

## **QUARTERLY REPORT FOR THE PERIOD ENDING 31 MARCH 2021**

### **HIGHLIGHTS**

- **Hazen Research Inc. successfully produced  $\text{Li}_2\text{CO}_3$  at 99.8% purity from the Company's Big Sandy Sedimentary Lithium Project, meeting the  $\text{Li}_2\text{CO}_3$  specifications of major international battery manufacturers and exceeding the Benchmark Mineral Intelligences battery grade  $\text{Li}_2\text{CO}_3$  at >99.5%<sup>1</sup>.**
- **Lithium recoveries of 90.7% in leaching with sulfuric acid and removal of impurities were achieved with minimal lithium losses.**
- **Bench scale metallurgical testwork is commencing to determine the most efficient production process, which will include a bulk sample and the design and construction of a pilot plant.**
- **The POE (Permit of Exploration) is due for approval in the 1<sup>st</sup> half of 2021, enabling the Company to complete further resource definition drilling and bulk sampling at Big Sandy.**

Hawkstone Mining Limited (**ASX:HWK**) ("**Hawkstone**" or the "**Company**") is pleased to provide an update of the Company's activities for the period ending 31 March 2021 ("**Quarter**", "**Reporting Period**").

**Hawkstone Mining Managing Director, Paul Lloyd, commented:** *"The March Quarter was a significant period with Hawkstone successfully producing 99.8% battery grade lithium from the initial metallurgical testwork on mineralised drill core from the Big Sandy Sedimentary Lithium Project. The Company is now entering the bench scale phase of metallurgical testing, to further advance the project through construction of a pilot plant. With the Permit of Exploration due for approval over the coming months, this will enable drill expansion of the existing resource base and bulk sampling."*

*At the Devil's Canyon Gold-Copper Project, further mapping and sampling has produced spectacular results with gold up to 191.5 g/t gold, 524 g/t silver & 10.25% copper, further enhancing the prospectivity of the project within a well mineralised geological terrain hosting the Carlin Gold Trend<sup>2</sup>.*

*I would like to thank shareholders for their support to date, as we continue to advance the projects in a logical and cost-effective manner, maximising shareholder value."*

<sup>1</sup> HWK Announcement, March 24, 2021, Battery Grade 99.8% Lithium Carbonate Produced

<sup>2</sup> HWK Announcement, February 1, 2021, Spectacular Grades from the Devil's Canyon Gold Project

## BIG SANDY LITHIUM PROJECT

With President Joe Biden's "Plan for a Clean Energy Revolution", the US Departments of Energy and Defence are accelerating solicitations for the US federal government to secure domestic supply chain security of critical battery metals. Hawkstone is well positioned to capitalise on this dynamic shift in US federal policy with its Big Sandy Sedimentary Lithium Project strategically located in Arizona (ranked #1 by 2020 Fraser Institutes Mining Survey) halfway between Phoenix and Las Vegas, Nevada (Figure 1).

With the Big Sandy Project located in a highly positive structural framework and coupled with the advances by Hazen Research on the metallurgical front, the Project is positioned squarely in the front of a rising tide in demand and price in the lithium market.

### Metallurgical Test Work

Hawkstone has successfully completed its initial metallurgical testing program with Hazen Research Inc, ("Hazen") on the lithium-mineralised sedimentary material from the Big Sandy Lithium Project achieving the goal of high lithium recoveries at 90.7%, while removing impurities with minimal lithium losses and producing "battery grade" 99.8%  $\text{Li}_2\text{CO}_3$ .<sup>3</sup>

Hawkstone is concluding plans for an extended bench-scale and concurrent pilot plant design program to commence at Hazen. This testing and design work will be used to develop a flowsheet and form a design basis for a full-scale operation to bring Big Sandy to commercial production. A scalable, continuous pilot plant design will be developed that will ultimately be located adjacent to the production facility enabling additional technology development, testing of different ore types, and in support of project financing requirements.

The hydrometallurgical process that Hazen is evaluating involves sulphuric acid leaching, leach solution purification, and the subsequent production of 99.8%  $\text{Li}_2\text{CO}_3$  used in the production of lithium-ion batteries. The process is straightforward, environmentally-superior to peer developments, and based on proven unit operations. Hawkstone will continually assess process improvements including those achieved during the initial testing program, with the initial test work demonstrating that the present flowsheet is a viable approach for the development of the Big Sandy resource.



