ASX ANNOUNCEMENT

21 December 2022

BENCH SCALE METALLURGICAL TEST WORK CONFIRMS OHMGEBIRGE PROCESSING ROUTE

- Metallurgical test work validates scoping study process flow design
- Targeted K60 grade MOP product confirmed
- Byproduct NaCl produced as chemical grade vacuum salt with a purity of >99%
- Potential $Mg(OH)_2$ and $CaCO_3$ process byproducts identified
- Feasibility Study level metallurgical test work scheduled to commence Q1 CY23

South Harz Potash Limited (ASX:SHP) (**South Harz** or the **Company**) is pleased to report that it has received encouraging results from metallurgical test work completed by K-UTEC AG Salt Technologies (K-UTEC). Test work was performed on core samples collected from drillholes OHM-01 and OHM-02 completed during 2022 within the Ohmgebirge Mining Licence[1].

Results of the metallurgical test work confirm the process route selected for the Ohmgebirge Scoping Study is suitable for processing the ore type expected to be delivered to the mill. Results confirm a preliminary crushing size of <4mm will enable KCl extraction from the cold leach stage of the process flow design. The selected processing route is expected to achieve production of K60 (agriculture sales grade) MOP that is the standard of the global potash industry.

Test work carried out by K-UTEC in their Sondershausen laboratories, located close to the project area, considered the quantity and quality of NaCl (salt) byproduct expected to be produced from future operations. Results verified the selected process route can produce chemical grade vacuum salt with a purity exceeding 99%. K-UTEC further reported that additional $Mg(OH)_2$ and $CaCO_3$ by-products can be extracted via the selected processing route. A well-established market for chemical grade NaCl, $Mg(OH)_2$ and $CaCO_3$ exists in the NW European area.

Test work informed the composition and character of the resultant waste products and additionally confirmed that process waste is suitable for use as mine backfill material. Further metallurgical and backfill test is planned during 2023.

South Harz Managing Director, Luis da Silva, commented:

"Outcomes from the recent scoping study were based on conventional KCl processing routes common to the potash industry. We are delighted to report that metallurgical test work results received from K-UTEC validate the selected processing route is appropriate for the Ohmgebirge Development Project. Importantly, results confirm that salable MOP product should be easily achievable from the samples provided. Metallurgical testing also indicate that high-grade by-products, including NaCl, are achievable, providing a significant benefit given South Harz' proximity to well established European markets. We are looking forward to beginning the next phase of work in the new year and remain on track with feasibility study workstreams as we continue to advance the Ohmgebirge Development Project toward production."

OHMGEBIRGE SCOPING STUDY PROCESS FLOWSHEET

The Ohmgebirge Scoping Study (see ASX release 8th August 2022) selected an optimal process route of cold leaching followed by evaporation and cooling crystallisation. The key steps involved in this process flowsheet are:

- Crushing/milling of ore at surface.
- Cold leaching of soluble chloride minerals, KCl and NaCl, at approximately 20-25°C with water.
- Separation of undissolved sulphate minerals and undissolved NaCl and usage as backfilling material.
- Clarification of leaching liquor and separation of fines (clay, anhydrite).
- Mixing of clarified potash liquor with recycled mother liquor and heating this mixed brine to boiling temperature.
- Evaporation of water with mechanical vapour compression at approximately 110°C.
- Separation of crystallised NaCl.
- Cooling of hot KCl-NaCl liquor in multi-step vacuum crystallisation plant.
- Separation of obtained KCl-crystalline crop from the mother liquor and preparation of Muriate of Potash (MOP) with a K_2O content of 60% to 62%.
- Recycling of cold KCl-NaCl-mother liquor back to the evaporation process.

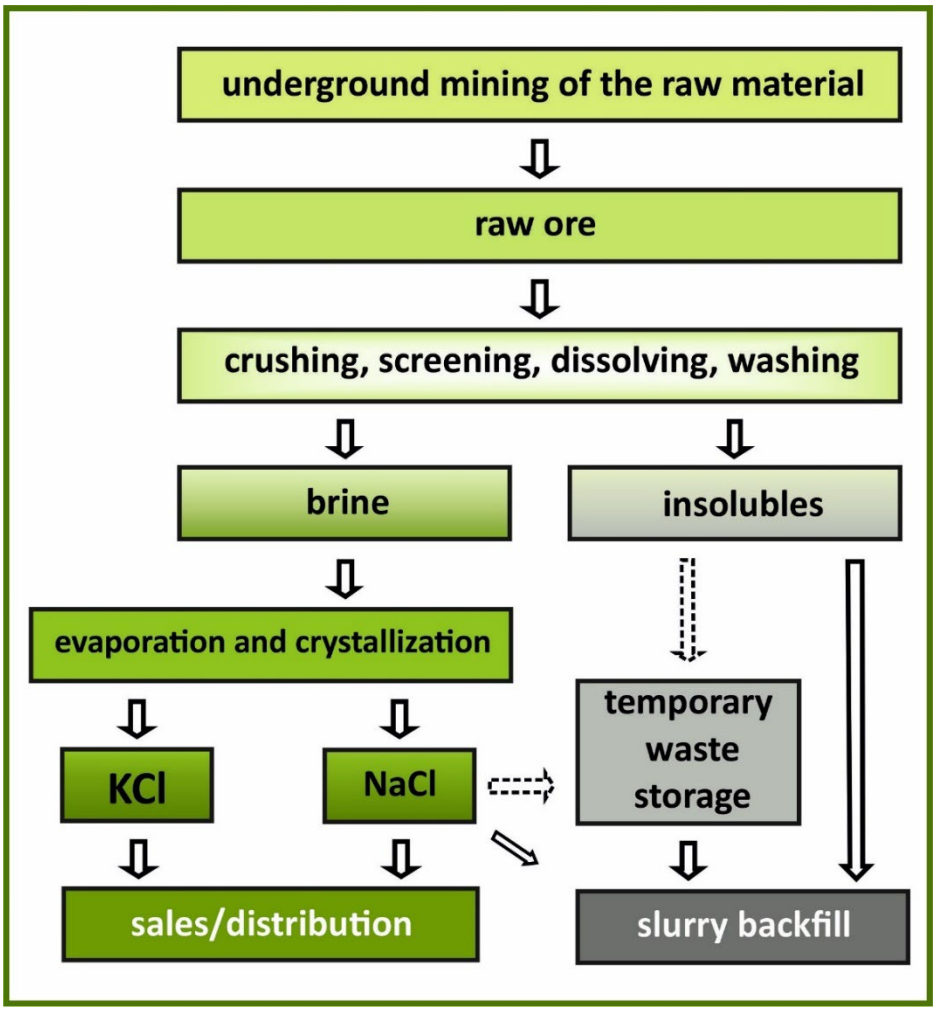

Figure 1: Block flow diagram of process route selected for the Ohmgebirge Project.

