MATSA RESOURCES

LIMITED
ABN 48 106 732 487

**ASX Announcement** **14th February 2017**

# Significantly Increased Copper Grades
# Chang 1 Paisali Base Metals Project Thailand

## Highlights

- *Re-assay of drill holes 16SCDD03 to 16SCDD07 in Australia, returned significantly higher copper values than previously announced*
- *Revised results include a significant* **22m @ 0.55% Cu** from 106m within a ***48m @ 0.39% Cu*** *intercept from 104m in diamond drillhole 16SCDD007 which was previously reported as* 22m at 0.4% Cu *within a 48m @ 0.29% Cu intercept at Chang 1*
- *Assays from the last 5 holes recently drilled are awaited*
- *This result is significant and investigations to date indicate the cause to be incorrect calibration of the analyser in Thailand*
- *The increased copper values from previously announced intercepts, further underlines the potential for economic copper mineralisation associated with an altered diorite intrusion underlying a large (~1.8km x 1.2km) soil copper anomaly*

## CORPORATE SUMMARY

**Executive Chairman**

Paul Poli

**Director**

Frank Sibbel

**Director & Company Secretary**

Andrew Chapman

**Shares on Issue**

144.7 million

**Unlisted Options**

17.02 million @ $0.25 - $0.30

**Top 20 shareholders**

Hold 54.34%

**Share Price on 13 February 2017**

26.5 cents

**Market Capitalisation**

$38.35 million

**Head Office:** Suite 11, 139 Newcastle Street, Perth Western Australia 6000 **Tel**: +61 8 9230 3555 **Fax:** +61 8 9227 0370
**Bangkok Office:** Unit 1808, Pacific Place 2, 142 Sukhumvit Road, Klongtoey, Bangkok 10110 **Tel**: +66 0 2653 0258 **Fax**: +66 0 2653 0258
reception@matsa.com.au www.matsa.com.au

Matsa Resources Limited ("Matsa" or "the Company" ASX: MAT) is pleased to provide an update on its Paisali base metals project. Drilling was carried out to test several targets associated with a large (1.8km x 1.2km) soil copper geochemical anomaly. The soil copper anomaly which overlies a complex magnetic feature is interpreted to reflect the presence of an altered and copper mineralised diorite intrusion. Importantly, Chang 1 is in an area with strong support for mining and the local community is working hand in hand with Matsa during the exploration phase.

## Diamond Drilling

11 diamond drill holes for a total of 1,926m have now been completed. Assay results from the last 5 holes are awaited. Copper mineralisation observed in diamond drill core is considered to be associated with sheared and hydrothermally brecciated diorite with accompanying chalcopyrite, covellite, magnetite and lesser pyrite as well as quartz and carbonate veining. Higher grade copper mineralisation is interpreted to be controlled by faults which have had the effect of focusing mineralised hydrothermal fluids. The distribution of copper in soils is interpreted to reflect these mineralised structures

## Assay Results

As previously announced *(refer MAT announcement to ASX dated 30th January 2017)*, check duplicate assays were completed in Australia from the Chang 1 diamond drilling program. These check duplicate assays results returned significantly higher copper values than those previously announced from a Thailand based laboratory. An investigation into the issue has concluded that the likely reason for the undercall error was a calibration issue with the ICP analytical unit in the Thailand laboratory where original assays were carried out. The calibration issue has since been rectified and check assays on drill hole 17SCDD008 are comparable with original assays.

Consequently the calibration issue has affected previously announced intercepts from holes 16SCDD003 to 16SCDD007 inclusive.

## Revised Intercepts

Samples making up previously announced intercepts in drill holes 16SCDD003 to 16SCDD007 have been re-assayed and both original and repeat assay intercepts are listed below and summarised in Figure 1. A complete listing of individual original and repeat copper assays is provided in Appendix 2.

| | |
|---|---|
| 16SCDD003 | 6m at 0.16% Cu from 176m (Originally 6m at 0.13% Cu) |
| 16SCDD004 | 10m at 0.19% Cu from 148m (Originally 10m at 0.13% Cu) |
| 16SCDD005 | 88m at 0.18% Cu from 24m, including **17.7m at 0.34% Cu** from 94.3m (Originally 88m at 0.12% Cu, including 17.7m at 0.22% Cu) |
| 16SCDD006 | 8m at 0.14% Cu from 88m (Interval not re-assayed)<br>**4m at 0.3% Cu** from 114m (Originally 4m at 0.24% Cu) |
| 16SCDD007 | **48m at 0.39% Cu** from 104m, including **22m at 0.55% Cu** from 106m (Originally 48m at 0.29% Cu, including 22m at 0.4% Cu)<br>6m at 0.16% Cu from 160m (Originally 6m at 0.12% Cu from 160m) |

Results clearly illustrate the consistent under reporting of copper values by the Thailand based laboratory.

Mr Poli Commented, "the revised assays are an excellent result and the higher grades significantly increase the chance that these results may represent economic mineralisation at Chang 1. Further work is planned on receipt of the awaited assays which we hope will expand the current area of interest."

