

ASX / Media Announcement 14 February 2023

# Vital achieves 26% increase in Tardiff Mineral Resource tonnes and 19% increase in contained NdPr

# Highlights

- Updated Mineral Resource Estimate ("MRE") for the Tardiff Upper Zone ("Tardiff") at Nechalacho achieves a 26% increase in Mineral Resource tonnes and a 20% increase in total rare earth oxides ("TREO") tonnes
- Tardiff is estimated to contain 1.67 million tonnes of TREO within a total mineral resource of 119.0 million tonnes at 1.4% TREO
- Tardiff is estimated to include 416,000 tonnes of neodymium and praseodymium (NdPr), a 19% increase over the previous MRE estimate dated 13 December 2019
- Vital will commence drilling at Nechalacho this month, aiming to infill the Tardiff deposit to increase confidence in the Inferred component of the MRE
- Vital aims to develop Tardiff to become a large-scale, long-life rare earths producer; initial economic assessment for Tardiff due in Q3 CY23

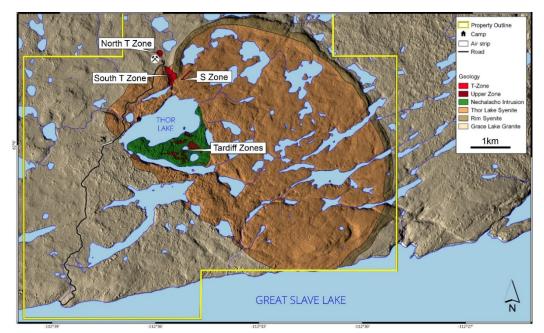


Figure 1: Location of the Tardiff deposit at Vital's Nechalacho Rare Earths Project, Canada

**Vital Metals' Managing Director John Dorward said:** *"With a contained NdPr endowment of more than 416,000 tonnes, this updated MRE for the Tardiff Deposit underlines the global significance of the Nechalacho Rare Earths Project. This is why we recently sharpened our focus towards advancing* 



Nechalacho through economic studies and permitting. Tardiff is one of the largest single deposits of these critical minerals in the Western World and responded extremely well to the drill bit in 2021 and 2022. We are excited to be launching our follow up drilling program in the current field season and look forward to reporting results over the coming months."

Canada's first rare earths mining company Vital Metals Ltd (ASX: VML | OTCQB: VTMXF) ("Vital", "Vital Metals" or "the Company") is pleased to announce a substantial increase in the Mineral Resource Estimate for its Tardiff Upper Zone Deposit ("Tardiff"), which forms part of the Nechalacho Rare Earth Project ("Nechalacho" or the "Project"), 100 kilometres south-east of Yellowknife in Canada's Northwest Territories.

Vital has updated the MRE with the incorporation of 4,483 metres of drilling from 66 holes drilled over the 2021 and 2022 drilling seasons. Total MRE tonnage (across all classifications) has increased by approximately 26%, with a slight reduction in TREO grade of approximately 4%.

The Company holds a 100% interest in the minerals located on the mining leases at Nechalacho between the surface topography and the depth limit of 150 metres above sea level ("ASL"), or approximately 90 metres below surface, known as the Upper Zone. The material below 150 metres ASL is referred to as the Basal Zone and is retained by the original owner, Avalon Advanced Minerals Inc. ("**Avalon**").

### **Key points**

- Vital achieved the MRE increase due to re-interpreting the cut-off grades for the resource and the inclusion of Tardiff Zone 2 area in the resource and the inclusion of an additional 4,483 metres of drilling from the 2021 and 2022 campaigns;
- Vital selected a cut-off grade percentage of the full suite of rare earth oxides as opposed to the previous practice of using an Nd<sub>2</sub>O<sub>3</sub> based cut-off value;
- the MRE was interpolated using Ordinary Kriging;
- 5,500 metres of drilling is planned for the 2023 field season at Nechalacho with a focus on increasing confidence in the current MRE with additional infill drilling; and
- additional exploration drilling will be focused on assessing the potential to increase North T's resources through extension drilling and testing other potential satellite targets.

The Tardiff MRE was compiled and is reported in accordance with the Australasian Code of Reporting of Exploration Results, Mineral Resources and Ore Reserves (the JORC 2012 edition) and Chapter 5 of the ASX Listing Rules.



| Cut-off Grade %<br>TREO | Category  | Tonnage<br>(Mt) | TREO Grade<br>(%) | NdPrO:TREO<br>Ratio | Nd <sub>2</sub> O <sub>3</sub><br>(%) | Pr <sub>6</sub> O <sub>11</sub><br>(%) |
|-------------------------|-----------|-----------------|-------------------|---------------------|---------------------------------------|--|
| 1.0                     | Inferred  | 108.1           | 1.39              | 25.1%               | 0.28                                  | 0.07                                   |
| 1.0                     | Indicated | 6.3             | 1.45              | 24.8%               | 0.28                                  | 0.08                                   |
| 1.0                     | Measured  | 4.6             | 1.59              | 24.6%               | 0.31                                  | 0.08                                   |
| 1.0                     | Total     | 119.0           | 1.40              | 25.1%               | 0.28                                  | 0.07                                   |

Table 1: Tardiff Upper Zone Deposit – Mineral Resource Estimate at 1.0% cut-off (31 December 2022)

TREO = Total Rare Earth Oxides – La<sub>2</sub>O<sub>3</sub>, CeO<sub>2</sub>, Pr<sub>6</sub>O<sub>11</sub>, Nd<sub>2</sub>O<sub>3</sub>, Sm<sub>2</sub>O<sub>3</sub>, Eu<sub>2</sub>O<sub>3</sub>, Gd<sub>2</sub>O<sub>3</sub>, Tb<sub>4</sub>O<sub>7</sub>, Dy<sub>2</sub>O<sub>3</sub>, Ho<sub>2</sub>O<sub>3</sub>, Er<sub>2</sub>O<sub>3</sub>, Tm<sub>2</sub>O<sub>3</sub>, Yb<sub>2</sub>O<sub>3</sub>, Lu<sub>2</sub>O<sub>3</sub>, Y<sub>2</sub>O<sub>3</sub>

NdPrO = Neodymium oxide and Praseodymium oxide: Nd<sub>2</sub>O<sub>3</sub>+Pr<sub>6</sub>O<sub>11</sub>

#### **Summary of Key Information**

The Tardiff Upper Zone Deposit is hosted near the top of a layered nepheline syenite intrusion, which is part of an anorogenic alkaline granitoid intrusion. The TREO mineralisation is hosted in hydrothermally altered eudialyte syenite and mainly contained in the minerals bastnaesite, synchysite, parisite, fergusonite, samarskite, allanite and monazite.

Tardiff extends approximately 2km in length and the upper limit of the MRE is covered in glacial till which varies from surface to 10 metres in depth.

Diamond core drilling of PQ, NQ and HQ diameter core using wireline recovery was used for all the drilling at Tardiff. A limited number of oriented core holes were drilled by Avalon for geotechnical purposes.

Rock Quality Designation ("RQD") logging was performed on all drill holes starting in 2009. Due to the very limited weathering profile and semi-massive nature of the mineralisation, core recovery was generally excellent.

All 2021 and 2022 drill samples were analysed by ALS Laboratories in North Vancouver, BC using ICP-MS. Historic drill samples were treated by several different companies, including Acme Laboratories, Actlabs and ALS.



| Cut-off Grade %<br>TREO | Category  | Tonnage<br>(Mt) | TREO Grade<br>(%) | NdPrO:TREO<br>Ratio | Nd2O3<br>(%) | Pr <sub>6</sub> O <sub>11</sub><br>(%) |
|-------------------------|-----------|-----------------|-------------------|---------------------|--------------|--|
| 0.8                     | Inferred  | 155.5           | 1.24              | 25.2%               | 0.25         | 0.07                                   |
| 0.8                     | Indicated | 8.9             | 1.29              | 24.8%               | 0.25         | 0.07                                   |
| 0.8                     | Measured  | 5.9             | 1.43              | 24.6%               | 0.28         | 0.08                                   |
| 0.8                     | Total     | 170.3           | 1.25              | 25.1%               | 0.25         | 0.07                                   |
| 0.9                     | Inferred  | 130.8           | 1.31              | 25.2%               | 0.26         | 0.07                                   |
| 0.9                     | Indicated | 7.6             | 1.37              | 24.8%               | 0.27         | 0.07                                   |
| 0.9                     | Measured  | 5.2             | 1.51              | 24.6%               | 0.29         | 0.08                                   |
| 0.9                     | Total     | 143.6           | 1.32              | 25.1%               | 0.26         | 0.07                                   |
| 1.0                     | Inferred  | 108.1           | 1.39              | 25.1%               | 0.28         | 0.07                                   |
| 1.0                     | Indicated | 6.3             | 1.45              | 24.8%               | 0.28         | 0.08                                   |
| 1.0                     | Measured  | 4.6             | 1.59              | 24.6%               | 0.31         | 0.08                                   |
| 1.0                     | Total     | 119.0           | 1.40              | 25.1%               | 0.28         | 0.07                                   |
| 1.1                     | Inferred  | 87.9            | 1.47              | 25.1%               | 0.29         | 0.08                                   |
| 1.1                     | Indicated | 5.3             | 1.53              | 24.7%               | 0.30         | 0.08                                   |
| 1.1                     | Measured  | 3.9             | 1.68              | 24.6%               | 0.32         | 0.09                                   |
| 1.1                     | Total     | 97.1            | 1.48              | 25.0%               | 0.29         | 0.08                                   |
| 1.2                     | Inferred  | 70.4            | 1.54              | 25.0%               | 0.31         | 0.08                                   |
| 1.2                     | Indicated | 4.3             | 1.62              | 24.7%               | 0.31         | 0.09                                   |
| 1.2                     | Measured  | 3.3             | 1.77              | 24.6%               | 0.34         | 0.09                                   |
| 1.2                     | Total     | 78.1            | 1.56              | 25.0%               | 0.31         | 0.08                                   |

Table 2: Tardiff Upper Zone – Mineral Resource Estimate (31 December 2022) at selected cut-off grades

TREO = Total Rare Earth Oxides – La<sub>2</sub>O<sub>3</sub>, CeO<sub>2</sub>, Pr<sub>6</sub>O<sub>11</sub>, Nd<sub>2</sub>O<sub>3</sub>, Sm<sub>2</sub>O<sub>3</sub>, Eu<sub>2</sub>O<sub>3</sub>, Gd<sub>2</sub>O<sub>3</sub>, Tb<sub>4</sub>O<sub>7</sub>, Dy<sub>2</sub>O<sub>3</sub>, Ho<sub>2</sub>O<sub>3</sub>, Er<sub>2</sub>O<sub>3</sub>, Tm<sub>2</sub>O<sub>3</sub>, Yb<sub>2</sub>O<sub>3</sub>, Lu<sub>2</sub>O<sub>3</sub>, Y<sub>2</sub>O<sub>3</sub>

NdPrO = Neodymium oxide and Praseodymium oxide: Nd<sub>2</sub>O<sub>3</sub>+Pr<sub>6</sub>O<sub>11</sub>

### **Estimation and Modelling Techniques**

Key parameters employed for the estimation of the 31 December 2022 MRE include the following:

- The block model uses a block size of 10 x 10 x 4m with sub-blocks size 2.5 x 2.5 x 1m;
- The blocks were assigned the lithology codes from wireframes that delineated the different lithology domains;
- The rock density in the mineralised zone was assigned to each block by using the nearest neighbour search technique using downhole density data;
- No capping of the REO data was used. Previous modelling used capping of high grades, but the latest close spaced drilling showed the high-grade outliers in the Avalon data were supported by other high grades in nearby holes in the close spaced drilling;
- The assays were composited into one metre intervals for the resource estimation;
- An ordinary kriging interpolation with 3 search passes of differing dimensions was used for the Mineral Resource Estimation. The first pass was an ellipsoid with a 200m by 100m by 12m search. Passes 2 and 3 were octant passes with Pass 2 being 60m by 30m by 12m and the Pass 3 being 40m by 20m by 8m. Passes 2 and 3 required at least four octants with more than 10 composite samples.
- Pass 1 was restricted to between 5 and 24 composites whilst Passes 2 and 3 were restricted to between 10 and 24 composites;



- A cut-off grade of 1.0% TREO was selected, and by-products were not considered in the cut-off grade calculation; and
- The cut-off grade, based upon the full suite of rare earth oxide assays, was used for the updated MRE as opposed to the previous MRE which used a 0.1% Nd<sub>2</sub>O<sub>3</sub> cut-off value.

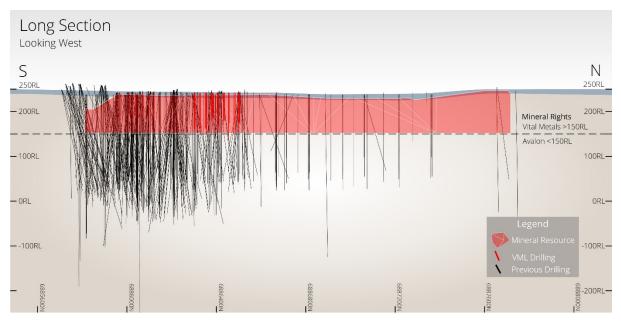


Figure 2: Tardiff Upper Zone Longitudinal Section looking west

Table 3: Tardiff Upper Zone – Mineral Resource Estimate (31 December 2022) individual REO proportions at a 1.0% cut-off grade (Total Resource)

| REO    | % of TREO |
|--------|-----------|
| CeO2   | 43.96%    |
| La2O3  | 18.43%    |
| Nd2O3  | 19.81%    |
| Pr6011 | 5.29%     |
| Sm2O3  | 3.49%     |
| Eu2O3  | 0.36%     |
| Gd2O3  | 2.45%     |
| Tb4O7  | 0.25%     |
| Dy2O3  | 0.97%     |
| Ho2O3  | 0.14%     |
| Er2O3  | 0.32%     |
| Tm2O3  | 0.04%     |
| Yb2O3  | 0.26%     |
| Lu2O3  | 0.04%     |
| Y2O3   | 4.21%     |



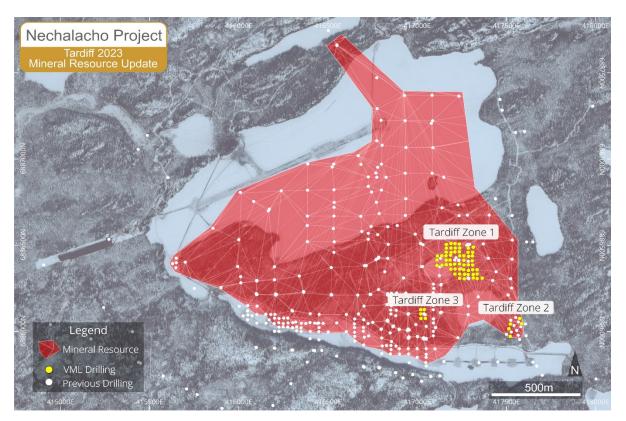


Figure 3: Tardiff Upper Zone Plan View

### **Upcoming Catalysts**

| Commencement of drilling at Nechalacho            | Q1 CY2023   |
|---|-------------|
| Drilling results from Nechalacho                  | Q2/3 CY2023 |
| Completion of Tardiff initial economic assessment | Q3 CY2023   |
| Completion of Saskatoon Calcine Circuit           | Q3 CY2023   |

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This announcement has been authorized for release by the Board of Vital Metals.



#### ABOUT VITAL METALS

Vital Metals Limited (ASX: VML) is Canada's first rare earths mining company following commencement of mining at its Nechalacho rare earths project in Canada in June 2021. It holds a portfolio of rare earths, technology metals and gold projects located in Canada and Germany.

#### Nechalacho Rare Earth Project - Canada

The Nechalacho project is located at Nechalacho in the Northwest Territories of Canada and has potential to develop into a significant large scale supplier of critical electric motor magnet minerals.

#### **Competent Person Declaration**

The information in this report relating to Mineral Resource Estimation at the Nechalacho Rare Earths Project is based on, and fairly represents, information and supporting documentation prepared for Vital Metals Limited by Mr Brendan Shand. Mr Shand is a Competent Person and a member of the Australasian Institute of Mining and Metallurgy and an employee of the Company. Mr Shand has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and to the activity being undertaken to qualify as a Competent Person as defined in the 2012 Edition of the 'Australian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'. Mr Shand consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

#### **Compliance Statements**

This announcement contains information relating to exploration results in respect of the Nechalacho Project extracted from ASX market announcements dated 26 May 2021 "<u>Vital Intersects Broad High</u> <u>Grade REO at Tardiff Zone</u>", 3 August 2021 "<u>Vital Intersects High-Grade REO in Tardiff Zones 2 & 3</u>" and 22 July 2022 "<u>Vital Intersects Further Broad Zones of REO at Tardiff</u>" and reported in accordance with the 2012 edition of the "Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves" ("2012 JORC Code"). VML confirms that it is not aware of any new information or data that materially affects the information included in the abovementioned ASX market announcement.

#### **Forward Looking Statements**

This release includes forward looking statements. Often, but not always, forward looking statements can generally be identified by the use of forward-looking words such as "may", "will", "expect", "intend", "plan", "estimate", "anticipate", "continue", and "guidance", or other similar words and may include, without limitation statements regarding plans, strategies and objectives of management, anticipated production or construction commencement dates and expected costs or production output.

