



ASX ANNOUNCEMENT

2 August 2018

## Maiden Mineral Resource Establishes Manono as The World's Largest Hard Rock Spodumene Deposit

*INITIAL MINERAL RESOURCE FOR THE ROCHE DURE PEGMATITE IS REPORTED AS 259.9MT AT 1.63%  $Li_2O$  CONTAINED WITHIN APPROXIMATELY 50% OF THE TOTAL STRIKE OF THE ROCHE DURE PEGMATITE*

*SCOPING STUDY PROGRESSING WELL TO FAST-TRACK PROJECT DEVELOPMENT*

### HIGHLIGHTS:

- Total Measured, Indicated and Inferred Resources of 259.9Mt grading 1.63%  $Li_2O$  (spodumene) containing 4.25 million tonnes of lithium oxide ( $Li_2O$ ), 219Kt of tin as cassiterite grading 844ppm Sn and 11.2Kt Tantalum grading 43ppm  $Ta_2O_5$  (Tantalum);
- Measured Resources of 43Mt grading 1.71%  $Li_2O$ , 871ppm Sn and 42ppm  $Ta_2O_5$ ; Indicated Resources of 104.7Mt grading 1.64%  $Li_2O$ , 844ppm Sn and 43ppm  $Ta_2O_5$
- In addition to Sn,  $Ta_2O_5$  and  $Li_2O$ , MSA has also estimated  $Fe_2O_3$ , a potentially deleterious element, at an average of 0.88%  $Fe_2O_3$ , which when compared to other ASX-listed hard rock deposits, is the lowest reported.
- The initial Mineral Resource was estimated on an approximate 980m strike length or 50% of the Roche Dure pegmatite utilising assay data from 31 drill holes and geological data from 42 drill holes. The balance of the assay data (11 drill holes) will be incorporated into the next Mineral Resource estimate.
- Drilling is continuing with a focus on mapped extensions to the north and south of the current Mineral Resource area

**AVZ's Managing Director, Nigel Ferguson said:** "This is a significant advance for the project. Manono is now confirmed as the world's largest lithium deposit, with the second highest grade globally. Additionally, there is considerable advantage in having a significant tin component which should help to reduce operating costs by providing a valuable by-product credit. Deleterious elements are all low and we are encouraged by the results of the ongoing drilling, some of which were not included in this Mineral Resource. This work clearly demonstrates that Manono will continue to grow and potentially become a world leading source of lithium."

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### Directors

Managing Director: Nigel Ferguson  
Technical Director: Graeme Johnston  
Non-Executive Director: Rhett Brans  
Non-Executive Director: Honliang Chen  
Non-Executive Director: Guy Loando

### Issued Capital

1,888 M Ordinary Shares

### Market Cap

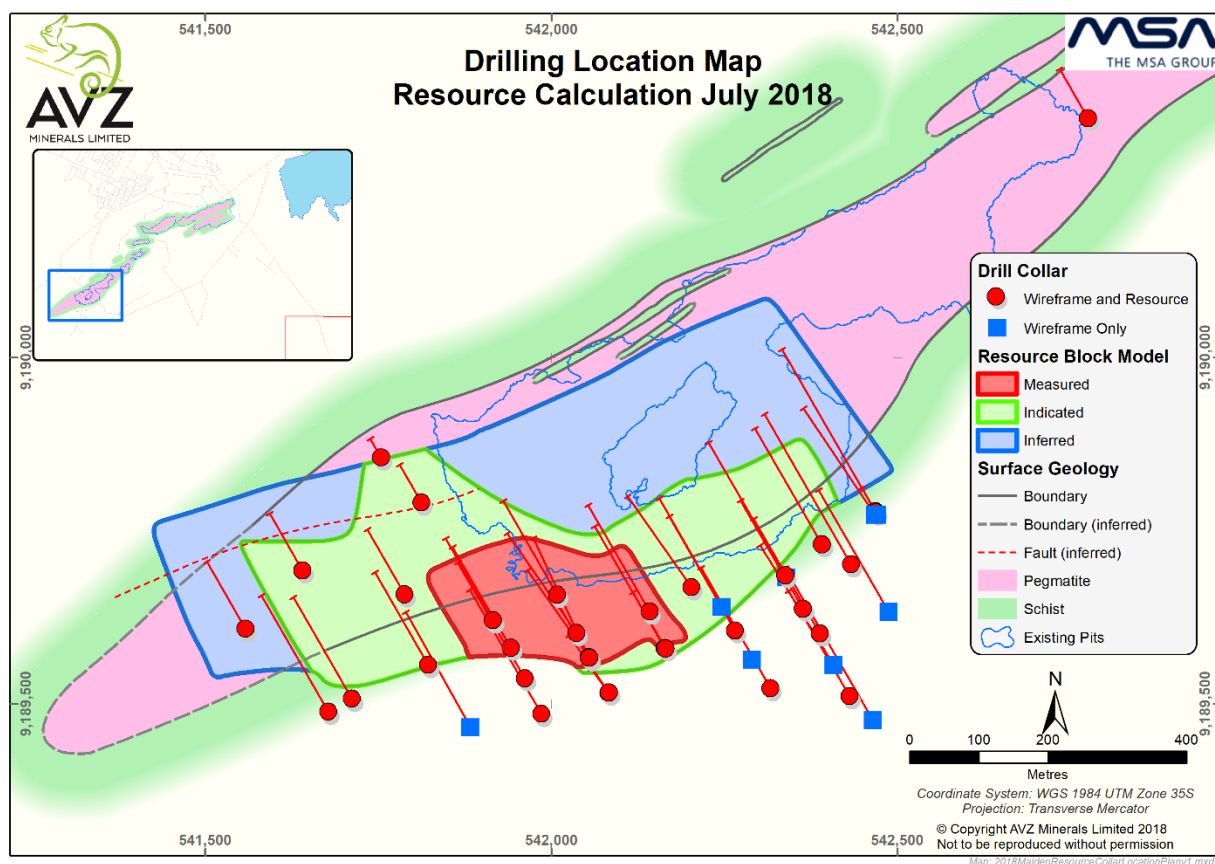
\$264.3 M

ASX Code: AVZ

Australian listed lithium metal Company, **AVZ Minerals Ltd (ASX: AVZ)** is pleased to advise that it has confirmed the potential of its 60% owned Manono Lithium-Tin-Tantalum Project in the DRC's Tanganyika Province to become a world leader in the global lithium market after announcing a world class maiden Mineral Resource.

The Mineral Resource stated as 259.9Mt grading 1.63% Li<sub>2</sub>O (spodumene) is further categorized into Measured, Indicated and Inferred Mineral Resources as shown in Table 3.

The initial Mineral Resource includes assay data from only 31 drill holes on 980m of strike length and geological data from 42 drill holes to enable interpretation of a geological model (*Refer Figure 1*). All drill holes except two, MO17DD001 and MO17DD002, have been completed in 2018 with commencement of the drilling program in February this year. A total of 13,576m of diamond core, mainly PQ (3,129m) and HQ (10,447m) in size, has been completed at the Roche Dure pegmatite.



**Figure 1. Schematic of Drill Hole Locations at Roche Dure used in the Resource Estimation and Classification Categories at 570m elevation**

Recent and ongoing drilling also clearly indicates the potential for the Mineral Resource to increase given the assay data from only an approximate 50% of the total strike length at Roche Dure has been included in this statement. AVZ still needs to drill test the Mpete and Tempete pegmatites at Kitotolo Sector just north of Roche Dure and the Carrier de L'Est pegmatite at Manono sector.

The overall Roche Dure Mineral Resource now comprises some 4.25 million tonnes of lithium oxide (Li<sub>2</sub>O), 219Kt of tin as cassiterite grading 844ppm Sn and 11.2Kt of tantalum grading 43ppm Ta<sub>2</sub>O<sub>5</sub>.

Current drilling at Manono, is focusing on the northern and southern extensions to the Roche Dure Pegmatite, which are located outside of the currently defined Mineral Resource. Drilling in these zones is likely to result in an increase in the Mineral Resource tonnage.

The ongoing drilling and this maiden Mineral Resource at Roche Dure demonstrates that AVZ is able to delineate a globally significant hard-rock lithium deposit at Manono.

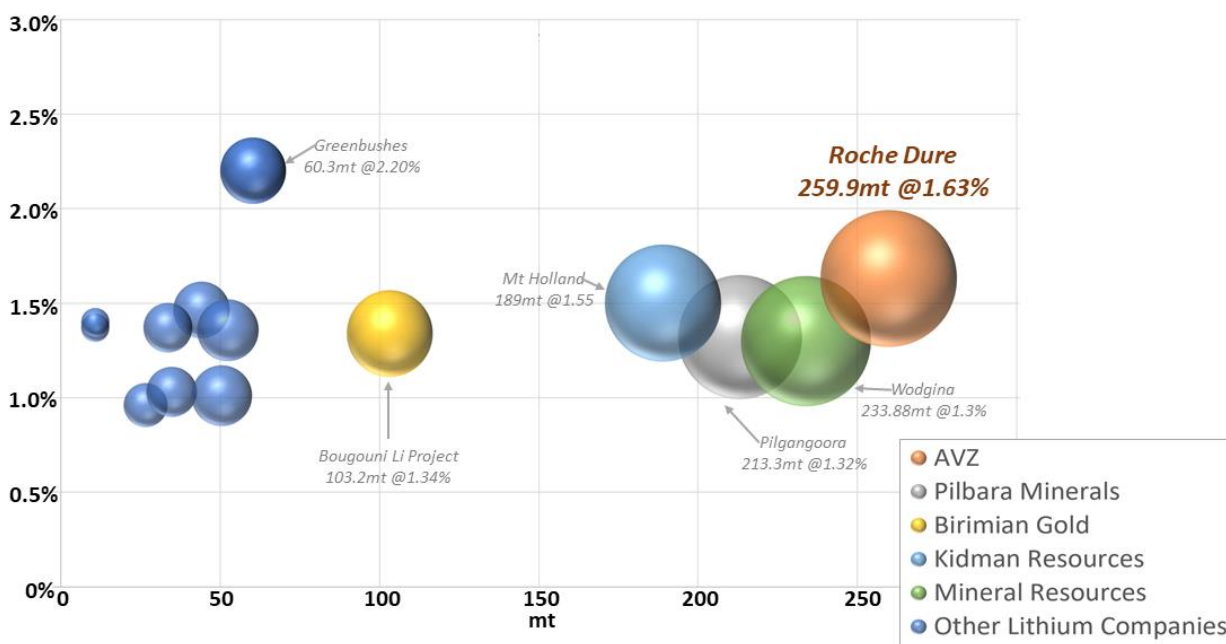


Table 1. Peer Comparison Lithium Companies Mineral Resources

Company	Location	Resource / MT				
		Grade	Measured	Indicated	Inferred	Total
AVZ Minerals	DRC	1.63%	43.0	104.7	112.2	259.9
Birimian Gold	Mali	1.34%		43.7	59.5	103.2
Kidman Resources	WA, Australia	1.50%	66.0	106.0	17.0	189
Critical Elements Corp	ON, Canada	1.03%		31.9	2.8	34.7
Pilbara Minerals	WA, Australia	1.32%	22.1	107.0	84.2	213.3
Tawana Resources (100% Ownership)	WA, Australia	0.96%		14.4	12.1	26.5
Nemaska Lithium	ON, Canada	1.46%				44
Mineral Resources (Wodgina)	Diversified	1.30%		173.2	60.6	233.9
Altura Mining	WA, Australia	1.01%	8.7	38.0	3.8	50.5
Neometals (Mt Marion)	WA, Australia	1.37%				10.7
Galaxy Resources (Mt Caitlin)	WA, Australia / Canada	1.36%	1.9	7.4	2.4	52.4
Sichuan Tianqi Lithium	WA, Australia	2.20%				60.3
Albemarle Corp - Hardrock	Australia / USA	2.20%				60.3
Ganfeng (Mt Marion)	WA, Australia	1.37%				33.5

Table 2. Peer Comparison Lithium Companies Mineral Resource

## Update on Drill Hole Assay Results

In order to estimate and report this maiden Mineral Resource according to JORC 2012 guidelines, AVZ used assays from a total of 31 diamond drill holes. AVZ made fully operational its onsite sample preparation facility that greatly reduced the delays experienced by having to transport, overland, over 1200kg of samples per hole to the ALS sample preparation laboratory in Lubumbashi. As a result, a significant number of drill hole assay data have been reported simultaneously in the Mineral Resources report (refer to press release “Exploration Update 2<sup>nd</sup> August 2018”).

## Mineral Resource Estimation according to JORC 2012 Guidelines

The Mineral Resource estimate was carried out by The MSA Group (“MSA”), an independent consultancy, based in Johannesburg, South Africa ([www.msagroupservices.com](http://www.msagroupservices.com)).

The Roche Dure Mineral Resource estimate applies to the drilled and sampled extent of pegmatite i.e. 980m of strike length at a dip of approximately 45° to the SE. The Fresh (Main) Pegmatite contains a Mineral Resource of 259.9 Mt at a Li<sub>2</sub>O grade of 1.63%. The lithium is hosted primarily in spodumene with trace amounts of lithium micas (based on XRD analyses and geological logging). The Mineral Resource is reported in Table 3 at a cut-off grade of 0.5% Li<sub>2</sub>O and areas have been classified as Measured, Indicated or Inferred Resources in accordance with the guidelines of the JORC Code (2012).