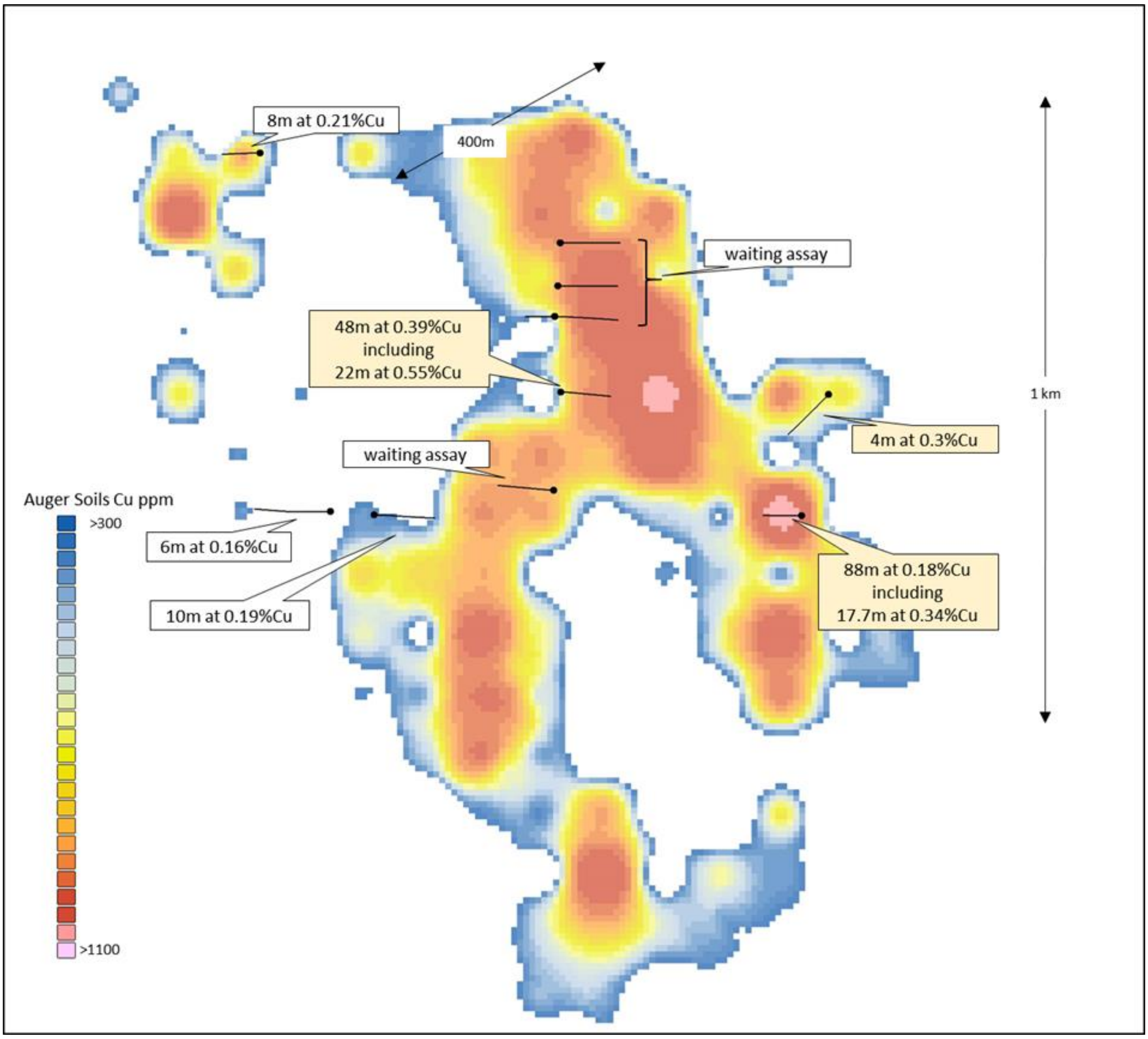
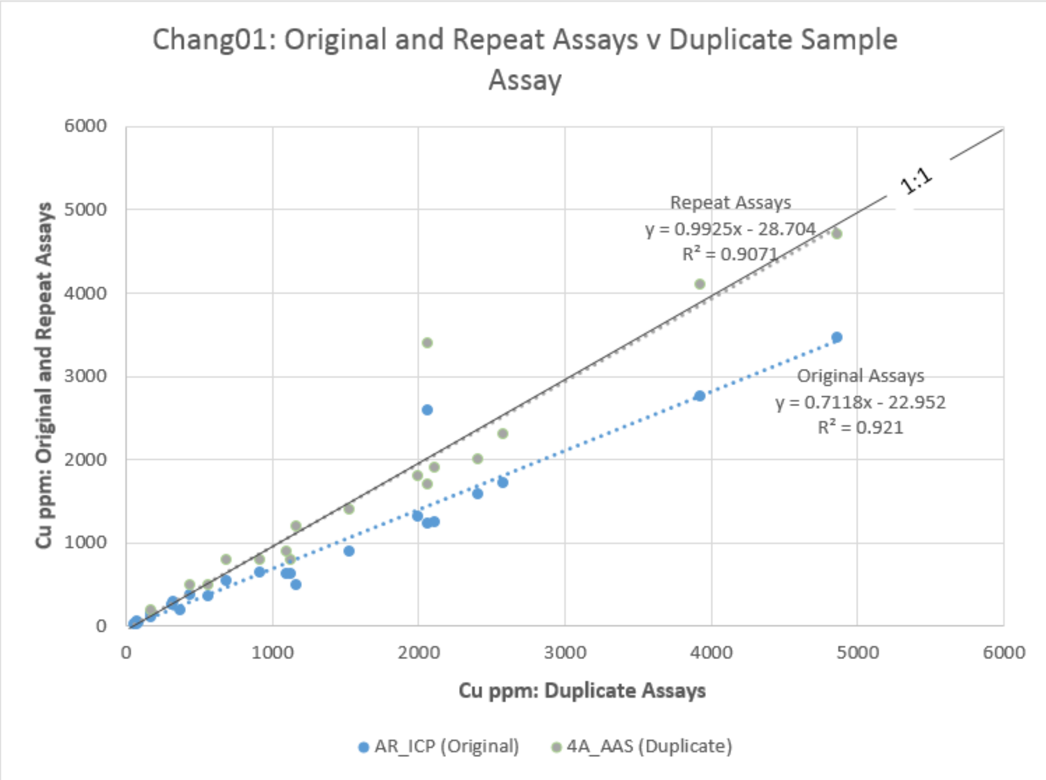