Forward looking statements inherently involve known and unknown risks, uncertainties and other factors that may cause the Company's actual results, performance and achievements to differ



materially from any future results, performance or achievements. Relevant factors may include, but are not limited to, changes in commodity prices, foreign exchange fluctuations and general economic conditions, increased costs and demand for production inputs, the speculative nature of exploration and project development, including the risks of obtaining necessary licences and permits and diminishing quantities or grades of resources or reserves, political and social risks, changes to the regulatory framework within which the Company operates or may in the future operate, environmental conditions including extreme weather conditions, recruitment and retention of personnel, industrial relations issues and litigation.

Forward looking statements are based on the Company and its management's good faith assumptions relating to the financial, market, regulatory and other relevant environments that will exist and affect the Company's business and operations in the future. The Company does not give any assurance that the assumptions on which forward looking statements are based will prove to be correct, or that the Company's business or operations will not be affected in any material manner by these or other factors not foreseen or foreseeable by the Company or management or beyond the Company's control.

Although the Company attempts to identify factors that would cause actual actions, events or results to differ materially from those disclosed in forward looking statements, there may be other factors that could cause actual results, performance, achievements or events not to be anticipated, estimated or intended, and many events are beyond the reasonable control of the Company. Accordingly, readers are cautioned not to place undue reliance on forward looking statements.

Forward looking statements in this release are given as at the date of issue only. Subject to any continuing obligations under applicable law or any relevant stock exchange listing rules, in providing this information the Company does not undertake any obligation to publicly update or revise any of the forward-looking statements or to advise of any change in events, conditions or circumstances on which any such statement is based.



#### Information provided pursuant to ASX Listing Rule 5.8.1

### Definitions

TREO includes the rare earth element oxides,  $La_2O_3$ ,  $CeO_2$ ,  $Nd_2O_3$ ,  $Pr_6O_{11}$ ,  $Sm_2O_3$ ,  $Eu_2O_3$ ,  $Gd_2O_3$ ,  $Tb_4O_7$ ,  $Dy_2O_3$ ,  $Ho_2O_3$ ,  $Er_2O_3$ ,  $Tm_2O_3$ ,  $Yb_2O_3$ ,  $Lu_2O_3$  and  $Y_2O_3$ .

LREO includes the light rare earth element oxides,  $La_2O_3$ ,  $CeO_2$ ,  $Nd_2O_3$  and  $Pr_6O_{11}$ .

HREO includes the heavy rare earth element oxides, Sm2O3, Eu<sub>2</sub>O<sub>3</sub>, Gd<sub>2</sub>O<sub>3</sub>, Tb<sub>4</sub>O<sub>7</sub>, Dy<sub>2</sub>O<sub>3</sub>, Ho<sub>2</sub>O<sub>3</sub>, Er<sub>2</sub>O<sub>3</sub>, Tm<sub>2</sub>O<sub>3</sub>, Yb<sub>2</sub>O<sub>3</sub>, Lu<sub>2</sub>O<sub>3</sub> and Y<sub>2</sub>O<sub>3</sub>.

KT and MT means thousands and millions of metric tonnes, respectively.

REO means rare earth oxides

#### Geology and Geological Interpretation

The area referred to in this announcement is located near Thor Lake in the Mackenzie Mining District of the Northwest Territories. Tardiff is hosted by a syenite intrusion that is part of the Blatchford Lake Intrusive Complex. A number of magmatic layers, collectively referred to as the Lake Zone, host the rare earth mineralization in the upper part of the Nechalacho intrusion. The boundary of the rare earth mineralisation on the horizontal plane is defined by the outer limit of the syenite intrusion and has been used as a limit in the modelling.

#### Sampling and sub-sampling techniques

The geological database used for the Lake Zone Resource estimate includes a total of 7,498 samples over a combined length of 14,290.75 metres from 415 diamond drill holes were available, with 2 metres as the most common sample length. Owing to the large spatial extent of Tardiff, the drill hole spacing is highly variable, with the closest drill spacing at approximately 25 metres. The diamond drill core was sawn or split mechanically. Samples from Tardiff were riffle split following crushing, before being pulverized (see Table 1 for further details).

#### **Drilling Techniques**

Drilling was diamond core drilling, mainly with NQ (4.76 cm), HQ (6.35 cm) or PQ (8.50 cm) drilling with the majority of the holes being HQ diameter for Tardiff.

#### **Classification Criteria**

The lithological controls on the mineralization have been extensively studied and are well understood, and adequate density data sets are available for the estimated resource domains. The resource confidence categories were assigned based on successively larger searches for TREO in Tardiff. Further



details are provided in Table 1. Stringent quality control procedures were followed during the acquisition of the assay data set for Tardiff.

#### Sample Analysis Method

For the Upper Zone, routine assaying of 14 lanthanides as well as Y, Th, U, Al, Si, P, Mg, Fe, Ca, Ga, Hf, Nb, S, Sc, Ta, Ti and Zr have been performed usually by ALS Global Laboratories in North Vancouver, BC using ICP-MS techniques. Other independent laboratories including Acme, Actlabs and SGS were used for check analyses of one in 10 to 25 of drill core samples at particular periods. For the drill program of 2007 all core samples were analysed in two independent laboratories. Custom certified standards were prepared from typical project mineralization with similar overall chemistry and utilized in all analyses post 2007. Details of QAQC procedures are publicly available in Canadian NI 43-101 reports.

#### Estimation Methodology

Grade estimation was performed using the Ordinary Kriging Method with search ellipses for inferred resources and search octants for measured and indicated resources. The searches were restricted to the REO mineralised syenite above the 150RL using a wireframe of the syenite limits. All the rare earth oxides were estimated individually. Further details on the grade interpolation methods are given in Table 1.

#### Cut off grades

TREO was chosen for the cut-off grade as a number of the REO are of economic importance. The cutoff grade for this resource estimate is preliminary, at pre-scoping study level, as no detailed market, metallurgical or engineering studies have been performed.

#### Mining and metallurgical considerations

Mining and metallurgical factors or assumptions were not explicitly used in estimating the Mineral Resource, but open pit mining methods will be utilised for any future mining operations. Metallurgical test work and associated mineralogical study work has been carried out to support the process flowsheet development and economic assessment.



# Appendix 1 - JORC Code, 2012 Edition – Table 1 report – Tardiff

### Section 1 Sampling Techniques and Data

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

| Criteria               | JORC Code explanation   | Commentary  |
|------------------------|---|---|
| Sampling<br>techniques | <ul> <li>Nature and quality of sampling (eg cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling.</li> <li>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</li> <li>Aspects of the determination of mineralisation that are Material to the Public Report.</li> <li>In cases where 'industry standard' work has been done this would be relatively simple (eg 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (eg submarine nodules) may warrant disclosure of detailed information.</li> </ul> | <ul> <li>All samples are splits of diamond drill core over lengths of one (PQ-diameter core) or two meters (NQ and HQ diameter). Shorter or slightly longer samples were taken in cases where geological contacts were encountered. Of the NQ- and HQ-diameter core, a half or quarter mechanical split was sampled; the PQ-diameter core was sampled entirely in the mineralized zones and a third of the core was sawn and sampled in unmineralized or weakly mineralized zones. The drill core was crushed and splits for geochemical analysis were prepared by independent laboratories.</li> <li>The samples are considered representative because the drill core was marked with a centre line for the sampler, so that no sampling bias was introduced by choosing the location of the split.</li> <li>Drill core was crushed to 90% passing 10 mesh. The PQ core was crushed to 6 mesh (about 3.3 mm) and about 2 kg was split off using a rotary splitter which were then crushed to 10 mesh. Splits of 250 g pulps were then prepared.</li> <li>For the Avalon drill-holes the REE concentrations were determined using ICP-MS and XRF for the highest concentrations by several geochemical laboratories. The laboratories), 4B (Actlabs), and ME-MS81d, ME-MS81h and XRF10 (ALS Laboratories). The majority of the samples were analyzed by ALS Laboratories. All the 2021 and 2022 REO assaying was carried out by ALS Laboratories using ICP-MS.</li> </ul> |
| Drilling<br>techniques | <ul> <li>Drill type (eg core, reverse circulation, open-hole hammer, rotary air blast,<br/>auger, Bangka, sonic, etc) and details (eg core diameter, triple or standard<br/>tube, depth of diamond tails, face-sampling bit or other type, whether core<br/>is oriented and if so, by what method, etc).</li> </ul>   | <ul> <li>Diamond core drilling of PQ NQ and HQ diameter core using wireline<br/>recovery was used for all the drilling at Tardiff. A limited number of<br/>oriented core holes were drilled by Avalon for geotechnical purposes.</li> </ul>   |



| Criteria  | JORC Code explanation  | Commentary  |
|---|--|---|
| Drill sample<br>recovery                                | <ul> <li>Method of recording and assessing core and chip sample recoveries and results assessed.</li> <li>Measures taken to maximise sample recovery and ensure representative nature of the samples.</li> <li>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.</li> </ul>   | <ul> <li>RQD logging was performed on all drill holes starting in 2009. Due to the very limited weathering profile, core recovery was generally excellent. For the entire data set for Tardiff, RQD averages 96.2% with a median of 98.7%.</li> <li>The split lines were marked on the core to ensure systematic representative sampling.</li> <li>Owing to the semi-massive nature of the mineralization in combination with the drill method (diamond core drilling) and the excellent core recovery, grade modification due preferential loss/gain of material is highly unlikely.</li> </ul>  |
| Logging   | <ul> <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> <li>All drill core was logged geologically by qualified personnel to a level adequate for mineral resource estimation.</li> <li>The logging is qualitative.</li> <li>All drill core for the 2007 to 2014 holes was photographed digitally with Avalon maintaining a database for these holes. All holes in the 2021 and 2022 drilling programs were photographed digitally and the database of these photos is maintained by Vital Metals.</li> <li>415 drill holes logged and sampled intersections of the Upper Zone over a total length of 14,290.75 m were used for the resource estimate.</li> </ul>  |
| Sub-sampling<br>techniques and<br>sample<br>preparation | <ul> <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> <li>Of the NQ- and HQ-diameter core, a half or quarter mechanical split was sampled; the PQ-diameter core was sampled entirely in the mineralized zones and a third of the core was sawn and sampled in unmineralized or weakly mineralized zones.</li> <li>Sampling of mechanical or sawn splits of core is standard practice and considered appropriate for hard rock deposits.</li> <li>Duplicate analyses of the rejects and the pulps were routinely performed for the Avalon drilling.</li> <li>Independent core duplicates sampled by RPA in 2010 yielded similar assay values to the original data.</li> <li>The sample size (one- or two-meter-long core intervals) is considered appropriate for the rock type (hydrothermally altered nepheline syenite containing REE in in finer-grained replacement mineral assemblages).</li> </ul> |



| Criteria  | JORC Code explanation  | Commentary  |
|---|--|---|
| Quality of<br>assay data and<br>laboratory<br>tests | <ul> <li>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</li> <li>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.</li> <li>Nature of quality control procedures adopted (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established.</li> </ul> | <ul> <li>The analyses of the REE are considered total analyses. The methods include lithium metaborate/tetraborate fusion (Actlabs), in some cases followed by dilute nitric digestion (Acme Labs, ALS Laboratories) of 0.1 g of pulp followed by multi-element ICP-MS analysis. Samples with high REE values were analyzed via XRF or further diluted using ICP-MS. These methods are deemed appropriate to analyze the REE.</li> <li>Handheld XRF was only used as a guide for drill core logging.</li> <li>For the Avalon drilling the pulp of every tenth sample was analyzed by a secondary laboratory. Every 40<sup>th</sup> sample was a blank and one of several inhouse standards was inserted as every 15<sup>th</sup> sample. Assay batches that did not meet the quality control criteria were re-assayed. For the 2021 and 2022 drilling by Vital Metals the blanks and house standards were inserted as per Avalon's ratio. Acceptable levels of accuracy and precision were maintained.</li> </ul> |
| Verification of<br>sampling and<br>assaying         | <ul> <li>The verification of significant intersections by either independent or alternative company personnel.</li> <li>The use of twinned holes.</li> <li>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</li> <li>Discuss any adjustment to assay data.</li> </ul>  | <ul> <li>The assay values of the REE-mineralized zones were confirmed by multiple independent consultants, universities and laboratories.</li> <li>No twinned holes were drilled. However, in multiple cases, zones of REE-mineralization were intersected from different drill hole collar locations.</li> <li>Industry standard procedures were followed for data entry, verification and storage. Following industry standard reporting practices, oxides were calculated from the ppm assay values for the REE.</li> </ul>  |
| Location of<br>data points                          | <ul> <li>Accuracy and quality of surveys used to locate drill holes (collar and downhole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.</li> <li>Specification of the grid system used.</li> <li>Quality and adequacy of topographic control.</li> </ul>   | <ul> <li>All drill hole collar locations were determined by registered surveyors.</li> <li>All collar location data are in the UTM NAD83 Zone 12N coordinate system.</li> <li>A 0.5 m resolution satellite digital elevation survey was obtained by Avalon in 2010, providing adequate topographic data.</li> </ul>   |
| Data spacing<br>and<br>distribution                 | <ul> <li>Data spacing for reporting of Exploration Results.</li> <li>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.</li> <li>Whether sample compositing has been applied.</li> </ul>   | <ul> <li>The drill hole collars are spaced 25 m, 50 m, or wider in the less explored areas. In combination with geological and grade continuity in the deposit, these spacings are considered adequate for the assigned resource confidence categories.</li> <li>The drill hole assays were composited in one metre intervals within the</li> </ul>   |



| Criteria   | JO | ORC Code explanation   | Со | ommentary  |
|--|----|--|----|--|
|  |    |  |    | intercepts of the mineralized zones.   |
| Orientation of<br>data in relation<br>to geological<br>structure | •  | Whether the orientation of sampling achieves unbiased sampling of possible<br>structures and the extent to which this is known, considering the deposit<br>type.<br>If the relationship between the drilling orientation and the orientation of key<br>mineralised structures is considered to have introduced a sampling bias, this<br>should be assessed and reported if material. | •  | The zones of REE mineralization are sub horizontal magmatic layers which<br>have not been structurally modified. As the drill holes generally dip -45 to -<br>90°, averaging -76°, the REE-mineralized zones were intersected at<br>appropriate angles. However, the apparent drill hole intercept lengths may<br>be longer than true thicknesses in cases where the drill hole dip $\neq$ -90°. |
| Sample<br>security   | •  | The measures taken to ensure sample security.  | •  | Samples were double-sealed and standard chain of custody procedures were applied. Due to the nature of the mineralization (wt. % concentration levels) and the number of drill hole samples, post-sampling modification is highly unlikely.  |
| Audits or<br>reviews   | •  | The results of any audits or reviews of sampling techniques and data.  | •  | The sampling techniques and data for the Avalon drilling have been<br>independently reviewed and approved multiple times, including reviews by<br>consulting firms RPA and MICON. Vital Metals has followed the same<br>sampling techniques previously used by Avalon.   |

# Section 2 Reporting of Exploration Results

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

| Criteria   | JORC Code explanation  | Commentary  |
|--|--|---|
| Mineral<br>tenement and<br>land tenure<br>status | <ul> <li>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.</li> <li>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.</li> </ul> | <ul> <li>The property is located in the Northwest Territories of Canada,<br/>approximately 100 km ESE of Yellowknife, centered on coordinates 416,400<br/>m E / 6,887,000 m N or 112° 36' 6" W / 62° 6' 20" N. The Upper Zone REE<br/>deposits are located mainly on Mining Lease NT-3178, which is 100% owned<br/>by Avalon Advanced Materials Inc. and expires 21 May 2027. The adjacent<br/>properties include Mining Leases NT-3179, NT-3265, NT-3267 and NT3266,<br/>and Mining Claims Angela 1, Angela 2 and Angela 3 (all registered to Avalon<br/>Advanced Materials Inc.). On June 24, 2019, Avalon Advanced Materials Inc.<br/>announced that it has entered into a definitive agreement with Vital Metals<br/>Pty Ltd. to transfer ownership of the near-surface mineral resources on the</li> </ul> |



| Criteria                                | JORC Code explanation  | Commentary   |
|---|--|--|
|   |  | Property, which includes the Upper Zone and will grant Avalon a royalty<br>(see Avalon's News Release NR 19-04).<br>A 2.5% NSR royalty to J. Daniel Murphy applies to the Thor Lake property<br>which is capped at an escalating amount indexed to the rate of inflation.<br>Cheetah has been granted the option to purchase Avalon's option in this<br>third party-owned royalty for a payment of \$1.5 million provided that, upon<br>exercising the option, Cheetah extinguishes this royalty. Avalon has also<br>agreed to waive the Avalon-owned 3% net smelter royalty (over the same<br>mining leases), for the first five years of commercial production and to grant<br>Cheetah the option to pay Avalon \$2.0 million within eight years of the<br>transaction closing to extend the waiver of Avalon's royalty in perpetuity (see<br>Avalon's News Release NR 19-04). |
|   |  | <ul> <li>Although there are no known impediments, provincial and/or federal<br/>approvals and consultation with local communities are standard<br/>requirements for obtaining a license to operate in the area.</li> </ul>   |
| Exploration<br>done by other<br>parties | • Acknowledgment and appraisal of exploration by other parties.  | <ul> <li>Historic exploration drilling on the property was performed by Highwood<br/>Resources in the 1980s. None of the 1980s data was used for the Mineral<br/>Resource estimation.</li> </ul>   |
| Geology                                 | • Deposit type, geological setting and style of mineralisation.  | • Tardiff is hosted near the top of a layered nepheline syenite intrusion,<br>which is part of an anorogenic alkaline granitoid intrusion. The REE<br>mineralization is hosted in hydrothermally altered eudialyte syenite and the<br>REE are mainly contained in the minerals bastnäsite, synchysite, parisite,<br>fergusonite, samarskite, allanite, monazite.   |
| Drill hole<br>Information               | <ul> <li>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:         <ul> <li>easting and northing of the drill hole collar</li> <li>elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar</li> <li>dip and azimuth of the hole</li> <li>down hole length and interception depth</li> </ul> </li> </ul> | <ul> <li>See Appendices 2 and 3 for the Avalon drill hole locations, azimuth, dip and<br/>intercepts. For the details of the holes drilled by Vital Metals in 2021 and<br/>2022 see Vital Metals ASX releases 26 May 2021, 03 August 2021 and 22<br/>July 2022.</li> </ul>   |



