

MELROSE EM SURVEY IDENTIFIES SEVERAL DRILLING TARGETS

EM Survey has identified potential drilling targets along a linear trend coincident with magnetic anomalies and shallow historical air-core drill-holes with elevated levels of nickel and copper

Key Points

- Electromagnetic (EM) Survey has been completed over a portion of the Melrose tenement
- Potential targets are indicated along a linear trend with coincident magnetic and geochemical anomalies
- Drilling is planned to test these targets as soon as access is available after the agricultural cropping season
- Cauldron's Melrose Project lies near to the western margin of the Yilgarn Craton, ~125kms north of Julimar and ~15kms immediately south of Chalice's Barrabarra Project
- Melrose Project covers an area of approximately 1,507 km² and is the largest contiguous Nickel-Copper-PGE prospective land-holding in the Barrabarra Greenstone Belt portion of the West Yilgarn Craton; and is on accessible private farmland, containing sealed road frontage where native title has been largely extinguished
- This region of the West Yilgarn Craton is receiving increasing activity from various minerals explorers and is of increasing interest to investors

Cauldron Energy Limited (**Cauldron** or the **Company**) (ASX: CXU) is pleased to provide this update on the **Melrose Project**.

An EM Survey was completed over two areas of the Melrose tenement recently acquired. Previously identified high priority Targets 01 to 04 were surveyed together with a number of other targets identified from historical geochemical results and airborne magnetics (ASX: CXU 11 May 2023).

In total, the survey consisted of 361.3 line kilometres comprising 105 E-W lines, spacing 150 metres N-S from each other. Some infill at 75m line spacing was included in the survey.

As shown on Figure 1, a linear trend of coincident trend of magnetic, geochemical, and now EM targets has emerged. It is hypothesised that the magnetic and geochemical signatures indicate

mafic/ultramafic intrusive rocks potentially carrying nickel-copper-PGE mineralisation, and that the EM anomalies indicate zones where more conductive sulphides might be present.

