Elemental Minerals Announces Excellent Results for the Dougou Potash Project Scoping Study

Phase 1 capex of US$430 million

Unlevered, after-tax $NPV_{10\%}$ of US$880 million and IRR of 21.7%[1]

Perth, Australia, 17 February 2015 – Elemental Minerals Ltd. (ASX: ELM) ('Elemental' or 'the Company') is pleased to announce the Scoping Study completed by ERCOSPLAN Geotechik and Bergbau mbH (ERCOSPLAN) for the Dougou Project in the Republic of Congo (RoC).

Highlights

- Key results from the Scoping Study are presented in the table below:

Phase 1 MoP Production	400ktpa
Phase 1 Capital Expenditure (including 20% contingency)	US$430m
Average Life of mine operating costs (including 3% contingency)	US$68/t MoP
Life of mine based on measured and indicated resource	47 years
Internal Rate of Return (IRR) [1]	21.67%
After Tax NPV 10% [1]	US$880m

- First production in 2019
- Phase 1 free cash flows (approximately US$100m/annum) potentially allow for the self-financing of Phase 2 and subsequent Phase 3 capital expenditures
- Unleveraged Phase 1 capex of US$430m. Appropriate debt-equity ratios will be considered, further reducing the initial project equity requirements
- The recently announced[2] 1.1 billion tonne Measured and Indicated Resource @ 20.6% KCl underpins a 47 year mine life
- ERCOSPLAN has recommended that the project be progressed to Feasibility Study. Minimal additional resource work and field data acquisition will be required.

The estimated mineral resources underpinning the Scoping Study production targets and economic analyses have been prepared by ERCOSPLAN, competent persons in accordance with the current JORC Code 2012 Edition and the current ASX Listing Rules.

The Scoping Study referred to in this report is based on low-level technical and economic assessments, and is insufficient to support estimation of Ore Reserves or to provide assurance of an economic development case at this stage, or to provide certainty that the conclusions of the Scoping Study will be realised. Production data after 2067 is based on Inferred Mineral Resource.

A summary of the project design and results of the Scoping Study are provided below and the full Report is available on the ELM website.

[1] Based on ramp up from Phase 1 to Phase 3 within 8 years
[2] Refer to announcement of 9 Feb 2015

Commenting on the results of this study, Elemental's CEO John Sanders stated: "*The very favourable geological attributes coupled with the location and infrastructure in the area, provide a rare opportunity to develop a potash mine with low capital requirements and low operating costs relative to potash projects elsewhere. A mining operation at Dougou would be placed at the very low end of the global operating cost curve and is located 5600km from the key Brazilian market (compared to > 13000km from Vancouver). Dougou compliments ELM's Kola Sylvinite Project (573 Mt Measured and Indicated Resources grading 33.1% KCl), which is located less than 15 km away, and further underscores our plans to see the Sintoukola Permit becoming a centre for low-cost potash production. Infrastructure synergies between the two projects will be pursued in the next study phase.*"

1. Introduction

As a result of ELM's strategy to increase the focus on the remainder of the Sintoukola Permit[3], evidence of significant and rich potash ore intersections was found in historic exploration data of the Dougou Deposit ("Dougou"). Further drilling and investigation led to the announcement of Mineral Resources at Dougou on 9th July 2014. These were expanded and upgraded on 9th February 2015. The extent and characteristics of the resource indicated that this area could be the focus of an initial small-capacity, quick-to-production carnallite solution mine, which could subsequently be expanded in capacity.

ELM therefore requested ERCOSPLAN to undertake a scoping study for the Dougou deposit. The study objective was to provide design and cost estimates for the brine field and process plant, define and estimate requirements for further infrastructure and determine the economic viability of the Project by means of an economic evaluation. Production is to be undertaken in three distinct project phases:

- Phase 1: 400ktpa K60 MoP (0% granular)
- Phase 2: 800ktpa K60 MoP (67% granular) ➔ to start production 5 years after Phase 1.
- Phase 3: 1,200ktpa K60 MoP (89% granular) ➔ to start production 3 years after Phase 2.