| Criteria  | JORC Code explanation   | Commentary   |
|---|---|--|
|   | <ul> <li>hole length.</li> <li>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.</li> </ul>   |  |
| Data<br>aggregation<br>methods  | <ul> <li>In reporting Exploration Results, weighting averaging techniques, maximul and/or minimum grade truncations (eg cutting of high grades) and cut-off grades are usually Material and should be stated.</li> <li>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.</li> <li>The assumptions used for any reporting of metal equivalent values should be clearly stated.</li> </ul> | TREO with no lengths no more than 2 metres of below 1% TREO of internal material within an intercept.  |
| Relationship<br>between<br>mineralisation<br>widths and<br>intercept<br>lengths | <ul> <li>These relationships are particularly important in the reporting of Exploration Results.</li> <li>If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</li> <li>If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (eg 'down hole length, true width not known').</li> </ul>   | the true width. A lot of the Avalon drill holes are steeply angled and for<br>these the interval lengths are slightly longer than true width.  |
| Diagrams  | <ul> <li>Appropriate maps and sections (with scales) and tabulations of intercepts<br/>should be included for any significant discovery being reported These shoul<br/>include, but not be limited to a plan view of drill hole collar locations and<br/>appropriate sectional views.</li> </ul>  | • A map and a cross-section showing the drill hole collars and traces with the geological wireframe for Tardiff above the 150RL are included in the announcement.  |
| Balanced<br>reporting   | • Where comprehensive reporting of all Exploration Results is not practicable representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.  |  |
| Other<br>substantive<br>exploration<br>data                                     | • Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or   | <ul> <li>An airborne magnetics survey has been performed.</li> <li>A sample from drill core of the Upper Zone has been extracted and on-going metallurgical test-work is being carried to develop a flowsheet for extracting the REO.</li> <li>The rocks do not contain significant amounts of sulphide and, with the</li> </ul> |



| Criteria     | JORC Code explanation   | Commentary   |
|--------------|---|--|
|              | contaminating substances.   | exception of low thorium concentrations (~140 ppm on average), there are no deleterious elements in the Tardiff Project.   |
| Further work | <ul> <li>The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).</li> <li>Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.</li> </ul> | • On-going resource development drilling is going to be carried out over the next couple of years to define a resource around 40 million tonnes in the measured and indicated categories. It is expected a feasibility study will be carried out on the 40 million tonnes. |

# Section 3 Estimation and Reporting of Mineral Resources

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

| Criteria                     | JORC Code explanation   | Commentary  |
|------------------------------|---|---|
| Database<br>integrity        | <ul> <li>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.</li> <li>Data validation procedures used.</li> </ul>   | <ul> <li>The database has been routinely validated by Avalon against the original assay sheets before sending the database to Vital Metals. Data from the 2021 and 2022 drilling programs has been check thoroughly to ensure the data integrity has been maintained during the data entering process.</li> <li>All original data from the 2021 and 2022 drilling programs and the database received from Avalon is stored separately from the data entering process to ensure the data integrity can be checked in the future</li> </ul> |
| Site visits                  | <ul> <li>Comment on any site visits undertaken by the Competent Person and the outcome of those visits.</li> <li>If no site visits have been undertaken indicate why this is the case.</li> </ul>   | • Brendan Shand, the competent person for this Mineral Resource estimation, has visited the site and is satisfied the mineralisation is as per the data received from Avalon. Inspections of the core and mineralisation in trenches was carried out to verify the REO mineralisation was as expected.  |
| Geological<br>interpretation | <ul> <li>Confidence in (or conversely, the uncertainty of ) the geological<br/>interpretation of the mineral deposit.</li> <li>Nature of the data used and of any assumptions made.</li> <li>The effect, if any, of alternative interpretations on Mineral Resource<br/>estimation.</li> <li>The use of geology in guiding and controlling Mineral Resource estimation.</li> <li>The factors affecting continuity both of grade and geology.</li> </ul> | <ul> <li>The geology of the syenite intrusion is well understood from drill hole logs and outcrop observations.</li> <li>The REO mineralisation is hosted in mafic, hydrothermally altered eudialyte syenite. Continuity between drill holes has been assumed and is supported by the predictable nature of the layered mineralization as observed in drill holes.</li> <li>The outer intrusion contacts are sharp and provide a vertical limit to the</li> </ul>   |



| Criteria                                  | JORC Code explanation   | Commentary  |
|---|---|---|
|   |   | <ul> <li>mineralization. The contact between the Upper Zone and the HREO richer<br/>Basal Zone is also commonly sharp along a sub-horizontal plane at<br/>approximately the 150RL. This is the reason Avalon used the 150RL as the<br/>boundary between the portion of the REO mineralisation they sold to Vital<br/>Metals and the portion of the mineralisation they decided to keep<br/>ownership of.</li> <li>The continuity of the mineralization was largely controlled by the<br/>deposition of eudialyte crystals in magmatic cumulate layers and by the<br/>interstitial crystallization of eudialyte in distinct horizons. Localized<br/>hydrothermal REE-mobilization and redeposition in locally semi-massive<br/>bastnäsite veins and pervasive disseminated zones is less predictable and<br/>no attempt has been made to outline these zones in 3D.</li> </ul> |
| Dimensions                                | • The extent and variability of the Mineral Resource expressed as length (along strike or otherwise), plan width, and depth below surface to the upper and lower limits of the Mineral Resource.  | • In plan, the wireframe Tardiff extends approximately 1,940 m in N-S and E-<br>W direction at its widest points. Vertically, the Mineral Resource lower limit<br>is at the 150 RL. Above the 150RL Vital Metals has ownership of the REO<br>mineralisation and below the 150RL Avalon Advanced Materials has<br>maintained ownership. The 150RL closely approximates the geological<br>contact between the Upper Zone and the Basal Zone. The Upper limit of the<br>Mineral Resource is the contact between the Nechalacho Syenite and a<br>layer of Glacial Till that varies in thickness from 0 to 10 metres.  |
| Estimation and<br>modelling<br>techniques | <ul> <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 (eg sulphur for acid mine drainage characterisation).</li> <li>In the case of block model interpolation, the block size in relation to the</li> </ul> | <ul> <li>The Dassault Systems / Geovia Surpac software was used to generate the resource model.</li> <li>The block model uses a block size of 10 x 10 x4 m with sub-blocks size 2.5 x 2.5 x 1 m</li> <li>The blocks were assigned the lithology codes from wireframes that delineated the different lithology domains.</li> <li>The rock density in the mineralised zone was assigned to each block by using the nearest neighbour search technique using downhole density data.</li> <li>No assumptions about correlation between variables were made.</li> <li>No capping of the REO data was used. Previous modelling used capping of high grades, but the latest close spaced drilling showed the high-grade outliers in the Avalon data was supported by other high grades in nearby</li> </ul>  |



| Criteria                                   | JORC Code explanation  | Commentary   |
|--|--|--|
|  | <ul> <li>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 cor resource estimates.</li> <li>Discussion of basis for using or not using grade cutting or cappin</li> <li>The process of validation, the checking process used, the comparamodel data to drill hole data, and use of reconciliation data if av</li> </ul>                         | dimensions was used for the Mineral Resource Estimation. The first passng.was an ellipsoid with a 200 m by 100 m by 12m search. The 2 and 3 passesrison ofwere octant passes with pass 2 60 m by 30 m by 12m and the pass 3 40 m |
| Moisture                                   | • Whether the tonnages are estimated on a dry basis or with natu moisture, and the method of determination of the moisture cont  |  |
| Cut-off<br>parameters                      | • The basis of the adopted cut-off grade(s) or quality parameters of   | <ul> <li>The cut-off grade for this resource estimate is preliminary, at pre-scoping<br/>study level, as no detailed market, metallurgical or engineering studies have<br/>been performed.</li> </ul>                            |
| Mining factors<br>or assumptions           | <ul> <li>Assumptions made regarding possible mining methods, minimum<br/>dimensions and internal (or, if applicable, external) mining diluti<br/>always necessary as part of the process of determining reasonal<br/>prospects for eventual economic extraction to consider potential<br/>methods, but the assumptions made regarding mining methods<br/>parameters when estimating Mineral Resources may not always<br/>rigorous. Where this is the case, this should be reported with an<br/>of the basis of the mining assumptions made.</li> </ul> | on. It issurface resources have thick sequences of greater than 1% TREO within 95blemetres of the surface and are thus amenable to open pit mining.I miningandandbe  |
| Metallurgical<br>factors or<br>assumptions | • The basis for assumptions or predictions regarding metallurgical amenability. It is always necessary as part of the process of dete reasonable prospects for eventual economic extraction to consid  | assumptions have been applied to this resource estimate.   |



| Criteria                                   | JORC Code explanation  | Commentary  |
|--|--|---|
|  | metallurgical methods, but the assumptions regarding metallurgical<br>treatment processes and parameters made when reporting Mineral<br>Resources may not always be rigorous. Where this is the case, this should be<br>reported with an explanation of the basis of the metallurgical assumptions<br>made.  |   |
| Environmental<br>factors or<br>assumptions | • Assumptions made regarding possible waste and process residue disposal options. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider the potential environmental impacts of the mining and processing operation. While at this stage the determination of potential environmental impacts, particularly for a greenfields project, may not always be well advanced, the status of early consideration of these potential environmental impacts should be reported. Where these aspects have not been considered this should be reported with an explanation of the environmental assumptions made. | <ul> <li>Conventional waste dumps would be designed as part of the future mine design but would require permitting. The waste material is low in sulphides and other environmentally hazardous material and is likely to have low hazardous potential.</li> <li>Approximately 50% of the Mineral Resource is under small shallow lakes. The lakes appear to be small enough to dewater. Getting environmental approvals would be required to dewater these lakes before mining could occur in the areas under these lakes. It is expected the first areas to be mined would be the areas not covered by the lakes.</li> </ul> |
| Bulk density                               | <ul> <li>Whether assumed or determined. If assumed, the basis for the assumptions.<br/>If determined, the method used, whether wet or dry, the frequency of the<br/>measurements, the nature, size and representativeness of the samples.</li> <li>The bulk density for bulk material must have been measured by methods<br/>that adequately account for void spaces (vugs, porosity, etc), moisture and<br/>differences between rock and alteration zones within the deposit.</li> <li>Discuss assumptions for bulk density estimates used in the evaluation<br/>process of the different materials.</li> </ul>   | <ul> <li>Density was measured every five meters on a 10 cm size core segment using the water displacement method. This method is considered adequate as the rock contains little porosity.</li> <li>The average density for the Upper Zone is 2.806 ± 0.156 t/m<sup>3</sup> (N = 1,907, 1 standard deviation).</li> <li>As the density data was very comprehensive and the density was reasonably uniform throughout the mineralised syenite above the 150RL a nearest neighbour approached was used to assign densities to the blocks.</li> </ul>  |
| Classification                             | <ul> <li>The basis for the classification of the Mineral Resources into varying confidence categories.</li> <li>Whether appropriate account has been taken of all relevant factors (ie relative confidence in tonnage/grade estimations, reliability of input data, confidence in continuity of geology and metal values, quality, quantity and distribution of the data).</li> <li>Whether the result appropriately reflects the Competent Person's view of the deposit.</li> </ul>   | <ul> <li>The interpolation passes were used as a basis for assigning the confidence categories.<br/>Measured: Pass 3, 40 m by 20m by 8m octant search with at least 4 octants.<br/>Minimum composite samples is 10 and maximum is 24.</li> <li>Indicated: Pass 2, 60m by 30m by 12m octant search with at least 4 octants.<br/>Minimum composite samples is 10 and maximum is 24.</li> <li>Indicated: Pass 1, 200m by 100m by 12m ellipsoid search. Minimum composite samples is 5 and maximum is 24.</li> </ul>  |



| Criteria   | JORC Code explanation   | Commentary   |
|--|---|--|
|  |   | <ul> <li>The relevant factors affecting the confidence in the block model estimates have been considered. The main control on block confidence is the distribution of the drill hole data, as the input assays are considered to be of high quality and the geology is well understood.</li> <li>Brendan Shand, the Competent Person for this report, considers the classifying block confidence methods and criteria to be adequate.</li> </ul>   |
| Audits or<br>reviews                                 | • The results of any audits or reviews of Mineral Resource estimates.   | • The current mineral resource estimate has not been externally reviewed or audited.   |
| Discussion of<br>relative<br>accuracy/<br>confidence | <ul> <li>Where appropriate a statement of the relative accuracy and confidence<br/>level in the Mineral Resource estimate using an approach or procedure<br/>deemed appropriate by the Competent Person. For example, the application<br/>of statistical or geostatistical procedures to quantify the relative accuracy of<br/>the resource within stated confidence limits, or, if such an approach is not<br/>deemed appropriate, a qualitative discussion of the factors that could affect<br/>the relative accuracy and confidence of the estimate.</li> <li>The statement should specify whether it relates to global or local estimates,<br/>and, if local, state the relevant tonnages, which should be relevant to<br/>technical and economic evaluation. Documentation should include<br/>assumptions made and the procedures used.</li> <li>These statements of relative accuracy and confidence of the estimate should<br/>be compared with production data, where available.</li> </ul> | <ul> <li>The relative accuracy and confidence in the mineral resource estimate is considered to be adequately reflected by the confidence categories assigned to the blocks of the resource model, which are based on the block's distance from assay data and the number of composited samples captured by the searches.</li> <li>Geostatistical methods have helped to produce a robust resource estimate for Tardiff above the 150RL; local variability in the resource estimation may exist and the likelihood of this affecting the resource estimation in any particular area is reflected in the confidence levels assigned to blocks in the area.</li> <li>There has been no production from Tardiff and hence no reconciliation data is available to estimate the accuracy of the resource estimation and the confidence levels.</li> </ul> |



Appendix 2 - List of historic Avalon Advanced Materials drill-holes used in the Mineral Resource estimation

| Hole_ID  | Northing | Easting  | Elevation (m) | Length (m) | Dip | Orig_Azimuth |
|----------|----------|----------|---------------|------------|-----|--------------|
| L07-052  | 6886424  | 416835   | 244           | 201.17     | -90 | 0            |
| L07-053  | 6886310  | 416923.8 | 241.7         | 250.1      | -90 | 0            |
| L07-054  | 6886376  | 417029.5 | 241.46        | 250.1      | -90 | 0            |
| L07-055  | 6886414  | 417234.4 | 241.75        | 200.4      | -90 | 0            |
| L07-056  | 6886309  | 417285.5 | 240.91        | 21.4       | -90 | 0            |
| L07-056A | 6886309  | 417285.5 | 240.91        | 198.3      | -90 | 0            |
| L07-057  | 6886212  | 417510.6 | 240.75        | 33.9       | -90 | 0            |
| L07-057A | 6886212  | 417510.6 | 240.75        | 183        | -90 | 0            |
| L07-058  | 6886419  | 417532.6 | 243.75        | 164.7      | -90 | 0            |
| L07-059  | 6886542  | 417126.6 | 243.5         | 151        | -90 | 0            |
| L07-060  | 6886717  | 417139.3 | 240.07        | 143.25     | -90 | 0            |
| L07-061  | 6886424  | 416835   | 244           | 18.3       | -60 | 142          |
| L07-061A | 6886424  | 416835   | 244           | 183        | -60 | 142          |
| L07-062  | 6886216  | 416736.6 | 243.16        | 149.45     | -90 | 0            |
| L07-063  | 6886212  | 416521.3 | 243.64        | 183        | -90 | 0            |
| L07-064  | 6886321  | 416339.5 | 243.1         | 183        | -90 | 0            |
| L08-065  | 6887221  | 417086.7 | 237.31        | 189.1      | -90 | 0            |
| L08-066  | 6887222  | 416932.7 | 237.29        | 164.7      | -90 | 0            |
| L08-067  | 6887368  | 416928.6 | 237.28        | 140.3      | -90 | 0            |
| L08-068  | 6887370  | 417084   | 237.23        | 183        | -90 | 0            |
| L08-069  | 6887364  | 417234   | 237.21        | 186.05     | -90 | 0            |
| L08-070  | 6887067  | 416937.3 | 237.19        | 183        | -90 | 0            |
| L08-071  | 6887066  | 417088.6 | 237.26        | 140.3      | -90 | 0            |
| L08-072  | 6887066  | 417088.6 | 237.26        | 195.3      | -60 | 0            |