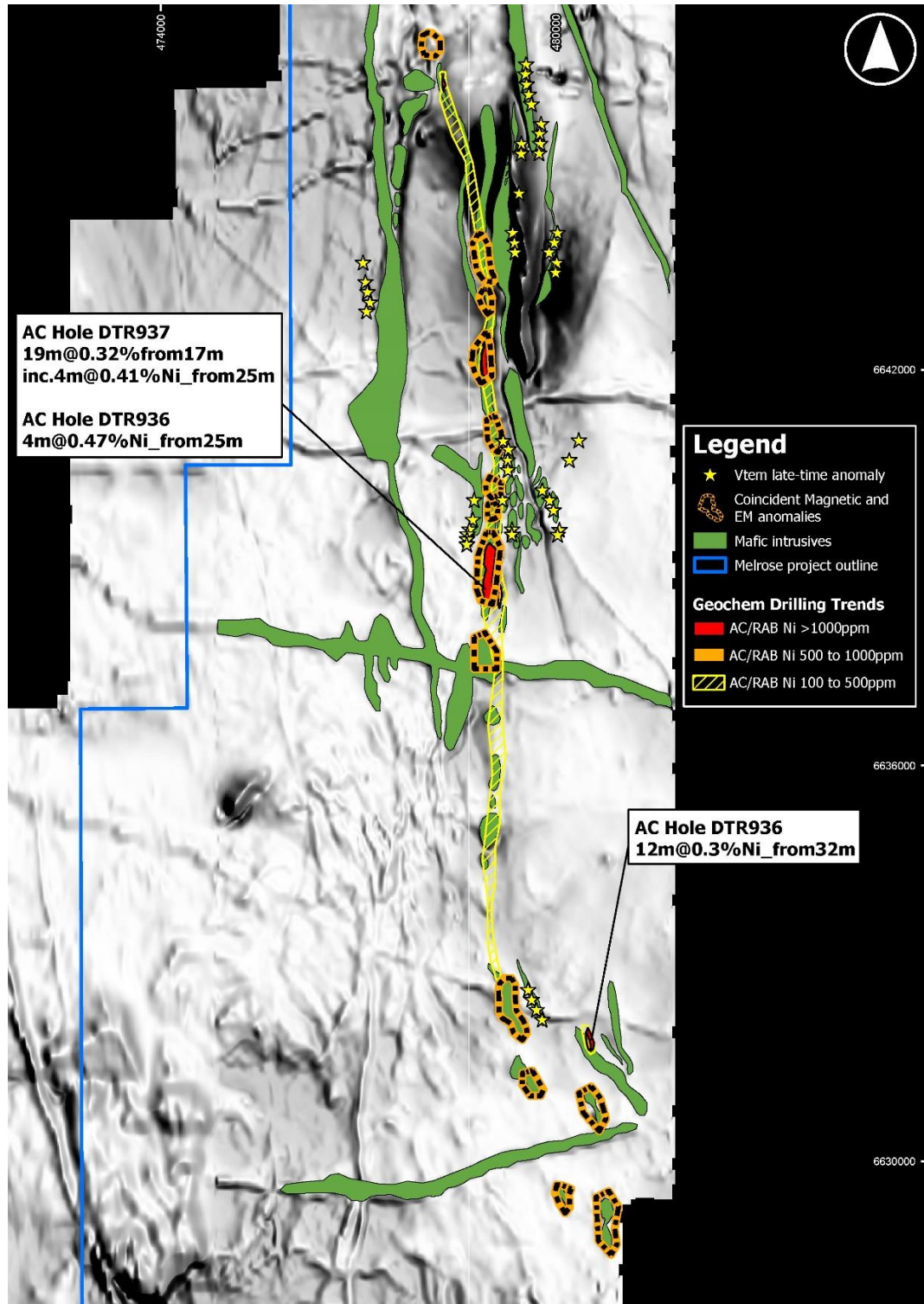


Figure 1: Coincident EM and Magnetic anomalies along a linear trend, with geochemical anomalies also shown over a background of grey-scale aeromagnetics

The EM response was very strong from surface saline conductive material, but more subtle anomalies away from this surface material were able to be discerned.

Drill testing (a combination of aircore and RC) is planned to occur as soon as access can be gained after the agricultural cropping season, probably within the next two months.

Target 1 (see Figure 1) is a 1km long zone of anomalous geochemistry ($>1,000\text{ppm Ni}$) with a coincident magnetic and EM anomaly. Previous drilling there returned 19m @ 0.32% Ni from 17m depth and 4m @ 0.47% Ni from 25m depth.

Another target further north (Target 3) shows similar features. The previous geochemical drilling coverage was quite sparse, so it is highly likely further targets will be produced once drilling is completed.

Previous ASX announcements (viz. ASX:CXU 11 May 2023, 31 July 2023) have described the various geochemical and magnetic targets in more detail.

Melrose Project – Background and New Tenements Granted

The Melrose Project is located in the Dalwallinu region of Western Australia, approximately 250 km north of Perth (Figure 2).



Figure 2: Location Map - Melrose Project

The project covers an area of approximately $1,507\text{ km}^2$ and comprises E70/6160 covering an area of $\sim 169\text{ km}^2$ and the area immediately west and south of E70/6160 covering a further area of $\sim 1,338\text{ km}^2$ (pegged by Cauldron; represented by Applications E70/6463, 6466, 6467, 6468 and 6469).

Of the areas pegged, two have recently been granted (E70/6467 and E70/6468), and three remain as tenement applications (E70/6463, 6466, and 6469).

Cauldron's Melrose Project is the largest contiguous Nickel-Copper-PGE prospective land-holding in the Barrabarra Greenstone Belt portion of the West Yilgarn Craton.

The Melrose Project area is 13 km south of Chalice's Barrabarra Ni-Cu-PGE project. Chalice have described Barrabarra as containing a ~15 km long unexplored interpreted mafic-ultramafic complex, with anomalous Ni-Cu in soils, and a similar geophysical signature to the Julimar Complex. Barrabarra is about 140 km north of Chalice's Julimar project.

