Elemental Minerals announces maiden Mineral Resource for the Dougou Deposit

Inferred Resource of 1.29 billion tonnes of carnallitite grading 21.72 % KCl

Includes 520 million tonnes grading 24.58 % KCl within the Hangingwall Seam

The Resource occupies a small portion of the prospective area and is open in most directions

Sylvinite prospect identified west of the Dougou Deposit

Perth, Australia, 9th July 2014 – Elemental Minerals Ltd. (ASX: ELM) ('Elemental' or 'the Company') is pleased to announce the completion of the maiden Mineral Resource Estimate for a portion of the Dougou target (part of the Sintoukola Potash Project) in the Republic of Congo (RoC) and the identification of an extensive area prospective for sylvinite[1] mineralisation.

Highlights

- The Inferred Mineral Resource Estimate ('MRE' or the 'estimate') for Dougou is 1.29 billion tonnes grading 21.72% KCl, including 520 million tonnes grading 24.58% KCl within the Hangingwall Seam.
- The deposit is hosted by 3 near-horizontal carnallitite[2] seams (Hangingwall Seam, Upper Seam, Lower Seam) and between a depth of 400 and 600 metres. Available historic data indicates insoluble content of the seams is less than 0.3%.
- Globally, carnallitite seams typically grade between 12% and 20% KCl. At over 24% KCl, the Hangingwall Seam at Dougou is high grade for a carnallitite seam and is of significant thickness averaging 8.35 metres.
- Coupled with the grade and low insoluble content, the apparent continuity of grade and thickness and the gentle dip of the seams at Dougou, may provide key advantages for extraction by solution mining.
- The deposit is open and occupies less than 50 percent part of the Dougou Exploration Target (announced 7 May 2014) which is itself a small portion of the overall prospective area.
- A drilling programme designed to expand and increase confidence in the maiden MRE is to commence this week; crews are mobilized and final preparation of equipment and drill sites is underway.
- An area (named the Yangala sylvinite prospect) of approximately 10 by 7 kilometres in extent has been identified as being prospective for sylvinite and is a possible target for future drilling.
- The Dougou deposit compliments the Company's Kola sylvinite deposit located 15 km further inland which hosts Probable and Proven Reserves of 152 Mt grading 31.7% KCl [3].

---

[1] Sylvinite is a rock comprising predominantly of the secondary potash mineral sylvite (KCl) and halite (NaCl).
[2] Carnallitite is a rock comprising predominantly of the primary potash mineral carnallite ($KMgCl_3 \cdot 6H_2O$) and halite (NaCl).
[3] Source: NI 43-101 Technical Report, Sintoukola Potash Project, Sep. 17, 2012

Table 1. Inferred Mineral Resource Estimate for the Dougou Deposit at a 14% KCl cut-off grade

Seam	Million Tonnes	Density (g/cm3)	% KCl	Ave Thickness (m)
Hangingwall Seam	*520*	*1.61*	*24.58*	*8.35*
Upper Seam	*399*	*1.68*	*20.68*	*7.25*
Lower Seam	*366*	*1.72*	*18.81*	*6.51*
TOTAL	1,285	1.66	*21.72*	7.48

1. *This Mineral Resource Estimate is effective as of 20th June 2014.*
2. *Delineated exclusion zones and a further 15% of the tonnage have been removed from the Estimate.*
3. *A minimum thickness cut-off of 2 metres was applied.*
4. *Table entries are rounded to the second significant figure.*
5. *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.*
6. *Confidence in the estimate of Inferred Mineral Resources is not sufficient to allow the results of the application of technical and economic parameters to be used for detailed planning in Pre-Feasibility or Feasibility Studies.*

This estimate is for a relatively small portion of the western half of Elemental's Sintoukola Permit (Fig. 1) which is considered prospective for potash mineralisation. The location of the MRE was largely determined by the presence of a number of historic drillholes (with geological and grade data) of sufficiently close spacing to support the estimate (Fig. 2). Since the announcement of the Dougou Exploration Target (7 May, 2014), a large database of oil industry seismic data was acquired by Elemental (announced 16 May, 2014), which is considered a requirement for the reporting of the MRE.

The modelling and estimation of the resource was prepared by independent resource industry consultants CAE Mining Africa (CAE) and Elemental's geological staff. The MRE is reported in accordance with The Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (the "JORC Code", 2012 edition)

The important potash seams are the Hangingwall Seam, Upper Seam and Lower Seam and each may be carnallitite or sylvinite. Within the area of the maiden MRE these seams in all drillholes except K52 (and Elemental's 'twin'[4] drillhole ED_01) are carnallitite. These seams also host the potash resource at Kola, 15 kilometres to the northeast. At Kola they are largely of sylvinite.

The Yangala sylvinite Prospect has been identified to the west of the Dougou deposit (Fig.2), and may be the target of future drilling. Before initiating a sylvinite exploration programme, the Company is assessing the immediate carnallitite opportunity. The large size (and potential for expansion), reasonably assumed continuity and simple geometry of the Dougou deposit and the high grade of the Hangingwall Seam carnallitite relative to carnallitite seams globally, highlights the quality of the opportunity.

Commenting on the update, Elemental's CEO, Iain Macpherson stated: *"Though already large at 1.29 billion tonnes, the maiden Mineral Resource for Dougou is just a small portion of the potash we believe to be present within the Dougou section and the broader Sintoukola License, highlighting the global importance of this permit and the RoC for possible future global potash supply. We are confident that the Dougou drilling which is about to commence will expand the resource and allow partial conversion into the Indicated Resource category. The Yangala Prospect provides a further exciting opportunity to explore for Hangingwall Seam Sylvinite which typically grades between 50% and 60% KCl within the Sintoukola permit. The Dougou opportunity complements the Company's Kola sylvinite project some 15 km further inland and may have a positive impact on the economics of both projects."*

[4] A 'twin' drillhole is a hole drilled close (in this case 50 metres) away from an earlier drillhole, to confirm grade and geology of the original hole.

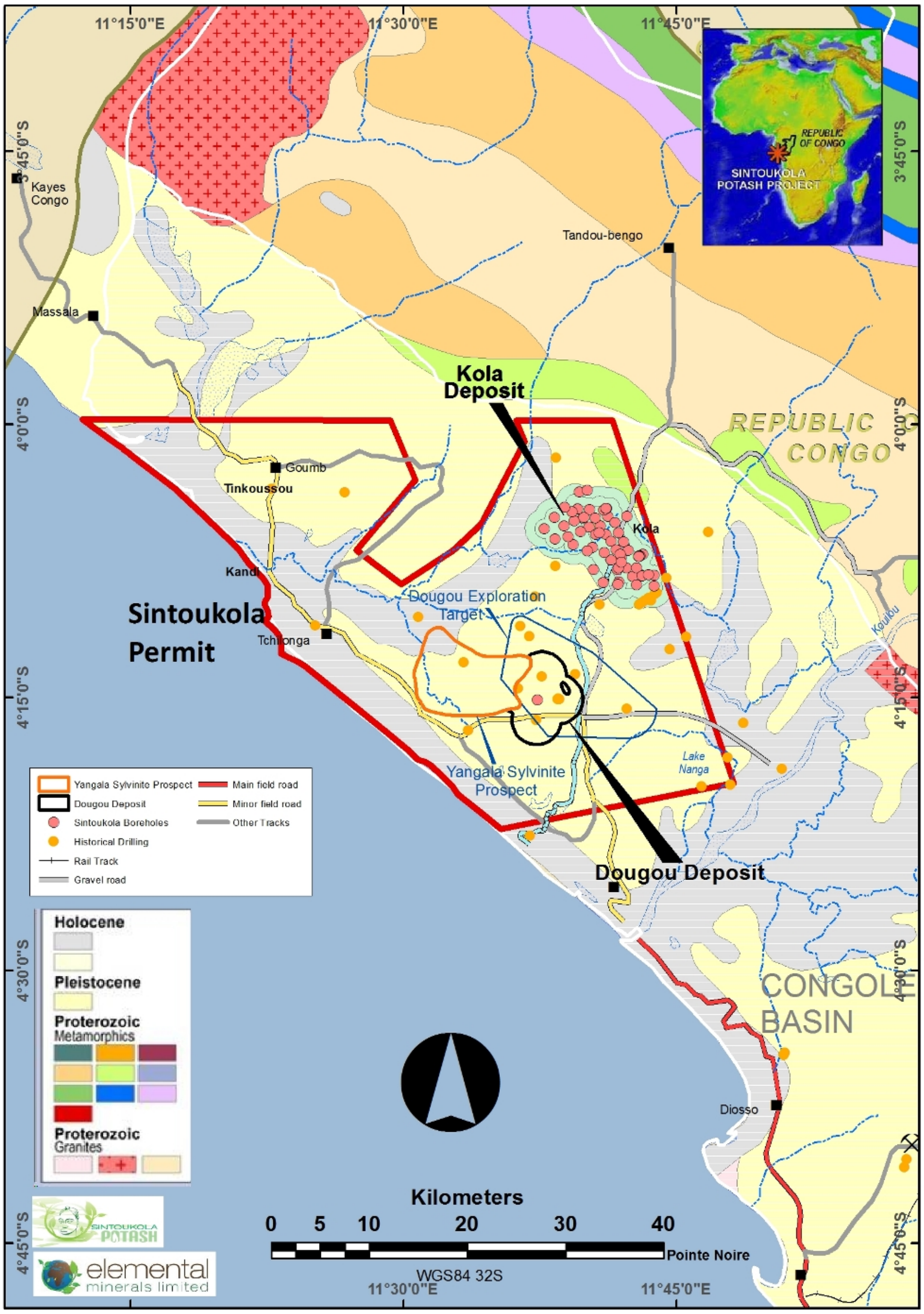


Figure 1. The Sintoukola Exploration Permit and the location of the Dougou deposit and Yangala sylvinite prospect

Drillhole data and a description of the data collection, data quality, geology and estimation methodology are provided in Appendix 1 and 2 and are summarized below.

<u>The Potash seams</u>

The deposit is hosted by three potash seams. From highest to lowest (stratigraphic position) these are: the Hangingwall Seam, the Upper Seam and the Lower Seam. The Hangingwall seam is 40 to 50 metres above the Upper Seam which is approximately 3 metres above the Lower Seam (Fig.3). The depth of the potash seams ranges from 400 to 600 metres. The average thickness of the seams is 8.35, 7.25 and 6.51 metres respectively for the Hangingwall Seam, the Upper Seam and the Lower Seam. Available historic mineralogical data indicates that the Hangingwall seam within the MRE is comprised 88 to 91% of the mineral carnallite and the Upper and Lower Seams approximately 65% and 75% carnallite respectively. The balance of the seams is halite, very small amounts of sylvite (<1%) and insoluble material (<0.3%).

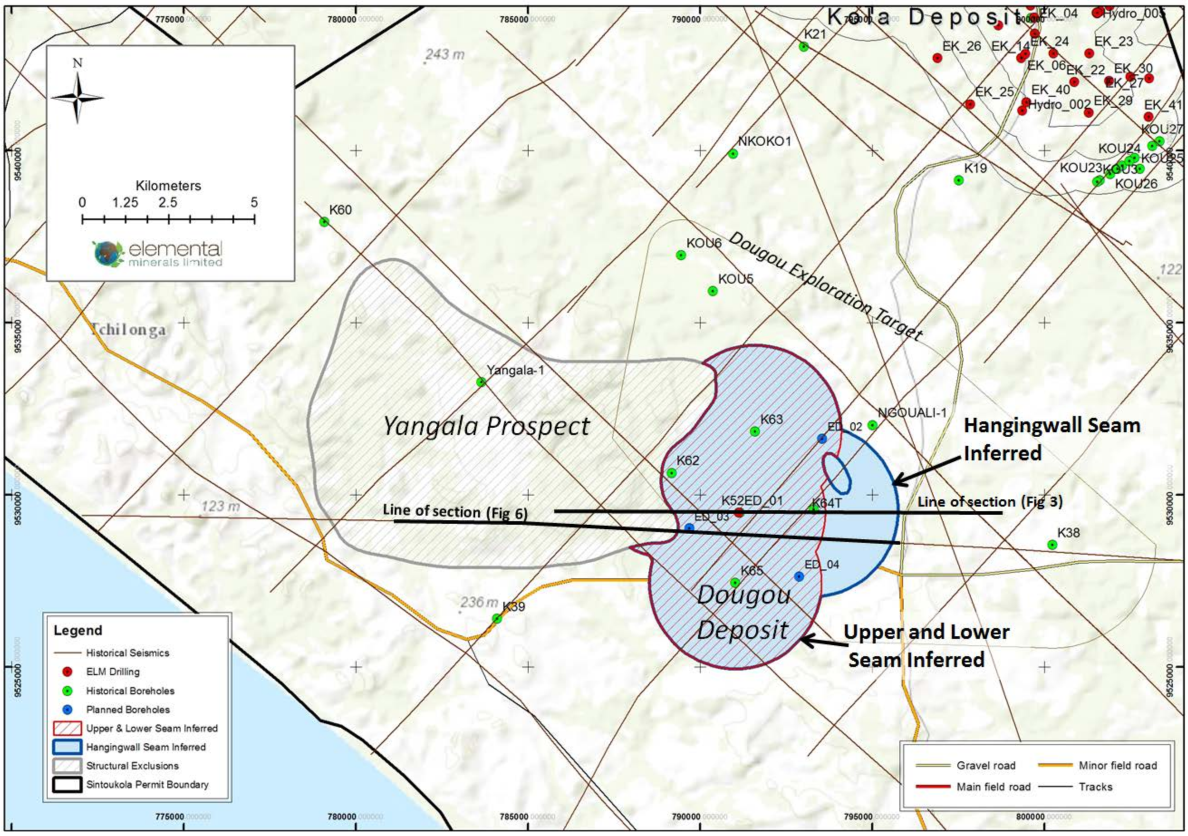


Figure 2. Map showing the MRE area for the Hangingwall Seam and the MRE area for the Upper and Lower Seam. The positions of the cross-section in figure 3 and 6 are shown. The 'Yangala Prospect' and the historic seismic lines are shown.