| Hole_ID  | Northing | Easting  | Elevation (m) | Length (m) | Dip | Orig_Azimuth |
|----------|----------|----------|---------------|------------|-----|--------------|
| L08-073  | 6886917  | 417084.3 | 237.25        | 186.05     | -90 | 0            |
| L08-074  | 6886917  | 416933.1 | 237.21        | 192.15     | -90 | 0            |
| L08-075  | 6886969  | 416685   | 237.23        | 27.45      | -90 | 0            |
| L08-075A | 6887019  | 416669.6 | 237.22        | 204.35     | -90 | 0            |
| L08-076  | 6887224  | 416797.9 | 237.21        | 206.9      | -90 | 0            |
| L08-077  | 6887079  | 416803.8 | 237.19        | 210.45     | -90 | 0            |
| L08-078  | 6886684  | 416787.3 | 237.21        | 183        | -90 | 0            |
| L08-079  | 6886669  | 416534   | 237.23        | 164.7      | -90 | 0            |
| L08-080  | 6886821  | 416533.9 | 237.19        | 173.85     | -90 | 0            |
| L08-081  | 6886769  | 416936.9 | 237.2         | 173.85     | -90 | 0            |
| L08-082  | 6886520  | 416535.3 | 237.2         | 189        | -90 | 0            |
| L08-083  | 6886521  | 416384.7 | 237.2         | 179.95     | -90 | 0            |
| L08-084  | 6886669  | 416384.8 | 237.22        | 173.85     | -90 | 0            |
| L08-085  | 6886819  | 416385.5 | 237.2         | 213.5      | -90 | 0            |
| L08-086  | 6886971  | 416532.7 | 237.22        | 213.5      | -90 | 0            |
| L08-087  | 6886971  | 416387.3 | 237.19        | 179.95     | -90 | 0            |
| L08-088  | 6886816  | 416238.3 | 237.23        | 189.1      | -90 | 0            |
| L08-089  | 6886710  | 416171.9 | 237.18        | 213.5      | -90 | 0            |
| L08-090  | 6886668  | 416683.9 | 237.22        | 192.15     | -90 | 0            |
| L08-091  | 6886673  | 416934.1 | 237.22        | 213.5      | -90 | 0            |
| L08-092  | 6886596  | 416530.5 | 237.19        | 228.75     | -55 | 0            |
| L08-093  | 6886749  | 416534.9 | 237.79        | 161.65     | -55 | 180          |
| L08-094  | 6886720  | 416534.4 | 237.9         | 198.25     | -90 | 0            |
| L08-095  | 6886970  | 416800   | 237.2         | 188.65     | -90 | 0            |
| L08-096  | 6886820  | 416800   | 237.2         | 185        | -90 | 0            |
| L08-097  | 6886214  | 417128.4 | 241.36        | 201.3      | -90 | 0            |



| Hole_ID  | Northing | Easting  | Elevation (m) | Length (m) | Dip | Orig_Azimuth |
|----------|----------|----------|---------------|------------|-----|--------------|
| L08-098  | 6886109  | 417131.9 | 243.99        | 238.8      | -90 | 0            |
| L08-099  | 6886510  | 417020   | 243.28        | 183        | -90 | 144          |
| L08-100  | 6886510  | 417020   | 243.28        | 198.25     | -75 | 335          |
| L08-101  | 6886510  | 417020   | 243.28        | 204.35     | -65 | 335          |
| L08-102  | 6886510  | 417020   | 243.28        | 198.25     | -75 | 245          |
| L08-103  | 6886510  | 417020   | 243.28        | 228.75     | -65 | 245          |
| L08-104  | 6886510  | 417020   | 243.28        | 228.75     | -76 | 155          |
| L08-105  | 6886510  | 417020   | 243.28        | 204.05     | -66 | 155          |
| L08-106  | 6886510  | 417020   | 243.28        | 228.45     | -76 | 65           |
| L08-107  | 6886510  | 417020   | 243.28        | 210.15     | -65 | 65           |
| L08-108  | 6886503  | 417032.8 | 243.28        | 213.2      | -75 | 110          |
| L08-109  | 6886503  | 417032.8 | 243.28        | 182.7      | -75 | 200          |
| L08-110  | 6886607  | 416835.9 | 238.314       | 216.85     | -90 | 0            |
| L08-111  | 6886505  | 416838.1 | 244.4103      | 201.3      | -90 | 0            |
| L08-112  | 6886346  | 416819.1 | 242.6138      | 198.25     | -90 | 0            |
| L08-113  | 6886219  | 416834   | 244.0193      | 198.25     | -90 | 0            |
| L08-114  | 6886223  | 416936.6 | 243.3462      | 192.15     | -90 | 0            |
| L08-115  | 6886156  | 416830.6 | 243.5849      | 198.25     | -90 | 0            |
| L08-116  | 6886100  | 416949.5 | 244.1941      | 198.25     | -90 | 0            |
| L08-117  | 6886023  | 417103.9 | 243.1783      | 205.1      | -90 | 0            |
| L08-118  | 6886305  | 417524   | 241.8387      | 216.55     | -90 | 0            |
| L08-119  | 6886530  | 417533.7 | 246.1595      | 198.25     | -90 | 0            |
| L08-120  | 6886672  | 417532.1 | 243.0985      | 198.25     | -90 | 0            |
| L08-121  | 6887153  | 417551.6 | 241.2897      | 198.25     | -90 | 0            |
| L08-122  | 6887345  | 417465   | 242.8842      | 21.4       | -90 | 0            |
| L08-122A | 6887283  | 417477   | 242.8842      | 109.8      | -90 | 0            |



| Hole_ID | Northing | Easting  | Elevation (m) | Length (m) | Dip | Orig_Azimuth |
|---------|----------|----------|---------------|------------|-----|--------------|
| L08-123 | 6886675  | 417404.2 | 238.4571      | 207.4      | -90 | 0            |
| L08-124 | 6886572  | 417400.1 | 241.5943      | 198.25     | -90 | 0            |
| L08-125 | 6886425  | 417399.9 | 242.7624      | 195.2      | -90 | 0            |
| L08-126 | 6886506  | 417284.3 | 241.1258      | 204.35     | -90 | 0            |
| L08-127 | 6886672  | 417235.4 | 238.0429      | 201.3      | -90 | 0            |
| L08-128 | 6885964  | 417228.7 | 240.2761      | 213.5      | -90 | 0            |
| L08-129 | 6885961  | 416952.1 | 240.5429      | 213.5      | -90 | 0            |
| L08-130 | 6886371  | 416518.8 | 246.0406      | 198.25     | -90 | 0            |
| L08-131 | 6886229  | 416363.2 | 249.7816      | 244        | -90 | 0            |
| L08-132 | 6886218  | 416206.9 | 247.1045      | 261.65     | -90 | 0            |
| L08-133 | 6886375  | 416200   | 238.5         | 64.05      | -90 | 0            |
| L08-134 | 6886377  | 415993.9 | 242.3092      | 231.8      | -90 | 0            |
| L08-135 | 6886532  | 416000.2 | 248.5231      | 210.45     | -90 | 0            |
| L08-136 | 6887306  | 417984.8 | 257.31        | 368.8      | -90 | 0            |
| L09-137 | 6886377  | 417030   | 241.364       | 199.78     | -75 | 90           |
| L09-138 | 6886376  | 417025   | 241.364       | 184.71     | -70 | 270          |
| L09-139 | 6886009  | 416952.1 | 242.3202      | 199.95     | -90 | 0            |
| L09-140 | 6886015  | 416950   | 242.4148      | 166.42     | -75 | 0            |
| L09-141 | 6886009  | 416956.2 | 242.4148      | 199.95     | -70 | 90           |
| L09-142 | 6885869  | 416952.4 | 237.1669      | 224.33     | -90 | 0            |
| L09-143 | 6885962  | 416801.3 | 237.1593      | 197.21     | -90 | 0            |
| L09-144 | 6886424  | 417130.9 | 240.5949      | 200.25     | -90 | 0            |
| L09-145 | 6886324  | 417124.6 | 240.6127      | 203.3      | -90 | 0            |
| L09-146 | 6886374  | 417127.7 | 240.5917      | 194.16     | -90 | 0            |
| L09-147 | 6886200  | 417342.6 | 239.8266      | 212.14     | -90 | 0            |
| L09-148 | 6886147  | 417287.2 | 239.8023      | 214.88     | -90 | 0            |



| Hole_ID | Northing | Easting  | Elevation (m) | Length (m) | Dip | Orig_Azimuth |
|---------|----------|----------|---------------|------------|-----|--------------|
| L09-149 | 6886098  | 417286.2 | 239.8086      | 215.19     | -90 | 0            |
| L09-150 | 6886147  | 417401.9 | 239.8423      | 215.19     | -90 | 0            |
| L09-151 | 6886295  | 417423   | 240.5541      | 215.19     | -90 | 0            |
| L09-152 | 6886269  | 417133.8 | 241.0472      | 193.85     | -90 | 0            |
| L09-153 | 6885868  | 417050.6 | 237.1706      | 215.19     | -90 | 0            |
| L09-154 | 6885819  | 416955.6 | 237.1823      | 230.43     | -90 | 0            |
| L09-155 | 6885870  | 416850.6 | 237.1913      | 230.43     | -90 | 0            |
| L09-156 | 6885429  | 416609.4 | 241.1934      | 309.68     | -90 | 0            |
| L09-157 | 6885919  | 416853.6 | 237.1716      | 206.04     | -90 | 0            |
| L09-158 | 6885869  | 416901.4 | 237.1894      | 206.04     | -90 | 0            |
| L09-159 | 6885916  | 416804.4 | 237.1555      | 203        | -90 | 0            |
| L09-160 | 6885872  | 416801.9 | 237.1936      | 224.33     | -90 | 0            |
| L09-161 | 6885967  | 416704.2 | 237.1594      | 199.95     | -90 | 0            |
| L09-162 | 6885999  | 416603.1 | 237.1677      | 215.19     | -90 | 0            |
| L09-163 | 6886110  | 417135   | 243.996       | 203        | -75 | 35           |
| L09-164 | 6886110  | 417135   | 243.996       | 184.71     | -74 | 125          |
| L09-165 | 6886109  | 417131.1 | 243.996       | 184.71     | -75 | 180          |
| L09-166 | 6886109  | 417130.9 | 243.727       | 193.85     | -75 | 270          |
| L09-167 | 6886023  | 417103.8 | 243.018       | 184.1      | -75 | 90           |
| L09-168 | 6886023  | 417103.8 | 243.055       | 184.71     | -74 | 180          |
| L09-169 | 6886022  | 417103.3 | 242.991       | 190.8      | -75 | 270          |
| L09-170 | 6885958  | 417038.4 | 240.917       | 203        | -89 | 90           |
| L09-171 | 6885958  | 417038   | 240.917       | 199.95     | -75 | 90           |
| L09-172 | 6885958  | 417036.3 | 240.929       | 199.95     | -75 | 0            |
| L09-173 | 6885957  | 417037   | 240.917       | 199.95     | -75 | 270          |
| L09-174 | 6885956  | 417036.7 | 240.862       | 184.71     | -70 | 220          |



| Hole_ID | Northing | Easting  | Elevation (m) | Length (m) | Dip | Orig_Azimuth |
|---------|----------|----------|---------------|------------|-----|--------------|
| L09-175 | 6885956  | 417038.5 | 240.693       | 233.89     | -75 | 180          |
| L09-176 | 6885965  | 416951.4 | 240.588       | 218.24     | -75 | 180          |
| L09-177 | 6885965  | 416953.2 | 240.54        | 206.04     | -75 | 270          |
| L09-178 | 6886102  | 417039   | 244.488       | 169.47     | -90 | 0            |
| L09-179 | 6886102  | 417038.8 | 244.44        | 178.61     | -76 | 0            |
| L09-180 | 6886101  | 417039.6 | 244.503       | 169.47     | -75 | 270          |
| L09-181 | 6886099  | 417040.8 | 244.633       | 184.47     | -75 | 180          |
| L09-182 | 6886098  | 417045   | 244.76        | 193.47     | -73 | 90           |
| L09-183 | 6886199  | 417041   | 242.711       | 184.37     | -89 | 0            |
| L09-184 | 6886200  | 417041   | 242.783       | 190.32     | -74 | 0            |
| L09-185 | 6886200  | 417047.9 | 242.294       | 190.47     | -75 | 90           |
| L09-186 | 6886202  | 417045.6 | 242.295       | 199.07     | -75 | 180          |
| L09-187 | 6886204  | 417041.1 | 242.634       | 196.23     | -75 | 270          |
| L09-188 | 6886213  | 417130.4 | 241.269       | 190.08     | -76 | 90           |
| L09-189 | 6886112  | 417136.2 | 243.805       | 177.65     | -76 | 315          |
| L09-190 | 6886006  | 416945.2 | 242.018       | 204.36     | -74 | 270          |
| L09-191 | 6886061  | 416833.2 | 244.344       | 198.65     | -74 | 0            |
| L09-192 | 6886064  | 416836   | 244.039       | 201.36     | -75 | 270          |
| L09-193 | 6886062  | 416831.7 | 244.069       | 201.36     | -75 | 180          |
| L09-194 | 6886061  | 416835.5 | 244.324       | 1070       | -90 | 0            |
| L09-195 | 6886061  | 416835.5 | 244.582       | 181.66     | -75 | 90           |
| L09-196 | 6885963  | 416954.7 | 240.312       | 257.86     | -70 | 225          |
| L09-197 | 6885961  | 417032.8 | 241.073       | 251.76     | -65 | 225          |
| L09-198 | 6885964  | 417036.7 | 241.171       | 206.04     | -65 | 135          |
| L09-199 | 6886064  | 416836.3 | 244.108       | 248.72     | -68 | 135          |
| L09-200 | 6886066  | 416833.3 | 243.779       | 207.75     | -74 | 225          |



| Hole_ID | Northing | Easting  | Elevation (m) | Length (m) | Dip | Orig_Azimuth |
|---------|----------|----------|---------------|------------|-----|--------------|
| L09-201 | 6886006  | 416949.9 | 241.951       | 203        | -68 | 270          |
| L09-202 | 6886007  | 416950.2 | 241.984       | 186.86     | -82 | 270          |
| L09-203 | 6885969  | 416954.6 | 240.874       | 227.38     | -70 | 270          |
| L09-204 | 6885969  | 416955   | 240.842       | 221.28     | -83 | 270          |
| L09-205 | 6886232  | 416363.3 | 249.617       | 299.04     | -74 | 180          |
| L09-206 | 6886216  | 416211.7 | 247.324       | 301.95     | -75 | 180          |
| L10-207 | 6886046  | 416250.2 | 237.11        | 282.53     | -88 | 0            |
| L10-208 | 6885997  | 416501.4 | 237.09        | 288.31     | -88 | 0            |
| L10-209 | 6886273  | 417135.1 | 241.03        | 199.92     | -75 | 90           |
| L10-210 | 6886273  | 417135.1 | 241.03        | 243.46     | -66 | 90           |
| L10-211 | 6886414  | 417233.2 | 241.64        | 199        | -76 | 0            |
| L10-212 | 6886411  | 417234.5 | 241.56        | 221        | -75 | 270          |
| L10-213 | 6886407  | 417287   | 241.12        | 227.4      | -89 | 0            |
| L10-214 | 6886363  | 417245.9 | 241.37        | 202.85     | -90 | 0            |
| L10-215 | 6886310  | 417288.6 | 240.98        | 227.1      | -75 | 270          |
| L10-216 | 6886310  | 417287.8 | 240.97        | 232.71     | -76 | 180          |
| L10-217 | 6886306  | 417289.2 | 240.94        | 223.97     | -75 | 90           |
| L10-218 | 6886308  | 417288.7 | 240.88        | 203.1      | -76 | 0            |
| L10-219 | 6886214  | 417134   | 241.44        | 183.2      | -75 | 180          |
| L10-220 | 6886214  | 417133.9 | 241.49        | 200.3      | -66 | 180          |
| L10-221 | 6885790  | 416789   | 260.66        | 452        | -88 | 0            |
| L10-222 | 6886306  | 417524.6 | 241.97        | 275.05     | -75 | 90           |
| L10-223 | 6886252  | 417530   | 241.3         | 212.9      | -89 | 0            |
| L10-224 | 6886505  | 417284   | 241.62        | 196.6      | -80 | 180          |
| L10-225 | 6886502  | 417289.7 | 241.52        | 201.65     | -75 | 90           |
| L10-226 | 6886505  | 417294.1 | 241.62        | 221.4      | -75 | 0            |



| Hole_ID | Northing | Easting  | Elevation (m) | Length (m) | Dip | Orig_Azimuth |
|---------|----------|----------|---------------|------------|-----|--------------|
| L10-227 | 6885791  | 416789   | 260.69        | 376        | -59 | 0            |
| L10-228 | 6886499  | 417278.8 | 241.59        | 206        | -75 | 270          |
| L10-229 | 6886047  | 416351.3 | 237.1         | 248.21     | -89 | 0            |
| L10-230 | 6886048  | 416153.5 | 237.07        | 251.8      | -90 | 0            |
| L10-231 | 6888605  | 417214.1 | 247.61        | 401        | -89 | 0            |
| L10-232 | 6886099  | 416101.5 | 237.05        | 282.4      | -89 | 0            |
| L10-233 | 6888807  | 417322.1 | 247.52        | 197        | -89 | 0            |
| L10-234 | 6886146  | 416002.5 | 237.15        | 272.65     | -89 | 0            |
| L10-235 | 6889222  | 417912.5 | 247.12        | 440        | -88 | 0            |
| L10-236 | 6886100  | 416151.5 | 237.1         | 263.5      | -88 | 0            |
| L10-237 | 6886099  | 416202.5 | 237.08        | 284        | -89 | 0            |
| L10-238 | 6886046  | 416198.4 | 237.1         | 278        | -90 | 0            |
| L10-239 | 6889281  | 418199.8 | 247.18        | 207        | -89 | 0            |
| L10-240 | 6886049  | 416101.8 | 236.99        | 290        | -89 | 0            |
| L10-241 | 6887745  | 416502.1 | 244.64        | 407.6      | -89 | 0            |
| L10-242 | 6886096  | 416051.3 | 237.17        | 274        | -89 | 0            |
| L10-243 | 6885794  | 416701   | 261           | 395        | -89 | 0            |
| L10-244 | 6886147  | 416102.8 | 236.86        | 277        | -90 | 0            |
| L10-245 | 6885794  | 416701   | 260           | 298.3      | -65 | 0            |
| L10-246 | 6886150  | 416050.8 | 236.96        | 257.6      | -89 | 0            |
| L10-247 | 6885794  | 416701   | 260           | 254.3      | -65 | 45           |
| L10-248 | 6886249  | 415751.1 | 237.16        | 250        | -90 | 0            |
| L10-249 | 6886399  | 415650.2 | 237.07        | 269        | -88 | 0            |
| L10-250 | 6886385  | 414906.5 | 242.889       | 302.35     | -90 | 0            |
| L10-251 | 6886534  | 415272.3 | 246.035       | 353        | -90 | 0            |
| L10-252 | 6885999  | 415403.5 | 256.75        | 302        | -89 | 0            |



