

KORE POTASH LIMITED

Level 3, 88 William Street, Perth, Western Australia 6000 Telephone: +61 (8) 9463 2463 Facsimile: +61 (8) 9463 2499

EMAIL AND WEBSITE info@korepotash.com www.korepotash.com

DIRECTORS

Chairman: David Hathorn CEO: Sean Bennett Non-exec Director: Jonathan Trollip Non-exec Director: Leonard Math Non-exec Director: Timothy Keating Non-exec Director: Pablo Altimiras

ISSUED CAPITAL (As at – 8 September 2017) 768.2m Ordinary Shares ASX Code: K2P

# Two additional Sylvinite intersections of over 50% KCI indicate potential for extension of Kola 7 km southeast

### Highlights:

- As part of the Kola drilling programme initiated in January 2017 to test for additional Hangingwall Seam Sylvinite ("HWSS"), the Company recently completed two additional holes 1.5 and 7 km south of the current Measured and Indicated Resource, EK\_53 and EK\_54;
- Both of these holes intersect HWSS; in EK\_53 it is 2.2 m thick grading 52.0% KCl from a depth of 350.9 m; and EK\_54 it is 3.2 m thick grading 54.1% KCl from a depth of 297.27 m, reported as true thicknesses;
- The KCl grade is based on calibrated gamma-ray data. All previous intersections of this seam at Kola have been between 48 and 63 %KCl (Table 2). Assay data for EK\_53 and EK\_54 is expected during Q4 2017. Assay data for previously reported hole EK\_49 returned 63.0% KCl over 4.05m; compared to the then reported gamma-ray based grade of 58.9% KCl<sup>1</sup>.
- These intersections support the view that additional areas of HWSS mineralisation are present at Kola and highlight the potential to significantly extend the Kola Sylvinite deposit (current Measured and Indicated Resource of 508 Million tonnes ("Mt") grading 35.4% KCl)<sup>2</sup> several kilometres along strike to the southeast (Fig. 1). Available seismic data suggests continuity of the host rocks between the existing resource and the new holes.

**Perth, Australia, 11 September 2017** - **Kore Potash Limited** (ASX:K2P) ('**Kore**' or the **Company**) is pleased to provide an update on its ongoing exploration activities at the Company's 97%-owned Sintoukola Kola Potash Project ('**Kola**'), in the Republic of Congo ("**RoC**"). Two additional intersections have been made, of 52.0 and 54.1 %KCl, 1.5 and 7 kilometres ("**km**") south 'on strike' of the current Measured and Indicated Sylvinite Resource. The intersections highlight the potential for significant resource expansion and additional areas of Sylvinite of very high grade.

## Sean Bennett, CEO of Kore, commented:

"These results are some of the best exploration news to date for Kore. Kola is already amongst the highest grading potash deposits globally with 508 Mt grading 35.4% in the Measured and Indicated categories. The recent drill-holes are a further 1.5 and 7 km south of this resource and demonstrate both the potential to extend the deposit, and that additional areas of 50-60% KCI grading Hangingwall Seam are present. These grades set Kore apart from other global potash deposits. If further exploration is carried out and additional resources and reserves are successfully defined in this area, they may support an increase of the Kola life-of-mine and improvement in operating costs, post DFS".

<sup>&</sup>lt;sup>1</sup> Announcement dated 23 January 2017: Drilling at Kola Intersects very High-Grade Seam of 58.9% KCl

<sup>&</sup>lt;sup>2</sup> Announcement dated 6 July 2017: Updated Mineral Resource for the High Grade Kola Deposit



Table 1. EK\_53 and EK\_54 Sylvinite intersections

Drill-hole	From (m)	To (m)	Thickness (m)	Dip (degrees)	True thickness (m)	KCI% from gamma-ray
EK_53	350.90	353.27	2.37	22	2.20	52.0
EK_54	297.27	300.47	3.20	<5	3.20	54.1

Table 2. All previously reported intersections of HWSS at Kola. \*Note: EK\_49 KCl grade was previously reported based on gamma-ray data (58.9% KCl) and is here reported based on assay data.