<b>Fresh Pegmatite Category</b>	<b>Tonnes (Millions)</b>	<b>Li<sub>2</sub>O (%)</b>	<b>Sn (ppm)</b>	<b>Ta<sub>2</sub>O<sub>5</sub> (ppm)</b>	<b>Fe<sub>2</sub>O<sub>3</sub> (%)</b>	<b>SG</b>
<b>Measured</b>	43.0	1.71	871	42	0.96	2.73
<b>Indicated</b>	104.7	1.64	844	43	0.85	2.73
<b>Inferred</b>	112.2	1.60	834	43	0.88	2.73
<b>Total</b>	<b>259.9</b>	<b>1.63</b>	<b>844</b>	<b>43</b>	<b>0.88</b>	<b>2.73</b>

**Table 3: Manono Roche Dure – Mineral Resource at a 0.5% Li<sub>2</sub>O cut-off**

Diamond drillhole section lines are spaced 100 m apart, with drilling on section lines spaced 40-60 m apart. The drilling was completed using diamond drill rigs, with PQ diameter rods used from surface through the weathered zone, and HQ-sized drill rods used below the intersection fresh rock. Most holes were angled between 50° and 75° to the northeast and collared from surface into weathered bedrock.

Core is cut longitudinally and half-core samples of a nominal 1 m length are submitted for assay. The half-core samples have been prepared at ALS Lubumbashi and the ALS sample preparation facility on site at Manono, with holes from MO18DD021 onwards being prepared onsite at Manono. At the onsite sample preparation facility, the half-core samples of approximately 4-5 kg were oven dried, crushed to -2 mm with a 500 g sub-sample being split out. This 500 g sub-sample was then pulverised to produce a pulp with 85% passing -75µm size fraction. A 120 g subsample was then split from this; the certified reference material, blanks and duplicates were inserted at appropriate intervals into the sample stream, and then the complete sample batch was couriered to Australia for assay analysis.

Of the 42 drill holes supplied by AVZ, all contain geological logging data of which 31 contain assay data for Li<sub>2</sub>O, Al<sub>2</sub>O<sub>3</sub>, Fe<sub>2</sub>O<sub>3</sub>, K<sub>2</sub>O, MgO, P<sub>2</sub>O<sub>5</sub>, SiO<sub>2</sub>, Nb, Sn, Ta, Th and U. The assay data is supported by a QAQC programme consisting of the insertion of blank, duplicate and certified reference materials, as well as the use of a second umpire laboratory for check analysis.

The outstanding assay samples are currently either being prepared onsite or being analysed at ALS in Perth.

A geological model of the Roche Dure Pegmatite, along with host rock lithologies, was constructed by MSA in Leapfrog Geo (v 4.2.3). An automatic coding process, based on geological logging, was initially used to identify the primary domains i.e. hanging-wall, pegmatite and footwall (Figure 2), following which manual coding was conducted to refine primary, and identify secondary domains, by making use of geological and assay data. The resulting domains of overburden, hanging-wall, weathered pegmatite, fresh pegmatite, low-grade (altered) internal pegmatite, low-grade footwall contact pegmatite and footwall were modelled in Leapfrog Geo (Figure 3) and imported into Datamine Studio 3 (v 3.22.173.0) for block model construction and estimation. Grades were estimated into the four pegmatite domains by means of ordinary kriging (depending on the availability of data and semi-variogram stability) or inverse distance weighting.

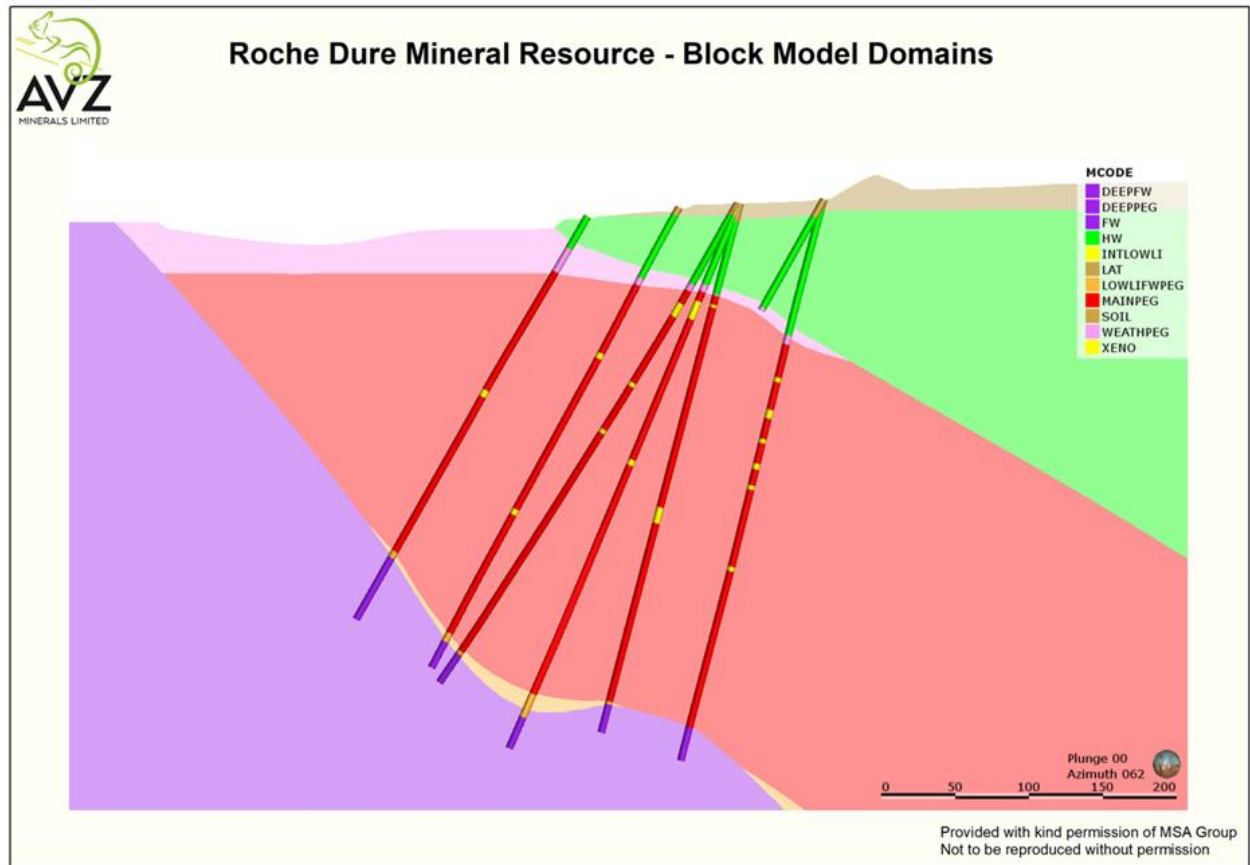


Figure 2. Leapfrog modelling of the geological domains

To date, 1,046 specific gravity (SG) determinations have been carried out on Roche Dure drill core. The majority of these were completed on fresh pegmatite material by the Archimedes principal of weighing the remaining half core corresponding to the full assay sample (one metre) in air and then submerged in water. A caliper was used to measure and calculate the volume of drill core that was too weathered to submerge in water. This material was then weighed in air and the density calculated from its volume and mass. An average SG was calculated for each of the modelled domains and assigned in the block model for tonnage calculations.

The Mineral Resource is reported in accordance with the 2012 edition of the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (The JORC Code).

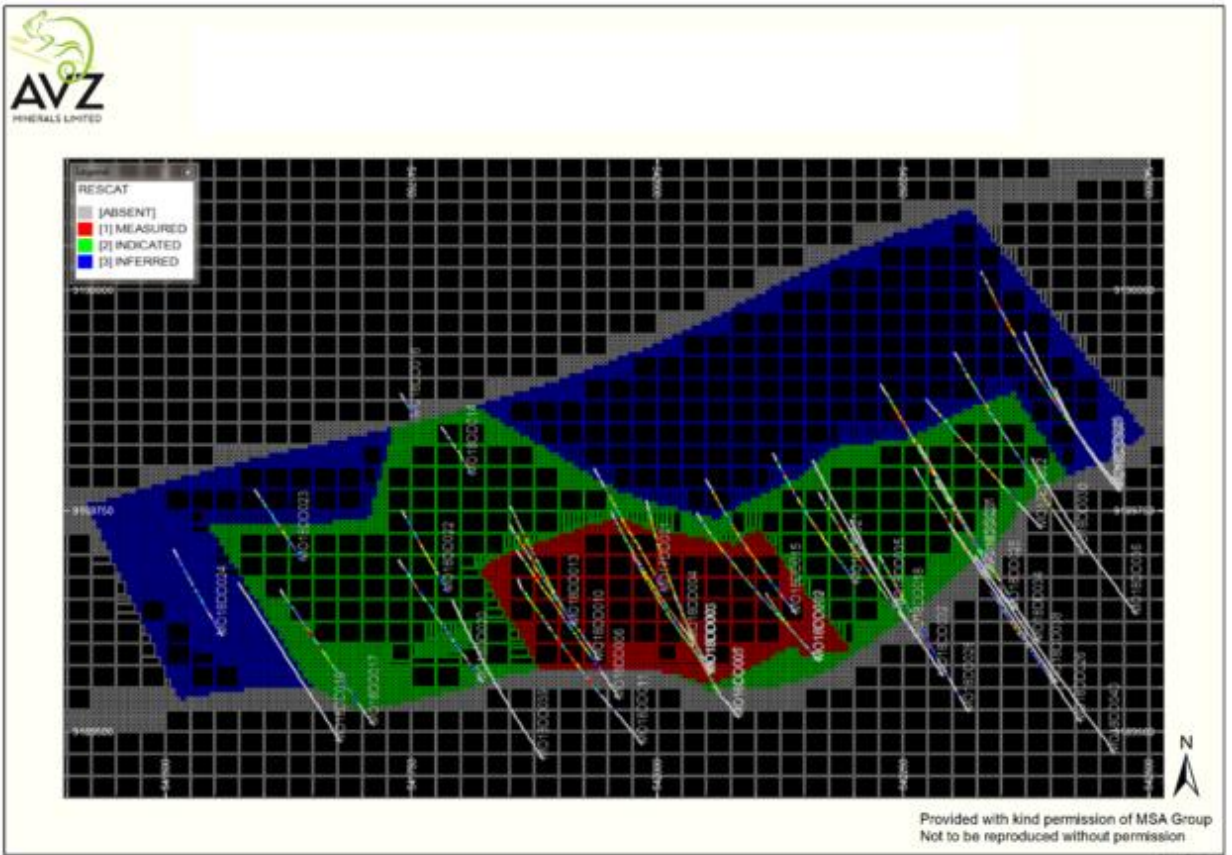


Figure 3. Plan view of the classification of the Roche Dure Mineral Resource Block Model at 570m elevation

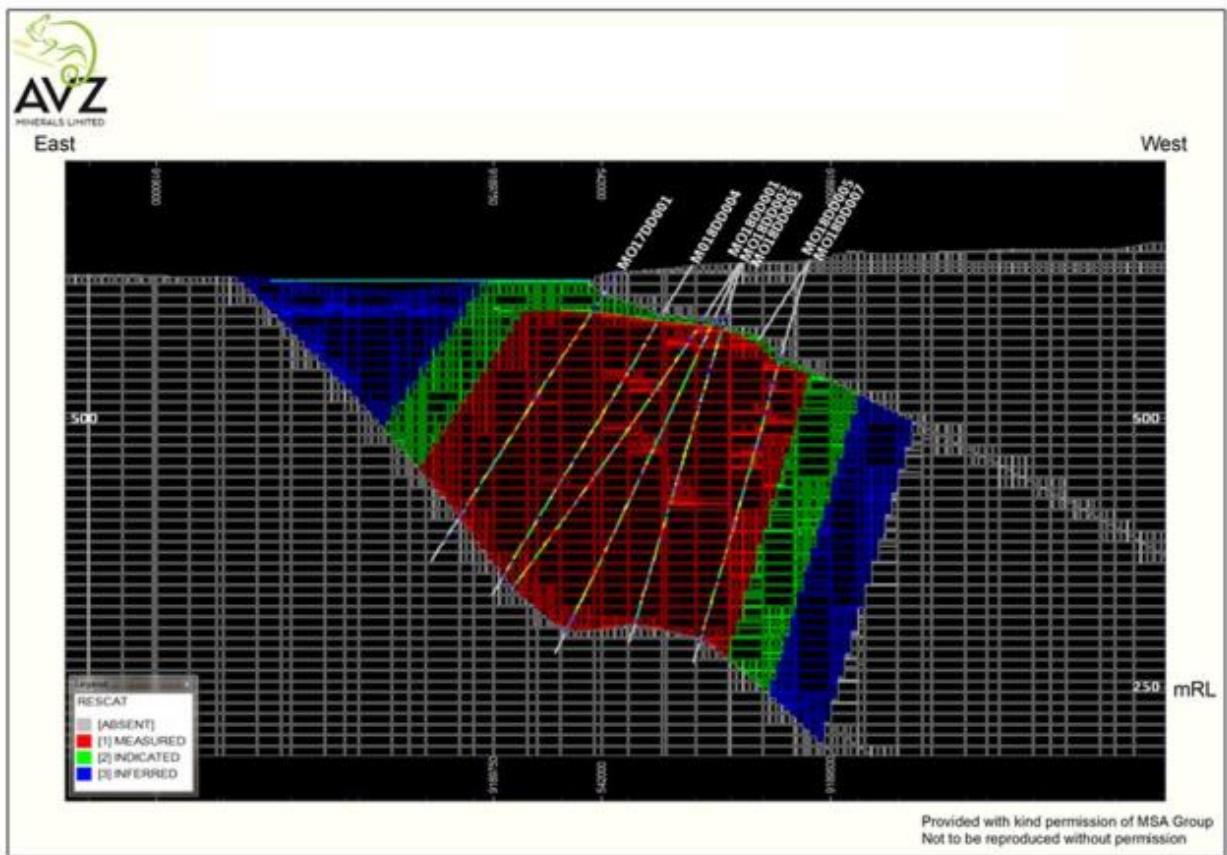


Figure 4. Sectional view of the classification of the Roche Dure Mineral Resource (Section 7000)

The Mineral Resource is classified as Measured where blocks have been estimated within the first search volume (derived from Li<sub>2</sub>O% semi-variogram range), are within the drill-hole spacing of 100 m by 50 m, and are not extrapolated more than 25 m down-dip of assay data. Indicated Mineral Resources are defined as those blocks estimated within the first or second search volume (double the Li<sub>2</sub>O% semi-variogram range), are within the drill-hole spacing of 100 m by 100 m and are not extrapolated more than 75 m away from assay data. Inferred Mineral Resources are limited within 125 m of drilling data and are mostly estimated within the second search volume.

