

7 October 2025

## New Geochemical Study Upgrades Prospectivity at the Dudley Lithium Project

### Key Points:

- Independent review of the geochemical data from the Dudley Lithium Project confirms robust drilling targets and reveals potential for additional mineralisation.
- Several new high priority targets have been identified with infill sampling due to commence in October.
- The Reverse Circulation (RC) drilling program that is currently planned and permitted will be re-designed following the infill sampling with drilling expected to take place following the Christmas 2025 holiday season
- Xenora continues to review new opportunities as they are identified

Xenora Minerals Limited (**ASX: XRA**) (**Xenora** or the **Company**) is pleased to report that following a third party review of geochemical data across the Dudley Lithium Project (Figure 1), new drilling targets have been identified and further infill and extension sampling planned.

It is anticipated that the sampling and mapping program will commence in mid October and be completed over a two week period. Figure 2 shows the areas of focus for the additional sampling.

Once results are received and interpreted, the currently permitted and planned drilling program will be expanded to incorporate additional holes where required. It is expected that the program will be completed in early 2026.

### **Xenora Minerals' Managing Director, Will Dix said:**

*"It is always reassuring to have an independent review confirm the targeting and focus that the technical team has developed for any project and I am pleased that this has been the case at Dudley. Once we have completed the infill and extensional sampling program we will be in a strong position to re-design the RC drilling program which I am sure will be expanded to cover new areas."*