| Hole_ID | Northing | Easting  | Elevation (m) | Length (m) | Dip | Orig_Azimuth |
|---------|----------|----------|---------------|------------|-----|--------------|
| L10-253 | 6885907  | 416099   | 258.555       | 359        | -89 | 0            |
| L10-254 | 6885908  | 416098.5 | 258.488       | 320        | -64 | 0            |
| L10-255 | 6885907  | 416098.4 | 258.535       | 239        | -76 | 0            |
| L10-256 | 6885903  | 416201.8 | 255.984       | 359        | -90 | 0            |
| L10-257 | 6885904  | 416201.8 | 256.006       | 303.75     | -64 | 0            |
| L10-258 | 6885903  | 416201.8 | 256.069       | 296        | -74 | 0            |
| L10-259 | 6885903  | 416201.1 | 256.123       | 302        | -65 | 330          |
| L10-260 | 6886274  | 417091.7 | 241.596       | 205.5      | -90 | 0            |
| L10-261 | 6886212  | 416207.1 | 247.388       | 281        | -75 | 225          |
| L10-262 | 6886250  | 417093.2 | 241.415       | 199.5      | -90 | 0            |
| L10-263 | 6886212  | 416207.3 | 247.463       | 293        | -75 | 270          |
| L10-264 | 6886225  | 417090.3 | 241.563       | 196.5      | -90 | 0            |
| L10-265 | 6886211  | 416208.6 | 247.432       | 272        | -75 | 315          |
| L10-266 | 6886174  | 417091.6 | 242.568       | 184.5      | -90 | 0            |
| L10-267 | 6886212  | 416208.2 | 247.26        | 290        | -76 | 0            |
| L10-268 | 6886151  | 417091.8 | 242.709       | 201.5      | -90 | 0            |
| L10-269 | 6886212  | 416208.2 | 247.174       | 305        | -75 | 135          |
| L10-270 | 6886126  | 417090.8 | 244.623       | 213.5      | -90 | 0            |
| L10-271 | 6886214  | 416207.8 | 247.228       | 311        | -75 | 90           |
| L10-272 | 6886073  | 417091.6 | 244.692       | 203        | -90 | 0            |
| L10-273 | 6886228  | 416364.8 | 249.539       | 278        | -65 | 135          |
| L10-274 | 6886049  | 417091.4 | 242.916       | 185        | -90 | 0            |
| L10-275 | 6886212  | 416521   | 243.81        | 299        | -67 | 315          |
| L10-276 | 6886000  | 417090.6 | 242.842       | 182        | -90 | 0            |
| L10-277 | 6886060  | 416836.4 | 244.14        | 251        | -54 | 220          |
| L10-278 | 6886122  | 416883.2 | 243.02        | 176        | -90 | 0            |



| Hole_ID | Northing | Easting  | Elevation (m) | Length (m) | Dip | Orig_Azimuth |
|---------|----------|----------|---------------|------------|-----|--------------|
| L10-279 | 6886211  | 416834.5 | 243.955       | 249.65     | -64 | 180          |
| L10-280 | 6886180  | 416876.3 | 243.516       | 172        | -90 | 0            |
| L10-281 | 6886049  | 417091.2 | 242.902       | 269        | -66 | 250          |
| L10-282 | 6886223  | 416885.4 | 243.971       | 177        | -90 | 0            |
| L10-283 | 6886174  | 417091.4 | 242.531       | 218        | -65 | 20           |
| L10-284 | 6886222  | 416855.1 | 243.825       | 173        | -90 | 0            |
| L10-285 | 6885962  | 417036.9 | 241.192       | 277.6      | -55 | 150          |
| L10-286 | 6886091  | 416880.3 | 243.367       | 166        | -90 | 0            |
| L10-287 | 6885974  | 417091.1 | 241.104       | 221        | -90 | 0            |
| L10-288 | 6886101  | 416852.7 | 243.014       | 175        | -90 | 0            |
| L10-289 | 6886213  | 416519.3 | 243.81        | 249.1      | -75 | 90           |
| L10-290 | 6886124  | 416852.1 | 242.93        | 202        | -90 | 0            |
| L10-291 | 6886213  | 416519.3 | 243.81        | 261.5      | -76 | 180          |
| L10-292 | 6886149  | 416854.8 | 242.89        | 194        | -90 | 0            |
| L10-293 | 6886213  | 416519.3 | 243.81        | 286.4      | -67 | 180          |
| L10-294 | 6886174  | 416853.6 | 243.15        | 190        | -90 | 0            |
| L10-295 | 6886211  | 416519.4 | 243.21        | 241.9      | -76 | 225          |
| L10-296 | 6886200  | 416854.9 | 243.09        | 179        | -90 | 0            |
| L10-297 | 6886211  | 416519.4 | 243.21        | 259.5      | -76 | 270          |
| L10-298 | 6886243  | 416783.9 | 243.13        | 179        | -90 | 0            |
| L10-299 | 6886211  | 416519.4 | 243.21        | 239        | -76 | 0            |
| L10-300 | 6886040  | 416993.4 | 243.47        | 182.4      | -89 | 0            |
| L10-301 | 6886211  | 416519.4 | 243.21        | 224        | -75 | 45           |
| L10-302 | 6886892  | 415603   | 239.49        | 364.6      | -88 | 0            |
| L10-303 | 6886211  | 416519.4 | 243.21        | 209.5      | -76 | 135          |
| L10-304 | 6886228  | 416364.4 | 249.44        | 302        | -75 | 270          |



| Hole_ID | Northing | Easting  | Elevation (m) | Length (m) | Dip | Orig_Azimuth |
|---------|----------|----------|---------------|------------|-----|--------------|
| L10-305 | 6886228  | 416364.4 | 249.44        | 281        | -73 | 0            |
| L10-306 | 6886228  | 416364.4 | 249.44        | 281        | -74 | 315          |
| L10-307 | 6886228  | 416364.4 | 249.44        | 309        | -73 | 230          |
| L10-308 | 6886228  | 416364.4 | 249.44        | 284        | -75 | 90           |
| L10-309 | 6887888  | 416777.8 | 245.67        | 287        | -90 | 0            |
| L10-310 | 6887658  | 416550.1 | 253.23        | 278        | -88 | 0            |
| L10-311 | 6887661  | 416550.9 | 253.27        | 211        | -75 | 0            |
| L11-312 | 6886300  | 416200.5 | 239.811       | 295.5      | -90 | 0            |
| L11-313 | 6886295  | 416101.2 | 240.392       | 268.5      | -90 | 0            |
| L11-314 | 6886300  | 416200.5 | 239.811       | 263        | -75 | 0            |
| L11-315 | 6886282  | 416011.7 | 240.585       | 70.5       | -90 | 0            |
| L11-316 | 6886300  | 416200.5 | 239.811       | 321        | -65 | 0            |
| L11-317 | 6886318  | 416010.8 | 241.289       | 250.5      | -90 | 0            |
| L11-318 | 6886295  | 416101.2 | 240.392       | 277        | -74 | 0            |
| L11-319 | 6886255  | 415900.3 | 238.291       | 241.5      | -90 | 0            |
| L11-320 | 6886295  | 416101.2 | 240.392       | 90         | -60 | 0            |
| L11-321 | 6886370  | 415647.7 | 237.126       | 256.5      | -90 | 0            |
| L11-322 | 6886295  | 416101.2 | 240.392       | 271        | -65 | 0            |
| L11-323 | 6886393  | 415629.2 | 237.124       | 271.5      | -90 | 0            |
| L11-324 | 6886292  | 416100.7 | 240.568       | 270        | -75 | 180          |
| L11-325 | 6886425  | 415649.7 | 237.367       | 254.8      | -90 | 0            |
| L11-326 | 6886282  | 416011.7 | 240.585       | 265        | -75 | 180          |
| L11-327 | 6886402  | 415700.3 | 238.382       | 247.5      | -90 | 0            |
| L11-328 | 6886255  | 415900.3 | 238.291       | 277        | -75 | 180          |
| L11-329 | 6886091  | 416024.5 | 237.245       | 250.5      | -90 | 0            |
| L11-330 | 6886255  | 415900.3 | 238.291       | 253        | -76 | 0            |



| Hole_ID | Northing | Easting  | Elevation (m) | Length (m) | Dip | Orig_Azimuth |
|---------|----------|----------|---------------|------------|-----|--------------|
| L11-331 | 6886068  | 416049.5 | 237.198       | 250.5      | -90 | 0            |
| L11-332 | 6886598  | 415855.2 | 237.098       | 250.5      | -89 | 0            |
| L11-333 | 6886091  | 416074.5 | 237.084       | 235.5      | -90 | 0            |
| L11-334 | 6886099  | 416450.8 | 238.239       | 242        | -88 | 0            |
| L11-335 | 6886119  | 416048.9 | 237.112       | 265.5      | -90 | 0            |
| L11-336 | 6886099  | 416603.1 | 238.228       | 247.5      | -89 | 0            |
| L11-337 | 6885820  | 417048.6 | 237.109       | 224.5      | -90 | 0            |
| L11-338 | 6886049  | 416549.1 | 237.056       | 251.5      | -89 | 0            |
| L11-339 | 6885825  | 417150.1 | 237.172       | 246.5      | -90 | 0            |
| L11-340 | 6886000  | 416448.7 | 237.123       | 235.5      | -90 | 0            |
| L11-341 | 6885942  | 416856.3 | 237.118       | 224        | -90 | 0            |
| L11-342 | 6886000  | 416400.5 | 237.152       | 269.5      | -90 | 0            |
| L11-343 | 6885915  | 416881.5 | 237.085       | 211.5      | -90 | 0            |
| L11-344 | 6886049  | 416448.6 | 237.123       | 250.5      | -89 | 0            |
| L11-345 | 6885895  | 416854.1 | 237.099       | 211.5      | -90 | 0            |
| L11-346 | 6886000  | 416348.8 | 237.063       | 289.5      | -90 | 0            |
| L11-347 | 6885918  | 416828.3 | 237.075       | 247.5      | -90 | 0            |
| L11-348 | 6886001  | 416200.7 | 237.097       | 352.5      | -73 | 180          |
| L11-349 | 6886049  | 416276.3 | 237.082       | 280.5      | -90 | 0            |
| L11-350 | 6885725  | 418002.8 | 243.656       | 352.5      | -89 | 0            |
| L11-351 | 6886051  | 416224.6 | 237.221       | 262.5      | -90 | 0            |
| L11-352 | 6885823  | 417649.2 | 237.048       | 321        | -90 | 0            |
| L11-353 | 6886027  | 416248.6 | 237.035       | 247.5      | -90 | 0            |
| L11-354 | 6885823  | 417452.2 | 237.123       | 309.37     | -89 | 0            |
| L11-355 | 6886067  | 416170.1 | 237.053       | 202.5      | -90 | 0            |
| L11-356 | 6886077  | 416252.3 | 237.052       | 253.5      | -90 | 0            |



| Hole_ID | Northing | Easting  | Elevation (m) | Length (m) | Dip | Orig_Azimuth |
|---------|----------|----------|---------------|------------|-----|--------------|
| L11-357 | 6886098  | 416179.4 | 237.054       | 256.5      | -90 | 0            |
| L11-358 | 6885819  | 417346.4 | 237.064       | 309.85     | -90 | 0            |
| L11-359 | 6885821  | 415438.1 | 256.5122      | 7.92       | -90 | 0            |
| L11-360 | 6885742  | 415577.4 | 256.3067      | 46.63      | -45 | 120          |
| L11-361 | 6885742  | 415576.9 | 256.1734      | 53.04      | -45 | 300          |
| L11-362 | 6885667  | 415707.1 | 254.1885      | 90.1       | -45 | 120          |
| L11-363 | 6885667  | 415707.1 | 254.1885      | 80.2       | -45 | 300          |
| L11-364 | 6885634  | 415766.9 | 251.8234      | 100.58     | -45 | 120          |
| L11-365 | 6885554  | 415906.2 | 250.343       | 119.79     | -45 | 300          |
| L11-366 | 6885519  | 415969.4 | 249.627       | 126.2      | -46 | 300          |
| L11-367 | 6885519  | 415969.7 | 249.5978      | 165.8      | -45 | 120          |
| L11-368 | 6885442  | 416090.3 | 247.0913      | 150.57     | -47 | 300          |
| L11-369 | 6885441  | 416094.7 | 247.1231      | 132.89     | -88 | 0            |
| L11-370 | 6885442  | 416095.5 | 247.1813      | 202.39     | -44 | 37           |
| L11-371 | 6885816  | 415448.8 | 256.3943      | 75         | -45 | 120          |
| L11-372 | 6885571  | 416191.6 | 250.0378      | 235.92     | -43 | 37           |
| L11-373 | 6885698  | 416292.6 | 252.928       | 342.15     | -46 | 37           |
| L11-374 | 6886101  | 416671.1 | 240.0249      | 239.3      | -90 | 0            |
| L11-375 | 6885698  | 416292.8 | 252.9085      | 300.53     | -57 | 37           |
| L11-376 | 6886101  | 416671.1 | 240.0249      | 237        | -78 | 180          |
| L11-377 | 6885697  | 416291.9 | 253.0236      | 453.24     | -89 | 18           |
| L11-378 | 6886101  | 416671.1 | 240.0249      | 236        | -78 | 90           |
| L11-379 | 6885822  | 416383.5 | 253.9013      | 328.44     | -44 | 37           |
| L11-380 | 6886119  | 416302   | 242.065       | 271        | -90 | 0            |
| L11-381 | 6885888  | 416423.6 | 258.2723      | 257.86     | -90 | 0            |
| L11-382 | 6886120  | 416299.7 | 242.2951      | 288.5      | -78 | 280          |



| Hole_ID  | Northing | Easting  | Elevation (m) | Length (m) | Dip | Orig_Azimuth |
|----------|----------|----------|---------------|------------|-----|--------------|
| L11-383  | 6885889  | 416425.2 | 258.3375      | 385.27     | -44 | 36           |
| L11-384  | 6886123  | 416298.8 | 242.3591      | 252.5      | -78 | 100          |
| L11-385  | 6885888  | 416423.6 | 258.2723      | 269.44     | -74 | 217          |
| L11-386  | 6886213  | 416101.8 | 240.6334      | 277        | -90 | 0            |
| L11-387  | 6886211  | 416667.2 | 242.1079      | 343.5      | -67 | 217          |
| L11-388  | 6886213  | 416101.8 | 240.6334      | 288.5      | -78 | 315          |
| L11-389  | 6886211  | 416667.2 | 242.1079      | 274.5      | -90 | 0            |
| L11-390  | 6886214  | 416101.2 | 240.6751      | 276.5      | -78 | 20           |
| L11-391  | 6886211  | 416667.2 | 242.1079      | 248.5      | -75 | 217          |
| L11-392  | 6886006  | 416946.7 | 241.7888      | 202        | -78 | 270          |
| L11-393  | 6886213  | 416737.2 | 242.8706      | 275        | -64 | 180          |
| L11-394  | 6886219  | 416098.8 | 240.8505      | 280        | -78 | 145          |
| L11-395  | 6886214  | 416739.1 | 242.8683      | 268.5      | -64 | 0            |
| L11-396  | 6886014  | 416899.4 | 241.7581      | 193        | -78 | 0            |
| L11-396a | 6886014  | 416899.4 | 241.7581      | 13         | -78 | 0            |
| L11-397  | 6886215  | 416739.9 | 242.9928      | 209.5      | -75 | 45           |
| L11-398  | 6886013  | 416899.8 | 241.7128      | 199        | -90 | 0            |
| L11-399  | 6886214  | 416739.1 | 240           | 184.5      | -75 | 135          |
| L11-400  | 6886010  | 416899.5 | 241.5678      | 225.5      | -78 | 45           |
| L11-401  | 6886382  | 416714.7 | 245.9672      | 212        | -89 | 0            |
| L11-402  | 6886011  | 416899.3 | 241.5017      | 208        | -78 | 180          |
| L11-403  | 6886382  | 416714.7 | 245.98        | 206        | -76 | 180          |
| L11-404  | 6886029  | 416865.4 | 243.154       | 211        | -90 | 0            |
| L11-405  | 6886383  | 416714   | 246.0979      | 215        | -76 | 135          |
| L11-406  | 6886029  | 416865.4 | 243.154       | 208        | -80 | 180          |
| L11-407  | 6886382  | 416713.9 | 246.0492      | 194        | -77 | 225          |



