

ASX Release

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# Second LiDAR interpretation identifies additional compelling targets at GDM's Devils Mountain Gold Project

Emerging gold producer and exploration company Great Divide Mining Ltd (the **Company** or **GDM**) (ASX:GDM), is pleased to announce the completion of a second LiDAR interpretation over EPM 26135 Kilkivan, Devil's Mountain Gold Project, SE Queensland.

## Highlights:

- GDM purchased the Gympie 2023 LiDAR dataset from the QLD Government, totalling 80 km<sup>2</sup>, covering EPM 26135, which lies directly SE of the historical gold mining town of Kilkivan.
- A comprehensive LiDAR interpretation was undertaken by specialists GeoCloud Analytics. The interpretation indicated a total of <u>486 potential historical mine workings</u>, including 40 adits, 16 shafts and 430 other prospecting pits. Many of the old workings were not previously known to GDM.
- The new LiDAR results, combined with previous exploration data has significantly enhanced GDM's dataset, used to identify and prioritise gold bearing targets for further follow-up exploration work.

Chief Executive Officer, Justin Haines, commented:

"This second LiDAR dataset for Devils Mountain has allowed GDM to get a more accurate picture of all of the historical gold mining at Kilkivan prospects area. Shafts and adits are good indicators of the presence of significant gold and base metal mineralisation, because of the effort invested in producing those old excavations. The LiDAR results confirm GDM's strategy of targeting areas of abundant historical workings and applying modern exploration technologies to those targets".

### **Devils Mountain Project**

GDM's Devils Mountain Project comprises 5 x EPMs (17685, 26062, 26135, 26709, 28438) located ~30 km northwest of Gympie (see **Figure 1**). The Project lies in the Palaeozoic Gympie and Wandilla Provinces of the New England Orogen in southeast Queensland.

Devils Mountain is highly prospective for gold and is host to an abundance of mineral occurrences. In addition to gold, the area contains occurrences of copper, silver, lead, zinc, tungsten and mercury, as well as a number of manganese deposits (see **Figure 2**). It's geological setting has many similarities to the nearby Gympie goldfield.

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Figure 1: Devils Mountain Gold Project Location Map





Figure 2: Devils Mountain Project Geology and known historical mining prospects

### LiDAR Survey Data

LiDAR specialists GeoCloud Analytics purchased part of the Gympie 2023 LiDAR dataset from the QLD Government on behalf of GDM, over an 80 km<sup>2</sup> area in the western part of the Devils Mountain Project, covering EPM 26135. The resolution of the raw data is 1 m. GeoCloud Analytics reprocessed the point cloud data to yield a 50cm resolution bare earth Digital Terrain Model (DTM).

The LiDAR survey was flown in 2023 with a minimum average density of 10.5 points per square metre with an average flying height of 1933m above ground level. Details of the survey are provided in the JORC Table 1, see **Appendix 1**.

A number of new LiDAR images were generated by GeoCloud Analytics in order to extract more information about the project. The enhanced 3D datasets and 2D images produced have facilitated detailed interpretations, allowing the identification of historical mine workings, prospecting pits, geological structures, access tracks and other surface features such as drill pads.



### How LiDAR Works

Light Detection and Ranging (LiDAR) is a remote sensing technique that uses laser pulses to measure distances and directions to objects. LiDAR systems can create 3D models of the earth's surface (see **Figure 3**).

A laser scanner fitted to an aircraft scans along its flight path, sending pulses out at a rate up to 1000khz, with multiple target reflections per pulse. While scanning, the GPS (GNSS receiver) on the aircraft is in constant communication with the GPS satellite constellation, always knowing where it is in 3D space. During flight, the subtle aircraft movements are recorded, allowing post processing to correct these deviations ensuring the laser scan lines are calibrated and corrected for maximum precision and accuracy.

The standout feature of LiDAR is its ability to see the ground through trees and heavy vegetation.