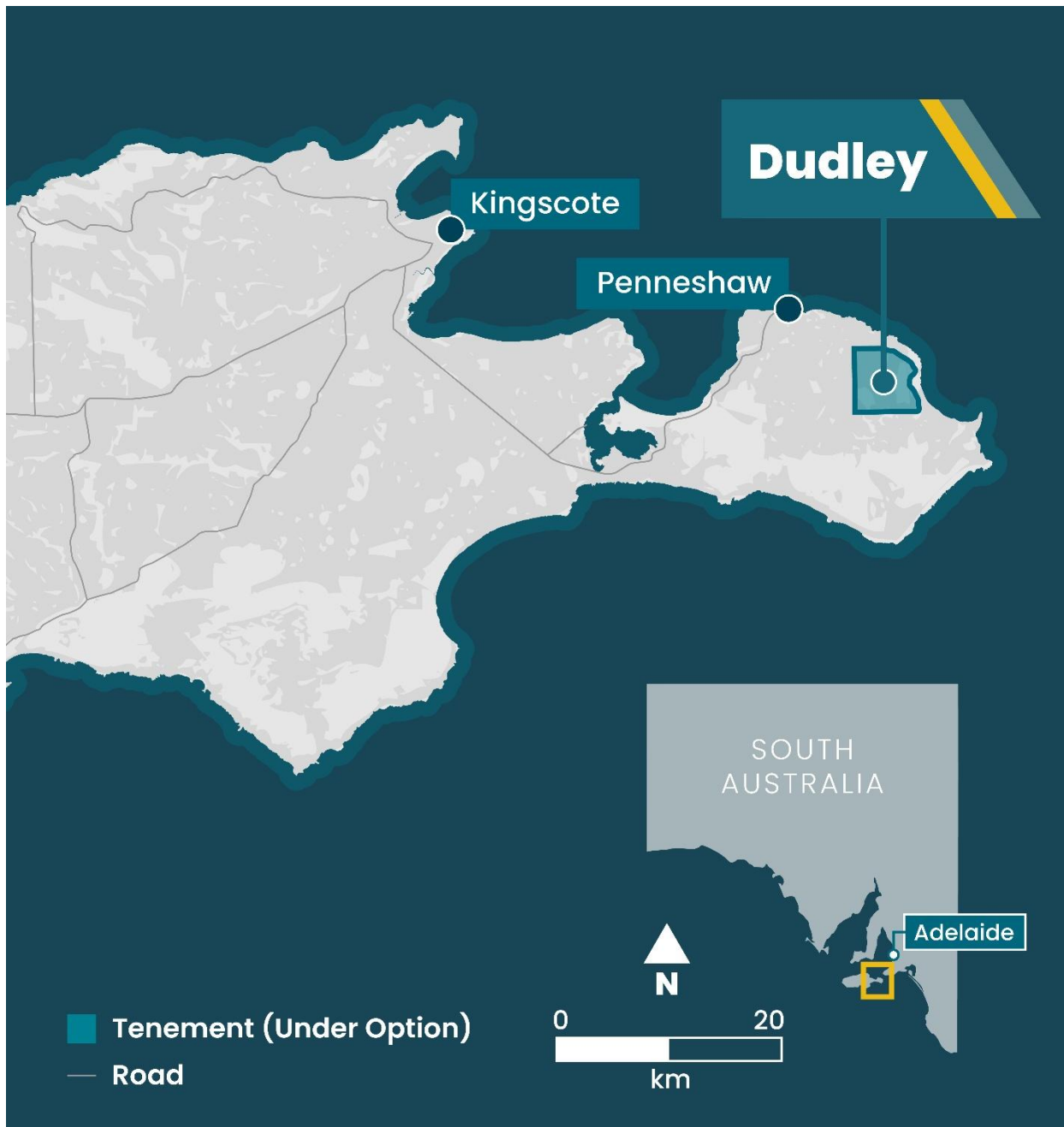


Figure 1 – EL6892 (Dudley Lithium Project tenement which Xenora has an option to acquire up to a 90% interest in), located on the eastern side of Kangaroo Island, South Australia

## Dudley Lithium Project – Geochemical Review

Streamline Geo was approached to undertake a review of the geochemistry of the Dudley Lithium Project in South Australia to ensure the Company was extracting as much information as possible from the data and that the drill planning was optimised.

The review included:

- Principal Component Analysis (PCA) and weighted sum calculations of rock chip and soil (MMI) geochemical datasets;
- Identification of key fractionation trends and fertility domains indicative of LCT pegmatite systems;

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- Assessment of data reliability, regolith influence, and alignment with known mineralised zones, and;
- Definition of most compelling target(s), led by the Dudley pegmatite (and southwest extension).

The interpretation of the data was split into two parts, soil geochemistry and rock geochemistry. The soil geochemistry was analysed using Principal Component Analysis and the fertility classified using a weighted sum of the most informative elements (Li, Cs, Ta, Rb, Sn, Ga, Be and Nb). Outcomes from this study include:

- The soil data supports the occurrence of a highly evolved granitic melt showing strong affinity for Li-Cs-Ta mineralisation.
- Soil sampling shows moderately coherent linear anomalism in some areas, suggesting possible tabular pegmatitic sources.
- Elevated lithium responses are generally associated with lateritic terrain, which may increase the risk of false positives due to background enrichment.
- Conversely, non-lateritic areas may yield false negatives, particularly where soil development is poor (e.g., in gullies or stripped slopes).

The rock chip geochemistry shows the following:

- Rock chip sampling confirms advanced fractionation trends, with multiple samples showing elevated Li, Cs, Rb, Ta, and Sn values consistent with LCT pegmatite fertility (Figure 3).
- The highest anomaly intensity is centred on the main Dudley pegmatite, suggesting it is the most evolved and mineralised body identified to date.
- Two additional areas show compelling signatures:
  - Float samples to the south-southwest of the Dudley pegmatite, suggesting potential for other fertile pegmatites nearby.
  - One in situ anomaly ~2 km along strike from Dudley

## Dudley Lithium Project – Background

The Dudley Lithium Project is located on Kangaroo Island in South Australia within exploration licence EL 6892. The project contains multiple pegmatite systems that are apparent at surface for over 6 kilometres in strike extent and up to 80 metres thick at surface.

The project area has a long history of historical mining and prospecting for lithium tourmalines and kaolin primarily from strongly weathered surface exposures of the Dudley pegmatite, but also from other pegmatites across the project. Trenching of the Dudley pegmatite revealed widths of up to 80m. Lithium tourmalines indicate the pegmatites are highly fractionated and they are commonly associated with spodumene mineralised pegmatites.

