ASX Announcement

13 November 2025

Geophysical and Geological Interpretation Confirms Priority Exploration Targets at North Pine Project Idaho

Highlights

- **Springfield prospect priority target defined:** Geophysical review confirms the historical scheelite-bearing, pyrrhotite skarn occurs within a structurally favourable extensional setting at the southwestern termination ('scissor-end') of the Big Creek–Thunder Mountain graben, considered prospective for repetition of concealed skarn lenses along strike and at depth.
- **Strong conductivity supports electromagnetic detection:** The Springfield skarn system is pyrrhotite-rich and strongly conductive, making it highly responsive to airborne electromagnetic surveys. A VTEM survey is planned to identify additional mineralised bodies and refine drill targeting for the upcoming field season**.**
- **Silver Cliff prospect, large shear-controlled system confirmed:** Interpretation confirms Silver Cliff prospect lies within a broad, shear-controlled mineralised corridor associated with potassic alteration linked to the Laramide Au–Sb–W event. The scale and continuity of alteration indicate strong potential for a significant, structurally hosted antimony system.
- **Northman prospect, structural setting analogous to stibnite:** The review confirms a favourable structural framework comparable to the nearby Yellow Pine–Stibnite system, with north–south shear zones and subsidiary fault splays providing fluid pathways for antimony, tungsten, gold mineralisation. High-resolution geophysics will refine next stage targeting.
- **High resolution geophysics to define drill targets:** Due to the coarse spacing of legacy data, Pioneer will planning to undertake new high-resolution geophysical surveys to map the shear zone architecture and delineate drill targets at Silver Cliffs.
- **Strategic processing advantage, proximity to newly acquired resolution minerals (ASX:RML) Johnson Creek Tungsten & Antimony Mill**: The newly staked Silver Cliffs extension claims surround Resolution Minerals recently acquired Johnson Creek Tungsten & Antimony Mill, providing potential downstream processing opportunities and value leverage for future tungsten and antimony development (*ASX: RML 31/10/2025*).
- **Strategic Expansion in a Proven District:** North Pine now represents one of the largest contiguous critical minerals projects in Idaho's central mineral belt, targeting antimony, tungsten, gold and associated polymetallic mineralisation.
- **North Pine Project, Idaho: A Tier-One Critical Minerals Opportunity**
  - **Strategically Positioned:** Strategically located nearby to one of North America's most advanced antimony-gold developments (Perpetua's Stibnite Project).
  - **Historic High-Grade Tungsten Mine:** (*see PLN ASX: 22/10/2025*)
  - **Geological Analogues:** The Northman Prospect with directly analogous geology to Perpetua Stibnite Gold Project and Resolution Minerals Horse Heaven Project.
- **Aligned with US Critical Mineral Priorities:** Projects primarily target antimony and tungsten both designated by the US Government as critical to national security and defence supply chains.

