ASX Announcement

13 October 2025



Pioneer Expands Strategic Footprint in Idaho: North Pine Project Grows Nearby Perpetua Resources' World-Class Stibnite Project

Strategic expansion strengthens Pioneer's position in North America's critical mineral sector, targeting Antimony and Tungsten in a Tier-One mining jurisdiction

Highlights

- Strategic Expansion of Land Position: Pioneer has filed additional staking application of 192 claims (~15.5 km²) at its North Pine Project in Idaho, USA. This brings the total landholding to 234 claims total (~ 18.8 km²), Significantly increasing Pioneer's footprint in a Teir-One geological district prospective for antimony and tungsten.
- Three New Highly Prospective Areas Added: The three new additional areas, Northman, Silver Cliffs and Big Creek are highly prospective for antimony, tungsten and polymetallic mineralisation with geological controls analogous to the Perpetua Resources' (NASDAQ/TSX: PPTA) flagship Stibnite Gold Project (market cap ~A\$2.2 billion), a globally significant antimony-gold operation under development. The expanded claims package introduces three new exploration prospects:
 - ➤ Northman Prospect: Located north of Resolution Minerals Limited (ASX:RML) Horse Heaven Project and nearby Perpetua Resources' (NASDAQ/TSX: PPTA) flagship Stibnite Gold Project, The Northman area comprises of 112 claims (~9 km²). This prospect is geologically significant, where the metal rich granite of the Idaho Batholith comes into direct contact with the Windermere Supergroup. The contact zone similar to that which hosts the world class Stibnite Gold Project (see figure 2).
 - ➤ **Silver Cliffs Prospect:** Positioned along the western border of Resolution Minerals Horse Heaven Project. Silver cliffs comprises of 40 claims (~3.2 km²) over the historical Silver Cliff Lode (MDRS id 10096303) a silicious lode hosting antimony mineralisation¹ approximately 350m wide and 1500m long.
 - ➤ Big Creek Prospect: Located ~20 km northeast of Stibnite and Horse Heaven Projects, Big Creek comprises of 40 claims (~3.2 km²) with polymetallic mineral occurrences including antimony striking north-south directly adjacent to a regional north-south strike slip fault. (see figure 2)
- 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: 09/10/2025)
 - ➤ **Geological Analogues:** The Northman Prospect with directly analogous geology to Perpetua Stibnite Gold Project.
 - Multiple untested antimony and polymetallic Occurrences: Silver Cliffs antimony prospect and Big Creek Sb, Au, Ag, Cu, Zn and Pb polymetallic occurrences.
- **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.
- **Exploration Momentum:** Desktop geological review and initial field reconnaissance (including rockchip sampling) will commence shortly to define early-stage targets.



Pioneer Lithium Limited (ASX Code: **PLN**) ('**Pioneer'** or 'the Company') Pioneer Lithium Limited is pleased to announce it has successfully staked three new 100%-owned lode claim packages in Idaho, United States. The strategic expansion significantly enhances Pioneer's North Pine critical minerals portfolio, increasing the Company's footprint in a Tier-One jurisdiction highly prospective for antimony, tungsten, and polymetallic mineralisation.