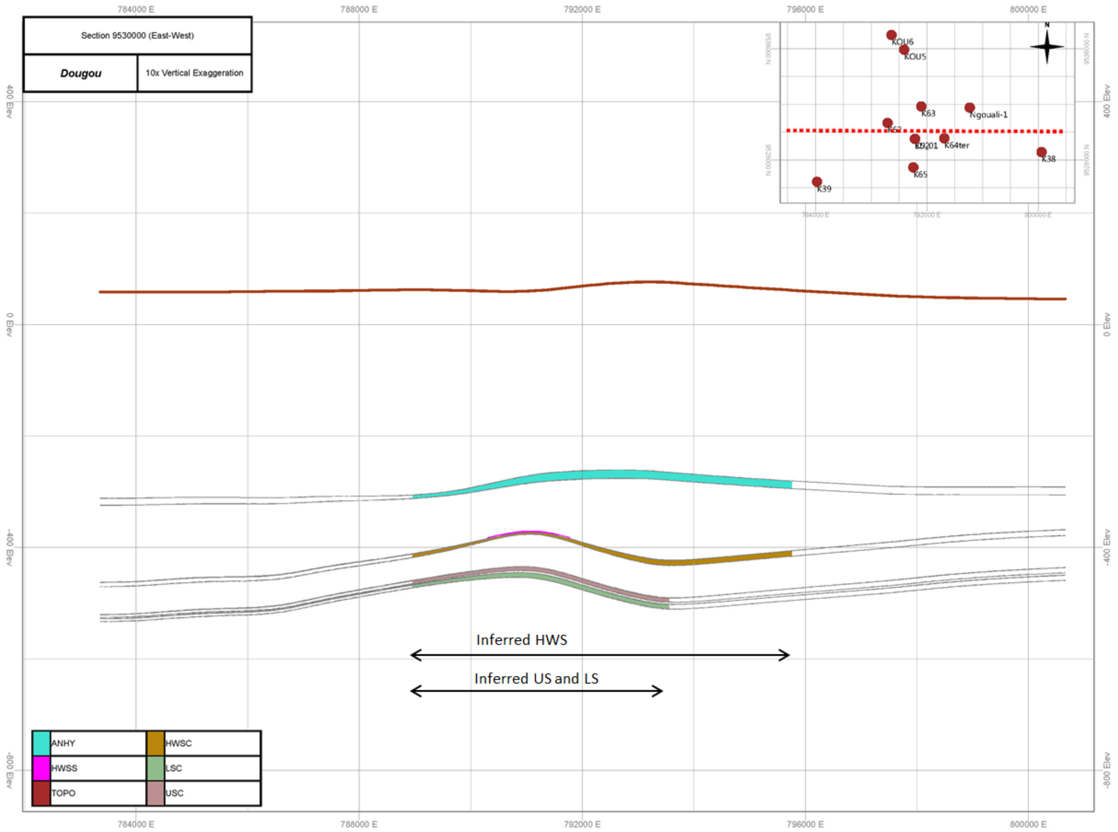


Figure 3. Cross-section through part of the Dougou deposit. Anhy = Anhydrite Sequence. HWSS = Hangingwall Seam Sylvinite. TOPO = surface. HWSC = Hangingwall Seam Carnallitite. USC = Upper Seam Carnallitite. LSC = Lower Seam Carnallitite. Note: a 10 x vertical exaggeration has been applied.

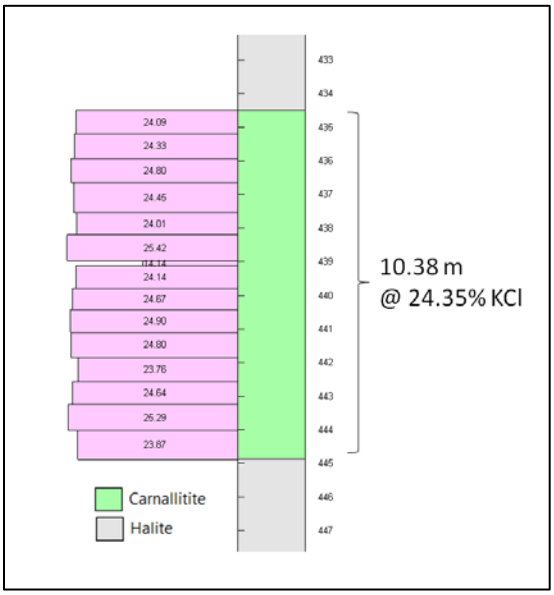


Figure 4. Typical carnallitite Hangingwall Seam intersection at Dougou (drillhole K63) showing grade (KCl %) of individual samples (left) and the weighted average grade on the right. Depth (metres) is shown on the right.

<u>Methodology</u>

Resource modelling and estimation was completed by CAE Mining using Strat3D® seam modelling software. Potash seam data and drillhole positional data was provided to CAE in Microsoft Excel Sheets. Seam elevation and seam thickness were modelled using Nearest Neighbor interpolation and Inverse Distance Weighting Squared (IDW2) respectively, to generate 100 by 100 metre blocks of variable height (Fig.5). Grade was estimated to each block using Nearest Neighbor interpolation. A minimum seam thickness of 2 metres was applied in the estimation and a grade cut-off of 14% KCl. Oil industry seismic data was used to delineate exclusion areas that may affect the deposit, including a large area of thinned evaporite stratigraphy referred to as the Yangala sylvinite prospect, and a smaller feature interpreted to be a disturbance zone[5] (Fig.2). A further 15 percent was subtracted from the tonnage to account for the possible presence of additional exclusion areas within the deposit area.

<u>Classification</u>

The Inferred classification of the Dougou MRE was assigned based upon a review of the geological model and seam characteristics, the spacing and reliability of the supporting drillhole and seismic data and quality control and assurance data (QAQC). The Inferred classification requirements used are as follows:

- Maximum drillhole spacing of 2.5 kilometres.
- Maximum extent of extrapolation beyond a drillhole of 2.5 kilometres.
- The exclusion of areas where the potash seams may be affected by structure or replaced by sylvinite
- Seismic data coverage. No point greater than 2 kilometres from a seismic line.

<u>Drillhole data</u>

The estimate is based on historic drillhole data and a verification hole drilled by Elemental (Fig.2). The seam intersections for the drillholes within the Dougou area are listed in Table 1 of Appendix 1, including those beyond the limits of the MRE. The seam intersections in drillholes KOU5, KOU6, K38, K39 and oil exploration drillhole Ngouali-1 were used in the modelling of the potash seam but fall outside of the MRE area. Within the MRE area the spacing of the drillholes is between 2.0 and 3.0 kilometres.

[5] A disturbance zone (also known as collapse structures or subrosion zones) are areas where seismic data indicates subsidence of the evaporite and the overlying strata and are a feature of potash districts globally.

In Situ Bulk Density

Bulk density for each block is based on potash grade; there is a correlation between grade and density for the seams in question. This is described in detail in Appendix 2. The average density for the Hangingwall Seam, Upper Seam and Lower Seam.is 1.61 g/cm^3 , 1.68 g/cm^3 and 1.72 g/cm^3 respectively.

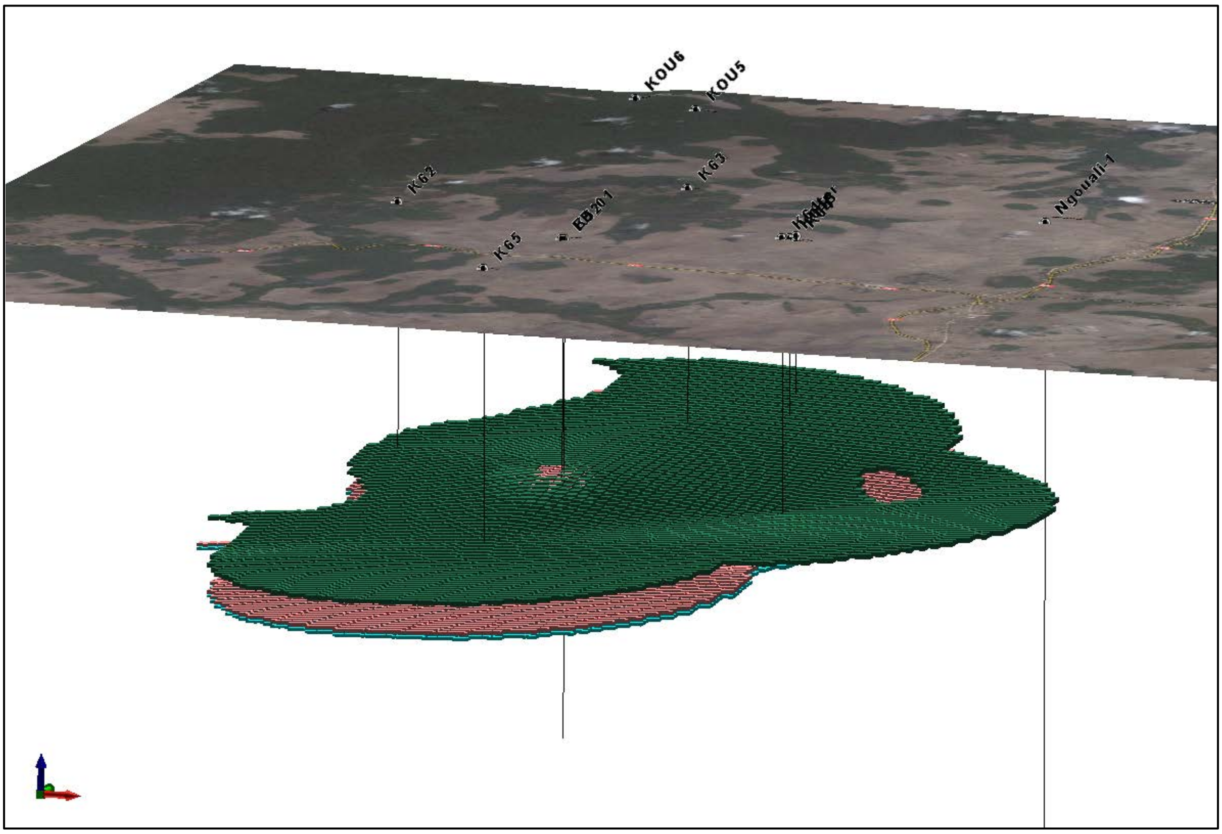


Figure 5. 3D view of the block model viewed from the south. Green = Hangingwall Seam. Pink = Upper Seam. Blue = Lower Seam. Vertical exaggeration of 5.

Quality Assurance and Quality Control (QA-QC)

QA-QC data is unavailable for the historic data. Elemental's drillhole ED_01 was drilled (in 2012) as a twin of Mines de Potasse d' Alsace S.A (MDPA) drillhole K52 and provide verification of the grade and geological data for that drillhole as is discussed in detail in Appendix 2 and giving confidence in the reliability of the historic drillhole data at Dougou. Recovery data is not available for all of the historic intersections but where it is, states over 99 percent recovery from the potash seams.

Yangala Sylvinite Prospect

At Yangala the interpretation is that of an elevated footwall related to horst development (historically referred to as the Horst De La Noumbi). The current interpretation is that the elevated footwall, promoted faulting and sagging of the Cover Sequence (Fig. 6) and thinning of the Salt Sequence. Increased brine movement into and through the evaporite may then have caused the observed replacement of carnallite by sylvite (as in drillholes K52 and ED_01 which are close to the edge of the area). ED_01 contained an intersection of 4.47 metres grading 57.66% KCl as announced 4 September 2012 but since then no follow-up drilling has taken place. The Yangala Sylvinite Prospect as identified from the historic seismic data is approximately 10 by 7 kilometres in extent (Fig. 2). Historic oil exploration drillhole Yangala-1 (Fig. 2) intersected several sylvinite seams within the upper 190 metres of the Salt Sequence. Assay data for this drillhole is not available but potash seams are interpreted by historic workers as belonging to Cycle 8 and 9 which ordinarily host the Hangingwall, Upper and Lower Seams. Work to better define drill-targets at Yangala is underway.