CRUSHING AND SCREENING

Test work completed on samples collected from recent drillholes OHM-01 and OHM-02 considered the crushing and milling requirements of the expected ore from the future mine. The results carried out with a crushing size of <4mm resulted in sufficient grain separation to enable dissolution of KCl during the cold leach stage.

DISSOLVING AND WASHING

The test work investigated the dissolving kinetics of KCl and NaCl, and $MgSO_4$ and $CaSO_4$ to highlight the optimal cold leach retention times and temperature of the cold leach solvent. Test work confirmed that weak NaCl brine solution is potentially the best solvent option for the cold leach phase, in comparison to pure demineralised water, which would have an advantageous effect on future water demands for the processing facility. This will be further refined during follow on test work.

Characterisation of leach residues was also carried out by K-UTEC, with the results indicating a waste residue composed of 62% NaCl, 18.4% SO_4 and 3.1% K_2O, and 5.3% H_2O using a weak NaCl bine as a solvent at 25^oC solvent temperature. The scoping study envisages that all leach residues will be backfilled into open spaces in the mine, and characterisation and composition of the leach residue confirms that this is feasible. Further optimisation work for the cold leach stage is planned for during 2023 together with comprehensive slurry backfill test work.

The resultant brine from the cold leach stage then underwent the brine purification step where NaOH is added to precipitate out $Mg(OH)_2$ and Na_2CO_3 is added to precipitate out $CaCO_3$. This purification bench scale test work confirmed the process route as developed in the scoping study. The test work also confirmed the potential for production of $Mg(OH)_2$ and $CaCO_3$ as additional by-products from the operations.

EVAPORATION AND CRYSTALLIZATION

Evaporation-crystallisation bench scale test work was carried out on purified leach brine or mother liquor. The scoping study proposed crystallisation of NaCl be carried out by heating and evaporation and crystallisation of KCl is carried out by cooling. The composition of the KCl-NaCl-Liquors obtained from the cold leach and brine purification stage was near saturation with a ratio between KCl and NaCl approximately 1 to 2. The mother liquor brine was heated up to ~110^oC where hot solid-liquid separation of NaCl was achieved at 5 bar pressure. The mother liquor brine was allowed to cool, resulting in the crystallisation of KCl, with cold solid-liquid separation of KCl being carried out under vacuum. Four cycles of brine recirculation were required to achieve maximum recovery of the KCl and NaCl products. All KCl was crystallised out with a composition close to 60 % K_2O without any further washing, which has been included in the scoping study. Further washing guarantees product specifications are reached and may be used to increase product grade to K62. The crystallised NaCl product direct from the crystalliser achieved an initial grade of ~80 % NaCl, which could satisfy local road de-icing salt requirements without further washing. The scoping study does include an additional washing purification step for NaCl and the test work confirmed that the grade and composition of NaCl after leaching, filter cake washing and drying is ~99.6% NaCl with 0.4% H_2O.

KEY PROCESS ATTRIBUTES

The selected process route avoids the disadvantages of conventional hot leaching and flotation and increases recoveries of the components of the raw salt. It can efficiently handle the polymineralic ore type found at Ohmgebirge by separating out the easily soluble chloride minerals (KCl and NaCl) from insoluble material and sulphate minerals at the cold leach stage. As noted in the scoping study, unwanted dissolved salt components in the resultant brine can be removed by precipitation of calcium carbonate and/or magnesium hydroxide with soda ash and/or caustic soda when added in the brine purification step prior to evaporation-crystallisation. The precipitates are freely removed by sedimentation and filtration.

Other key attributes identified during initial testing include:

- Bleed streams can be either monetized as other products or handled in the backfill.

- The chosen process, proven historically, maximizes the KCl recovery in similar ore bodies.
- That a simple process route optimises the number of employees.
- The chosen route requires a lower demand for steam in heating process
- The selected process consumes less energy and other auxiliary materials.

Over the various unit operations, the predicted recoveries were identified, and the results are in the range quoted in the scoping study. To clearly show the overall recovery from the ore, including the volumes of the waste streams to be backfilled, pilot scale testing is planned during 2023. Preliminary mass and energy balances will be included in pilot scale test work to inform equipment sizing and estimating for the PFS planned for completion during 2023.

Ohmgebirge Mineral Resource Estimate

The Ohmgebirge Mineral Resource is 338 Mt at 12.9% potassium oxide (K_2O) totalling approximately 44 Mt of contained K_2O (see Table 1). This estimate comprises 290 Mt of Sylvinite (key focus seam for development) grading 13.5% K_2O (split approximately 89% Indicated and 11% Inferred categories) and 48 Mt of Carnallitite at 9.8% K_2O (100% Inferred).[2]

Table 1: JORC Ohmgebirge Mineral Resource estimate (July 2022)

Mineralised Seam	Categorisation	Tonnage (Mt)	K_2O (%)	K_2O (Mt)
Sylvinite	Indicated	258	13.54	35
	Inferred	32	12.85	4
	Sylvinite total	**290**	**13.47**	**39**
Carnallite	Inferred	48	9.81	5
	Carnallitite total	**48**	**9.81**	**5**
TOTAL RESOURCE	**Indicated and Inferred**	**338**	**12.91**	**44**

Minimum cut-off grade ≥5% K2O; 15% geological loss applied to account for potential unknown geological losses.