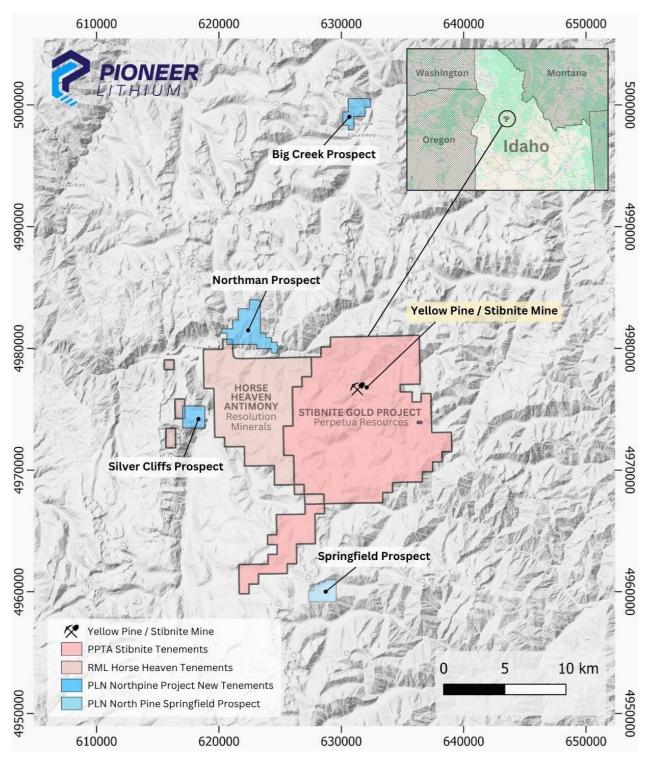


Figure 1: Showing the Location of the newly claimed Northman, Silver Cliffs and Big Creek Prospects nearby to Perpetua Resources, Stibnite Gold Project and Resolution Minerals, Horse Heaven Antimony Project.



Commenting on the additional staking application, CEO Michael Beven said:

"The expansion of the North Pine Project and the inclusion of three highly prospective new areas is genuinely exciting. This newly staked ground not only provides Pioneer Lithium a renewed focus and momentum toward becoming a key player in the US critical minerals sector, but it also represents an exceptional geological opportunity.

In fact, this is the best ground I have ever staked in my entire geological career. The broader North Pine Project area is remarkably prospective for antimony, tungsten and gold mineralisation. Metals that are strategically important and increasing in demand.

The current drive by the US to secure domestic supply of critical minerals mirrors the great resource booms that shaped the nation's industrial foundation, from the Gold Rush to the World War II mineral mobilisation. We are seeing a renewed emphasis on self-sufficiency in key materials vital for defence, clean energy, and advanced manufacturing. Pioneer's growing North American footprint places us squarely in this new era of domestic exploration and development, with potential to play a meaningful role in strengthening the US critical minerals supply chain."

Northman Prospect

The Northman Prospect lies directly nearby to both the Horse Heaven and Stibnite Gold Projects, with the claim package located approximately 8 km from the historic Yellow Pine Antimony and Tungsten Mine. The project area is structurally well-positioned, being bounded on both its eastern and western margins by regional-scale fault systems. Secondary fault splays within the project footprint are interpreted to potentially acted as primary conduits for metal-rich hydrothermal fluids associated with the intrusion of the Idaho Granitic Batholith, resulting in the precipitation of antimony, tungsten, and gold mineralisation, analogous to that observed at the historic Yellow Pine Mine (now the Perpetua Stibnite Gold Project).

Importantly, the Idaho Batholith is in direct contact with the quartzites and limestones of the Windermere Supergroup, which provide favourable structural and chemical trap sites for ore deposition.

Given the favourable geological setting, lithological assemblages, and structural architecture which are all fundamental ingredients for ore formation, the Northman Project is considered highly prospective for the discovery of a previously unrecognised Yellow Pine style polymetallic ore system.

Silver Cliffs Prospect

The Silver Cliff Prospect covers a broad north-south-trending mineralised corridor up to 350 m wide and over 1.5 km long, hosted within altered granodiorite and fine-grained aplite containing quartz stringers and replacement bodies of stibnite. Boulders derived from the main lode contain up to 25% stibnite, with coarse bladed crystals up to **5 cm** long recorded historically¹.

Mineralisation occurs within a structurally controlled zone adjacent to a major fault and is associated with the intrusion of the Idaho Batholith. Historical work reported grades of up to 4.2% Sb² and traces of silver. The prospect is considered highly encouraging for the discovery of a large-scale antimony and silver system analogous to other deposits within the Yellow Pine District

¹ Schrader, F. C., and Ross, C. P., 1926, Antimony and Quicksilver Deposits in the Yellow Pine District, Idaho: USGS Bull. 780, PP 137-167

² MRDS ld 10096303



Big Creek Prospect

The Big Creek Prospect lies within the northern extent of the North Pine Project, approximately 20 km northeast of the Perpetua Stibnite Gold Project, where granites of the Idaho Batholith come into contact with, or are overlain by, sedimentary lithologies of the Windermere Supergroup. The prospect sits adjacent to a major regional strike-slip fault, with three recorded polymetallic occurrences trending north—south and offset approximately 500 m from the main fault trace.