2. Geology and Resource

The reader is referred to the recent Dougou Mineral Resource announcement[4] for a detailed description of the geology and resource estimation.

The potash seams are hosted by the Loeme Evaporite Formation, comprising a 400-500m thick Salt Member overlain by a 10-20m thick Anhydrite Member. Within the Loeme Evaporite Formation several evaporite cycles have been identified, all of which contain variable amounts of potash in the form of flat-lying to subhorizontal extensive layers (also referred to as 'seams' or 'horizons' of carnallitite). The seams hosting the Dougou Deposit are within cycles 8 and 9.

The carnallitite consists of an interlayering of Carnallite rich layers (70%-91% Carnallite) with lesser Halite (NaCl) and minor amounts (<1% combined) of Anhydrite ($CaSO_4$) and insoluble material. In the Dougou area, four potentially economic and extractable carnallitite seams make up the Mineral Resource, all within an interval of less than 100m thickness, and 400-600m below the surface. The seams have an average and combined thickness of 35m. The Mineral Resources for Dougou are shown in Table 1.

[3] Refer to announcement 1 May 2014
[4] Refer to announcement 9 February 2015

Table 1 Measured, Indicated and Inferred Potash Mineral Resource for the Dougou Deposit

CATEGORY	Potash Seam	Million Tonnes carnallitite	average grade KCl %	average grade K2O %	Milliontonnes contained KCl
Total Measured	All seams	148	20.1	12.7	30
Total Indicated	All seams	920	20.7	13.0	190
Subtotal Measured + Indicated	*All seams*	*1068*	*20.6*	*13.0*	*220*
Total Inferred	All Seams	1988	20.8	13.1	413

This Mineral Resource Estimate is effective as of 9 February 2015 and was completed by ERCOSPLAN. A 5% allowance for structure has been removed from the Estimate. No thickness and grade cut-off was applied as all intersections are > 7 m and seams have abrupt grade (lithological) upper and lower contacts. Bulk density for each seam is between 1.64 and 1.81 (t/m3). Insoluble material plus anhydrite content is <1% throughout. Classification of Resources is described in full in the Company's announcement of 9/2/2015 and summarised: Measured: 750 m radius around a drill hole intersection if a correlation is possible on 2 sides to other comparable potash intervals. Indicated: 1,500m radius around a drill hole intersection if a correlation is possible on 2 sides to other drill holes with a comparable potash intervals. Inferred: 3,000m radius around an intersection if a correlation is possible on 2 sides to other comparable potash intervals. Table entries are rounded to the appropriate significant figure. Mineral Resources are not Mineral Reserves and do not have demonstrated economic viability. The estimate of Mineral Resources may be materially affected by environmental, permitting, legal, marketing, or other relevant issues.

3. Mining Method

The ore will be mined by solution mining. Water is pumped down a well to dissolve the carnallitite, resulting in production of a K, Mg and Na mineralized brine. This brine is continuously displaced by further pumping and transferred to the brine processing plant for processing to a MOP product. To increase KCl content in the brine, a hot solution mining operation is planned using dual well caverns, with approximately 50m cavern radius and 70 m between the cavern wells.

For Phase 1 production the number of operating caverns will be 12. In order to maintain steady state production, 2.5 caverns have to be mined out annually, requiring the drilling of 5 new solution mining wells per year. Completing expansion to the full Phase 3 operation will increase the number of operating caverns to 22 in Phase 2 and 32 in Phase 3, with 5 and 7.5 caverns respectively being depleted annually. The pipeline network required for the solution mining operation has been designed for a 400ktpa operation, and will be duplicated for each subsequent production phase.