On an adjacent tenement Nickel X has identified two very strong EM conductors associated with magnetic anomalies that they plan to drill test soon. Both Chalice and Nickel X are targeting Julimar style Ni-Cu-PGE deposits in the region (Figure 3).

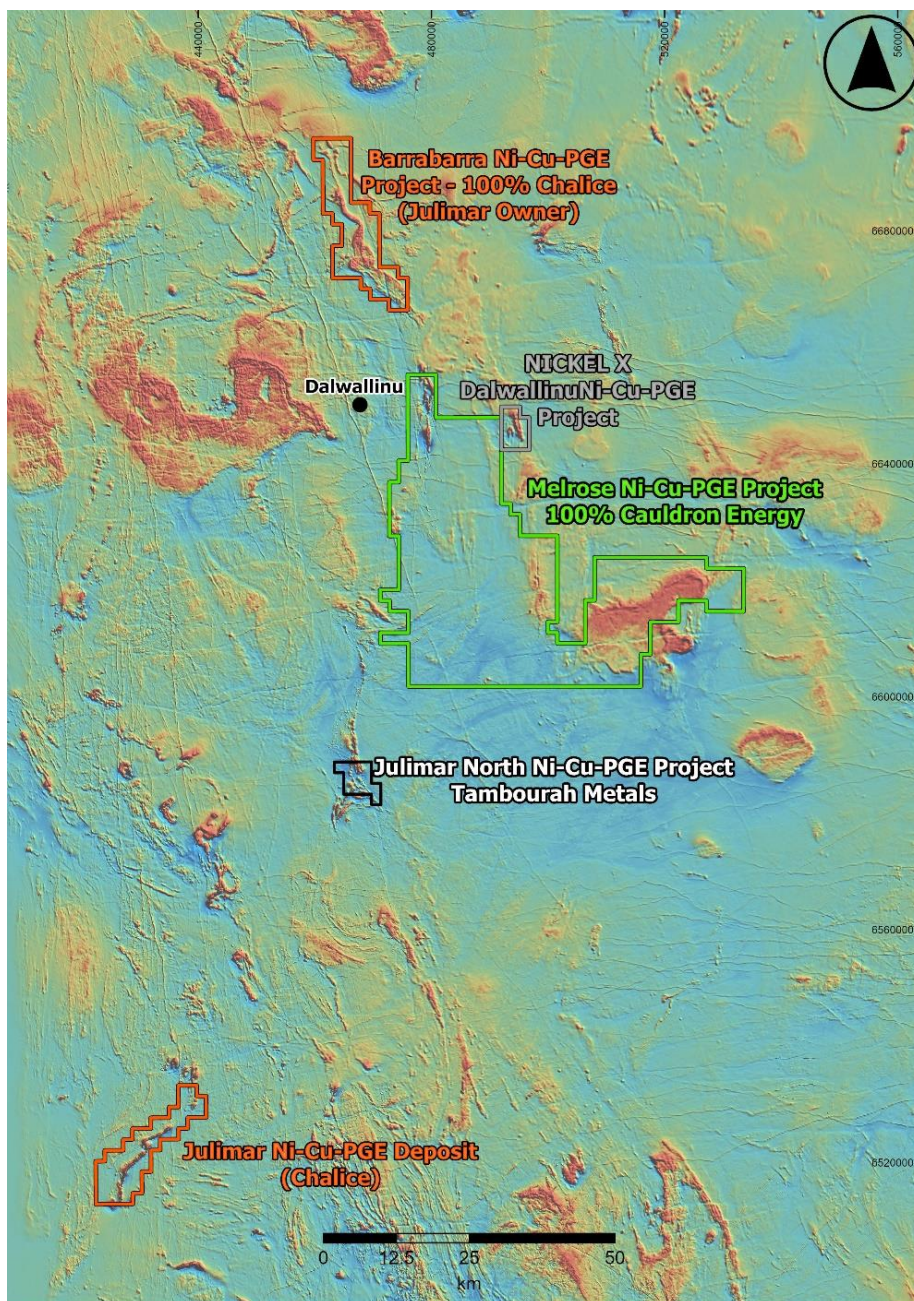


Figure 3: Melrose project - nearby projects over regional aeromagnetics

Authorisation For Release

Authorised for release by Mr Ian Mulholland, Non-Executive Chairperson of Cauldron Energy Limited