Borehole	From (m)	To (m)	True Thickness (m)	KCl % by assay	Mg %	Insolubles %
EK_13	258.74	262.47	3.73	54.4	0.11	no data
EK_33	214.90	217.79	2.89	53.2	0.02	0.14
EK_38	209.60	212.06	1.77	48.5	0.03	0.17
EK_43	222.58	225.69	3.11	59.9	0.04	0.14
EK_45	196.48	200.23	3.75	54.2	0.04	no data
EK_49*	255.85	259.90	4.05	63.0	0.03	0.11

#### Kola potentially significantly larger than expected

Holes EK\_53 and EK\_54 were drilled as part of a campaign initiated in February 2017, to define additional areas of HWSS at Kola. The current Measured and Indicated Resource for Kola already includes 29.6 Mt grading 58.5% KCl hosted by this seam, which grades between 48 and 63% KCl (Table 2) placing it amongst the world's highest grading potash seams. Added to this, insoluble content is very low at <0.15%. The seam is overlain and underlain by massive rock-salt comprised of approximately 98% halite.

In February 2017 drilling aimed at defining additional areas of HWSS commenced with the drilling of EK\_52, following the earlier success of EK\_49 (HWSS of 4.05 m grading 58.9% KCI) drilled in December 2016. EK\_52 located west of the deposit (Fig. 2) was unsuccessful. The Company's geological staff then recognised the presence of the HWSS in old gamma-ray logs for KOU4 and KOU23, holes drilled in the late 1980's in the area southeast (along strike) from the current Kola resource. These old holes were located in the field and 'twinned' by EK\_53 and EK\_54 respectively.

Both of the new holes contain the HWSS of a mineable thickness with a grade of 52.0 and 54.1% KCl, suggesting that the HWSS at Kola extends significantly further south than previously interpreted. This opens up the possibility for significant resource expansion, of the HWSS and also for Sylvinite of the Upper and Lower Seam (the main host seams of the Kola deposit). Available oil-industry seismic data suggests that the hosting evaporite rocks are continuous between the existing Kola resource and the new holes.





Figure 1. Map showing the Kola Sylvinite, drill-holes EK\_53 and EK\_54 and the interpreted possible extension. The distribution of the HWSS resource is also shown.





Figure 2. Kore's senior geologist with the 54.1% KCl intersection of HWSS in EK\_54.

#### EK\_53 and EK\_54 grade

The reported grades for EK\_53 and EK\_54 are based on downhole gamma-ray data for which a conversion factor has been determined based on a number of intersections logged by independent geophysical logging contractor Wireline Workshop of South Africa. Supporting the grade is the visual estimate of sylvite content, and that all other intersections of the seam have been between 48 and 63 %KCI (Table 2), by assay. Strict QA QC protocol is adhered to in the collection and validation of the gamma-ray data.

#### **Further Work**

Core for EK\_53 and EK\_54 has been sampled and will be sent to the laboratory for analysis. It is expected that results will be available Q4 2017.

Additional drilling and seismic surveying would be required to support potential delineation of Measured and Indicated Mineral Resources in this area. As the Company's focus remains on the completion of the DFS which will be based on the existing Measured and Indicated Resource, no additional work is currently planned in the EK\_53/EK\_54 area. The intersections do, however, point to further upside in the scale and quality of the Kola project, in terms of life of mine extension and potential for very high grade areas which could be brought into the mine plan subsequent to the completion of the DFS if future exploration is carried out and is successful.



Table 3. Collar positions of EK\_53 and EK\_54. Projection and datum is UTM WGS84 32 S.

Drill-hole	Depth m	East m	North m	Hole inclination	Elevation
EK_53	429.0	804700	9534567	vertical	31.0
EK_54	373.2	801633	9539146	vertical	30.9



Figure 3. Stratigraphic logs for EK\_53 and EK\_54, with EK\_49 (within the existing Kola resource) shown on the left. Key potash seams are labelled. The ease of correlation between holes is apparent. Note, this not a cross-section, continuity of the host rocks is highly likely, but continuity of Sylvinite depends on a number of controls and would require additional exploration to establish.