4. Processing Method

The brine produced is processed at a centrally located process plant facility. The processing concept continually adds Carnallite (produced during a later stage) to the incoming brine, which results in the precipitation of Halite and Sylvite. The solid slurry is separated from the brine and processed using hot leaching and KCl crystallisation to produce a K60 product. The K60 product is dried and during Phase 2 and Phase 3 partially compacted before being transported to the storage facility. The brine from the Carnallite decomposition is evaporated to produce Carnallite, which is recycled to the Carnallite decomposition stage. Remaining $MgCl_2$ brine and solid NaCl will be disposed off in deep injection wells or mined out caverns.

Phase 2 and Phase 3 are each planned with the installation of 532ktpa compaction capacity to produce an increasingly larger volume of granular product in each phase.

The process has a conservative recovery ratio of 90.0% of KCl from the incoming brine, transformed to product. It is planned to undertake full core dissolution and process test work in the next study phase.

5. Supporting Infrastructure

The Dougou Deposit is situated approximately 12 km from the Atlantic Ocean. Access to the Dougou Project (near the village of Yanika) is via National Highway 5 (RN5) from Pointe Noire to the village Tchizalamou (70 km), which crosses the Sintoukola permit's southern boundary (Figure 1) and then via the RN6 to the project site. The RN5 is a 50km section of dual lane bitumen road approximately 7 m in width with hard shoulders from Pointe Noire to the village of Tandou Youmbi. The remaining section of the RN5 is unpaved, a distance of approximately 10 km.

Electrical power and steam for the operation are generated from gas turbines and a gas boiler system. Gas to operate these facilities will be sourced by means of a 70km long gas pipeline joining the main existing pipeline in the north of Pointe Noire.

The required amounts of water for the operation are obtained from groundwater for Phase 1. Ocean water will be used for Phase 2 and Phase 3 solution mining, whereas the groundwater is used as process water in the plant.

Maintenance and office facilities for the operation will be built at the plant site. The existing exploration camp will be upgraded for the personnel working at the operation.

Several ROC mining companies are pursuing the construction of an export facility at Pointe Indienne for the direct loading of bulk commodities such as potash, phosphate and iron ore. ELM is in discussion with one of these companies to share joint usage of a common facility at Pointe Indienne. This Scoping Study assumes ELM will make use of a containerised solution to store and transport MoP to this facility during all three phases of the project.