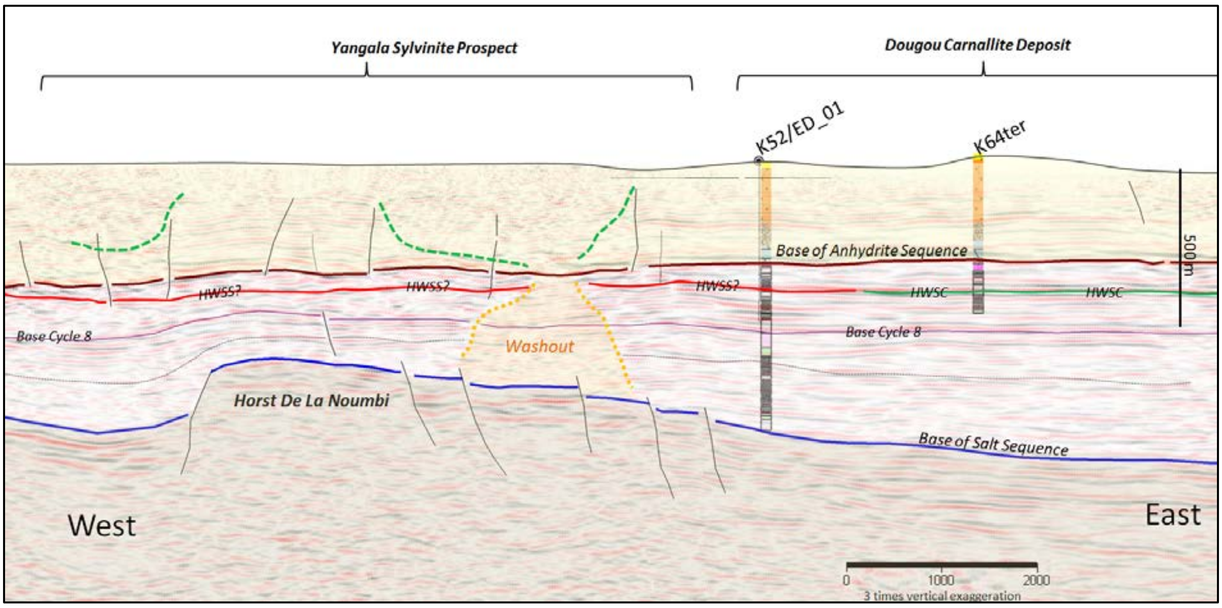


Figure 6. Cross section through the Yanagla Sylvinite Prospect and part of the Dougou Carnallitite deposit area showing 2D seismic data. Possible position of the Hangingwall Seam at Yangala is shown and the Upper and Lower Seams would be expected 50-60 metres beneath. Green dashed lines are areas of sagging of the Cover Sequence.

<u>Further Work</u>

- As announced 3 June 2014, the Company has signed a contract with Meridian Drilling Limited to complete 3 new drillholes with the aim of providing additional seam intersections and expanding and increasing the level of confidence in the MRE. Drilling is expected to commence this week and take 8 to 10 weeks to complete. The location of these holes is shown in Figure 2.

- Additional historic seismic lines are to be acquired to increase the density of the seismic data coverage and further the structural interpretation of the area.

- Additional density measurements should be made on core from the potash seams, in ED_01 and planned drillholes. Mineralogical work to confirm the composition of the carnallitite is required.

- Further interpretation of drillhole and seismic data is required at Yangala to better define sylvinite drill targets.

About Elemental Minerals

Elemental Minerals Limited (ASX: ELM) is an advanced mineral exploration and development company whose primary asset is the 93%-owned Sintoukola Potash Project in the Republic of Congo. ELM completed an advanced Pre-Feasibility Study on its Kola Project in September 2012 and was awarded a mining license and an environmental license in August 2013. The Sintoukola Project has the potential to be among the world's lowest-cost potash producers and its strategic location near the coast of Central Africa offers a transport cost advantage to key Brazilian and Asian fertilizer markets. For more information, visit www.elementalminerals.com

Competent Person Statement:

The Information in this report that relates to Resource Estimation and Exploration Results is based on information compiled by Mr. Andrew Pedley, Elemental's Chief Geologist and a full-time employee of the Company. Mr. Pedley is a member of the South African Council for Natural Scientific Professions (SACNASP) being a registered Professional Natural Scientist in the field of Geological Science. 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.

Contacts:

Iain Macpherson	Sam Middlemas	Ilja Graulich
Chief Executive Officer	Non-Executive Chairman	Investor Relations Manager
Tel: +27 76 238 4461	Tel: +61 419 936 040	Tel: +27 83 604 0820
iain.macpherson@elementalminerals.com	sam.middlemas@elementalminerals.com	ilja.graulich@elementalminerals.com

Johannesburg Office: +27 11 469 9140

www.elementalminerals.com

- ENDS -

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.

APPENDIX 1. Borehole Data

Table 1. All Hangingwall Seam (HWS), Upper Seam (US) and Lower Seam (LS) intersections within the Dougou area, including those outside of the MRE area. Boreholes are shown on figures 1 and 2 of the announcement.

Borehole ID	Company	Seam	from (m)	to (m)	thickness (m)	KCl %	Mineralogy
ED_01	Elemental Minerals	HWS	421.93	426.40	4.47	57.66	Sylvite
ED_01	Elemental Minerals	US	488.42	495.93	7.51	22.12	Carnallite
ED_01	Elemental Minerals	LS	499.48	509.78	10.30	18.63	Carnallite
K38	Historic (MDPA)	HWS	422.72	433.38	10.66	25.07	Carnallite
K38	Historic (MDPA)	US	490.62	500.57	9.95	19.86	Carnallite
K38	Historic (MDPA)	LS	505.04	514.68	9.64	17.92	Carnallite
K52	Historic (MDPA)	HWS	423.55	427.16	3.61	57.54	Sylvite
K52	Historic (MDPA)	HWS	427.16	428.80	1.64	25.34	Carnallite
K52	Historic (MDPA)	US	490.75	498.47	7.72	22.06	Carnallite
K52	Historic (MDPA)	LS	502.78	512.63	9.85	16.84	Carnallite
K62	Historic (MDPA)	HWS	455.42	462.00	6.58	24.33	Carnallite
K62	Historic (MDPA)	US	501.94	507.83	5.89	19.74	Carnallite
K62	Historic (MDPA)	LS	509.51	515.03	5.52	17.75	Carnallite
K63	Historic (MDPA)	HWS	434.50	444.88	10.38	24.35	Carnallite
K63	Historic (MDPA)	US	499.69	507.07	7.38	21.68	Carnallite
K63	Historic (MDPA)	LS	510.36	517.68	7.32	19.21	Carnallite
K64ter	Historic (MDPA)	HWS	513.30	522.75	9.45	24.71	Carnallite
K64ter		hole stopped above the Upper and Lower Seams					
K65	Historic (MDPA)	HWS	508.34	516.27	7.93	24.33	Carnallite
K65	Historic (MDPA)	US	556.36	563.60	7.24	20.01	Carnallite
K65	Historic (MDPA)	LS	566.50	570.35	3.85	20.94	Carnallite
KOU5	Historic (MDPA)	HWS	374.50	384.00	9.50	no assay	Carnallite
KOU5		hole stopped above the Upper and Lower Seams					
KOU6	Historic (MDPA)	HWS	275.00	283.75	8.75	no assay	Carnallite
KOU6		hole stopped above the Upper and Lower Seams					
Ngouali-1	Historic (BP Congo)	HWS	452.59	462.65	10.06	no assay	Carnallite
Ngouali-1	Historic (BP Congo)	US	523.00	531.84	8.84	no assay	Carnallite
Ngouali-1	Historic (BP Congo)	LS	535.65	543.73	8.08	no assay	Carnallite
K39	Historic (MDPA)	HWS	634.63	642.33	7.70	24.93	Carnallite
K39	Historic (BP Congo)	US	690.86	695.12	4.26	18.80	Carnallite
K39	Historic (BP Congo)	LS	697.00	701.04	4.04	19.02	Carnallite

Table 2. Position of all boreholes used in the MRE. All are positioned in UTM (WGS datum) Zone 32 S. Deviation data (verticality) was not available for the historic boreholes but significant deviations were not reported.

BHID	EASTING	NORTHING	ELEVATION (m ASL)	DEPTH (m)	DIP	AZIMUTH
K38	800239.8	9528549.7	44	853	-90	0
K62	789183.8	9530646.7	61.16	531	-90	0
K63	791608.8	9531845.7	73.78	519.5	-90	0
K64ter	793256.8	9529548.7	80.25	524	-90	0
K65	791038.8	9527446.7	69.4	570.5	-90	0
KOU5	790385.4	9535922.9	66.12	428	-90	0
KOU6	789465.8	9536961.7	39.05	296	-90	0
NGOUALI-1	795101.0	9531738.2	54.9	2083	-90	0
K52	791162.8	9529488.7	56.57	934	-90	0
ED_01	791144.8	9529490.5	55.29	525.15	-90	0

APPENDIX 2: Checklist of Assessment and Reporting Criteria.

Note: Description of borehole and sample data is for the historical drilling, or where specified Elemental's borehole ED_01. For historic boreholes KOU5, KOU6 and Ngouali (outside of the MRE) no sampling or logging information is available; only the down-hole gamma-ray data and interpretation and the collar location data.

Section 1 - Sampling Techniques and Data

Sampling techniques

- Historic drillholes were drilled for core of diameter 3.5 inches (89mm) diameter was sampled at intervals between 0.1 and 1.5 metres. Core was sampled to lithological boundaries.
- For the historical holes, no core is available for inspection and there is no description of the sampling methodology in the reports. It is unknown what proportion was sampled (half, quarter, whole).
- ED_01 was drilled to PQ size (85 mm diameter) core. Sample intervals were between 0.2 and 1.0 metres and sampled to lithological boundaries and of half-core. Figure 4 shows core in ED_01.
- Core of ED_01 was cut using an Almonte© core cutter without water and blade and core holder cleaned down between samples.
- Elementals sampling was carried out according to a strict quality control protocol beginning at the drill rig.

Drilling techniques

- Drilled by rotary Percussion through the 'cover sequence' then diamond core within the salt sequence. Coring was by conventional diamond drilling methods with the use of tri-salt brine.
- ED_01 was drilled by the same methods as above and was PQ size.

Drill sample recovery

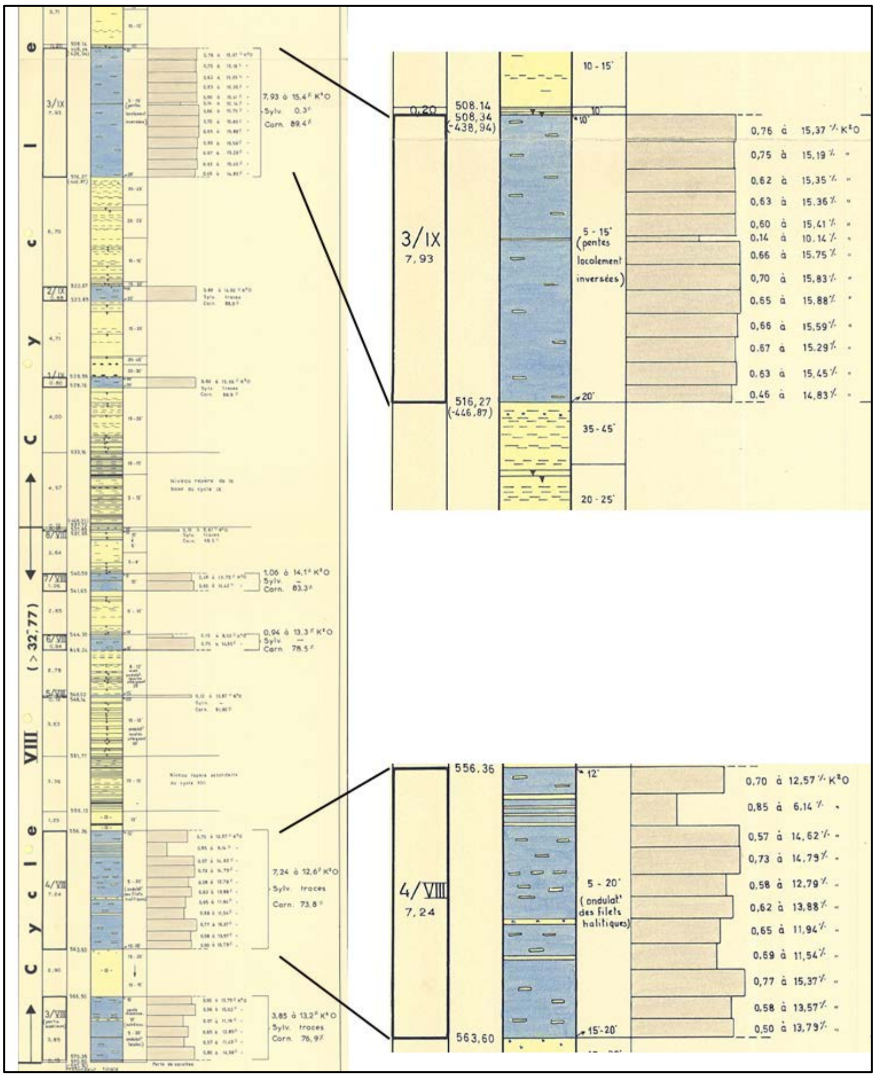
- Recovery data is not available for all of the historic boreholes. Those that are available report >99% recovery for the potash intervals. The use of tri-salt (Mg, Na, and K) chloride brine to maximize recovery was standard.
- There is no mention of sample storage prior to sampling which can have a bearing on sample integrity of carnallitite and sylvinite.