| Hole_ID | Northing | Easting  | Elevation (m) | Length (m) | Dip | Orig_Azimuth |
|---------|----------|----------|---------------|------------|-----|--------------|
| L11-408 | 6886031  | 416864.8 | 243.457       | 205        | -78 | 270          |
| L11-409 | 6886382  | 416712.7 | 245.8474      | 209        | -75 | 0            |
| L11-410 | 6886031  | 416865.2 | 243.407       | 208        | -78 | 0            |
| L11-411 | 6886381  | 416713.7 | 246.036       | 212        | -75 | 315          |
| L11-412 | 6886031  | 416866.7 | 243.373       | 214        | -78 | 45           |
| L11-413 | 6886428  | 416783.3 | 245.429       | 209        | -90 | 0            |
| L11-414 | 6886032  | 416868.6 | 243.53        | 211        | -82 | 90           |
| L11-415 | 6886427  | 416783.3 | 245.395       | 194        | -74 | 180          |
| L11-416 | 6886027  | 416864.1 | 242.901       | 202        | -78 | 225          |
| L11-417 | 6886428  | 416782.5 | 245.588       | 209        | -73 | 0            |
| L11-419 | 6886427  | 416784.2 | 245.285       | 209        | -75 | 270          |
| L11-421 | 6886427  | 416784.2 | 245.285       | 257        | -75 | 225          |
| L11-423 | 6886431  | 416785   | 245.492       | 239        | -72 | 315          |
| L11-424 | 6886416  | 416768.9 | 245.987       | 200        | -74 | 90           |
| L11-425 | 6886418  | 416770.6 | 245.988       | 224        | -73 | 135          |
| L12-418 | 6886008  | 416951   | 242.5388      | 202        | -85 | 0            |
| L12-420 | 6886008  | 416951   | 242.5388      | 211.5      | -77 | 0            |
| L12-422 | 6886101  | 416671   | 240.2364      | 299        | -73 | 235          |
| L12-426 | 6885961  | 416950.5 | 240.8465      | 229.5      | -84 | 180          |
| L12-427 | 6886147  | 416702   | 241.0259      | 250.5      | -89 | 180          |
| L12-428 | 6885961  | 416951.9 | 240.7457      | 224        | -82 | 0            |
| L12-429 | 6886147  | 416702   | 241.0259      | 251        | -79 | 180          |
| L12-430 | 6885970  | 417001.9 | 241.196       | 217        | -90 | 0            |
| L12-431 | 6886012  | 416797.8 | 238.8611      | 194        | -90 | 0            |
| L12-432 | 6885971  | 417002   | 241.2625      | 262        | -60 | 0            |
| L12-433 | 6886012  | 416797.8 | 238.8611      | 194        | -79 | 0            |



| Hole_ID | Northing | Easting  | Elevation (m) | Length (m) | Dip | Orig_Azimuth |
|---------|----------|----------|---------------|------------|-----|--------------|
| L12-434 | 6885971  | 417001.6 | 241.2929      | 241        | -75 | 180          |
| L12-435 | 6886014  | 416799.8 | 238.8269      | 200        | -80 | 180          |
| L12-436 | 6885955  | 417051.1 | 241.0647      | 196        | -80 | 0            |
| L12-437 | 6886053  | 416751.6 | 238.99        | 206        | -89 | 0            |
| L12-438 | 6885960  | 417050.9 | 241.1664      | 256        | -80 | 180          |
| L12-439 | 6886053  | 416751.6 | 238.99        | 200        | -70 | 0            |
| L12-440 | 6886030  | 417050.4 | 243.3736      | 227        | -88 | 0            |
| L12-441 | 6886053  | 416751.6 | 238.99        | 179        | -80 | 0            |
| L12-442 | 6886103  | 416951.9 | 243.9708      | 181        | -80 | 0            |
| L12-443 | 6886053  | 416751.6 | 238.99        | 206        | -70 | 180          |
| L12-444 | 6886103  | 416951.9 | 243.9708      | 181        | -79 | 180          |
| L12-445 | 6886053  | 416751.6 | 238.99        | 194        | -79 | 180          |
| L12-446 | 6886077  | 416275   | 237.1996      | 117        | -90 | 0            |
| L12-447 | 6886068  | 416700.9 | 238.6831      | 229.25     | -89 | 0            |
| L12-448 | 6886077  | 416275   | 237.1996      | 259.55     | -90 | 0            |
| L12-449 | 6886068  | 416700.9 | 238.6831      | 189.2      | -69 | 0            |
| L12-450 | 6886075  | 416226.2 | 237.3783      | 258        | -90 | 0            |
| L12-451 | 6886068  | 416700.9 | 238.6831      | 200        | -84 | 90           |
| L12-452 | 6886077  | 416200.6 | 237.1373      | 263.6      | -90 | 0            |
| L12-453 | 6886068  | 416700.9 | 238.6831      | 206.35     | -82 | 135          |
| L12-454 | 6886004  | 416325.1 | 237.2294      | 274.5      | -90 | 0            |
| L12-455 | 6886068  | 416700.9 | 238.6831      | 220        | -84 | 180          |
| L12-456 | 6886055  | 416319.1 | 237.13        | 260.3      | -90 | 0            |
| L12-457 | 6885992  | 416848.8 | 239.06        | 208        | -90 | 0            |
| L12-458 | 6885900  | 416899.9 | 237.07        | 235        | -90 | 0            |
| L12-459 | 6885992  | 416848.8 | 239.04        | 196        | -82 | 180          |



| Hole_ID | Northing | Easting  | Elevation (m) | Length (m) | Dip | Orig_Azimuth |
|---------|----------|----------|---------------|------------|-----|--------------|
| L12-460 | 6885900  | 416949.9 | 237.1         | 220.5      | -90 | 0            |
| L12-461 | 6886001  | 416225.8 | 237.18        | 249.6      | -89 | 0            |
| L12-462 | 6885900  | 417000   | 237.1         | 223        | -90 | 0            |
| L12-463 | 6886025  | 416225.9 | 237.13        | 250        | -89 | 0            |
| L12-464 | 6885900  | 417051   | 237.08        | 247        | -90 | 0            |
| L12-465 | 6886026  | 416274.8 | 237.12        | 250        | -89 | 0            |
| L12-466 | 6885899  | 417100.3 | 237.07        | 205        | -90 | 0            |
| L12-467 | 6886027  | 416324.7 | 237.24        | 273        | -89 | 0            |
| L12-468 | 6885850  | 417050.1 | 237.1         | 250        | -90 | 0            |
| L12-469 | 6885850  | 417000.6 | 237.11        | 241        | -90 | 0            |
| L12-470 | 6885799  | 417050.8 | 237.1         | 223        | -90 | 0            |
| L12-471 | 6885795  | 416700.6 | 261.048       | 256        | -75 | 0            |
| L12-472 | 6885796  | 416700.4 | 261.202       | 277        | -61 | 0            |
| L12-473 | 6885797  | 416700.5 | 261.254       | 253        | -68 | 340          |
| L12-474 | 6885796  | 416701.3 | 261.327       | 250        | -67 | 20           |
| L12-475 | 6885788  | 416788   | 260.643       | 250        | -74 | 12           |
| L12-476 | 6885789  | 416786   | 260.451       | 250        | -80 | 20           |
| L12-477 | 6885731  | 416920.7 | 260.903       | 301        | -54 | 0            |
| L12-478 | 6885730  | 416920.8 | 260.782       | 277        | -58 | 0            |
| L12-479 | 6885730  | 416920.8 | 260.705       | 262        | -64 | 0            |
| L12-480 | 6885730  | 416920.8 | 260.719       | 249        | -73 | 0            |
| L12-481 | 6885761  | 416878.4 | 262.946       | 280        | -70 | 342          |
| L12-482 | 6885762  | 416878.9 | 262.963       | 284        | -56 | 0            |
| L12-483 | 6885761  | 416878.9 | 262.954       | 278        | -65 | 0            |
| L12-484 | 6885761  | 416879   | 262.962       | 260        | -73 | 0            |
| L12-485 | 6885761  | 416879   | 262.996       | 242        | -83 | 0            |



| Hole_ID | Northing | Easting  | Elevation (m) | Length (m) | Dip | Orig_Azimuth |
|---------|----------|----------|---------------|------------|-----|--------------|
| L12-486 | 6885750  | 416975.8 | 256.127       | 278        | -56 | 0            |
| L12-487 | 6885750  | 416975.8 | 256.089       | 263        | -64 | 0            |
| L12-488 | 6885750  | 416975.9 | 256.037       | 260        | -70 | 0            |
| L12-489 | 6885750  | 416975.7 | 256.192       | 242        | -82 | 0            |
| L12-490 | 6885749  | 416975.8 | 256.581       | 251        | -89 | 0            |
| L12-491 | 6885712  | 417025   | 248.387       | 277        | -47 | 0            |
| L12-492 | 6885712  | 417025.1 | 248.454       | 278        | -53 | 0            |
| L12-493 | 6885712  | 417025.1 | 248.72        | 260        | -62 | 0            |
| L12-494 | 6885711  | 417025.3 | 248.866       | 236        | -68 | 0            |
| L12-495 | 6885738  | 417076.1 | 245.599       | 254        | -53 | 0            |
| L12-496 | 6885738  | 417076.1 | 245.609       | 251        | -62 | 0            |
| L12-497 | 6885745  | 417127.7 | 242.143       | 281        | -47 | 0            |
| L12-498 | 6885744  | 417127.7 | 242.176       | 236        | -59 | 0            |
| L12-499 | 6885795  | 416700.1 | 261.146       | 263        | -58 | 335          |
| L12-500 | 6885795  | 416700.7 | 260.988       | 266        | -58 | 20           |
| L12-501 | 6885893  | 416302.3 | 257.445       | 281        | -66 | 0            |
| L12-502 | 6885892  | 416302.3 | 257.496       | 269        | -77 | 0            |
| L12-503 | 6885893  | 416302.3 | 257.466       | 277        | -72 | 0            |
| L12-504 | 6885893  | 416302.2 | 257.344       | 304        | -58 | 0            |
| L12-505 | 6885892  | 416298.1 | 257.242       | 281        | -74 | 315          |
| L12-506 | 6885892  | 416297.6 | 257.43        | 355        | -47 | 315          |
| L12-507 | 6885890  | 416465.3 | 258.234       | 349        | -51 | 315          |
| L12-508 | 6886215  | 416208.3 | 247.217       | 322        | -47 | 135          |
| L12-509 | 6886215  | 416208   | 247.158       | 325        | -66 | 135          |
| L13-510 | 6886044  | 416647.8 | 237.053       | 215        | -88 | 0            |
| L13-511 | 6885944  | 416650.7 | 236.919       | 215        | -89 | 0            |



| Hole_ID | Northing | Easting  | Elevation (m) | Length (m) | Dip | Orig_Azimuth |
|---------|----------|----------|---------------|------------|-----|--------------|
| L13-512 | 6886001  | 416698.8 | 236.99        | 200        | -89 | 0            |
| L13-513 | 6885995  | 416649.2 | 237.022       | 212        | -89 | 0            |
| L13-514 | 6886103  | 416400.5 | 238.42        | 251        | -89 | 0            |
| L13-515 | 6886052  | 416399.9 | 236.894       | 233        | -89 | 0            |
| L13-516 | 6885958  | 416399.9 | 236.914       | 236        | -89 | 0            |
| L13-517 | 6885952  | 416449.3 | 236.938       | 212        | -89 | 0            |
| L13-518 | 6885953  | 417574.7 | 237.875       | 50         | -90 | 0            |
| L13-519 | 6885978  | 417566.6 | 238.348       | 50         | -89 | 0            |
| L13-520 | 6886414  | 417210.9 | 241.504       | 52.3       | -90 | 0            |
| L13-521 | 6886428  | 417218.4 | 241.46        | 50         | -89 | 0            |
| L13-522 | 6885857  | 416549   | 258           | 251        | -72 | 315          |
| L13-523 | 6885857  | 416549   | 258           | 251        | -77 | 0            |
| L13-524 | 6885857  | 416549   | 258           | 233        | -73 | 45           |
| L13-525 | 6885890  | 416420   | 258           | 266        | -80 | 284          |
| L14-526 | 6886046  | 416725.2 | 237.981       | 191        | -88 | 0            |
| L14-527 | 6886072  | 416649.9 | 238.013       | 182        | -89 | 0            |
| L14-528 | 6886023  | 416698.9 | 236.88        | 185        | -89 | 0            |
| L14-529 | 6885971  | 416650   | 236.793       | 188        | -90 | 0            |
| L14-530 | 6885922  | 416700.2 | 236.916       | 185        | -90 | 0            |
| L14-531 | 6886023  | 416649   | 236.83        | 188        | -90 | 0            |
| L14-532 | 6885974  | 416727.9 | 236.872       | 182        | -89 | 0            |
| L14-533 | 6886048  | 416425.3 | 236.845       | 221        | -90 | 0            |
| L14-534 | 6886046  | 416375.7 | 236.834       | 221        | -89 | 0            |
| L14-535 | 6886022  | 416301.3 | 236.853       | 239        | -90 | 0            |
| L14-536 | 6886022  | 416450.3 | 236.841       | 218        | -90 | 0            |
| L14-537 | 6886022  | 416349.3 | 236.892       | 239        | -89 | 0            |



| Hole_ID | Northing | Easting  | Elevation (m) | Length (m) | Dip | Orig_Azimuth |
|---------|----------|----------|---------------|------------|-----|--------------|
| L14-538 | 6886047  | 416473.2 | 236.851       | 227        | -90 | 0            |
| L14-539 | 6886051  | 416302.5 | 236.946       | 242        | -89 | 0            |
| L14-540 | 6886048  | 416441.2 | 236.937       | 230        | -89 | 0            |
| L14-541 | 6886214  | 416099.6 | 240.4976      | 244.5      | -88 | 285          |
| L14-542 | 6886214  | 416099.6 | 240.4976      | 262.5      | -84 | 263          |
| L14-543 | 6886214  | 416099.6 | 240.4976      | 270        | -81 | 270          |
| L14-544 | 6885889  | 416420   | 258.3084      | 271.5      | -68 | 272          |
| L14-545 | 6885889  | 416420   | 258.3084      | 247.5      | -66 | 179          |
| L14-546 | 6885889  | 416420   | 258.3084      | 238.5      | -61 | 180          |
| L14-547 | 6885889  | 416420   | 258.3084      | 238.5      | -76 | 180          |

| Appendix 3- Historic Avaion Advanced Material Drill-nole intercepts |       |       |              |          |  |  |  |
|---|-------|-------|--------------|----------|--|--|--|
| Hole_ID   | From  | То    | Interval (m) | TREO (%) |  |  |  |
| L07-053   | 7     | 12    | 5            | 1.53     |  |  |  |
| L07-053   | 32    | 46    | 14           | 1.54     |  |  |  |
| L07-053   | 56    | 60.55 | 4.55         | 1.96     |  |  |  |
| L07-053   | 70.53 | 91    | 20.47        | 1.60     |  |  |  |
| L07-054   | 42    | 74.71 | 34.71        | 1.45     |  |  |  |
| L07-054   | 79.27 | 87.75 | 8.48         | 1.63     |  |  |  |
| L07-055   | 15.25 | 47    | 31.75        | 4.76     |  |  |  |
| L07-056A  | 84    | 91.55 | 7.55         | 2.07     |  |  |  |
| L07-057A  | 73    | 91.5  | 18.5         | 1.40     |  |  |  |
| L07-058   | 27.75 | 33.25 | 5.5          | 5.44     |  |  |  |
| L07-058   | 46    | 65    | 19           | 1.39     |  |  |  |

