



ASX Announcement

29th October 2019

COMPANY DETAILS

Davenport Resources Limited

ABN: 64 153 414 852

ASX CODE: DAV

ASX CODE (Options): DAVO

FRANKFURT CODE: A2DWXX

PRINCIPAL AND REGISTERED OFFICE (& Postal Address)

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Capital Structure

164.4M Ordinary Shares

16.7M Unlisted Options

45.0M Listed Options

3.1M Performance Rights

BOARD OF DIRECTORS

Patrick McManus

(Non-Executive Chairman)

Dr Chris Gilchrist

(Managing Director)

Rory Luff

(Non-Executive Director)

Dr Reinout Koopmans

(Non-Executive Director)

Hansjörg Plaggemars

(Non-Executive Director)

Positive Technical Studies for two potash projects

- Technical and preliminary economic studies completed by K-Utec AG Salt Technologies (“K-Utec”) on Davenport’s Ohmgebirge and Mühlhausen-Nohra potash mining licence areas in Germany
- Studies concluded proposed development of both areas was technically viable and justify Davenport committing to progress the projects
- Studies proposed environmentally-friendly mining techniques for both project areas with zero waste discharge
- Project partnership discussions continuing with well-known German companies
- Next step is to forge agreements with potential project partners on Ohmgebirge by early 2020, leading to subsequent project development.

Davenport Resources Ltd (ASX: DAV, “Davenport” or “The Company”) is pleased to report positive results from preliminary technical and economic studies on its Ohmgebirge and Mühlhausen-Nohra perpetual mining licence areas in the South Harz potash basin, Germany.

Leading potash and salt consultancy K-Utec completed the studies.

Ohmgebirge and Mühlhausen-Nohra are among Davenport’s inventory of potash projects, which comprises at least four potential standalone projects in Western Europe.

Following positive study results, the Company will initially focus on progressing the Ohmgebirge project due to its proximity to infrastructure, which include operating shafts.

Davenport MD Dr Chris Gilchrist said, “These studies by K-Utec, a highly-respected consultancy, have provided us with encouragement regarding potential development of Ohmgebirge and Mühlhausen-Nohra. In keeping with our announcement of 25th September 2019, we will use these studies in our discussions with potential project partners. I anticipate this will lead to the execution of several cooperation agreements which will endorse our excellent assets and take Davenport closer to unlocking the potential of these tier one potash assets.”

Study Parameters Cautionary Statements

The technical studies described in this announcement were undertaken to determine the potential viability of underground potash mines and associated processing facilities at the Ohmgebirge and Mühlhausen-Nohra areas respectively which will enable the Company to make informed decisions with regard to conducting further studies. The work represents a preliminary technical and economic assessment but are not sufficient to support the estimation of ore reserves at this stage. Further evaluation work would be required by the Company before it would be possible to provide any assurance of an economic development case.

The work is based upon material assumptions which were made by K-Utec on the Company's behalf and were made on the basis of K-Utec's longstanding experience in the potash industry and their knowledge of the South Harz area. While the Company considers all the material assumptions to be based on reasonable grounds, there is no certainty that they will prove to be correct or that the range of outcomes indicated by the work will be achieved.

To achieve the range of future feasibility studies and potential mine development, additional funding will likely be required. Investors should note that there is no certainty that the Company will be able to raise funding when required.

Licences

Davenport's wholly-owned German subsidiary, East Exploration Pty Ltd, acquired the Mühlhausen and Ohmgebirge perpetual mining licences from the Bodenverwertungs und Verwaltungs GmbH ("BVVG") in August 2017. BVVG is a German federal government body commissioned to dispose of certain industrial assets belonging to the former German Democratic Republic ("GDR") prior to German reunification in the early 1990s. The licences are extremely valuable as they carry no rent or royalty and were granted in perpetuity with no commitments regarding development plans or timescales.

Ohmgebirge

The Ohmgebirge licence is in the Federal State of Thuringia and covers an area of 24.84km². The area lies adjacent to the former potash mines Bischofferode and Sollstedt, both of which had been in operation since the late 1800s. The Ohmgebirge licence area has been explored extensively in several campaigns from the late 19th century through to the 1980s.