Figure 3: How LiDAR Works (source: GeoCloud Analytics Website)

## LiDAR Can Detect Old Mine Workings

Historical mine shafts can be detected using this technology, which essentially "sees through" the vegetation cover that may conceal old shafts overgrown with vegetation. An example is shown below from the Devils Mountain Project (Itchy Quid Gold Prospect), defining a 15.3 m deep shaft below ground level, concealed under vegetation cover (see **Figure 4**).





Figure 4: Point Cloud of LiDAR data points defining a 15.3 m deep shaft at Devils Mountain

### **Results of the Second LiDAR Interpretation**

GeoCloud Analytics completed a detailed interpretation of the 2023 LiDAR data covering GDM's EPM 26135, the Kilkivan Prospects area of Devils Mountain Project, accurately documenting the extent of historical mining activity. This work follows-up the first LiDAR interpretation, as announced by GDM in early 2025 (see ASX Announcement dated 30 January 2025).

The interpretation of this second LiDAR dataset has indicated a total of <u>486 historical mine workings, including</u> <u>40 adits, 16 shafts and 430 other prospecting pits</u>, within the survey area (see **Figure 5**).

The old workings identified across EPM 26135 are much more abundant that previous thought and more widespread, opening up new target areas for GDM to pursue.

The new LiDAR interpretation has identified a significant line of old workings at the Ortts and Sawpit Creek prospects, extending over a 1.5 km strike length (see **Figures 5 and 6**).

The LIDAR interpretation has also identified greater definition of previous access tracks and drill pads, allowing GDM to minimise earthworks and environmental impacts in the future, by re-using existing tracks and drill pads.





Figure 5: Devils Mountain LiDAR Image (Hill shade HSD 50 cm resolution) and location of interpreted historical workings and major fault structures



#### **Ortts and Sawpit Creek Prospects**

An abundance of historical workings were identified along an interpreted 1.5 km long NNW-trending structure linking the Ortts and Sawpit Creek Prospects (see **Figure 6**). The abundance of shafts/adits plus other significant workings around Ortts / Sawpit Creek, is a strong indicator of the presence of gold and base metal mineralisation, as significant mining effort was invested in this small area by the "old timers". The historical Ortts and Sawpit Creek Prospects are reported to contain gold mineralisation plus other metals such as silver, copper, lead and zinc. An evaluation of the historical exploration work at these prospects is underway. This target area justifies further follow-up exploration work.



Figure 6: Devils Mountain LiDAR Image (HSD 50 cm tint) around the Ortts and Sawpit Creek Prospect areas showing a 1.5 km line of historical workings along the NNW interpreted structure



#### **Forward Plans**

The LiDAR results combined with previous exploration data, has significantly enhanced GDM's dataset used to identify and prioritise gold and base metal targets and confirms GDM's strategy of targeting areas of abundant historical workings, then applying modern exploration technologies to those targets.

The next steps at Devil's Mountain EPM 26135 will include ground follow-up of the most significant historical workings (e.g. Ortts and Sawpit Creek Prospects), detailed mapping, rock chip and soil sampling then geophysical surveys to confirm drilling targets.

ASX release authorised by the Board of Great Divide Mining Ltd.

For further information:

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### About Great Divide Mining Ltd (ASX: GDM)

Great Divide Mining is a Gold, Antimony and critical metals miner, explorer and developer with five projects across 17 tenements (including two in application). GDM's focus is on operating producing assets within areas of historical mining and past exploration with nearby infrastructure, thus enabling rapid development. Through a staged exploration and development programme, GDM intends to generate cash flow from its initial projects to support further exploration across its portfolio of highly prospective tenements.

#### Competent Persons Statement

The information in this announcement that relates to Exploration Results based on information compiled by Mr Justin Haines who is CEO of Great Divide Mining Ltd and a Fellow of the Australasian Institute of Mining and Metallurgy (AusIMM) and a Member of the Australian Institute of Geoscientists (AIG). Mr Haines has sufficient experience that is relevant to the styles of mineralisation and types of deposit under consideration, and to the activity that is being undertaking 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.' Mr Haines is an employee of GDM, and consents to the inclusion in this report of the matters based on his information in the form and context in which it appears.