Logging

- The entire length of the borehole was logged in detail for the historic boreholes and for Elemental borehole ED_01.
- Detailed graphical logs and written descriptions are available, with identification and naming of each individual potash seam and marker within the salt. An example is provided below.
- The top and base of the seams is a distinct lithological boundary easily visible in core and on the historic logs; the change from potash to halite (or vice versa) is abrupt (< than 10 centimetres) and is also reflected in the assay data (Fig 1 below).
- For boreholes KOU5, KOU6 and Ngouali-1 the top and base of the HWS were

- identified from gamma-ray logs for these boreholes (Fig 2 below).
- Downhole geophysical logging was completed for ED_01 to provide detailed information used to cross-reference lithology, mineralogy, geochemical assay data, and to check depths of the core. Geophysical wireline logging conducted included; gamma-ray, density, resistivity, porosity, 3-arm caliper and full-wave sonic.

Figure 1. Example of historic strip log (K65) for part of the Salt Sequence showing potash seams (blue), halite (yellow) and narrow insoluble layers (black). The assay data (K^2O) is shown on the right of the geology. The Hangingwall Seam is labelled 3/IX, the Upper Seam 4/VIII and the Lower Seam 3/VIII.



Sub-sampling techniques and sample preparation

- There is no information available regarding sample preparation of the historic samples.
- For ED_01 the entire half-core sample was submitted for whole sample pulverization.

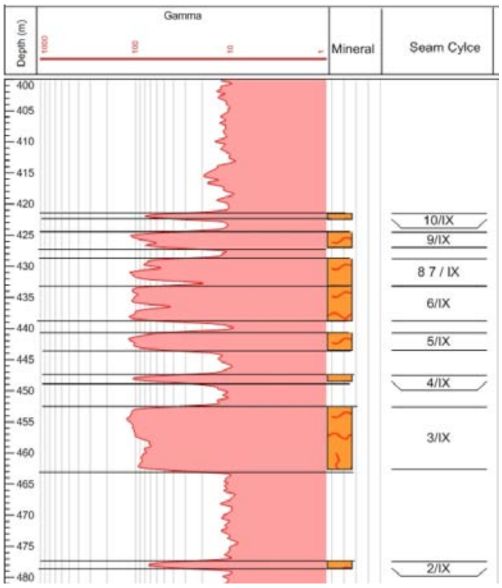
Quality of assay data and laboratory tests

- Samples from Elementals twin borehole ED_01 were processed and analysed by Genalysis, Perth, Australia. Potassium, Sodium, Calcium, Magnesium, Chlorine, and Sulphur were analysed by ICP-OES. Routine international-standard QA/QC procedures were used by Genalysis. Analysis was for six elements including potassium (K). The detection limit for K is 0.001%.
- ED_01 was subject to full QA-QC (blanks, duplicates, standards) for which performance was assessed by an Independent CP (CSA Global of Perth) at that time.
- Elemental's hole (ED_01) has provided confidence in the integrity of the historical

exploration data.

- Assay data for the historic boreholes is in the form of hand-written tables. Analyses were carried out by the Mines de Potasse d' Alsace S.A (MDPA) in-house analytical division.
- No description of the geochemical analytical method is available for the historic data and there is no quality control procedure or data available for the historical boreholes.
- No duplicate sample data is available to assess that the sample size is sufficient but the Company's duplicate data for samples from the Kola Deposit (which are of a similar core diameter) showed excellent precision.

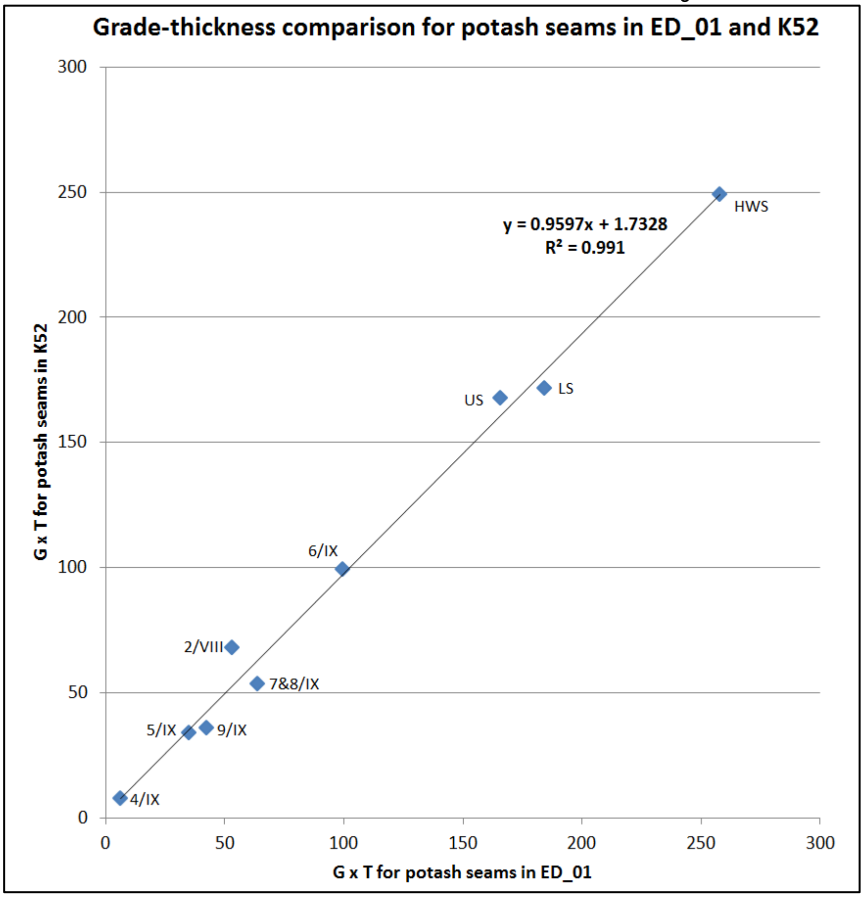
Figure 2. Gamma-ray log for part of borehole Ngouali-1, one of 3 boreholes (also KOU5 and KOU6) with no assay data available. In this example, the Hangingwall Seam is easily recognised from the gamma-ray data for this borehole and is labelled 3/IX. The Upper and Lower Seams are not shown.



Verification of sampling and assaying

- Elemental drillhole ED_01 was drilled to twin historic MDPA borehole K52 (50 metres away). Figures 7a to 7c show a comparison of the Salt Sequence stratigraphy, potash seam logging, and thickness and grade for potash seams in these holes.
- The geological logging, grade and thickness comparison is excellent, allowing for small differences in the sampled intervals and minor change in seam thickness over the 50 metre distance between the holes.
- The basal 1.64 metres of the Hangingwall Seam in K52 is carnallitite whereas in ED_01 the seam is completely replaced by sylvinite hence the grades and thickness of this seam differ between the two holes. This is consistent with the model for sylvinite mineralization. The sylvinite grades are very similar (57.66 % versus 57.54 %). A meaningful comparison of the assay data for this seam is provided by the grade x thickness (GT) data as contained potash should remain unchanged even after replacement by sylvinite.
- Figure 3 shows the GT comparison for all seams analysed in K52 and ED_01. The correlation is excellent (R^2 of 0.991).
- Additional validation of the historic data is provided by the Company's two twin drillholes at the Kola deposit show a good comparison with the historical data there, in terms of geological logging and grade. Historical drillholes there were also drilled by MDPA and in the 1960's.
- In summary, the twin-hole data for Dougou coupled with the Company's work at Kola supports the use of the MDPA assay and geological data for resource modelling and estimation.

Figure 3. Comparison of grade x thickness (GT) for all potash seams analysed, in K52 and twin hole ED_01. Seams are labelled and are also shown in figure 7a to 7c.



Location of data points	o	Collar positions of historic boreholes were reportedly surveyed to within 0.1 metres. Easting and Northing were recorded as WGS with a Pointe Noire datum. These were converted to WGS UTM 32 S by Elemental's GIS staff. Collar information is provided in Table 2 of this Appendix.
	o	Historic boreholes were ground checked in the field by Mr. Pedley. In most cases the original collar with stand-pipe and borehole name were well preserved (Fig 4.)
	o	An elevation model was created by gridding the elevation of the borehole data.
	o	Assay data was compared with geological logs and with gamma-ray data if available to check depths of the assay data.

Figure 4. Collar with stand-pipe for historic borehole K64ter.

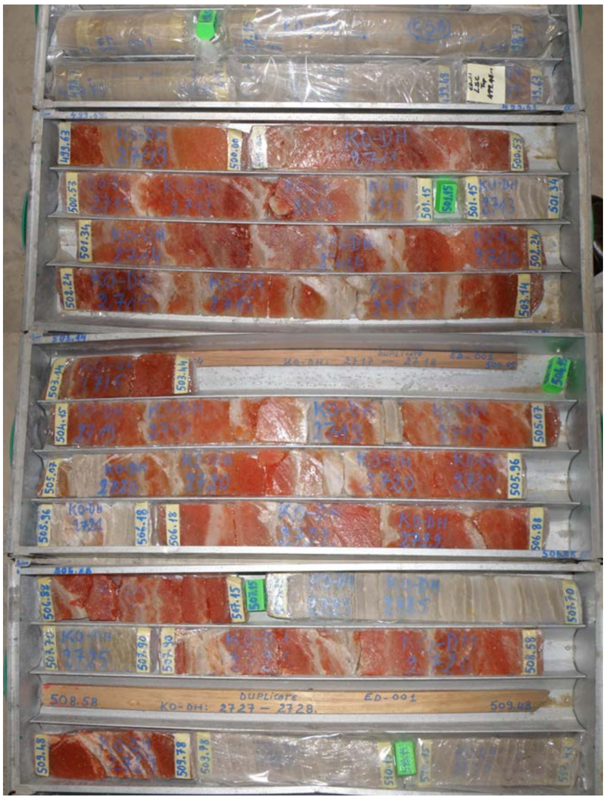
Data spacing and distribution	o	Within the MRE area, borehole spacing (excluding the twin borehole) ranges from 2 to 3 kilometres. Seismic line spacing varies from 1 to 5 kilometres (Fig 2 in the announcement).
Orientation of data in relation to geological structure	o	Seam dip data on the historic logs shows that the potash seam intersections within the MRE area are either sub-horizontal or gently dipping and not more than 15 degrees. The boreholes are close to vertical so the interval lengths are equal or very close to the true thickness. No correction for apparent thickness was deemed necessary. Geological logging of ED_01 (which was fully surveyed) supports these observations.
Sample security	o	No information on sample security in storage or transport of the historic core is available for the historic samples.
	o	Core from ED_01 was securely stored and transported. Half-core remains at the Kola core-shed and is kept in plastic film and within an air-conditioned room to minimize deterioration. Pulp rejects remain in storage at Genalysis in Perth.
Audits or reviews	o	The results of ED_01 were independently reviewed by the Company's geological and resource consultants (CSA Global) at the time this borehole was reported.

<u>Section 2 Reporting of Exploration Results</u>

Mineral tenement and land tenure status	o	The exploration permit (permits de recherche) is owned 100% by Sintoukola Potash S.A. Elemental holds a 93% shareholding in Sintoukola Potash S.A.
	o	The permit was renewed in 2012 in accordance with decret n°2012-1193 on the 27th November 2012 for a further two years. There are currently no impediments to exploration on the permit.