The maximum depth of the Mineral Resource is approximately 475 m below surface, beneath which there is insufficient information from which to model the mineralisation and it can be considered open at depth. Lower-grade domains such as the Weathered Pegmatite, Internal Low-grade Pegmatite and Low-grade Footwall Contact Pegmatite have not been reported as Mineral Resources due to the low grade within these.

### Deleterious Elements

Deleterious elements namely iron, phosphorous and fluorine are contained within minerals like in apatite, lithium micas and black tourmaline which are accessory minerals within the pegmatite. Trace amounts of iron can also be included in spodumene crystals. In addition to Sn, Ta<sub>2</sub>O<sub>5</sub> and Li<sub>2</sub>O, MSA has also estimated the Fe<sub>2</sub>O<sub>3</sub> as it is a potential deleterious element in the production of spodumene concentrates for the glass and ceramics industry.

On 21<sup>st</sup> May 2018, AVZ announced that high-quality spodumene concentrate was successfully produced from bulk sample by Nagrom Laboratories in Perth, using simple flotation and magnetic separation. Additional test-work was completed on deleterious elements and all were found to be of low risk. (*Refer ASX Release 21<sup>st</sup> May 2018 titled Positive Preliminary Metallurgical Test Work Results for Manono Lithium Project*)

Concentrations of deleterious elements are:

Component	Mean Concentration	Majority composition
<b>Iron (iii) oxide (Fe<sub>2</sub>O<sub>3</sub>)</b>	0.90%	80% of samples from 0.63% - 1.17%
<b>Phosphorus (v) oxide (P<sub>2</sub>O<sub>5</sub>)</b>	0.31%	80% of samples from 0.18% - 0.46%
<b>Fluorine (F)</b>	998 ppm	70% of samples from 630 ppm – 1420 ppm

### Summary and Management Comment

**AVZ's Managing Director Mr Nigel Ferguson said:** "This maiden Mineral Resource represents a major step forward in the Company's plans to fast-track the development of the Project."

"This represents the culmination of a highly successful drilling program over a period of 7 months which clearly demonstrated the world-class scale, grade and potential of the Manono Lithium Project."

"We are encouraged by the results of the drilling which is continuing at the moment, but which couldn't be included in this Mineral Resource. This work has clearly demonstrated that Manono will continue to grow significantly and is underpinned by the maiden Mineral Resource."

“We can now fast-track a Feasibility Study with the intention to progress into production as quickly as possible. Key elements of this work are already well underway and we look forward to providing further information going forward.”

The next phase of drilling planned for the second half of 2018 totals some 70 planned drill holes for approximately 20,000m dependent on pegmatite thickness. This program includes step-out and in-fill drilling covering the northern extension to the Roche Dure pegmatite, the Mpete and Tempete pegmatites covering a strike length of over 4km and initial drilling of the Carrier de L’Est pegmatite over an approximate strike length of some 2km. The current Mineral Resource covers only 980m of the overall strike potential of the Roche Dure pegmatite as previously defined through rock chip sampling and mapping.

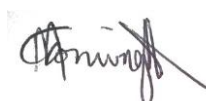
### Competent Persons Statement

The information in this document to which this statement is attached that relates to the estimation and reporting of the Roche Dure Mineral Resource at the Manono Lithium Project, is based upon information compiled by Mr Anton Geldenhuys. Mr Geldenhuys (BSc Hons, MEng) who is a geologist with 17 years’ experience in exploration and mining as well as Mineral Resource evaluation and reporting. He is a Principal Mineral Resource Consultant with The MSA Group (an independent consulting company), is a member in good standing with the South African Council for Natural Scientific Professions (SACNASP 400313/04) and is a Member of the Geological Society of South Africa (GSSA 965136). Mr Geldenhuys has the appropriate relevant qualifications and experience to be considered a Competent Person for the activity being undertaken as defined in the 2012 edition of the JORC Code. Mr Geldenhuys consents to the inclusion in the report of matters based on his information in the form and context in which it appears.

The information in the document to which this statement is attached that relates to the geology of the Roche Dure pegmatite is based upon information compiled by Mr Michael Cronwright, who is a fellow of The Geological Society of South Africa and Pr. Sci. Nat. (Geological Sciences) registered with the South African Council for Natural Professions. Mr Cronwright is a Principal Consultant with The MSA Group (Pty) Ltd (an independent consulting company). Mr Cronwright has sufficient experience relevant to the style of mineralisation and type of deposit under consideration and to the activity he is undertaking to qualify as a Competent Person as defined in the 2012 edition of the JORC Code. Mr Cronwright consents to the inclusion in the report of matters based on his information in the form and context in which it appears.

On behalf of:

### THE MSA GROUP



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Michael Cronwright Pr. Sci. Nat.

**Principal Consultant – The MSA Group**



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Anton Geldenhuys Pr. Sci. Nat.

**Principal Mineral Resource Consultant – The MSA Group**



For further information, visit [www.avzminerals.com.au](http://www.avzminerals.com.au) or contact:

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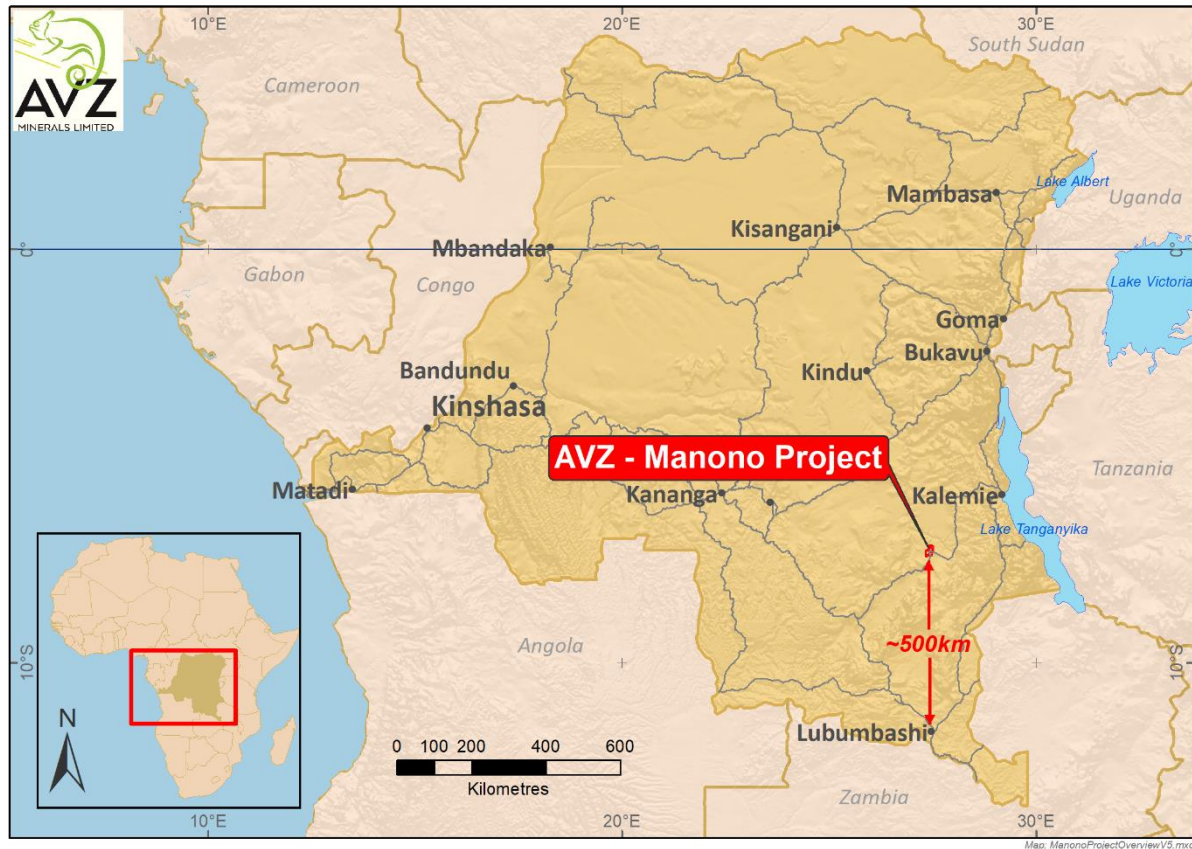


Figure 5 – Location Plan of Manono Lithium Project

## JORC TABLE 1

<p><b>Section 1 Sampling Techniques and Data</b> (Criteria in this section apply to all succeeding sections.)</p>
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Criteria	JORC Code explanation	Commentary
<p><i>Sampling techniques</i></p>	<ul style="list-style-type: none"> <li>• <i>Nature and quality of sampling (e.g. cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling.</i></li> <li>• <i>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</i></li> <li>• <i>Aspects of the determination of mineralisation that are Material to the Public Report.</i></li> <li>• <i>In cases where 'industry standard' work has been done this would be relatively simple (e.g. 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (e.g. submarine nodules) may warrant disclosure of detailed information.</i></li> </ul>	<ul style="list-style-type: none"> <li>• Diamond drilling, producing drill core has been utilised to sample the pegmatite below ground surface. This method is recognised as providing the highest quality information and samples of the unexposed geology.</li> <li>• Supplementing the drilling data, surface samples were collected from outcrops, utilising channel sampling from trenches and point-source sampling of scattered outcrops. Due to the known limitations of data derived from these types of samples, the data has not been incorporated in defining the Mineral Resource.</li> <li>• Based on available data, there is nothing to indicate that drilling and sampling practices were not to normal industry standards at the time within the Manono licence PR13359. The pegmatite has been sampled from the hanging wall contact continuously through to the footwall contact. In addition, the host-rocks extending 2 m from the contacts have also been sampled.</li> <li>• Diamond drilling has been used to obtain core samples which have then been cut longitudinally. Intervals submitted for assay have been determined according to geological boundaries. Samples were taken at 1 m intervals.</li> <li>• The submitted half-core samples typically had a mass of 3 – 4 kg.</li> </ul>
<p><i>Drilling techniques</i></p>	<ul style="list-style-type: none"> <li>• <i>Drill type (e.g. core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (e.g. core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc).</i></li> </ul>	<ul style="list-style-type: none"> <li>• The drilling was completed using diamond core rigs with PQ used from surface to sample through to fresh-rock and HQ sized drill rods used after the top-of-fresh-rock had been intersected. Most holes are angled between 50° and 75° and collared from surface into weathered bedrock. All collars were surveyed after completion. All holes were downhole surveyed using a digital multi-shot camera at about 30 m intervals. Apart from drillholes MO17DD001, MO17DD002, MO18DD001 and MO18DD008, all core was oriented.</li> </ul>
<p><i>Drill sample recovery</i></p>	<ul style="list-style-type: none"> <li>• <i>Method of recording and assessing core and chip sample recoveries and results assessed.</i></li> <li>• <i>Measures taken to maximise sample recovery and ensure representative nature of the samples.</i></li> <li>• <i>Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.</i></li> </ul>	<ul style="list-style-type: none"> <li>• Drill core recovery attained &gt;97% in the pegmatite.</li> <li>• Based upon the high recovery, AVZ did not have to implement additional measures to improve sample recovery and the drill core is considered representative and fit for sampling.</li> <li>• For the vast majority of drilling completed, core recovery was near 100% and there is no sample bias due to preferential loss or gain of fine or coarse material.</li> </ul>