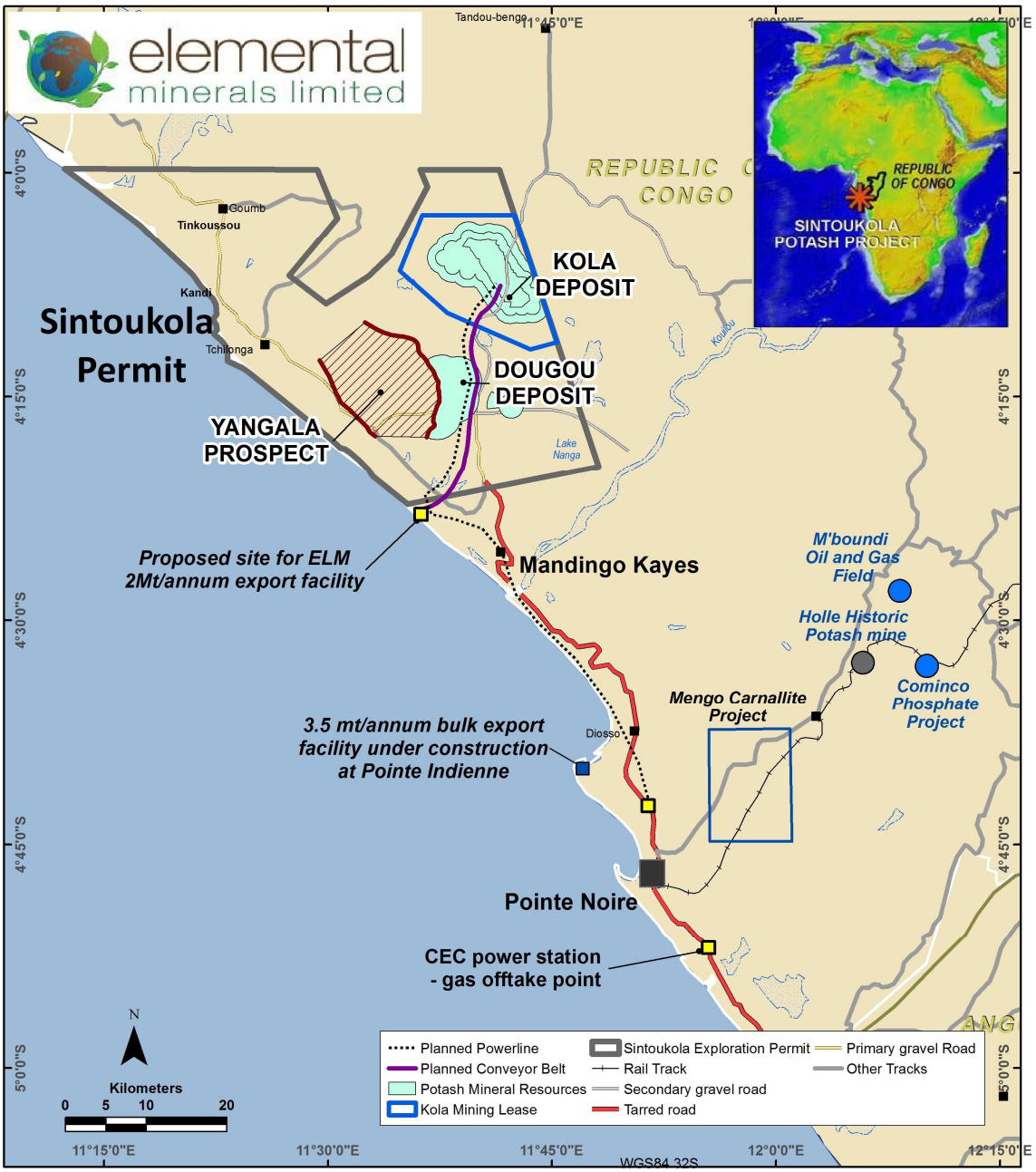

Figure 1: Location of the Dougou Project within the Sintoukola Permit and in relation to available infrastructure

6. Cost Estimates

All estimated capex has been based either on European and American prices from 2013 and 2014 comparable projects, or, where applicable, on the detailed work undertaken for the Kola project. At this stage of the project, the accuracy of the capex estimation is about ± 40%, due to uncertainties in engineering as well to uncertainties in cost estimates.

In addition to the direct capex, variable percentages for indirect capex have been applied to account for:

- Engineering, Procurement and Construction Management (EPCM)
- Owner Costs
- Provisory Facilities
- Start Up costs
- Insurance

A contingency of 20% was applied to the estimate to account for project design uncertainties, which are typical at this phase. This number was selected to reflect ERCOSPLAN's experience with operations of this type, location and size, as well as the detailed understanding of local conditions resulting from the Kola project.

The overall capex for Phase 1, Phase 2 and Phase 3 is summarized in Table 2.

Table 2 Dougou Capex Estimate

Capex US$ '000s	Phase 1	Phase 2	Phase 3
Brine Field	33 708	28 491	24 774
Processing	185 723	266 316	266 464
Process Equipment	65 039	65 385	65 615
Compaction	-	34 890	34 890
Civil & Structural	73 622	96 206	96 065
Electrical, Misc, Installation	47 062	69 836	69 895
General Infrastructure	76 490	36 270	19 168
Ancillary Buildings & Employee Facilities	1 684	247	263
Gas Supply	32 060	-	-
Power Plant + Steam	30 915	24 210	17 505
Water Supply	4 100	10 413	-
Product Export	6 332	-	-
Brine Discharge	1 400	1 400	1 400
Direct Cost	295 921	331 077	310 406
Indirects	62 143	44 695	41 905
Contingency	71 613	75 155	70 462
Total	429 678	450 927	422 772

Sustaining capex is calculated separately for each phase and at different stages of the project. The costs consider drilling of new wells, equipment replacement on the well field, loading equipment and overhaul of process plant equipment. Incremental sustaining capex for each phase is summarized in Table 3.