Historical records from the USGS MRDS database identify the Routson's antimony (MRDS ID 10071461), Silver Anchor (MRDS ID 10071838) and Freddy (MRDS ID 10290875) occurrences within the project area. Together, these support the presence of an antimony-bearing polymetallic system extending along strike, with potential for multiple mineralisation styles analogous to those observed elsewhere within the Yellow Pine District

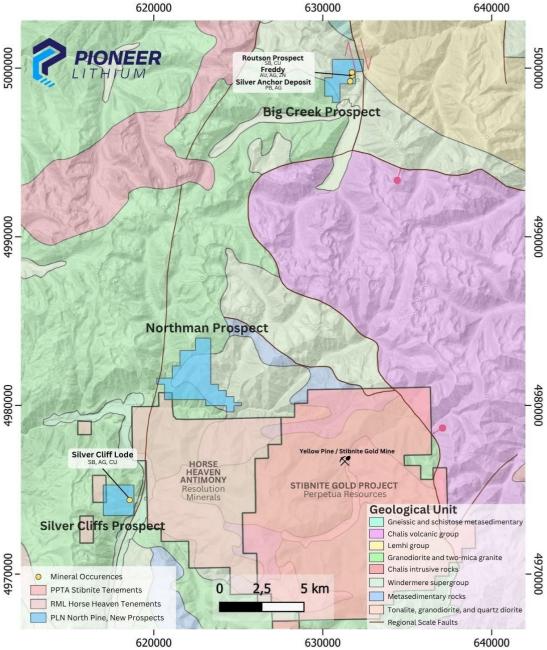


Figure 2: Showing location of the North Pine Project extensions, basement geology and locations of mineral occurrences recorded of the USGS MRDS. Geological basemap provided by Geological Survey of Idaho.



MRDS Historical Records

The US Geological Survey's Mineral Resources Data System (MRDS) identifies multiple historical mineral occurrences within Pioneer Lithium's newly staked claim areas, including:

- Silver Cliff Prospect Silver Cliff Lode
 – Antimony and trace silver hosted in north south orientated silicious lode (MRDS ID 10096303).
- Big Creek Prospect Polymetallic occurrences orientated north south following orientation of regional strike slip fault trace. (MRDS records including Deposit IDs 10071461, 10071838 and 10290875).

Note: These MRDS records are historical in nature and have not been independently verified by Pioneer Lithium. The Company cautions that the data does not conform to the JORC (2012) Code and should not be relied upon as an indication of current mineralisation.

Staking and Claim Status

Pioneer has physically staked the 192 lode claims. 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 committed to advancing its strategic growth objectives through a focused and results-driven exploration program. Following the successful registration of its claims, the Company will undertake a detailed geological and geophysical technical review of the North Pine Projects. This initial phase will include comprehensive data analysis and the development of a targeted reconnaissance mapping and geochemical sampling program, scheduled to commence shortly.

References

- Schrader, F. C., and Ross, C. P., 1926, Antimony and Quicksilver Deposits in the Yellow Pine District, Idaho: USGS Bull. 780, PP 137-167
- Cooper. J. R Geology of the Tungsten, Antimony, and Gold Deposits Near Stibnite Idaho.
- Cook, E. C 1956 Tungsten Deposits of South Central Idaho Pamphlet No 108

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

ENDS

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Competent Persons Statement

The information in this report that relates to the staking of claim packages in the United States and excerpts from historic reports and recordings of mineralisation occurrences recorded on the US Geological Survey's Mineral Resources Data System. The reporting of project information at the North Pine Project is based on, and fairly represents, information and supporting documentation compiled and evaluated by 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.

Appendix 1: Idaho Claims Application

Claim Name	Serial Number	BLM Claim ID	Customer Name	BLM Product Name	BLM Admin State
AP01 -	Not yet	Not yet	Lia Energy	Load	ID
AP192	available	available	Corporation	Claim	