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Competent Person Statement

The information in this report that relates to Exploration Results for the Melrose Project is extracted from reports prepared by Mr Angelo Socio, Cauldron's Exploration Manager. Mr Socio is a member of Australian Institute of Geoscientists (AIG – Member Number), and has sufficient experience 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). Mr. Socio consents to the inclusion in this report of the matters based on his information in the form and context in which it appears.

The information in this report that relates to previous exploration results is extracted from reports released to the Australian Securities Exchange (ASX) listed in the table below and which are available to view at www.cauldronenergy.com.au and for which Competent Persons' consents were obtained. The Competent Persons' consents remain in place for subsequent releases by the Company of the same information in the same form and context, until the consent is withdrawn or replaced by a subsequent report and accompanying consent. The Company confirms that is not aware of any new information or data that materially affects the information included in the original ASX announcements released.

Unless otherwise stated, where reference is made to previous releases of exploration results in this announcement, the Company confirms that it is not aware of any new information or data that materially affects the information included in those announcements and all material assumptions and technical parameters underpinning the exploration results included in those announcements continue to apply and have not materially changed.

Date of Release	Title
11-May-2023	Option over Melrose Project, Dalwalinu, WA
11-May-2023	Additional Information - Melrose Project
03-Jul-2023	Highly promising Geophysical Response at Melrose Project
26-Jul-2023	Another Highly promising Geophysical Response at Melrose Project
31-Jul-2023	Exercise of Option Over Key Melrose Tenement

Disclaimer

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JORC Table 1

SECTION 1: SAMPLING TECHNIQUES AND DATA

	JORC Code explanation	Commentary
Sampling techniques	<p><i>Nature and quality of sampling (e.g. cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling.</i></p> <p><i>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</i></p> <p><i>Aspects of the determination of mineralisation that are Material to the Public Report. In cases where 'industry standard' work has been done this would be relatively simple (e.g. 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (e.g. submarine nodules) may warrant disclosure of detailed information.</i></p>	<ul style="list-style-type: none"> Not applicable for geophysical survey.
Drilling techniques	<p><i>Drill type (e.g. core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (e.g. core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc).</i></p>	<ul style="list-style-type: none"> Not applicable for geophysical results.
Drill sample recovery	<p><i>Method of recording and assessing core and chip sample recoveries and results assessed.</i></p> <p><i>Measures taken to maximise sample recovery and ensure representative nature of the samples.</i></p> <p><i>Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.</i></p>	<ul style="list-style-type: none"> Not applicable for geophysical results.
Logging	<p><i>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.</i></p> <p><i>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.</i></p> <p><i>The total length and percentage of the relevant intersections logged.</i></p>	<ul style="list-style-type: none"> Not applicable for geophysical results.
Sub-sampling techniques and sample preparation	<p><i>If core, whether cut or sawn and whether quarter, half or all core taken.</i></p> <p><i>If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.</i></p> <p><i>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</i></p>	<ul style="list-style-type: none"> Not applicable for geophysical results.