## **Appendix 3- Historic Avalon Advanced Material Drill-hole Intercepts**



| Hole_ID  | From  | То    | Interval (m) | TREO (%) |
|----------|-------|-------|--------------|----------|
| L07-058  | 73    | 94.45 | 21.45        | 1.40     |
| L07-059  | 69    | 80.2  | 11.2         | 1.64     |
| L07-060  | 16    | 31.6  | 15.6         | 2.30     |
| L07-060  | 55    | 61.3  | 6.3          | 1.47     |
| L07-060  | 71    | 90    | 19           | 2.01     |
| L07-061A | 51    | 65.65 | 14.65        | 1.58     |
| L07-063  | 34    | 68.3  | 34.3         | 1.73     |
| L07-063  | 91    | 95.1  | 4.1          | 1.72     |
| L07-064  | 58    | 62    | 4            | 1.35     |
| L07-064  | 65    | 76    | 11           | 1.34     |
| L07-064  | 80    | 84.8  | 4.8          | 1.13     |
| L08-065  | 27    | 43    | 16           | 1.76     |
| L08-065  | 47    | 70.65 | 23.65        | 2.75     |
| L08-067  | 22    | 26.75 | 4.75         | 1.31     |
| L08-068  | 72    | 80    | 8            | 1.47     |
| L08-069  | 82.6  | 87    | 4.4          | 3.44     |
| L08-070  | 29    | 35.25 | 6.25         | 2.38     |
| L08-070  | 46.4  | 58    | 11.6         | 1.52     |
| L08-070  | 68.6  | 78.6  | 10           | 2.12     |
| L08-071  | 11.5  | 20.2  | 8.7          | 2.18     |
| L08-071  | 32.3  | 20.2  | -12.1        | -0.91    |
| L08-072  | 39.55 | 49.2  | 9.65         | 2.12     |
| L08-073  | 42.6  | 54    | 11.4         | 1.54     |
| L08-073  | 60    | 68    | 8            | 2.60     |
| L08-073  | 82    | 86.25 | 4.25         | 2.30     |
| L08-074  | 0.25  | 16    | 15.75        | 1.66     |



| Hole_ID  | From  | То    | Interval (m) | TREO (%) |
|----------|-------|-------|--------------|----------|
| L08-074  | 24    | 28    | 4            | 1.38     |
| L08-074  | 76    | 88    | 12           | 2.17     |
| L08-075A | 23    | 27    | 4            | 1.38     |
| L08-076  | 35    | 39    | 4            | 1.07     |
| L08-076  | 72.9  | 81.4  | 8.5          | 1.58     |
| L08-077  | 44    | 61.25 | 17.25        | 1.52     |
| L08-078  | 27    | 31.3  | 4.3          | 2.09     |
| L08-078  | 37.1  | 42.5  | 5.4          | 2.10     |
| L08-079  | 24    | 42.5  | 18.5         | 0.38     |
| L08-079  | 35.4  | 74.6  | 39.2         | 1.50     |
| L08-080  | 6.75  | 10.75 | 4            | 1.61     |
| L08-080  | 35.8  | 48.15 | 12.35        | 2.29     |
| L08-080  | 60.9  | 66.5  | 5.6          | 1.49     |
| L08-080  | 69.7  | 76    | 6.3          | 1.19     |
| L08-081  | 30.35 | 65.8  | 35.45        | 1.70     |
| L08-082  | 35    | 53.75 | 18.75        | 1.41     |
| L08-084  | 7.25  | 13.5  | 6.25         | 1.75     |
| L08-084  | 26.6  | 48    | 21.4         | 1.94     |
| L08-084  | 57    | 68    | 11           | 2.49     |
| L08-085  | 17.7  | 28.6  | 10.9         | 1.95     |
| L08-085  | 42.4  | 48    | 5.6          | 1.70     |
| L08-085  | 61.15 | 87    | 25.85        | 1.49     |
| L08-086  | 16.9  | 24.15 | 7.25         | 2.10     |
| L08-086  | 41.8  | 50.25 | 8.45         | 1.51     |
| L08-087  | 15    | 41    | 26           | 2.11     |
| L08-087  | 75.2  | 81.2  | 6            | 1.32     |



| Hole_ID | From  | То    | Interval (m) | TREO (%) |
|---------|-------|-------|--------------|----------|
| L08-088 | 15.4  | 31    | 15.6         | 1.69     |
| L08-088 | 58    | 86.5  | 28.5         | 2.30     |
| L08-090 | 24.4  | 39.5  | 15.1         | 1.35     |
| L08-091 | 52.4  | 63.25 | 10.85        | 2.54     |
| L08-091 | 81.4  | 87.65 | 6.25         | 2.18     |
| L08-092 | 34    | 50    | 16           | 1.69     |
| L08-092 | 67    | 74    | 7            | 1.76     |
| L08-093 | 72    | 101   | 29           | 1.87     |
| L08-095 | 5.7   | 14    | 8.3          | 1.37     |
| L08-095 | 42    | 66    | 24           | 1.66     |
| L08-095 | 74    | 84.7  | 10.7         | 1.51     |
| L08-096 | 21.65 | 26.5  | 4.85         | 1.84     |
| L08-096 | 46.8  | 55.4  | 8.6          | 1.51     |
| L08-097 | 17.2  | 42.4  | 25.2         | 1.37     |
| L08-097 | 70.15 | 80    | 9.85         | 2.18     |
| L08-098 | 37.5  | 59    | 21.5         | 1.40     |
| L08-098 | 65    | 72.95 | 7.95         | 1.60     |
| L08-099 | 15    | 22.1  | 7.1          | 1.69     |
| L08-099 | 58    | 64.4  | 6.4          | 2.44     |
| L08-099 | 85    | 91.35 | 6.35         | 1.73     |
| L08-100 | 16.3  | 22.1  | 5.8          | 1.66     |
| L08-100 | 64.7  | 70.4  | 5.7          | 1.84     |
| L08-101 | 70.7  | 84    | 13.3         | 2.54     |
| L08-102 | 13.6  | 22    | 8.4          | 2.10     |
| L08-103 | 8     | 23.8  | 15.8         | 1.33     |
| L08-103 | 63    | 69.5  | 6.5          | 1.93     |



| Hole_ID | From | То    | Interval (m) | TREO (%) |
|---------|------|-------|--------------|----------|
| L08-103 | 86   | 91.5  | 5.5          | 1.96     |
| L08-104 | 15   | 28    | 13           | 1.57     |
| L08-104 | 73   | 77.05 | 4.05         | 2.77     |
| L08-105 | 6    | 14    | 8            | 3.04     |
| L08-105 | 26   | 31.3  | 5.3          | 1.39     |
| L08-105 | 39   | 43    | 4            | 1.46     |
| L08-105 | 85   | 89.65 | 4.65         | 2.01     |
| L08-105 | 94   | 100.1 | 6.1          | 2.01     |
| L08-106 | 68   | 88.3  | 20.3         | 1.45     |
| L08-107 | 5.8  | 11    | 5.2          | 2.55     |
| L08-108 | 6.4  | 30    | 23.6         | 1.39     |
| L08-108 | 70.5 | 83.35 | 12.85        | 1.68     |
| L08-109 | 6    | 21    | 15           | 1.50     |
| L08-109 | 27.2 | 33.65 | 6.45         | 1.79     |
| L08-109 | 40   | 46    | 6            | 1.40     |
| L08-109 | 93   | 97    | 4            | 1.48     |
| L08-110 | 6    | 18    | 12           | 2.51     |
| L08-111 | 9.15 | 15    | 5.85         | 2.66     |
| L08-111 | 21   | 31    | 10           | 1.74     |
| L08-111 | 87   | 91    | 4            | 1.24     |
| L08-113 | 10   | 15.15 | 5.15         | 1.36     |
| L08-113 | 42   | 58    | 16           | 1.46     |
| L08-113 | 80.5 | 94    | 13.5         | 2.03     |
| L08-114 | 5.9  | 17    | 11.1         | 1.70     |
| L08-114 | 64.9 | 71    | 6.1          | 1.39     |
| L08-114 | 81.6 | 88    | 6.4          | 1.32     |



| Hole_ID | From  | То    | Interval (m) | TREO (%) |
|---------|-------|-------|--------------|----------|
| L08-115 | 76.1  | 94    | 17.9         | 1.82     |
| L08-116 | 18    | 22    | 4            | 1.33     |
| L08-117 | 48.8  | 87    | 38.2         | 1.59     |
| L08-118 | 8     | 19    | 11           | 2.86     |
| L08-118 | 30    | 68.4  | 38.4         | 1.99     |
| L08-118 | 79    | 91.2  | 12.2         | 1.18     |
| L08-125 | 9     | 27    | 18           | 1.64     |
| L08-125 | 37    | 55.8  | 18.8         | 1.62     |
| L08-125 | 89    | 93    | 4            | 1.28     |
| L08-126 | 12    | 20    | 8            | 2.95     |
| L08-126 | 36    | 42    | 6            | 1.21     |
| L08-126 | 52    | 58    | 6            | 1.25     |
| L08-126 | 86    | 92    | 6            | 2.65     |
| L08-127 | 6     | 10    | 4            | 3.11     |
| L08-127 | 22    | 89    | 67           | 1.84     |
| L08-129 | 84    | 88    | 4            | 1.15     |
| L08-132 | 73.6  | 80.2  | 6.6          | 1.54     |
| L08-132 | 88    | 96.55 | 8.55         | 1.24     |
| L08-134 | 60.75 | 69    | 8.25         | 2.05     |
| L09-137 | 64    | 73.1  | 9.1          | 1.44     |
| L09-137 | 89.15 | 95    | 5.85         | 2.87     |
| L09-138 | 32.55 | 38    | 5.45         | 2.57     |
| L09-138 | 46    | 65.4  | 19.4         | 2.01     |
| L09-139 | 42.15 | 58    | 15.85        | 1.36     |
| L09-139 | 80    | 84    | 4            | 2.28     |
| L09-140 | 48.85 | 54.7  | 5.85         | 1.53     |



| Hole_ID | From  | То    | Interval (m) | TREO (%) |
|---------|-------|-------|--------------|----------|
| L09-140 | 67    | 72.45 | 5.45         | 1.31     |
| L09-141 | 77.4  | 91    | 13.6         | 1.54     |
| L09-143 | 28    | 32    | 4            | 1.32     |
| L09-144 | 21.3  | 34.55 | 13.25        | 3.10     |
| L09-144 | 41    | 45    | 4            | 1.51     |
| L09-145 | 5.3   | 41    | 35.7         | 1.35     |
| L09-145 | 65    | 78.2  | 13.2         | 1.84     |
| L09-146 | 8.84  | 21.7  | 12.86        | 1.57     |
| L09-146 | 34.75 | 46.7  | 11.95        | 1.38     |
| L09-146 | 78    | 89    | 11           | 1.85     |
| L09-147 | 50.5  | 75    | 24.5         | 1.44     |
| L09-148 | 49    | 56.5  | 7.5          | 1.57     |
| L09-149 | 55    | 65    | 10           | 1.54     |
| L09-150 | 71    | 90    | 19           | 1.34     |
| L09-151 | 51.2  | 67.9  | 16.7         | 1.55     |
| L09-151 | 86    | 90    | 4            | 1.18     |
| L09-152 | 27    | 39    | 12           | 1.72     |
| L09-152 | 43    | 56    | 13           | 1.97     |
| L09-162 | 83    | 87    | 4            | 1.38     |
| L09-163 | 3.1   | 9     | 5.9          | 1.51     |
| L09-163 | 31.2  | 72    | 40.8         | 1.62     |
| L09-164 | 3     | 12    | 9            | 1.21     |
| L09-164 | 47.1  | 53    | 5.9          | 1.72     |
| L09-164 | 69    | 97    | 28           | 1.70     |
| L09-165 | 1.5   | 12    | 10.5         | 1.43     |
| L09-165 | 32    | 45.6  | 13.6         | 1.66     |



| Hole_ID | From  | То    | Interval (m) | TREO (%) |
|---------|-------|-------|--------------|----------|
| L09-165 | 62.95 | 83.15 | 20.2         | 1.41     |
| L09-166 | 2.6   | 11    | 8.4          | 1.38     |
| L09-166 | 37    | 55    | 18           | 1.56     |
| L09-166 | 61    | 69.5  | 8.5          | 1.73     |
| L09-167 | 47.6  | 57    | 9.4          | 1.64     |
| L09-167 | 68    | 80.5  | 12.5         | 1.77     |
| L09-168 | 65    | 96    | 31           | 1.68     |
| L09-169 | 62.05 | 86.4  | 24.35        | 1.79     |
| L09-171 | 39    | 43    | 4            | 1.26     |
| L09-171 | 59.6  | 63.6  | 4            | 1.12     |
| L09-172 | 7.87  | 13    | 5.13         | 1.25     |
| L09-172 | 79    | 94.4  | 15.4         | 1.58     |
| L09-174 | 90    | 94    | 4            | 1.12     |
| L09-177 | 69.45 | 76.95 | 7.5          | 1.36     |
| L09-177 | 84.05 | 90    | 5.95         | 1.36     |
| L09-178 | 6.84  | 43    | 36.16        | 2.34     |
| L09-178 | 69    | 75.25 | 6.25         | 1.42     |
| L09-179 | 7     | 24.6  | 17.6         | 2.81     |
| L09-179 | 31    | 39.05 | 8.05         | 1.35     |
| L09-179 | 83.1  | 94.45 | 11.35        | 1.69     |
| L09-180 | 7     | 43.95 | 36.95        | 2.11     |
| L09-180 | 57    | 73    | 16           | 1.68     |
| L09-181 | 12    | 83.7  | 71.7         | 1.87     |
| L09-182 | 9     | 17    | 8            | 1.60     |
| L09-182 | 26.35 | 53.2  | 26.85        | 2.36     |
| L09-183 | 2.3   | 12.4  | 10.1         | 1.54     |



| Hole_ID | From  | То    | Interval (m) | TREO (%) |
|---------|-------|-------|--------------|----------|
| L09-183 | 28    | 51    | 23           | 1.57     |
| L09-184 | 6     | 13    | 7            | 1.58     |
| L09-184 | 31    | 49.5  | 18.5         | 1.59     |
| L09-184 | 79    | 83    | 4            | 1.09     |
| L09-185 | 2.2   | 21    | 18.8         | 1.90     |
| L09-185 | 44    | 52    | 8            | 1.51     |
| L09-185 | 66    | 70    | 4            | 1.57     |
| L09-185 | 90    | 95    | 5            | 1.66     |
| L09-186 | 2.3   | 16    | 13.7         | 1.64     |
| L09-186 | 39    | 45    | 6            | 2.17     |
| L09-186 | 61    | 65    | 4            | 1.80     |
| L09-186 | 74.2  | 96    | 21.8         | 1.64     |
| L09-187 | 4     | 12    | 8            | 1.23     |
| L09-187 | 34    | 50    | 16           | 1.22     |
| L09-188 | 21    | 47.2  | 26.2         | 1.78     |
| L09-189 | 3     | 8     | 5            | 1.48     |
| L09-189 | 36    | 53.7  | 17.7         | 1.43     |
| L09-189 | 60    | 64.9  | 4.9          | 1.61     |
| L09-190 | 41.45 | 56.9  | 15.45        | 1.95     |
| L09-190 | 62.6  | 68.2  | 5.6          | 1.46     |
| L09-191 | 18    | 26    | 8            | 1.37     |
| L09-191 | 30    | 34    | 4            | 1.24     |
| L09-191 | 42    | 55.7  | 13.7         | 1.68     |
| L09-191 | 68.5  | 72.9  | 4.4          | 3.39     |
| L09-191 | 85    | 99    | 14           | 1.96     |
| L09-192 | 20.5  | 25.55 | 5.05         | 1.38     |



| Hole_ID | From  | То    | Interval (m) | TREO (%) |
|---------|-------|-------|--------------|----------|
| L09-192 | 31    | 37    | 6            | 1.62     |
| L09-193 | 31.45 | 39.3  | 7.85         | 2.81     |
| L09-194 | 20    | 26.6  | 6.6          | 1.54     |
| L09-194 | 31.45 | 63    | 31.55        | 1.83     |
| L09-195 | 16    | 20    | 4            | 1.18     |
| L09-195 | 24    | 55.5  | 31.5         | 1.84     |
| L09-195 | 93    | 97    | 4            | 1.14     |
| L09-197 | 92    | 98    | 6            | 1.44     |
| L09-198 | 40    | 44    | 4            | 1.13     |
| L09-199 | 22.25 | 62.35 | 40.1         | 1.72     |
| L09-199 | 66.5  | 81    | 14.5         | 1.75     |
| L09-199 | 87    | 101   | 14           | 1.72     |
| L09-200 | 11    | 15    | 4            | 1.17     |
| L09-200 | 29    | 39    | 10           | 1.23     |
| L09-200 | 43    | 47.85 | 4.85         | 1.40     |
| L09-200 | 69.85 | 92    | 22.15        | 1.30     |
| L09-201 | 38    | 61    | 23           | 1.37     |
| L09-201 | 65    | 70.5  | 5.5          | 1.57     |
| L09-202 | 46    | 53.5  | 7.5          | 1.30     |
| L09-202 | 88    | 92    | 4            | 3.34     |
| L09-203 | 63.2  | 78.5  | 15.3         | 1.43     |
| L09-205 | 79    | 83    | 4            | 1.36     |
| L09-206 | 67    | 101   | 34           | 1.50     |
| L10-209 | 10    | 14    | 4            | 1.10     |
| L10-209 | 28.16 | 62    | 33.84        | 1.50     |
| L10-210 | 35    | 72    | 37           | 1.47     |



| Hole_ID | From  | То     | Interval (m) | TREO (%) |
|---------|-------|--------|--------------|----------|
| L10-211 | 14.2  | 50     | 35.8         | 3.27     |
| L10-212 | 14.05 | 45     | 30.95        | 5.14     |
| L10-213 | 15    | 68.45  | 53.45        | 2.25     |
| L10-214 | 10.85 | 39.7   | 28.85        | 1.39     |
| L10-214 | 78.9  | 87.05  | 8.15         | 2.37     |
| L10-215 | 22    | 58     | 36           | 1.62     |
| L10-215 | 80.4  | 94     | 13.6         | 1.95     |
| L10-216 | 40    | 46.5   | 6.5          | 1.52     |
| L10-216 | 54    | 62.25  | 8.25         | 1.78     |
| L10-216 | 80    | 94     | 14           | 1.72     |
| L10-217 | 19    | 27     | 8            | 3.16     |
| L10-217 | 35    | 52     | 17           | 1.52     |
| L10-217 | 90    | 94     | 4            | 1.26     |
| L10-218 | 22.75 | 28     | 5.25         | 1.50     |
| L10-218 | 36    | 42     | 6            | 3.46     |
| L10-218 | 46    | 52     | 6            | 2.17     |
| L10-218 | 56.95 | 93     | 36.05        | 1.26     |
| L10-219 | 27    | 52     | 25           | 1.93     |
| L10-219 | 60.8  | 66     | 5.2          | 1.76     |
| L10-219 | 70    | 74     | 4            | 1.21     |
| L10-219 | 78.45 | 95.15  | 16.7         | 1.71     |
| L10-220 | 25    | 100.05 | 75.05        | 1.77     |
| L10-222 | 5     | 11     | 6            | 1.97     |
| L10-222 | 15    | 19     | 4            | 2.42     |
| L10-222 | 27.8  | 74     | 46.2         | 1.62     |
| L10-222 | 88    | 96.15  | 8.15         | 1.69     |



