

Level 11, 52 Phillip St Sydney NSW 2000 P: +61 2 8316 3997 F: +61 2 8316 3999 Info@silvermines.com.au www.silvermines.com.au

### 19th February 2021

Company Announcement Officer ASX Limited Exchange Centre 20 Bridge Street SYDNEY NSW 2000

# Outstanding high-grade drill results from the Bowdens Silver Project

#### **HIGHLIGHTS**

- Northwest extensions to the Bowdens Silver Main Zone targeted with drilling.
- Preliminary results returned from BD21002 include:
  - **34.6 metres** @ **471g/t silver equivalent** (413g/t silver, 1.14% lead, 0.39% zinc) from 96 metres which includes:
  - **7.0 metres** @ **1090g/t silver equivalent** (966g/t silver, 2.86% lead, 0.56% zinc) from 97 metres; and
  - **6.1 metres** @ **874g/t silver equivalent** (789g/t silver, 1.67% lead, 0.59% zinc) from 122 metres.

#### Introduction

Silver Mines Limited (ASX:SVL) ("Silver Mines" or "the Company") is pleased to announce significant drill assay results from the Bowdens Silver Project located near Mudgee in New South Wales.

Diamond drilling continues to test extensions of potential source/feeder structures to the Northwest High-Grade Zone and Main Zone at depth beneath the proposed open pit design. Assay results have been returned for a portion of BD21002 (refer to Figures 1 and 2). These latest results, from the upper portion of the hole (89.0 metres to 130.6 metres depth), fall within the modelled mineral resource yet show substantially stronger mineralisation than what was indicated by previous drilling. The remainder of the hole has been tested for extensions of high-grade mineralisation at depth beneath the existing pit with assay results pending. As these results are only for part of the hole, any detailed modelling work and 3D analysis of this result is yet to be completed. Further results and geological context will be released when available.

Silver Mines Managing Director, Anthony McClure commented, "We are delighted with the recent exploration from Bowdens Silver. Our team has been tenacious in its work in understanding the deposit and its extensions. This current hole BD21002 has produced some of the best intercepts ever returned at Bowdens further demonstrating the quality of the deposit. We have two rigs on site to continue exploration on this exciting program."



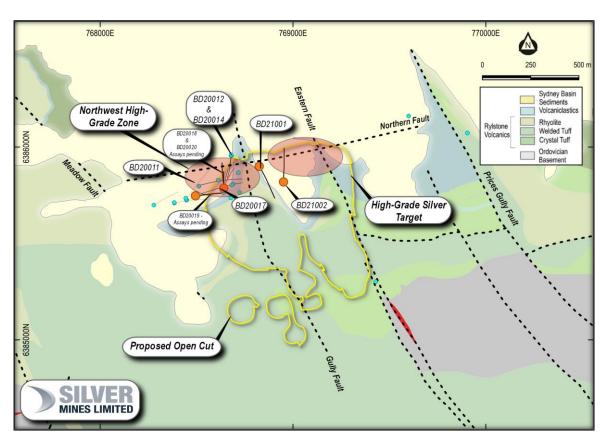


Figure 1. Recent drillhole locations and High-Grade silver targets at the Bowdens Silver Project.

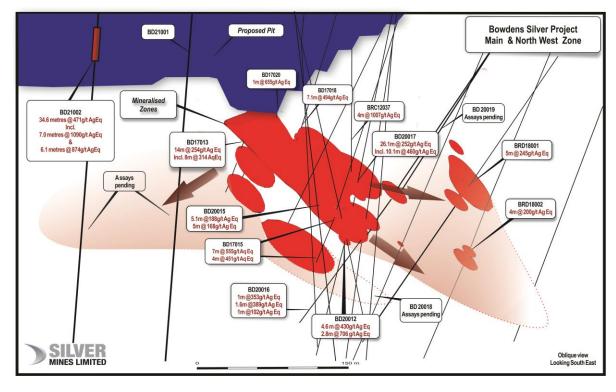


Figure 2. Schematic cross-section in proximity to proposed open pit.