***Figure 1:* Chang 1, Repeat 4 acid digest assay intercepts on soil geochemistry**

## Graphical Comparison Original versus Repeat Assays

The graph below shows original and repeat Cu assay results against duplicate Cu assays from ¼ core. Duplicate samples are taken every 10th sample. The graph shows original assays were consistently under-reporting duplicate assays as reported in the December quarter ASX release. Repeat assays report similar to the duplicate assay result indicating the repeat results are robust and reliable.




**For further information please contact:**

**Paul Poli**
**Executive Chairman**

**Phone** +61 8 9230 3555
**Fax** +61 8 9227 0370
**Email** reception@matsa.com.au
**Web** www.matsa.com.au

***Competent Person Statement***

*The information in this report that relates to Exploration results, is based on information compiled by David Fielding, who is a Fellow of the Australasian Institute of Mining and Metallurgy. David Fielding is a full time employee of Matsa Resources Limited. David Fielding has sufficient experience which is relevant to the style of mineralisation and the type of ore deposit under consideration and the activity which he is undertaking to qualify as a Competent Person as defined in the 2012 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'. David Fielding consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.*

# Appendix 1: JORC Code, 2012 Edition – Table 1 report

## Section 1 Sampling Techniques and Data

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

| Criteria | JORC Code explanation | Commentary |
|---|---|---|
| ***Sampling techniques*** | • *Nature and quality of sampling (eg cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling.*<br>• *Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.*<br>• *Aspects of the determination of mineralisation that are Material to the Public Report.*<br>• *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.* | Diamond drill core Chang 1, Siam 1 (Thailand). Core is split with diamond saw ensuring representivity and sampled based on intervals of 2m where visible mineralisation is noted. Occasionally at geological discretion, sampling to a geological boundary rather than a 2m interval is conducted. Core is 1/2 cut providing approximately a 4kg sample for assaying. |
| ***Drilling techniques*** | • *Drill type (eg core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (eg core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc).* | Triple tube diamond drilling at Chang 1. Core oriented using Camteq camera. |
| ***Drill sample recovery*** | • *Method of recording and assessing core and chip sample recoveries and results assessed.*<br>• *Measures taken to maximise sample recovery and ensure representative nature of the samples.*<br>• *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.* | Diamond drilling core is measured and recorded as a percentage of drilled metres with visual check of lost core intervals.<br><br>Mineralisation in the form of disseminated sulphides, unlikely to be biased significantly by minor core loss. |
| ***Logging*** | • *Whether core and chip samples have been geologically and* | Diamond core Chang 1 and Siam 1. Geology, orientation, structure, |

| Criteria | JORC Code explanation | Commentary |
|---|---|---|
| | *geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.*<br>• *Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.*<br>• *The total length and percentage of the relevant intersections logged.* | magnetic susceptibility, photography, selected samples are submitted for petrographic analysis. The level of detail is sufficient to provide a robust geological model of mineralisation.<br>Logging is typically qualitative to semi-quantitative in nature.<br>Core is logged over 100% of its length. |
| ***Sub-sampling techniques and sample preparation*** | • *If core, whether cut or sawn and whether quarter, half or all core taken.*<br>• *If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.*<br>• *For all sample types, the nature, quality and appropriateness of the sample preparation technique.*<br>• *Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.*<br>• *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.*<br>• *Whether sample sizes are appropriate to the grain size of the material being sampled.* | Diamond core Chang 1 and Siam 1, core is split in half with half marked up and left in tray and half submitted for assay.<br>Every 10th sample is ¼ cut with the second quarter assayed as a duplicate check of representivity. |
| ***Quality of assay data and laboratory tests*** | • *The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.*<br>• *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.*<br>• *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.* | Quality of core at Chang 1 and Siam 1 is assessed on inspection of Laboratory QA QC data.<br>Samples are digested by Aqua Regia and analysed using ICP-ES in Thailand. The laboratory conducts and reports lab duplicates and standards and no significant issue was initially noted though standards were universally low but within acceptable levels. The second ¼ core duplicate is assayed (4 Acid ICP-MS) at a Laboratory in Australia and as reported in ASX release 30 January 2017, a significant bias was noted between duplicates and original assays. While Aqua Regia is a weaker digest than 4 Acid and a lower result is expected, the significant discrepancy led to further investigation. Repeat Aqua Regia assays of the duplicates confirmed the Thailand laboratory was significantly under-reporting through all reported elements. The Thailand lab since reported rectification of their ICP analyser. A program of repeat analysis of the original pulps was then carried out using 4 Acid AAS in Australia. These revised results returned acceptable levels of accuracy and precision when compared to the duplicate assays and internal Aust lab duplicates |