#### **ABOUT KORE POTASH**

Kore Potash (ASX: K2P) is an advanced stage mineral exploration and development company whose primary asset is 97%owned Sintoukola Potash SARL (SP) in the RoC. SP has 100% ownership of the Kola Mining Lease within which the Company's lead project, the Kola Sylvinite deposit is located. SP also has 100% ownership of the Dougou Mining Lease within which the Dougou Carnallitite Deposit and the Dougou Extension Prospect are situated.

These projects are easily accessed, being located approximately 80 km to the north of the city of Pointe Noire and 15 to 30 km from the Atlantic coast. The Projects have the potential to be among the world's lowest-cost potash producers and their location near the coast offers a transport cost advantage to global fertilizer markets.

The Kola Deposit has a Measured and Indicated Sylvinite Mineral Resource of 508 Mt grading 35.4 % KCl<sup>3</sup>. A Definitive Feasibility Study (DFS) which is underway, being conducted by a consortium of world class engineering and construction companies consisting of Technip FMC, Vinci Construction Grands Projects, Egis International and Louis Dreyfus Armateurs (the "French Consortium"). The DFS contract was signed on 28 February 2017 and the study is scheduled to be completed in Q2 2018.

The Dougou Deposit is 15 km southwest of Kola and is a very large Carnallitite deposit with a Measured and Indicated Potash Mineral Resource of 1.1 billion tonnes grading 20.6% KCI (at a depth of between 400 and 600 metres) hosted by 35-40 metres of Carnallitite within 4 flat-lying seams<sup>4</sup>. A Scoping Study was completed by ERCOSPLAN of Germany in February 2015<sup>5</sup>. This Study indicated that a low capital cost, low operating cost (Life of Mine operating cost of US\$68 per tonne MoP), and quick to production carnallite solution mine could be established at Dougou, taking advantage of the deposit quality and availability of low cost energy in the RoC.

The Dougou Extension Prospect (previously referred to as Yangala) lies immediately west of Dougou. Here the Company has drilled two holes, both intersecting a flat-lying layer of thickness 4.0 to 4.5 metres with a grade of between 57 and 60% KCl<sup>6</sup>. Drilling to follow-up on these holes commenced March 2017.

<sup>&</sup>lt;sup>3</sup> Announcement dated 6 July 2017: Updated Mineral Resource for the High Grade Kola Deposit

<sup>&</sup>lt;sup>4</sup> Announcement dated 9 February 2015: Elemental Minerals Announces Large Mineral Resource Expansion and Upgrade for the Dougou Potash Deposit.

<sup>&</sup>lt;sup>5</sup> Announcement dated 17 February 2015: Results for the Dougou Potash Project Scoping Study

<sup>&</sup>lt;sup>6</sup> Announcement dated 20 October 2014: Elemental Minerals Announces Exceptional Results from Dougou-Yangala Drilling





Figure 4. Map showing the location if the Company's projects within the Republic of Congo



#### Kore Potash's Mineral Resources

		Potas	sh Mineral R	esources	
Potash Deposit	Category	Million	Tonnes	Grade KCI %	
	Measured	216		34.9	
Kola Sylvinite (July 2017)	Indicated	292		35.7	
	Inferred	340		34.0	
	Measured	341		17.4	
Kola Carnallitite (July 2017)	Indicated	441		18.7	
	Inferred	1,266		18.7	
	Measured	148		20.1	
Dougou Carnallitite (February 2015)	Indicated	920		20.7	
	Inferred	1,988		20.8	

**Notes:** The Mineral Resource estimates are reported in accordance with the JORC code 2012 edition. The Kola Mineral Resources were reported on the 6 July 2017, and was prepared by Met-Chem division of DRA Americas Inc., a subsidiary of the DRA Group. Resources are reported at a cut-off grade of 10% KCI. The Dougou Mineral Resource was prepared by ERCOSPLAN Ingenieurgesellschaft Geotechnik und Bergbau mbH ("ERCOSPLAN") and reported in the ASX announcement dated 9 February 2015. The form and context of the Competent Person's findings as presented in this document have not materially changed since the resource was first reported. Mineral Resources which are not Mineral Reserves do not have demonstrated economic viability. The estimate of Mineral Resources may be materially affected by environmental, permitting, legal, marketing, or other relevant issues. The Mineral resources are considered to have reasonable expectation for eventual economic extraction using underground mining methods.

