Ravensgate
Mining Industry Consultants

INDEPENDENT EXPERTS TECHNICAL REPORT

on

GABON POTASH PROJECTS

for

PLYMOUTH MINERALS LIMITED

26 February 2016

RESOURCEFUL TECHNICAL PARTNERS

INDEPENDENT EXPERTS TECHNICAL REPORT

Prepared by RAVENSGATE on behalf of:

Plymouth Minerals Limited

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Sam Ulrich
For and on behalf of:
RAVENSGATE

This report has been commissioned from and prepared by Ravensgate for the exclusive use of Plymouth Minerals Limited.

Each statement or opinion in this report is provided in response to a specific request Plymouth Minerals Limited to provide that statement or opinion. Each such statement or opinion is made by Ravensgate in good faith and in the belief that it is not false or misleading.

Each statement or opinion contained within this report is based on information and data supplied by Plymouth Minerals Limited to Ravensgate, or otherwise obtained from public searches conducted by Ravensgate for the purposes of this report.

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1.1 Introduction

Ravensgate International Pty Ltd ATF Ravensgate Unit Trust (Ravensgate) has been commissioned by Plymouth Minerals Limited (Plymouth) to provide an Independent Experts Technical Report (IETR) on the Manama and Banio potash projects in Gabon, West Africa. Plymouth has entered into a Binding Heads of Agreement to acquire a 100% interest in these projects through the purchase of Equatorial Potash Pty Ltd (Equatorial). Mayumba Potasse SARL (Gabon) is a wholly owned subsidiary of Equatorial and holds a 100% interest in an exploration permit application over the Mamana project and granted exploration permit G5-595 over the Banio project. The IETR is for inclusion in Plymouth's Notice of Meeting.

1.2 Plymouth's Gabon Potash Projects

The Mamana and Banio potash projects are located in Gabon, West Africa. The Mamana project is located approximately 120km southeast of Libreville, the capital of Gabon and the Banio project is approximately 450km southeast of Libreville. The southern extent of the Banio project is located approximately 5km north of the border between Gabon and the Republic of the Congo.

The first salt deposits of Gabon were discovered in 1935 during early petroleum exploration. Potash was first intersected in 1948, with the systematic search for potash in the Gabon Basin launched in 1954.

Potash is present as sylvite and carnallite in the Ezanga Formation within the Gabon Basin and the Loeme Formation within the Congo basin.

1.2.1 Mamana Potash Project

The Mamana project consists of a single exploration permit application (DGPEM: No. 651) covering 219km^2. Historical exploration comprises of seismic surveying and drilling. Ten drill holes have been drilled within the Mamana project area. Three holes completed in the 1930s were not deep enough to intersect the Ezanga Formation with the remaining seven holes (MM1-MM7) that were drilled in the 1950s specifically targeted potash. There has been no exploration for potash since.

All of the MM1-MM7 holes intersected potash mineralisation with details of these intercepts presented in Table 3 of Section 5.3.1. Mineralised potash horizons in MM1-MM7 within the Ezanga Formation start at depths ranging from 384m to 992m with widths ranging from 2.06m to 13.0m. A representative selection of intercepts is presented below showing the range in widths, depths and grades.

MM2: 4.35M @ 29.1% K_2O (46.1% KCl) from 384m

MM3: 2.06m @ 15.9% K_2O (25.2% KCl) from 701m

MM4: 7.30m @ 15.9% K_2O (16.5% KCl) from 992m

MM5: 8.5m @ 10.0% K_2O (15.4% KCl) from 514m

MM7: 13.0m @ 12.0% K_2O (19.0% KCl) from 628m)

Two separate Exploration Targets were developed by independent consultants based on the Mamana drilling in 2012 and 2013.

- 2012 Exploration Target: 545Mt @ 13-14% KCl
- 2013 Exploration Target: 200-250Mt @ 12-14% K_2O (19-22% KCl)

With an Exploration Target it is important to note that the potential quality and grade is conceptual in nature, that there has been insufficient exploration to estimate a Mineral Resource and that it is uncertain if further exploration will result in the estimation of a Mineral Resource.