Figure 1 – Project Location Map

<sup>3</sup> HWK Announcement, March 24, 2021, Battery Grade 99.8% Lithium Carbonate Produced

## Resources and Exploration Target

Hawkstone's successful 2019 drill program at Big Sandy resulted in the estimation of a total Indicated and Inferred JORC resource of 32.5 million tonnes grading 1,850 ppm Li for 320,800 tonnes  $\text{Li}_2\text{CO}_3$ <sup>4</sup>.

This represents 4% of the Big Sandy Project area that contains an estimated Exploration Target of between 271.1Mt to 483.15Mt at 1,000 - >2,000ppm Li<sup>5</sup>.

*\*Note: the potential quantity and grade of the estimated geological potential (Exploration Target) is conceptual in nature. There has been insufficient exploration to estimate a mineral resource and it is uncertain whether future exploration will result in the definition of a mineral resource. It has been estimated using a range of thicknesses for the mineralised sediments calculated from drill intercepts, surface sampling and geological mapping. The grade estimates a range of values demonstrated from drilling and surface sampling.*

## Preliminary Engineering and Logistical Work

Preliminary engineering studies have been completed by the Company's Phoenix-based engineer to determine process scenarios and possible mining, processing and consumable/product logistics scenarios, in addition to establishing contacts within the local, State and Federal governments. A broad level of support, including tangible economic incentives from the Governor's Arizona Commerce Authority, has been demonstrated. Baseline environmental and cultural surveys forming part of the Plan of Exploration (POE) process were completed in 2020, and the Company is awaiting the approval by the BLM to allow bulk sampling and resource extension drilling to commence.

## DEVIL'S CANYON GOLD-COPPER PROJECT

Devil's Canyon Gold-Copper Project located in the prolific Carlin Gold Trend covering 7.28km<sup>2</sup> located 20km west of Kinross's Bald Mountain Gold Mine (5.95Moz Au) and 40km north of Barrick's Ruby Hill Gold Mine (1.6Moz Au) (Figures 1 & 2)<sup>6</sup>.

## Regional Geology

The Project is underlain by a sequence of Palaeozoic sediments deposited on a passive continental margin with later compressional tectonics establishing a favourable structural regime of **steeply dipping fluid conduits, shallow, low dipping "traps" and reactive calcareous host rocks**. North-northwest trending normal faults and northeast trending transform faults control the regional position, orientation, and alignment of the gold mineralisation in the Carlin and Battle Mountain gold trends.

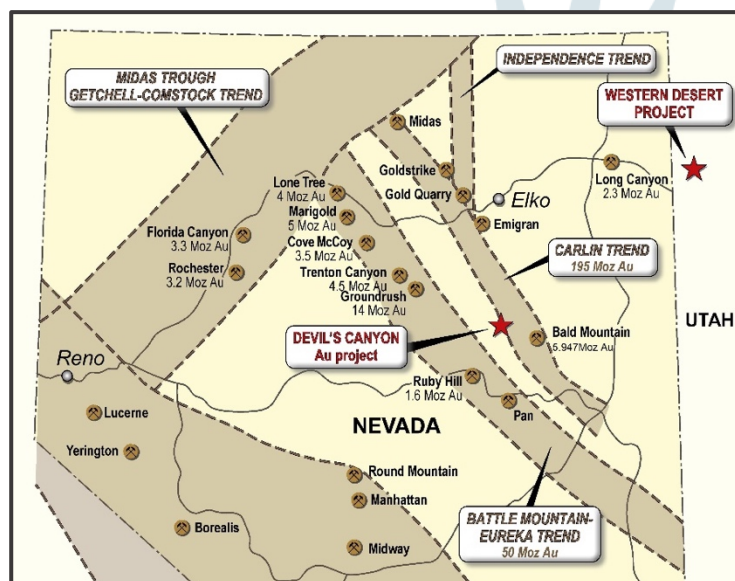


Figure 2 – Location of the Devil's Canyon Gold-Copper Project

<sup>4</sup> Hawkstone Announcement Sept 26, 2019, Big Sandy Lithium Project, Maiden Mineral Resource

<sup>5</sup> Hawkstone Announcement Nov 7, 2019, Big Sandy Lithium Project, Exploration Target Update

<sup>6</sup> HWK ASX Announcement, December 2, 2020, High Grade Gold and Copper Results at Devil's Canyon Gold Project, Nevada



## Mapping and Sampling

During the Quarter, results were received for 37 rocks samples (DC015-52) previously collected as both outcrop and float. Anomalous rock samples were recorded from several areas with peak results of **191.5 g/t gold (Au), 524 g/t silver (Ag) and 10.25% copper (Cu)** (Figure 3)<sup>7</sup>.