#### **Forward-Looking Statements**

This announcement contains statements that are "forward-looking". Generally, the words "expect," "potential", "intend," "estimate," "will" and similar expressions identify forward-looking statements. By their very nature and whilst there is a reasonable basis for making such statements regarding the proposed placement described herein; forward-looking statements are subject to known and unknown risks and uncertainties that may cause our actual results, performance or achievements, to differ materially from those expressed or implied in any of our forward-looking statements, which are not guarantees of future performance. Statements in this announcement regarding the Company's business or proposed business, which are not historical facts, are "forward looking" statements that involve risks and uncertainties, such as resource estimates and statements that describe the Company's future plans, objectives or goals, including words to the effect that the Company or management expects a stated condition or result to occur. Since forward-looking statements address future events and conditions, by their very nature, they involve inherent risks and uncertainties. Actual results in each case could differ materially from those currently anticipated in such statements.

Investors are cautioned not to place undue reliance on forward-looking statements, which speak only as of the date they are made.



#### **Competent Person Statement**

The information in this report that relates to Exploration Results and findings relating to EK\_53 and EK\_54 is based on information compiled by Mr. Andrew Pedley, the Chief Geologist for Kore Potash and a full time employee of the Company. Mr Pedley is a registered scientist (Pr. Sci. Nat) with the South African Council for Natural Scientific Professions (reg No. 400311/13) and is a member of the Geological Society of South Africa. Mr. Pedley has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and to the activity 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" (the JORC Code). Mr. Pedley consents to the inclusion in this report of the matters based on his information in the form and context in which it appears.

The information relating to Exploration Targets, Exploration Results, Mineral Resources or Ore Reserves, and the results of economic studies for the Kola and Dougou Deposits, is extracted from previous reports, as referred to in footnotes herein, and available to view on the Company's website. The Company confirms that it is not aware of any new information or data that materially affects the information included in the original market announcements and, in the case of estimates of Mineral Resources or Ore Reserves, that all material assumptions and technical parameters underpinning the estimates in the relevant market announcement continue to apply and have not materially changed. The company confirms that the form and context in which the Competent Person's findings are presented have not been materially modified from the original market announcement.

JORC Criteria	JORC Explanation	Commentary
1. SAMPLING TECHNIQUES	<ul> <li>Nature and quality of sampling (eg cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling.</li> <li>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</li> <li>Aspects of the determination of mineralisation that are Material to the Public Report. In cases where 'industry standard' work has been done this would be relatively simple (eg 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (eg submarine nodules) may warrant disclosure of detailed information.</li> </ul>	The grade is determined from conversion of calibrated API data as discussed in section 6 below. Sampling and submittal of samples for conventional analysis is in progress. The collection and conversion of API data is discussed in section 6 below.
2. 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).	Holes were drilled by 12 and 8 inch diameter rotary Percussion through the 'cover sequence', stopping in the Anhydrite Member and cased and grouted to this depth. Holes were then advanced using diamond coring with the use of tri-salt (K, Na, Mg) mud to ensure excellent recovery. Coring was HQ (64.5 mm core diameter) as standard and HQ.
3. DRILL SAMPLE RECOVERY	<ul> <li>Method of recording and assessing core and chip sample recoveries and results assessed.</li> <li>Measures taken to maximise sample recovery and ensure representative nature of the samples.</li> <li>Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material</li> </ul>	Core recovery was recorded for all cored sections of the holes by recording the drilling advance against the length of core recovered. Recovery is between 95 and 100% for the evaporite and all potash intervals. Figure 2 of the announcement provides an image of the Sylvinite core. The use of tri-salt (Mg, Na, and K) chloride brine to maximize recovery was standard. A fulltime mud engineer was recruited to maintain drilling mud chemistry and physical properties. Core is wrapped in cellophane sheet soon after it is removed from the core barrel, to avoid dissolution in the atmosphere, and is then transported at the end of each shift to a de-humidified core storage room where it is stored permanently.
4. LOGGING	<ul> <li>Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.</li> <li>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc.) photography.</li> <li>The total length and percentage of the relevant intersections logged.</li> </ul>	The entire length of each hole was logged, from rotary chips in the 'cover sequence' and core in the evaporite. Logging is qualitative and supported by quantitative downhole geophysical data including gamma, acoustic televiewer images, density and caliper data which correlates well with the geological logging. Due to the conformable nature of the evaporite stratigraphy and the observed good continuity and abrupt contacts, recognition of the potash seams is straightforward and made with a high degree of confidence. Core was photographed to provide an additional reference for checking contacts at a later date.