High-grade mineralisation observed in BD21002 consists of silver minerals such as acanthite and pearcite, along with sphalerite (zinc sulphide) and galena (lead sulphide). Mineralisation is hosted in veins and breccias within coarse grained Rylstone Volcanics (refer to Figures 3 and 4).



Figure 3. Sheeted high-grade vein pearcite, sphalerite, galena with brecciated pyrite blebs at 128.1m.



Figure 4. High-grade mineralisation in BD21002 from ~100-104metres down hole



Table 1. Intercept calculations from recent results from the Northwest High-Grade Zone.

| Hole    | From | То    | Interval | Silver | Lead | Zinc | Silver Eq          |
|---------|------|-------|----------|--------|------|------|--------------------|
| Tiole   | (m)  | (m)   | (m)      | (g/t)  | (%)  | (%)  | (g/t) <sup>1</sup> |
| BD21002 | 96   | 130.6 | 34.6     | 413    | 1.14 | 0.39 | 471                |
| Incl.   | 97   | 104   | 7        | 966    | 2.86 | 0.56 | 1090               |
| & incl. | 122  | 128.1 | 6.1      | 789    | 1.67 | 0.59 | 874                |

<sup>1.</sup>Bowdens' silver equivalent reported consistent with previous reports and current resource modelling based on assumptions: Ag Eq (g/t) = Ag (g/t) + 33.48\*Pb (%) + 49.61\*Zn (%) calculated from prices of US\$20/oz silver, US\$1.50/lb zinc, US\$1.00/lb lead, and metallurgical recoveries of 85% silver + gold, 82% zinc and 83% lead estimated from test work commissioned by Silver Mines Limited. Intercept calculated using a 90g/t Ag cut-off and 3 metre internal dilution factor, with higher grade intervals >200g/t Ag Eq. cut-off and maximum 1 metre internal dilution factor.

### **Further Exploration**

Drilling continues to test other high-grade silver targets around the current resource and extensions at depth. Refer to release dated 28<sup>th</sup> January 2021 for further recent drilling results. The base-metal and gold bearing Bundarra zone remains open to the south and down-dip to the west of previous drilling, with BD20001 drilled in early 2020 (refer release dated 8 April 2020) proving the Bowdens system is developed extensively at depth to the west.

Regional exploration activities, around the Bowdens Silver Deposit, have continued through the latter half of 2020 in accordance with the Company's COVID-19 policies. A detailed gravity survey was completed over the Deposit area and surrounds. The increased survey resolution will assist with the interpretation of the controlling structures and possible source intrusives in the area. These data and updated models, once received from the Company's geophysical consultant, will aid in targeting new silver deposits in proximity to the Bowdens Silver Deposit.

Two diamond drilling rigs continue with the current program at Bowdens Silver.



#### **About the Bowdens Silver Project**

The Bowdens Silver Project is located in central New South Wales, approximately 26 kilometres east of Mudgee (refer to Figure 5). The consolidated project area comprises 2,007 km² (496,000 acres) of titles covering approximately 80 kilometres of strike of the highly mineralised Rylstone Volcanics. Multiple target styles and mineral occurrences have potential throughout the district including analogues to Bowdens Silver, high-grade silver-lead-zinc epithermal and volcanogenic massive sulphide (VMS) systems and copper-gold targets.

Bowdens Silver is the largest undeveloped silver deposit in Australia with substantial resources and a considerable body of high-quality technical work already completed. The projects boast outstanding logistics for future mine development.

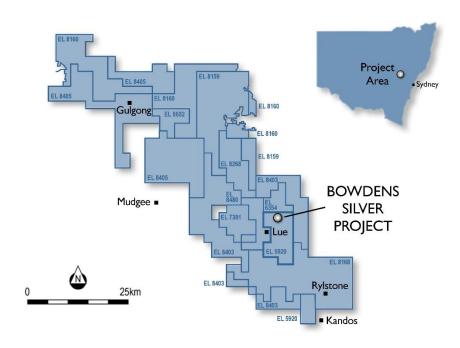


Figure 5: Silver Mines Limited tenement holdings in the Mudgee district.