Criteria	JORC Code explanation	Commentary
Logging	<ul style="list-style-type: none"> <li>• 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.</li> <li>• Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.</li> <li>• The total length and percentage of the relevant intersections logged.</li> </ul>	<ul style="list-style-type: none"> <li>• Drill core was logged by qualified geologists using a data-logger and the logs were then uploaded into Geobank which is a part of the Micromine software system. The core was logged for geology and geotechnical properties (RQD &amp; planar orientations). A complete copy of the data is held by an independent consultant. The parameters recorded in the logging are adequate to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.</li> <li>• All core was logged, and logging was by qualitative (lithology) and quantitative (RQD and structural features) methods. All core was also photographed both in dry and wet states, with the photographs stored in the database.</li> <li>• The entirety of all drillholes are logged for geological, mineralogical and geotechnical data.</li> </ul>
Sub-sampling techniques and sample preparation	<ul style="list-style-type: none"> <li>• If core, whether cut or sawn and whether quarter, half or all core taken.</li> <li>• If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.</li> <li>• For all sample types, the nature, quality and appropriateness of the sample preparation technique.</li> <li>• Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</li> <li>• Measures taken to ensure that the sampling is representative of the in situ material collected, including for instance results for field duplicate/second-half sampling.</li> <li>• Whether sample sizes are appropriate to the grain size of the material being sampled.</li> </ul>	<ul style="list-style-type: none"> <li>• Core is cut longitudinally, and half-core samples of a nominal 1 m length are submitted for assay.</li> <li>• The current programme is diamond core drilling.</li> <li>• The sample preparation for drill core samples incorporates standard industry practice. The half-core samples have been prepared at ALS Lubumbashi and the ALS sample preparation facility on site at Manono, with holes from MO18DD021 onwards being prepared at Manono.</li> <li>• At AVZ's onsite sample preparation facility the half-core samples of approximately 4-5 kg are oven dried, crushed to -2 mm with a 500 g sub-sample being split out. This 500 g sub-sample is then pulverised to produce a pulp with 85% passing -75um size fraction. A 120 g subsample is then split from this, the certified reference material, blanks and duplicates are inserted at appropriate intervals and then the complete sample batch is couriered to Australia for assay analysis.</li> <li>• Standard sub-sampling procedures are utilised by ALS Lubumbashi and ALS Manono at all stages of sample preparation such that each sub-sample split is representative of the whole it was derived from.</li> <li>• Duplicate sampling was undertaken for the drilling programme. After half-core samples were crushed at the ALS Lubumbashi and ALS Manono preparatory facility, an AVZ geologist took a split of the crushed sample which is utilised as a field duplicate. The geologist placed the split into a pre-numbered bag which was then inserted into the sample stream. It is then processed further, along with all the other samples. The drilling produced PQ and HQ drill core, providing a representative sample of the pegmatite which is coarse-grained. Sampling was mostly at 1 m intervals, and the submitted half-core samples typically had a mass of 3-4 kg.</li> </ul>

Criteria	JORC Code explanation	Commentary
<p>Quality of assay data and laboratory tests</p>	<ul style="list-style-type: none"> <li>• <i>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</i></li> <li>• <i>For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.</i></li> <li>• <i>Nature of quality control procedures adopted (e.g. standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (i.e. lack of bias) and precision have been established.</i></li> </ul>	<ul style="list-style-type: none"> <li>• Diamond drillhole (core) samples were submitted to ALS Lubumbashi and ALS Manono (DRC) where they were crushed and pulverised to produce pulps. These pulps were couriered to Australia and analysed by ALS Laboratories in Perth, Western Australia using a sodium peroxide fusion of a 5g charge followed by digestion of the prill using dilute hydrochloric acid thence determination by AES or MS, i.e. methods ME-ICP89 and ME-MS91. Samples from the drilling completed in 2017 i.e. MO17DD001 and MO17DD002, were assayed for a suite of 24 elements that included Li, Sn, Ta &amp; Nb. Samples from the drilling completed in 2018 were assayed for a suite of 12 elements; Li, Sn, Ta, Nb, Al, Si, K, Fe, Mg, P, Th and U, with Li reported as Li<sub>2</sub>O, Al as Al<sub>2</sub>O<sub>3</sub>, Si as SiO<sub>2</sub>, K as K<sub>2</sub>O, Mg as MgO, Fe as Fe<sub>2</sub>O<sub>3</sub> and P as P<sub>2</sub>O<sub>5</sub>.</li> <li>• Peroxide fusion results in the complete digestion of the sample into a molten flux. As fusion digestions are more aggressive than acid digestion methods, they are suitable for many refractory, difficult-to-dissolve minerals such as chromite, ilmenite, spinel, cassiterite and minerals of the tantalum-tungsten solid solution series. They also provide a more-complete digestion of some silicate mineral species and are considered to provide the most reliable determinations of lithium mineralisation.</li> <li>• Sodium peroxide fusion is a total digest and considered the preferred method of assaying pegmatite samples.</li> <li>• Geophysical instruments were not used in assessing the mineralisation.</li> <li>• For the drilling, AVZ incorporated standard QAQC procedures to monitor the precision, accuracy and general reliability of all assay results from assays of drilling samples. As part of AVZ's sampling protocol, CRMs (standards), blanks and duplicates were inserted into the sampling stream. In addition, the laboratory (ALS Perth) incorporated its own internal QAQC procedures to monitor its assay results prior to release of results to AVZ. The Competent Person is satisfied that the results of the QAQC are acceptable and that the assay data from ALS is suitable for Mineral Resource estimation.</li> <li>• AVZ utilised Nagrom in Perth as a secondary umpire laboratory for external laboratory checks to compare results received from ALS Perth. The Competent Person is satisfied that the results from the umpire laboratory are acceptable and that the assay data from ALS is suitable for Mineral Resource estimation.</li> </ul>

Criteria	JORC Code explanation	Commentary
Verification of sampling and assaying	<ul style="list-style-type: none"> <li>• <i>The verification of significant intersections by either independent or alternative company personnel.</i></li> <li>• <i>The use of twinned holes.</i></li> <li>• <i>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</i></li> <li>• <i>Discuss any adjustment to assay data.</i></li> </ul>	<ul style="list-style-type: none"> <li>• MSA observed the mineralisation in the majority of cores on site, although no check assaying was completed by MSA.</li> <li>• MSA observed and photographed several collar positions in the field, along with rigs that were drilling at the time of the site visit.</li> <li>• Twinned holes for the verification of historical drilling, were not required. Short vertical historical holes were drilled within the pit but are neither accessible nor included within the database used to define the Mineral Resource.</li> <li>• Drilling data is stored on site as both hard and soft copy. Drilling data is validated onsite before being sent to data management consultants in Perth where the data is further validated. When results are received they are loaded to the central database in Perth and shared with various stakeholders via the cloud. QC results are reviewed by both independent consultants and AVZ personnel at Manono. Hard copies of assay certificates are stored in AVZ's Perth offices.</li> <li>• AVZ has not adjusted assay data.</li> </ul>
Location of data points	<ul style="list-style-type: none"> <li>• <i>Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.</i></li> <li>• <i>Specification of the grid system used.</i></li> <li>• <i>Quality and adequacy of topographic control.</i></li> </ul>	<ul style="list-style-type: none"> <li>• The drillhole collars have been located by a registered surveyor using a Hi-Target V30 Trimble differential GPS with an accuracy of +/- 0.02 m.</li> <li>• All holes were downhole surveyed using a digital multi-shot camera at approximately 30 m intervals.</li> <li>• MSA produced a topographic surface which was based on 2 m contours supplied by iSpatial in Australia. The contours were generated from a digital terrain model which used ellipsoid values only (no geoid correction was applied).</li> <li>• For the purposes of geological modelling and estimation, the drillhole collars were projected onto this topographic surface. In most cases adjustments were within 1 m (in elevation).</li> <li>• Coordinates are relative to WGS 84 UTM Zone 35M.</li> </ul>
Data spacing and distribution	<ul style="list-style-type: none"> <li>• <i>Data spacing for reporting of Exploration Results.</i></li> <li>• <i>Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied.</i></li> <li>• <i>Whether sample compositing has been applied.</i></li> </ul>	<ul style="list-style-type: none"> <li>• Drillhole spacing was completed on sections 100 m apart, and collars were 50 to 100 m apart on section where possible. In situations of difficult terrain, multiple holes were drilled from a single drill pad using differing angles for each drillhole.</li> <li>• In the Competent Person's opinion, the spacing is sufficient to establish geological and grade continuity consistent with Measured, Indicated and Inferred Mineral Resources.</li> <li>• Samples were composited to 3 m intervals (smallest modelling unit) for geological modelling and grade estimation.</li> </ul>

Criteria	JORC Code explanation	Commentary
<i>Orientation of data in relation to geological structure</i>	<ul style="list-style-type: none"> <li>• <i>Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.</i></li> <li>• <i>If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.</i></li> </ul>	<ul style="list-style-type: none"> <li>• The drillhole orientation is designed to intersect the Roche Dure Pegmatite at, or nearly at, 90° to the plane of the pegmatite.</li> <li>• No material sampling bias exists due to drilling direction.</li> </ul>
<i>Sample security</i>	<ul style="list-style-type: none"> <li>• <i>The measures taken to ensure sample security.</i></li> </ul>	<ul style="list-style-type: none"> <li>• When utilizing ALS Lubumbashi, chain of custody is maintained by AVZ personnel on-site to Lubumbashi. Samples are stored on-site until they are delivered by AVZ personnel in sealed bags to the laboratory at ALS in Lubumbashi. The ALS laboratory checked received samples against the sample dispatch form and issues a reconciliation report.</li> <li>• At Lubumbashi, the prepared samples (pulp) are sealed in a box and delivered by DHL to ALS Perth.</li> <li>• ALS issue a reconciliation of each sample batch, actual received vs documented dispatch.</li> <li>• The ALS Manono site preparation facility is managed independently by ALS who supervise the sample preparation. Prepared samples are sealed in boxes and transported by air to ALS Lubumbashi and are accompanied by an AVZ employee, where export documentation and formalities are concluded. DHL couriers the samples to ALS in Perth.</li> </ul>
<i>Audits or reviews</i>	<ul style="list-style-type: none"> <li>• <i>The results of any audits or reviews of sampling techniques and data.</i></li> </ul>	<ul style="list-style-type: none"> <li>• The sampling techniques were reviewed by the Competent Person during the site visit.</li> <li>• The Competent Person considers that the exploration work conducted by AVZ was carried out using appropriate techniques for the style of mineralisation at Roche Dure, and that the resulting database is suitable for Mineral Resource estimation.</li> </ul>

## Section 2 Reporting of Exploration Results

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

Criteria	JORC Code explanation	Commentary
<i>Mineral tenement and land tenure status</i>	<ul style="list-style-type: none"> <li>• <i>Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.</i></li> <li>• <i>The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area.</i></li> </ul>	<ul style="list-style-type: none"> <li>• The Manono licence was awarded as Research Permit PR13359, issued on the 28<sup>th</sup> December 2016 to o La Congolaise d'Exploitation Miniere SA (Cominiere). It is valid for 5 years. On the 2<sup>nd</sup> February 2017, AVZ formed a joint-venture (JV) with Cominiere and Dathomir Mining Resources SARL (Dathomir) to become the majority partner in a JV aiming to explore and develop the pegmatites contained within PR 13359. Ownership of the Manono Lithium Project is AVZ 60%, Cominiere 30% and Dathomir 10%.</li> <li>• AVZ manages the project and meets all funding requirements.</li> <li>• All indigenous title is cleared and there are no other known historical or environmentally sensitive areas.</li> </ul>
<i>Exploration done by other parties</i>	<ul style="list-style-type: none"> <li>• <i>Acknowledgment and appraisal of exploration by other parties.</i></li> </ul>	<ul style="list-style-type: none"> <li>• Within PR13359 exploration of relevance was undertaken by Geomines whom completed a programme of drilling between 1949 and 1951. The drilling consisted of 42 vertical holes drilled to a general depth of around 50 - 60 m. Drilling was carried out on 12 sections at irregular intervals ranging from 50 - 300 m, and over a strike length of some 1,100 m. Drill spacing on the sections varied from 50 - 100 m. The drilling occurred in the Roche Dure Pit only, targeting the fresh pegmatite in the Kitotolo sector of the project area.</li> <li>• The licence area has been previously mined for tin and tantalum through a series of open pits over a total length of approximately 10 km excavated by Zairetain SPRL. More than 60 Mt of material was mined from three major pits and several subsidiary pits focused on the weathered upper portions of the pegmatites. Ore was crushed and then upgraded through gravity separation to produce a concentrate of a reported 72% Sn. There are no reliable records available of tantalum or lithium recovery as tin was the primary mineral being recovered.</li> <li>• Apart from the mining excavations and the drilling programme, there has been very limited exploration work within the Manono region.</li> </ul>

Criteria	JORC Code explanation	Commentary
Geology	<ul style="list-style-type: none"> <li>• <i>Deposit type, geological setting and style of mineralisation.</i></li> </ul>	<ul style="list-style-type: none"> <li>• The Project lies within the mid-Proterozoic Kibaran Belt - an intracratonic domain, stretching for over 1,000 km through Katanga and into southwest Uganda. The belt strikes predominantly SW-NE and is truncated by the N-S to NNW-SSE trending Western Rift system. The Kibaran Belt is comprised of a sedimentary and volcanic sequence that has been folded, metamorphosed and intruded by at least three separate phases of granite. The latest granite phase (900 to 950 million years ago) is assigned to the Katangan cycle and is associated with widespread vein and pegmatite mineralisation containing tin, tungsten, tantalum, niobium, lithium and beryllium. Deposits of this type occur as clusters and are widespread throughout the Kibaran terrain. In the DRC, the Katanga Tin Belt stretches over 500 km from near Kolwezi in the southwest to Kalemie in the northeast comprising numerous occurrences and deposits of which the Manono deposit is the largest. The geology of the Manono area is poorly documented and no reliable maps of local geology were observed. Recent mapping by AVZ has augmented the overview provided by Bassot and Morio (1989) and has led to the following description. The Manono Project pegmatites are hosted by a series of mica schists and by amphibolite in some locations. These host rocks have a steeply dipping penetrative foliation that appears to be parallel to bedding. There are numerous bodies of pegmatite, the largest of which have sub-horizontal to moderate dips, with dip direction being towards the southeast. The pegmatites post-date metamorphism, with all primary igneous textures intact. They cross-cut the host rocks but despite their large size, the contact deformation and metasomatism of the host rocks by the intrusion of the pegmatites seems minor. The absence of significant deformation of the schistosity of the host rocks implies that the pegmatites intruded brittle rocks. The pegmatites constitute a pegmatite swarm in which the largest pegmatites have an apparent en-echelon arrangement in a linear zone more than 12 km long. The pegmatites are exposed in two areas; Manono in the northeast, and Kitotolo in the southwest. These areas are separated by a 2.5 km section of alluvium-filled floodplain which contains Lake Lukushi. At least one large pegmatite extends beneath the floodplain. The pegmatites are members of the LCT-Rare Element group of pegmatites and within the pegmatite swarm there are LCT albite-spodumene pegmatites and LCT Complex (spodumene sub-type) pegmatites.</li> </ul>



