

ASX Announcement

15 November 2017



COMPANY DETAILS

Davenport Resources Limited

ABN: 64 153 414 852

ASX CODE: DAV

PRINCIPAL AND REGISTERED OFFICE (& Postal Address)

Davenport Resources Limited
Level 28,
303 Collins Street
Melbourne VIC 3000

W: www.davenportresources.com.au

E: info@davenportresources.com.au

P: +61 (0) 415 065 280

Capital Structure

74.3M Ordinary shares
33.85M First milestone shares
33.85M Second milestone shares
6.2M Unlisted options

BOARD OF DIRECTORS

Patrick McManus
(Non-Executive Chairman)

Chris Bain
(Managing Director)

Rory Luff
(Non-Executive Director)

Chris Gilchrist
(Non-Executive Director)

Historic potash resource at Ebeleben mining licence - update

Highlights

- **Historic Resource on Ebeleben mining licence of 356 million tonnes of 16.1% K₂O (57.4 million tonnes contained K₂O) in Sylvinite**
- **Ebeleben area considered an extension of the Volkenroda Potash Mine that operated for more than 80 years to 1991**
- **Quality of historic data will allow Davenport to rapidly advance evaluation of South Harz resources and achieve JORC compliance**

Davenport Resources (ASX: DAV) ("Davenport", "the Company"), is pleased to announce a historic resource of **356 million tonnes of 16.1% K₂O (57.4 million tonnes contained K₂O) in Sylvinite, equivalent to 91 million tonnes of potassium chloride (KCl)**, on its 100%-owned Ebeleben mining licence in the South Harz region of Germany.

Updates in this report include certain assurances as to the reliability of historic data and plans for future exploration.

Ebeleben is one of three perpetual mining licences in the South Harz basin that Davenport acquired recently from German government agency Bodenverwertungs-und-verwaltungs GmbH (BVVG). The resource on the Ebeleben licence area was estimated in 1987 and given a classification of C2 (minable or "Balance Resources") and c2 (not minable or "Non-Balance Resources") under the former German Democratic Republic (GDR) system. No known resource estimate has been done on the licence area since then.

At that time the Ebeleben mining licence was defined as an extension of the Volkenroda potash mine and the operator commenced shaft sinking within the Ebeleben mining licence area. However, the reunification of Germany resulted in the closure of the Volkenroda mine in 1991 and sinking of the shaft stopped at a depth of around 100m.

Davenport Managing Director Chris Bain said: *"The detailed information supporting this historic resource estimate will allow Davenport to fast track cost-effective brownfields evaluation of the area with the aim of reinvigorating the South Harz as a globally significant potash producing region. Davenport anticipates that a minimum number of carefully located confirmation drill holes can readily validate these historic resources to allow conversion to JORC 2012 standard. Further historic resources on the other mining licences acquired from BVVG will be released as the data is reviewed."*

Cautionary Note: The Ebeleben resource estimate is a historical foreign estimate and is not reported in accordance with the JORC Code. A competent person has not done sufficient work to classify this historical foreign estimate as a mineral resource in accordance with the JORC code and it is uncertain that following further exploration work that this historical foreign estimate will be able to be reported as a mineral resource in accordance with the JORC Code.

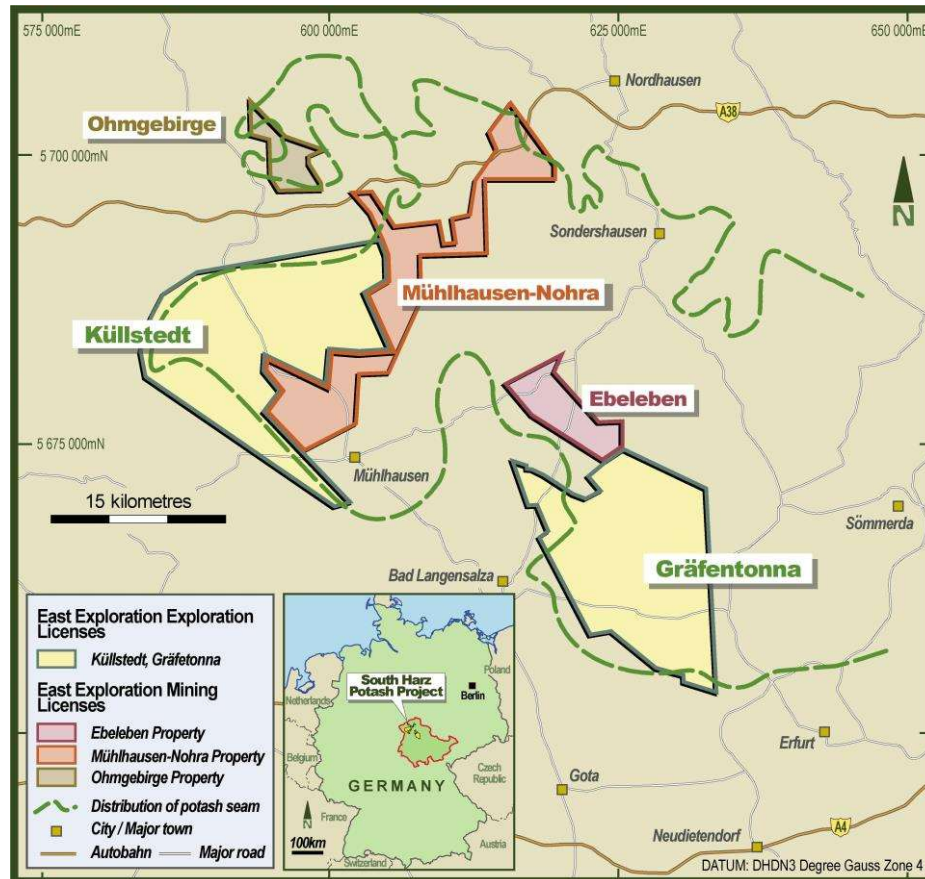


Figure 1 Location of the South Harz potash project

The Ebeleben mining licence covers a band of Sylvinitic potash mineralization that extends from the now closed Volkenroda mine to Davenport's Grafentonna exploration licence. (Figure 2). Within the licence area there were 12 potash holes drilled in two stages in the 1960s and the 1980s. In parallel to the potash exploration, hydrocarbon exploration was also conducted, mainly along the SW part of the Ebeleben mining licence. In total 18 hydrocarbon exploration drill holes were sunk within the area.

The historic drilling provided a relatively detailed picture of the lithostratigraphic structure and the predominantly Sylvinitic mineralogy. Geological and hydrological conditions were considered to be largely similar to those in the adjacent Volkenroda mine and the potash salts were considered processable with the technology then in use at Volkenroda.

Typically, if both potash-bearing rock types are present (Sylvinitic and Carnallitic), the Sylvinitic occurs at the top and/or base of the Carnallitic. In most parts of the Ebeleben Mining Licence area only the overlying Sylvinitic occurs separately or is additionally underlain by a Carnallitic layer. The potash-bearing horizon is developed over the entire Ebeleben Mining Licence area with varying thicknesses and K_2O grades. The bedding shows in general wide alternating synclines and anticlines with, especially within the saliferous horizons, faults and folds as well as local thinning and thickening of the potash-bearing horizon.