This document has been authorised for release to the ASX by the Company's Managing Director, Mr Anthony McClure.

#### **Further information:**

Anthony McClure Managing Director Silver Mines Limited +61 2 8316 3997 Luke Forrestal Associate Director M+C Partners +61 411 479 144



### **Competent Persons Statement**

The information in this report that relates to mineral exploration from the Bowdens Silver Project is based on information compiled by the Bowdens Silver team and reviewed by Darren Holden who is an advisor to the Company. Dr Holden is a member of the Australasian Institute of Mining and Metallurgy and 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 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves' (JORC code). Dr Holden consents to the inclusion in this report of the matters based on the information in the form and context in which it appears.

Table 2. Drill collar locations.

| Target       | Hole ID | GDA94<br>East | GDA94<br>North | RL<br>(m) | Dip | Azimuth<br>(grid) | Depth<br>(m) | Drill<br>Type | Comment   |
|--------------|---------|---------------|----------------|-----------|-----|-------------------|--------------|---------------|---|
| Main<br>Zone | BD21002 | 768591        | 6385818        | 656       | 78  | 3                 | 447.6        | Core          | Partial Assays received. Assays from 0 to 89m and from 130.6 to 447.6m are pending. |



Level 11, 52 Phillip St Sydney NSW 2000 P: +61 2 8316 3997 F: +61 2 8316 3999 Info@silvermines.com.au www.silvermines.com.au

# **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 (e.g. cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling.</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 (e.g. 'reverse circulation drilling was used to obtain 1m samples from which 3kg was pulverised to produce a 30g charge for fire assay.') In other cases, more explanation may be required such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (e.g. submarine nodules) may warrant disclosure of detailed information.</li> </ul> | <ul> <li>Sampling taken continuously downhole from HQ diameter diamond core.</li> <li>HQ size core – all samples taken as nominal 1 metre intervals where mineralisation observed from half cut core, or as composite 2 metre samples of quarter core, or as otherwise defined by logged geology intervals and from the same side of the core where downhole orientations permit.</li> <li>Samples vary in weight but are generally between 2 and 4 kilograms of material.</li> <li>Each sample was sent for multi-element assay using ICP technique (ME-ICP61) with the entire sample pulverized and homogenized with a 2.5g extract taken for assay.</li> <li>Select samples were also sent for gold using fire assay technique (Au-AA25) with a 30g sample taken for assay.</li> <li>Assays are considered representative of the sample collected.</li> </ul> |
| Drilling<br>techniques   | <ul> <li>Drill type (e.g. core, reverse circulation, open-hole hammer, rotary<br/>air blast, auger, Bangka, sonic, etc) and details (e.g. core diameter,<br/>triple or standard tube, depth of diamond tails, face-sampling bit or<br/>other type, whether core is oriented and if so, by what method, etc).</li> </ul>  | <ul> <li>Diamond drilling undertaken with HQ diamond core rig with triple tube used.</li> <li>All core, where unbroken ground allows, is oriented by drilling team and an orientation line drawn along the base of the hole.</li> </ul>  |
| 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</li> </ul>  | <ul> <li>Core recovery is estimated at greater than 98%.</li> <li>Some zones, (less than 5%) were broken core with occasional clay zones where sample loss may have occurred. However, this is not considered to have materially affected the results.</li> <li>No significant relationship between sample recovery and grade</li> </ul>   |