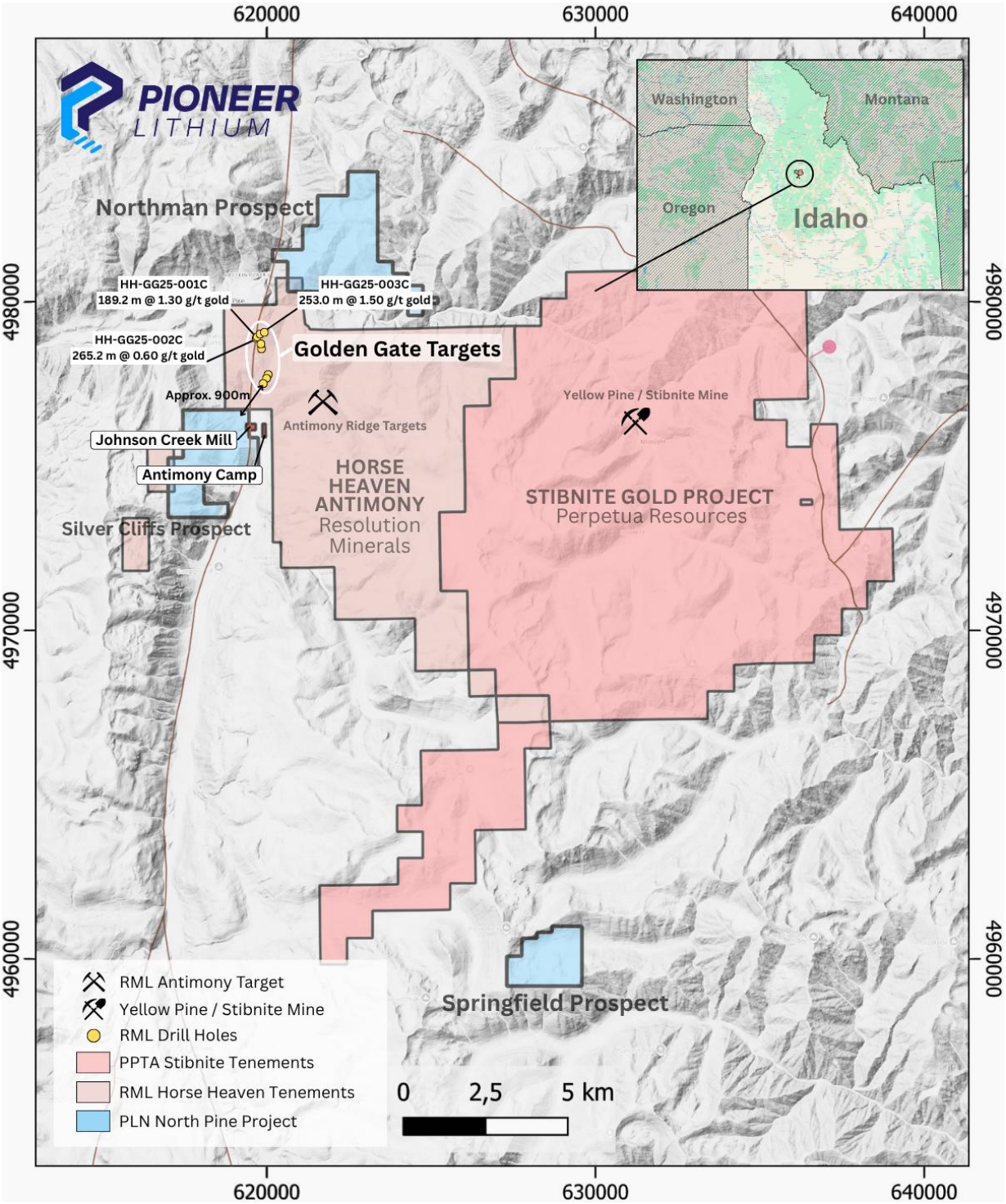

Figure 1: Showing the Location of the North Pine Project and prospect areas nearby to Perpetua Resources, Stibnite Gold Project and Resolution Minerals, Horse Heaven Antimony Project.

Pioneer Lithium Limited (ASX Code: **PLN**) (‘**Pioneer’** or ’**the Company’**) is pleased to advise that an extensive geophysical and geological interpretation of the North Pine Project, Idaho, has been completed by Mitre Geophysics Pty Ltd, an independent specialist geophysical consultancy.

The study synthesised 33 scientific and technical publications, including government geological maps, academic studies and historical reports covering the tectonostratigraphic evolution of central Idaho and the metallogenic framework of the Yellow Pine – Stibnite district.

Legacy regional datasets comprising 1978–79 airborne magnetic and radiometric surveys (3-mile spacing), USGS Bouguer gravity compilations, and regional structural mapping were reprocessed and integrated to define priority exploration targets across the Springfield, Silver Cliffs, and Northman Prospects.

The review further incorporated district-scale structural analysis of the Johnson Creek Profile Gap Shear Zone and the Big Creek, Thunder Mountain extensional corridor, which are both recognised as primary controls on tungsten, antimony and gold mineralisation in the region. The purpose of the study was to establish a coherent mineral systems framework for the North Pine Project, define key structural and stratigraphic controls on mineralisation, and determine the most appropriate high-resolution geophysical survey specifications required to refine drill targets across the project

Commenting on the geophysical and geological interpretation, CEO Michael Beven said:

“This technical review provides Pioneer with a clear, evidence-based framework for advancing the North Pine Project. The confirmation of Springfield as a high priority exploration target, with the favourable structural setting and skarn system geometry indicating strong potential for additional concealed mineralised lenses along strike and at depth.