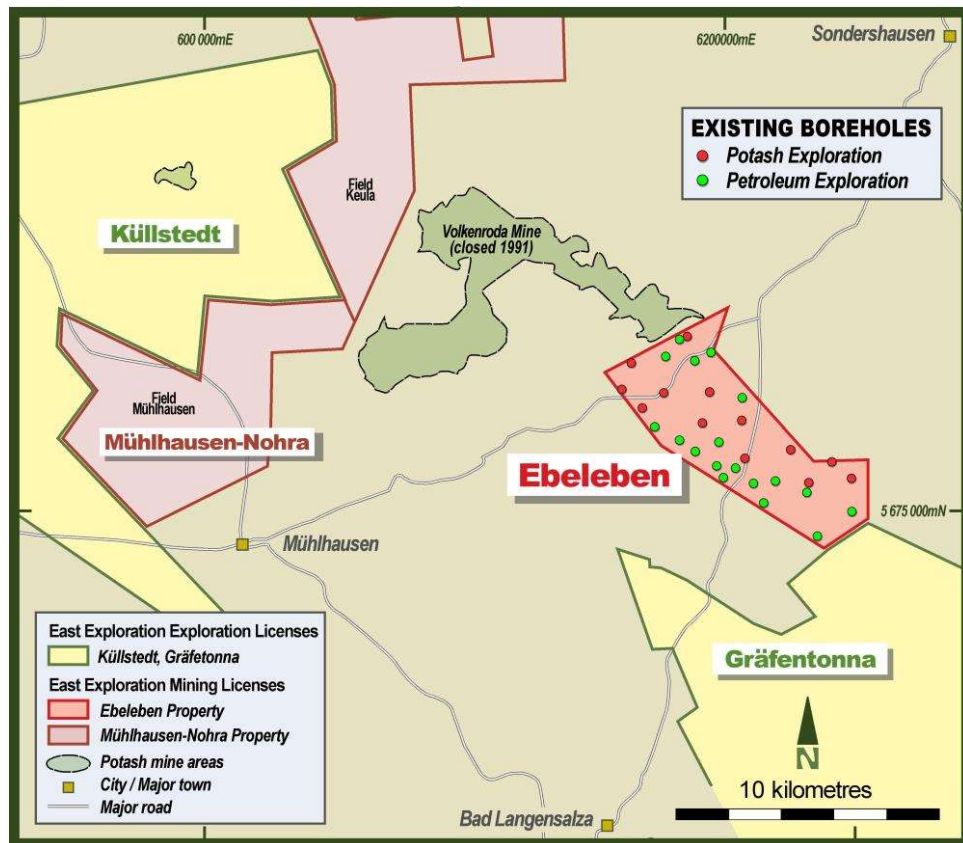


Figure 2 Ebeleben mining licence extending from closed Volkenroda mine to Grafentonna exploration licence

Historic Resource

A historical resource estimate for Sylvinit was commissioned by the Ministry of Geology and prepared by “VEB Geologische Forschung und Erkundung Freiberg” (VEB Geological Research and Exploration Freiberg) in 1987 using the GDR guidelines of the time for an area mostly coinciding with the current Ebeleben mining licence. The following parameters were applied:

- Area of resource: 38.8 km²
- Minimum content of the total resources of 13.11 % K₂O of crude salt and 14.9 % K₂O of the in-situ mineralised rock
- Geological cut-off: 8.0% K₂O
- Maximum content of deleterious minerals for processing:
 - 3.0 % Kieserite, 1.8 % Glaserite, 3.0 % Anhydrite in mined raw salt
 - 2.4 % Kieserite, 2.8 % Glaserite, 2.0 % Anhydrite in-situ mineralised rock
- Minimum extraction height: 3.0 m
- Maximum extraction height: 7.0 m
- Commodity coefficient: 0.5 for anhydritic Sylvinit; 0.6 for polysulphatic Sylvinit
- Maintaining a roof beam above the mining horizon of 2.0 m rock salt to the overlying anhydrite and clay strata.

Carnallite was only included in the estimate where necessary to reach the minimum extraction height and was limited to keep the composition of crude salt within the tolerance range of processing facilities. The resource estimation used a block method with an area of influence around drill holes after subtracting drill hole safety pillars. The average thickness per block was calculated as arithmetic mean based on drill holes with available drill cores and matching cut-off criteria. Average potash assay values in

each drill hole were calculated as thickness weighted mean and density values were calculated from mineralogical composition. The influence of any drill holes not matching the cut-off criteria (e.g. barren zones) was allowed for by applying the commodity coefficient across the entire resource based on mining experience at Volkenroda mine.

The resource was classified as C2 according to the estimation standard “Kali-Instruktion” of the former GDR. Total resources defined in the historic report are shown in Table 1.

The Sylvinite resource was subdivided into that which was considered as a mining horizon **221 million tonnes at 16.7% K₂O (37 mill tonnes of contained potash), this is the equivalent of 59 million tonnes of KCl, (C2)**, and the balance of the resource (c2). An allowance in the Sylvinite resource has been made for a 2-metre roof beam together with areas exceeding the maximum extraction height of 7 metres, generally located immediately below the mining horizon. This material was estimated to c2 standard but excluded from the Sylvinite resource. No allowance has been made for exclusions from the historic resource for areas along the south-west boundary of Ebeleben where there is a partial overlap with the Allmenhausen underground gas storage area located in the stratigraphy above the potash horizon.

There has been no mining in the Ebeleben Mining Licence and no known exploration since 1987. The Volkenroda mine closed in 1991.

	Resource Category	Tonnes (Million)	K ₂ O grade %	Contained K ₂ O (Million tonnes)
Sylvinite Resource within the “Mining Horizon”	C2	220.9	16.7%	36.9
“Roof Beam	c2	33.5	17.3%	5.8
Resource outside the “Mining Horizon”	c2	101.3	14.5%	14.7
TOTAL		355.7	16.1%	57.4

Table 1 Historic Resource Estimation for the Ebeleben Mining Licence area (Kästner et al., 1987)

Note on comparison between C2 Resources and JORC resource classification.

No direct comparison exists between the former GDR resource classification and the JORC resource classification. Under the GDR (or Soviet system as used in the GDR) once an area had an approved “Mining Scheme” then economic parameters were applied to a C2 resource and it could be considered an equivalent to a Measured Resource. However, given the uncertainties and different modifying factors to allow a Reserve estimation under JORC it is generally considered that C2 resources are broadly equivalent to a JORC Inferred Resource.

Reliability of the Historic Resource Estimate

In order to check the reliability of the historic resource Davenport’s consultants, ERCOSPLAN, undertook a thorough evaluation of the available historic data on the Ebeleben mining licence. This work included checking original drill hole data and information available on sampling and parameters used as set out in TABLE 1. Work undertaken by ERCOSPLAN to check the reliability of historic data by modelling the potash horizons is also described in TABLE 1.