**Silver Mines Limited** 



| Criteria  | JORC Code explanation  | Commentary   |
|---|--|--|
|   | and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.   | exists.  |
| 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 diamond core is logged using lithology, alteration, veining, mineralisation and structure, including geotechnical structure.</li> <li>All core is photographed using both a wet and dry image.</li> <li>In all cases the entire hole is logged by a geologist.</li> </ul>   |
| Sub-sampling<br>techniques<br>and sample<br>preparation | <ul> <li>If core, whether cut or sawn and whether quarter, half or all core were 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>Selective sub-sampling based on geology to a maximum size of 2 metres and a minimum of 0.3 metres.</li> <li>All core is cut using a Corewise core saw with core rotated 10 degrees to the orientation line to preserve the orientation for future reference.</li> <li>For HQ core the half of the core without the orientation line is removed, bagged and sent to the laboratory for assay.</li> <li>Sample sizes are considered appropriate for the rock type, style of mineralisation, the thickness and consistency of the intersections and assay ranges expected at Bowdens.</li> </ul> |
| Quality of<br>assay data<br>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, calibration factors applied and their derivation, etc.</li> <li>Nature of quality control procedures adopted (e.g. standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (i.e. lack of bias) and precision have been established.</li> </ul>  | <ul> <li>Samples dispatched to ALS in Orange NSW for sample preparation<br/>and analysis. Site standards and blanks are inserted at a rate of 8 per<br/>100 samples, and duplicates are inserted at a rate of 5 per 100<br/>samples to check quality control. Laboratory standards and blanks<br/>are inserted every 25 samples.</li> </ul>  |



| Criteria  | JORC Code explanation  | Commentary  |
|---|--|---|
| 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>Significant intersections calculated by Bowdens Silver geologists.</li> <li>All geological logging is entered digitally before inputting into a Maxwell Geoservices database schema.</li> <li>Primary assay data is sent electronically from the laboratory to the SVL database administrator and then entered into the geological database for validation.</li> <li>All assays matched with the logging sheets and loaded directly from the output provided by the laboratory with no manual entry of assays undertaken.</li> <li>No adjustments were made or required to be made to the assay data.</li> </ul> |
| Location of data points                                 | <ul> <li>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.</li> <li>Specification of the grid system used.</li> <li>Quality and adequacy of topographic control.</li> </ul>  | <ul> <li>The collar position is initially surveyed using hand-held GPS with accuracy of +- 3 metres.</li> <li>Locations are later collected by Real Time Kinetic by VRS to an accuracy of +- 1 centimetre.</li> <li>Down hole surveys collected every 30 metres using an electronic downhole reflex survey camera.</li> <li>The terrain includes steep hills and ridges with a digital elevation model derived from a combination of locally flown LIDAR and publically available point cloud data.</li> <li>All collars recorded in MGA94 zone 55.</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>This drilling relates to exploration drilling of Main Zone Silver defined<br/>by previous drilling at the Bowdens Deposit. Drilling is not defined to a<br/>set spacing.</li> </ul>  |
| Orientation of data in relation to geological structure | <ul> <li>Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.</li> <li>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.</li> </ul> | <ul> <li>Drill orientation was designed to intersect the projection of the major structural controls to the Deposit.</li> <li>An interpretation of the mineralisation has indicated that no sampling bias has been introduced.</li> </ul>   |

**Silver Mines Limited** 



| Criteria           | JORC Code explanation   | Commentary   |
|--------------------|---|--|
| Sample<br>security | The measures taken to ensure sample security.   | <ul> <li>All samples bagged on site under the supervision the senior geologist<br/>with sample bags tied with cable ties before being driven by site<br/>personnel to the laboratory in Orange, NSW (~200 kilometres from<br/>the site)</li> </ul> |
| Audits or reviews  | <ul> <li>The results of any audits or reviews of sampling techniques and<br/>data.</li> </ul> | <ul> <li>The drilling campaign and drill work includes on-going internal<br/>auditing with advice taken on process from external advisors.</li> </ul>  |