At Silver Cliffs, the scale and continuity of the shear-hosted alteration corridor are highly encouraging and consistent with substantial antimony-bearing system. The planned high-resolution airborne geophysical surveys will position Pioneer to refine our highest priority drill targets with precision and advance the North Pine Project confidently toward the next stage of exploration.”

The Springfield Prospect

The Springfield Prospect hosts a scheelite-bearing, pyrrhotite-rich tactite (skarn) system formed where carbonate components of the Windermere Supergroup were thermally and chemically replaced during emplacement of the Idaho Batholith. The known mineralised body, which was historically mined during the 1950s, represents only one lens within a broader stratigraphic and structural environment that is favourable for repeated skarn development.

The geophysical review identifies that Springfield is located at the southwestern termination, or “scissor-end,” of the Big Creek–Thunder Mountain extensional graben system, where fault rotation, uplift and extensional tilting create structural geometries conducive to the formation of stacked or down-dip-extended skarn lenses.

The Springfield skarn system is dominated by massive pyrrhotite, resulting in strong electrical conductivity that makes it particularly well suited to airborne electromagnetic detection. A VTEM survey-oriented perpendicular to the interpreted mineralised trend (130°–310°) has been identified as the most effective method for detecting concealed skarn bodies at depth and assessing potential structural continuity toward the Old Faithful occurrence along strike. The results of this survey will directly inform the definition of drill targets during the upcoming field season. The results of this survey will directly inform the definition of drill targets during the upcoming field season.