Renowned salt and potash consultancy Ercosplan Ingenieurgesellschaft Geotechnik und Bergbaus mbH ("Ercosplan") undertook a review of the historic exploration, which Davenport reported in mid-2018. The Ercosplan review was conducted on results from 13 exploration drillholes (Figure 1) completed between 1894 to 1984 to test for potash at depth, and concluded there was a Historic Resource, of Soviet C2 classification, of 149 million tonnes at 13.5% K₂O with an average thickness of 5m to 7m (refer [ASX announcement 18 June 2018](#)).

Davenport advises that this historical Ohmgebirge resource estimate is not reported in accordance with the JORC Code 2012, that a competent person has not done sufficient work to classify this historical estimate as mineral resources or ore reserves in accordance with the JORC Code 2012, and that it is uncertain that following evaluation and further exploration work that the historical estimate will be able to be reported as mineral resources or ore reserves in accordance with the JORC Code 2012.

The data were re-modelled to estimate a JORC exploration target for the area, the results of which are summarised in Table 1.

	Volume (million m ³)	Tonnage of mineralised rock (Million tonnes)		K ₂ O Grade (%)		Tonnage of K ₂ O (Million tonnes)	
		Minimum	Maximum	Minimum	Maximum	Minimum	Maximum
Sylvinite	113	183	271	10.82	17.00	20	46
Carnallite	38	57	71	10.10		6	7
Total	151	240	342			26	53

Table 1: Exploration target for Ohmgebirge Mining Licence area (ASX announcement 18th June 2018)

The potential quantity and grade of the exploration targets are conceptual in nature and currently the available exploration data are considered insufficient for the estimation of a Mineral Resource.

The Ohmgebirge resource was estimated as recently as 1996 (Watznauer & Tita)¹, which was an update of an earlier estimate completed in 1986 (Hayndrode)². This included results from close drill spacing and showed good potash intersections, which provided Davenport with sufficient confidence in the exploration target values to commission a preliminary technical and economic study and the conversion of the exploration data to a JORC-compliant resource. The Company commissioned Micon International to conduct this work and the results are expected in Q4 CY2019.

Davenport commissioned K-Utec to conduct a preliminary technical and economic study for the production of MOP (muriate of potash) from the Ohmgebirge licence area. This work was completed in September 2019.

Mining would be by industry-standard room and pillar methods and the processing route would be a hot leach as the polymineralic hard salts are not readily amenable to flotation. The raw salt would be digested in hot brine at elevated temperature, the resultant brine clarified and subsequently introduced to a multi-stage, vacuum crystallizer train from which high-purity MOP would be extracted. All solid and liquid wastes would be backfilled to void spaces within the mine, achieving a zero-effluent status.

The study identified target locations for the processing plant. These comprise redundant areas which are already designated for industrial activities, hence the permitting process for these areas is anticipated to be straightforward. Operating shafts exist in close proximity to the licence area, which are used for storage in mined out areas close to the licence area (Figure 1).

Davenport has met with elected officials and community members in the region, and these are supportive of the renewal of mining in order to create employment opportunities.

¹ Watznauer, W., Tita, J. (1996): Bewertung der Vorratssituation für das Bergwerksigentum OHMGEBIRGE – Gutachten, Ingenieurbüro Watznauer/Tita, 20 September 1996, Gotha, 26 pages, 8 appendices.

² VEB GFEB (1986a) Geologisch-petrographische Aussagen zum Vorerkundungsobject, Hayndrode – VEB Geologische Forschung und Erkundung Freiberg, Sondershausen, July 1986, 68 pages.