**JORC Criteria** 

#### **JORC Explanation**

#### Commentary



Figure A1. Extract of acoustic televiewer (ATV) image for the sidewall of the borehole, and downhole gamma data (converted to API) for EK54. The Hangingwall Seam is the 3.2 m thick layer beginning 297.27 m. The abrupt nature of the contacts is evident in the data as is the flat/low dip of the rocks. Note: the diagonal dark feature is an artifact of the log.

#### 5. SUB-SAMPLING TECHNIQUES AND SAMPLE PREPARATION

- If core, whether cut or sawn and whether quarter, half or all core taken.
- If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.
- For all sample types, the nature, quality and appropriateness of the sample preparation technique.
- Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.
- 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.
- Whether sample sizes are appropriate to the grain size of the material being sampled.

• Sampling of the core is in progress. As is described in section 6, the gamma ray logging provides a representative insitu 'sample' of the side-wall of the hole.

#### JORC Criteria

#### **JORC Explanation**

#### Commentary

- 6. QUALITY OF ASSAY DATA The nature, quality and appropriateness of the assaying and
- **AND LABORATORY TESTS** *laboratory procedures used and whether the technique is considered partial or total.* 
  - 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.
  - 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.

- No laboratory assays have been carried out for EK\_53 and EK\_54; sampling is underway.
- The KCl grade was determined by converting downhole logged gamma-ray data . A Geovista digital Natural (total) Gamma Ray Sonde (NGRS) was used with unique sonde number 6569.
- Gamma-ray data is converted to standard API units by applying a HQ hole diameter and fluid density correction of 0.947, which were then converted to KCI % by the application of a conversion factor known as a K-factor.
- The K factor was selected following a review of different methods of calculating the factor (as summarised in figure A2). Importantly, all factors based on Kore assay data are very similar.
- The selected factor of 0.0742 was determined by WW using the 'area-under-the-curve' method to sum API for potash intervals for all intersections logged, with QA-QC'd assay data, as shown in figure A4
- The geophysical logging was carried out by independent downhole geophysical logging company Wireline Workshop (WW) of South Africa, and data was processed by WW. Data collection, data processing and quality control and assurance followed a stringent operating procedure.
- As a check on instrument stability over time, a 'check hole' is logged frequently. No drift in the gamma-ray data is observed (Fig. A3)



Figure A2. Comparison of various iterations of K-factors with the final version of 0.0742 highlighted. Note the small range in the values, excluding the theoretical value, which is less conservative.

Figure A3. QA-QC graph: Plots of gamma-ray data for a sylvinite interval in Kore's 'check hole, showing all logs for the relevant time period overlain, as a check on instrument variation and 'drift' – none is observable.'.