	<p>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</p> <p>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.</p> <p>Whether sample sizes are appropriate to the grain size of the material being sampled.</p>	
Quality of assay data and laboratory tests	<p>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</p> <p>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.</p> <p>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.</p>	<ul style="list-style-type: none"> Not applicable for geophysical results.
Verification of sampling and assaying	<p>The verification of significant intersections by either independent or alternative company personnel.</p> <p>The use of twinned holes.</p> <p>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</p> <p>Discuss any adjustment to assay data.</p>	<ul style="list-style-type: none"> Not applicable for geophysical results.
Location of data points	<p>Accuracy and quality of surveys used to locate drillholes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.</p> <p>Specification of the grid system used.</p> <p>Quality and adequacy of topographic control.</p>	<ul style="list-style-type: none"> The grid system used for the survey UTM grid (MGA94 Zone 50). Airborne survey lines have been measured by a real time GPS Navigation System providing an accuracy of up to 1.5metres. Topographic control of the airborne geophysical survey was achieved using a Raday altimeter with an accuracy of approximately 1 metre.
Data spacing and distribution	<p>Data spacing for reporting of Exploration Results. 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.</p> <p>Whether sample compositing has been applied.</p>	<ul style="list-style-type: none"> Airborne geophysical survey data was acquired continuously on 150m line spacing. The data spacing is not relevant for establishing geological control and grade continuity, nor was any sample compositing applied. The mineralisation has not yet been demonstrated to have sufficient continuity to support the definition of a Mineral Resource
Orientation of data in relation to geological structure	<p>Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.</p> <p>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.</p>	<ul style="list-style-type: none"> Geophysical survey data was acquired in an orientation generally perpendicular to the stratigraphic trend.
Sample security	<p>The measures taken to ensure sample security.</p>	<ul style="list-style-type: none"> Not applicable for geophysical results.
Audits or reviews	<p>The results of any audits or reviews of sampling techniques and data.</p>	<ul style="list-style-type: none"> Internal review of all data was undertaken by Newexco Exploration Pty Ltd geophysicists.

		<ul style="list-style-type: none"> The geophysicists determined the data and analysis to be of good quality.
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SECTION 2: REPORTING OF EXPLORATION RESULTS

Geology	<i>Deposit type, geological setting and style of mineralisation.</i>	<ul style="list-style-type: none"> The geological setting is of Archaean age with common host rocks related to mafic/ultramafic intrusive-hosted nickel-copper-PGE sulphide mineralisation as found throughout the Yilgarn Craton of Western Australia.
Drill hole Information	<p><i>A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes:</i></p> <ul style="list-style-type: none"> <i>easting and northing of the drill hole collar</i> <i>elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar</i> <i>dip and azimuth of the hole</i> <i>down hole length and interception depth</i> <i>hole length.</i> 	<ul style="list-style-type: none"> Not applicable.
Data aggregation methods	<p><i>In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (e.g. cutting of high grades) and cut-off grades are usually Material and should be stated.</i></p> <p><i>Where aggregate intercepts incorporate short lengths of high grade results and longer lengths of low grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail.</i></p> <p><i>The assumptions used for any reporting of metal equivalent values should be clearly stated.</i></p>	<ul style="list-style-type: none"> Not applicable.
Relationship between mineralisation widths and intercept lengths	<p><i>These relationships are particularly important in the reporting of Exploration Results.</i></p> <p><i>If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</i></p> <p><i>If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (e.g. 'down hole length, true width not known').</i></p>	<ul style="list-style-type: none"> Not applicable.
Diagrams	<i>Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views.</i>	<ul style="list-style-type: none"> Refer to Figures in text.
Balanced reporting	<i>Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.</i>	<ul style="list-style-type: none"> Not applicable for these geophysical results.
Other substantive exploration data	<i>Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.</i>	<ul style="list-style-type: none"> Everything meaningful and material is disclosed in the body of the report, or in previous reports referred to in the text. Geological and geophysical observations have been factored into the report. VTEM (Versatile Time-Domain Electromagnetic) Max_{TM} helicopter borne system developed by Geotech Ltd with a 35metre diameter transmitter loop. The VTEM

		<p>Max system can generate up to 700,000 NIA peak dipole moment (230Amps). The EM receiver provides both dB/dt and B-field measurements for Z, X and optional Y axis.</p> <ul style="list-style-type: none"> The revised data acquisition system (full waveform) provides a wider range of time gate windows (18 microseconds to 10 milliseconds).
Further work	<p><i>The nature and scale of planned further work (e.g. tests for lateral extensions or depth extensions or large-scale step-out drilling).</i></p> <p><i>Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.</i></p>	<ul style="list-style-type: none"> A range of exploration techniques are being considered to progress exploration, including ground EM surveys, AC and/or RC drilling.