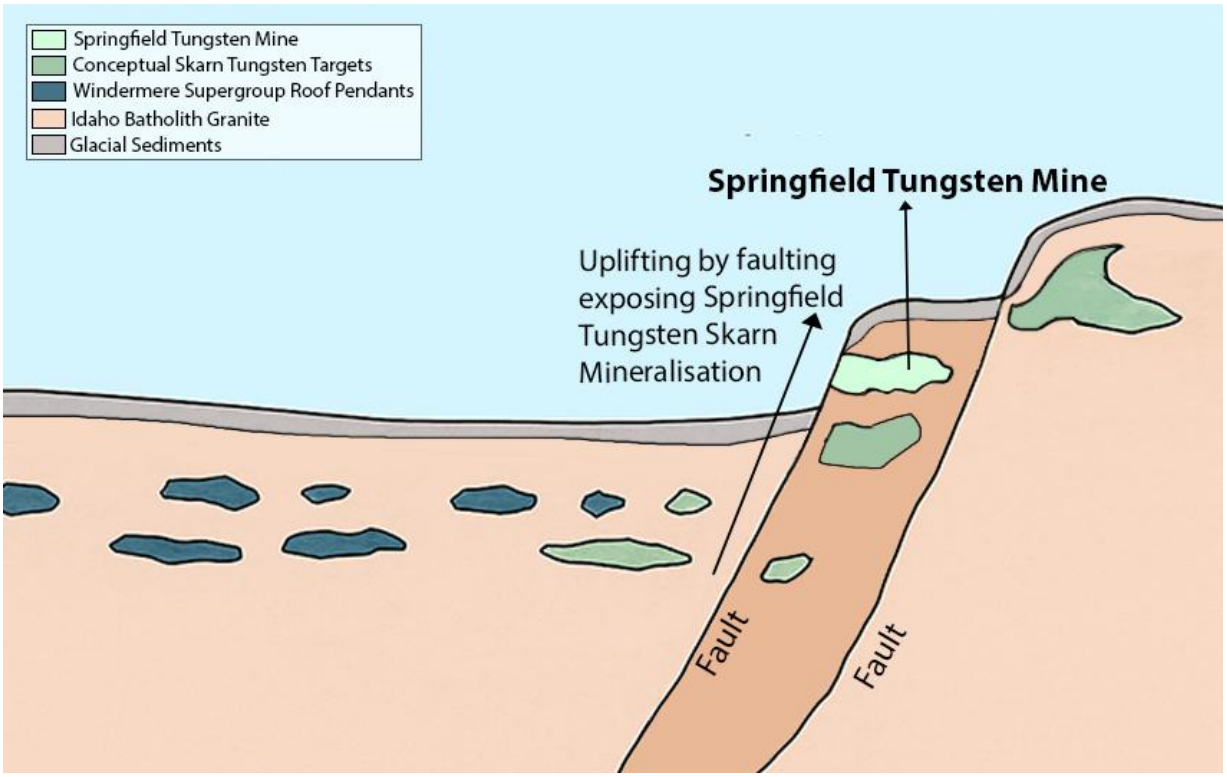

Figure 2: Conceptual diagram of the mineralisation model at Springfield Prospect showing uplifting and exposure of historic Springfield mineralisation at surface and with potential for further discovery laterally and at depth.

Northman Prospect

The Northman Prospect is located on the western flank of the Idaho Batholith, within the Yellow Pine–Stibnite metallogenic belt and is structurally positioned between major north–south oriented fault corridors.

The geophysical review confirms that subsidiary northeast–southwest splays intersect these primary structures, forming dilation zones favourable for the focusing of hydrothermal fluids. This structural framework is consistent with the development of shear-hosted antimony–tungsten–gold mineralisation observed at the historic Yellow Pine Mine and the Perpetua Stibnite Gold Project located nearby.

Field reconnaissance completed by Pioneer identified a north–south trending shear zone with associated quartz veining at the NT1 target, interpreted to represent the near-surface expression of a deeper transgressional structural corridor. High-resolution airborne geophysics will now be deployed to delineate shear continuity, map alteration patterns and prioritise areas for follow-up surface sampling and drill targeting.

Silver Cliffs Prospect

The Silver Cliffs Prospect is situated along the Johnson Creek–Profile Gap Shear Zone, a major long-lived transpressional structural corridor that is known to host stibnite-, scheelite- and gold-bearing lode systems throughout the Yellow Pine District.

Mineralisation at Silver Cliffs is interpreted to be structurally controlled, with quartz–carbonate vein systems hosted within altered granodiorite and monzonitic aplite. The corridor is interpreted to be laterally extensive, approximately 350 metres in width and exceeding 1.5 kilometres in strike length. Regional potassium radiometric imagery displays a linear anomaly coincident with this structural corridor, consistent with hydrothermal potassic alteration associated with the Laramide Au–Sb–W mineralising event.

However, the legacy 1978–79 aeromagnetic and radiometric datasets are too coarsely spaced to resolve the internal structure and alteration pattern at prospect scale. To properly delineate shear segmentation and define prospective target panels, a high-resolution helimagnetic and radiometric survey at 35-metre line spacing is planned to refine the structural architecture and guide subsequent ground-based targeting and drilling.