| Hole_ID | From  | То    | Interval (m) | TREO (%) |
|---------|-------|-------|--------------|----------|
| L10-223 | 3.7   | 51    | 47.3         | 1.58     |
| L10-224 | 16    | 24    | 8            | 1.21     |
| L10-224 | 30    | 43.6  | 13.6         | 1.60     |
| L10-224 | 64.5  | 70    | 5.5          | 2.02     |
| L10-224 | 76.55 | 93    | 16.45        | 2.60     |
| L10-225 | 6.9   | 15    | 8.1          | 1.09     |
| L10-225 | 19    | 38    | 19           | 1.14     |
| L10-225 | 51    | 55    | 4            | 1.67     |
| L10-225 | 67    | 94    | 27           | 2.06     |
| L10-226 | 15    | 33    | 18           | 1.59     |
| L10-226 | 43    | 55.9  | 12.9         | 1.33     |
| L10-226 | 82.9  | 95    | 12.1         | 2.27     |
| L10-228 | 9     | 43    | 34           | 1.36     |
| L10-228 | 80.3  | 92.7  | 12.4         | 2.93     |
| L10-237 | 74    | 87    | 13           | 1.43     |
| L10-244 | 53    | 59    | 6            | 1.24     |
| L10-244 | 69.4  | 73.6  | 4.2          | 1.51     |
| L10-260 | 7     | 38.75 | 31.75        | 1.74     |
| L10-260 | 50    | 54.6  | 4.6          | 1.49     |
| L10-261 | 74.5  | 101   | 26.5         | 1.67     |
| L10-262 | 4.85  | 32    | 27.15        | 1.77     |
| L10-263 | 60.1  | 100.4 | 40.3         | 1.79     |
| L10-264 | 20.7  | 54    | 33.3         | 1.57     |
| L10-265 | 68    | 95.05 | 27.05        | 1.89     |
| L10-266 | 5.5   | 78.8  | 73.3         | 1.45     |
| L10-267 | 74    | 91.8  | 17.8         | 1.42     |



| Hole_ID | From | То    | Interval (m) | TREO (%) |
|---------|------|-------|--------------|----------|
| L10-268 | 20   | 30    | 10           | 1.71     |
| L10-268 | 53   | 93    | 40           | 1.78     |
| L10-269 | 93   | 97    | 4            | 1.20     |
| L10-270 | 38   | 49.2  | 11.2         | 1.58     |
| L10-270 | 55.6 | 81    | 25.4         | 1.65     |
| L10-271 | 78   | 96.65 | 18.65        | 2.14     |
| L10-272 | 38.2 | 80.5  | 42.3         | 1.76     |
| L10-274 | 34   | 70.7  | 36.7         | 1.88     |
| L10-274 | 81.5 | 92.3  | 10.8         | 2.12     |
| L10-275 | 50   | 61.1  | 11.1         | 1.87     |
| L10-276 | 62.2 | 77    | 14.8         | 1.58     |
| L10-276 | 83   | 93    | 10           | 1.45     |
| L10-277 | 22   | 26    | 4            | 1.30     |
| L10-277 | 51   | 70    | 19           | 1.35     |
| L10-278 | 9    | 15    | 6            | 1.43     |
| L10-279 | 76   | 105   | 29           | 1.58     |
| L10-280 | 9    | 14.45 | 5.45         | 1.58     |
| L10-280 | 75.4 | 93    | 17.6         | 1.53     |
| L10-281 | 44   | 50    | 6            | 1.68     |
| L10-281 | 78   | 102.5 | 24.5         | 1.41     |
| L10-282 | 9.6  | 37    | 27.4         | 1.86     |
| L10-282 | 78   | 94    | 16           | 2.17     |
| L10-283 | 13.2 | 30    | 16.8         | 1.65     |
| L10-283 | 38   | 62    | 24           | 1.52     |
| L10-283 | 80   | 87.5  | 7.5          | 2.02     |
| L10-283 | 97   | 102   | 5            | 2.11     |



| Hole_ID | From  | То    | Interval (m) | TREO (%) |
|---------|-------|-------|--------------|----------|
| L10-284 | 14.9  | 23.2  | 8.3          | 2.66     |
| L10-284 | 41.1  | 49.65 | 8.55         | 2.88     |
| L10-284 | 81.3  | 90    | 8.7          | 1.73     |
| L10-285 | 60    | 64    | 4            | 1.43     |
| L10-286 | 10    | 31    | 21           | 1.56     |
| L10-286 | 45.5  | 67    | 21.5         | 1.90     |
| L10-287 | 68    | 91    | 23           | 1.45     |
| L10-288 | 89.6  | 94    | 4.4          | 1.85     |
| L10-289 | 32    | 38    | 6            | 1.36     |
| L10-289 | 42    | 58    | 16           | 1.76     |
| L10-289 | 71.75 | 75.8  | 4.05         | 2.06     |
| L10-289 | 91.4  | 96.7  | 5.3          | 1.77     |
| L10-290 | 13    | 17.35 | 4.35         | 1.24     |
| L10-291 | 50.7  | 95    | 44.3         | 1.92     |
| L10-292 | 69    | 93    | 24           | 1.37     |
| L10-293 | 63    | 102   | 39           | 1.64     |
| L10-294 | 64    | 93    | 29           | 1.59     |
| L10-295 | 51    | 96.1  | 45.1         | 1.68     |
| L10-296 | 26    | 31.2  | 5.2          | 1.20     |
| L10-296 | 62.3  | 92.8  | 30.5         | 2.18     |
| L10-297 | 51    | 77.6  | 26.6         | 1.67     |
| L10-298 | 11    | 16.3  | 5.3          | 1.88     |
| L10-298 | 50    | 63    | 13           | 1.15     |
| L10-298 | 66.7  | 93    | 26.3         | 1.83     |
| L10-299 | 8     | 12    | 4            | 1.13     |
| L10-299 | 45    | 65    | 20           | 1.67     |



| Hole_ID | From  | То    | Interval (m) | TREO (%) |
|---------|-------|-------|--------------|----------|
| L10-300 | 48.3  | 81.6  | 33.3         | 1.53     |
| L10-301 | 53    | 61    | 8            | 1.55     |
| L10-303 | 30.5  | 64    | 33.5         | 1.81     |
| L10-303 | 78    | 96    | 18           | 1.74     |
| L10-304 | 88    | 104   | 16           | 1.48     |
| L10-305 | 57    | 102.5 | 45.5         | 1.48     |
| L10-306 | 66    | 72    | 6            | 1.52     |
| L10-308 | 93    | 97    | 4            | 1.80     |
| L11-313 | 77.15 | 90    | 12.85        | 1.45     |
| L11-314 | 79.6  | 88.8  | 9.2          | 1.21     |
| L11-316 | 74    | 94    | 20           | 1.44     |
| L11-318 | 83    | 93    | 10           | 2.38     |
| L11-324 | 77    | 94.7  | 17.7         | 1.96     |
| L11-326 | 72    | 82.5  | 10.5         | 1.32     |
| L11-332 | 82    | 86.15 | 4.15         | 1.87     |
| L11-336 | 36    | 52    | 16           | 1.36     |
| L11-336 | 81    | 89    | 8            | 1.37     |
| L11-341 | 50    | 56    | 6            | 1.39     |
| L11-341 | 59.9  | 73.2  | 13.3         | 1.49     |
| L11-341 | 82    | 87    | 5            | 1.48     |
| L11-347 | 74    | 88    | 14           | 1.24     |
| L11-374 | 11    | 21.3  | 10.3         | 1.21     |
| L11-374 | 31    | 37    | 6            | 1.37     |
| L11-374 | 46.6  | 52.1  | 5.5          | 1.44     |
| L11-376 | 28.3  | 43    | 14.7         | 1.23     |
| L11-376 | 82.7  | 92    | 9.3          | 2.69     |



| Hole_ID | From  | То    | Interval (m) | TREO (%) |
|---------|-------|-------|--------------|----------|
| L11-378 | 14    | 36    | 22           | 1.24     |
| L11-382 | 72.3  | 86.45 | 14.15        | 2.14     |
| L11-384 | 62.75 | 81.7  | 18.95        | 1.62     |
| L11-387 | 66    | 102   | 36           | 1.89     |
| L11-389 | 54    | 84    | 30           | 1.84     |
| L11-390 | 79.3  | 93    | 13.7         | 1.67     |
| L11-391 | 65    | 91    | 26           | 1.62     |
| L11-392 | 66    | 70.5  | 4.5          | 1.64     |
| L11-396 | 50    | 55    | 5            | 1.46     |
| L11-396 | 87    | 94    | 7            | 1.65     |
| L11-398 | 45    | 55.1  | 10.1         | 1.32     |
| L11-400 | 29    | 41    | 12           | 1.36     |
| L11-400 | 52    | 58    | 6            | 1.71     |
| L11-401 | 31.8  | 42.3  | 10.5         | 2.15     |
| L11-401 | 54    | 58.5  | 4.5          | 1.16     |
| L11-401 | 78    | 88    | 10           | 2.26     |
| L11-402 | 37    | 43    | 6            | 1.24     |
| L11-403 | 34.7  | 40.4  | 5.7          | 1.28     |
| L11-403 | 46    | 52    | 6            | 1.42     |
| L11-403 | 63    | 73    | 10           | 1.05     |
| L11-403 | 82.6  | 91    | 8.4          | 1.62     |
| L11-404 | 21    | 44.1  | 23.1         | 1.22     |
| L11-404 | 69    | 75.8  | 6.8          | 1.77     |
| L11-405 | 36    | 48    | 12           | 2.17     |
| L11-405 | 54    | 71    | 17           | 1.88     |
| L11-405 | 79.7  | 98    | 18.3         | 1.44     |



| Hole_ID | From | То   | Interval (m) | TREO (%) |
|---------|------|------|--------------|----------|
| L11-406 | 37   | 44   | 7            | 1.69     |
| L11-406 | 49   | 61.9 | 12.9         | 1.55     |
| L11-407 | 24   | 30   | 6            | 2.05     |
| L11-407 | 34   | 73.9 | 39.9         | 1.71     |
| L11-407 | 84   | 99   | 15           | 1.42     |
| L11-408 | 21   | 39   | 18           | 1.63     |
| L11-409 | 33   | 45.7 | 12.7         | 2.01     |
| L11-409 | 70   | 85.9 | 15.9         | 1.33     |
| L11-410 | 75   | 90   | 15           | 1.61     |
| L11-411 | 32   | 48.9 | 16.9         | 1.40     |
| L11-411 | 75   | 88.9 | 13.9         | 2.12     |
| L11-412 | 87   | 95   | 8            | 1.74     |
| L11-413 | 9.7  | 23   | 13.3         | 1.46     |
| L11-413 | 29   | 33   | 4            | 1.43     |
| L11-414 | 50   | 56   | 6            | 1.30     |
| L11-414 | 83   | 90   | 7            | 1.34     |
| L11-415 | 17.7 | 25   | 7.3          | 1.88     |
| L11-415 | 80   | 86   | 6            | 1.06     |
| L11-415 | 94   | 100  | 6            | 1.75     |
| L11-416 | 41   | 47   | 6            | 1.51     |
| L11-416 | 59   | 68.6 | 9.6          | 2.05     |
| L11-417 | 10.3 | 16   | 5.7          | 1.25     |
| L11-417 | 20   | 42   | 22           | 1.61     |
| L11-417 | 66   | 70   | 4            | 1.81     |
| L11-419 | 13.9 | 18   | 4.1          | 1.32     |
| L11-419 | 60   | 64   | 4            | 1.86     |



| Hole_ID | From  | То    | Interval (m) | TREO (%) |
|---------|-------|-------|--------------|----------|
| L11-421 | 12.8  | 34    | 21.2         | 1.48     |
| L11-423 | 18    | 22    | 4            | 2.26     |
| L11-423 | 28    | 38.5  | 10.5         | 1.61     |
| L11-423 | 69    | 80.6  | 11.6         | 2.19     |
| L11-424 | 21    | 25    | 4            | 1.60     |
| L11-424 | 74    | 78    | 4            | 1.13     |
| L11-424 | 88    | 99    | 11           | 1.35     |
| L11-425 | 18    | 25.5  | 7.5          | 1.28     |
| L11-425 | 69    | 91    | 22           | 1.30     |
| L12-418 | 48    | 54    | 6            | 1.74     |
| L12-420 | 42    | 59    | 17           | 1.55     |
| L12-420 | 67    | 74.5  | 7.5          | 1.47     |
| L12-422 | 22    | 27    | 5            | 1.17     |
| L12-422 | 89    | 95    | 6            | 2.30     |
| L12-427 | 32    | 38    | 6            | 1.76     |
| L12-427 | 54.2  | 85.8  | 31.6         | 1.47     |
| L12-429 | 28    | 36.45 | 8.45         | 1.52     |
| L12-429 | 60.65 | 65    | 4.35         | 2.09     |
| L12-430 | 13    | 17    | 4            | 1.46     |
| L12-430 | 85    | 89    | 4            | 1.03     |
| L12-431 | 25    | 41    | 16           | 1.23     |
| L12-431 | 53    | 63    | 10           | 1.69     |
| L12-432 | 18    | 22    | 4            | 1.18     |
| L12-432 | 38    | 42    | 4            | 1.08     |
| L12-432 | 62    | 66    | 4            | 1.47     |
| L12-432 | 93    | 106   | 13           | 1.42     |



| Hole_ID | From  | То    | Interval (m) | TREO (%) |
|---------|-------|-------|--------------|----------|
| L12-433 | 34    | 40    | 6            | 1.18     |
| L12-433 | 50    | 56    | 6            | 2.04     |
| L12-434 | 62    | 70    | 8            | 1.18     |
| L12-434 | 74    | 78    | 4            | 1.27     |
| L12-435 | 29    | 35    | 6            | 1.25     |
| L12-435 | 61    | 70    | 9            | 2.36     |
| L12-436 | 6     | 10    | 4            | 1.37     |
| L12-436 | 54.35 | 59.3  | 4.95         | 1.36     |
| L12-436 | 80.65 | 86.45 | 5.8          | 1.24     |
| L12-436 | 89    | 93    | 4            | 1.46     |
| L12-437 | 21    | 27    | 6            | 1.54     |
| L12-437 | 31    | 35    | 4            | 1.32     |
| L12-437 | 47    | 51.6  | 4.6          | 1.73     |
| L12-438 | 17    | 22    | 5            | 1.07     |
| L12-438 | 70    | 74.1  | 4.1          | 1.27     |
| L12-439 | 18    | 24    | 6            | 1.49     |
| L12-439 | 40.4  | 55.35 | 14.95        | 1.77     |
| L12-440 | 44    | 48    | 4            | 1.34     |
| L12-440 | 70    | 93    | 23           | 1.59     |
| L12-441 | 16    | 22    | 6            | 1.33     |
| L12-441 | 43    | 51.3  | 8.3          | 1.66     |
| L12-442 | 70    | 95.8  | 25.8         | 1.61     |
| L12-443 | 21    | 29    | 8            | 1.22     |
| L12-443 | 48.3  | 60.2  | 11.9         | 1.59     |
| L12-443 | 64.95 | 75    | 10.05        | 1.53     |
| L12-444 | 19    | 24    | 5            | 1.55     |



| Hole_ID | From  | То   | Interval (m) | TREO (%) |
|---------|-------|------|--------------|----------|
| L12-444 | 70.8  | 81   | 10.2         | 1.95     |
| L12-445 | 23    | 27   | 4            | 1.65     |
| L12-445 | 47.4  | 54.4 | 7            | 1.53     |
| L12-447 | 38    | 44   | 6            | 1.31     |
| L12-447 | 65    | 72.8 | 7.8          | 1.84     |
| L12-448 | 72    | 78   | 6            | 1.20     |
| L12-449 | 17    | 21   | 4            | 1.08     |
| L12-449 | 47    | 56.5 | 9.5          | 1.47     |
| L12-450 | 79    | 83   | 4            | 1.63     |
| L12-451 | 17    | 25   | 8            | 1.43     |
| L12-451 | 38    | 44.6 | 6.6          | 1.51     |
| L12-453 | 20    | 24   | 4            | 1.17     |
| L12-453 | 37    | 45.8 | 8.8          | 1.30     |
| L12-455 | 41    | 45   | 4            | 1.20     |
| L12-455 | 68    | 75   | 7            | 1.59     |
| L12-455 | 78.9  | 89   | 10.1         | 1.48     |
| L12-457 | 34    | 45   | 11           | 1.43     |
| L12-457 | 51    | 55.5 | 4.5          | 1.62     |
| L12-459 | 24    | 28   | 4            | 1.26     |
| L12-459 | 40    | 44   | 4            | 1.07     |
| L12-464 | 28    | 32   | 4            | 1.73     |
| L12-464 | 84    | 88   | 4            | 2.30     |
| L13-519 | 23    | 32.8 | 9.8          | 3.48     |
| L13-520 | 12.25 | 44   | 31.75        | 2.57     |
| L13-521 | 16    | 46.6 | 30.6         | 2.83     |
| L14-526 | 22    | 32   | 10           | 1.14     |



| Hole_ID | From  | То   | Interval (m) | TREO (%) |
|---------|-------|------|--------------|----------|
| L14-526 | 41.32 | 49   | 7.68         | 1.30     |
| L14-526 | 66.16 | 73.8 | 7.64         | 1.61     |
| L14-527 | 34.5  | 38.5 | 4            | 3.04     |
| L14-531 | 29    | 33   | 4            | 1.18     |
| L14-538 | 82    | 86   | 4            | 1.51     |