The information in this report that relates to historic resources, is an accurate representation of the available data and studies for the Ebeleben mining licence reviewed by Andreas Jockel, a Competent Person who is a Member of a ‘Recognised Professional Organisation’ (RPO), the European Federation of Geologists, and a registered “European Geologist” (Registration Number 1018). Andreas Jockel is a full-time employee of ERCOSPLAN Ingenieurgesellschaft Geotechnik und Bergbau mbH (ERCOSPLAN). Andreas Jockel has sufficient experience that is relevant to the style of mineralisation and type of deposit

under consideration and to the activity being undertaken 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'. Andreas Jockel consents to the inclusion in the report of the matters based on their information in the form and context in which it appears.

Planned Exploration

Davenport has prioritised areas within all the new mining Licences where known historic exploration was conducted for systematic data analysis and additional information will be released to the market as this analysis progresses.

Once all data has been evaluated Davenport intends to select priority areas with historic resources for drill testing. Areas will be prioritised based on the quality of historic results and also on available access and approval requirements for new drilling. Not all areas will be further evaluated.

To upgrade the Ebeleben historic resource to JORC 2012 standard Davenport plans to do confirmatory drilling by twinning one or two of the 12 historic drill holes drilled specifically for Potash. Ideally the confirmation drill holes would be planned to twin a historic hole from each of the drilling campaigns carried out in the 1960's and 1980's.

If Ebeleben is considered a priority area the focus for confirmatory drilling would likely be in the north along strike from the Volkanroda Mine, or in the south along strike from the Exploration Target on Davenport's Gräfentonna Exploration Licence.

Drilling will allow collection of core material from the potash bearing horizon for detailed description, chemical and mineralogical analyses. All confirmation drill holes will need to be logged geophysically to cross-check against the historical data and to correlate the results with the chemical analyses. On successful confirmation of the data from historic drillhole(s), ERCOSPLAN would consider whether there is sufficient information to extend the area of confidence to other nearby drillholes and potentially to drillholes from the same historic drilling campaign. Subsequently this would allow adjacent holes and other holes from the historic drilling campaigns to define a JORC Inferred Resource.

Planning, permitting, drilling and compilation of a new Resource Estimate will take approximately 18 months to complete. The cost of drilling varies depending on the depth to the potash horizon. In addition drilling costs are influenced by conditions that may be mandated by the State mining regulator regarding establishment and access to drill sites. Davenport intends to initiate the approval process once sites are selected using existing working capital and will require new equity capital to fully fund a comprehensive drilling program.

Exploration Target

An outcome of the evaluation of the historic data is that ERCOSPLAN have estimated an Exploration Target for the licence area. This estimate considered the potash horizon across the licence above a cutoff grade of 5% K₂O. However, unlike the historic resource estimate, it excluded the overlapping area of the Allmenhausen Mining Licence which has a designated gas storage area in strata overlying the potash layer.

- The K₂O grade was calculated by the mean value and standard deviation of the average K₂O grades for the upper Sylvinitic layer and Carnallitic layer of each drill hole. The minimum K₂O grade was determined by subtracting the standard deviation from the mean; the maximum K₂O grade by adding the standard deviation to the mean. For the upper Sylvinitic layer the average K₂O grade is 15.69 % with a standard deviation of 4.49 % and for the Carnallitic layer the average K₂O grade is 8.87 % with a standard deviation of 2.16 %. The potential quantity and grade of the Exploration Target is conceptual in nature. There has been insufficient exploration to estimate a mineral resource and it is uncertain if further exploration will result in the estimation of a mineral resource.

- The tonnage range of K₂O was obtained by multiplying the tonnage of mineralised rock with the corresponding minimum/maximum K₂O grades of the upper Sylvinite layer and Carnallitite layer.

The estimated Exploration Target for the Ebeleben Mining Licence area is shown in Table 2.

	Volume (million m ³)	Tonnage of mineralised rock (Million tonnes)		Tonnage of K ₂ O (Million tonnes)	
		Minimum	Maximum	Minimum	Maximum
Sylvinite	171	303	379	34	77
Carnallitite	97	144	180	10	20
TOTAL	268	447	559	54	97

Table 2 Exploration Target for Ebeleben mining licence area

Based on the mean K₂O grade of 15.69 % K₂O for the upper Sylvinite layer, an average Tonnage of K₂O between 48 and 59 Million Metric Tonnes of K₂O can be calculated for this layer.

The potential quantity and grade of the Exploration Target is conceptual in nature. There has been insufficient exploration to estimate a mineral resource and it is uncertain if further exploration will result in the estimation of a mineral resource.

Davenport now holds exploration licences and perpetual mining licences covering well in excess of 650km² in the South Harz. In addition to the Küllstedt and Gräfentonna exploration licences, the three mining licences – Mühlhausen-Nohra, Ebeleben and Ohmgebirge (Figure 1) – are unique and valuable, being perpetual mining licences granted under the former GDR system.

The report on the Ebeleben mining licence prepared by ERCOSPLAN can be read on Davenport's website: <https://davenportresources.com.au/technical-reports/>

INVESTOR & MEDIA ENQUIRIES

Chris Bain - Managing Director
Davenport Resources Ltd
+61 (0) 413 275 756
cbain@davenportresources.com.au

Luke Forrestal - Account Director
Media & Capital Partners
+61 (0) 411 479 144
luke.forrestal@mcpartners.com.au

Competent Person Statement

The information in this report that relates to Exploration Targets, is based on information compiled by Andreas Jockel, a Competent Person who is a Member of a 'Recognised Professional Organisation' (RPO), the European Federation of Geologists, and a registered "European Geologist" (Registration Number 1018). Andreas Jockel is a full-time employee of ERCOSPLAN Ingenieurgesellschaft Geotechnik und Bergbau mbH (ERCOSPLAN). Andreas Jockel has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and to the activity being undertaken 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'. Andreas Jockel consents to the inclusion in the report of the matters based on their information in the form and context in which it appears.