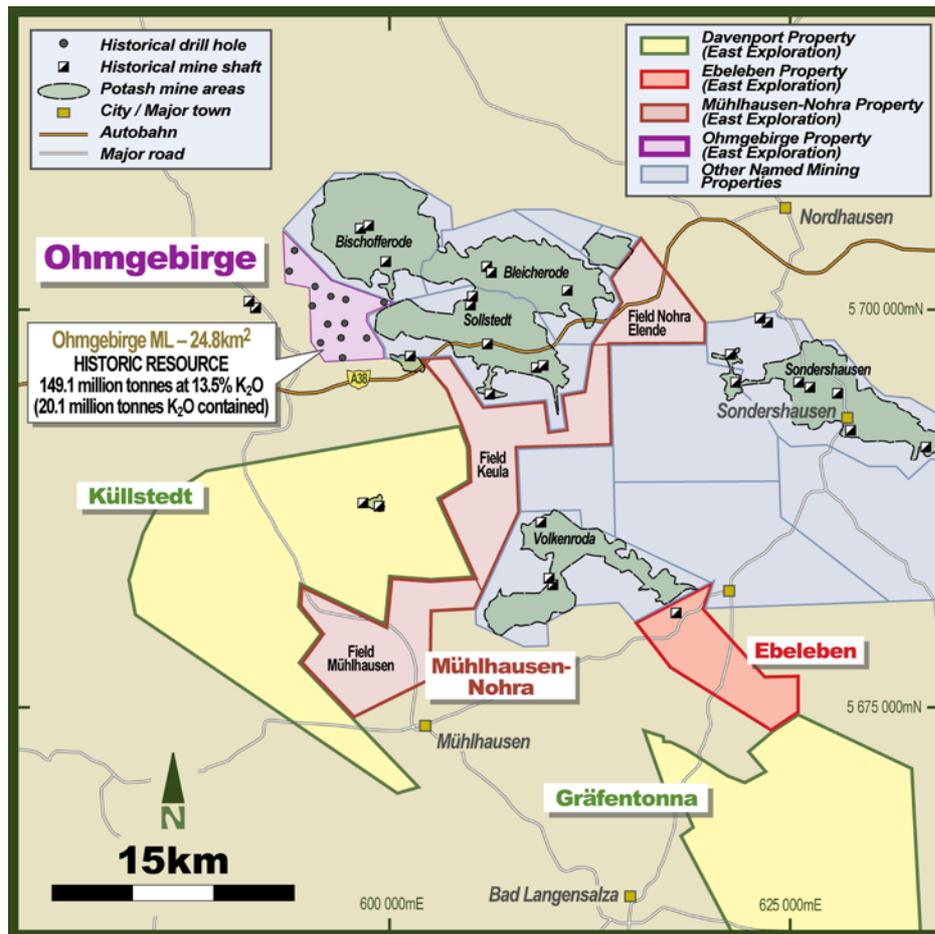


Figure 1: Location of Ohmgebirge mining licence area (violet) showing proximity of former GDR state potash mines Bischofferode, Bleicherode and Söllstedt (light green).

Mühlhausen-Nohra

In mid-2018, Davenport appointed Micon International Co. Limited (“Micon”) to create a geological resource model based upon results from historic drillholes Davenport acquired as part of the mining licence purchases. Micon initially modelled the data from the Mühlhausen-Keula sub-area (Figure 2) which represents approximately 50% of the area of the entire Mühlhausen licence, covering 54.4km². Davenport subsequently announced an existing Inferred Resource of more than 1.1 billion tonnes grading at 11.1% K₂O, of which the predominant mineral was sylvinite, 834 million tonnes grading 12.1% K₂O (Table 2) (refer to ASX announcement 16th October 2018).