# **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 Bowdens Resource is located wholly within Exploration Licence No 5920, held wholly by Silver Mines Limited and is located approximately 26 kilometres east of Mudgee, New South Wales.</li> <li>The tenement is in good standing.</li> <li>The project has a 2.0% Net Smelter Royalty which reduces to 1.0% after the payment of US\$5 million over 100% of EL5920</li> <li>The project has a 0.85% Gross Royalty over 100% of EL5920.</li> </ul>  |
| Exploration<br>done by other<br>parties          | Acknowledgment and appraisal of exploration by other parties.  | <ul> <li>The Bowdens project was previously managed by Kingsgate<br/>Consolidated and Silver Standard Ltd, however the new results under<br/>this table is based on work conducted solely by Silver<br/>Mines/Bowdens Silver.</li> </ul>  |
| Geology  | Deposit type, geological setting and style of mineralisation.  | <ul> <li>The Bowdens Deposit is a low sulphidation epithermal base-metal and silver system hosted in Permian aged Volcanic rocks.</li> <li>Mineralisation includes veins, shear veins and breccia zones within tuff and ignimbrite rocks.</li> <li>Mineralisation is overall shallowly dipping (~15 degrees to the north) with high-grade zones preferentially following a volcanic dome. There are several vein orientations within the broader mineralised zones including some areas of stock-work veins.</li> </ul> |



| Criteria   | JORC Code explanation   | Commentary  |
|--|---|---|
|  |   | <ul> <li>The mineralisation reported in this release is hosted in the main<br/>Rylstone Volcanics which unconformably overlie the Ordovician<br/>Coomber Formation (sediments). The mineralization reported in this<br/>report is typical of the high-grade silver dominant portion of the<br/>deposit.</li> </ul>  |
| 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; and</li> <li>hole length.</li> </ul> </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> | All information is included in Table 1 and Table 2 of this report above.  |
| Data<br>aggregation<br>methods   | <ul> <li>In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (e.g. cutting of high grades) and cut-off grades are usually Material and should be stated.</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>   | <ul> <li>Intersection calculation are weighted to sample length. The average sample represents 1 metre of drill core.</li> <li>Reported intersections are based on a cut off of 90g/t silver with no internal dilution factors</li> <li>No top cutting of data or grades was undertaken in the reporting of these results.</li> </ul>   |
| Relationship<br>between<br>mineralisatio<br>n 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 (e.g. 'down hole length, true width not known').</li> </ul>   | <ul> <li>Mineralisation is both stratabound and vein hosted. The stratigraphy<br/>dips moderately to the north within the volcanics and moderately to<br/>the west in the basement units. This drill hole is pending further<br/>assays, and as such has not been modelled in detail to assess for<br/>true width. However, given the information available the stratigraphic<br/>controls on the zone, the drilling width is estimated to be 120 to 140%<br/>of true-width for this mineralized zone.</li> </ul> |

Page 11

**Silver Mines Limited** 

ABN: 45 107 452 942



| Criteria                                    | JORC Code explanation  | Commentary   |
|---|--|--|
| Diagrams                                    | <ul> <li>Appropriate maps and sections (with scales) and tabulations of<br/>intercepts should be included for any significant discovery being<br/>reported These should include, but not be limited to, a plan view of<br/>drill hole collar locations and appropriate sectional views.</li> </ul>   | <ul> <li>Map and 3D schematic cross section provided in the body of this<br/>report.</li> </ul>  |
| Balanced reporting                          | <ul> <li>Where comprehensive reporting of all Exploration Results is not<br/>practicable, representative reporting of both low and high grades<br/>and/or widths should be practiced to avoid misleading reporting of<br/>Exploration Results.</li> </ul>  | <ul> <li>All results received and compiled to date are reported in this release.</li> <li>Drilling is on-going with further results expected.</li> </ul>   |
| 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 and potential deleterious or contaminating substances. | This report relates to drill data reported from this program.  |
| Further work                                | <ul> <li>The nature and scale of planned further work (e.g. 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>                  | <ul> <li>This report relates to a drill program that is designed to test the extension and explore for further zones to the High-Grade Silver Zone situated around the Bowdens Silver Deposit. Drilling is on-going with further results pending.</li> </ul> |