JORC Criteria	JORC Explanation	Commentary
7. VERIFICATION OF SAMPLING AND ASSAYING	<ul> <li>The verification of significant intersections by either independent or alternative company personnel.</li> <li>The use of twinned holes.</li> <li>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</li> <li>Discuss any adjustment to assay data.</li> </ul>	<ul> <li>As described in section 6, the API derived KCI data was determined by an independent consultant after a stringent process of verification.</li> <li>Visually observed sylvite content and the acoustic televiewer data provides validation of the of the sylvite abundance and thickness of the seam.</li> <li>All data is stored on the Company's database, in digital and in pdf format, and the Consultant. Data entry is minimal as data is captured in digital .LAS format during logging.</li> </ul>
8. LOCATION OF DATA POINTS	<ul> <li>Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.</li> <li>Specification of the grid system used.</li> <li>Quality and adequacy of topographic control.</li> </ul>	<ul> <li>The holes were positioned using a handheld GPS and so is likely to be accurate to within 5-10 m and elevation accurate to within 10-20 m. The positions are given in UTM zone 32 S using WGS 84 datum (Table 3 of the announcement).</li> </ul>
9. DATA SPACING AND DISTRIBUTION	<ul> <li>Data spacing for reporting of Exploration Results.</li> <li>Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied.</li> <li>Whether sample compositing has been applied.</li> </ul>	<ul> <li>Figure1 of the announcement shows the location of the drillholes.</li> <li>No sample compositing has been applied as the API derived KCI grade is for the full thickness of the seam.</li> </ul>
10. ORIENTATION OF DATA IN RELATION TO GEOLOGICAL STRUCTURE	<ul> <li>Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.</li> <li>If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.</li> </ul>	• Downhole survey data shows that holes were close to vertical (between 88 and 90 degrees) The logging and acoustic televiewer data shows that the seams in EK_54 are close to being horizontal (layering is perpendicular to the core axis). Therefore the reported intersection for that hole is considered the true thickness. In EK_53, the seam is dipping approximately 22 degrees and a correction for this to determine true thickness (the reported thickness) has been made. No bias in sampling is considered possible.
11. SAMPLE SECURITY	• The measures taken to ensure sample security.	• All core is stored at the Koutou core shed at the project field camp/office. Core is wrapped in plastic film and sealed tube bags, and within an air-conditioned room (17-18 degrees C) to minimize deterioration.
12. AUDITS OR REVIEWS	• The results of any audits or reviews of sampling techniques and data.	<ul> <li>The KCl grades were determined by an independent consulting company Wireline Workshop of South Africa. The data and the grade determination was reviewed the Competent Person.</li> </ul>
13. MINERAL TENEMENT AND LAND TENURE STATUS	<ul> <li>Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.</li> <li>The security of the tenure held at the time of reporting along with any known impediments to obtaining a license to operate in the area.</li> </ul>	<ul> <li>The intersections are within the Kola Mining Lease and the Dougou Mining Lease, which are held 100% under the local company Kola Mining SARL which is in turn held 100% by Sintoukola Potash SA of the RoC, of which Kore Potash holds a 97% share.</li> <li>There are no impediments on the security of tenure.</li> </ul>