Criteria	JORC Code explanation	Commentary
<i>Drill hole Information</i>	<ul style="list-style-type: none"> <li>• <i>A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes:</i> <ul style="list-style-type: none"> <li>○ <i>easting and northing of the drill hole collar</i></li> <li>○ <i>elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar</i></li> <li>○ <i>dip and azimuth of the hole</i></li> <li>○ <i>down hole length and interception depth</i></li> <li>○ <i>hole length.</i></li> </ul> </li> <li>• <i>If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case.</i></li> </ul>	<ul style="list-style-type: none"> <li>• See table in Appendix 1.</li> </ul>
<i>Data aggregation methods</i>	<ul style="list-style-type: none"> <li>• <i>In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (e.g. cutting of high grades) and cut-off grades are usually Material and should be stated.</i></li> <li>• <i>Where aggregate intercepts incorporate short lengths of high grade results and longer lengths of low grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail.</i></li> <li>• <i>The assumptions used for any reporting of metal equivalent values should be clearly stated.</i></li> </ul>	<ul style="list-style-type: none"> <li>• Exploration Results are not reported, therefore no data was aggregated for reporting purposes.</li> <li>• No equivalent values are used or reported.</li> </ul>
<i>Relationship between mineralisation widths and intercept lengths</i>	<ul style="list-style-type: none"> <li>• <i>These relationships are particularly important in the reporting of Exploration Results.</i></li> <li>• <i>If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</i></li> <li>• <i>If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (e.g. 'down hole length, true width not known').</i></li> </ul>	<ul style="list-style-type: none"> <li>• Exploration Results are not reported.</li> <li>• There is no relationship between mineralisation width and grade.</li> <li>• The geometry of the mineralisation is reasonably well understood however the pegmatite is not of uniform thickness nor orientation. Consequently, most drilling intersections do not represent the exact true thickness of the intersected pegmatite, although intersections are reasonably close to true thickness in most cases.</li> </ul>
<i>Diagrams</i>	<ul style="list-style-type: none"> <li>• <i>Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views.</i></li> </ul>	<ul style="list-style-type: none"> <li>• The relevant plans and sections are included in this document and in Appendix 2.</li> </ul>
<i>Balanced reporting</i>	<ul style="list-style-type: none"> <li>• <i>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.</i></li> </ul>	<ul style="list-style-type: none"> <li>• Exploration Results are not reported.</li> </ul>
<i>Other substantive exploration data</i>	<ul style="list-style-type: none"> <li>• <i>Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.</i></li> </ul>	<ul style="list-style-type: none"> <li>• No other exploration data is available.</li> </ul>

Criteria	JORC Code explanation	Commentary
<i>Further work</i>	<ul style="list-style-type: none"> <li>• <i>The nature and scale of planned further work (e.g. tests for lateral extensions or depth extensions or large-scale step-out drilling).</i></li> <li>• <i>Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.</i></li> </ul>	<ul style="list-style-type: none"> <li>• Diamond drill testing of the identified priority targets will be on-going.</li> </ul>

**Section 3 Estimation and Reporting of Mineral Resources**  
(Criteria listed in section 1, and where relevant in section 2, also apply to this section.)

Criteria	JORC Code explanation	Commentary
<i>Database integrity</i>	<ul style="list-style-type: none"> <li>• <i>Measures taken to ensure that data has not been corrupted by, for example, transcription or keying errors, between its initial collection and its use for Mineral Resource estimation purposes.</i></li> <li>• <i>Data validation procedures used.</i></li> </ul>	<ul style="list-style-type: none"> <li>• The geology, grade and SG data were checked by the Competent Person.</li> <li>• The data validation process used during Mineral Resource estimation consisted of:               <ul style="list-style-type: none"> <li>○ Examination of the assay, collar survey, downhole survey and geology data to ensure that the data were complete and usable for all drillholes. Assay data is outstanding for eleven of the later drillholes with these samples either currently being prepared, shipped or analysed.</li> <li>○ Examination of the desurveyed data in three dimensions to check for spatial errors.</li> <li>○ Examination of the assay data in order to ascertain whether they were within expected ranges.</li> <li>○ Checks for "FROM-TO" errors, to ensure that the sample data did not overlap one another or that there were no unexplained gaps between samples.</li> </ul> </li> </ul>
<i>Site visits</i>	<ul style="list-style-type: none"> <li>• <i>Comment on any site visits undertaken by the Competent Person and the outcome of those visits.</i></li> <li>• <i>If no site visits have been undertaken indicate why this is the case.</i></li> </ul>	<ul style="list-style-type: none"> <li>• The Competent Person conducted a site inspection in April 2018 in order to inspect the cores, review the exploration processes and further his understanding of the Roche Dure mineralisation. The Competent Person considers that the exploration work conducted by AVZ was carried out using appropriate techniques for the style of mineralisation.</li> </ul>
<i>Geological interpretation</i>	<ul style="list-style-type: none"> <li>• <i>Confidence in (or conversely, the uncertainty of) the geological interpretation of the mineral deposit.</i></li> <li>• <i>Nature of the data used and of any assumptions made.</i></li> <li>• <i>The effect, if any, of alternative interpretations on Mineral Resource estimation.</i></li> <li>• <i>The use of geology in guiding and controlling Mineral Resource estimation.</i></li> <li>• <i>The factors affecting continuity both of grade and geology.</i></li> </ul>	<ul style="list-style-type: none"> <li>• The quantity and spacing of drilling is sufficient to define the shape and extents of the pegmatite to a high level of confidence.</li> <li>• Where drilling is sparse i.e. below the historically mined pit, surface mapping was used to constrain the interpretation of the pegmatite outcrop on surface. In the pit area, shallow holes were not possible since the pit is currently filled with water.</li> <li>• Geological logging and assay data were used to define estimation domains within the pegmatite i.e. Weathered Pegmatite, Fresh Pegmatite, Low-grade Footwall Contact Pegmatite and Internal Low-grade Pegmatite.</li> <li>• Geological logging was used to define the host rock domains i.e. Overburden, Hangingwall and Footwall.</li> <li>• No alternative geological models are likely given the geological and grade continuity of the pegmatite.</li> </ul>

Criteria	JORC Code explanation	Commentary
<i>Dimensions</i>	<ul style="list-style-type: none"> <li><i>The extent and variability of the Mineral Resource expressed as length (along strike or otherwise), plan width, and depth below surface to the upper and lower limits of the Mineral Resource.</i></li> </ul>	<ul style="list-style-type: none"> <li>The area defined as a Mineral Resource extends approximately 980 m along strike by 600 m on dip and is limited by data extents to a maximum depth of 475 m below surface.</li> <li>The Mineral Resource is between approximately 250 m and 300 m thick.</li> <li>The Roche Dure Pegmatite dips approximately 45° to the southeast and outcrops on surface within the Manono project area.</li> <li>The pegmatite is weathered to varying depths from 0 – 100 m below surface.</li> </ul>

Criteria	JORC Code explanation	Commentary
<p>Estimation and modelling techniques</p>	<ul style="list-style-type: none"> <li>• 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.</li> <li>• The availability of check estimates, previous estimates and/or mine production records and whether the Mineral Resource estimate takes appropriate account of such data.</li> <li>• The assumptions made regarding recovery of by-products.</li> <li>• Estimation of deleterious elements or other non-grade variables of economic significance (e.g. sulphur for acid mine drainage characterisation).</li> <li>• In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed.</li> <li>• Any assumptions behind modelling of selective mining units.</li> <li>• Any assumptions about correlation between variables.</li> <li>• Description of how the geological interpretation was used to control the resource estimates.</li> <li>• Discussion of basis for using or not using grade cutting or capping.</li> <li>• The process of validation, the checking process used, the comparison of model data to drill hole data, and use of reconciliation data if available.</li> </ul>	<ul style="list-style-type: none"> <li>• Leapfrog Geo 4.2.3 was used to model the geology and weathering state.</li> <li>• Datamine Studio 3 was used to estimate grades.</li> <li>• Samples were composited to 3 m intervals using length weighting.</li> <li>• The geological wireframes were filled with blocks of 25 mN by 25mE by 10 mRL and coded according to the geological zone.</li> <li>• The parent block size is approximately half of the drillhole spacing in the well drilled area.</li> <li>• The blocks were sub-celled to a minimum of 5 mN by 5mE by 5 mRL to accurately fill the geological model.</li> <li>• The Weathered Pegmatite was estimated separately to the Fresh Pegmatite using hard boundaries due to distinct grade differences between the two domains.</li> <li>• An Li<sub>2</sub>O top cut was applied to the 3 m composites of the Weathered Pegmatite only, as the uncut values resulted in extensive areas being over-estimated. It is likely that these relatively high-grade composites in the Weathered Pegmatite are in blocks of unweathered Fresh Pegmatite included in the Weathered Pegmatite. Within the Weathered Pegmatite, a top cut of 1.0% Li<sub>2</sub>O was applied. The top cut affected 20 out of 171 composites. The original values of the affected 20 composites average 1.44% Li<sub>2</sub>O.</li> <li>• Li<sub>2</sub>O_pct, Al<sub>2</sub>O<sub>3</sub>_pct, Fe<sub>2</sub>O<sub>3</sub>_pct, K<sub>2</sub>O_pct, MgO_pct, P<sub>2</sub>O<sub>5</sub>_pct, SiO<sub>2</sub>_pct, Nb_ppm, Sn_ppm, Ta_ppm, Th_ppm, U_ppm were estimated into the block model.</li> <li>• The Li<sub>2</sub>O_pct and Sn_ppm grades were estimated into the Fresh Pegmatite domain using ordinary kriging, all other grades and domains were estimated using inverse distance weighting (power 2).</li> <li>• Search ellipses were roughly aligned with the range of the Li<sub>2</sub>O semi-variogram model and are within the maximum semi-variogram range.</li> <li>• The search ellipse was aligned in the plane of the pegmatite. A search distance of 100 m in the plane of mineralisation and 50 m across plane was used for all variables. A minimum of 6 and maximum of 15 composites were used to estimate a block. Should enough samples not be collected in the first search, then the search was expanded two times, and finally ten times to ensure all model blocks were estimated. The majority of the Mineral Resource is estimated within the first and second search volumes.</li> <li>• Estimates were validated using visual checks of the drillhole grades against the model and statistical comparisons of the input data and output estimated grades.</li> </ul>
<p>Moisture</p>	<ul style="list-style-type: none"> <li>• Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content.</li> </ul>	<ul style="list-style-type: none"> <li>• Tonnages are estimated on a dry basis.</li> </ul>

Criteria	JORC Code explanation	Commentary
<i>Cut-off parameters</i>	<ul style="list-style-type: none"> <li><i>The basis of the adopted cut-off grade(s) or quality parameters applied.</i></li> </ul>	<ul style="list-style-type: none"> <li>A cut-off grade of 0.5% Li<sub>2</sub>O has been applied for the reporting of the Mineral Resource. This is based on other hard rock lithium projects but will be required to be investigated in future through economic assessments.</li> <li>The parameters used in the assessment of Reasonable Prospects for Eventual Economic Extraction (RPEEE) are not definitive and should not be misconstrued as an attempt to estimate an Ore Reserve for which economic viability would be required to be demonstrated.</li> </ul>
<i>Mining factors or assumptions</i>	<ul style="list-style-type: none"> <li><i>Assumptions made regarding possible mining methods, minimum mining dimensions and internal (or, if applicable, external) mining dilution. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential mining methods, but the assumptions made regarding mining methods and parameters when estimating Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the mining assumptions made.</i></li> </ul>	<ul style="list-style-type: none"> <li>It is assumed that the Mineral Resource will be extracted using an open pit mining methodology.</li> <li>A high-level observation is that the entire Mineral Resource could likely be extracted from an open pit (45° slope angle) with a worst case waste:ore stripping ratio of 1:1. Due to this observation the Mineral Resource is reported to a depth of 475 m below surface as it is reasonable to expect economic extraction to this depth.</li> </ul>
<i>Metallurgical factors or assumptions</i>	<ul style="list-style-type: none"> <li><i>The basis for assumptions or predictions regarding metallurgical amenability. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential metallurgical methods, but the assumptions regarding metallurgical treatment processes and parameters made when reporting Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the metallurgical assumptions made.</i></li> </ul>	<ul style="list-style-type: none"> <li>Mineral characterisation and metallurgical studies have demonstrated that the economically significant lithium mineral present is spodumene, with negligible quantities of other lithium species present.</li> <li>Metallurgical test work was carried out on bulk samples derived from the complete Fresh Pegmatite intersections of drillholes, and tests can therefore be considered representative.</li> <li>Mineral characterisation work covered selected samples chosen to verify mineral species in, for example, varying grades of mineralisation, hydrothermally altered spodumene and greisen.</li> </ul>
<i>Environmental factors or assumptions</i>	<ul style="list-style-type: none"> <li><i>Assumptions made regarding possible waste and process residue disposal options. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider the potential environmental impacts of the mining and processing operation. While at this stage the determination of potential environmental impacts, particularly for a greenfields project, may not always be well advanced, the status of early consideration of these potential environmental impacts should be reported. Where these aspects have not been considered this should be reported with an explanation of the environmental assumptions made.</i></li> </ul>	<ul style="list-style-type: none"> <li>MSA is not aware of the details of any environmental studies that have been carried out.</li> </ul>