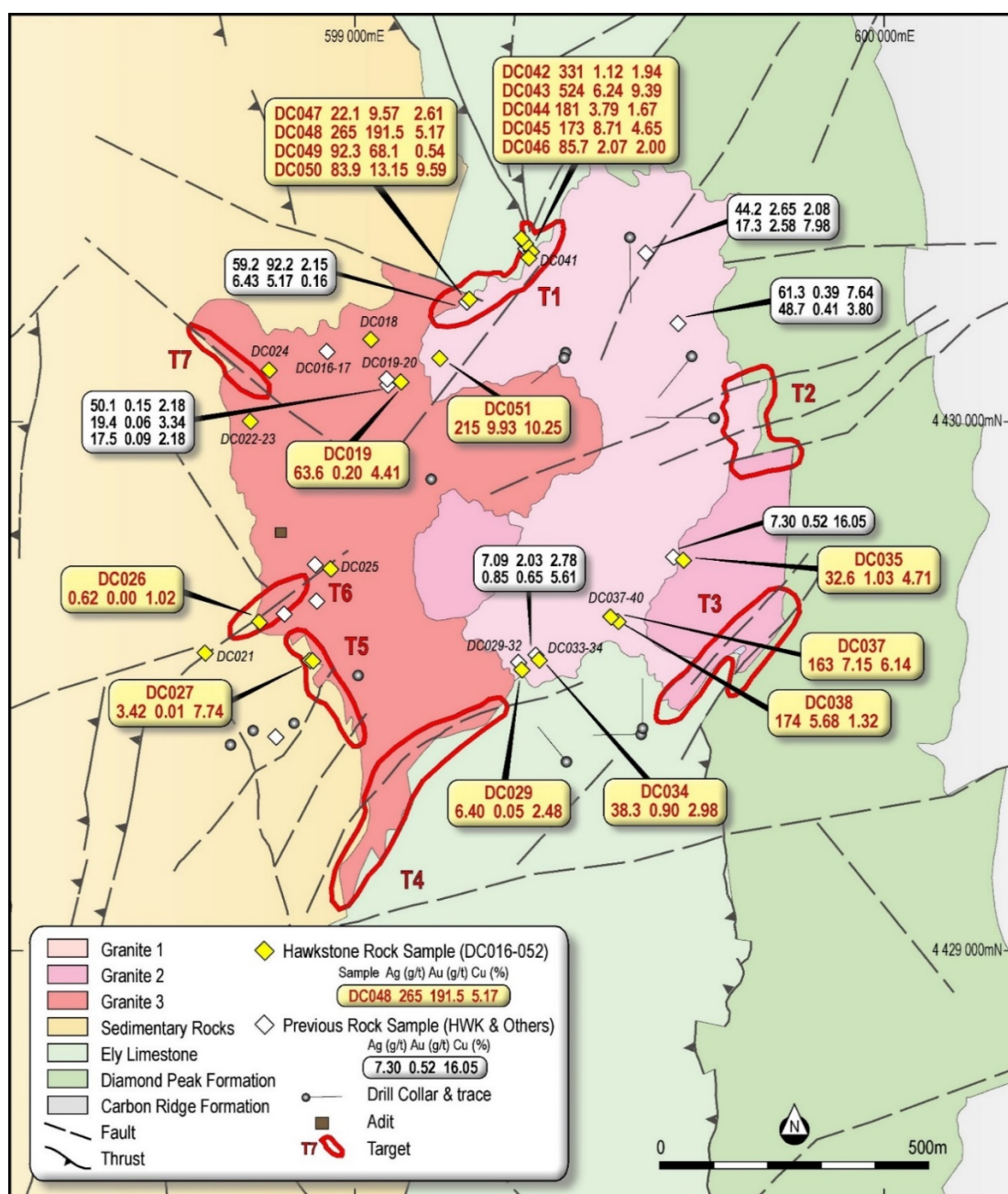


Figure 3 – Devil's Canyon Geology and RC (rock chip) Sampling

<sup>7</sup> HWK ASX Announcement, February 1, 2021, 191.5 g/t Gold, 524 g/t Silver & 10.25% Copper, Spectacular Grades from Devil's Canyon Gold Project

**Structural Target 1** contains 10 samples, DC042 to DC051, that returned highly elevated values: **gold (Au) ranging from 1.12 g/t to 191.5 g/t, silver (Ag) from 22.1 g/t to 524 g/t, copper (Cu) from 0.54% to 10.25%** on the contact between the Ely Limestone to the north and the intrusive granites to the south.