# Section 2 - Reporting of Exploration Results

JORC Criteria	a JORC Explanation	Commentary
14. EXPLORATIO OTHER PARTIES	<b>DN DONE BY</b> • Acknowledgment and appraisal of exploration by other parties.	<ul> <li>Potash exploration was carried out in the area in the1960's by Mines de Potasse d' Alsace SA (MDPA). Holes K6, K18, K19, K20, K21 are within or close to the existing Kola deposit, to the north of EK_53 and EK_54. MDPA also drilled several additional holes in 1988, including KOU4 and KOU23 which were located in the field by Kore. Historic gamma-ray images for these holes was interpreted by Kore as indicating the presence of Sylvinite. EK_53 and EK_54 were drilled 10 m and 15 m away from KOU4 and KOU23 respectively to confirm the interpretation.</li> </ul>
15. GEOLOGY	<ul> <li>The potash seams are hosted by the 300-900 m thick Loeme Evaporite formation enclave of Angola to southern from approximately 50 km and extending some 200 125 and 112 million years ago, 'proto Atlantic' seepage-fed sub-sea level basin fol in a post-rift setting leading to the development of evaporite layers with great cor</li> <li>The evaporites formed by the cyclic evaporation of marine-water sourced, seepage mineral precipitation model: dolomite then gypsum then halite then the bitterns of concentrated (over sea-water concentration). To precipitate the thick potash bediequaled losses.</li> <li>Reflecting the chloride-Mg-K dominated brine composition, halite (NaCl), carnallitit sylvite (KCl) forms by replacement of carnallitite in areas that have been affected</li> <li>The evaporite is covered by a thick 'cover sequence' (Fig. A5) of carbonate rocks ( between 170 and 270 m thick over the Kola deposit, and 327 m in EK_43, suggest dominated part (Salt Member) is an impermeable layer of anhydrite, gypsum and</li> <li>The EK_53 and EK_54 intersections are considered to be along strike of the nearb and halite). The sylvinite at Kola forms flat or gently dipping seams at depths of b area is one of gently undulating stratigraphy and overall elevation of the evaporit</li> <li>Stratigraphy can be correlated with that at the existing Kola Resource, taking into extends within the steadily narrowing 'high' bound laterally by half-graben feature of the vaporite deposition which is considered post-rift (during a transitional phac Oligocene onwards in response to uplift of the West African margin at this time (S at Kola.</li> <li>Sylvinite formed by the replacement of carnallitite by gradual movement of brine residual carnallite remains within the sylvite and the contact between the two is a The contact between the anhydrite grams at Kola and is the reason why the uppermost Lower Seam are preserved over most of the Kola deposit.</li> <li>The contact between the anhydrite member and the underlying salt is an unconfe</li></ul>	These sedimentary evaporite rocks belong to the Congo (Coastal) Basin which extends from the Cabinda D-300 km offshore. The evaporites were deposited during the Aptian of the Lower Cretaceous, between lowing the break-up of Gondwana into the African and South America continents. The sedimentation was ntinuity; the evaporite is of the basin-wide 'mega-halite' (Warren 2010) ge-fed brines of basinwide extent ,each cycle generally following the expected brine evolution and resultant of Mg and K as chlorides (as opposed to sulphates). Bittern minerals form when the brine is 60-95 times s the system experienced prolonged periods within that range of brine concentration, when water inflows the (KMgCl <sub>3</sub> -6H <sub>2</sub> O) and bischofite (MgCl <sub>2</sub> -6H <sub>2</sub> O) account for over 90% of the evaporite rocks. The mineral by gentle undulation of the salt as at Kola. limestone and dolomitic rocks) and clastic sediments of Cretaceous age (Albian) to recent, which is ing gradual dip of the stratigraphy southeastwards. At the top of the evaporite formation, above the salt clay typically between 5 and 15 m thick (the Anhydrite Member). y Kola deposit in which potash is hosted by layers of Sylvinite (sylvite and halite) and Carnallitite (carnallite etoks forming a 'high', thought to be an important control on sylvinite formation. account a gentle dip towards the southeast (Fig. 3). Available seismic data suggests the host stratigraphy es ( labeled 'edges of high' on figure 2 of the announcement). the evaporite stratigraphy is elevated over a horead area affected by horst formation, interpreted to have retaceous, pre-125 Ma) (Teisserenc and Villemin, 1989). Horst affected sediments were largely buried prior ise between rift and drift). Some later reactivation if the underlying structures probably took place from the pathopoulos, 1996). It is likely that this uplift gives rise to the relatively elevated situation of the evaporite structure soft the Salt Member beneath this contact varies and is the principal control on the seams



Figure A5. Typical geological column for the Kola area from surface to the (Chela/Coccobeach) sediments below the evaporite rocks, as intersected in EK\_13 at Kola. On the right is a close-up of the upper part of the 'salt' hosting the important seams discussed in text. Note: in this hole the Hangingwall seam is also preserved and is sylvinite. The Upper and Lower seams are carnallitite.



Figure A6. Typical Cross-section through the Kola deposit, several km to the north of EK\_53 and EK\_54. It is expected that the geological setting and model is very similar. Note the 4 x vertical exaggeration. Sylvinite shown in red. Carnallitite in green.