Exploration done by other parties	o	The majority of the historical boreholes used for the generation of the Exploration Target were drilled in the late 1960's by Mines de Potasse d' Alsace S.A (MDPA). Additional potash exploration was completed in the late 1980's by MDPA (boreholes KOU5 and KOU6) and by British Petroleum Congo (Ngouali-1).
	o	Elemental is in the possession of a large database containing data and reports by MDPA and this information has been reviewed in detail. The quality of the work appears to be of a high standard and level of detail.
	o	Seismic data was acquired by oil exploration company's British Petroleum Congo and Chevron during the 1980's.
Geology		
Setting	o	The setting is that of Pre, Syn and Post Rift continental and marine sedimentation (Permian to Tertiary aged) related to the break-up (rifting) of Gondwana drift and eventual uplift. The position of the Dougou area within this setting is considered to be the 'slope' portion of the main basin depocentre.
Potash mineralization	o	The potash mineralisation is within numerous laterally extensive tabular seams best developed within the upper parts of a 500 to 600-metre thick Early Cretaceous evaporite sequence (Fig 8 of this Appendix), also referred to as the Salt Sequence (described below). The Hangingwall Seam is within cycle 9 and the Upper and Lower Seams are within cycle 8. The Hangingwall Seam is also referred to as seam 3/IX (Seam 3 of Cycle 9), the Upper Seam as 4/VIII (Seam 4 of Cycle 8), and the Lower Seam 3/VII (Seam 3 of Cycle 8). Potash seams are present beneath the Lower Seam but are of low grade.
	o	Potash seams within the Sintoukola permit may be of carnallite ($KMgCl_3 \cdot 6H_2O$) which is a primary mineral, or of sylvite (KCl) which forms by replacement of carnallite summarised as: Carnallite + Water = Sylvite + MgCl2 rich brine. The remainder of the rock comprising the seams is halite (NaCl) with very small amount (<0.3% of insoluble material (clay, anhydrite, organic material).
	o	A rock comprised of carnallite and halite is named carnallitite. A rock comprised of sylvite and halite is sylvinite. Being comprised of KCl only, sylvite mineralization supports a significantly higher grade than carnallite. Pure Carnallite contains a maxiumum KCl content by weight of 26.83% KCl (varies slightly depending on moisture content).
	o	The MRE for Dougou is for carnallitite only.
	o	Some of the historic boreholes have mineralogical data for the seams which indicates: that Hangingwall Seam is unusually pure, comprised of between 88 and 91% carnallite. This is consistent with the KCl grade (90% carnallite would give a grade of 24.2 % KCl, varying slightly depending on moisture content). The Upper and Lower Seams contain a lesser amount of carnallite (and a greater amount of halite) and are therefore lower in grade; carnallite content is approximately 65% and 75% carnallite respectively. The historic data indicates that the balance of all seams is halite and very small amounts of sylvite (<1%) and insoluble material (<0.3%).The immediate (several metres) roof and floor of the seams is halite or narrow sylvinite seams.
	o	At the 60 kilometre distant Mengo Project (Ercosplan 43-101 Technical Report, November 2007) the Hangingwall Seam within the declared Mineral Resource has the following characteristics, very similar to those at Dougou: Average thickness: 10.0 metres Average carnallite content: 89.97% Average grade KCl: 24.14

Figure 5. Lower Seam potash mineralization in ED_01. Carnallitite from a depth of 499.48 to 509.78 metres (thickness of 10.30 metres) grading 18.63% KCl).Carnallitie is orange in colour. Halite is white. The massive halite above and below the seam can be seen.



- The Hangingwall thickness averages 8.35 metres thick and the minimum and maximum thickness within the MRE area is 2 and 10.3 metres respectively. The thickness of the Upper Seam within the model varies from 5.7 to 8.5 metres within the MRE area. The thickness of the Lower Seam within the model varies from 3.9 to 9.9 metres within the MRE area. Where sylvinitic the seam is thinner, being 4.5 metres thick in ED_01.

- Within the Yangala sylvinite Prospect (Fig 2 of the announcement) there is a likelihood that the Salt Sequence has been more affected by brine movement (also discussed below under ‘Modelling of structures from seismic data’ and that replacement of carnallite to sylvite occurred. Historic oil exploration borehole Yangala-1 intersected several sylvinite seams interpreted to be within cycle 8 and cycle 9 which ordinarily hoist the Hangingwall, Upper and Lower Seams. No assay data is available for this borehole. The reported sylvinite intersections lend support to the exploration concept for this Prospect.

Cover Sequence

- At Dougou, the Salt Sequence is covered by 250 to 350 metres of younger (Late Cretaceous, Paleogene and Neogene) sediments referred to collectively as the ‘Cover Sequence’ (Fig 8 of this Appendix). This sequence is comprised from top to base of; unconsolidated material near surface, ferruginous sandstone (mid-section), dolomitic siltstone (lower section) and a basal dolomitic limestone which rests on the Anhydrite Sequence. A more detailed description of these rocks is provided alongside figure 8 of this Appendix.

Anhydrite Sequence

- A 5 to 20 metre thick layer termed the Anhydrite Sequence separates the Salt Sequence form the cover sequence (Fig 8 of this Appendix) and is comprised of anhydrite, gypsum, clay and lesser organic matter. Importantly, the Anhydrite Sequence rests discomformably on the Salt Sequence. Though dip between the Salt Sequence and the Anhydrite Sequence may be similar, large thicknesses of the former are typically absent. It is postulated that the Salt Sequence is steadily dissolved at the contact with the Anhydrite Sequence. The amount of ‘loss’ of the Salt

		Sequence increases in a regional sense to the northeast (up-dip).
Salt Sequence (potash seam host)	o	Comprises of the Loeme Evaporite Formation which was deposited after break-up of Gondwana (circa 125 Ma) in extensive basinal marine-connected basin developed as a result of post rift subsidence.
	o	Layers and seams of the Loeme Evaporite Formation are identified according to their position with depositional 'cycles' of which cycles 2 to 11 are preserved in the Dougou area. Those cycles that are well developed are comprised of a basal argillaceous layer then a thick (50-70 metre) sequence of halite with up to 10 potash seams. A bischofite-tachyhydrite layer may be developed at the top of the thicker cycles.
	o	Cycles 1 to 6 are relatively thin being 5 to 50 metres thick. Cycles 7 upwards are thick being over 70 metres.
	o	The evaporite sequence is dominated by salt minerals of Na, Mg and K. Principal minerals are halite, carnallite, bischofite, tachyhydrite and sylvinite. Insoluble layers comprised of varying amounts of anhydrite, organic and clastic material are interspersed throughout the sequence.
	o	All lithologies form sub-horizontal or gently dipping layers from millimetre to metre scale and can be correlated significant distances (10's of kilometres).
	o	The Salt Sequence (and the seams and layers within it) has a regional dip of several degrees towards the coast (southwest).
Footwall Sediments	o	Immediately beneath the Salt Sequence the Chela Formation is typically present, which represents early fluviatile sedimentation within the early post-rift basin. Thickness of this formation is less than 100 metres.
	o	The Early Cretaceous and Jurassic aged clastic sediments loosely termed the Coccobeach Group form a thick sucession below the post-rift (Chela and Loeme Evaporite Formations) and are at a depth of approximately 900 metres in the Dougou area (Fig 8 of this Appendix).
	o	The Coccobeach Group sediments were deposited in rift setting and are underlain by crystalline Precambian aged 'basement' rocks (not reached in the Dougou area).
Structure	o	On a district scale, post-rift tectonics affected the slope portion of the new continental margin and was dominated by extensional seaward dipping rotational growth faults (Seranne and Anka, 2005). A hinge zone is postulated, comprising a section of the slope where the slope gradient is greater and there is likely to be normal faulting and horst development, as suggested by previous workers; Societe Des Petroles D'Afrique Equatoiale Francaise (SPAFE). Figure 9 of this Appendix shows a SPAFE section through part of the present-day Sintoukola Permit and identifies a horst block (Horst De La Noumbi) bound on its west side by a large normal fault within what is likely to be the hinge zone of the slope.
	o	Structural Interpretation is discussed in more detail below, under the heading 'Modelling of structures from seismic data'
Drill hole information	o	Borehole collar positions are provided in Table 1 of Appendix 1, along with final depth.
	o	All boreholes were drilled vertically and no significant deviation was reported.
	o	Table 1 of Appendix 1 provides the downhole length of the potash seam intersections (which is taken as an approximation of the true width of mineralization) within and around the MRE area.
	o	Intersections in boreholes KOU5, KOU6, K38, K39 and oil exploration borehole Ngouali-1 were used in the modelling of the potash seam but fall outside of the MRE area.
Data aggregation methods	o	The determination of the grades over the potash seam intervals was by weighted averaging of individual samples. No top or bottom cutting was applied or deemed necessary. There was no aggregation of short high grade intervals with long low grade intervals.

Relationship between mineralisation widths and intercept lengths	o The potash seams are close to being perpendicular to the core axis in all cases and therefore the intersection are taken as the true width.
Other substantive exploration data	o Analyses and metallurgical test work on Hangingwall Seam, Upper Seam and Lower Seam samples collected from the nearby Kola Deposit showed that amount of deleterious components (insoluble material) to be very minor (<0.3% by weight) supporting the historic data for Dougou.
Further Work	o Additional drilling to add boreholes in the vicinity of the MRE area (Fig 2 of the announcement). Additional data may increase confidence and possibly allow expansion of the MRE. o Additional historic seismic lines are to be acquired, specifically those of BP 1989 vintage. This would allow further structural interpretation and identification of potential structural exclusion zones. o Samples of carnallitite from existing and new core should be collected for additional density determination using the pycnometer and physical immersion methods. o Analyses of core must include insoluble content to confirm the extremely low values at Dougou indicated by the historic data and the Kola deposit data. Some mineralogical work should also be carried out to confirm that sylvite occurs in very minor amounts (<1%). o Detailed topographic data should be acquired. o Exploration of the Yangala Prospect is recommended to help define drill targets to test for sylvinite mineralisation. Additional seismic interpretation would form an important part of this target generation.

Section 3 Estimation and Reporting of Mineral Resources

Database Integrity	o Data from historic boreholes was captured into Excel. Given the relatively small number of assays (total of 730), every entry was checked a second time. Import error checks were also carried out in Micromine 2013 and seam assay data plots provided a final opportunity to observe errors though none were found. o The original historic data is stored in pdf format on Elemental's Johannesburg technical directory.
Site Visits	o Mr Pedley has visited site on several occasions over the last 2 years and has observed the drilling, sampling and logging of Elemental's core, including that of 'twin' borehole ED_01 which serves as validation of the historic data. Historic borehole sites which support this MRE have been visited and their position confirmed.
Geological Interpretation	o Correlation of the potash seams between boreholes is with confidence as each seam is unique in its grade and thickness; it is very unlikely to be confused with other potash seams. Smaller potash seams and lesser insoluble layers provide additional 'marker' layers which can be correlated between all boreholes. The continuity of the seams between boreholes can be reasonably assumed. o The historic borehole data is in the form of detailed logs and written descriptions. An example is shown in figure 1 of this Appendix. The work is of a high level standard. Every potash seam is identified clearly and named according to its position within the salt cycle. o The Mineral Resource Estimate (MRE) is heavily guided by the geological model for the potash seams. There is no mineralisation estimated for areas outside of the modelled extent (vertically and laterally) of the Hangingwall Seam, Upper Seam and Lower Seam. o Elemental's work at Kola and work on other deposits within the RoC basin shows that

	the potash layers are extensive and continuous, only broken if affected by a major structure or if removed by erosion/dissolution when close (within approximately 30 metres) to base of the Anhydrite Sequence. This is discussed further under 'Estimation and modelling techniques'
Dimensions	o The dimensions and distribution of the potash seam within the Inferred Mineral Resource area is shown in Figure 10 to 12 of this Appendix. The deposit is approximately 9.5 kilometres in length (strike) and 5 kilometres in width. Seam depths are between 400 and 600 metres below surface. Thickness data for the seams is summarized below.

Seam	Min Thickness (m)	Max Thickness (m)	Ave Thickness (m)
Hangingwall Seam	2	10.3	*8.35*
Upper Seam	5.7	8.5	*7.25*
Lower Seam	3.9	9.9	*6.51*

Estimation and modelling techniques

Potash Seam modelling and estimation:

- o The borehole collar data and the top and base (from, to) of each seam was imported into CAE Mining Strat3d ™ software and plotted in 3D space. The potash seam intersections within the resource area and beyond are listed in Table 1 of Appendix 1.
- o The MRE is for carnallitite only. In order to remove sylvinite from the model, the sylvinite of the Hangingwall Seam in ED_01 and K52 was also modelled but a resource for this material was not estimated. This is illustrated in Figure 9. No sylvinite is present in the Upper or Lower Seams.
- o The following parameters were used in the modelling of the seam elevation and thickness, based on the borehole intersections:

  - Interpolator for thickness: Inverse Power of Distance;
  - Interpolator for surfaces: Nearest Neighbour
  - Distance power: 2;
  - Trend order: 0;
  - Search ellipse radius: 10 000 m;
  - Minimum number of samples: 1 (primary search volume)
  - Maximum number of samples: 5 (primary search volume)

  Figures 10 to 12 of this Appendix are thickness isopach maps for the seams.

- o Nearest Neighbour Interpolation method was used to estimate the grade of the blocks, using the a single weighted average grade for the full seam intersection for each potash seam.
- o A 2-metre minimum seam thickness was applied in the determination of the MRE.
- o No grade capping was applied as the grade range is narrow reflecting the relative mineralogical homogeneity of the seams; there are no high or low values.
.

Modelling of structures from seismic data

- o An important part of the geological model for most potash deposits including that of Dougou, is the modelling of faults and other structures that can impact on seam continuity. At Dougou, structures are considered to post-date the salt precipitation and potash layer formation and therefore cross-cut the evaporite stratigraphy.
- o A large database of 2D seismic data for the Dougou area was recently acquired (ASX announcement 16 May 2014) by Elemental and dates from 1980/81, 1989 and 2006 and was collected by oil exploration companies at that time. The seismic lines are shown in Figure 2 of the announcement. There are approximately 38 kilometres of data for the Dougou Inferred Resource area.
- o The seismic data was imported in SEG-Y format into Micromine™ 2013 software and viewed in section and in 3D. A structural interpretation was carried out using the seismic data.