Criteria	JORC Code explanation	Commentary
<i>Bulk density</i>	<ul style="list-style-type: none"> <li>• <i>Whether assumed or determined. If assumed, the basis for the assumptions. If determined, the method used, whether wet or dry, the frequency of the measurements, the nature, size and representativeness of the samples.</i></li> <li>• <i>The bulk density for bulk material must have been measured by methods that adequately account for void spaces (vugs, porosity, etc), moisture and differences between rock and alteration zones within the deposit.</i></li> <li>• <i>Discuss assumptions for bulk density estimates used in the evaluation process of the different materials.</i></li> </ul>	<ul style="list-style-type: none"> <li>• To date 1,046 specific gravity (SG) determinations have been carried out on Roche Dure drill core.</li> <li>• Most of these determinations were done on Fresh Pegmatite material by the Archimedes principal of weighing the full assay sample (one metre) in air and then submerged in water.</li> <li>• A calliper was used to measure and calculate the volume of drill core that was too weathered to submerge in water. This material was then weighed in air and the density calculated from its volume and mass.</li> <li>• The average SG was calculated for each of the modelled domains and assigned in the block model for tonnage calculations.</li> </ul>
<i>Classification</i>	<ul style="list-style-type: none"> <li>• <i>The basis for the classification of the Mineral Resources into varying confidence categories.</i></li> <li>• <i>Whether appropriate account has been taken of all relevant factors (i.e. relative confidence in tonnage/grade estimations, reliability of input data, confidence in continuity of geology and metal values, quality, quantity and distribution of the data).</i></li> <li>• <i>Whether the result appropriately reflects the Competent Person's view of the deposit.</i></li> </ul>	<ul style="list-style-type: none"> <li>• The data that informs the grade estimate was derived from AVZ drillholes only and therefore no historical data is used. In the Competent Person's opinion, these data have been collected using industry acceptable practices and are reliable.</li> <li>• The Mineral Resource is classified as Measured where blocks: have been estimated within the first search volume (derived from Li2O% semi-variogram range), are within the drillhole spacing of 100 m by 50 m, and are not extrapolated more than 25 m downdip of assay data.</li> <li>• Indicated Mineral Resources are defined as those blocks estimated within the first or second search volume (double the Li2O% semi-variogram range), are within the drillhole spacing of 100 m by 100 m, and are not extrapolated more than 75 m away from assay data.</li> <li>• Inferred Mineral Resources are limited within 125 m of drilling data and are mostly estimated within the second search volume.</li> <li>• The classification reflects the Competent Persons view of the deposit.</li> </ul>
<i>Audits or reviews</i>	<ul style="list-style-type: none"> <li>• <i>The results of any audits or reviews of Mineral Resource estimates.</i></li> </ul>	<ul style="list-style-type: none"> <li>• The following review work was completed by MSA: <ul style="list-style-type: none"> <li>○ A site-based review of the drillhole data processes and data collection protocols,</li> <li>○ Inspection of the AVZ cores used in the Mineral Resource estimate,</li> <li>○ A complete inspection of all drilling data used in the Mineral Resource.</li> </ul> </li> </ul>

Criteria	JORC Code explanation	Commentary
<p><i>Discussion of relative accuracy/confidence</i></p>	<ul style="list-style-type: none"> <li>• <i>Where appropriate a statement of the relative accuracy and confidence level in the Mineral Resource estimate using an approach or procedure deemed appropriate by the Competent Person. For example, the application of statistical or geostatistical procedures to quantify the relative accuracy of the resource within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors that could affect the relative accuracy and confidence of the estimate.</i></li> <li>• <i>The statement should specify whether it relates to global or local estimates, and, if local, state the relevant tonnages, which should be relevant to technical and economic evaluation. Documentation should include assumptions made and the procedures used.</i></li> <li>• <i>These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.</i></li> </ul>	<ul style="list-style-type: none"> <li>• Quantification of relative accuracy was not carried out.</li> <li>• Due to the almost Gaussian distribution of Li<sub>2</sub>O grade values in the Fresh Pegmatite, it is reasonable to assume that the estimate of Li<sub>2</sub>O grades in the Fresh Pegmatite is highly accurate. This domain, which forms the majority of the Mineral Resource, displays a high level of stationarity not often seen in mineral deposits.</li> <li>• Caution should be placed on the Inferred estimates as they are based on limited data and are not suitable to support technical and economic studies at a Pre-Feasibility level.</li> <li>• Recoverable resource estimates were not carried out.</li> <li>• No production data are available as the deposit has not been mined.</li> </ul>



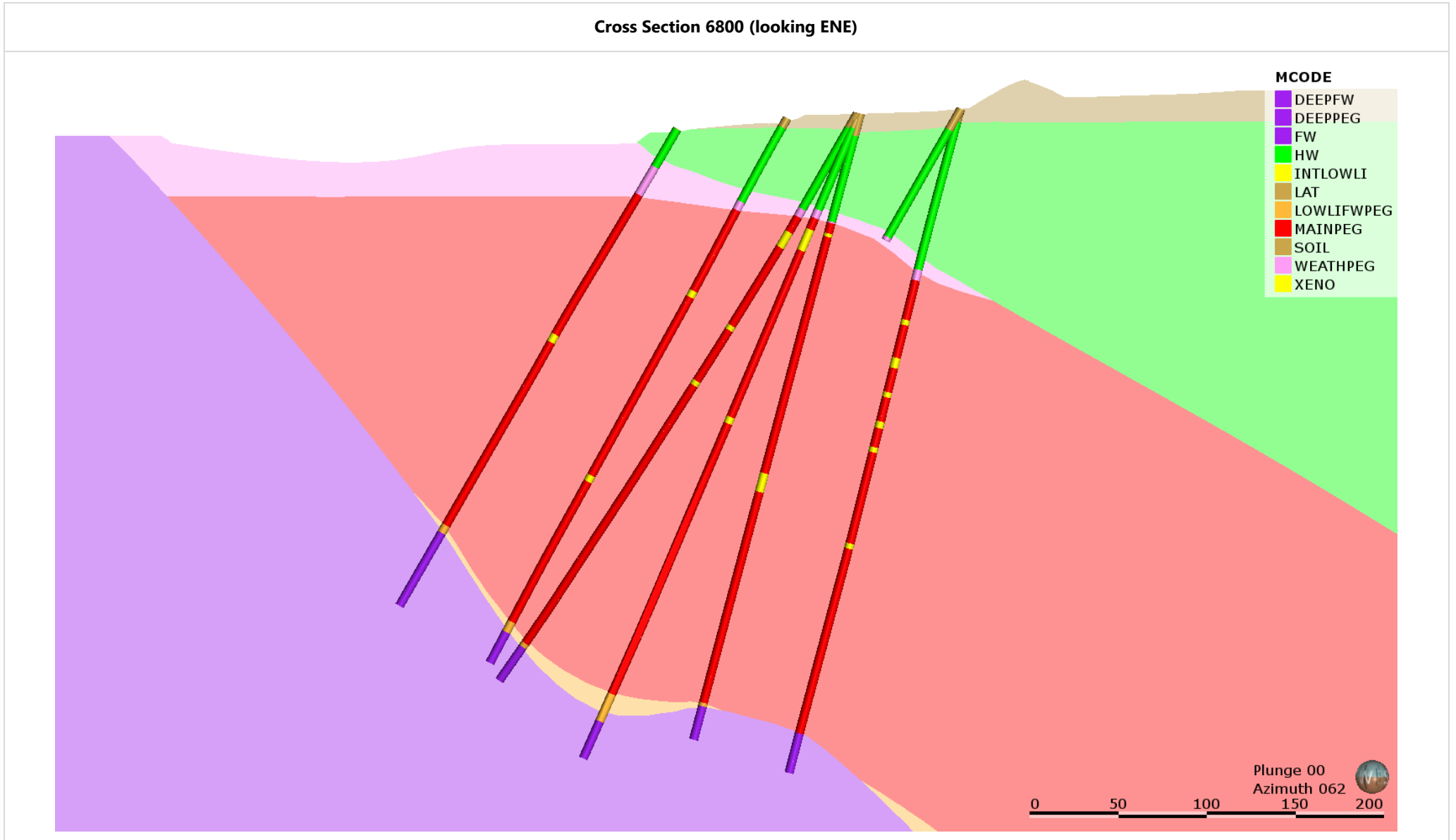
## Appendix 1: Drillhole Data

Drillhole	X coord UTM 35M	Y coord UTM 35M	Z coord UTM 35M	EOH metres	Azimuth degrees	Dip degrees	Weath_Peg modelled from	Weath_Peg modelled to	Fresh Peg modelled from	Fresh Peg modelled to	Comment
MO17DD001	542008.18	9189658.14	650.98	311.50	330	60	24.90	43.00	43.00	259.00	
MO17DD002	542390.56	9189730.54	657.37	300.70	320	50	73.85	76.00	76.00	300.70	Hole stopped in Fresh Pegmatite
MO18DD001	542054.05	9189567.51	645.17	380.00	336	60	62.00	67.00	67.00	354.00	
MO18DD002	542054.86	9189565.90	645.11	365.70	330	75	63.10	64.00	64.00	344.00	
MO18DD003	542054.43	9189566.64	645.17	395.81	325	67	59.01	64.11	64.11	356.00	
MO18DD004	542036.30	9189602.84	642.16	350.20	325	60	54.00	59.20	59.20	330.50	
MO18DD005	542082.19	9189516.12	646.78	85.50	325	60	83.50	85.50			Hole stopped in Weathered Pegmatite
MO18DD006	541961.35	9189537.00	645.69	386.73	330	60			81.00	359.00	No Weathered Pegmatite intersected
MO18DD007	542082.96	9189516.99	646.87	387.00	325	75	93.70	100.00	100.00	363.85	
MO18DD009	542163.85	9189581.00	644.73	406.00	325	60	44.48	80.00	80.00	382.50	
MO18DD010	541940.87	9189581.16	644.83	335.73	330	60	52.22	56.30	56.30	311.00	
MO18DD011	541985.35	9189485.70	648.52	413.22	325	60	144.05	151.00	151.00	390.00	
MO18DD012	542164.43	9189580.45	644.75	359.80	325	75	54.70	77.53	77.53	345.00	
MO18DD013	541915.08	9189621.17	640.73	272.30	330	60	14.30	44.00	44.00	259.00	
MO18DD014	541812.13	9189791.14	634.61	125.73	330	60	4.50	10.10	10.10	103.04	
MO18DD015	542141.72	9189633.44	644.15	355.20	325	60	28.80	70.00	70.00	330.00	
MO18DD016	541753.62	9189855.92	634.52	62.63	330	60	0.00	19.00	19.00	39.00	Hole collared in Weathered Pegmatite
MO18DD017	541711.54	9189507.54	645.24	338.13	330	60	63.88	87.00	87.00	321.00	
MO18DD018	542265.42	9189606.11	644.19	380.65	325	60	75.00	77.95	77.95	356.00	
MO18DD019	541677.67	9189488.77	645.22	387.02	330	60			111.92	363.26	No Weathered Pegmatite intersected
MO18DD020	541821.96	9189556.53	641.18	308.00	330	60	34.67	58.00	58.00	286.00	
MO18DD021	542202.42	9189668.69	637.35	320.65	325	60	22.15	41.00	41.00	300.00	
MO18DD022	541787.88	9189658.47	637.79	215.90	330	60	4.20	46.00	46.00	191.00	
MO18DD023	541640.10	9189693.11	637.85	188.70	330	60	3.80	58.00	58.00	155.00	
MO18DD024	541557.71	9189609.02	639.99	221.91	330	60	19.32	83.00	83.00	189.00	
MO18DD025	542363.04	9189637.89	643.28	359.55	330	60	114.20	134.00	134.00	337.95	
MO18DD026	542430.62	9189511.13	643.88	351.23	330	60	135.67	193.00	193.00	351.23	Hole stopped in Fresh Pegmatite
MO18DD027	542339.60	9189682.52	642.82	339.75	330	60	51.38	68.80	68.80	307.64	
MO18DD028	542316.63	9189522.71	644.67	401.35	330	60			132.00	380.00	No Weathered Pegmatite intersected