Parallel to structural **Target T3** and lying 200m north, 5 samples, DC034 to DC038, define a NE trending mineralised zone containing significant values: **gold (Au) ranging from 0.9 g/t to 7.15 g/t, silver (Ag) from 32.6 g/t to 174 g/t and copper (Cu) from 1.32% to 6.14**

Lying to the west of **Target 1** and consisting of 5 samples, DC016 to DC020, is an area containing elevated copper values: **copper (Cu) ranging from 0.22% to 4.41% and silver (Ag) from 0.6 g/t to 63.6 g/t**, which is possibly the western extension of **Target 1**.

**Structural Targets T5 and T6** underlie 4 samples, DC026 to DC029, containing **copper (Cu) from 0.40% to 7.74% and silver (Ag) from 0.60 g/t to 30.1 g/t**.

### Airborne Geophysics

An airborne drone (UAV) magnetic survey completed over the project area by independent US based contractors (MHW Geo-Surveys International Ltd) shows the presence of magnetic highs related to possible magnetite rich intrusives, alteration zones or skarns. Significant magnetic lows are also present possibly representing areas of magnetic destruction. Initial processing of the magnetic survey data has been completed and Resource Potentials Ltd are completing magnetic modelling.

### Planned Exploration

- Soil geochemistry to better define gold-copper and copper mineralised zones
- Detailed geological and structural mapping to aid in drill planning
- Drilling of selected targets

## WESTERN DESERT GOLD-COPPER PROJECT

The Western Desert Gold Project consisting of 218 claims and 3 state leases covering 25.4 km<sup>2</sup> is located in western Utah near to the Nevada Border (Figure 4).

### Regional Geology

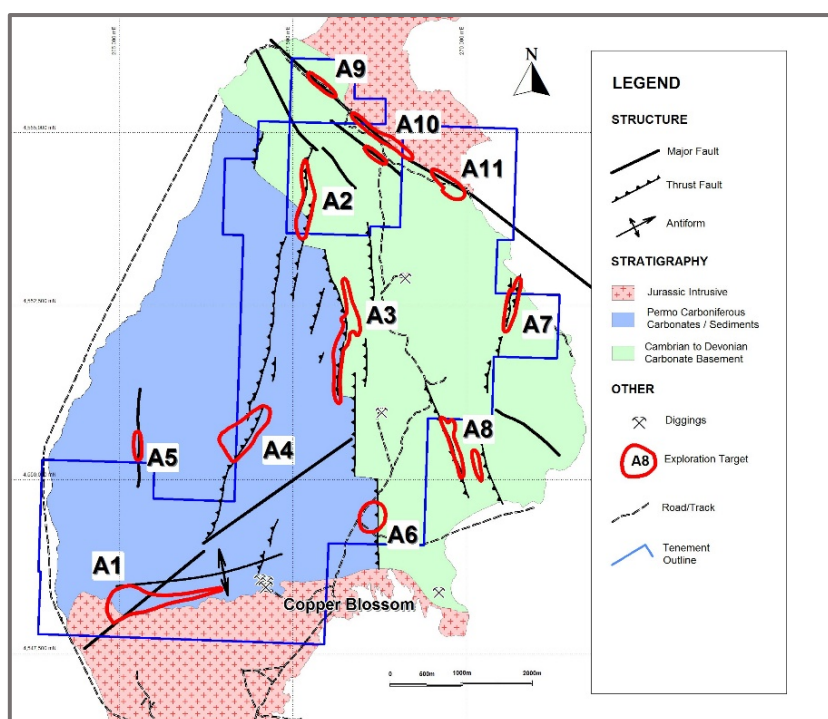
The Project area shares regional geology similar to the Devil's Canyon Project. Mineralisation consists of skarn style Au-Cu-Ag mineralisation within altered carbonate - sandy carbonate rocks proximal to intrusive contact. The mineralised zones at Copper Blossom strike ~290°/45°S over 350m+, possibly extending under cover to the east and at depth to the west (Figure 4)<sup>8</sup>.

Photogeological interpretation and targeting has identified **11 targets** on the basis of their potential to host Carlin Style gold mineralisation<sup>9</sup>. Preliminary stream sediment was completed over the entire claim area. Infill drainage sampling of the anomalies has been completed and this has led to refined targets, in particular **Targets A1 and A3** where recently soil geochemistry, mapping and rock chip sampling have been completed. Results of the rock chip sampling are awaited.