- The base of the cover sequence was interpreted along with other reflection events within the evaporate sequence and cover sequence. Possible faults were identified along with areas of disturbance (also known as collapse features or subrosion structures) which are typical of evaporite sequences dominated by halite and other soluble minerals. Only one disturbance area was identified (Fig 10 to 12 of this Appendix).
- An extensive area of elevated footwall stratigraphy referred to as the Yangala High (or Yangala Prospect) is interpreted (Fig 2 of the announcement) and extends to within 300 metres of borehole K62. This area was referred to as the 'Horst De La Noumbi' by earlier workers (Fig 9 of this Appendix). Within this area, the top of salt and the cover sequence appears to be undulating and 'lowered' and affected by faulting. A typical section through the Yangala High with seismic data interpretation is provided in figure 6 of the announcement.
- Within the Yangala High, it is postulated that horst development and faulting caused sagging of the Cover and Salt Sequence and thinning of the latter as a result of truncation at the top of the Salt Sequence and by increased dissolution and disturbance within salt. There is a possibility that the potash seams are thinned, replaced by sylvite or truncated within this area. For this reason the seam model was cut by the outline of this feature.
- With the aforementioned structural areas removed, the MRE appears largely unaffected by significant structures; the seismic data shows predominantly continuous and flat reflectors. It is unlikely that dip exceeds 15 degrees and for the most part significantly less. This is supported by the borehole data.
- Only a single disturbance area (Fig 2 of the announcement) was identified. An approximate 100 metre buffer was drawn around this feature and it was 'cut' from the seam model. Given the wide spacing of seismic data in should be assumed that additional disturbance areas are present and for this reason, an additional 15 percent of the resource tonnes from each seam were subtracted.

Deleterious Elements

- No deleterious elements were considered. Data for the insoluble content of the HWS shows that it is below 0.3% by weight, which is well below the maximum amount that would begin to be detrimental on potash recovery

Validation of the model and estimate

- Model validation was carried out visually on-screen using fence diagrams to ensure that the seam model geology represented the drillhole data.
- A check estimate on the tonnage was carried out by taking the average thickness of the intersections and multiplying this by the area of the Inferred Resource limits and the average density values as determined by CAE. This check estimate is shown below and returns a tonnage which supports that of the MRE reported in the announcement. The tonnage of the Hangingwall Seam check estimate is less than that of the MRE as the check estimate cannot satisfactorily weight the influence of the thin carnallitite intersection of ED_01/K52.

Seam	Av. BH intersectuion thickness (m)	Area (m2)	denisty	Million Tonnes minus 15% additional exclusions	MRE Million Tonnes for same
HWS	7.2	45,788,413	*1.61*	451	520
US	7.06	38,481,985	*1.68*	388	399
LS	6.63	38,481,985	*1.72*	373	366
TOTAL				1,212	1,285

- In the absence of swath plots, a comparison of the resource grade with the weighted average grades of the borehole intersections supports the MRE grades.

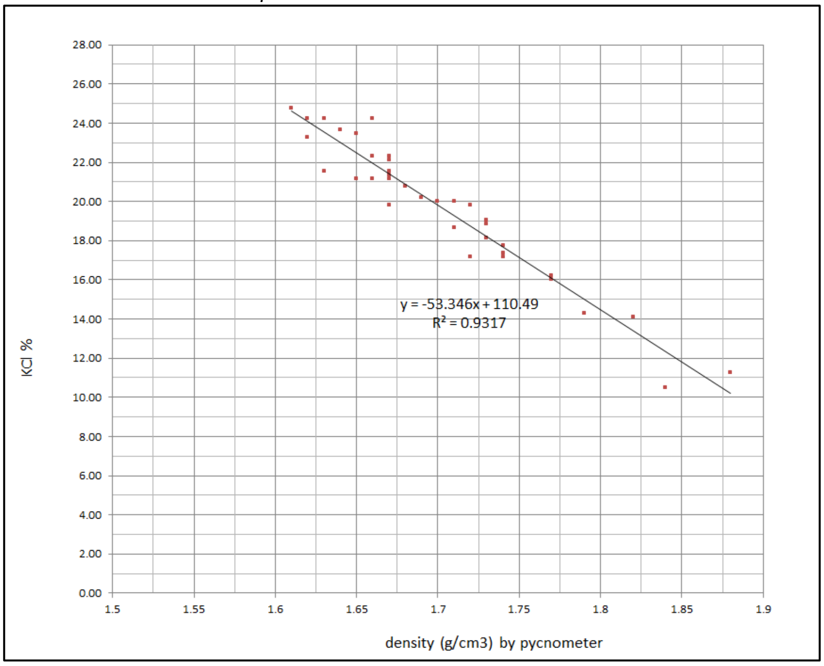
Moisture

- The potash seams are assumed to be dry. No adjustment for tonnages are required.

Cut-Off Parameters	o Operating costs from similar deposits were combined with internal estimates and previous studies for the adjacent Kola deposit to determine an approximate operating cost for the solution mining of carnallite. The current potash price was then used to determine a cut-off grade for the Dougou deposit. Using this methodology, a cutoff grade of 14% KCl was determined for the carnallite at Dougou. o The grade variation within the seams is minimal and the upper and lower contacts of the seams are abrupt. All seam intersections were above cut-off grade (Table 1 of this Appendix). o A minimum thickness cut-off of 2 metres was applied to the model in the determination of resources.
Mining Factors or assumptions	Eventual Economic Extraction o The grade, thickness, mineralogy and interpreted continuity of the potash seams supports the likelihood of eventual economic extraction and compare favourably with similar deposits including some for which economic studies with a positive outcome have been developed. o The MRE is assumed to be predominantly carnallitite and with an average seam thickness of 7.5 metres. These characteristics point towards solution mining as being the likely preferred method of mining. The depth of the seams of between 400 and 600 metres also favour solution mining as opposed to conventional underground methods. A minimum height of 2 metres was applied. No dilution was applied at this stage; this would become a consideration if Ore Reserves are estimated. o Within the MRE there may be areas that are unsuited to the development of solution mining infrastructure such as wetland areas or steep slopes, though such areas (typically referred to as technical exclusions) are not widespread. The consideration of technical exclusions would form part of the conversion of Mineral Resources to Mineral Reserves, if achieved. o It is assumed that the Lower and Upper Seam can be mined separately as they are separated by approximately 3 metres of halite. This will also need to be investigated in detail if Mineral Reserves are defined.
Environmental factors or assumptions	o A comprehensive Environmental Social Impact Assessment (ESIA) was prepared for the 15km distant Kola Mining Permit. This study includes considerations for impacts of the construction of infrastructure in the area, including a large portion of the Dougou permit. o The ore under consideration would be extracted by means of solution mining. This process generates relatively little waste: o NaCl waste is mostly left in-situ, with carnallite selectively dissolved in the cavern and pumped to the process plant. o MgCl2 bearing waste is generated in the process plant and re-injected into mined out caverns underground, together with any NaCl generated in the process. Any access waste will be stored in a custom built surface facility o Whilst storage ponds are used to store brine within the mining and beneficiation process, these ponds will be fully lined and contained and similar structures have been permitted as part of the ESIA on Kola o Insoluble material content in the ore is extremely low and will be left in the underground caverns as part of the solution mining process.
Bulk Density	o Samples from carnallitic Upper and Lower Seam from the Kola deposit were measured by the pycnometer method. There is an excellent correlation between grade and density (Fig. 6 below) which reflects the fact that the carnallitite is comprised almost entirely of halite and carnallite. The density of halite (2.16 g/cm^3) is higher than that of carnallite (1.60) so a sample with more carnallite (higher grade) has a lower density than a sample with less carnallite (low grade). There are no density measurements available for core from the Dougou boreholes but the carnallitite is comprised of halite and carnallite (with <1% sylvite and <0.3% insoluble material) so the density can be reliably determined from the grade by applying the formula for the regression line

created using the Kola deposit pycnometer data. The average density of the three seams are given in Table 1 of the announcement.

Figure 6. Carnallite density by pycnometer plotted against grade for samples collected from carnallitite seams at the Kola deposit.



- Additional support of this method of density determination from the density data for the seams at the 60 kilometre distant Mengo Project (Ercosplan 43-101 Technical Report, November 2007) which also hosts the Hangingwall Seam, Upper and Lower Seam. They report a density of 1.62 g/cm^3 for high grade carnallitite and 1.88 g/cm^3 for low grade carnallitite and an average of 1.64 g/cm^3 for the Hangingwall Seam (termed Horizon 3) and 1.73 for the Lower Seam (termed Horizon 4), which is very close to the averages for these seams at Dougou.

Classification

- The MRE is classified as Inferred. It relies on historic grade data which does not have QA-QC data but the Company's twin borehole ED_01 supports the use of the historic data to a accepted level of confidence. Additional drilling is required with full application of QA-QC procedures to allow possible classification within the Indicated or Measured categories.
- A radius of 2.5 kilometres around boreholes was chosen to limit the Inferred MRE (Fig 2 of the announcement). This is the maximum distance that the modelling and estimation was extrapolated beyond data points, supported by observations on the continuity of the potash seams within the Sintoukola Permit and the wider RoC coastal basin. The presence of the Hangingwall, Upper and Lower seams in outlying boreholes Ngouali-1, K38, K39, KOU5 and KOU6 (the latter two stopped short of the Upper and Lowder Seams) is an additional supporting factor.
- The thickness of the halite above the potash seams (saltback) within the MRE area and the apparent sub-horizontal aspect of the seams mean it is unlikely that the seams are absent due to truncation. The available historic seismic data does not indicate a break in the stratigraphy within the MRE area except outside of the two areas of exclusion.
- 2.5 kiloemtres is consistent with dimensions of 'classification radii' applied to other projects within the RoC and elsewhere in the world for potash seams of a similar nature.

- Borehole K64ter stopped short of the Upper and Lower Seams. These seams were modelled beneath the end of the hole but the extent of the MRE for the Upper and Lower Seams was reduced to reflect the absence of data for K64ter (Figs. 2 and 3 of the announcement).

- Areas where the potash seams may be affected by structure or replaced by sylvinite were excluded.

Audits or Reviews

- The model and estimate was reviewed by Mr. Pedley, visually on-screen using Micromine 2013 software, including a check estimate as described in the section titled 'Validation of the model and estimate'.

Figure 7a. Comparison of geological intervals within cycle 8 and 9 of the Salt Sequence in historic borehole K52 and Elemental (twin) verification borehole ED_01. Detail of the potash seam comparison is given in Figures 7b and 7c.

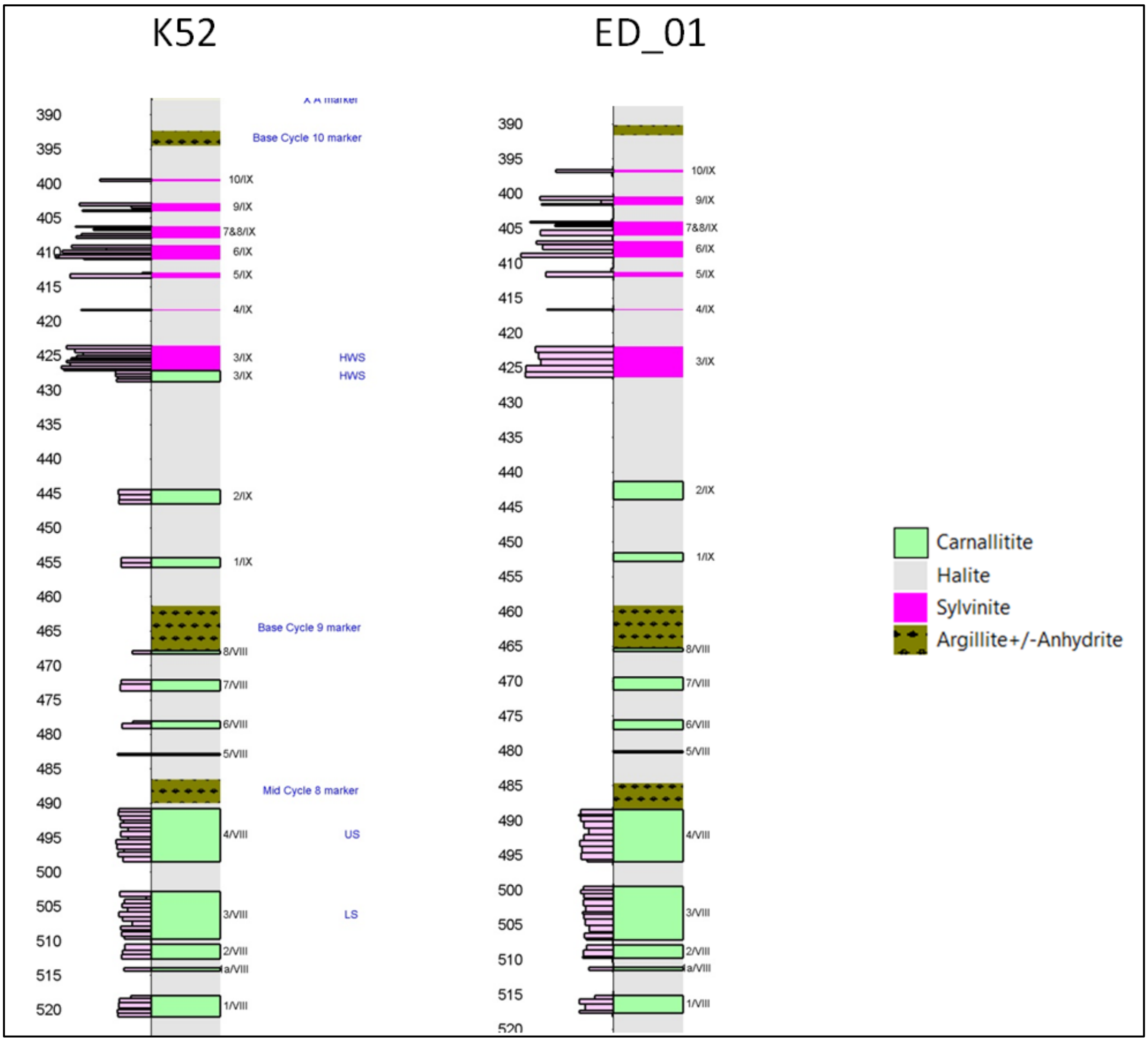


Figure 7b. Comparison of grade (KCl), seam thickness (metres) of potash seams of cycle 9, in historic borehole K52 and Elemental (twin) verification borehole ED_01. These boreholes were drilled 50 metres apart. HWSS = Hangingwall Seam Sylvinite HWSC = Hangingwall Seam Carnallitite. Other smaller seams are named according to the regional terminology. Notice the lower 1.64 metres of the Hangingwall Seam in K52 is carnallitite whereas in ED_01 the seam is completely replaced by sylvinite.