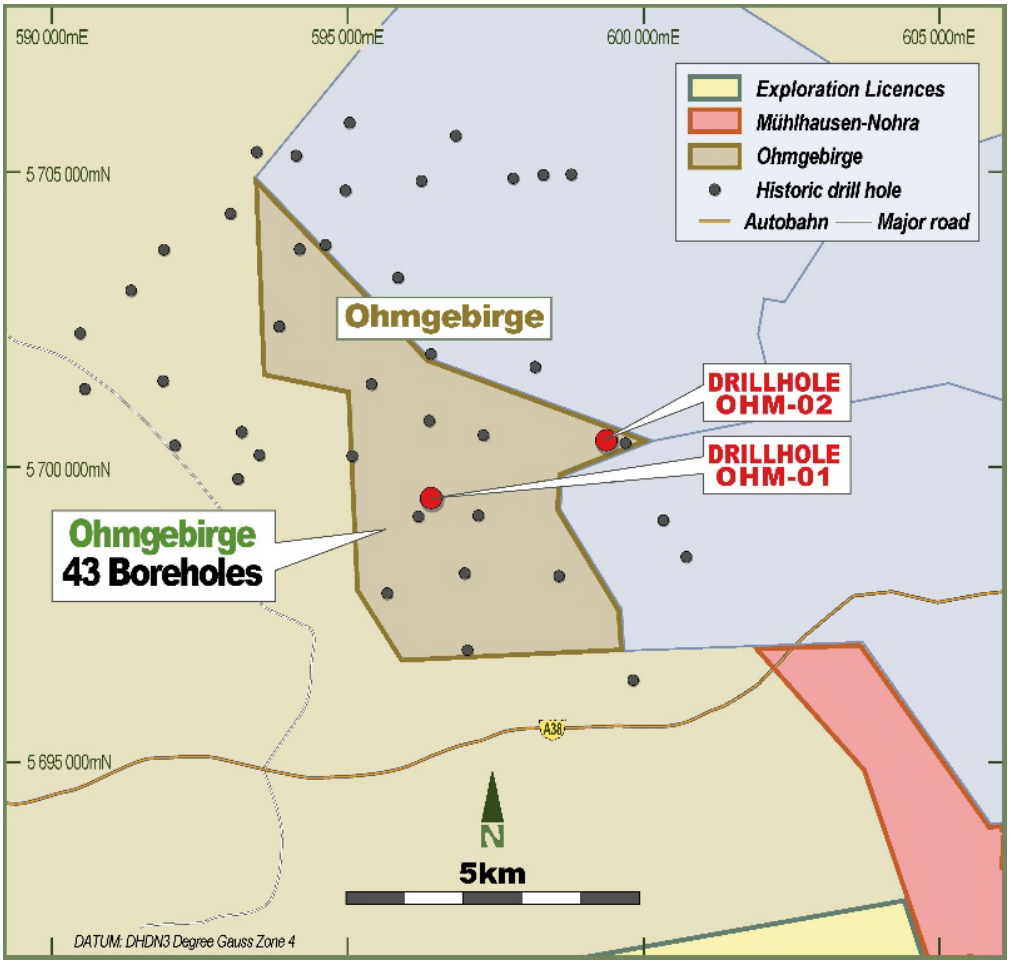

Figure 2: Ohmgebirge Mining Licence area showing the approximate location of historic drillholes and the twin confirmatory holes, OHM-01 and OHM-02.

Competent Persons Statement – Metallurgical Results

The information in this announcement that relates to the 2022 Metallurgical Test Work Results for Ohmgebirge and is based on test work completed by K-UTEC under the supervision of Mr. Stephan Kaps, who is a Fellow of the Institute of Mining and Metallurgy. Mr. Kaps is independent of South Harz Potash and is a consulting Chemical Engineering and Head of Engineering at K-UTEC. Mr Kaps has sufficient experience which is relevant to metallurgical processing of the style of potash mineralisation and type of deposit under consideration and to the activity which he is 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. Kaps consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

Competent Person Statement - Resources & Exploration Results

Elizabeth de Klerk M.Sc., Pr.Sci.Nat., SAIMM., Micon's Senior Geologist and Competent Person visited the South Harz Potash project on four separate occasions, from the 12th to 16th February, the 6th to 8th March 2018, from 15th to 17th October 2019 and specifically to the Ohmgebirge drill sites on 5th to 8th April 2022. The most recent visit included meetings with drilling supervisors and potash consultants "Ercosplan" and an inspection of the analytical laboratory facilities at K-UTEC AG Salt Technologies ("K-UTEC") in Sondershausen, Germany.

Elizabeth de Klerk is the Managing Director and Senior Geologist of Micon International Company Limited (UK) has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which she is 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".

Mrs de Klerk consents to the inclusion in this document of the matters based on this information in the form and context in which it appears.

This ASX release has been approved by Managing Director, Luis da Silva.

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About South Harz

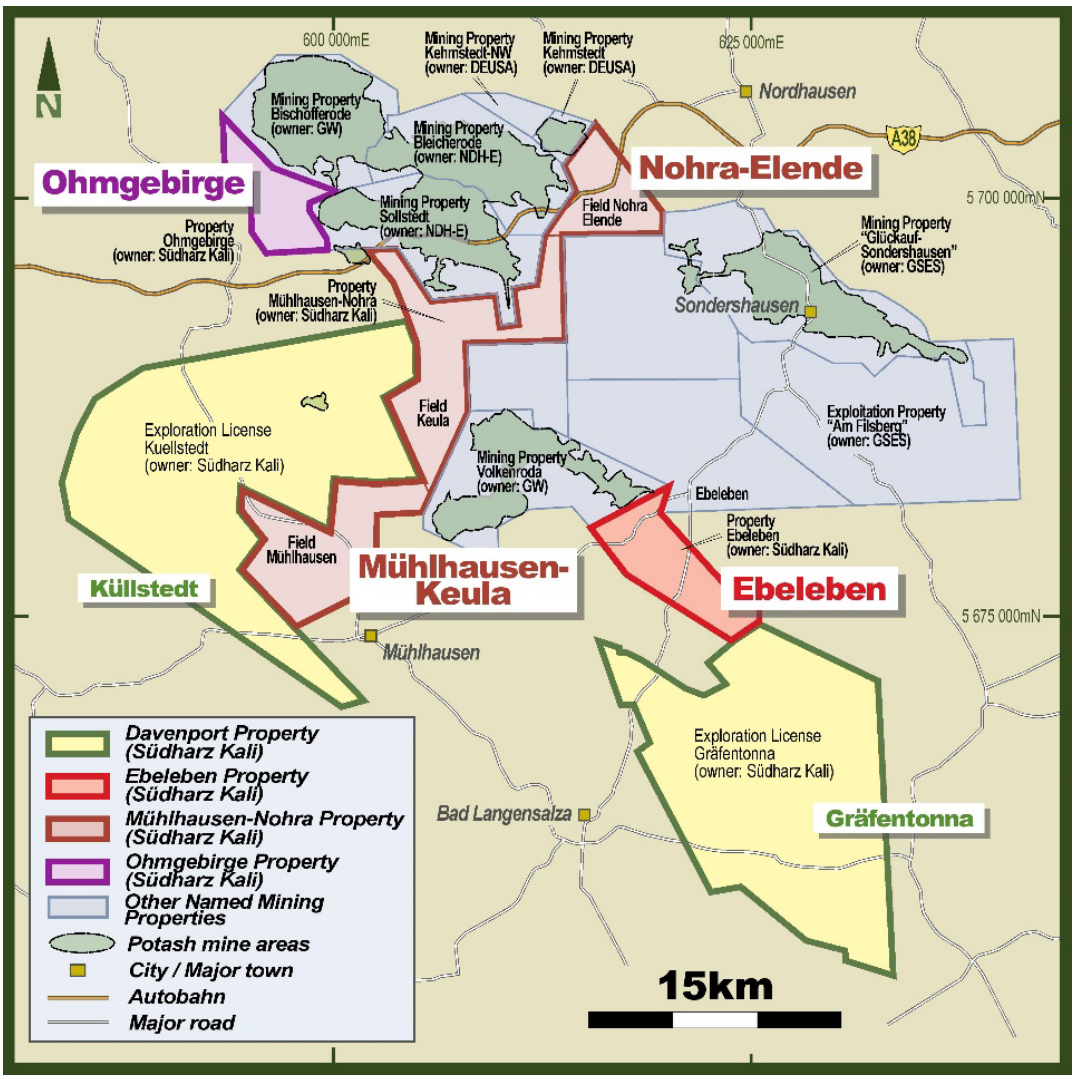
South Harz Potash (ASX: SHP) (**South Harz**) is a potash exploration and development company with its flagship project located in the South Harz Potash District region of Germany, midway between Frankfurt and Berlin.