JORC Code, 2012 Edition – Table 1

Ebeleben Mining Licence area

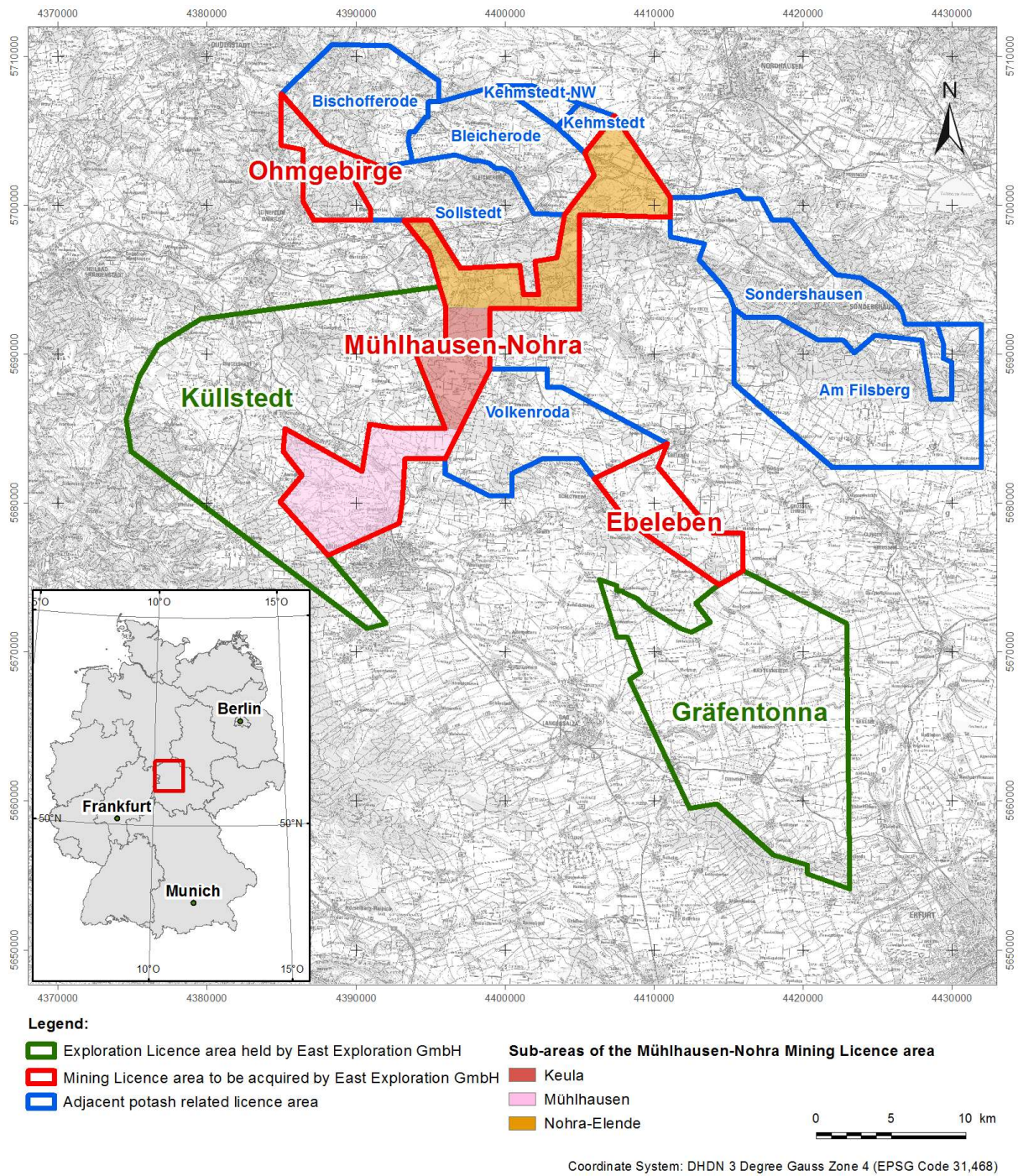


Figure 1 Potash related licence areas adjacent to the Ebeleben Mining Licence area

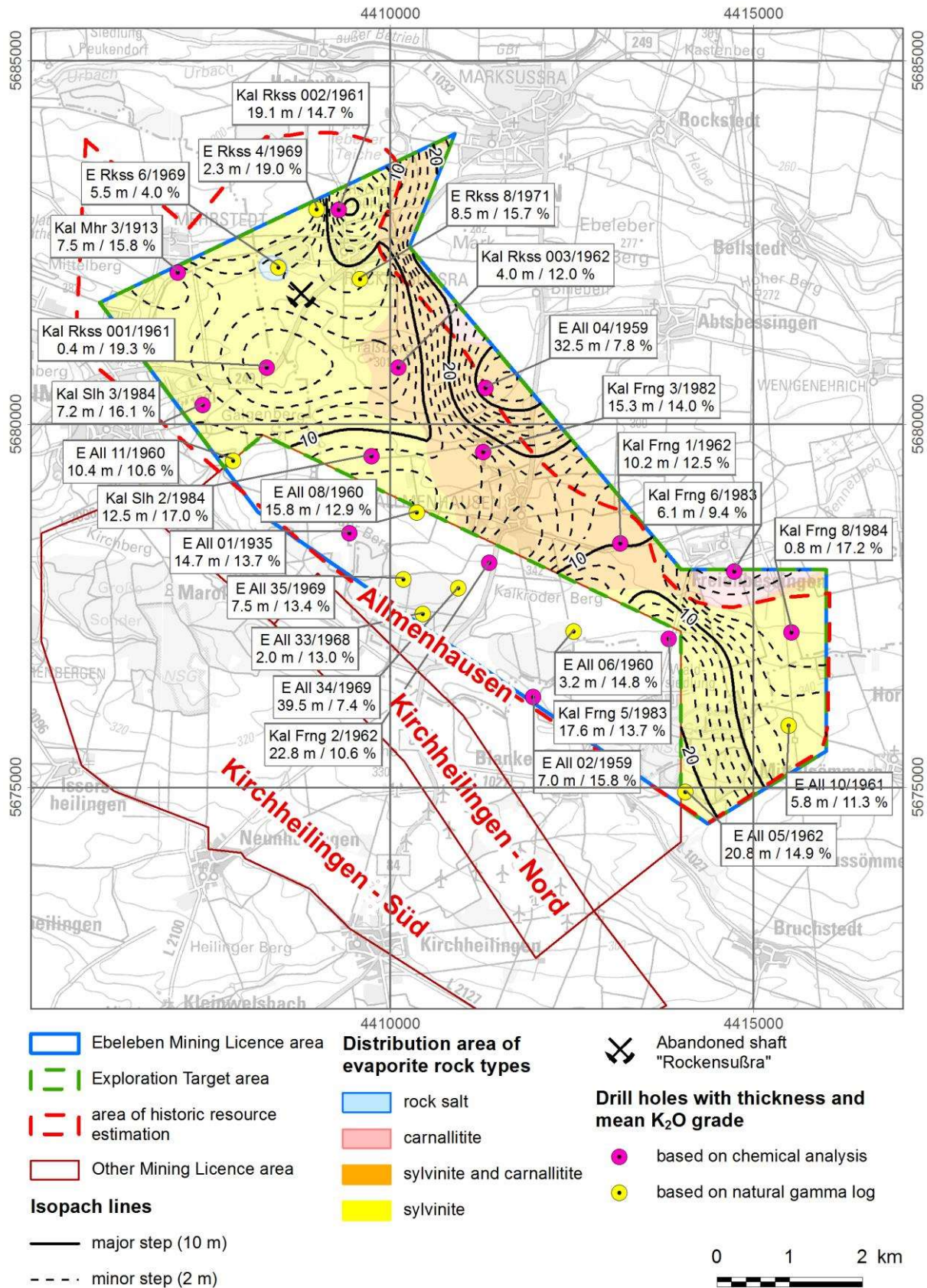


Figure 2 Isopach map and rock type distribution of the potash bearing horizon in the Ebeleben Mining Licence area