#### Forward-Looking Statements

This announcement may contain forward-looking information about the Company and its operations. In certain cases, forward-looking information may be identified by such terms as "anticipates", "believes", "should", "could", "estimates", "target", "likely", "plan", "expects", "may", "intend", "shall", "will", or "would". These statements are based on information currently available to the Company and the Company provides no assurance that actual results will meet management's expectations. Forward-looking statements are subject to risk factors associated with the Company's business, many of which are beyond the control of the Company. It is believed that the expectations reflected in these statements are reasonable, but they may be affected by a variety of variables and changes in underlying assumptions which could cause actual results or trends to differ materially from those expressed or implied in such statements. There can be no assurance that actual outcomes will not differ materially from these statements.



## APPENDIX 1. Devils Mountain LiDAR Data - JORC Code Table 1 Checklist of Assessment and Reporting Criteria

# **Section 1 Sampling Techniques and Data**

Criteria	JORC Code explanation	Commentary
Sampling techniques	<ul> <li>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.</li> <li>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</li> <li>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.</li> </ul>	<ul> <li>Great Divide Mining (GDM) purchased the Gympie 2023 LiDAR dataset from the QLD Government, totalling 80 km2 over the western section of the Devils Mountain Project.</li> <li>The LiDAR was acquired with a RIEGL VQ-1560II-S sensor by RPS.</li> <li>The point cloud data was reprocessed to yield a 50cm resolution bare earth DTM.</li> <li>The LiDAR data was supplied in GDA2020 datum, UTM zone 56 coordinate system in metres, Vertical Datum being Australian Height Datum 1971 (AHD71).</li> <li>The LiDAR was checked against and tied to ground control points to yield a horizontal accuracy of 0.6 m at 95% CI (2 Sigma), and vertical accuracy of 0.2 m at 95% CI (2 Sigma).</li> <li>The LiDAR was flown with a minimum average density of 10.5 points per square metre with an average flying height of 1933m AGL.</li> <li>A comprehensive LiDAR interpretation was undertaken by specialists GeoCloud Analytics, for GDM.</li> <li>The LiDAR data was reprocessed to extract and highlight the dormant detail within, producing an enhanced hillshade (HSD).</li> <li>The enhanced hillshade was consumed in 3D software and draped on the bare earth DTM facilitating detailed interpretation – allowing the identification of structures such as faults, folds, dykes and outcrop.</li> <li>The source point clouds used to derive the bare earth DTM were interrogated via machine learning to locate prospecting pits, adits, and shafts.</li> </ul>
Drilling techniques	<ul> <li>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</li> </ul>	Not Applicable (NA)
		Great Divide Mining Ltd ACN 655 868 803 Box 154 Brisbane QLD 4001



Criteria	JORC Code explanation	Commentary
	type, whether core is oriented and if so, by what method, etc).	
Drill sample recovery	<ul> <li>Method of recording and assessing core and chip sample recoveries and results assessed.</li> <li>Measures taken to maximise sample recovery and ensure representative nature of the samples.</li> <li>Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse materi</li> </ul>	• NA
Logging	<ul> <li>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.</li> <li>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.</li> <li>The total length and percentage of the relevant intersections logged.</li> </ul>	• NA
Sub-sampling techniques and sample preparation	<ul> <li>If core, whether cut or sawn and whether quarter, half or all core taken.</li> <li>If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.</li> <li>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</li> <li>Quality control procedures adopted for all subsampling stages to maximise representivity of samples.</li> <li>Measures taken to ensure that the sampling is representative of the in situ material collected.</li> </ul>	• NA
	<ul> <li>Propresentative of the mistic material conected, including for instance results for field duplicate/second-half sampling.</li> <li>Whether sample sizes are appropriate to the grain size of the material being sampled.</li> </ul>	
Quality of assay data and laboratory tests	<ul> <li>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</li> <li>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.</li> <li>Nature of quality control procedures adopted (eg</li> </ul>	• NA