The South Harz Project hosts a globally large-scale potash JORC (2012) Mineral Resource estimate of 5 billion tonnes at 10.6% K_2O of Inferred resources and 258 million tonnes at 13.5% K_2O of Indicated Resources across four wholly-owned project areas located favourably within central Europe.[2] This comprises three perpetual potash mining licences, Ohmgebirge, Ebeleben and Mühlhausen-Nohra, and two potash exploration licences, Küllstedt and Gräfentonna, covering a total area of approximately 659km².

With strong established infrastructure proximate to the key European market, the South Harz Project is well positioned to enable rapid economic development across multiple deposits.

South Harz Potash: Growing a responsible potash business in the heart of Germany

www.southharzpotash.com



1. **Refer ASX Announcements 29 April 2022 and 8 June 2022. South Harz is not aware of any new information or data that materially affects the information included in these ASX releases.**

2. ***Refer to South Harz ASX release dated 12 July 2022 for full Mineral Resource estimate details. In accordance with ASX Listing Rule 5.23, the Company is not aware of any new information or data that materially affects the information included in this release and the Company confirms that, to the best of its knowledge, all material assumptions and technical parameters underpinning the estimates in this release continue to apply and have not materially changed.***

GLOSSARY

%	-	Percent
°C	-	degree Centigrade
Ca	-	Calcium
$CaCO_3$	-	Calcium Carbonate
$CaSO_4$	-	Calcium sulphate
ASX	-	Australian Stock Exchange
CP	-	Competent Person
€	-	Euro
h	-	Hour(s)
Insols	-	Acid insoluble material
K	-	Potassium
K_2O	-	Potassium oxide
KCl	-	Potassium chloride
K60	-	Standard grade MOP product (K60 refers to 60% K_20 equivalent to 95% KCl)
kg	-	kilogramme
km	-	kilometre
km^2	-	square kilometre
kt	-	thousand tonnes
m	-	metre
Mg	-	Magnesium
$MgCl_2$	-	Magnesium chloride
$Mg(OH)_2$	-	Magnesium hydroxide
$MgSO_4$	-	Magnesium sulphate
MOP	-	Muriate of Potash
Mt	-	million tonnes
Mt/a	-	million tonnes per year
Na	-	Sodium
NaCl	-	Sodium chloride (salt)
QP	-	Qualified Person
Report	-	technical report
ROM	-	Run of Mine
SO_4	-	sulphates
Südharz	-	South Harz
t	-	tonne
t/a	-	tonnes/year
t/d	-	tonnes/day
t/h	-	tonnes/hour
Wt%	-	Weight percent
y	-	Year(s)

JORC Code, 2012 Edition – Table 1

Bench Scale Metallurgical Test Work – December 2022

Ohmgebirge Project

South Harz Potash Ltd

Section 1 Sampling Techniques and Data

(Criteria in this section apply to all succeeding sections.)

Criteria	JORC Code explanation	Commentary
Sampling techniques	*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.*	Samples were derived from drill core, which was split in half longitudinally. OHM-01 and OHM-02 were drilled using a combination of destructive and diamond core techniques, only the diamond drill core was analysed.
	Include reference to measures taken to ensure sample retrospectivity and the appropriate calibration of any measurement tools or systems used.	Downhole geophysics was performed by BLM Gesellschaft für Bohrlochmessung mbH and the geological drill hole logs were corrected according to the geophysical depths.
	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.	Sample thicknesses were correlated and corrected against the downhole natural gamma log. For OHM-01 and OHM-02 wet chemical analysis was performed on half drill core. Sodium, potassium, magnesium and calcium were analysed using ICP-OES in dilutions of the solved sample (DIN EN ISO 11885). Sulphur content was determined by ICP-OES in a dilution of the solved sample (DIN EN ISO 11885). Chloride was determined by automatic potentiometric titration with a silver nitrate solution (DIN 38405 part 1). The K_2O grade of the potash-bearing horizons was determined from the stoichiometric calculation using the analysed elements. Sampling was carried out by Ercosplan geologists and lithological contacts were honoured. Samples were taken across all potash-bearing horizons and the total sampled length represents the total thickness of the potash-bearing horizon of the z2KSt. Sample preparation and analysis was carried out in the accredited laboratory of K-Utec Salt Technologies (DIN EN ISO/EC 17025). Analysis followed the German standard methods for

