

# IDENTIFICATION OF A THIRD POTASH SEAM AND FURTHER INCREASE IN THE EXTENT OF THE KOLA DEPOSIT FOOTPRINT.

## All assay results for inclusion in the Phase 2 resource upgrade received.

**Perth, Australia 24 April 2012 – Elemental Minerals Ltd.** (ASX, TSX: ELM) ("Elemental" or "the Company") is pleased to announce that it has identified high grade potash in a 3<sup>rd</sup> seam at its Kola Deposit further increasing the extent of the footprint. The company is also pleased to report that all assay results from the Phase 2 drilling programme, scheduled for inclusion in the updated resource estimate of the Kola Deposit (Fig 1), have now been received. Results include high-grade (sylvinite) mineralisation in a seam previously known to contain only lower grade (carnallite) mineralisation located approximately 45m below the Lower Seam.

## HIGHLIGHTS:

- Intersections from EK\_32 include:
  - o 4.65m at 18.01% K<sub>2</sub>O (28.53% KCI) from 289.87m in the newly identified Footwall Seam (FWS)
- Intersections from EK\_33 include:
  - o Upper Seam: 3.82 m at 22.51% K<sub>2</sub>O (35.64% KCI) from 272.06m
  - o Lower Seam: 5.64 m at 10.89% K<sub>2</sub>O (17.25% KCI) from 278.91m
- Intersections from EK\_35 include:
  - o 5.27m at 17.85% K<sub>2</sub>O (28.27% KCI) from 264.03 in the newly identified Footwall Seam (FWS)
- Intersections from EK\_36 include:
  - o Upper Seam: 4.65 m at 19.16% K<sub>2</sub>O (30.35% KCI) from 281.10m

These results will be the last that will be included in the Resource Estimate update. All data is currently compiled and validated for integration ready for the delivery of the updated Kola Deposit Mineral Resource estimate.

The Company has completed a total of 36 boreholes (Phase 1 and 2) for a total of 6,427m, of which 4 stopped short of the ore horizon due to in-hole technical problems (Figure 2). Of the 32 successful holes only 3 do not contain a significant potash interception (EK\_02, EK\_16, EK\_25). Of the 29 boreholes that reached their target depth and contain significant potash mineralisation, complete assay results have been received for all but 3 boreholes; EK\_24 samples are undergoing geotechnical test-work and EK\_22 and EK\_36 Lower Seam sample submission is pending.

Interpretation of downhole geophysical data, geological logs and assay data have identified that sylvinite mineralisation in boreholes EK\_11, EK\_18, EK\_32 and EK\_35 is hosted by a seam at a stratigraphic position approximately 45 metres lower than that of the Lower Seam. This 'new' seam has been named the Footwall Seam (FWS). EK\_18, EK\_32 and EK\_35 are located on the north and north-western extent of drilling and EK\_11 is located half-way along the eastern extent of drilling (Figure 2). Where the FWS is present as sylvinite mineralisation, the Upper and Lower Seams are interpreted to have been removed.

The sylvinite FWS provides additional high-grade potash intersections that could contribute to the resource and is a target for potential resource expansion. Material from the FWS will be subject to metallurgical and geotechnical test-work.

The sylvinite mineralisation within the principal target horizons (Upper and Lower Seams) remains open in both the southern and northern sectors of the Kola deposit.

Based on these and previous results, the Company believes it remains on track to achieve the Phase 2 Exploration Target<sup>1</sup> of between 320 million tonnes and 1.08 billion tonnes of potash mineralisation grading between 19%  $K_2O$  (30.15% KCI) to 21%  $K_2O$  (33.33% KCI).

Table	1:	Assay	<u>returns</u>	

Hole	Zone	From (m)	To (m)	True Width (m)	% K <sub>2</sub> O	% KCI
EK_32	Footwall Seam	289.87	294.52	4.65	18.01	28.53
EK_33	Upper Seam	272.06	275.88	3.82	22.51	35.64
EK_33	Lower Seam	278.91	284.55	5.64	10.89	17.25
EK_35	Footwall Seam	264.03	269.30	5.27	17.85	28.27
EK_36	Upper Seam	281.1	285.75	4.65	19.16	30.35
EK_36	Lower Seam	288.98	297.70	8.72	pending	

Commenting on these results Elemental's CEO, Iain Macpherson stated: "The discovery of a new seam is extremely exciting in the development of this project. While we realise that we will have to complete more drilling and test work on this seam and it will not be included in our pre-feasibility study due for release later this year, the identification of a new seam shows the growth potential of our deposit. I am pleased that we have been able to meet our tight deadlines on all our assay results and I look forward on commenting on our resource update shortly."