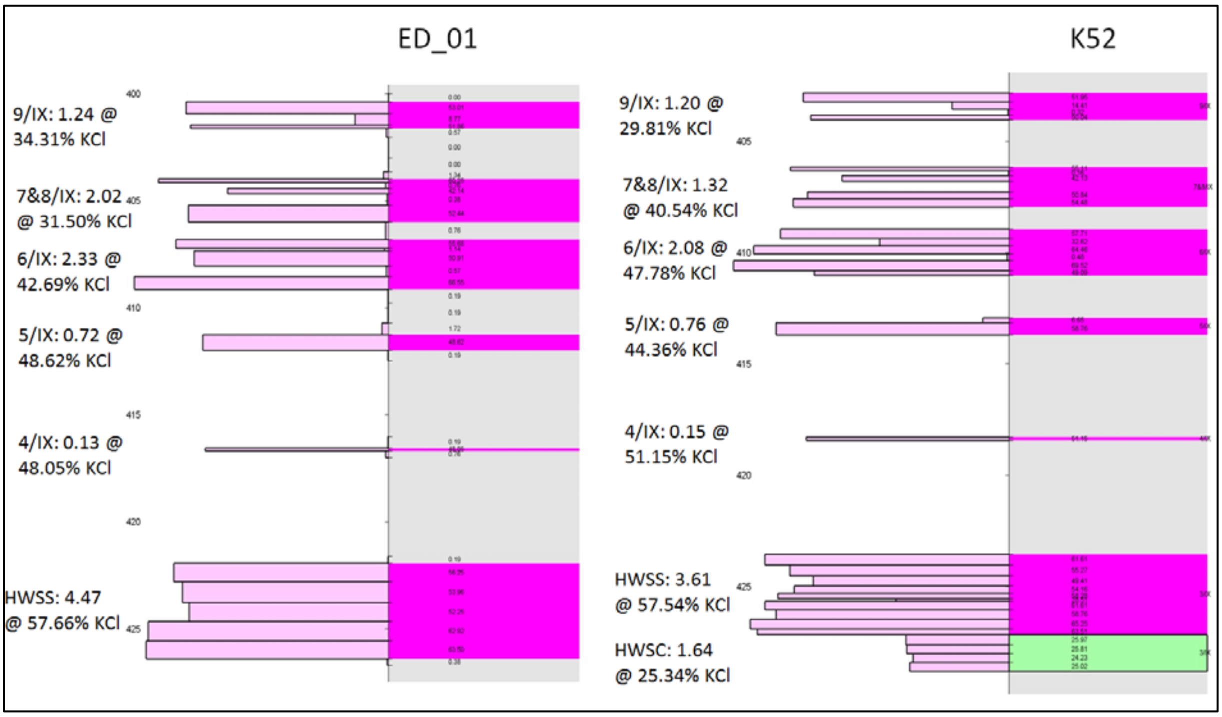


Figure 7c. Comparison of grade (KCl), seam thickness (metres) of potash seams of cycle 8, in historic borehole K52 and Elemental (twin) verification borehole ED_01. US = Upper Seam. LS = Lower Seam. The smaller seam 2/VIII is also shown.

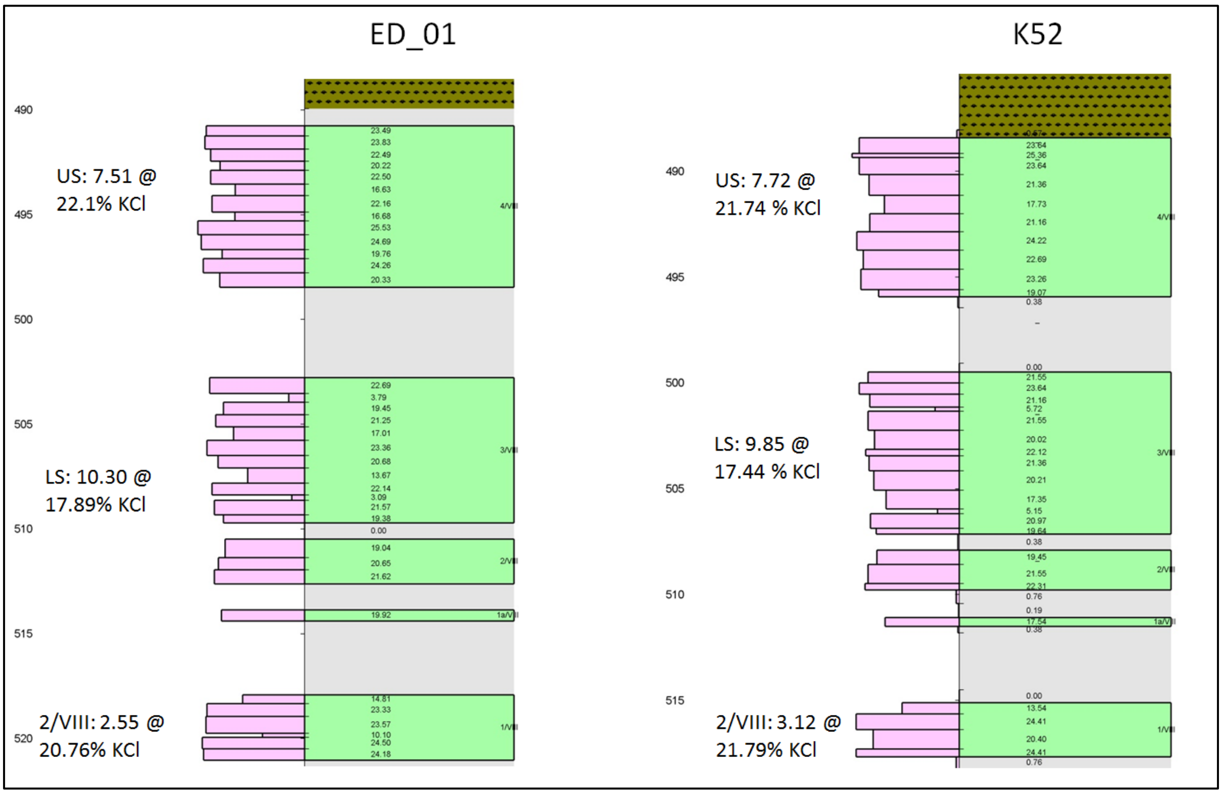


Figure 8. Typical Stratigraphic Log for the Dougou Area and description of Major Units

1. **Unconsolidated sands**: up to 50 metres thick. Plio-Pleistocene (< 5.3 Ma) age.

2. **Ferruginous Sandstone**: relatively coarse-grained sandstone, locally with iron concretions and separated by layers of clay and silt. Oligocene and Miocene (34 to 5.3 Ma = largely Neogene). Prograding shelf setting fed by Congo. Includes Daulouka Sandstone Formation. The contact to the underlying dolomitic siltstone is an unconformity.

3. **Dolomitic Siltstone:** Approx 50 metres. Greyish claystone to siltstone and fine-grained sandstone with dolomitic cement and some layers/lenses of limestone. Cenomanian to Miocene (99.5 to 34 Ma = Late Cretaceous and most of Paleogene). Includes Madingo Marls, Loango Carbonates, Likouala Silt Formations.

4. **Dolomitic Limestone**: Approx. 55 metres of fine grained dolomite and dolomitic limestone with minor silt and clay. Albian aged (112 to 99.5 Ma = *Upper* Early Cretaceous). Sendji Carbonate Formation. Conformable with the below.

5. **Anhydrite Sequence**: Typically 5 to 20 metres thick. Gypsum upper, massive Anhydrite middle and silt, clay, organic material lower portion. Is the uppermost part of Loeme Evaporite. Was conformable with below at time of deposition.

6. **Salt Sequence**: Typically 400-600 metres thick, mainly halite, potash layers and lesser bischofite and insoluble layers (Post Rift) Up to 11 evaporite cycles. Aptian (125 to 112 Ma = Early Cretaceous). Loeme Evaporite Formation.

7. **Footwall clastic sediments**: < 100 m thick (post-rift) Chela Formation (lowermost Aptian) is usually present, overlying several hundred metres or more of Early Cretaceous and Jurassic aged coarse clastics sediments (Pre and Syn Rift) loosely termed the Coccobeach Group. These in turn overly the crystalline Precambian aged basement rocks (not reached in the Dougou area).

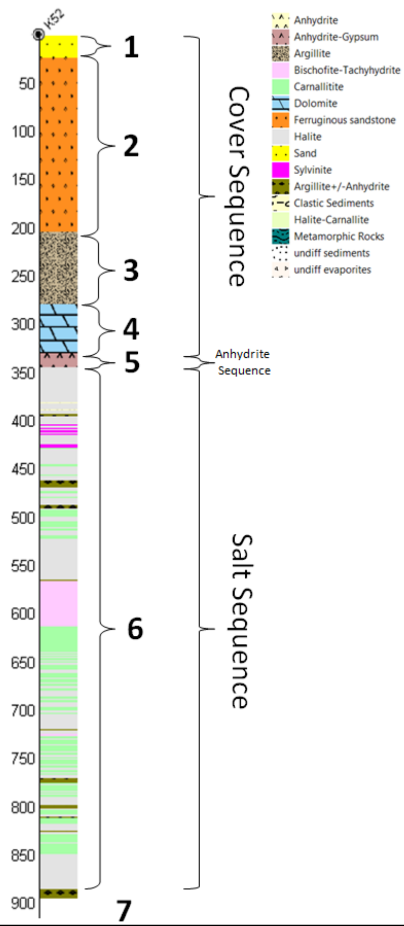


Figure 9. Historic Interpretation of borehole and seismic data through part of the Sintoukola Permit, several kilometres north of the Dougou MRE area. The Horst De La Noumbi is considered to be the same feature herewith referred to as the Yangala High.