		the examination of water, waste water and sludge (89th edition, Wiley-VCH/Beuth, Weinheim/Berlin, 2013. Samples were crushed to 1-2mm and then milled to µ50 before being dried in the laboratory furnace at 400°C. 5 g of sample (sample preparation II) is dissolved in 300 ml boiling deionized water (100°C), filtered for insoluble and topped up to 500 ml, creating a solution for all laboratory tests. For the historical drillholes all drill hole sampling was conducted according to the Kali-Instruktion (1956 and 1960) and were drilled using diamond core methods. Sampling information is available for drill holes drilled during the 1960-1963 and 1982-1984 exploration campaigns. Where possible, the K_2O grade of the potash-bearing horizons was determined on an empirical base using the correlation with the downhole natural gamma log. Over inhomogeneous potash horizons where interlayers of potential waste were included, the minimum sample thickness was 0.5 m and the maximum was 5 m. Sample preparation and analysis was carried out in the laboratory of VEB Kombinat Kali research department according to standard procedures. Potassium was analysed by flame photometry following applied standard KALI 97-003/01. Sylvinite samples were milled and sieved for microscopic determination of the degree of disintegration for metallurgical reasons and samples from all salt rocks were also prepared for X-ray analysis of insolubles. For both historical and new drill holes the samples were taken across all potash-bearing horizons and the total sampled length represents the total thickness of the potash-bearing horizon of the z2KSt. Core sample thickness in the Ohmgebirge database ranges from 0.07 m to 14.11 m with an average sample length of 1.59 m.

Drilling techniques	*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 type, whether core is oriented and if so, by what method, etc).*	Both 2022 drill holes were destructively drilled from surface and were switched to coring in the z4ANa horizon. OHM-02 was drilled by H. Anger's Söhne using a UH4-2 rig type using bentonite mud for the upper sections and magnesium rich mud in the core sections. The drill hole diameter is 95.8mm. Casing was used from surface to 536 m ranging in size starting at 558 mm to 127 mm. Drilling information is available for historical drill holes drilled during the 1960-1963 and 1982-1984 exploration campaigns. All historical drill holes were cored. Holes drilled in the 1960's were drilled using a SIF 1200 rig type. Holes drilled in the 1980's were drilled using a T 50 B rig type using bentonite mud. Casing was used in both 1960's and 1980's campaigns. Deviation in the 1980's campaign was a maximum of 3.5m with an average of 1.3m, geophysical logs were used to correct depths and thickness. Deviation in the 2022 drilling campaign was a maximum of 2.6 m with an average of 2.3 m.
Drill sample recovery	*Method of recording and assessing core and chip sample recoveries and results assessed.*	In the 2022 drilling campaign, core recovery was monitored by the Ercosplan project geologist on site at the time of drilling and this recorded in the drill hole log. Within the core section of the drill hole recoveries were 100% apart from three exceptions that had total core loss in OHM-02 between 630.98-631.06m and 632.73-633.05m and core loss in OHM-01 between 720.00-720.41 m. Core recoveries for the 2022 drill holes through the z2KSt unit were 100%. It is apparent that the core recovery was monitored by the project geologist on site at the time of drilling and this recorded in the historical logs and is available for holes Ktf 2/61, Ktf 3/62, Wr 1/61, Ktf 4/83, Ktf 5/83, Ktf 6 and 6a/84, and Ktf 8/84. Core recoveries through the z2KSt unit ranged from 97-100%. with the exception of hole Ktf 6/84, which was subsequently deviated with Ktf 6a/84.
	Measures taken to maximise sample recovery and ensure representative nature of the samples.	Casing was used as follows for OHM-02 0.00–4.70m surface pipe (outside-Ø=558mm), 0.00–9.00m standpipe (outside-Ø=340mm), 0.00–67.00m standpipe (outside-Ø=244mm), 0.00–190.00m anchor tube (outside-Ø=178mm), 0.00–536.00m technical pipe (outside-Ø=127mm). Casing was used as follows OHM-01: 0.00–16.80m auxiliary surface pipe (outside-Ø=711mm), 0.00–39.00m standpipe (outside-

		Ø=508mm), 0.00–129m standpipe (outside-Ø=340mm), 0.00–474.00m anchor tube (outside-Ø=178mm), 0.00–718.6m technical pipe (outside-Ø=127mm). Casing was also used in the 1960's and 1980's campaigns and drill hole Ktf 6/84 was stopped due to poor recovery and a deviation was drilled, Ktf 6a/84.
	Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.	Sampling was conducted according to the stratigraphic interpretation of the core using the downhole geophysical logging as a depth guide. For the historical drill holes axial drilling into the drill core with a spiral drill was conducted to contain pulverised material for chemical and mineralogical analysis. Core recovery is not expected to have affected grade.
Logging	*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.*	In 2022 core logging and sampling was conducted according to ISO standards: DIN EN ISO 14688-1; DIN EN ISO 14688-2; DIN EN ISO 14689-1 and DIN EN ISO 22475-1. Core samples were geologically logged in detail. Information recorded on the drill hole logs included lithological depths lithological description, stratigraphic interpretation, structural measurements and colour. Photographs were taken of all rock chips and core samples, including backlit core photography. Downhole geophysics was performed by BLM Gesellschaft für Bohrlochmessung mbH who measured salinity (ST16), temperature (ST16), calliper (CARI, CAL4017), gamma-ray (GRFEL, TA.ORI), gamma-gamma (GRFEL, TA.ORI), neutron and sonic. Lithological depth intersections have not yet been corrected according to the geophysical log prior to sampling. The detail recorded is sufficient for Mineral Resource estimation. During the historical campaigns core samples were geologically logged in detail and both full and summary drill hole logs were produced in both written and graphical format. Full drill hole logs included a detailed lithological description of the entire drill hole, which was also summarised and graphically portrayed alongside the downhole geophysical logging and assay results. Logs are available for 27 historical drill holes whilst information regarding mineralogy and stratigraphy were read of historical maps for 14 historical drill holes.
	Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.	

	The total length and percentage of the relevant intersections logged.	The complete core intersection was logged on a millimetre scale.
Sub-sampling techniques and sample preparation	*If core, whether cut or sawn and whether quarter, half or all core taken.*	In 2022 drill core was cut longitudinally for sample selection. Half core samples were analysed. Axial drilling into the historical drill core with a spiral drill was conducted to obtain pulverised material for chemical and mineralogical analysis.
	If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.	In the 2022 drilling campaign all horizons above 537m (OHM-02) and 720.41 m (OHM-01) were drilled with a percussion drill bit and produced rock chips. The chips were cleaned of drilling mud through a shaker tray and then logged on site. The rock chips have not been sampled. All historical drilling was core only.
	For all sample types, the nature, quality and appropriateness of the sample preparation technique.	Sample preparation and analysis was carried out in the accredited laboratory of K-Utec Salt Technologies (DIN EN ISO/EC 17025). Analysis followed the German standard methods for the examination of water, waste water and sludge (89th edition, Wiley-VCH/Beuth, Weinheim/Berlin, 2013. Samples were crushed to 1-2mm and then milled to µ50 before being dried in the laboratory furnace at 400°C. All historical drill hole sampling was conducted according to the Kali-Instruktion (1956 and 1960).
	Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.	Samples were homogenised to ensure a representative sample obtained.
	Measures taken to ensure that the sampling is representative of the in situ material collected, including for instance results for field duplicate/second-half sampling.	15 duplicate and 29 blank samples were included in the sample analysis, out of a total of 135 samples. 25 samples have also been sent to an umpire laboratory, called VKTA. Thicknesses of the potash-bearing horizons were confirmed by the geophysical logging and the full length of the potash was sampled. No field duplicates were taken during the historical drilling campaigns.
	Whether sample sizes are appropriate to the grain size of the material being sampled.	Sample sizes are considered appropriate to the material being sampled, which is bulk mineralisation.