Hole	East-WGS84	North-WGS84	RL	Depth	Azimuth	Dip	Assays
EK_32	795475.70	9550547.55	18.20	302.3	0	-90	Reported
EK_33*	794433.54	9548340.41	25	322.3	0	-90	Reported
EK_35*	795573	9546516	25	278.3	0	-90	Reported
EK_36*	796809	9544911	25	353.3	0	-90	Reported

#### Table 2: Drill hole coordinates

\*Handheld GPS position only.

#### Sampling and Analyses

Drill core samples (PQ core diameter sizes) are split in half by a diamond saw cutting machine at the project site. The half split samples, each weighing about three to seven kilograms, are collected at an average interval of 0.3 to 1.0 metre. The samples were processed and analysed by Genalysis, Perth, Australia. Sample preparation and analysis is done by Genalysis. Potassium, Sodium, Calcium, Magnesium, Chlorine, and Sulphur were analysed by ICP-ES. Routine international-standard QA/QC procedures were used by Genalysis. One of the six elements analysed are reported here: potassium (K) and its molecular equivalent of Potassium oxide (K<sub>2</sub>O, by multiplication with a factor of 1.204). The detection limit for K is 0.001%.

#### -ENDS-

<sup>&</sup>lt;sup>1</sup> The potential quantity and grade of the Exploration Target is conceptual in nature, there has been insufficient exploration to define a Mineral Resource and it is uncertain if further exploration will result in the determination of a Mineral Resource.

#### About Elemental Minerals

Elemental Minerals Limited is an advanced mining exploration and development company that aims to grow shareholder value through its 93%-owned Sintoukola Potash Project on the Republic of Congo coastline. Elemental Minerals is dual listed on the Australian Stock Exchange and the Toronto Stock Exchange under the symbol ELM. For more information, visit <u>www.elementalmineralsltd.com</u>

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#### Mineral Resource Summary - Kola Deposit of Sintoukola Project

- The Sintoukola Project's Kola deposit currently contains 362 Mt Indicated Mineral Resources and 442 Mt Inferred Mineral Resources, with an average grade of 19.5% K<sub>2</sub>O (30.8% KCI) and 19.6% K<sub>2</sub>O (31.0% KCI) respectively, at a 15.0% K<sub>2</sub>O cut-off grade.
- Within such Mineral Resources, the upper seam of the Kola deposit contains 229 Mt Indicated Mineral Resources and 289 Mt Inferred Mineral Resources, grading at 21.3% K<sub>2</sub>O (33.8% KCI) and 21.4% K<sub>2</sub>O (33.9% KCI) respectively, of which the upper seam is a higher-grade sylvinite only zone.
- The upper seam has a high-grade domain containing 151 Mt Indicated Mineral Resources and 186 Mt Inferred Mineral Resources, grading at 25.1% K<sub>2</sub>O (39.7% KCI) and 25.2% K<sub>2</sub>O (40.0% KCI) respectively, at a 20.0% K<sub>2</sub>O cut-off grade of pure sylvinite in a largely continuous mineralized horizon. This deposit is contained within 28 km<sup>2</sup> of the current 1,400 km<sup>2</sup> license area and current exploration activities aim to test a much larger area of the license to further expand resources.
- The Mineral Resources are reported in accordance with the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves 2004 Edition (The JORC Code), which is consistent with Canadian Institute of Mining, Metallurgy and Petroleum (CIM) Definition Standards 2005 and hence complies with NI 43-101.

#### Competent Person / Qualified Person Statement:

Information in this report that relates to Exploration Results or Mineral Resources is based on information compiled by Simon Dorling and Jeff Elliott, of CSA Global Pty Ltd, the Company's geological consultants. Dr. Dorling and Mr. Elliott are members of the Australian Institute of Geoscientists (MAIG) and have sufficient experience relevant to the style of mineralisation and type of deposit under consideration and to the activity they are undertaking to qualify as a Competent Person as defined in the 2004 Edition of the "Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves" (the JORC Code). Dr. Dorling and Mr. Elliott are also Qualified Persons for the purposes of Canadian National Instrument 43-101 and they consent to the inclusion in this report of the Information, in the form and context in which it appears.

Further information respecting Elemental's Sintoukola Project is contained in a technical report entitled "NI 43-101 Technical Report, Sintoukola Potash Project, Republic of Congo" prepared by Neal Rigby of SRK Consulting (U.S.), Inc. and Messrs. Simon Dorling, Jeff Elliott, Andrew Scogings and Peter Davies of CSA Global Pty Ltd. for the Company dated August 1, 2011 with an effective date of June 10, 2011 (the "Technical Report"). The Technical Report can be accessed on the Company's profile on SEDAR.

### **Forward-Looking Statements**

This news release 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, 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 news release 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.



Figure 1: Location of Sintoukola Potash Permit and historic drill hole locations.



Figure 2: Phase 1 and 2 Drill Hole Locations showing EK\_32, EK\_33, EK\_35 and EK\_36