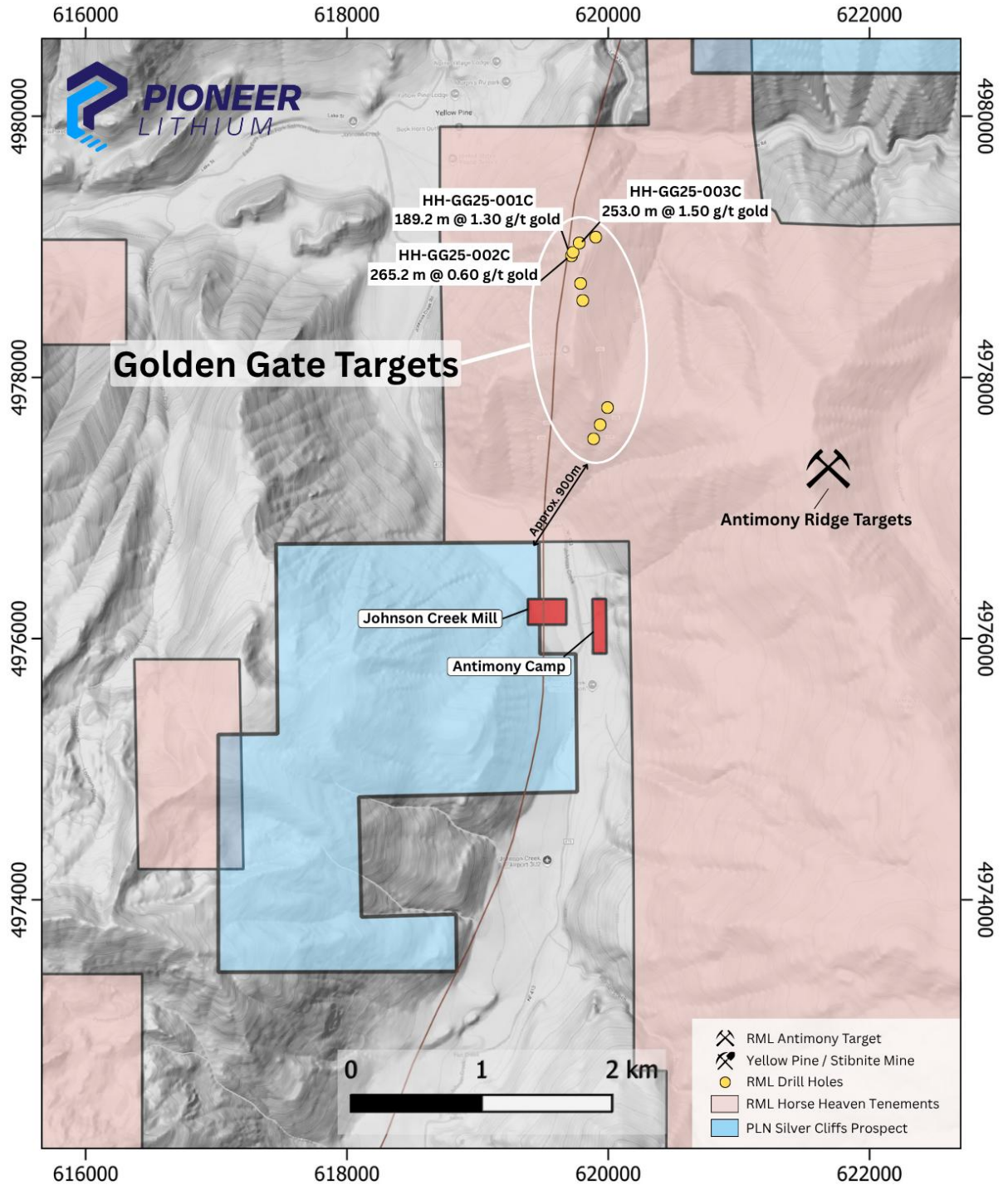

Figure 3: Map of the Silver Cliffs Prospect showing expanded staked claims and location of Resolution minerals newly acquired Antimony and Tungsten Mill and recently announced drill results (ASX:RML 03/11/2025).

Staking and Claim Status

Pioneer has physically staked the 227 lode claims at the North Pine Project in Idaho. Under the BLM system, mineral claims are awarded on a first-come, first-served basis however, there is no guarantee that all claims will be granted to Pioneer. The Company advises investors that the tenure status of the North Pine Project is subject to final confirmation by the BLM. Pioneer will update the market in due course once claim grants have been officially confirmed.

Near Term Work Program

Pioneer is planning to advance its exploration strategy through a series of high-resolution geophysical surveys designed to refine structural interpretation and guide ongoing target definition. Detailed helimag, radiometric, and VTEM surveys are planned across key project areas to enhance understanding of subsurface features and potential mineralisation extensions. Follow-up IP programs at the Northman and Silver Cliffs prospects will be considered as geological models are further refined.

129 samples (excluding QA&QC) have been collected and submitted to the laboratory for geochemical assay. Selective samples from the Springfield Prospect have been taken for petrographic description and tailings from the Springfield tailings pit submitted for recovery test work. Geochemical assay results are expected in November or early December.

For further information on Pioneer: www.pioneerlithium.com.au.

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Competent Persons Statement

The information in this report that relates to the geophysical and geological interpretations of publicly available literature and geophysical data sets in the United States. The reporting of project information at the North Pine Project is based on, and fairly represents, information and supporting documentation compiled and evaluated by Nick Direen from MITRE Geophysics and Michael Beven, the CEO to the Company and a Member of the Australian Institute of Geoscientists (AIG). Mr. Beven has sufficient experience relevant to the style of mineralisation, type of deposit under consideration, and the activity being undertaken to qualify as a Competent Person as defined in the 2012 Edition of the Australian Code for Reporting of Exploration Results, Mineral Resources, and Ore Reserves (JORC Code). Mr. Beven consents to the inclusion of the information in the form and context in which it appears. The information in the market announcement is an accurate representation of the available data and studies for the North Pine Project in the US.

