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AI Meets Exploration: Loyal Metals Teams Up with VRIFY to Accelerate Drilling at Highway-Reward Copper-Gold Mine

Key Highlights

- **Loyal has partnered with VRIFY, a global leader in AI-powered mineral exploration, to deploy its advanced DORA platform at the Highway Reward Copper-Gold Mine.**
- **DORA delivers rapid, iterative prospectivity modeling, identifying high-value drilling targets in hours instead of months, with enhanced accuracy and reduced human bias.**
- **The platform integrates global datasets with project-specific inputs including drilling, geochemistry, geophysics, and structural data and applies advanced machine learning to uncover overlooked prospective zones and generate deeper insights.**
- **At Highway Reward, DORA will synthesize historical exploration data with high-resolution MobileMTd geophysical surveys to detect hidden mineralisation patterns and accelerate drill targeting.**
- **VRIFY's AI engine evaluates thousands of geological scenarios, recognising complex spatial relationships beyond human capability. Its vision-transformer models are conceptually similar to ChatGPT's language models, but trained on geoscience data that enables powerful pattern recognition across vast datasets.**
- **Backed by \$5.8 million¹ in funding, Loyal Metals is aggressively advancing the Highway Reward project through data digitisation, geophysics, AI-driven analysis, and precision drilling—positioning itself at the forefront of next-generation mineral discovery.**

Loyal Metals Limited (ASX: LLM) ("Loyal" or the "Company") is pleased to announce a strategic partnership with VRIFY, a global leader in AI-powered mineral exploration, to accelerate exploration and drilling at the Highway Reward Copper-Gold Project in Queensland, Australia. By integrating VRIFY's cutting-edge DORA platform, Loyal is leveraging artificial intelligence and geoscience to enhance drill target generation, reduce exploration timelines, and improve decision-making accuracy. This collaboration, backed by \$5.8 million in funding, reflects Loyal's commitment to deploying innovative technologies that unlock deeper geological insights and drive shareholder value through smarter, faster mineral discovery.



Image 1: Example of VRIFY's AI-Assisted Mineral Discovery Platform, DORA

Loyal's Managing Director, Mr. Adam Ritchie, commented:

"Highway Reward is the perfect showcase for AI-powered exploration. With over 1,000 historical drill holes, extensive mining data, and the world's highest-resolution MobileMTd drone survey, it offers an unmatched dataset for discovery. Historical production confirms a high-grade, world-class system with untapped potential—making it the ideal candidate for VRIFY's cutting-edge technology."

"By harnessing DORA's advanced pattern recognition, we're unlocking insights that traditional methods simply couldn't reach. We've seen legacy assets revitalised through modern techniques, turning overlooked zones into high-grade discoveries. Highway Reward is poised to follow that path."

"With its unique geology and over 20 years of dormancy, this project is ready for a new chapter. Loyal is excited to lead the charge—modernising, de-risking, and accelerating exploration to deliver real value for investors as we move toward drilling in the coming months."