Table 3 Sustaining Capex Estimate

Sustaining Capex(million US$/annum)	Phase 1	Phase 2	Phase 3
Brine Field Extension from start of production (Year 1)	6.41	3.04	3.04
Sustaining Capex in Years 2-5	3.68	3.04	3.04
Sustaining Capex in Years 5-9	5.04	4.93	4.90
Sustaining Capex from Year 10 onwards	5.48	5.19	5.12

Operating costs are divided into direct operating costs and indirect operating costs. The following factors have to be taken into account for an estimation of the direct opex:

- personnel costs
- utility costs
- consumables
- maintenance
- miscellaneous cost (e.g. brine disposalcosts).

Further costs are indirect costs and contingency. Opex for each phase is given in Table 4.

Table 4 Total Operating Costs

Annual Operating Cost (in million US$)	Phase 1	Phase 2	Phase 3
Personnel	5.24	5.95	6.61
Utilities	8.33	16.66	24.96
Maintenance	3.45	8.02	12.03
Consumables	3.61	5.05	6.5
Transportation to Port	7.33	14.58	21.78
Miscellaneous	0.48	0.85	1.21
Indirect opex	2.51	3.36	4.18
Contingency	0.93	1.63	2.32
Total	31.90	56.12	79.60

Table 5 shows the unitized operating costs per discipline. Royalties, sustaining capex and shipping have been added for illustrative purposes to show an all-in operating cost for the landed potash in Brazil.

Table 5 Unitised Operating Costs

US$/t MoP	Phase 1	Phase 2	Phase 3	LOM Average
Brine Field	4.76	3.89	3.59	3.70
Processing	13.36	12.82	12.62	12.72
Power and Steam	21.39	20.94	20.38	20.55
Infrastructure	8.59	5.08	3.88	4.28
Miscellanous	1.20	1.07	1.01	1.03
Transport	18.33	18.23	18.15	18.22
G&A	9.78	6.07	4.77	5.19
Contingency	2.32	2.04	1.93	1.97
Total	79.74	70.14	66.34	67.67
Average LOM Royalty	14.18	14.18	14.18	14.18
Opex + Royalty	93.92	84.33	80.52	81.85
Sustaining Capex	12.59	11.96	11.72	11.72
Opex + Royalty + Sustaining Capex	106.51	96.29	92.24	93.57
Freight	13.00	13.00	13.00	13.00
Landed Cost in Brazil	119.51	109.29	105.24	106.57

7. Economic Evaluation

Based on the above capex, opex and sustaining capex as well realistic ramp up assumptions, a Discounted Cashflow Model (DCFM) has been developed using the following input assumptions:

- A real long term product price of USD$380/t FOB Vancouver was determined in a potash price study undertaken by ERCOSPLAN as part of this Scoping Study. A premium of USD$15/t for granular product and a USD$25/t component for transportation is added to arrive at a price of US$420//t CFR Brazil.

- A transportation cost of USD$13/t has been used for transport from RoC to Brazil to obtain a Pointe Noire FOB price.
- No allowance for debt finance was made in the DCFM.
- The fiscal regime assumptions are based on the terms of the mining convention signed between the ROC government and the Zanaga Iron Ore company in August 2014. ELM believes these terms to be realistic and achievable. The fiscal terms assumed in this study are as follows:
    - A 15% corporate income tax
    - A tax holiday of five years per phase beginning with the first year of production from each phase
    - A computer royalty of 1% of the operating revenue
    - A mining royalty of a 3% on EBITDA
    - A free-carried interest of 10% was allocated to the ROC government
- For the present value calculation a real discount rate of 10% is used.