Quality of assay data and laboratory tests	*The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.*	The 2022 samples were sent to K-Utec AG Salt Technologies. Wet chemical analysis was carried out according to the following standards HCl-insoluble KALI 97-003/01 2.2.1: 87-12, Total H2O KALI 97-003/01 2.3.3: 87-12, Chloride DIN 38 405-D 1-2: 1985-12, Sulphate DIN EN ISO 11885 - E22, Potassium DIN EN ISO 11885-E22:09-09, Sodium DIN EN ISO 11885-E22:09-09, Calcium DIN EN ISO 11885-E22:09-0, Magnesium DIN EN ISO 11885-E22:09-09, Aqua-regia-digestion DIN EN 13346-S7a: 2001-0, Lithium DIN EN ISO 11885-E22:09-09. Historical samples were sent to the VEB Kombinat Foundation of Potash Research Institute, now known as K-Utec AG Salt Technologies. Chemical analysis was carried out according to the Kali 97-003/01 standard using potassium flame photometry. Transmitted light investigation in bright field for thin sections was conducted
	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.	Downhole geophysics was carried out to confirm lithological contacts and deviation from vertical. X-ray diffractometer (XRD) D2 Phaser (Bruker AXS) was used for mineralogical analysis.
	Nature of quality control procedures adopted (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established.	In 2022 15 duplicate and 29 blank samples were included in the sample analysis, out of a total of 135 samples. 25 samples have also been sent to an umpire laboratory, called VKTA.
Verification of sampling and assaying	*The verification of significant intersections by either independent or alternative company personnel.*	In 2022 Ercosplan managed the drilling and logging campaign, which was overseen by SHP and approved by Micon International. For all exploration work conducted post-1950 in the SHP licence areas, quality assurance and quality control (QAQC) procedures were conducted by independent state institutions and quality checked by VEB Kombinat Kali company professionals. QAQC was conducted on 34 1960's drill core samples as part of the 1980's campaign using drill core that had been stored in the underground

		core storage facility at the Sondershausen potash mine. Samples were sent to internal and external laboratories and the analytical results were identical and showed good reproducibility.
	The use of twinned holes.	HM-02 is a twin hole of Kal Wr 6 Liese located 148 m to the west of the original drill hole position due to modern day surface logistical restraints. OHM-01 is a twin hole of Ktf 5/1983 located 100 m to the north of the original drill hole position due to modern day surface logistical restraints. The twin holes are considered to be comparable. No twin drilling has taken place historically although the comparison of hole Ktf 6/84 with Ktf 6a/84 is favourable despite the low core recovery in Ktf 6/84.
	Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.	Original drill hole logs were recorded on paper, using a combination of handwritten and typed records and the 2022 records are stored at Ercosplan. Historical logs were made in duplicate and are stored at the BVVG Archive in Berlin and the K-Utec archives. Digital copies of the drill hole logs (including the summary logs and geophysical logging etc) are saved on the SHP cloud and backed up at both K-Utec and Ercosplan.
	Discuss any adjustment to assay data.	Chemical assay results were used to calculate the mineral assemblages (including sylvinite and carnallitite) using the Rietveld method.
Location of data points	*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.*	The 2022 drill hole collars were surveyed by RÖSSLER Ingeniervermessung GmbH a Markscheider, a licenced surveyor who is registered by the TLUBN. OHM-02 has an officially registered name provided by TLUBN of Kal Haynrode 1/2021. OHM-01 has an officially registered name provided by TLUBN of Kal Worbis 1/2021. Historical drill hole collars were surveyed by the state surveyor subsequent to drilling and given with centimetre to decimetre accuracy.
	Specification of the grid system used.	Historical drill hole coordinates were recorded in local a German coordinate system, which is a 3-degree Gaus Kruger zone 4 projection with a DHDN datum and an East Germany local transformation to 2 m (EPSG-Code 31, 468). All new coordinates are surveyed in UTM 32 ETRS 89.
	Quality and adequacy of topographic control.	A new topographic survey was acquired by SHP in 2022 from the THÜRINGER LANDESAMT FÜR

		BODENMANAGEMENT UND GEOINFORMATION (https://www.tlbg.thueringen.de/) with an accuracy of 0.15 to 0.3 m. Some of the historical drill hole collars did not sit on the topographic survey and their elevations were adjusted accordingly.
Data spacing and distribution	*Data spacing for reporting of Exploration Results.*	With the exception of the 2022 drill holes, the drill hole spacing on Ohmgebirge ranges between 970-2400m with an average of approximately 1000m. The drill holes are evenly distributed across the property. OHM-01 was drilled approximately 100m north of Kal Ktf 5/83 and OHM-02 was drilled approximately 148 m to the west of Kal Wr 6 Liese. The complete potash horizon was sampled and analysed with all results reported. Average sample length is 0.35m.
	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.	The spacing of drill holes and samples is considered sufficient to imply geological and grade continuity based on information obtained from drill holes and samples.
	Whether sample compositing has been applied.	Samples were not composited prior to laboratory test work.
Orientation of data in relation to geological structure	*Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.*	All drill holes are vertical with minor deviations at depth. The potash-bearing horizons are regionally sub-horizontal with localise folds and undulations. Licence-scale differences in true and apparent thickness caused by undulations are taken into consideration during wireframing.
	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.	The potash seam at Ohmgebirge is horizontal to sub-horizontal on a regional scale and the vertical core drilling is considered appropriate to represent the seam without bias. Downhole geophysical readings indicate a final deviation from vertical of 5.7m.
Sample security	*The measures taken to ensure sample security.*	Core is stored at a secure warehouse in Erfurt and was transported from the drill rig by the drilling company Anger's.