Ground magnetic and gravity surveys were completed by independent US based contractors (MHW Geo-Surveys International Ltd) across an area covering all of Targets A1, A3 and A6. Initial processing of both the magnetic and gravity survey data is ongoing and will be modelled by Resource Potentials Ltd.

### Planned Exploration

- Modelling of geophysical surveys
- Target definition and ranking
- Drilling of selected targets



**Figure 4 – Western Desert Targets and Geology**

<sup>8</sup> ASX Announcement, March 16, 2020, Acquisition of Western Desert Gold - Copper Project, Utah, USA

<sup>9</sup> HWK Announcement, July 3, 2020, 950% Increase in Landholding at Western Desert Gold-Copper Project

## LONE PINE GOLD PROJECT

Drill planning for the 2021 northern field season is now underway. A UAV airborne magnetic survey will commence in April/May 2021.

## KANGWANE SOUTH ANTHRACITE PROJECT

No field activities were completed on the Company's anthracite project in South Africa. As previously advised, the Company is working towards the divestment of this asset.

## CORPORATE UPDATE

The Big Sandy sedimentary lithium project is a major asset and the Company continues to pursue the development of an economic processing route. The approval of the POE by the BLM will allow bulk sampling, enabling pilot plant testing and drilling to increase the resource base. The market sentiment for lithium and the commodity price increased significantly in the quarter and increased demand growth has been flagged due to the rapidly increasing demand for electric vehicles and power storage in the renewable energy sector.

This announcement has been authorised for release by the Board of Hawkstone Mining Limited.

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## ASX Announcements During the Period

Feb 1, 2021	Spectacular Grades from the Devil's Canyon Gold Project
Feb 4, 2021	Hawkstone Mining Investor Presentation
Mar 3, 2021	99.1% Lithium Carbonate Produced from Big Sandy Project
Mar 24, 2021	Battery Grade 99.8% Lithium Carbonate Produced

## FOR FURTHER INFORMATION PLEASE CONTACT:

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## COMPETENT PERSON'S STATEMENT

The exploration results in this announcement were reported by the Company in accordance with listing rule 5.7 on 7 November 2019, 2 December 2020, 1 February 2021, 3 March 2021 and 24 March 2021. The Company confirms it is not aware of any new information or data that materially affects the information included in the previous announcement. The mineral resource estimates in this announcement were reported by the Company in accordance with listing rule 5.8 on 26 September 2019. The Company confirms it is not aware of any new information or data that materially affects the information included in the previous announcement and that all material assumptions and technical parameters underpinning the estimates in the previous announcement continue to apply and have not materially changed.



## Appendix 1: Schedule of Mining Tenements

The following information is provided pursuant to Listing Rule 5.3.3 for the quarter ended 31 March 2021.

Project	Claim Number	Location	Interest
Big Sandy	WIK-001 to WIK-112	Arizona, USA	100%
Big Sandy	BSL-001 to BSL-146	Arizona, USA	100%
Big Sandy	BSLII 001 to BSLII 053	Arizona, USA	100%
Lordsburg	LLP-211 to LLP-274	New Mexico, USA	100%
Lordsburg	LLP-283 to LLP-298	New Mexico, USA	100%
Lordsburg	LLP-307 to LLP-322	New Mexico, USA	100%
Lone Pine	LP-001 to LP-075 LP EXT-076 to LP EXT-250 U.P Patented Claim Burlington Patented Claim	Idaho, USA	100%
Western Desert	WD001 to WD030 WD-031 to WD-258 State Leases 4N 17W Sect 16 4N 17W Sect 2 5N 16W Sect 36	Utah, USA	100%
Devil's Canyon	DP3, 4 & 5 DP10, 11 & 12 Devils Canyon-001 to Devils Canyon-084	Nevada, USA	100%
Kangwane South	N/A	Mpumulanga Province, South Africa	70%

## Appendix 2: Disclosure with respect to Quarterly Cashflow Report

In line with its obligations under ASX Listing Rule 5.3.5, Hawkstone Mining Limited notes that the only payments to related parties of the Company, as advised in the Appendix 5B for the period ended 31 March 2021, pertain to payments to director and administration fees paid during the quarter, including fees for services performed.

During the quarter ended 31 March 2021, the Company spent a total of \$120,000 on exploration and evaluation activities. The majority of the exploration expenditure relates to metallurgical testwork, metallurgical consulting and ground geophysics.