
- Blocks estimated in different domains were merged into a single block model. Blocks in more than one domain were assigned with a single grade using tonnage-weighted averages.
- Density was assigned using regression formula $SG = -571.5 / (ILMENITE - 215.4)$, if Ilmenite grade > 0.1. The density in blocks with ilmenite grade ≤ 0.1 or absent was interpolated with kriging.
- Probability of ilmenite grades exceeding the thresholds of 70, 72, 74, 76, and 78% were calculated

	in blocks within mineralized and disseminated domains but not used for reporting.
Moisture	<ul style="list-style-type: none"> All tonnages for Mineral Resources are considered as dry.
Cut-off parameters	<ul style="list-style-type: none"> The cut-off grade used is 60% ilmenite, as per the cut-off applied in the Tio operation. Grade is calculated as sum of oxides (TiO₂ + FeO + Fe₂O₃ + Cr₂O₃ + V₂O₅). The cut-off has been determined to return a production grade suitable for the Ore Preparation Plant (between 80 and 83%). This cut-off grade is uniformly applied throughout the Tio and Beaver deposits.
Mining factors or assumptions	<ul style="list-style-type: none"> It is assumed that the Beaver deposit will be mined as a conventional open pit truck and shovel operation, applying a similar bench height (11 m), pit slope and ramp width to the Tio mine. The main ramp is designed assuming the use of Caterpillar 777 trucks in accordance with local mining regulations. As the geometry of the mineralization indicates a narrow steeply dipping body, the conceptual design limits the waste to ore ratio and, as a result, the depth and lateral extent of mineable Mineral Resources. The design covers a 500 m x 410 m surface footprint down to level 154 m from a topo high of 328 m, with a waste to ore ratio of 1.2 to 1. Mineral Resources are reported using the constraint of the conceptual design. 
<p>Figure 7: Mineable Mineral Resource blocks in the Beaver conceptual mine design.</p>	
Metallurgical factors or assumptions	<ul style="list-style-type: none"> The only processing of the ore at the mine is crushing to minus 3.5 inches (ROM). The Beaver mineralization retains the same physical, textural and chemical characteristics as the Tio deposit and it is assumed that the ore will be processed with the same equipment and process flowsheet.
Environmental factors or assumptions	<ul style="list-style-type: none"> The ore and the ilmenite contain iron and nickel sulphides. It is assumed that mine waste will be deposited in the existing Tio mine waste dump and that current nickel leaching controls would be continued.
Bulk density	<ul style="list-style-type: none"> Density is determined by using weight in air/weight in water and by the water displacement method respectively for all diamond drill hole samples Based on a solid solution of pure anorthosite and pure hemo-ilmenite, a theoretical formula has also been developed to define the grade/density relationship. This formula derived from the Tio mine data has the form of: <ul style="list-style-type: none"> Grade = A - (B/ density) <p>where A and B are two constants related to the specific gravity of pure anorthosite and pure hemo-ilmenite respectively. The two constants were therefore calibrated using experimental data (chemical analysis) of more than 3000 samples from blast holes and diamond drill holes collected from the Tio deposit.</p>

Classification	<ul style="list-style-type: none"> The Beaver Mineral Resources are classified as Inferred because the number of drill holes is limited, most are located along a single section, and there is uncertainty on the lateral continuity of the grade and mineralization.
Audits or reviews	<ul style="list-style-type: none"> RTFT were audited by Rio Tinto Group Internal Audit in 2010, 2011, 2013 and 2015 using independent external consultants. The Mineral Resource model was peer-reviewed by the Rio Tinto Iron Ore in 2018 with the following conclusions: <ul style="list-style-type: none"> Estimation using LUC has been undertaken to an acceptable standard Mineral Resource classification is reasonable, taking into account factors such as geological continuity and drill hole spacing
Discussion of relative accuracy/ confidence	<ul style="list-style-type: none"> The relative accuracy and confidence of the model was tested using model standard validation techniques consisting of: <ul style="list-style-type: none"> Visual validations in sectional views Comparison of declustered means Comparison of correlation matrices of the drill hole data and composites Swath plots Global change of support Using grade control data The local confidence was validated with a visual inspection of sections of the block model and the drill hole data. Visual validation verified both the grade interpolation and the geological model. Visual validations revealed a slight local over-smoothing at the Beaver Zone - a result of the limited availability of drill hole data that is considered acceptable for an Inferred Mineral Resource estimate. Conditional simulations were used to quantify the uncertainty in each block. Global confidence on grade, on global trends and on the grade and tonnage curves were tested using a comparison of means calculated with the block model and drill hole data, comparison of correlation tables, swath plots, and global change of support.

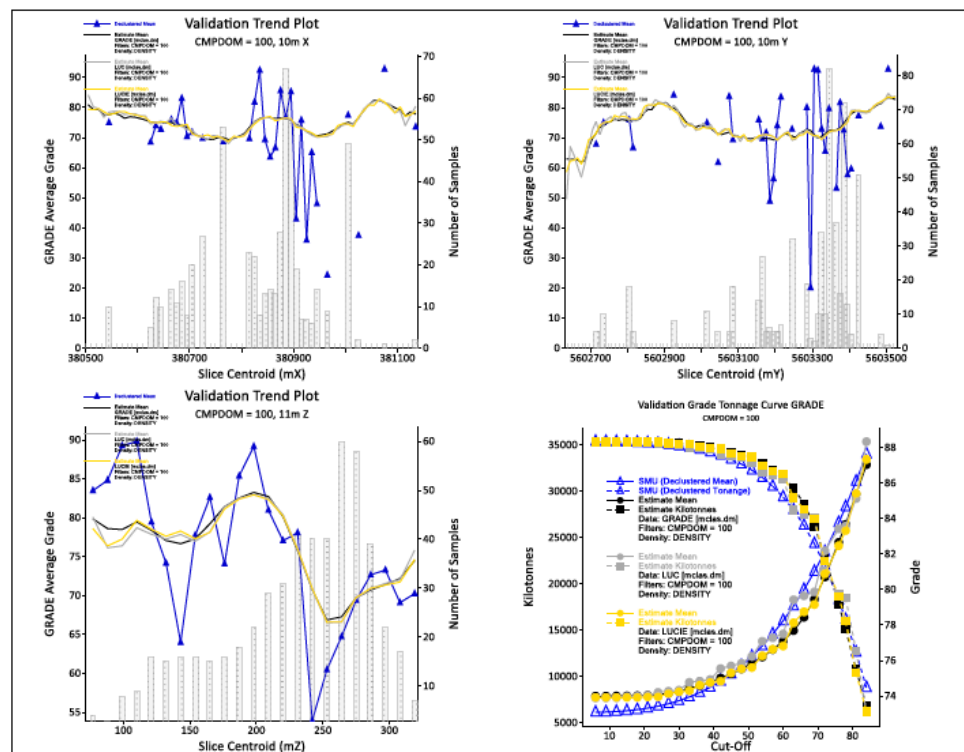


Figure 8: Swath plots and global change of support validation at Beaver, from CSA Global Report No R414/2018