Audits or reviews	*The results of any audits or reviews of sampling techniques and data.*	SHP and Micon have reviewed the sampling techniques and analytical data produced by K-Utec and Ercosplan and are satisfied with the methodology and results.

Section 2 Reporting of Exploration Results

Criteria listed in the preceding section also apply to this section.)

Criteria	JORC Code explanation	Commentary
Mineral tenement and land tenure status	*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.*	South Harz Potash (SHP) is a publicly listed company on the Australian Securities Exchange and holds the Ohmgebirge exploration licence through its wholly owned subsidiary Südharz Kali GmbH. The Ohmgebirge mining licence is located within the South Harz Potash District of the Thuringian Basin, Germany.
	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.	There are no known impediments to the security of the tenure that SHP have over the Ohmgebirge Mining Licence area. The Ohmgebirge Mining Licence is perpetual in nature, not subject to expiry and is valid to explore for and produce 'potash, including (associated) brine' with no applicable statutory royalties. The Ohmgebirge Mining Licence Deed No. is 1281/2017W and has an area of 24,840,100 m2 (24.84 km^2).
Exploration done by other parties	*Acknowledgment and appraisal of exploration by other parties.*	With the exception of the recently drilled OHM-01 and OHM-02, all of the exploration conducted on Ohmgebirge is historical. According to historical reports, exploration commenced within the Ohmgebirge mining licence in 1894 for potash including cored drill holes and downhole geophysics. The area around the Ohmgebirge mining licence is a well-known potash-bearing area and is adjacent to the now closed Bischofferode and the Bleicherode/Sollstedt Mines that are currently being backfilled with waste. After initial exploration in the early 1900s exploration recommenced on Ohmgebirge in earnest in the 1960's and all of the exploration drilling was conducted by the former GDR. Various parties were involved, most of which combined to form VEB Kombinat. A total of 14 historical exploration drillholes (including one deviation) have been drilled within the current Ohmgebirge mining licence area.

Criteria	JORC Code explanation	Commentary
Geology	*Deposit type, geological setting and style of mineralisation.*	The Ohmgebirge mining licence is located in the Südharz (South Harz) Potash District in the north-western extent of the Thuringian sedimentary basin, which has been separated by the uplift of the northerly Harz Mountains from the South Permian Basin (SPB). The regional stratigraphy of the South Permian Basin is fairly well understood with a pre-Variscan basement (Upper Carboniferous and older rocks) and a transition horizon of Upper Carboniferous to Lower Permian lying beneath an expansive sequence of evaporite rocks of the Upper Permian succession. These evaporite deposits are assigned to the Zechstein Group, and host the target potash mineralisation of the South Harz Potash District which occurs on the Ohmgebirge mining licence. The potash-bearing target Zechstein Group consists of seven depositional cycles with the potash mineralisation of the South Harz Potash District hosted within the second cycle, the Staßfurt Formation (Z2). The Z2 is further sub-divided into horizons, of which the Kaliflöz Staßfurt (z2KSt) hosts potentially economic potash. The z2KSt is split into a Hanging Wall Group that has 11 to 19 horizons of finely layered potassium salts and a Footwall Group that has 1 to 10 coarsely layered potassium salts and thick halite layers. Mineralised z2KSt occurs across almost the whole of the Ohmgebirge mining licence, with an area to the west that is barren. The z2KSt is present in 35 drill holes used in the 2019 Ohmgebirge model, 12 of which exist within the licence area. The mineralogy on Ohmgebirge is dominated by Sylvinite with carnallite intersected in only one hole within the licence area. The sylvite seam was modelled as one horizon, and was historical known as Sylvinite, and the carnallite seam was modelled separately. A major graben has been historically mapped within the Ohmgebirge mining licence trending NNE-SSW with offsets of 150-250m. The results of the graben have been logged in the downhole geophysical logs of drill holes on Ohmgebirge with noted steeper bedding, dipping joints and deformation in the strata accompanied by gases. In the centre of the graben the Leine-Steinsalz through to the Aller-Steinsalz units have thickened whilst the rock salt units have

Criteria	JORC Code explanation	Commentary
		thinned resulting in a weakened hanging-wall. No evidence of displacement in the z2KSt unit have been modelled.
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:*	The drill hole database for Ohmgebirge is made up of 43 historical drill holes and the recently drilled OHM-01 and OHM-02. The table below shows the key drill hole information.