Historical exploration at the Dudley Lithium Project by Lithium Australia was restricted to rock chips from the limited pegmatite outcrop and float present across the project. The low potassium/rubidium (K/Rb) and potassium/caesium (K/Cs) ratios suggest the pegmatites are highly fractionated, which is conducive to the presence of spodumene within the pegmatites. Rb and Cs are highly mobile in weathered rock and the sampling likely under-estimates the level and extent of the fractionation.

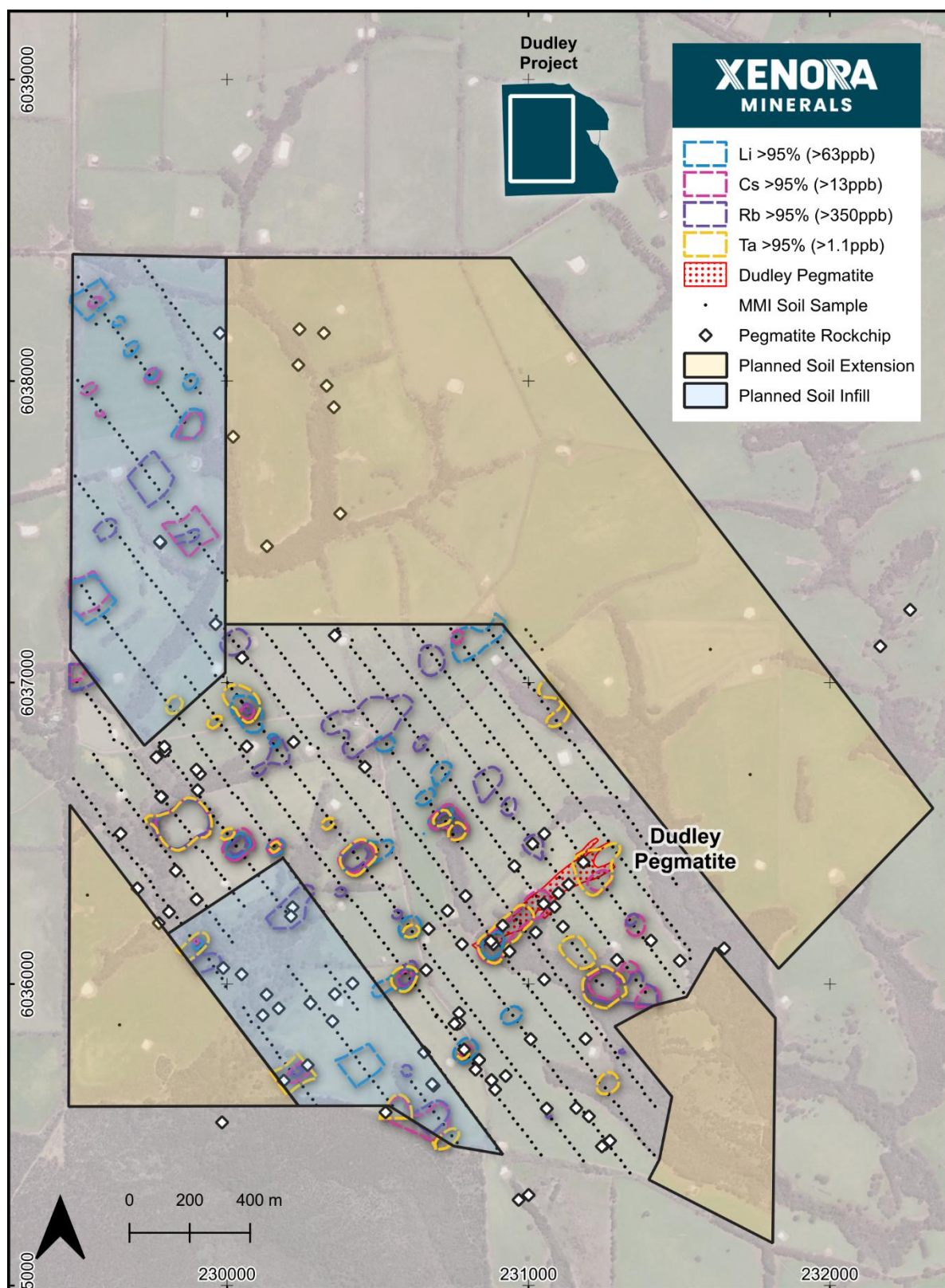


Figure 2 – Target Areas for Infill and Extensional Sampling at Dudley



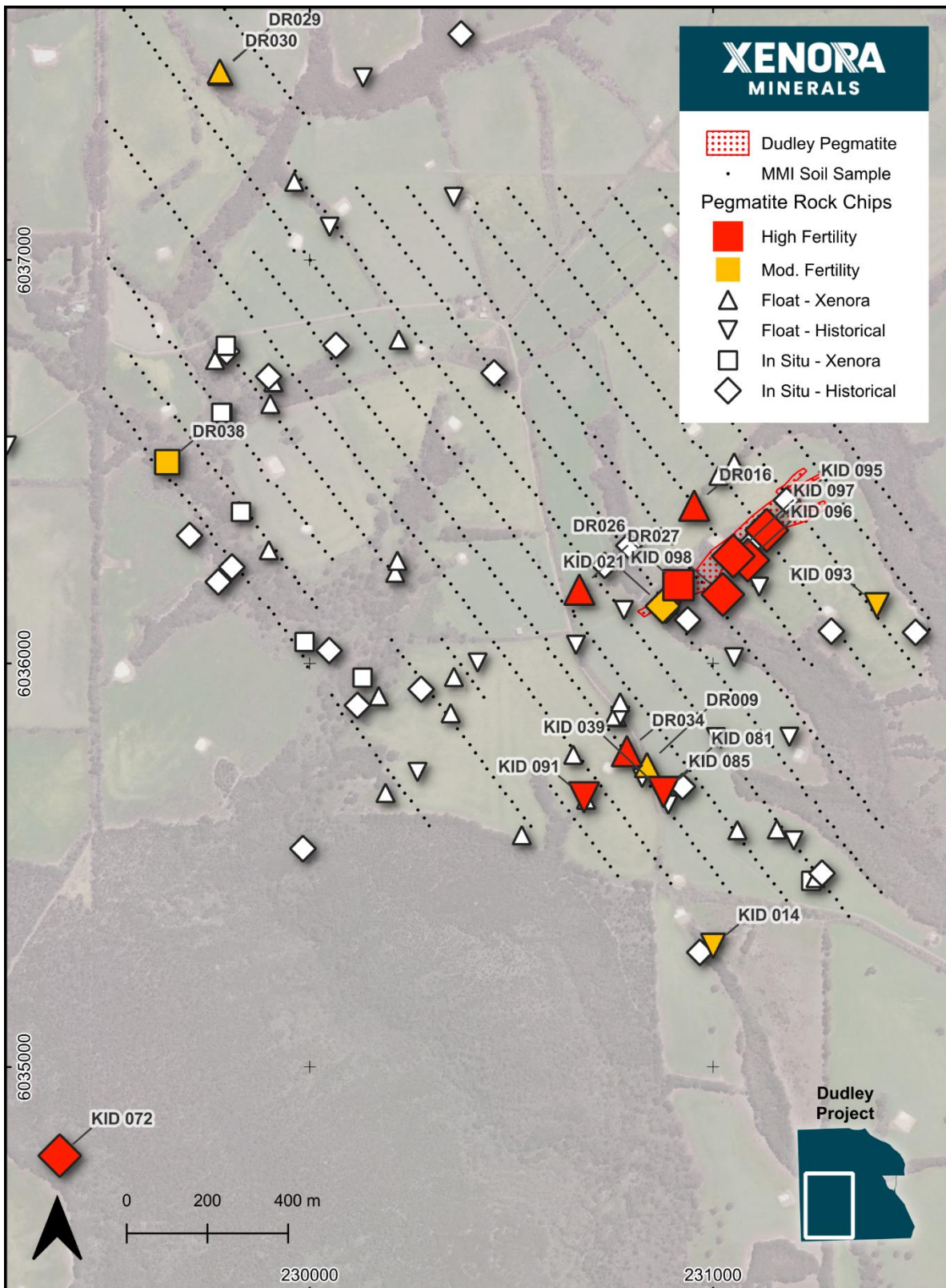


Figure 3 – Rock chip samples with moderately to highly fertile samples highlighted

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Sample ID	Sample Type	Easting	Northing	Be (ppm)	Cs (ppm)	Li <sub>2</sub> O (ppm)	Li (ppm)	Nb (ppm)	Rb (ppm)	Sn (ppm)	Ta (ppm)
<b>Xenora Rock Chip Samples</b>											
DR009	Float	230836	6035748	4.4	65.6	10	4.5	15	441	24	4.2