| Criteria | JORC Code explanation | Commentary |
|---|---|---|
| | | and standards. |
| ***Verification of sampling and assaying*** | • *The verification of significant intersections by either independent or alternative company personnel.*<br>• *The use of twinned holes.*<br>• *Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.*<br>• *Discuss any adjustment to assay data.* | Data is maintained in Datashed which is a database system which is maintained inhouse.<br><br>Logging data is entered in the field to minimize transcription errors, assay data are loaded electronically. |
| ***Location of data points*** | • *Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.*<br>• *Specification of the grid system used.*<br>• *Quality and adequacy of topographic control.* | All drill holes are set up by handheld GPS to 3m accuracy.<br><br>Drilling in Thailand is located using the Indian Thailand 1975 datum zone 47. |
| ***Data spacing and distribution*** | • *Data spacing for reporting of Exploration Results.*<br>• *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.*<br>• *Whether sample compositing has been applied.* | Reconnaissance drilling only, not attempting to establish continuity. |
| ***Orientation of data in relation to geological structure*** | • *Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.*<br>• *If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.* | Orientation of strike is not confirmed at this stage but inferred to be N or NNW with drilling generally E or W striking.<br><br>No potential bias has been recognised. |
| ***Sample security*** | • *The measures taken to ensure sample security.* | All core is locked in Matsa's storage facility. |
| ***Audits or reviews*** | • *The results of any audits or reviews of sampling techniques and data.* | No audits carried out. |

## Section 2 Reporting of Exploration Results

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

| Criteria | JORC Code explanation | Commentary |
|---|---|---|
| ***Mineral tenement and land tenure status*** | • *Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.*<br>• *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.* | All exploration at Chang 1 has taken place on a granted SPL. |
| ***Exploration done by other parties*** | • *Acknowledgment and appraisal of exploration by other parties.* | Regional aeromagnetic coverage has been of great assistance in selection of targets for more detailed exploration. |
| ***Geology*** | • *Deposit type, geological setting and style of mineralisation.* | Matsa is exploring for intrusion related hydrothermal mineralisation because of the strong association with magnetics. |
| ***Drill hole Information*** | • *A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes:*<br>  ○ *easting and northing of the drill hole collar*<br>  ○ *elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar*<br>  ○ *dip and azimuth of the hole*<br>  ○ *down hole length and interception depth*<br>  ○ *hole length.*<br>• *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.* | Drillhole information is included in the body of report as well as Appendix 2. |
| ***Data aggregation methods*** | • *In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (eg cutting of high grades) and cut-off grades are usually Material and should be stated.* | Intercepts at Chang 1 are quoted on the basis of simple weighted averages. |

| Criteria | JORC Code explanation | Commentary |
|---|---|---|
| | • *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.*<br>• *The assumptions used for any reporting of metal equivalent values should be clearly stated.* | |
| ***Relationship between mineralisation widths and intercept lengths*** | • *These relationships are particularly important in the reporting of Exploration Results.*<br>• *If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.*<br>• *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').* | All intercepts quoted are explicitly downhole depths and not true widths. |
| ***Diagrams*** | • *Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views.* | Appropriate diagrams are included in the body of the report |
| ***Balanced reporting*** | • *Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.* | All grade above 0.1%Cu reported. |
| ***Other substantive exploration data*** | • *Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.* | Drilling was based on results from broad soil sampling and ground magnetics. There is no outcrop in the area. |
| ***Further work*** | • *The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).*<br>• *Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.* | Infill soil sampling and ground magnetics. |