Section 1 Sampling Techniques and Data

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

Criteria	Commentary
<i>Sampling techniques</i>	Currently, only historical exploration data are available. Within the Ebeleben Mining Licence area 12 potash exploration drill holes and 18 hydrocarbon exploration drill holes were drilled between 1913 and 1985. Drill cores were obtained in the potash exploration drill holes and in three of the hydrocarbon exploration drill holes. Sample intervals of the drill cores were defined based on petrographical changes as well as stratigraphical elements, sample lengths range from 0.07 – 4.00 m. Axial drilling with spiral drill was conducted to obtain pulverized material for chemical and mineralogical analysis. Potassium was determined by flame-photometric analysis. Regarding all drill holes there is no knowledge about sample packing and sample transport to the laboratory for analysis. The remaining 15 hydrocarbon exploration drill holes were destructively drilled in the potash bearing horizon without samples been taken. For these drill holes the estimated K₂O grade as well as stratigraphical and lithological interpretation bases on geophysical well logging.
<i>Drilling techniques</i>	The potash exploration drill holes were drilled by a Type C 1500 (1960s) and a T 50 A (1980s) drilling rig. According to the available information, drilling started from the surface with tricone bits through the overburden and upper part of the Zechstein section into the transition zone of the lithostratigraphic units Leine-Anhydrit to Grauer Salzton and subsequently cored to final depth of the drill hole. The diameter of obtained drill cores in the 1960s were 108 mm. The later drill cores of the 1980s had diameters between 85 – 108 mm. Clay-/Bentonite mud or clear water was used as drilling fluid for the overburden section. Within the salt sections MgCl brine was used, which was concentrated (> 350 g/l MgCl₂) before reaching the potash bearing horizon. Usually two casings were set in the overburden. The first below the lithostratigraphic unit Mittlerer Muschelkalk and the second below the Oberer Buntsandstein. The last casing was secured by a blow-out preventer as gas hazard was expected. The casings of the abandoned drill holes of the 1960s were mostly recovered. The drill holes of the 1960s were filled by cement and gravel, the drill holes of the 1980s by cement, partly with clay seals and in the overburden partly by fly ash. No information is available about the drilling technique of the hydrocarbon exploration drill holes.
<i>Drill sample recovery</i>	Based on geophysical logging results drilling/core depths were corrected as well as depth intervals of core loss determined. According to available information core recovery within the potash bearing

Criteria	Commentary
	horizon varied between 93 % and 100 %. The total core recovery within the potash bearing horizon was about 98 %.
<i>Logging</i>	Lithological logs are available for six drill holes as detailed logs, where a detailed lithological description as well as high-resolution stratigraphy of the potash bearing horizon and its adjacent units is provided. For 24 drill holes only summary logs are available. For the five drill holes of the 1980s drilling campaign lithological logs are missing. The geophysical well logging data is only available as scanned graphs and nothing is known about the data processing. It has been documented that interpretations and correlations were additionally cross-checked by geologists comparing the logging results with results from other drill holes. Geophysical well logs are available for 24 drill holes covering the entire potash bearing horizon. They comprise mainly of calliper and natural gamma measurements. Additionally, for four drill holes gamma-gamma, for five drill holes neutron-gamma and for three drill holes resistivity logs are available. Logging speed is stated between 2.5 m/min and 7 m/min.
<i>Sub-sampling techniques and sample preparation</i>	Sub-sampling was conducted by axially drilling of the drill cores by a spiral drill. The gathered cuttings were homogenised, quartered and if applicable further reduced in sample size and subsequently chemically and partly mineralogically analysed according to standard procedures developed by the state authority of the former German Democratic Republic (GDR).
<i>Quality of assay data and laboratory tests</i>	The procedures conducted followed strict rules on execution, checking and evaluation of assay data. Quality control was ensured by independent state institutions. The quality of the analyses is considered to be satisfactory.
<i>Verification of sampling and assaying</i>	Cross-check analyses were conducted by independent laboratories to verify the assay results. In the exploration campaign of the 1960s about 21 % of the samples chemically analysed were checked by internal and external cross check analysis. In result, only minor differences occurred and chemical assay data deemed to be correct. Additionally, every drill hole was geophysically logged as described in respective section and the results independently interpreted regarding lithology and K₂O grade, which generally match with the results of chemical assays. For the 15 non-cored hydrocarbon exploration drill holes only geophysical well logging data is available. The K₂O grade was derived from natural gamma ray. Lithology was interpreted on the base of all available measurements. No core or sample material is preserved.
<i>Location of data points</i>	Coordinates of drill holes were obtained from available historical documents and partly from state authorities. Historical drill hole locations were determined by survey and are given with centimetre to decimetre accuracy. For nine potash exploration drill holes general deviation data of the

Criteria	Commentary
	drill hole is available, given as total lateral deviation at final depth. For one drill hole a detailed deviation survey is available. The measured borehole deviation at final depth ranges from 2.44 m (inclination: 0.2°) to 48.2 m (inclination: 2.7°). Coordinate system is DHDN 3 Degree Gauss Krueger Zone 4 (EPSG-Code 31,468).
<i>Data spacing and distribution</i>	The drill holes used as data points for modelling are regularly distributed over the Ebeleben Mining Licence area with higher drill hole density in the SE. Drill hole spacing ranges from 0.6 km to 2.2 km with an average of about 1.15 km.
<i>Orientation of data in relation to geological structure</i>	All drill holes are close to vertical. The bedding of the potash bearing horizon is in general more or less horizontally. The orientation of sampling in relation to geological structure is deemed to be insignificant.
<i>Sample security</i>	No information is available about the sample storage until shipment to the laboratories in charge. Furthermore, no information is available, if special procedures were executed to preserve sample material.
<i>Audits or reviews</i>	ERCOSPLAN could not review analytical results, since no sample and core material are available from the historical exploration campaigns. However, the editors of the historical reports and the results they present therein are considered to be reliable. The reported comprehensive verification measures support that opinion. Therefore, the available data is acceptable for the present project status and the initial estimation of Exploration Targets.

Section 2 Reporting of Exploration Results

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

Criteria	Commentary
<i>Mineral tenement and land tenure status</i>	East Exploration GmbH (EAST EXPLORATION), a subsidiary of Davenport Resources Limited, is acquiring the Mining Licences Mühlhausen-Nohra, Ebeleben and Ohmgebirge based on a contract dated 15 August 2017 from the present licence holder, the Bodenverwertungs und -verwaltungs GmbH (BVVG), a German federal agency. The Ebeleben Mining Licence is located adjacent to EAST EXPLORATIONs Exploration Licences Gräfen-tonna and Küllstedt in the Federal State of Thuringia, Federal Republic of Germany, about 30 km northwest of the state capital, Erfurt (cf. Figure 1). The Ebeleben Mining Licence area covers a total area of 37.08 km². The Mining Licence grants the mining of potash salts including occurring brine within the deposit. The southern part of the Ebeleben Mining Licence area overlaps with the Allmenhausen Mining Licence, a gas underground storage area. The underground storage is constructed in the sandstone strata of the lithostratigraphic unit Buntsandstein, inside the overburden of the potash bearing saliferous strata. An influence of this underground storage by potash mining cannot be excluded at the current project status. Hence, potash mining underneath the gas underground storage area is excluded for this estimation.
<i>Exploration done by other parties</i>	The first evidence of potash salts in the Ebeleben Mining Licence area was provided by the drill hole <i>Kal Mehrstedt 3/1913</i> in 1913. However, comprehensive potash exploration only started in 1961 with the aim to increase the resource base for the perspective development of the potash industry of the former GDR. In two stages 11 additional potash exploration drill holes were drilled within the Ebeleben Mining Licence area. The first exploration phase on potash in the area of the Ebeleben Mining Licence was conducted between 1961 and 1965, with five drill holes located inside of the Ebeleben Mining Licence area. During the second phase in 1982 - 1985 six drill holes were sunken, to densify drill hole pattern. In parallel to the potash exploration hydrocarbon exploration was conducted in the Ebeleben Mining Licence area since 1935. In total 18 hydrocarbon exploration drill holes, mainly drilled in the 1960s, were sunk.
<i>Geology</i>	The Ebeleben Mining Licence area is located at the S border of the South Harz Potash District, which covers the central and NW part of the Thuringian Basin. The South Harz Potash District reflects the extent of the potash deposit. Potash mineralisation occurs in the South Harz Potash District within the evaporite rocks of the Upper Permian succession, which are assigned to the Zechstein Group. The Zechstein Group is developed with seven cycles, where as the second cycle (Staßfurt Formation) hosts the potash mineralisation (lithostratigraphic units Staßfurt-Steinsalz and Kaliflöz Staßfurt). In the South Harz Potash District commercially mineable concentration of potassium salts occur normally within the lithostratigraphic unit Kaliflöz Staßfurt. However, the potash mineralisation has its onset already in the