MO18DD029	542468.06	9189778.29	641.76	419.70	325	50	73.96	87.00	87.00	286.30	Pegmatite continues to 398.59, but constrained for modelling
MO18DD030	542432.93	9189701.92	642.61	500.00	330	60	115.47	117.00	117.00	361.00	Pegmatite continues to 479.07, but constrained for modelling
MO18DD031	542338.00	9189685.83	642.77	344.43	330	50	41.70	69.30	69.30	320.00	
MO18DD032	542290.32	9189563.47	644.71	389.83	330	60			105.03	365.55	
MO18DD033	542468.93	9189776.99	641.72	81.30	325	62	78.60	80.60	80.60	81.30	Hole stopped in Fresh Pegmatite
MO18DD034	542387.51	9189602.34	642.68	380.68	330	60	109.12	114.00	114.00	359.00	
MO18DD035	542246.50	9189639.69	645.36	363.08	330	60	54.55	66.38	66.38	334.70	
MO18DD036	542487.85	9189632.66	642.91	407.03	325	60	152.96	164.20	164.20	385.50	
MO18DD037	542470.87	9189774.44	641.73	424.40	325	64			78.14	315.16	Pegmatite continues to 403.31, but constrained for modelling
MO18DD038	542405.64	9189556.06	643.16	416.78	329	61			137.57	383.30	No Weathered Pegmatite intersected
MO18DD039	541884.07	9189468.75	646.39	378.12	330	60			154.95	334.00	No Weathered Pegmatite intersected
MO18DD040	542464.79	9189475.67	644.04	509.83	330	60			183.82	486.55	No Weathered Pegmatite intersected
MO18DD041	542470.00	9189772.00	641.73	446.80	325	75	88.30	89.98	89.98	339.17	Pegmatite continues to 417.77, but constrained for modelling

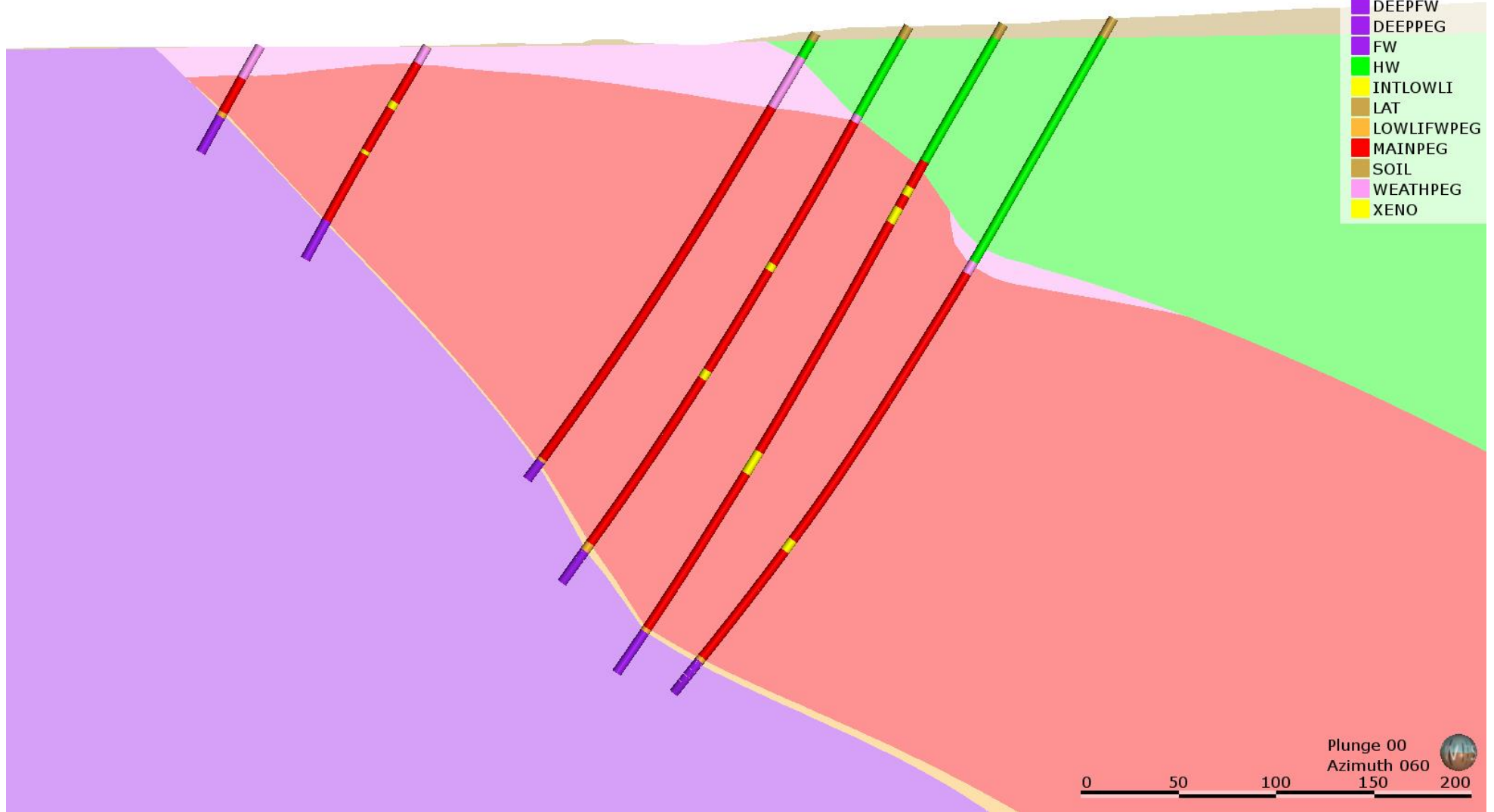
## Appendix 2: Geological Model Sections

Cross Section 6800 (looking ENE)



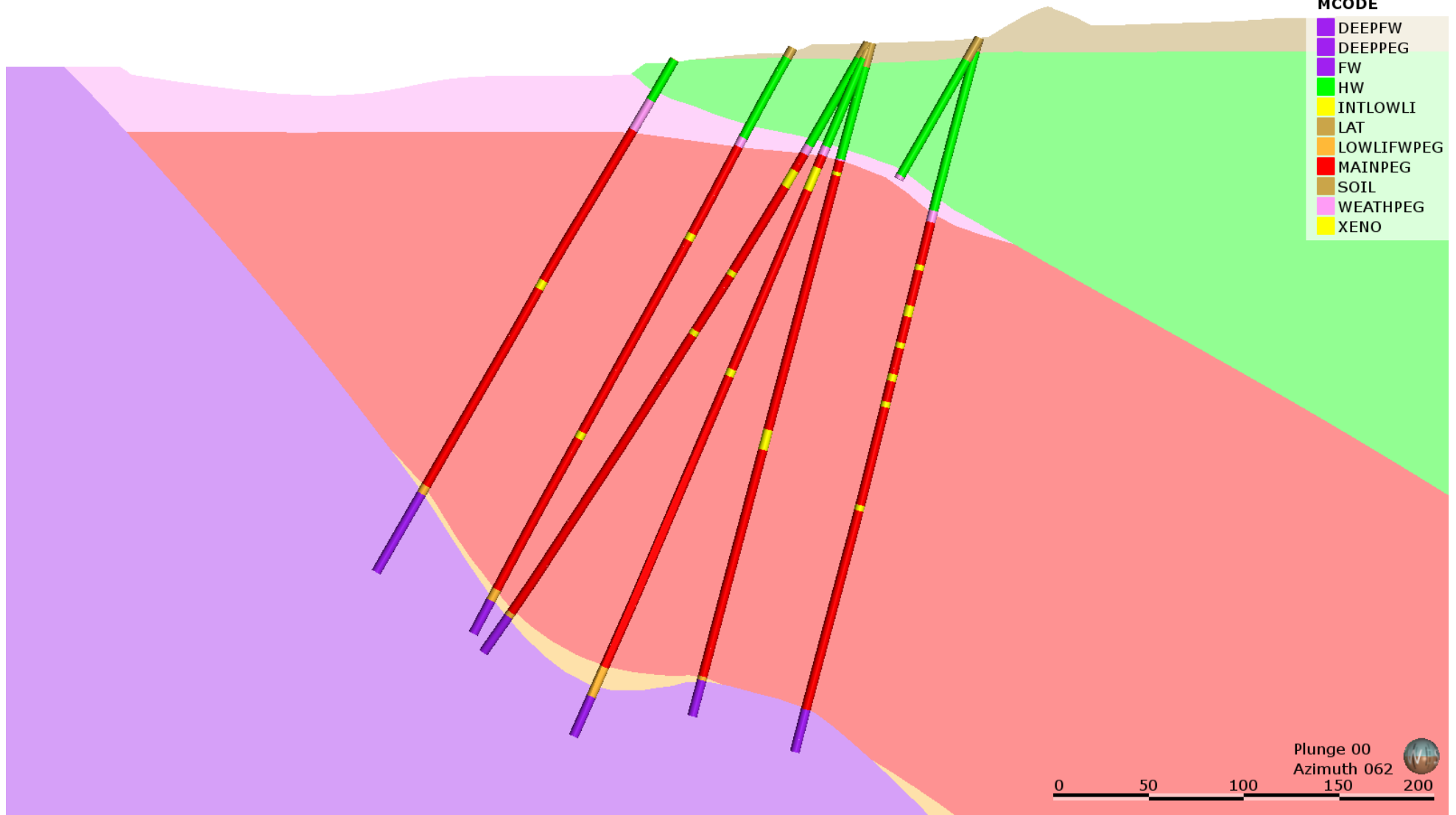
Cross Section 6900 (looking ENE)

- MCODE**
- DEEPFW
  - DEEPPEG
  - FW
  - HW
  - INTLOWLI
  - LAT
  - LOWLIFWPEG
  - MAINPEG
  - SOIL
  - WEATHPEG
  - XENO



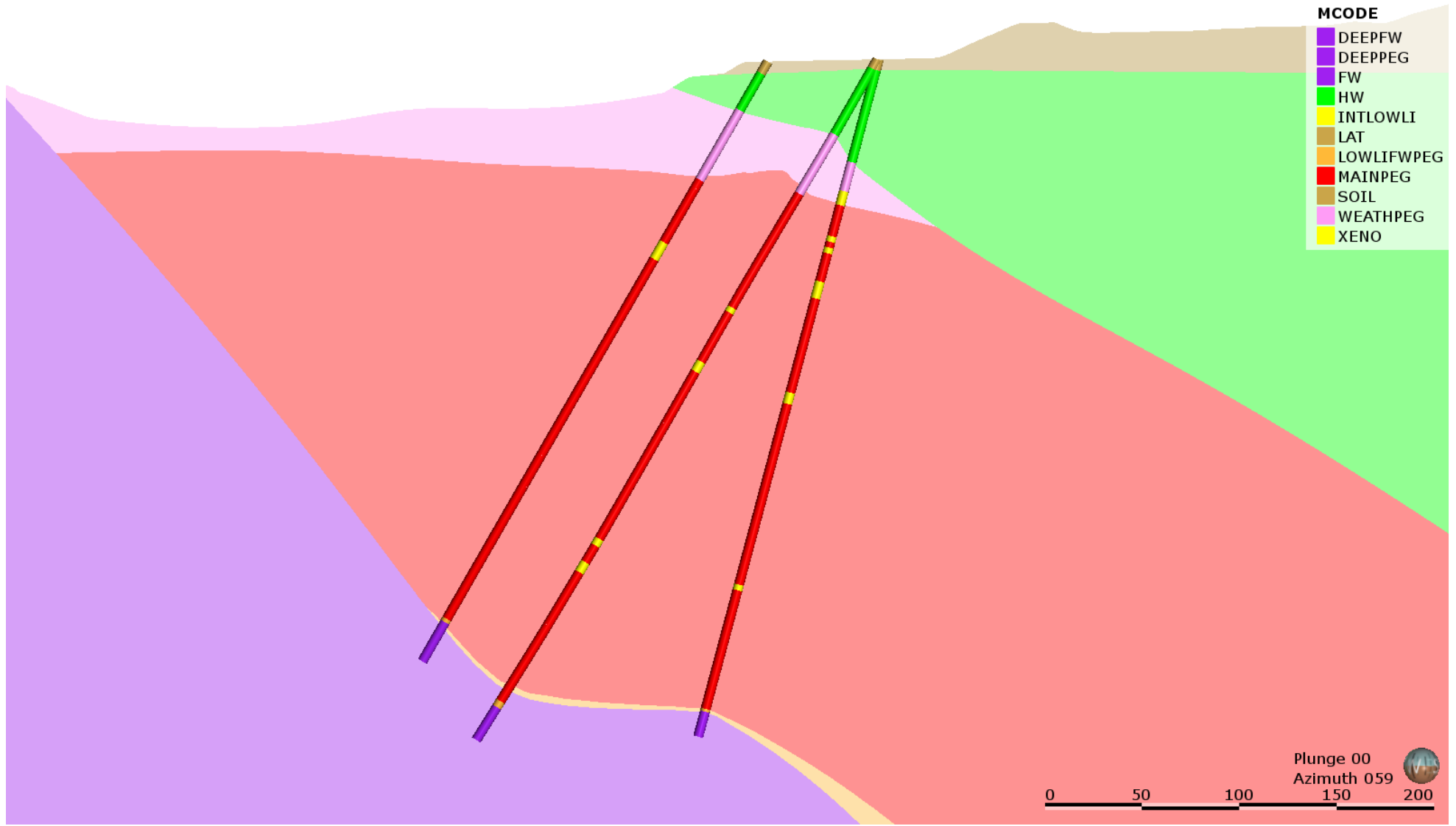
Cross Section 7000 (looking ENE)

- MCODE**
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  - DEEPPEG
  - FW
  - HW
  - INTLOWLI
  - LAT
  - LOWLIFWPEG
  - MAINPEG
  - SOIL
  - WEATHPEG
  - XENO