### Appendix 2: *Chang 1 Diamond Drilling, Comparison between Thailand original assays (Aqua Regia digest ICPMS) and Australian Reference Lab repeat assays (4 Acid digest AAS).*

| Sample ID | from | to | width | Cu ppm Original | Cu % Original | Cu % Repeat |
|---|---|---|---|---|---|---|
| SCDD003-17 | 132.0 | 134.0 | 2.0 | 346 | 0.03 | 0.05 |
| SCDD003-18 | 134.0 | 136.0 | 2.0 | 452 | 0.05 | 0.07 |
| SCDD003-19 | 136.0 | 138.0 | 2.0 | 699 | 0.07 | 0.09 |
| SCDD003-20 | 138.0 | 140.0 | 2.0 | 395 | 0.04 | 0.05 |
| SCDD003-21 | 140.0 | 142.0 | 2.0 | 644 | 0.06 | 0.08 |
| SCDD003-22 | 142.0 | 144.0 | 2.0 | 1080 | 0.11 | 0.15 |
| SCDD003-23 | 144.0 | 146.0 | 2.0 | 224 | 0.02 | 0.03 |
| SCDD003-24 | 146.0 | 148.0 | 2.0 | 232 | 0.02 | 0.03 |
| SCDD003-25 | 148.0 | 150.0 | 2.0 | 373 | 0.04 | 0.05 |
| SCDD003-26 | 150.0 | 152.0 | 2.0 | 320 | 0.03 | 0.05 |
| SCDD003-27 | 152.0 | 154.0 | 2.0 | 723 | 0.07 | 0.1 |
| SCDD003-28 | 154.0 | 156.0 | 2.0 | 703 | 0.07 | 0.09 |
| SCDD003-29 | 156.0 | 158.0 | 2.0 | 916 | 0.09 | 0.12 |
| SCDD003-30 | 158.0 | 160.0 | 2.0 | 462 | 0.05 | 0.06 |
| SCDD003-31 | 160.0 | 162.0 | 2.0 | 356 | 0.04 | 0.05 |
| SCDD003-32 | 162.0 | 164.0 | 2.0 | 322 | 0.03 | 0.05 |
| SCDD003-33 | 164.0 | 166.0 | 2.0 | 273 | 0.03 | 0.04 |
| SCDD003-34 | 166.0 | 168.0 | 2.0 | 291 | 0.03 | 0.03 |
| SCDD003-35 | 168.0 | 170.0 | 2.0 | 421 | 0.04 | 0.05 |
| SCDD003-36 | 170.0 | 172.0 | 2.0 | 385 | 0.04 | 0.06 |
| SCDD003-37 | 172.0 | 174.0 | 2.0 | 194 | 0.02 | 0.03 |
| SCDD003-38 | 174.0 | 176.0 | 2.0 | 161 | 0.02 | 0.01 |
| SCDD003-39 | 176.0 | 178.0 | 2.0 | 1188 | 0.12 | 0.14 |
| SCDD003-40 | 178.0 | 180.0 | 2.0 | 140 | 0.01 | 0.01 |
| SCDD003-41 | 180.0 | 182.0 | 2.0 | 2590 | 0.26 | 0.34 |
| SCDD003-42 | 182.0 | 184.0 | 2.0 | 424 | 0.04 | 0.05 |
| SCDD003-43 | 184.0 | 186.0 | 2.0 | 496 | 0.05 | 0.06 |
| SCDD003-44 | 186.0 | 188.0 | 2.0 | 594 | 0.06 | 0.09 |
| SCDD003-45 | 188.0 | 190.0 | 2.0 | 681 | 0.07 | 0.11 |
| SCDD003-46 | 190.0 | 192.0 | 2.0 | 253 | 0.03 | 0.04 |
| SCDD003-47 | 192.0 | 194.0 | 2.0 | 282 | 0.03 | 0.05 |
| SCDD003-48 | 194.0 | 196.0 | 2.0 | 462 | 0.05 | 0.06 |
| SCDD003-49 | 196.0 | 198.0 | 2.0 | 1359 | 0.14 | 0.2 |
| SCDD003-50 | 198.0 | 200.0 | 2.0 | 273 | 0.03 | 0.04 |
| SCDD003-51 | 200.0 | 202.0 | 2.0 | 544 | 0.05 | 0.08 |
| SCDD003-52 | 202.0 | 204.0 | 2.0 | 629 | 0.06 | 0.08 |
| SCDD003-53 | 204.0 | 206.0 | 2.0 | 472 | 0.05 | 0.06 |
| SCDD003-54 | 206.0 | 208.0 | 2.0 | 522 | 0.05 | 0.07 |
| SCDD003-55 | 208.0 | 210.0 | 2.0 | 588 | 0.06 | 0.08 |
| SCDD003-56 | 210.0 | 212.0 | 2.0 | 427 | 0.04 | 0.06 |
| SCDD003-57 | 212.0 | 214.0 | 2.0 | 342 | 0.03 | 0.04 |
| SCDD004-15 | 136.0 | 138.0 | 2.0 | 116 | 0.01 | 0.02 |
| SCDD004-16 | 138.0 | 140.0 | 2.0 | 380 | 0.04 | 0.06 |
| SCDD004-17 | 140.0 | 142.0 | 2.0 | 873 | 0.09 | 0.13 |
| SCDD004-18 | 142.0 | 144.0 | 2.0 | 760 | 0.08 | 0.13 |
| SCDD004-19 | 144.0 | 146.0 | 2.0 | 663 | 0.07 | 0.11 |
| SCDD004-20 | 146.0 | 148.0 | 2.0 | 658 | 0.07 | 0.12 |
| SCDD004-21 | 148.0 | 150.0 | 2.0 | 1246 | 0.12 | 0.19 |
| SCDD004-22 | 150.0 | 152.0 | 2.0 | 1246 | 0.12 | 0.2 |
| SCDD004-23 | 152.0 | 154.0 | 2.0 | 1144 | 0.11 | 0.16 |
| SCDD004-24 | 154.0 | 156.0 | 2.0 | 1677 | 0.17 | 0.24 |