JORC Criteria	JORC Explanation	Commentary
16. DRILL HOLE INFORMATION	<ul> <li>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: <ul> <li>easting and northing of the drill hole collar</li> <li>elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar</li> <li>dip and azimuth of the hole</li> <li>down hole length and interception depth</li> <li>hole length.</li> </ul> </li> <li>If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case.</li> </ul>	<ul> <li>The borehole collar positions of the holes are provided in Table 3 of the announcement, along with the final depth. Holes were drilled vertically and no significant deviation was reported in drillhole surveys. Positions of the hole in relation to other holes is shown in Figure 1 of the announcement.</li> <li>Additional historical holes have been located in the field, in the area east of EK_54 and it is interpreted from limited information available that they contain further intersections of Sylvinite and Carnallitite, Hangingwall Seam, Upper Seam and Lower Seam but depths, seam thickness and mineralogy need to be confirmed by drilling. The information does however support the likely continuation of widespread Sylvinite in this area, and that the nature of the mineralisation as described in section 15 and illustrated in figure A5 is likely to be similar. This information corroborates the findings of the report.</li> </ul>
17. DATA AGGREGATION METHODS	<ul> <li>In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (e.g. cutting of high grades) and cut-off grades are usually Material and should be stated.</li> <li>Where aggregate intercepts incorporate short lengths of high grade results and longer lengths of low grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail.</li> <li>The assumptions used for any reporting of metal equivalent values should be clearly stated.</li> </ul>	<ul> <li>The grade of the intersections in EK_53 and EK_54 were determined using an area-under-the curve method of conversion of API data for the full width of the mineralised zone (as described in section 6) so no weight averaging was required.</li> <li>No selective cutting of high or low grade material was carried out as is deemed unjustified given the flat to gently dipping layered massive nature of the potash and absence of localised high grade patches.</li> <li>No metal equivalents were calculated.</li> </ul>
18. RELATIONSHIP BETWEEN MINERALISATION WIDTHS AND INTERCEPT LENGTHS	<ul> <li>These relationships are particularly important in the reporting of Exploration Results.</li> <li>If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</li> <li>If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (eg 'down hole length, true width not known').</li> </ul>	• The sylvinite in EK_54 is perpendicular to the core axis and therefore the intersection is within 5% of the true width and so is reported as the true width. As stated in section 10 above, for EK_53 the reported interval has been corrected for an observed 22 degree dip of the seam.
19. DIAGRAMS	<ul> <li>Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views.</li> </ul>	• All relevant diagrams are provided, including maps, tables, lithological logs.
20. BALANCED REPORTING	• 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.	• All relevant exploration data is reported. The reporting is balanced and not misleading in any way.

JORC Criteria	JORC Explanation	Commentary
21. OTHER SUBSTANTIVE EXPLORATION DATA	<ul> <li>Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.</li> </ul>	• The thickness of the rocksalt between the Sylvinite and the anhydrite member in EK_53 is 21.7 m which is in excess of the minimum requirement of 15 metres for mining. In EK_54 this interval is 13.5 metres so would need consideration; the minimum salt-back is under review for the DFS currently underway for Kola, it may be shown that it can be reduced in certain areas.
22. FURTHER WORK	<ul> <li>The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).</li> <li>Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.</li> </ul>	<ul> <li>As mentioned in section 15, the geological model for Kola is one of seams that gently undulate; as a result, laterally the seams become truncated or revert to carnallitite, over a greater or lesser distance depending on the controlling 'geometries' at any particular point within the deposit. It should be assumed that that this will be the case in the area of EK_53 an EK_54. In order to model this, additional drilling and new seismic data would be required, potentially supporting the delineation of mineral resources. There is no plan currently for this work.</li> <li>The samples for EK_53 and EK_54 will be submitted to the laboratory for analysis and the results expected within 6 weeks thereon; there is a high degree of confidence the assay data will be very similar to the API-derived KCI grades.</li> </ul>

#### REFERENCES

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