Criteria	Commentary					
	upper part of the evaporites of the lithostratigraphic unit Staßfurt-Steinsalz. The potash deposit is tectonically divided into three tectonic main levels consisting of the basement, the saliferous strata and the overburden. The tectonic influence on the potash deposit resulted in folding and faulting of the saliferous strata to various degrees. The bedding shows in general wide alternating syn- and anticlines with faults and folds as well as local thinning and thickening of the potash bearing horizon. Partly, a more even and less complex structure is present. The historical drilling results show that the potash bearing horizon is distributed across the entire Ebeleben Mining Licence area. The top varies between -670 and -860 m above sea level (asl) with increasing depth generally from NW to SE. The thickness is ranging between about 0.4 and 39.5 m (cf. Figure 2). Main minerals of the potash deposit are Halite, Carnallite, Sylvite, Anhydrite and Kieserite with additional amounts of Polyhalite and Langbeinite and accompanying clay minerals. Based on the historical data within the Ebeleben Mining Licence area the potash bearing horizon consists predominantly of carnallite and/or sylvinitic rock. Rarely, rock salt occurs which also referred to as barren zones. Normally, the sylvinitic occurs at the top and/or base of the carnallite, if both rock types are present. In most parts of the Ebeleben Mining Licence area only the overlying sylvinitic occurs separately or is additionally underlain by a carnallite layer. (cf. Figure 2). Subrosion of the evaporite rocks of the Zechstein Group within the Ebeleben Mining Licence area is not known. The saliferous strata of the upper Zechstein cycles in the hanging wall of the potash horizon as well as the clayey-silty strata of the Buntsandstein in the overburden serve as an effective hydrogeological barrier. Below the potash bearing horizon of the lithostratigraphic unit Kalflöz Staßfurt hydrocarbon bearing dolomites exist. However, the several decameter thick lithostratigraphic unit Staßfurt-Steinsalz consisting mainly of rock salt serves as a barrier horizon against these dolomites.					
Drill hole information	No drill holes were drilled recently in the licence area. Only 30 historical drill holes exist. 25 of these 30 historical holes used for modelling intersected the entire thickness of the potash bearing horizon.					
Drill Hole Short Name	Easting [m]	Northing [m]	Elevation [m asl]	Final Depth [m]	Dip/Azimuth [°]	Depth Potash Intersection [m]
E All 01/1935	4409440.0	5678600.0	360.0	1.136.0	n/a	1037.10 - 1051.75
E All 02/1959	4411971.7	5676242.2	294.0	1.073.6	n/a	996.50 - 1003.50
E All 04/1959	4411315.2	5680498.3	279.0	1.274.6	n/a	1107.50 - 1140.00
E All 05/1962	4414062.1	5674935.2	297.6	1.324.5	n/a	1017.20 - 1038.00
E All 06/1960	4412526.7	5677148.5	333.6	1.174.6	n/a	1023.20 - 1026.40
E All 08/1960	4410370.9	5678783.6	334.0	1.218.9	n/a	1074.80 - 1090.60

Criteria		Commentary				
E All 10/1961	4415490.0	5675848.4	332.0	1.148.5	n/a	1052.00 - 1057.80
E All 11/1960	4407839.3	5679498.9	308.8	1.118.6	n/a	1021.20 - 1031.60
E All 11a/1960	4407839.3	5679498.9	308.8	658.0	n/a	not reached
E All 14/1963	4408794.6	5678939.6	354.0	510.0	n/a	not reached
E All 15/1962	4411553.6	5677150.2	319.4	390.0	n/a	not reached
E All 16/1962	4413723.9	5676691.3	352.9	427.7	n/a	not reached
E All 33/1968	4410449.1	5677385.9	353.6	1.215.2	n/a	1051.00 - 1053.00
E All 34/1969	4410942.4	5677743.0	360.2	1.193.0	n/a	1094.00 - 1133.50
E All 35/1969	4410185.4	5677862.9	365.3	1.235.2	n/a	1036.50 - 1044.00
E Rkss 4/1969 ¹	4408988.9	5682957.6	266.3	1.181.0	n/a	1031.70 - 1034.00 1099.30 - 1101.30
E Rkss 6/1969	4408463.8	5682159.7	277.5	1.146.8	n/a	1050.00 - 1055.50
E Rkss 8/1971 ¹	4409585.0	5681999.0	282.7	1.261.0	n/a	1090.00 - 1098.50 1123.00 - 1132.00
Kal Frng 1/1962	4413158.3	5678359.3	318.0	1.117.8	0.5/225	1065.25 - 1075.40
Kal Frng 2/1962	4411365.9	5678091.2	340.5	1.127.9	n/a	1074.43 - 1106.10
Kal Frng 3/1982	4411285.2	5679617.0	297.7	1.134.8	1.7/179	1078.34 - 1093.60
Kal Frng 5/1983	4413833.4	5677043.2	344.6	1.118.1	1.4/185	1045.40 - 1062.95
Kal Frng 6/1983 ¹	4414740.4	5677974.8	279.8	1.130.2	1.3/205	1049.78 - 1055.90 1065.09 - 1073.05
Kal Frng 8/1984	4415523.3	5677134.1	321.4	1.080.1	1.4/204	1037.86 - 1038.70
Kal Mhr 3/1913	4407080.0	5682090.0	265.0	1.076.0	n/a	1048.10 - 1055.60
Kal Rkss 001/1961	4408306.1	5680779.9	290.2	1.102.7	n/a	1060.77 - 1061.19
Kal Rkss 002/1961	4409295.4	5682950.4	260.0	1.106.8	n/a	1054.80 - 1074.00
Kal Rkss 003/1962	4410114.9	5680779.1	282.0	1.194.8	1.8/160	1142.75 - 1148.70
Kal SIh 2/1984 ¹	4409743.7	5679562.8	327.4	1.193.8	2.3/118	1078.98 - 1091.49 1102.20 - 1136.74 1140.00 - 1143.44
Kal SIh 3/1984	4407423.7	5680262.6	292.1	1.081.4	1.2/142	1023.65 - 1030.80
Data aggregation methods		A minimum cut-off grade of 5 % K ₂ O has been used for delineation of upper and lower boundary of potash mineralisation interval. Average K ₂ O content per drill hole was calculated by sample length weighted average. Single low grade samples with < 5 % K ₂ O within the potash mineralisation interval have been incorporated.				
Relationship between mineralisation widths and intercept lengths		All drill holes are close to vertical. The bedding of the potash bearing horizon is in general more or less horizontally. The difference between down hole length to true thickness of the potash bearing horizon is deemed to be insignificant for the Exploration Target estimation.				
Diagrams		Refer to Figure 1 and Figure 2.				
Balanced reporting		The documented thicknesses based on available information from				