| | | | | | | |
|---|---|---|---|---|---|---|
| SCDD004-25 | 156.0 | 158.0 | 2.0 | 1107 | 0.11 | 0.15 |
| SCDD004-26 | 158.0 | 160.0 | 2.0 | 911 | 0.09 | 0.13 |
| SCDD004-27 | 160.0 | 162.0 | 2.0 | 908 | 0.09 | 0.1 |
| SCDD004-28 | 162.0 | 164.0 | 2.0 | 892 | 0.09 | 0.12 |
| SCDD004-29 | 164.0 | 166.0 | 2.0 | 634 | 0.06 | 0.09 |
| SCDD004-30 | 166.0 | 168.0 | 2.0 | 934 | 0.09 | 0.13 |
| SCDD004-31 | 168.0 | 170.0 | 2.0 | 622 | 0.06 | 0.08 |
| SCDD004-32 | 170.0 | 172.0 | 2.0 | 589 | 0.06 | 0.08 |
| SCDD004-33 | 172.0 | 174.0 | 2.0 | 1357 | 0.14 | 0.18 |
| SCDD004-34 | 174.0 | 176.0 | 2.0 | 114 | 0.01 | 0.02 |
| SCDD004-35 | 176.0 | 178.0 | 2.0 | 454 | 0.05 | 0.06 |
| SCDD004-36 | 178.0 | 180.0 | 2.0 | 113 | 0.01 | 0.02 |
| SCDD005-01 | 20.0 | 22.0 | 2.0 | 494 | 0.05 | 0.12 |
| SCDD005-02 | 22.0 | 24.0 | 2.0 | 513 | 0.05 | 0.1 |
| SCDD005-03 | 24.0 | 26.0 | 2.0 | 1114 | 0.11 | 0.14 |
| SCDD005-04 | 26.0 | 28.0 | 2.0 | 1021 | 0.10 | 0.12 |
| SCDD005-05 | 28.0 | 30.0 | 2.0 | 1029 | 0.10 | 0.14 |
| SCDD005-06 | 30.0 | 32.0 | 2.0 | 1187 | 0.12 | 0.17 |
| SCDD005-07 | 32.0 | 34.0 | 2.0 | 947 | 0.09 | 0.14 |
| SCDD005-08 | 34.0 | 36.0 | 2.0 | 1061 | 0.11 | 0.15 |
| SCDD005-09 | 36.0 | 38.0 | 2.0 | 914 | 0.09 | 0.14 |
| SCDD005-10 | 38.0 | 40.0 | 2.0 | 1320 | 0.13 | 0.17 |
| SCDD005-11 | 40.0 | 42.0 | 2.0 | 1313 | 0.13 | 0.18 |
| SCDD005-12 | 42.0 | 44.0 | 2.0 | 1407 | 0.14 | 0.2 |
| SCDD005-13 | 44.0 | 46.0 | 2.0 | 1234 | 0.12 | 0.17 |
| SCDD005-14 | 46.0 | 48.0 | 2.0 | 1059 | 0.11 | 0.14 |
| SCDD005-15 | 48.0 | 50.0 | 2.0 | 763 | 0.08 | 0.11 |
| SCDD005-16 | 50.0 | 52.0 | 2.0 | 1095 | 0.11 | 0.15 |
| SCDD005-17 | 52.0 | 54.0 | 2.0 | 1542 | 0.15 | 0.24 |
| SCDD005-18 | 54.0 | 56.0 | 2.0 | 2326 | 0.23 | 0.27 |
| SCDD005-19 | 56.0 | 58.0 | 2.0 | 1229 | 0.12 | 0.14 |
| SCDD005-20 | 58.0 | 60.0 | 2.0 | 746 | 0.07 | 0.11 |
| SCDD005-21 | 60.0 | 62.0 | 2.0 | 625 | 0.06 | 0.09 |
| SCDD005-22 | 62.0 | 64.0 | 2.0 | 1058 | 0.11 | 0.15 |
| SCDD005-23 | 64.0 | 65.4 | 1.4 | 1062 | 0.11 | 0.16 |
| SCDD005-24 | 65.4 | 67.9 | 2.5 | 106 | 0.01 | 0.02 |
| SCDD005-25 | 67.9 | 70.0 | 2.1 | 1350 | 0.14 | 0.19 |
| SCDD005-26 | 70.0 | 72.0 | 2.0 | 1199 | 0.12 | 0.17 |
| SCDD005-27 | 72.0 | 74.0 | 2.0 | 889 | 0.09 | 0.14 |
| SCDD005-28 | 74.0 | 76.0 | 2.0 | 557 | 0.06 | 0.09 |
| SCDD005-29 | 76.0 | 78.0 | 2.0 | 572 | 0.06 | 0.09 |
| SCDD005-30 | 78.0 | 80.0 | 2.0 | 858 | 0.09 | 0.14 |
| SCDD005-31 | 80.0 | 82.0 | 2.0 | 898 | 0.09 | 0.14 |
| SCDD005-32 | 82.0 | 84.0 | 2.0 | 598 | 0.06 | 0.09 |
| SCDD005-33 | 84.0 | 86.0 | 2.0 | 1272 | 0.13 | 0.2 |
| SCDD005-34 | 86.0 | 88.0 | 2.0 | 1470 | 0.15 | 0.23 |
| SCDD005-35 | 88.0 | 90.1 | 2.1 | 863 | 0.09 | 0.14 |
| SCDD005-36 | 90.1 | 92.0 | 1.9 | 8 | 0.00 | NS |
| SCDD005-37 | 92.0 | 94.3 | 2.3 | 7 | 0.00 | NS |
| SCDD005-38 | 94.3 | 96.0 | 1.7 | 2215 | 0.22 | 0.33 |
| SCDD005-39 | 96.0 | 98.0 | 2.0 | 1166 | 0.12 | 0.18 |
| SCDD005-40 | 98.0 | 100.0 | 2.0 | 2186 | 0.22 | 0.34 |
| SCDD005-41 | 100.0 | 102.0 | 2.0 | 2761 | 0.28 | 0.41 |
| SCDD005-42 | 102.0 | 104.0 | 2.0 | 2286 | 0.23 | 0.36 |
| SCDD005-43 | 104.0 | 106.0 | 2.0 | 1280 | 0.13 | 0.19 |
| SCDD005-44 | 106.0 | 108.0 | 2.0 | 2425 | 0.24 | 0.36 |
| SCDD005-45 | 108.0 | 110.0 | 2.0 | 2375 | 0.24 | 0.35 |
| SCDD005-46 | 110.0 | 112.0 | 2.0 | 3384 | 0.34 | 0.51 |