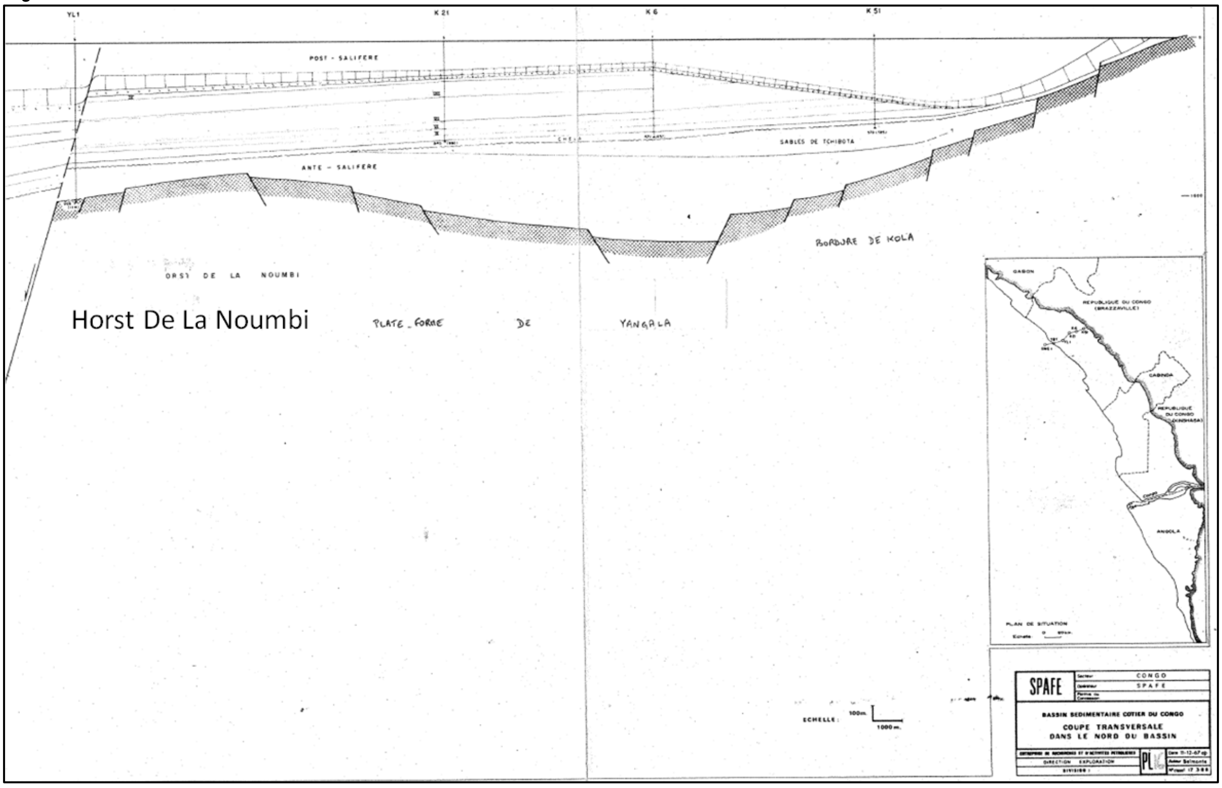


Figure 10. Hangingwall Seam carnallitite thickness isopach. The Inferred extent (black dashed line) and the exclusion areas (red dashed lines) are shown. The conversion of the carnallitite to sylvinite is reflected in the thinning of the carnallitite in the vicinity of ED_01/K52.

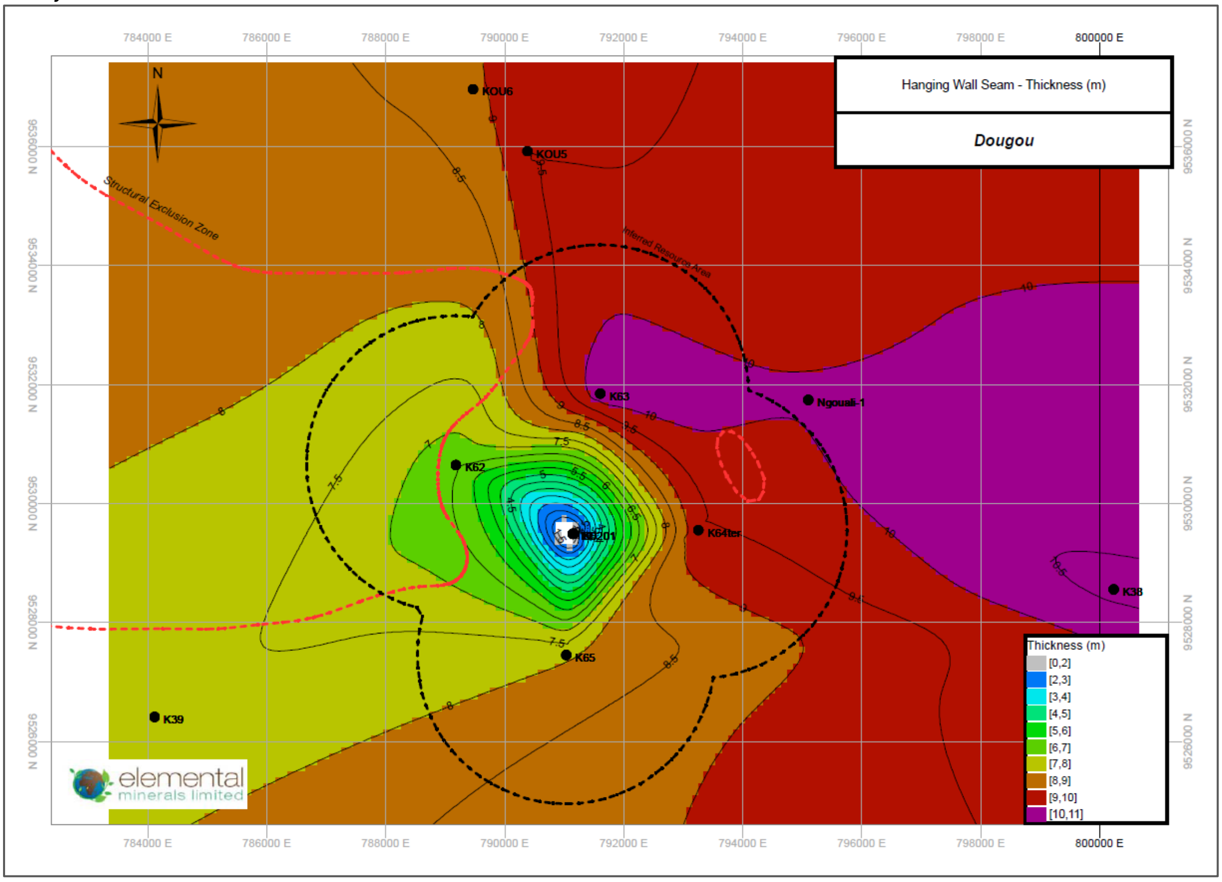


Figure 11. Upper Seam carnallitite thickness isopach. The Inferred extent (black dashed line) and the exclusion areas (red dashed lines) are shown.

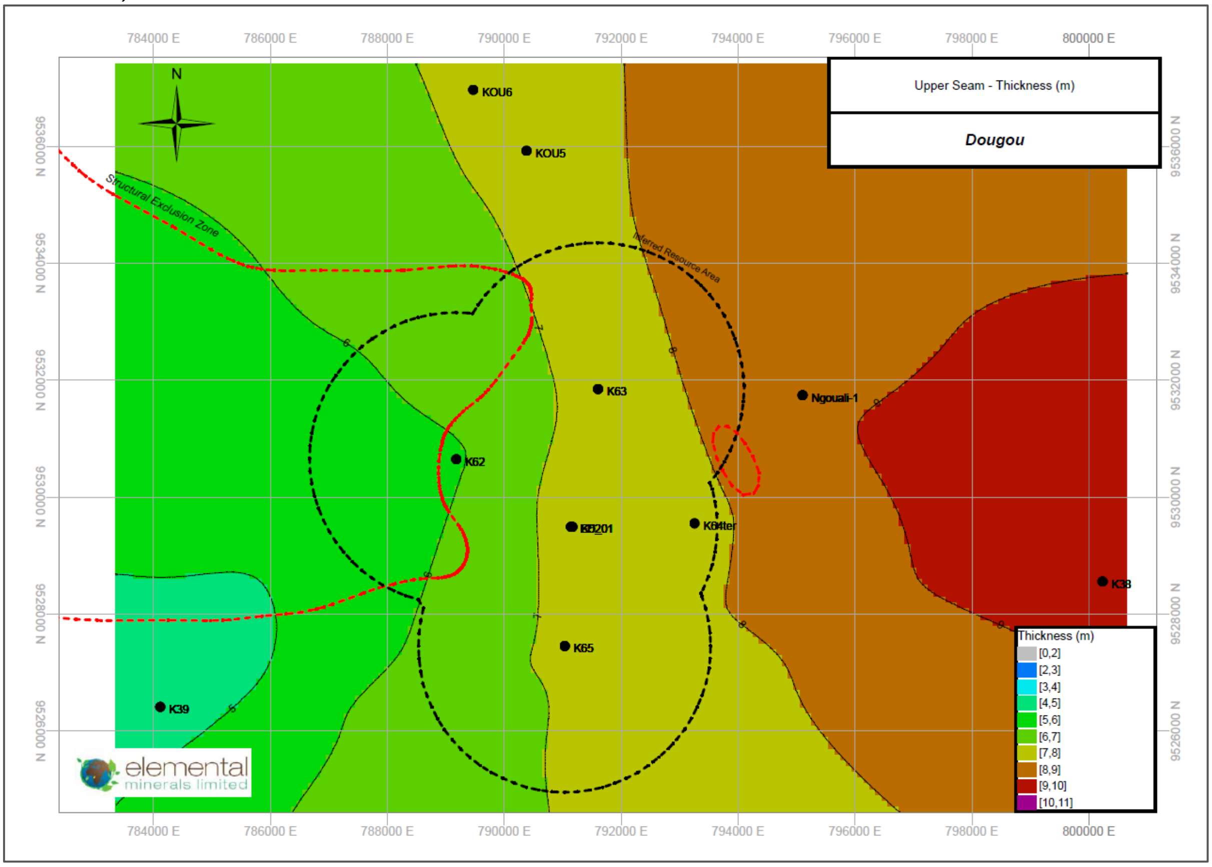
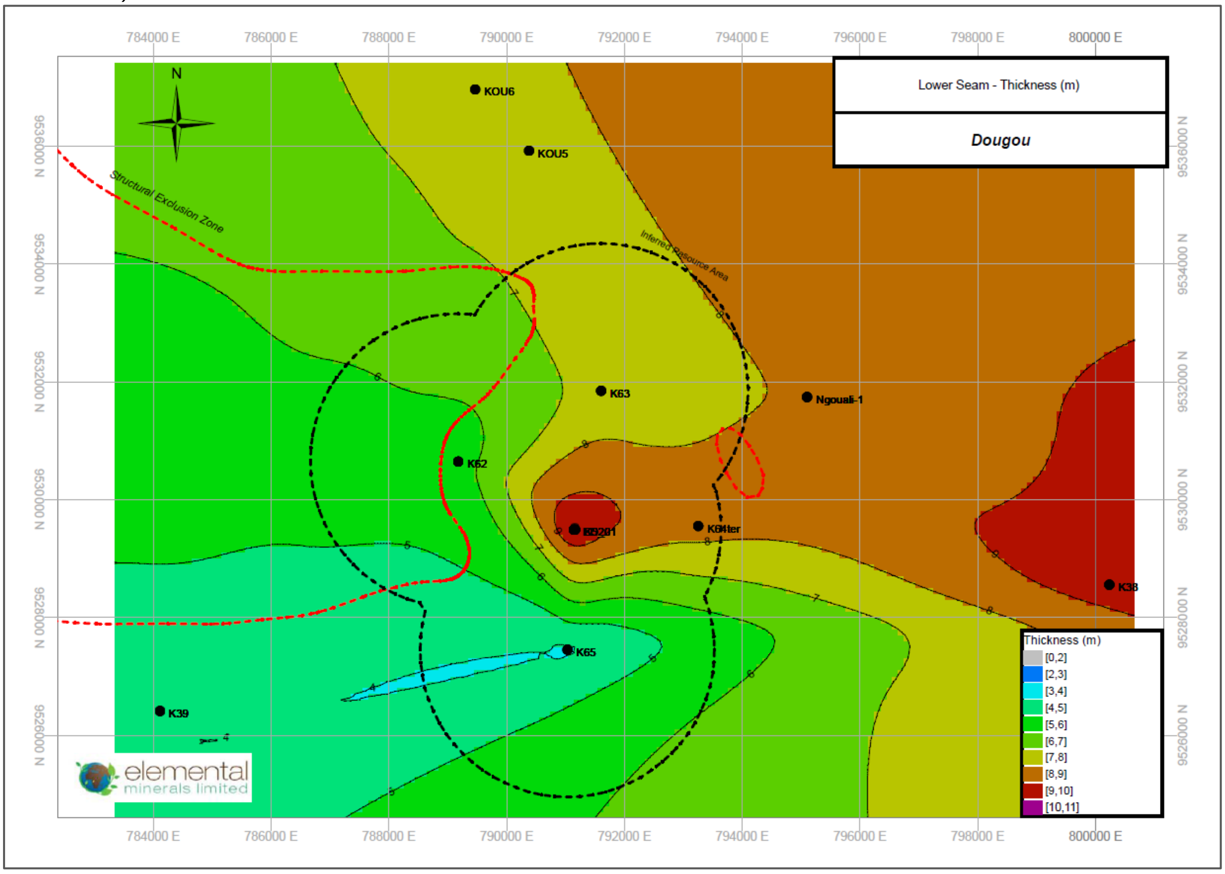


Figure 12. Lower Seam carnallitite thickness isopach. The Inferred extent (black dashed line) and the exclusion areas (red dashed lines) are shown.



References

Ercosplan, (2007). Resource Estimate for the Makola Exploration Permit Area, Kouilou Region, Republic of Congo. Prepared for MagMinerals Inc by ERCOSPLAN Ingenieurgesellschaft Geotechnik und Bergbau mbH

Seranne, Michel and Anka, Zahie, (2005). South Atlantic continental margins of Africa: A comparison of the tectonic vs climate interplay on the evolution of equatorial West Africa and Southwest Africa margins. In Journal of Earth Sciences 43 283-300

Societe Des Petroles D'Afrique Equatoiale Francaise, (1968). Basin Sedimentaire Cotier Du Congo. Various Company Documents and Sections. Unpublished.