DR016	Float	230953	6036391	6	100	81	37.7	15	748	< 10	4.6
DR026	In Situ	230914	6036194	25.2	253	2997	1392	18	650	56	5.3
DR027	Float	230668	6036183	4.7	74.8	433	201	14	323	15	10.5
DR029	Float	229779	6037463	133	26.4	76	35.1	87	559	48	35.4
DR030	Float	229777	6037467	81	26	72	33.6	76	638	43	18.8
DR034	Float	230786	6035783	9.1	34.2	398	185	17	302	19	9.9
DR038	In Situ	229646	6036499	55.2	28.3	13	5.9	56	350	75	22.3
<b>Lithium Australia Rock Chip Samples from 2019</b>											
KID 014	Float	231000	6035300		20	129	60		409	40	15
KID 021	In Situ	230875	6036142		50	151	70		358	< 10	3
KID 039	Float	230877	6035681		484	1119	520		919	< 10	6
KID 045	Float	230236	6038053		66	< 22	<10		634	< 10	24
KID 072	In Situ	229380	6034780	23	49	215	100	80	629	20	30
KID 081	Float	230877	6035681	9	564	1076	500	50	1130	< 10	< 10
KID 085	Float	230877	6035681	13	15	301	140	30	149	< 10	< 10
KID 091	Float	230680	6035668	5	78	215	100	< 10	393	10	20
KID 093	Float	231406	6036144	38	38	215	100	50	371	< 10	< 10
KID 095	In Situ	231133	6036330	24	27	387	180	90	355	< 10	20
KID 096	In Situ	231086	6036256	15	187	4327	2010	60	1617	60	50
KID 097	In Situ	231050	6036266	374	47	689	320	40	606	< 10	20
KID 098	In Situ	231024	6036171	42	51	344	160	40	438	< 10	< 10

*Table 1 – Selected pegmatite rock chip samples identified as anomalous / fertile in Cs Li Rb Sn Ta*

Historical rock chip samples ("KID" samples) were originally reported by Lithium Australia in: *LIT ASX Announcement 20 June 2019 – Lithium pegmatites identified at Dudley prospect, Kangaroo Island, South Australia.*

## Next Steps

Follow up sampling will continue to build the geochemical picture and 2026 drilling will focus on testing the Dudley pegmatite and other anomalous targets identified from the soils program. Drilling will target the pegmatites below the weathering profile, expected to be at most 20-30m deep, where potential lithium mineralisation has not degraded into clays. The initial program will consist of a number of holes designed to test the pegmatites both along strike and across the interpreted thickest zones well into fresh rock.