| | | | | | | |
|---|---|---|---|---|---|---|
| SCDD005-47 | 112.0 | 114.0 | 2.0 | 875 | 0.09 | 0.14 |
| SCDD005-48 | 114.0 | 116.0 | 2.0 | 65 | 0.01 | 0.01 |
| SCDD005-49 | 116.0 | 118.0 | 2.0 | 74 | 0.01 | 0.01 |
| SCDD005-50 | 118.0 | 120.0 | 2.0 | 112 | 0.01 | 0.02 |
| SCDD005-51 | 120.0 | 122.0 | 2.0 | 109 | 0.01 | 0.02 |
| SCDD005-52 | 122.0 | 124.0 | 2.0 | 241 | 0.02 | 0.04 |
| SCDD005-53 | 124.0 | 126.0 | 2.0 | 483 | 0.05 | 0.07 |
| SCDD005-54 | 126.0 | 128.0 | 2.0 | 299 | 0.03 | 0.05 |
| SCDD005-55 | 128.0 | 130.0 | 2.0 | 904 | 0.09 | 0.13 |
| SCDD006-07 | 112 | 114 | 2.0 | 261 | 0.03 | 0.03 |
| SCDD006-08 | 114 | 116 | 2.0 | 2003 | 0.20 | 0.23 |
| SCDD006-09 | 116 | 118 | 2.0 | 2855 | 0.29 | 0.36 |
| SCDD006-10 | 118 | 120 | 2.0 | 499 | 0.05 | 0.06 |
| SCDD006-33 | 164 | 166 | 2.0 | 741 | 0.07 | 0.09 |
| SCDD006-34 | 166 | 168 | 2.0 | 136 | 0.01 | 0.02 |
| SCDD006-35 | 168 | 170 | 2.0 | 137 | 0.01 | 0.02 |
| SCDD006-36 | 170 | 172 | 2.0 | 304 | 0.03 | 0.04 |
| SCDD006-37 | 172 | 174 | 2.0 | 950 | 0.10 | 0.12 |
| SCDD006-38 | 174 | 176 | 2.0 | 246 | 0.02 | 0.03 |
| SCDD006-39 | 176 | 178 | 2.0 | 462 | 0.05 | 0.06 |
| SCDD006-40 | 178 | 180 | 2.0 | 290 | 0.03 | 0.03 |
| SCDD006-41 | 180 | 182 | 2.0 | 761 | 0.08 | 0.09 |
| SCDD006-42 | 182 | 184 | 2.0 | 918 | 0.09 | 0.11 |
| SCDD006-43 | 184 | 186.2 | 2.2 | 404 | 0.04 | 0.05 |
| SCDD007-01 | 84.0 | 86.0 | 2.0 | 383 | 0.04 | 0.05 |
| SCDD007-02 | 86.0 | 88.0 | 2.0 | 210 | 0.02 | 0.03 |
| SCDD007-03 | 88.0 | 90.0 | 2.0 | 1153 | 0.12 | 0.16 |
| SCDD007-04 | 90.0 | 92.0 | 2.0 | 1249 | 0.12 | 0.18 |
| SCDD007-05 | 92.0 | 94.0 | 2.0 | 1443 | 0.14 | 0.21 |
| SCDD007-06 | 94.0 | 96.0 | 2.0 | 1768 | 0.18 | 0.2 |
| SCDD007-07 | 96.0 | 98.0 | 2.0 | 999 | 0.10 | 0.13 |
| SCDD007-08 | 98.0 | 100.0 | 2.0 | 555 | 0.06 | 0.08 |
| SCDD007-09 | 100.0 | 102.0 | 2.0 | 379 | 0.04 | 0.05 |
| SCDD007-10 | 102.0 | 104.0 | 2.0 | 836 | 0.08 | 0.09 |
| SCDD007-11 | 104.0 | 106.0 | 2.0 | 1591 | 0.16 | 0.2 |
| SCDD007-12 | 106.0 | 108.0 | 2.0 | 3741 | 0.37 | 0.48 |
| SCDD007-13 | 108.0 | 110.0 | 2.0 | 4681 | 0.47 | 0.58 |
| SCDD007-14 | 110.0 | 112.0 | 2.0 | 3518 | 0.35 | 0.38 |
| SCDD007-15 | 112.0 | 114.0 | 2.0 | 3894 | 0.39 | 0.43 |
| SCDD007-16 | 114.0 | 116.0 | 2.0 | 4513 | 0.45 | 0.54 |
| SCDD007-17 | 116.0 | 118.0 | 2.0 | 3122 | 0.31 | 0.4 |
| SCDD007-18 | 118.0 | 120.0 | 2.0 | 2904 | 0.29 | 1.07 |
| SCDD007-19 | 120.0 | 122.0 | 2.0 | 4968 | 0.50 | 0.6 |
| SCDD007-20 | 122.0 | 124.0 | 2.0 | 5624 | 0.56 | 0.65 |
| SCDD007-21 | 124.0 | 126.0 | 2.0 | 3475 | 0.35 | 0.47 |
| SCDD007-22 | 126.0 | 128.0 | 2.0 | 3925 | 0.39 | 0.49 |
| SCDD007-23 | 128.0 | 130.0 | 2.0 | 1866 | 0.19 | 0.24 |
| SCDD007-24 | 130.0 | 132.0 | 2.0 | 2577 | 0.26 | 0.35 |
| SCDD007-25 | 132.0 | 134.0 | 2.0 | 2468 | 0.25 | 0.31 |
| SCDD007-26 | 134.0 | 136.0 | 2.0 | 1620 | 0.16 | 0.21 |
| SCDD007-27 | 136.0 | 138.0 | 2.0 | 3159 | 0.32 | 0.35 |
| SCDD007-28 | 138.0 | 140.0 | 2.0 | 1347 | 0.13 | 0.15 |
| SCDD007-29 | 140.0 | 142.0 | 2.0 | 1400 | 0.14 | 0.19 |
| SCDD007-30 | 142.0 | 144.0 | 2.0 | 2811 | 0.28 | 0.37 |
| SCDD007-31 | 144.0 | 146.0 | 2.0 | 1721 | 0.17 | 0.23 |
| SCDD007-32 | 146.0 | 148.0 | 2.0 | 2097 | 0.21 | 0.24 |
| SCDD007-33 | 148.0 | 150.0 | 2.0 | 2087 | 0.21 | 0.27 |
| SCDD007-34 | 150.0 | 152.0 | 2.0 | 1340 | 0.13 | 0.17 |