Hole ID	Easting (UTM	Northing (UTM	RL	EOH (m)	z2KSt Intersection (m)		Average K_2O Grade	Location
					From	To		
OHM-01	596025	5699274	410	807	775.19	778.94	16.19	Ohmgebirge Licence
OHM-02	599469	5700592	365	720	651.34	662.32	14.62	Ohmgebirge Licence
Kal Bdst 1/62	593622	5702593	497	753	Not intersected			Ohmgebirge Licence
Kal Bfo 1/1908	598718	5705272	351	601	571.50	581.50	15.00	Off licence
Kal Bfo 2/1910	598220	5705241	344	611	576.50	586.50	15.00	Off licence
Kal Brm 1/58	594396	5704039	325	620	569.90	578.00	13.63	Off licence
Kal Brm 2/59	595396	5705282	310	589	508.30	519.85	8.71	Off licence
Kal Brm 3/58	593248	5705667	238	800	403.50	413.50	10.20	Off licence
Kal Brm 4/1961	592757	5704573	295	530	508.00	518.00	15.00	Off licence
Kal Fu 05	591588	5701662	280	800	547.46	557.33	8.25	Off licence
Kal Fu 06	590204	5701498	235	800	572.00	575.00	7.50	Off licence
Kal Fu 06 Ferna 1	591770	5700541	265	800	550.16	563.13	9.50	Off licence
Kal Holu 1/56	596070	5705125	383	766	643.90	653.50	6.51	Off licence
Kal Holu 2/1957	596690	5705931	380	701	575.40	585.40	10.20	Off licence
Kal Hyo 4/61	600303	5699208	341	800	709.27	720.84	13.51	Off licence
Kal Kcf 1/60	594888	5700354	458	837	Not intersected			Ohmgebirge Licence
Kal Ktf 1/61	596250	5702114	463	823	811.16	814.16	10.20	Off licence
Kal Ktf 2/61	597158	5700709	498	869	829.56	834.63	13.52	Ohmgebirge Licence
Kal Ktf 3/62	597080	5699325	462	884	840.88	842.69	17.72	Ohmgebirge Licence
Kal Ktf 4/83	596845	5698322	445	876	820.80	845.58	14.61	Ohmgebirge Licence
Kal Ktf 5/83	596009	5699281	412	814	784.00	787.00	12.42	Ohmgebirge Licence
Kal Ktf 6/84*	596217	5700963	463	878	832.28	839.50	14.97	Ohmgebirge Licence
Kal Ktf 6a/84	596217	5700963	463	847	833.85	841.05	16.22	Ohmgebirge Licence
Kal Ktf 7/81	598070	5701903	507	985	871.00	883.75	14.37	Off licence
Kal Ktf 8/84	595220	5701589	479	849	808.10	821.44	13.24	Ohmgebirge Licence
Kal Ktf 9/84	595691	5703446	425	798	692.71	702.40	13.57	Off licence
Kal Marie	600699	5698610	313	800	Not intersected (stopped short?)			Off licence
Kal Tst 1/1907	591020	5703227	288	582	554.20	569.60	7.18	Off licence
Kal Tst II/07	590124	5702490	230	800	492.75	497.75	5.20	Off licence
Kal Wde 1/1906	591615	5703927	324	558	544.97	558.00	8.56	Off licence
Kal Wr 06 Zuckerhut	594838	5706137	339	800	502.88	524.95	7.11	Off licence
Kal Wr 1/1905	597708	5705201	349	616	570.90	580.90	15.00	Off licence
Kal Wr 1/61	595487	5697974	346	766	730.73	732.38	5.78	Ohmgebirge Licence
Kal Wr 1906 Emmy	593959	5703936	325	460	Not intersected			Ohmgebirge Licence
Kal Wr 2/1906	593889	5705576	250	459	425.50	438.20	8.84	Off licence
Kal Wr 6 Liese	599617	5700583	362	662	651.70	657.20	15.72	Ohmgebirge Licence
Kal Wr 6/1906 Albert	594754	5704976	286	397	Not information			Off licence
Kal Wr 7 Martha	598467	5698259	340	726	672.24	692.24	14.37	Ohmgebirge Licence
Kal Wr 8 Frejya	596898	5696969	359	721	704.50	707.50	7.50	Ohmgebirge Licence
Kal Wr 9 Lotte	599769	5696452	290	572	525.00	535.60	8.28	Off licence
Kal Wr Roland	592887	5699954	295	800	614.00	623.50	10.50	Off licence
Kal Wzg 2/1906	593289	5700348	335	665	649.10	653.00	0.00	Off licence
Kal Wzg 3/1906	592950	5700778	310	601	597.08	599.38	0.00	Off licence

*1.96m core loss with no assay

Criteria	JORC Code explanation	Commentary
Data aggregation methods	*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.*	The chemical analysis for Ohmgebirge was composited according to stratigraphy (z2KSt). A minimum cut-off grade of 5% K_2O was applied to delineate the limits of the potash-bearing horizon within the z2KSt. A weighted average K_2O grade was calculated against sample length.
	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.	Waste was included in the grade composite with a 2 m maximum total length of waste and a 1 m maximum consecutive length of waste allowed.
	The assumptions used for any reporting of metal equivalent values should be clearly stated.	No metal equivalents were used or reported.
Relationship between mineralisation widths and intercept lengths	*These relationships are particularly important in the reporting of Exploration Results.*	All drill holes are vertical with minor deviations at depth. The potash-bearing horizons are regionally sub-horizontal with localise folds and undulations. Licence-scale differences in true and apparent thickness caused by undulations are taken into consideration during wireframing.
	If the geometry of the mineralisation with respect to the drill-hole angle is known, its nature should be reported.	
	If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (eg 'down hole length, true width not known').	
Diagrams	*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*	See separate diagrams provided.

<table>
<tr><th>Criteria</th><th>JORC Code explanation</th><th>Commentary</th></tr>
<tr><td></td><td>plan view of drill-hole collar locations and appropriate sectional views.</td><td></td></tr>
<tr><td>Balanced reporting</td><td>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.</td><td>All available drill hole information was used. Ohmgebirge has been reported as a mineral resource, see Section 3 of Table 1.</td></tr>
<tr><td>Other substantive exploration data</td><td>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 characteristics; potential deleterious or contaminating substances.</td><td>Acoustic televiewer measurements taken downhole in the historical drilling campaigns show steeply dipping (70-90 degrees) joints in the stratigraphic formations, associated with the Ohmgebirge graben. No other exploration was conducted on the Ohmgebirge licence area and seismics was deemed irrelevant to the internal structure of the Zechstein-aged rocks. The z2KSt intersection in OHM-02 has been subdivided into three distinct mineralogical units as detailed in the table below (thickness shown is apparent). The subtle variations in mineralogy across the licence area should be considered as they offer different product options, though the process design would have to allow for that. These details will be investigated in the next phase of techno-economic study.
<table>
<tr><th>Hole ID</th><th>From (m)</th><th>To (m)</th><th>Thick (m)</th><th>Mineral Unit</th><th>Av. K_2O (%)</th></tr>
<tr><td rowspan="3">OHM-02</td><td>651.53</td><td>654.43</td><td>2.9</td><td>Kieseritic Hartsalz</td><td>12.62</td></tr>
<tr><td>654.43</td><td>658.46</td><td>4.03</td><td>Anhydritic Hartsalz</td><td>19.69</td></tr>
<tr><td>658.46</td><td>662.51</td><td>4.05</td><td>Carnallitic Sylvinite</td><td>10.51</td></tr>
</table>
Information in relation to metallurgical test work undertaken by K-UTEC AG Salt Technologies (K-UTEC) at their facilities in Sondershausen, Germany is reported in this release.</td></tr>
</table>

Criteria	JORC Code explanation	Commentary
Further work	*The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).*	SHP are continuing to investigate the economic potential of the Ohmgebirge Licence and their other licence areas in the South Harz Basin. The anticipated next step for Ohmgebirge is a Pre-Feasibility Study (PFS).
	Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.	The mineralisation modelled on Ohmgebirge using the drill hole database covers almost the entire licence area. Potential expansion could only be outside of SHP's current mining licence to the north and west. To show the overall recovery from the ore, including the volumes of the waste streams to be backfilled, pilot scale testing is planned during 2023. Preliminary mass and energy balances will be included in pilot scale test work to inform equipment sizing and estimating for the PFS planned for completion during 2023.