**Release authorised by the Board of Directors of Xenora Minerals.**

### For further information please contact:

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## Competent Person Statement

The information in this announcement that relates to Exploration results and Historical Geological Results is based on, and accurately represents, the information, available data, studies and supporting documentation compiled by William Dix, who is a full time employee and share and option holder of Xenora Minerals Limited. Mr Dix is a Fellow of the Australian Institute of Mining and Metallurgy. Mr Dix has sufficient experience of relevance to the style of mineralisation and the types of deposits under consideration, and to the activities undertaken, to qualify as a Competent Person as defined in the 2012 Edition of the Joint Ore Reserves Committee (JORC) Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves. Mr Dix consents to the inclusion in this announcement of the matters based on information in the form and context in which it appears.

## About Xenora Minerals

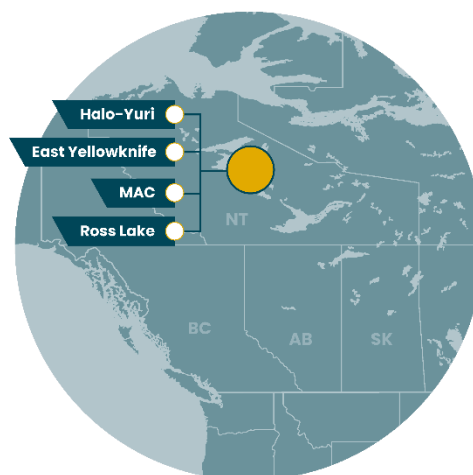
Xenora Minerals Limited (ASX: XRA) is an Australian-based resources company exploring for critical minerals, which are essential for the future transition towards clean energy.

The Company holds an option to acquire up to 51% in the highly prospective Dudley Lithium Project on Kangaroo Island in South Australia, with the potential to increase to a 90% interest across a two-stage farm-in. Xenora also holds a significant lithium exploration footprint in the Northwest Territories, Canada.

### Australian Projects



### Canadian Projects





## Annexure A JORC Tables

The following Tables are provided to ensure compliance with the JORC code (2012) edition requirements for the reporting of exploration results.

**JORC Table One – Sampling Techniques and data**

Criteria	JORC Code explanation	Commentary
Sampling techniques	<p>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.</p> <p>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</p> <p>Aspects of the determination of mineralisation that are Material to the Public Report.</p>	<p>Modern samples reported (“DR” samples) are grab rock chips collected from weathered outcrop to subcrop and float. 1-3 kg of rock fragments were collected per sample via geo hammer.</p> <p>Samples were analysed for lithium and other elements using a sodium fusion method by SGS Perth.</p> <p>Historical rock chip samples (“KID” samples) were originally reported by Lithium Australia in: <i>LIT ASX Announcement 20 June 2019 – Lithium pegmatites identified at Dudley prospect, Kangaroo Island, South Australia.</i></p> <p>See original Lithium Australia release for sampling techniques.</p>
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).	Not applicable as no drilling is reported.
Drill sample recovery	<p>Method of recording and assessing core and chip sample recoveries and results assessed.</p> <p>Measures taken to maximise sample recovery and ensure representative nature of the samples.</p> <p>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.</p>	Not applicable as no drilling is reported.
Logging	<p>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.</p> <p>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.</p> <p>The total length and percentage of the relevant intersections logged.</p>	Samples collected in the field are logged for rock type, mineralogy, and mineral abundance. Descriptions are qualitative in nature.
Sub-sampling techniques and	If core, whether cut or sawn and whether quarter, half or all core taken.	Rock chip samples were ‘grab’ point samples taken of either float or in situ