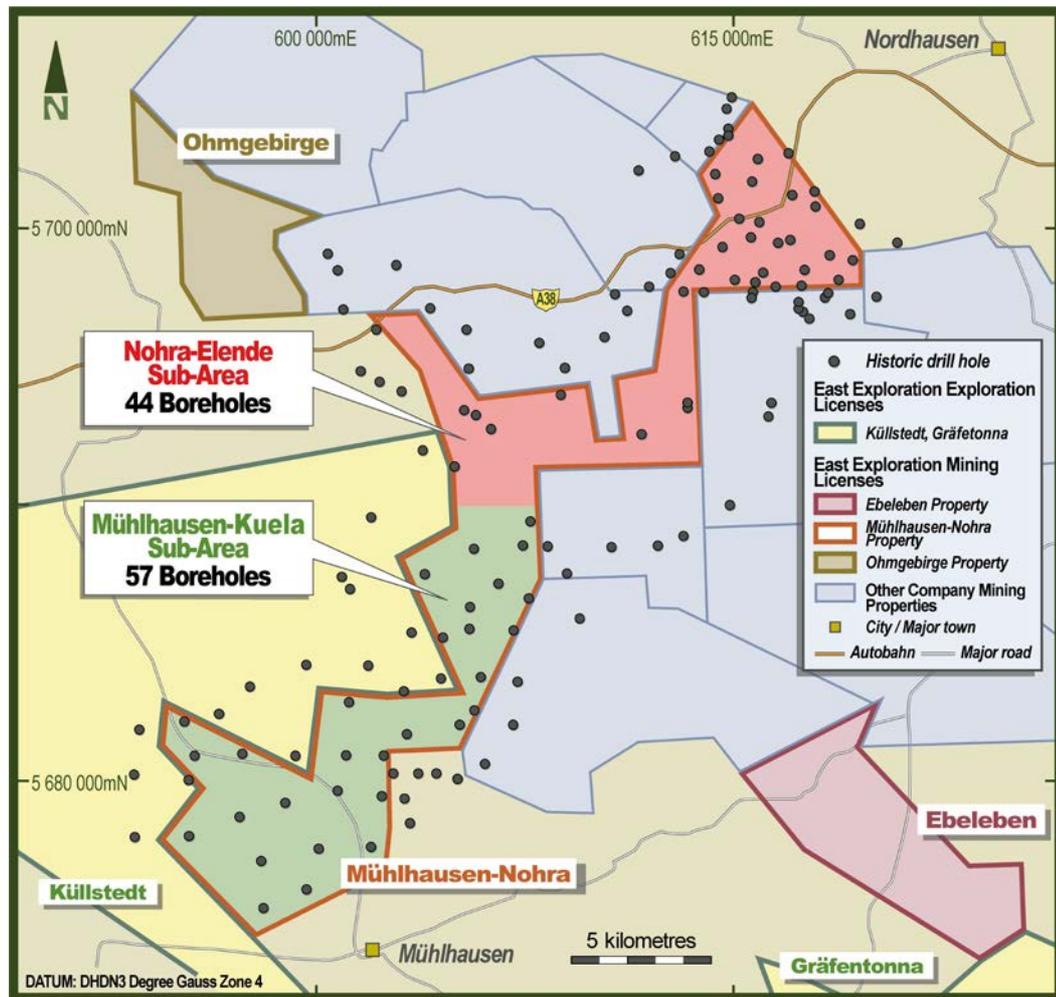


Figure 2: The Mühlhausen-Nohra sub-area (green) in the South Harz potash basin, Germany.

Seam	JORC Category	ρ g/cm ³	Geol Loss (%)	Tonnage (Mt)	K ₂ O (%)	K ₂ O (Mt)	Insols (%)	Mg (%)	Na (%)	SO ₄ (%)
Upper Sylvinite	Inferred	2.26	20	660	12.69	84	0.97	1.32	20.87	16.00
Upper Carnallite	Inferred	1.88	20	233	8.53	20	0.67	4.89	18.09	6.52
Lower Carnallite	Inferred	1.88	20	63	6.88	4	0.66	3.55	22.55	5.27
Lower Sylvinite	Inferred	2.21	20	174	9.76	17	1.07	0.95	28.02	12.31
Total Mühlhausen-Keula Sub-Area	Inferred			1,130	11.10	125	0.97	1.32	20.87	16.00

Table 2: Mühlhausen-Keula Mineral Resources as defined by Micon, October 2018 (ASX announcement 16th October 2018)

Davenport commissioned K-Utec to conduct a preliminary technical and economic study which would facilitate an assessment of the potential of this resource, as well as identify the optimal mining and processing method and potential project costs.

As the majority of the resource lies at a depth of approximately 800m-900m below surface, K-Utec recommended twin vertical shafts and an industry-standard, room and pillar mining method using continuous miners. Processing would be by a hot leach of the raw salts followed by brine clarification and conventional cooling crystallization to yield 1 million tonnes per annum of high-grade muriate of potash (MOP). A high-purity NaCl by-product would be produced for sale from the operation while the other waste streams, comprising solid clay and anhydrite together with the magnesium chloride brine, would be backfilled to voids within the underground mine.

K-Utec concluded the project was technically feasible and recommended that Davenport would be justified in moving to the next phase, which is to establish Measured and Indicated resources through some limited, additional exploration drilling followed by constructing a reportable technical and financial study.

INVESTOR & MEDIA ENQUIRIES

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JORC Statements

Davenport confirms, in respect of the historical Ohmgebirge resource estimate (ASX [announcement 18 June 2018](#)), that it is not in possession of any new information or data relating to that historical estimate that materially impacts on the reliability of the estimate or Davenport's ability to verify that estimate in accordance with the JORC Code 2012, and that the supporting information provided in the 18 June 2018 announcement continues to apply and has not materially changed.

Davenport confirms, in respect of the Ohmgebirge Mining Licence area exploration target (ASX announcement 18 June 2018) and the Mühlhausen-Keula mineral resource estimate (ASX announcement 16 October 2018), that it is not aware of any new information or data that materially affects the information included in the previous announcements, and confirms that all material assumptions and technical parameters underpinning the exploration target and mineral resource estimate in the earlier announcements continue to apply and have not materially changed.