Forward-looking statements

This announcement contains forward-looking statements. Generally, the words "expect", "potential", "intend", "estimate", "will" and similar expressions identify forward-looking statements. By their very nature forward-looking statements are subject to known and unknown risks and uncertainties that may cause our actual results, performance or achievements, to differ materially from those expressed or implied in any of our forward-looking statements, which are not guarantees of future performance. Statements in this announcement regarding Pioneer's business or proposed business, which are not historical facts, are forward-looking statements that involve risks and uncertainties, such as Mineral Resource estimates, market prices of commodities (including gold), capital and operating costs, changes in project parameters as plans continue to be evaluated, continued availability of capital and financing and general economic, market or business conditions, and statements that describe Pioneer's future plans, object.

Proximate Statements

This announcement contains references to mineral exploration results derived by other parties either nearby or proximate to the North Pine Project and includes references to topographical or geological similarities to that of the North Pine Project. It is important to note that such discoveries or geological similarities do not in any way guarantee that the Company will have similar exploration successes on the North Pine Projects, if at all.

Compliance Statement

This report contains information on the North Pine projects extracted from Resolution Minerals ASX market announcements dated 03/11/2025 and Pioneer Lithium on the 02/11/2025, 22/10/2025 released by the Company and reporting in accordance with the 2012 edition of the "Australian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves" (JORC Code). The original market announcements are available to view on www.pioneerlithium.com.au and www.asx.com.au. Pioneer Lithium is not aware of any new information or data that materially affects the information included in the original market announcement which continue to apply.

Appendix A:

Idaho Claims Application

Claim Name	Serial Number	BLM Claim ID	Customer Name	BLM Product Name	BLM Admin State
SP001 – SP042	Not yet available	Not yet available	Lia Energy Corporation	Lode Claim	ID
AP041 – AP178	Not yet available	Not yet available	Lia Energy Corporation	Lode Claim	ID
AP187 – AP234	Not yet available	Not yet available	Lia Energy Corporation	Lode Claim	ID
SC001 – SC048	Not yet available	Not yet available	Lia Energy Corporation	Lode Claim	ID

Appendix B: JORC Code, 2012 Table 1

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.* • *Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.* • *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 (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.*	• No sampling results are included in this announcement. The announcement pertains to geological and geophysical interpretation.
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).*	• N/A. No drilling results are being reported in this release.
Drill sample recovery	• *Method of recording and assessing core and chip sample recoveries and results assessed.* • *Measures taken to maximise sample recovery and ensure representative nature of the samples.* • *Whether a relationship exists*	• N/A. No drilling results are being reported in this release.

Criteria	JORC Code explanation	Commentary
	between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.	
Logging	• *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.* • *Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.* • *The total length and percentage of the relevant intersections logged.*	• N/A. No drilling results are being reported in this release.
Sub-sampling techniques and sample preparation	• *If core, whether cut or sawn and whether quarter, half or all core taken.* • *If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.* • *For all sample types, the nature, quality and appropriateness of the sample preparation technique.* • *Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.* • *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.* • *Whether sample sizes are appropriate to the grain size of the material being sampled.*	• N/A. No drilling results are being reported in this release.
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.* • *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.* • *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.*	• No geochemical assays are reported in this announcement.
Verification of sampling and assaying	• *The verification of significant intersections by either independent or alternative company personnel.* • *The use of twinned holes.* • *Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.* • *Discuss any adjustment to assay data.*	• No assay data is reported in this announcement.
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*	• The grid system is UTM NAD83 Zone 11N

Criteria	JORC Code explanation	Commentary
	estimation. • *Specification of the grid system used.* • *Quality and adequacy of topographic control.*	
Data spacing and distribution	• *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.* • *Whether sample compositing has been applied.*	• Data spacing for publicly available geophysical data sets available from the USGS are at 3-mile line spacing and ~ 4.8km flying heights. This is sufficient for preliminary exploration work designed to assess the mineral prospectivity of the project area.
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.*	• No drilling is reported in this announcement.
Sample security	• *The measures taken to ensure sample security.*	• Not applicable no samples are reported in this announcement.
Audits or reviews	• *The results of any audits or reviews of sampling techniques and data.*	• A review of historical literature covering the area and surrounds which includes government mapping, academic studies and prior mineral exploration was completed by MITRE Geophysics, an independent contractor. • The contents of this ASX announcement have been reviewed by the consultant who agrees the content of the ASX announcement confirms with the findings of the report.