¹ remoulded

Criteria	Commentary
	drill holes range from approx. 0.4 m to 33.2 m with an average of about 8.4 m for the upper sylvinite layer and from approx. 1.7 m to 33.0 m with an average of about 13.8 m for the carnallitite layer. Highest K₂O content in a single sample reaches 27.0 % (1.0 m sample interval). The average K₂O grade per drill hole varies between 5.0 and 25.8 % K₂O for the upper sylvinite layer with an arithmetic mean of about 14.4 % K₂O and between 5.0 and 11.1 % K₂O for the carnallitite layer with an arithmetic mean of about 8.4 % K₂O.
<i>Other substantive exploration data</i>	Beside the evaluation of the potash mineralisation comprehensive hydrogeological, geological engineering and rock mechanic investigations of the overburden has been conducted. The results are available in the historical reports. Moreover, 2D seismic surveys have been conducted, covering the entire Ebeleben Mining Licence area. The data or results are not available to the authors of this memorandum but are incorporated in the isobath maps of the historical reports.
<i>Further work</i>	The data from the historical drill holes located within the Ebeleben Mining Licence area should be checked via confirmation drilling. This will allow collection of core material from the potash bearing horizon for the purpose of detailed description and chemical and mineralogical analyses. All confirmation drill holes will need to be logged geophysically to cross-check against the historical data and to correlate the results with the chemical analyses, in addition to obtain independent and additional data from the new drill holes for assay and drill record confirmation.

Section 3 Estimation and Reporting of Mineral Resources

(Criteria listed in section 1, and where relevant in section 2, also apply to this section.)

Criteria	Commentary
<i>Database integrity</i>	Summarised lithological and geophysical drill hole data in the licence area have been processed using Paradigms SKUA-GOCAD (Version 17), Microsoft Excel (Version 2010), RockWare RockWorks (Version 15) and ESRI ArcGIS (Version 10.5). Digitized data were cross-checked by other team members responsible for the Report. The database was internally validated comparing the results of the different data types (e.g. lithological description, chemical assay data, geophysical drill hole logs) while database development.
<i>Site visits</i>	A site visit was carried out by ERCOSPLAN and EAST EXPLORATION on 06 June 2016. The objectives of the site visit were an overview of the site situation, an inspection of closed shafts and a general geological introduction.
<i>Geological interpretation</i>	Confidence on the geological interpretation of the potash deposit and its overburden is very high as exploration activities as well as mining activities since more than 100 years in different areas have extended the overall and detailed knowledge tremendously. The data used is historical. Assumptions made are based on methods, which were applied for resource and reserve estimations in former times. Factors affecting the potash deposit are small-scale tectonic structures and variations in mineralisation, which cannot be investigated in detail by exploration drilling or other surficial exploration methods. The existence of these small-scale variations is proven by mining activities conducted in the deposit.
<i>Dimensions</i>	The potash bearing horizon spreads across the entire licence area over a distance of about 10 km in NW-SE direction and over a distance of about 4 km in NE-SW direction (cf. Figure 2). The top of the potash bearing horizon ranges between about 996 m below surface and about 1,143 m below surface. Its base ranges between about 1,003 m below surface and about 1,148 m below surface.
<i>Estimation and modelling techniques</i>	For the estimation of the Exploration Target tonnages, the modelling results of the software Paradigm SKUA-GOCAD (Version 17) with implemented Discrete Smooth Interpolation (DSI) algorithm (Mallet, 1992²) and a gridding cell size of 50x50 m were used. The following procedures were carried out (Exploration Target is given as mineralisation in place): (1) The geometry of the whole three dimensional model is represented by the base surfaces of each modelled lithostratigraphic unit. (2) All drill holes within the modelling area were used to build

² Mallet, J.L. (1992): Discrete Smooth Interpolation.- Computer Aided Design Journal, 24(4): p. 263–270.

Criteria	Commentary
	up the stratigraphic model. Additionally the geological surface map 1:200.000 (BGR, 2007³) was included to specify the border between the lithostratigraphic units Keuper and Muschelkalk, which are therefore the best explored lithostratigraphic units in the licence area. Their geometry was calculated by depth interpolation. (3) The base surfaces of the underlying Buntsandstein and Zechstein strata is modelled afterwards by thickness interpolation of each lithostratigraphic unit and cumulative addition of the thicknesses below the base surface of the lithostratigraphic unit Muschelkalk. (4) The tectonically caused duplication of the potash bearing horizon in the drill holes E Rkss 4/1969, E Rkss 8/1971, Kal Frng 6/1983 and Kal Slh 2/1984 was not incorporated in the model. For modelling and interpolation the sequence was simplified and reduced to one potash bearing horizon. In all four drill holes the uppermost block was chosen, where grade and thickness of potash bearing horizon was interpreted as representative for lateral interpolation. (5) The potash bearing horizon was lithologically subdivided in an upper sylvinite layer and an underlying carnallite layer, both modelled individually. The thickness and K₂O grade distribution of these horizons, was also interpolated using the DSI algorithm. (6) The volumes of the sylvinite and carnallite layer were calculated by summarizing the single cell volumes, derived from the average thickness of each cell of the above mentioned grid with a cell area of 2,500 m². (7) The calculated volumes of the sylvinite and carnallite layer were multiplied by a tonnage factor depending on the mineralisation (density). This average density was calculated from the available chemical assay data for the sylvinite and carnallite layer individually. The derived average density is 2.21 t/m³ for the upper sylvinite layer and 1.86 t/m³ for the carnallite layer. This amounts to the maximum tonnage of mineralised rock for the sylvinite and carnallite layer within the Exploration Target area. (8) Based on the experience gained from adjacent mines, a factor of up to 20% for barren zones is assumed. Therefore, the maximum tonnage of mineralised rock for the two layers has to be multiplied by 0.8 to retrieve the minimum tonnage of mineralised rock for the two layers. (9) The K₂O grade was calculated by the mean value and standard deviation of the average K₂O grades for the upper sylvinite layer and carnallite layer of each drill hole. The minimum K₂O grade was determined by subtracting the standard deviation from the mean; the maximum K₂O grade by adding the standard deviation to the mean. For the upper sylvinite layer the average K₂O grade is 15.69 % with a standard deviation of 4.49 % and for the carnallite layer the average K₂O grade is 8.87 % with a

³ BGR (2007): Digitale Geologische Übersichtskarte der Bundesrepublik Deutschland.- Bundesanstalt für Geowissenschaften und Rohstoffe, Hannover