Criteria	JORC Code explanation	Commentary
	standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established.	
Verification of sampling and assaying	<ul> <li>The verification of significant intersections by either independent or alternative company personnel.</li> <li>The use of twinned holes.</li> <li>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</li> <li>Discuss any adjustment to assay data.</li> </ul>	• NA
Location of data points	<ul> <li>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.</li> <li>Specification of the grid system used.</li> <li>Quality and adequacy of topographic control.</li> </ul>	<ul> <li>The LiDAR covered an area of 80km2, over GDM's EPM 26135.</li> <li>The point cloud data was reprocessed to yield a 50cm resolution bare earth DTM</li> <li>The LiDAR data was supplied in GDA2020 datum, UTM zone 56 coordinate system in metres, Vertical Datum being Australian Height Datum 1971 (AHD71).</li> <li>The LiDAR was checked by RPS against and tied to ground control points to yield a horizontal accuracy of 0.6 m at 95% CI (2 Sigma), and vertical accuracy of 0.2 m at 95% CI (2 Sigma).</li> <li>The LiDAR was flown with a minimum average density of 10.5 points per square metre with an average flying height of 1933m AGL.</li> </ul>
Data spacing and distribution	<ul> <li>Data spacing for reporting of Exploration Results.</li> <li>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.</li> <li>Whether sample compositing has been applied.</li> </ul>	<ul> <li>Processing was undertaken by GeoCloud Analytics to derive a 50cm resolution DTM.</li> <li>Reprocessing of LiDAR was undertaken to enhance and extract ground model detail.</li> <li>Ground model DTM at 50cm resolution in GeoTiff format.</li> <li>Ground model hillshade (HSD) at 50cm resolution in GeoTiff format.</li> <li>Reprocessed and enhanced hillshade (HSD) at 50cm resolution in GeoTiff format</li> </ul>
Orientation of data in relation to geological structure	<ul> <li>Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.</li> <li>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.</li> </ul>	• NA



Criteria	JORC Code explanation	Commentary
Sample security	The measures taken to ensure sample security.	LiDAR data is purchased from the Queensland Government, and derived products accessed only by Great Divide Mining Representatives and GeoCloud Analytics
Audits or reviews	The results of any audits or reviews of sampling techniques and data.	<ul> <li>The LiDAR was checked by RPS against and tied to ground control points to yield a horizontal accuracy of 0.6 m at 95% CI (2 Sigma), and vertical accuracy of 0.2 m at 95% CI (2 Sigma)</li> <li>Derisk GeoMining Consultants completed a review of the previous exploration undertaken on this project, which was reported in the GDM Prospectus lodged with the ASX in May 2023.</li> </ul>

# **Section 2 Reporting of Exploration Results**

Criteria	JORC Code explanation	Commentary
Mineral tenement and land tenure status	<ul> <li>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.</li> <li>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.</li> </ul>	<ul> <li>The Devils Mountain Project tenements comprise EPMs 17685, 26062, 26135, 26709, 28438 held by GDM Yellow Jack Pty Ltd and GDM Devils Mountain Pty Ltd, which are fully owned subsidiaries of Great Divide Mining (ASX:GDM).</li> <li>All tenements are in good standing.</li> </ul>
Exploration done by other parties	<ul> <li>Acknowledgment and appraisal of exploration by other parties.</li> </ul>	<ul> <li>Numerous previous exploration permits (EPMs) have been held over parts and/or all of the EPM 26135 area of the Devils Mountain Project. Previous exploration has included geological mapping, stream sediment, soil and rock chip geochemical sampling, trenching, airborne geophysics, plus RC and diamond drilling. Major programs included:</li> </ul>
		<ul> <li>Pacminex (1976 - 1977) completed geochemical surveys (stream sediment, rock chip and soils),</li> <li>Peko-Wallsend (1983 - 1899) completed geochemical surveys (stream sediment, rock chip and soil) and ground magnetics.</li> <li>Beaumark JV Cyprus (1984 - 1990) completed geochemical surveys (stream sediment, rock chip and soil) and drilling (airtrack and RC holes).</li> </ul>