The project's economic results are robust, with an after-tax $NPV_{10\%}$ of UDS$880 million and an IRR of 21.7%. Figure 2 graphically demonstrates the project cash flows. The right hand axis demonstrates the MoP production, while the left hand axis shows annual capex and free cash flow. It can be seen that the free cash flow generated in Phase 1 is sufficient to fund the Phase 2 expansion and the Phase 2 cash flow is similarly sufficient to fund the Phase 3 expansion.

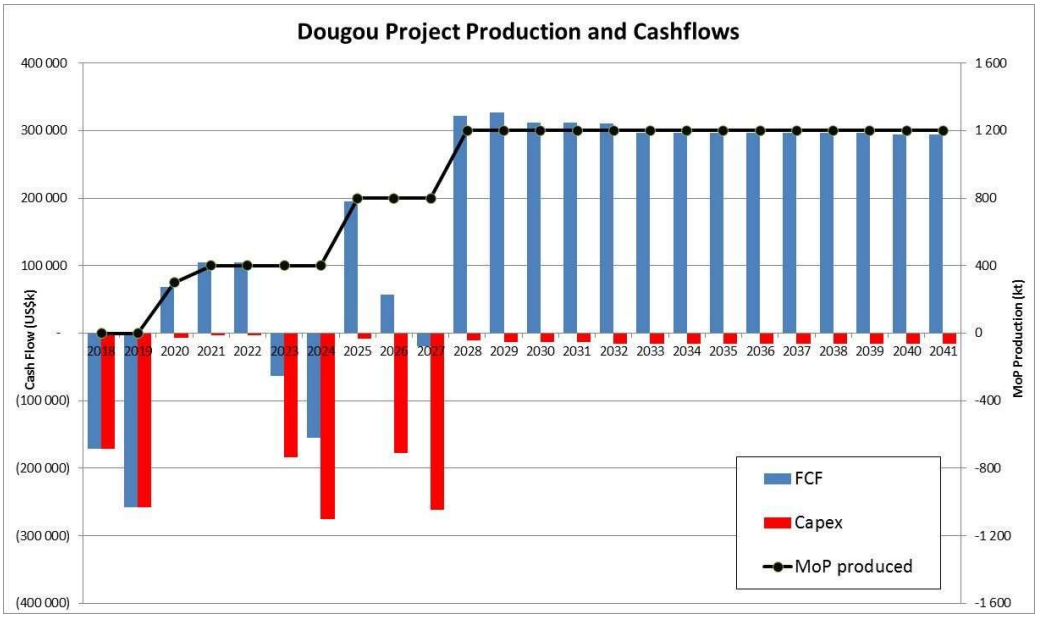

Figure 2: Dougou project phased expansions financed from Phase 1 free cash flow

8. Implementation Schedule

Figure 3 shows a graphic demonstration of the project timeline to production. It is expected that Phase 1 construction will take approximately two years, with preparation of the first solution mining wells in the second year. First production can be expected in H2 2019.