Details of these Exploration Targets are presented in Section 5.4.1.

Ravensgate has concluded that the Mamana project is of merit and worthy of further exploration. Based on the historical drilling, the depth to the top of the potash hosting Ezanga Formation is generally shallow (<1,000m) ranging from 363m to 607m. Based on the historical drilling results and Exploration Targets, the Mamana project has good potential for defining additional potash mineralisation and future Mineral Resources with additional infill drilling and/or further seismic section interpretation or acquisition of seismic data. Areas of specific interest would be those interpreted to be less deformed part of the Mamana Dome anticline as identified in holes MM2 and MM3.

1.2.2 Banio Potash Project

The Banio project consists of a single granted exploration permit (G5-595) covering 1,238km^2. It is located just over 50km northwest of Elemental Mineral Resources' Kola and Dougou potash Mineral Resources in the Republic of Congo. Historical exploration comprises of seismic surveying and petroleum oil well drilling. Within the project area two oil wells are confirmed as being drilled (BO1 and BO2) in the 1970s, with a third hole (BATC-1) being unconfirmed as drilled, as only a well planning report is presently available, though it appears on later maps.

BO1 intersected the salt formation from 580m to 1,175m with it being labeled as the Loeme Formation containing anhydrite, salt and potash, with little other details available. BO2 intersected the salt formation from 454m to 1,207m. Within the salt formation of BO2, nine intervals of greater than 10m in length and greater than 90% salt were recorded. Selective spot samples were taken from some of these intervals and analysed by X-ray Diffraction (XRD) detailing the individual constituents of the salt interval, with some returning high percentages of carnallite and sylvite. Details of these analyses are presented in Table 7 in Section 6.3.1.

As the salt formation in BO1 being interpreted as the Loeme Formation (placing it in the Congo Basin), this is important as the Loeme Formation is considered to be of much simpler geometry than the Ezanga formation due to a lack of deformation. It also makes the salt sequence analogous to that hosting the Kola and Dougou potash Mineral Resources - also in the Loeme Formation.

Based on the historical petroleum drilling within and surrounding the Banio project, the depth to the top of the Ezanga Formation prospective for potash is generally shallow (<1,000m) ranging from 253m to 660.5m. Further analysis of the seismic data within and around the project area will aid in identifying areas of relatively undeformed salt for targeting.

2. INTRODUCTION

2.1 Terms of Reference

Ravensgate has been commissioned by Plymouth to provide an Independent Experts Technical Report (IETR) on the Manama and Banio potash projects in Gabon, West Africa. Plymouth has entered into a Binding Heads of Agreement to acquire a 100% interest in these projects through the purchase of Equatorial. Mayumba Potasse SARL (Gabon) is a wholly owned subsidiary of Equatorial and holds a 100% interest in an exploration permit application over the Mamana project and granted exploration permit G5-595 over the Banio project. The IETR is for inclusion in Plymouth's Notice of Meeting.

This report has been prepared in accordance with the Code and Guidelines for Assessment and Valuation of Mineral Assets and Mineral Securities for Independent Expert Reports (VALMIN Code, 2005) and the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (JORC Code, 2012). The report has also been prepared in accordance with ASIC Regulatory Guides 111 (Contents of Expert Reports) and 112 (Independence of Experts). The Technical Project Review and Independent Technical Valuation report has been compiled based on information available up to and including the date of this report.

2.2 Tenement Status Verification

Ravensgate has not independently verified the status of the tenements that are referred to in this report, which is a matter for independent legal experts. At the time of writing Ravensgate understands that the Mamana project tenement is under application and Banio project tenement (G5-595) is granted. Ravensgate has sighted a copy of the granted licence document for exploration permit G5-595 and conditions of grant.