Criteria	Commentary
	standard deviation of 2.16 %. (10) The tonnage range of K₂O was obtained by multiplying the tonnage of mineralised rock with the corresponding minimum/maximum K₂O grades of the upper sylvinite layer and carnallitite layer
<i>Moisture</i>	Considered not relevant for determination of tonnage of potash salts.
<i>Cut-off parameters</i>	For lateral differentiation of the potash bearing horizon against barren zones a minimum cut-off grade of 5 % average K ₂ O of a cell for the individual sylvinite and carnallitite layer was applied.
<i>Mining factors or assumptions</i>	Neither assumptions for preliminary processing concepts nor mining factors has been considered during the current Exploration Target estimation.
<i>Metallurgical factors or assumptions</i>	Neither assumptions for preliminary mining concepts nor metallurgical factors has been considered during the current Exploration Target estimation.
<i>Environmental factors or assumptions</i>	No environmental factors, which would have been relevant to the current Exploration Target estimation, have currently been considered.
<i>Bulk density</i>	In each drill hole the density for each chemical sample was calculated based on the derived mineralogical composition. By thickness weighted averaging an average density for the upper sylvinite and the underlying carnallitite layer of the potash bearing horizon was calculated individually for each drill hole. The total average density of the Ebeleben Mining Licence area per layer was determined by arithmetic mean of the average densities of the drill holes. An average density of 1.86 t/m³ has been calculated from 7 drill holes for the carnallitite layer and 2.21 t/m³ from 18 drill holes for the upper sylvinite layer.
<i>Classification</i>	The potash mineralisation present in the potash bearing horizon can be correlated between the historical drill holes. The thickness is relatively uneven with local highs and lows due to halotectonic and dissolution processes. Locally, barren zones occur within the licence area. For the Exploration Target estimation, the following values have been calculated: • The volume of the upper sylvinite layer amounts to 171 million m³ and for the carnallitite layer to 97 million m³, in total 268 million m³. • The tonnage of mineralised rock ranges for the upper sylvinite layer between 303 and 379 million metric tonnes and for the carnallitite layer between 144 and 180 million metric tonnes, in total between 447 and 559 million metric tonnes. • The K₂O grade ranges for the upper sylvinite layer between 11.20 and 20.19 % of K₂O and for the carnallitite layer between 6.71 and 11.03 % of K₂O, in total between 9.84 and 17.35 % of K₂O.

Criteria	Commentary
	The tonnage of K₂O ranges for the upper sylvinite layer between 34 and 77 million metric tonnes and for the carnallite layer between 10 and 20 million metric tonnes, in total between 44 and 97 million metric tonnes. No Mineral Resources have been defined at present.
Audits or reviews	Exploration Data The historic resource estimate of 1987 was reviewed in detail as the exploration data of this report was reprocessed and represents the base for the current Exploration Target estimation. Based on the provided data for quality control and verification the historical exploration results and resource estimation are considered to be consistent and satisfactory. Conditions The so-called conditions correlate with cut-off criterions in order to estimate the crude salt, which summarises the minable parts of the in-situ mineralised rock. - Geological cut-off content per drill hole: 8.0 % K₂O - Maximum content of undesirable components for processing: 3.0 % Kieserite, 1.8 % Glaserite, 3.0 % Anhydrite in mined raw salt 2.4 % Kieserite, 2.8 % Glaserite, 2.0 % Anhydrite in-situ mineralised rock - Minimum extraction height: 3.0 m - Maximum extraction height: 7.0 m - Commodity coefficient: 0.5 for anhydritic sylvinite; 0.6 for polysulphatic sylvinite - Maintaining a roof beam above the mining horizon of 2.0 m rock salt to the overlying anhydrite and clay strata - The Inclusion of carnallite in the mining horizon to reach the minimum extraction height was limited to keep the composition of crude salt within the tolerance range of processing facilities. Historic Resource Estimation Balance resources for sylvinite has been estimated, assigned to a resource category C₂ according to the formerly applied resource estimation standard “4. Kali-Instruktion” of the former GDR. Additionally, non-balance resources for sylvinite, assigned to a resource category c₂, has been estimated for resources in the roof beam (2 m rock salt) above the mining horizon and for resources below the mining horizon, which exceed the maximum extraction height. The historical resources are shown in the following table.

Criteria	Commentary			
	Resource category	Tonnage of Mineralised Rock [Mio. t]	Tonnage of K ₂ O [Mio. t]	K ₂ O Grade [%]
Balance Resources				
Mining horizon	C ₂	220.9	36.9	16.7
Non-balance Resources				
Roof beam	C ₂	33.5	5.8	17.3
Below mining horizon	C ₂	101.3	14.7	14.5
The estimated historical resources according the resource estimation standard of the former GDR cannot be directly converted to resource categories according to international standards as significant differences, amongst others, by the assignment of resource areas to resource categories or incorporation of mining or metallurgical factors in resource estimation exist. Therefore, an Exploration Target estimate according to international standards has been prepared based on the historical exploration data. Comparision to this Exploration Target Estimation Hence the historical resource estimation is only focusing the upper sylvinite layer, only the results of this layer can be compared. Additionally, no mineable cut-off parameters (e.g. roof beam, maximum extraction height, etc.) were applied for this Exploration Target estimation, historical Balance Resources (C₂) and Non-Balance Resources (C₂) have to be summarised. This results in a total Tonnage of Mineralised Rock of 355.7 Million Metric Tonnes and a total K₂O Tonnage of 57.4 Million Metric Tonnes for the historical resource. Based on the mean K₂O grade of 15.69 % K₂O for the upper sylvinite layer of this Exploration Target estimation, an average Tonnage of K₂O between 48 and 59 Million Metric Tonnes of K₂O can be calculated for this layer, which is comparable to the historic resource estimation.				
<i>Discussion of relative accuracy/confidence</i>	Will be applied at a later project stage.			

Section 4 Estimation and Reporting of Ore Reserves

(Criteria listed in section 1, and where relevant in sections 2 and 3, also apply to this section.)

Criteria	Commentary
<i>Mineral Resource estimate for conversion to Ore Reserves</i>	NOT APPLICABLE FOR THIS REPORT
<i>Site visits</i>	
<i>Study status</i>	
<i>Cut-off parameters</i>	
<i>Mining factors or assumptions</i>	
<i>Metallurgical factors or assumptions</i>	
<i>Environmental</i>	
<i>Infrastructure</i>	
<i>Costs</i>	
<i>Revenue factors</i>	
<i>Market assessment</i>	
<i>Economic</i>	
<i>Social</i>	
<i>Other</i>	
<i>Classification</i>	
<i>Audits or reviews</i>	
<i>Discussion of relative accuracy/ confidence</i>	

Section 5 Estimation and Reporting of Diamonds and Other Gemstones

(Criteria listed in other relevant sections also apply to this section. Additional guidelines are available in the 'Guidelines for the Reporting of Diamond Exploration Results' issued by the Diamond Exploration Best Practices Committee established by the Canadian Institute of Mining, Metallurgy and Petroleum.)

Criteria	Commentary
<i>Indicator minerals</i>	NOT APPLICABLE FOR THIS REPORT
<i>Source of diamonds</i>	
<i>Sample collection</i>	
<i>Sample treatment</i>	
<i>Carat</i>	
<i>Sample grade</i>	
<i>Reporting of Exploration Results</i>	
<i>Grade estimation for reporting Mineral Resources and Ore Reserves</i>	
<i>Value estimation</i>	
<i>Security and integrity</i>	
<i>Classification</i>	