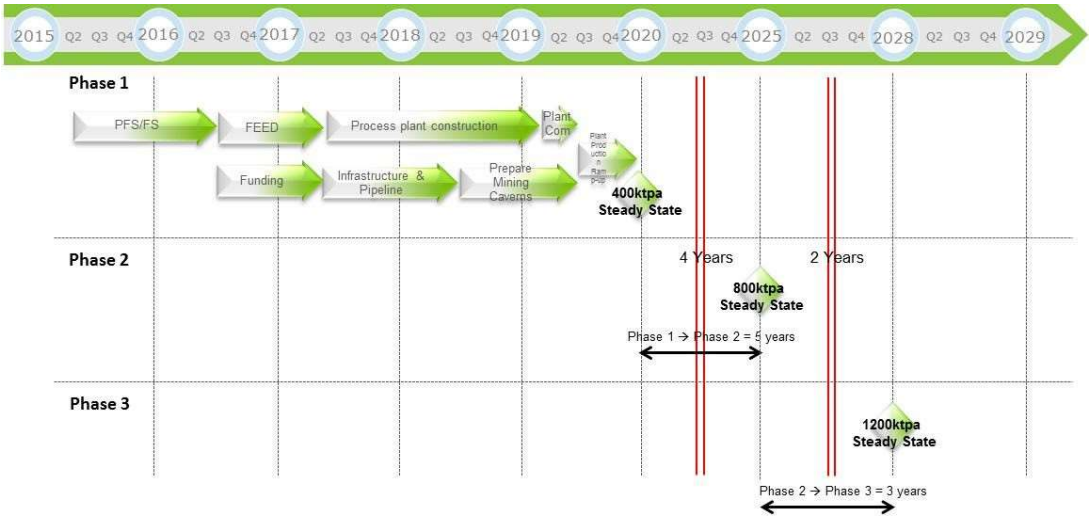

Figure 3: Graphic representation of the Dougou implementation schedule

9. Conclusions and Recommendations

ERCOSPLAN has demonstrated in this Scoping Study that the Dougou Carnallitite solution mining project is economically viable and can be brought into production with a low initial capital cost by global standards. Furthermore, the projected operating costs would make Dougou one of the lowest cost greenfields producers globally, particularly when viewed on a "landed cost" in Brazil basis. Evaluation of the solution mining process and the process design (both of which are based on established technologies) have shown that there are no fatal flaws in the project. The recommendation is therefore to continue the project to the feasibility study phase.

Competent Persons:

All scientific and technical information ("Information") in this press release is based on information approved by Sebastiaan van der Klauw, Eur Geol, PhD (ERCOSPLAN), who is independent of the Company and has sufficient experience to qualify as Competent Persons as defined in the 2012 Edition of the "Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves" (the JORC Code). He consents to the inclusion in this press release of the Information, in the form and context in which it appears.

About Elemental Minerals

Elemental Minerals Limited (ASX: ELM) is an advanced stage mineral exploration and development company whose primary asset is the 97%-owned Sintoukola Potash Permit in the Republic of Congo. ELM has three projects at varying development stages; all within the 1408 km^2 Sintoukola Permit.

Kola is a large sylvinite deposit, for which a Pre-Feasibility Study (PFS) defined Proven and Probable Reserves of 152 Mt of sylvinite ore with an average grade of 31.7% KCl[5] to be mined by conventional underground methods. A Mining License and ESIA approval for Kola were granted in August 2013[6]. The PFS has recently been updated by the Phased Implementation Study which has reduced the initial capital requirement for the project significantly while maintaining low operating costs[7]. The Company plans to commence its Definitive Feasibility Study (DFS) during this year.

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[5] SRK Pre-Feasibility Study, 17 September 2012

[6] ELM Announcement dated 15 August 2012

[7] ELM Announcement dated 23 October 2014

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% KCl[8]. A Scoping Study on the deposit has been completed and confirmed that a low capital, low operating cost, quick to production carnallite solution mine can be established at Dougou by 2019.

The Yangala sylvinite Prospect is immediately west of Dougou. At Yangala the Company has drilled two boreholes, both intersecting a potash seam of over 4m grading between 57 and 60% KCl[9]. An Exploration Target of 235 to 470 Mt grading 55 to 60 % KCl was announced on 27th January 2015.

Elemental's RoC Projects have the potential to be among the world's lowest-cost potash producers and their location near the Congolese coast of Central West Africa offers a transport cost advantage to key Brazilian and Asian fertilizer markets. Elemental's management team has a record of bringing quality African mineral projects to production. For more information contact us or visit www.elementalminerals.com.

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.

Contacts:

John Sanders	Leonard Math
Managing Director	Non-Executive Director
Tel: +27 82 445 5291	Tel: +61 403 464 396
john.sanders@elementalminerals.com	leonard@gdacorporate.com.au

Johannesburg Office: +27 11 469 9140

www.elementalminerals.com

[8] ELM Announcement dated 9 February 2015

[9] ELM Announcement dated 20 October 2014