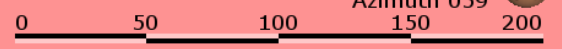


Cross Section 7100 (looking ENE)

- MCODE**
- DEEPFW
  - DEEPPEG
  - FW
  - HW
  - INTLOWLI
  - LAT
  - LOWLIFWPEG
  - MAINPEG
  - SOIL
  - WEATHPEG
  - XENO

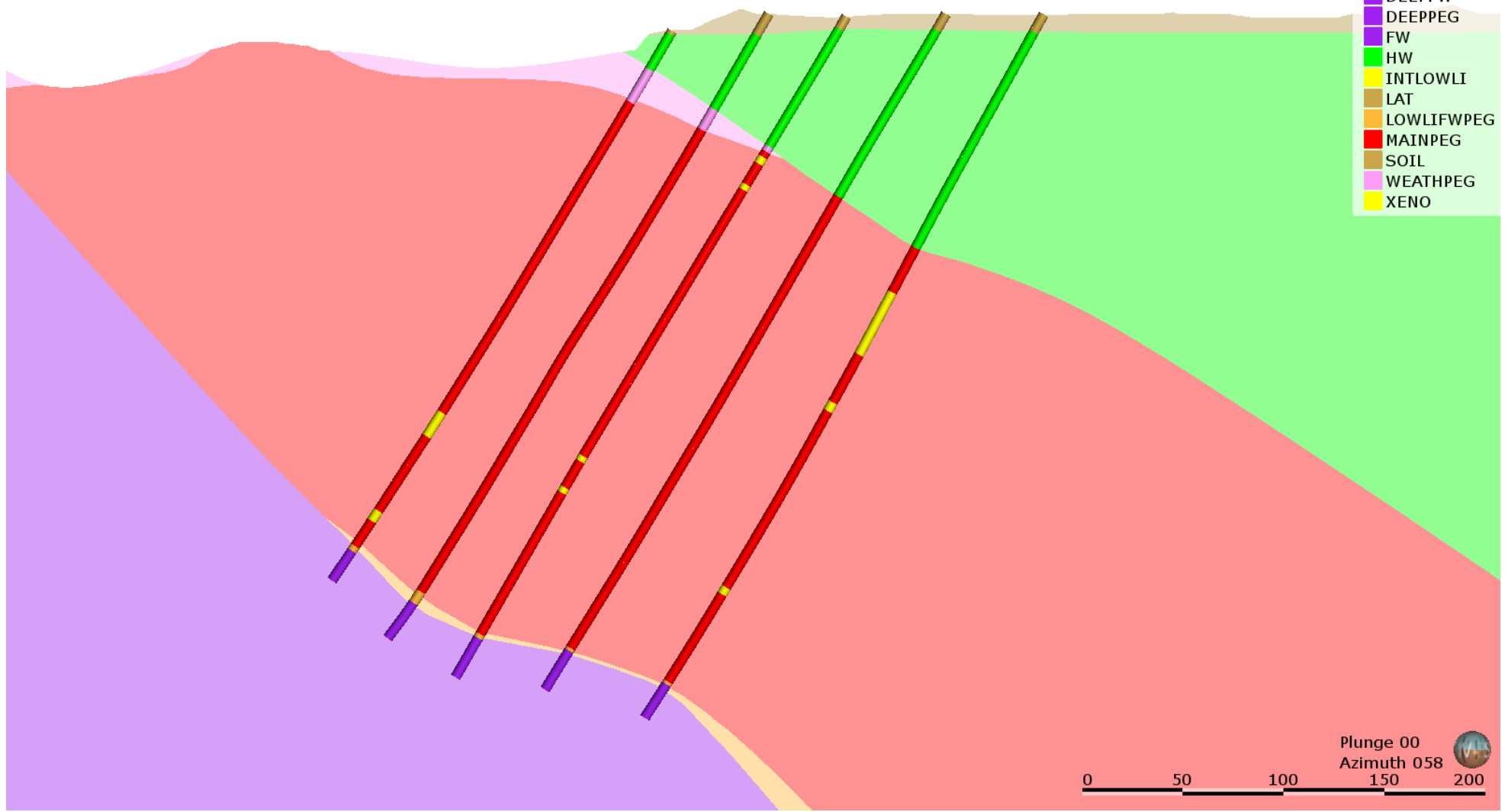


Plunge 00  
Azimuth 059

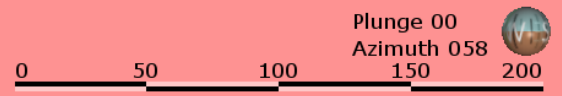


Cross Section 7200 (looking ENE)

- MCODE**
- DEEPFW
  - DEEPPEG
  - FW
  - HW
  - INTLOWLI
  - LAT
  - LOWLIFWPEG
  - MAINPEG
  - SOIL
  - WEATHPEG
  - XENO



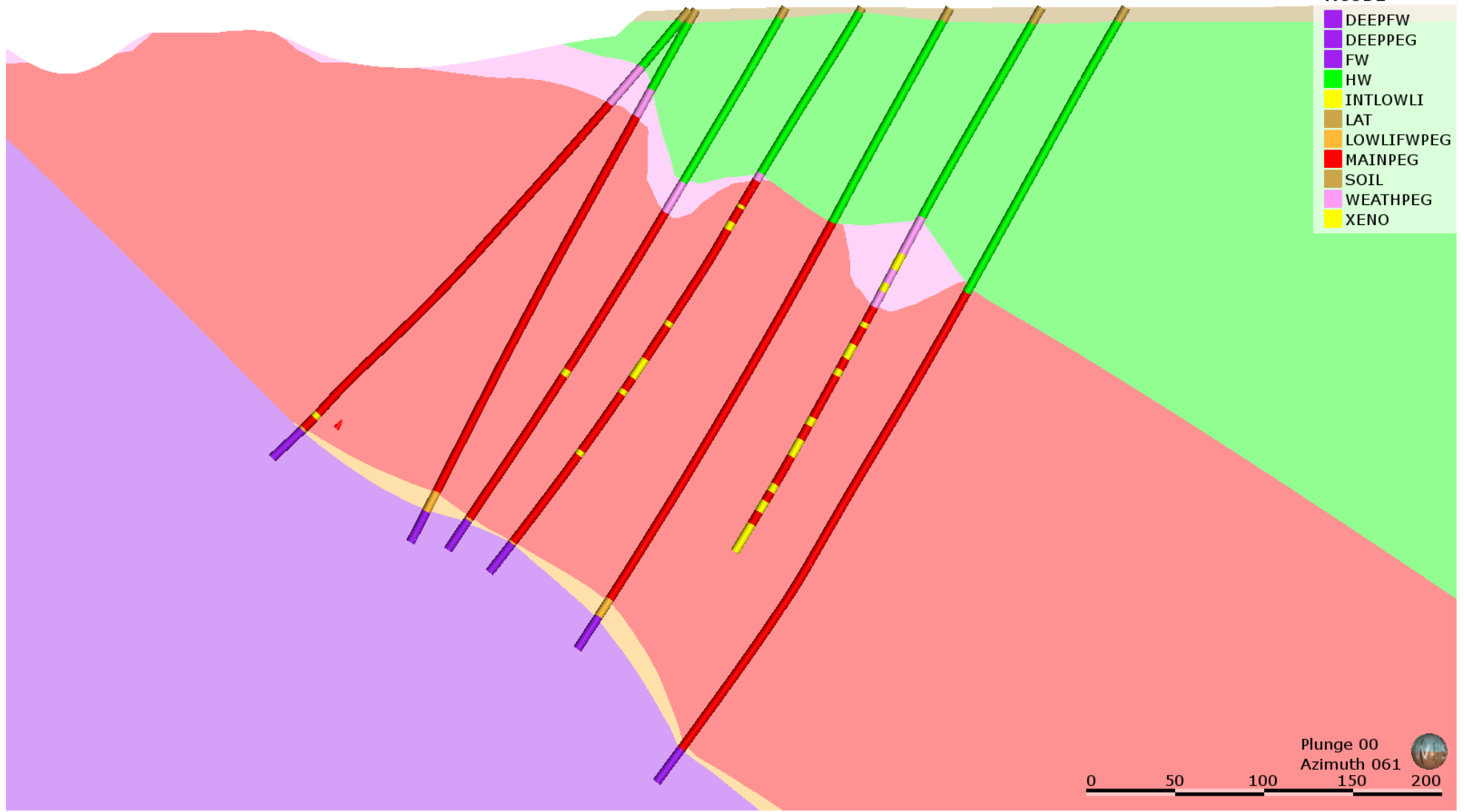
Plunge 00  
Azimuth 058



Cross Section 7300 (looking ENE)

**MCODE**

DEEPFW	DEEPPEG	FW	HW	INTLOWLI	LAT	LOWLIFWPEG	MAINPEG	SOIL	WEATHPEG	XENO
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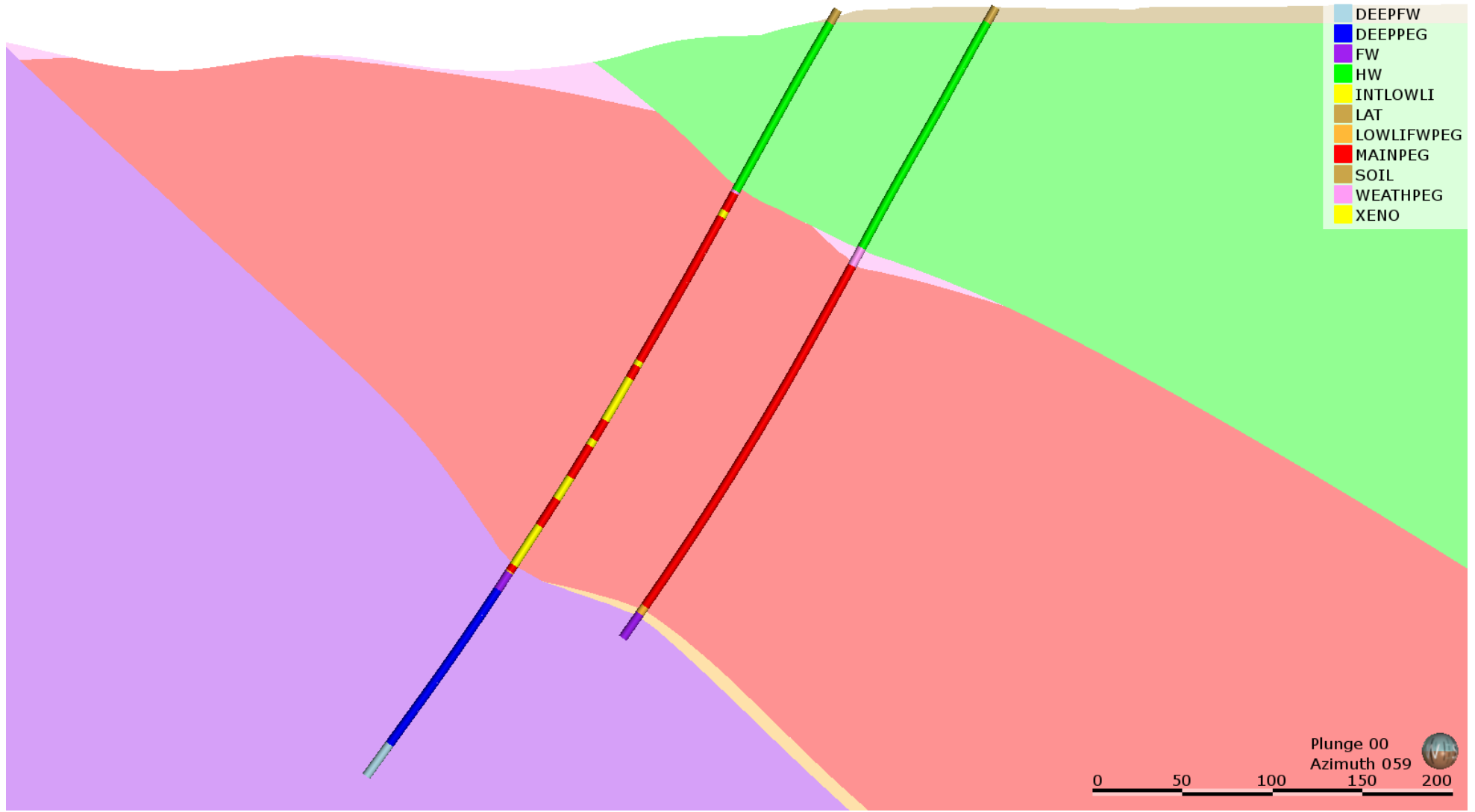
Plunge 00  
Azimuth 061




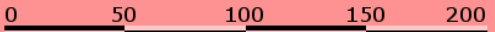
Cross Section 7400 (looking ENE)

**MCODE**

DEEPFW	Light Blue
DEEPPEG	Blue
FW	Purple
HW	Light Green
INTLOWLI	Yellow
LAT	Brown
LOWLIFWPEG	Orange
MAINPEG	Red
SOIL	Tan
WEATHPEG	Pink
XENO	Yellow



Plunge 00  
Azimuth 059



Cross Section 7500 (looking ENE)

**MCODE**

DEEPFW	DEEPPEG	FW	HW	INTLOWLI	LAT	LOWLIFWPEG	MAINPEG	SOIL	WEATHPEG	XENO
Light Blue	Blue	Purple	Green	Yellow	Brown	Orange	Red	Light Brown	Pink	Yellow