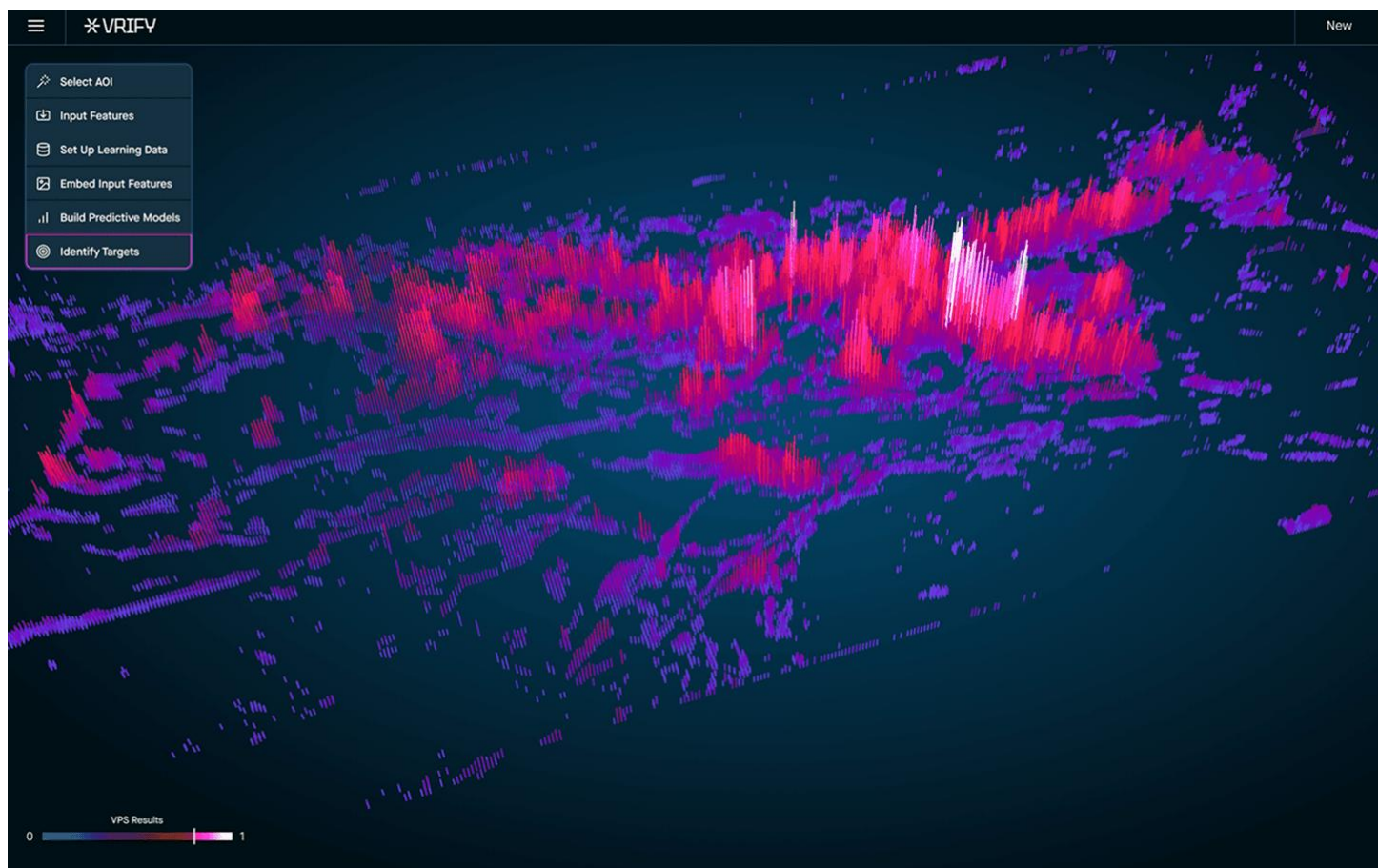


Image 2: Example of VRIFY's AI-Assisted Mineral Discovery Platform, DORA

VRIFY's CEO, Mr. Steve de Jong, commented:

"At the core of VRIFY's approach is the concept of Complete Data Utilisation (CDU), which is fundamentally transforming mineral exploration. Traditional methods discard up to 99% of collected data simply because the datasets are too vast and complex for human interpretation. AI excels in this space—rapidly identifying patterns and correlations across massive datasets that would otherwise go unnoticed."

"AI doesn't just enhance discovery—it dramatically accelerates exploration timelines. Geologists can now reassess projects under multiple scenarios and prioritise targets where data indicates the highest probability of success. In today's economic and environmental landscape, discovering deposits near existing mining infrastructure is critical. The Highway Reward Copper-Gold Mine is an ideal candidate for our AI technology. Leveraging VRIFY is not only a strategic exploration advantage—it's a capital advantage, driving both efficiency and investor interest. Loyal Metals exemplifies this forward-thinking approach."

DORA Meets Highway Reward

At the core of this partnership is VRIFY's DORA platform, which delivers rapid, iterative prospectivity modeling. By identifying high-value copper-gold targets in hours instead of months, DORA enables Loyal to streamline exploration workflows, improve targeting accuracy, and reduce human bias. The platform integrates global datasets with project-specific inputs—including drilling, geochemistry, geophysics, and structural data—and applies sophisticated machine learning algorithms to uncover overlooked mineral zones and generate deeper geological insights.

At Highway Reward, DORA will synthesize decades of historical exploration data with new high-resolution MobileMTd geophysical surveys. This integration is expected to reveal concealed mineralisation patterns and significantly enhance drill targeting. A key component of the program is the digitisation and interpretation of legacy data by Dr. Simon Beams and Terra Search, transforming more than 1,000 historical drill holes into a format optimised for DORA's algorithms. This AI-assisted approach will reassess the project's potential and surface new targets that traditional methods may have missed.

VRIFY's AI-Assisted Mineral Discovery Platform was built on a vision to revolutionise mineral exploration by combining deep industry expertise with cutting-edge technology. Its AI engine evaluates thousands of geological scenarios, recognising complex spatial relationships beyond human capability. Using vision-transformer models—conceptually similar to ChatGPT's language models but trained on geoscience data—VRIFY enables powerful pattern recognition across vast datasets.

By integrating data-driven algorithms with mineral system-specific models and expert geological knowledge, VRIFY identifies high-potential targets and extends known mineral zones. This approach significantly de-risks exploration by maximising the value of multilayered datasets, detecting hidden mineralisation patterns, and minimising human error. The result is faster, more confident decision-making and efficient prioritisation of high-prospect areas.

Backed by \$5.8 million in funding, Loyal Metals is aggressively advancing the Highway Reward project using a next-generation toolkit: data digitisation, high-resolution geophysics, AI-driven analysis, and precision drilling. This integrated strategy places Loyal at the forefront of AI-powered mineral discovery and sets the stage for a transformative exploration campaign.

This announcement has been authorised for release by Loyal Metal's Board of Directors.

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About Loyal Metals

Loyal Metals Limited (ASX: LLM) is a well-structured listed resource exploration company with projects in Tier 1 North American and Australian mining jurisdictions. Through the systematic exploration of its projects, the Company aims to delineate JORC compliant resources, creating value for its shareholders.

Future Performance

This announcement may contain certain forward-looking statements and opinion. Forward-looking statements, including projections, forecasts and estimates, are provided as a general guide only and should not be relied on as an indication or guarantee of future performance and involve known and unknown risks, uncertainties, assumptions, contingencies and other important factors, many of which are outside the control of the Company and which are subject to change without notice and could cause the actual results, performance or achievements of the Company to be materially different from the future results, performance or achievements expressed or implied by such statements. Past performance is not necessarily a guide to future performance and no representation or warranty is made as to the likelihood of achievement or reasonableness of any forward-looking statements or other forecast. Nothing contained in this announcement, nor any information made available to you is, or and shall be relied upon as, a promise, representation, warranty or guarantee as to the past, present or the future performance of Loyal Metals Limited.

List of References:

- ¹ ASX LLM Announcement - 31 July 2025 Quarterly Activities Report for the Quarter Ending 30 June 2025.
- ² ASX LLM Announcement - Loyal to Acquire The High-Grade Highway Reward Copper Gold Mine 02 July 2025.