Criteria	JORC Code explanation	MINING Commentary
		<ul> <li>Freeport Ltd (1988 - 1989) completed geological mapping, geochemical survey (stream sediment, rock chip and soil) and drilling (3 diamond holes for 520.45m).</li> <li>Gympie Eldorado (1986 – 1991; 1995 - 2002) completed geological mapping geochemical surveys, airborne magnetics survey, evaluation of alluvial gol prospects, trenching (13 trenches for 582m) and drilling (13 RC holes for 727.5m).</li> <li>Cyprus Ltd (1986 – 1988) completed geochemical surveys.</li> <li>Palladin Ltd (1988 – 1989) completed geochemical surveys.</li> <li>Newcrest Ltd (1991 – 1992) completed geochemical surveys.</li> <li>Strike Mining Ltd (1996 – 1998) completed geochemical surveys.</li> <li>Navaho Mining (1997 – 2007) completed geochemical surveys (rock chip and soils and RC drilling.</li> <li>Ausnico (2005 – 2014) completed geochemical surveys (rock chip and soils trenching and RC drilling</li> <li>China Australia (2008 – 2014) completed geochemical surveys (rock chips).</li> <li>D'Aguilar Gold Ltd (2012 – 2017) completed a literature review, geochemical surveys and drilling (13 holes for 519m).</li> </ul>
Geology	Deposit type, geological setting and style of mineralisation.	<ul> <li>The Devils Mountain Project lies in the Gympie (rocks of Permian to Triassic age and Wandilla Provinces (rocks of Late Devonian to early Carboniferous age) of th New England Orogen in southeast Queensland.</li> <li>Devils Mountain is highly prospective for both gold and copper systems and is host to an abundance of mineral occurrences.</li> <li>It's geological setting has many similarities to the nearby Gympie goldfield. In addition to gold, the area contains occurrences of copper, silver, lead, tungsten and mercury, as well as a number of manganese deposits.</li> <li>The Devils Mountain area is host to a number of old mine workings, including shafts, adits and trenches</li> </ul>
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: o easting and northing of the drill hole collar	• NA.



Criteria	JORC Code explanation	Commentary
	<ul> <li>elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar</li> <li>dip and azimuth of the hole</li> <li>down hole length and interception depth</li> <li>hole length.</li> <li>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.</li> </ul>	
Data aggregation methods	<ul> <li>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.</li> <li>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.</li> <li>The assumptions used for any reporting of metal equivalent values should be clearly stated.</li> </ul>	• NA
Relationship between mineralisation widths and intercept lengths	<ul> <li>These relationships are particularly important in the reporting of Exploration Results.</li> <li>If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</li> <li>If it is not known and only the down hole lengths are</li> </ul>	• NA.
longtho	reported, there should be a clear statement to this effect (eg 'down hole length, true width not known').	
Diagrams	<ul> <li>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.</li> </ul>	Appropriate location plans are provided above.
Balanced reporting	<ul> <li>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.</li> </ul>	<ul> <li>Balanced reporting of Exploration Results is presented.</li> </ul>
Other substantive exploration data	<ul> <li>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</li> </ul>	The Devils Mountain Project includes a large amount of exploration data collected by previous companies, including regional stream sediment geochemical data, so sample and rock chip data, geological mapping data, drilling data, geophysical survey data, and costean data. Much of this data has been captured and validated



Criteria	JORC Code explanation	Commentary
	characteristics; potential deleterious or contaminating substances.	<ul> <li>into a GIS database.</li> <li>Previous mining is small-scale. No systematic data has been collected to date to assess metallurgy and mining parameters relevant to a modern operation.</li> </ul>
Further work	<ul> <li>The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).</li> <li>Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.</li> </ul>	<ul> <li>Great Divide Mining plans to conduct prospect evaluations, surface geological mapping, geochemical sampling, ground geophysics and drilling at the highest- priority targets.</li> </ul>