Criteria	JORC Code explanation	Commentary
sample preparation	<p>If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.</p> <p>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</p> <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>	<p>outcrop-subcrop, with 1-3kg collected using a geo hammer.</p> <p>The technique is appropriate for early-stage exploration. Samples are not representative of the pegmatite as a whole.</p> <p>Samples were prepared by SGS in Perth by crushing to 90% passing 2 mm and pulverized to 85% passing 75 microns.</p> <p>No field duplicates were taken.</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 (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established.</p>	<p>Samples were analysed by SGS in Perth using a sodium peroxide fusion (GE_FUS92A50) with ICP MS and OES finish (GE_ICP92A50 &amp; GE_IMS92A50), which is a complete digestion method for refractory minerals encountered in LCT pegmatites.</p> <p>5% (2 of 41) of samples were standards. Standard results have acceptable levels of accuracy and precision. No coarse blanks were analysed.</p> <p>SGS internal quality control includes duplicates, repeats, standards and blanks.</p>
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>	<p>Not applicable as no drilling is reported.</p> <p>Li<sub>2</sub>O values were converted from Li using an oxide conversion factor of 2.1527.</p>
Locations of data points	<p>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.</p> <p>Specification of the grid system used.</p> <p>Quality and adequacy of topographic control.</p>	<p>Map figures and coordinates in the release are in GDA2020 MGA zone 54 (EPSG:7854).</p> <p>Sample locations are measured using a handheld GPS and accurate to ± 5 m.</p>
Data spacing and distribution	<p>Data spacing for reporting of Exploration Results.</p> <p>Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral</p>	<p>No drilling has been completed and historical sampling is not sufficient for Mineral Resource or Ore Reserve purposes.</p> <p>No compositing has been applied.</p>

Criteria	JORC Code explanation	Commentary
	Resource and Ore Reserve estimation procedure(s) and classifications applied.  Whether sample compositing has been applied.	
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.  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.	Rock chip samples collected are 'point' samples and relation to orientation of structures is unknown.
Sample security	The measures taken to ensure sample security.	Samples were bagged and zip-tied on site and sent to the laboratory via a 3rd party transport company.
Audits or reviews	The results of any audits or reviews of sampling techniques and data.	An independent review of geochemical sampling results is summarised in this report. No audits have been completed.

## Section 2 Reporting of Exploration Results

Criteria	JORC Code explanation	Commentary
Mineral tenement and land tenure status	<p>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.</p> <p>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.</p>	<p>There is a single tenement that makes up the Project – EL6892. All due diligence has been completed and the claims are all in good standing.</p> <p>The Company has an option to earn up to 90% of the Project.</p>
Exploration done by other parties	Acknowledgment and appraisal of exploration by other parties.	<p>Relevant historical exploration work is detailed in annual exploration reports listed below, available on the SARIG online database.</p> <p>Lithium Australia Envelope 13205 Envelope 13267</p> <p>Roebuck Resources Envelope 6813</p> <p>Entia Gems and Jewellery Envelope 12986</p>
Geology	Deposit type, geological setting and style of mineralisation.	<p>The project is hosted in Cambrian aged Kanmantoo Group metasediments of the Delamerian Orogeny. The pegmatites as described in the report are spatially associated with the Cape Willoughby Granite.</p> <p>Mineralisation style sought is typical rare-element Li-Cs-Ta (LCT) pegmatite mineralisation that forms proximal to a cogenetic peraluminous fractionated granite.</p>
Drill hole Information	<p>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:</p> <ul style="list-style-type: none"> <li>○ Easting and northing of the drill collar</li> <li>○ Elevation of RL (Reduced Level – elevation above sea level in metres) of the drill collar</li> <li>○ Dip and azimuth of the hole</li> <li>○ Down hole length and interception depth</li> <li>○ Hole length</li> </ul>	Sample details are reported in Table 1.
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.	No data aggregation methods have been used.



Criteria	JORC Code explanation	Commentary
	<p>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.</p> <p>The assumptions used for any reporting of metal equivalent values should be clearly stated.</p>	
Relationship between mineralisation widths and intercept lengths	<p>These relationships are particularly important in the reporting of Exploration Results.</p> <p>If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</p> <p>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').</p>	Not applicable as no drilling is reported.
Diagrams	<p>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.</p>	See Figures in the document for historical sample locations.
Balanced reporting	<p>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.</p>	All relevant information is reported.
Other substantive exploration data	<p>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.</p>	No substantial new information is available other than that reported above.
Further work	<p>The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).</p> <p>Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.</p>	Further infill and extensional soil sampling is planned in October 2025 with drilling to follow in the new year.