Section 2 Reporting of Exploration Results

(Criteria in this section apply to all succeeding sections)

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.* • *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.*	• The North Pine Project Located in Idaho consists of 227 staked claims, approx. 18.37 Km^2. The tenure status of the North Pine Project is subject to final confirmation by the BLM. Pioneer will update the market in due course once claim grants have been officially confirmed.
Exploration done by other parties	• *Acknowledgment and appraisal of exploration by other parties.*	• At Northman and Silver Cliffs prospect within the North Pine Project no systematic historical exploration is recorded on the project areas. • At Springfield Prospect, Only1,900 ft of diamond drilling was reported to have taken place to define the tungsten mineralisation which was already exposed in the rockface. Production commenced 1953–1955 under U.S. Government tungsten subsidy and Ore was processed in a 75-tpd gravity mill with concentrates trucked to Stibnite for final electric separation • Historical records indicate that 39,000 tons of ore were mined averaging 0.35 to 0.40% WO3 for 1,522 short ton units of high grade >70% WO3 concentrate sold. An additional 2,159 lower grade concentrate and 8 tons of >9% material was sent to the Salt Lake Tungsten Co. (Mitchell, 2008, p.8;
Geology	• *Deposit type, geological setting and style of mineralisation.*	• The Yellow Pine district is underlain by Cretaceous granitic rocks of the Idaho Batholith intruding metasedimentary rocks of the Windermere Supergroup. Mineralisation occurs as structurally and lithologically controlled hydrothermal replacement and skarn-related systems, associated with late-stage magmatic fluids derived from the Idaho Batholith. Primary mineralisation comprises stibnite (Sb_2S_3) and scheelite ($CaWO_4$) with accessory sulfides, hosted in brecciated shear zones and carbonate horizons adjacent to major fault structures. Alteration assemblages include illite–sericite–quartz and calc-silicate skarns, with later oxidation producing jarosite and ferruginous halos. The mineralisation is interpreted as a multi-phase magmatic-hydrothermal Sb–W system analogous to the nearby Perpetua (Stibnite) and Horse Heaven deposits.
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:* ○ *easting and northing of the drill hole collar* ○ *elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar* ○ *dip and azimuth of the hole* ○ *down hole length and interception depth* ○ *hole length.* • *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.*	• N/A No drilling results are reported in this release.
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.* • *Where aggregate intercepts incorporate short lengths of high*	• N/A No drilling results are reported in this release.

Criteria	JORC Code explanation	Commentary
	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. • *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.* • *If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.* • *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').*	• N/A No drilling results are reported in this release.
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.*	• Pertinent maps for this stage of the Project are included in the release.
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 material results pertaining to the collection of field samples analysis at the North Pine Project are disclosed.
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.*	• All relevant and material historical exploration data related to the project area is discussed, have been reported or referenced. • Preliminary analysis of the prospectivity of the project area is based on extensive, independent expert review of publicly available geophysical datasets (gravity, magnetics, radiometrics) from the US Geological Survey (USGS), and USGS and Idaho Geological Survey open file reports, together with review of geology maps, observations and geochronological results published in the academic literature. • Geophysical data used included the USGS Bouguer gravity anomaly data grid for the conterminous US, and the Magnetic anomaly map of North America, and related potassium, thorium, uranium and total count channel grids
Further work	• *The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).* • *Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.*	• The company intends to complete more detailed 35m spaced helimag and 100m spaced VTEM surveys at the North Pine Prospect to increase resolution of geophysical data and increase confidence in drill target identification. • Open file geophysical datasets were of too coarse resolution to apply to prospect scale findings but were used to evaluate larger scale tectonic structures relevant to the mineralising system.