| | | | | | | |
|---|---|---|---|---|---|---|
| SCDD007-35 | 152.0 | 154.0 | 2.0 | 816 | 0.08 | 0.11 |
| SCDD007-36 | 154.0 | 156.0 | 2.0 | 808 | 0.08 | 0.11 |
| SCDD007-37 | 156.0 | 158.0 | 2.0 | 1351 | 0.14 | 0.18 |
| SCDD007-38 | 158.0 | 160.0 | 2.0 | 813 | 0.08 | 0.1 |
| SCDD007-39 | 160.0 | 162.0 | 2.0 | 1270 | 0.13 | 0.18 |
| SCDD007-40 | 162.0 | 164.0 | 2.0 | 1057 | 0.11 | 0.14 |
| SCDD007-41 | 164.0 | 166.0 | 2.0 | 1228 | 0.12 | 0.17 |
| SCDD007-42 | 166.0 | 168.7 | 2.7 | 853 | 0.09 | 0.11 |
| SCDD008-1 | 22.0 | 24.0 | 2.0 | 460 | 0.05 | 0.05 |
| SCDD008-2 | 24.0 | 26.0 | 2.0 | 1234 | 0.12 | 0.15 |
| SCDD008-3 | 26.0 | 28.0 | 2.0 | 1674 | 0.17 | 0.18 |
| SCDD008-4 | 28.0 | 30.0 | 2.0 | 2400 | 0.24 | 0.22 |
| SCDD008-5 | 30.0 | 32.0 | 2.0 | 3148 | 0.31 | 0.29 |
| SCDD008-6 | 32.0 | 34.0 | 2.0 | 493 | 0.05 | 0.05 |