2.3 Site Investigation

Ravensgate did not carry out a site visit to Plymouth's project areas in the preparation of this report. Ravensgate is satisfied that there is sufficient current information available to allow an informed appraisal to be made. Ravensgate is of the opinion that no significant additional benefit would have been gained through a site visit to the project areas at this stage. Ravensgate has concluded that Plymouth's projects are of technical merit and worthy of conducting further review and exploration.

2.4 Qualifications, Experience and Independence

Ravensgate has been consulting to the mining industry since 1997 with its services that include valuations, independent technical reporting, exploration management and resource estimation. Our capabilities include reporting for all the major securities exchanges and encompass a diverse variety of commodity types.

Author: Sam Ulrich, Principal Consultant, BSc (Hons) Geology, GDipAppFin, MAusIMM, MAIG, FFin.

Sam Ulrich is a geologist with over 20 years' experience in near mine and regional mineral exploration, resource development and the management of exploration programs. He has worked in a variety of geological environments in Australia, Indonesia, Laos and China primarily in gold, base metals and uranium. Prior to joining Ravensgate Sam worked for Manhattan Corporation Ltd, a uranium exploration and resource development company in a senior management position. Mr Ulrich holds the relevant qualifications and experience as well as professional associations required by the ASX, JORC and VALMIN Codes in Australia 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'. He is a Qualified Person under the rules and requirements of the Canadian Reporting Instrument NI43-101.

Co-author: H. Kate Holdsworth, Senior GIS Geologist, BSc (Hons) Geology, MAusIMM

H. Kate Holdsworth is a senior GIS geologist with over 24 years GIS experience who joined the Ravensgate team in September 2006. During her tenure at Ravensgate, she has contributed to the compilation of numerous Independent Geologists Reports, Valuation Reports, GIS projects as well as having assisted clients with their exploration reporting requirements and QA/QC investigations into client's data quality. Prior to joining Ravensgate, she worked for Giscoe Pty Ltd, a GIS company in Johannesburg, for ten years, where she was involved in diverse GIS projects, including database creation, database population and data validation. Kate has four years' experience in GIS with the Geological Survey of South Africa.

Peer Reviewer: Alan Hawkins, Principal Consultant, BSc (Hons) Geology, MSc (Ore Deposit Geology), MAIG RPGeo, FSEG

Alan Hawkins is a geologist with over 19 years' experience in near mine and regional mineral exploration, resource development and the management of exploration programs. He has worked in a variety of geological environments in Australia and Indonesia, primarily in gold and copper. Prior to joining Ravensgate, Alan worked for Newmont Mining Corporation as a Principal Geologist in their exploration, corporate and business development divisions, providing technical support, due diligence and rapid first-filter geological and economic analysis to M&A teams in the Asia Pacific region as well as US and African EBD teams. This role also included project and non-core asset divestments including commercial negotiations with junior exploration companies, stakeholders and land & legal teams.

Previous to this, Alan held various principal and senior regional exploration management roles in WA and NT. In the 1990's Alan worked as a near mine exploration geologist for Eagle Mining Corporation NL, Great Central Mines Ltd and Normandy Mining Ltd at the Jundee-Nimary Gold Mine and was part of the team that discovered the +2Moz gold Westside deposit, where he also worked as a resource modelling geologist before joining Newmont's regional exploration team. Alan holds the relevant qualifications and professional associations required by the ASX, JORC and VALMIN Codes in Australia to qualify as a Competent Person as defined in the JORC Code. He is a Qualified Person under the rules and requirements of the Canadian Reporting Instrument NI43-101 and is a Registered Professional Geoscientist in the field of Mineral Exploration with the Australian Institute of Geoscientists.

2.5 Disclaimer

The authors of this report and Ravensgate is independent of Plymouth, its directors, senior management and advisors and has no economic or beneficial interest (present or contingent) in any of the mineral assets being reported on. Ravensgate is remunerated for this report by way of a professional fee determined in accordance with a standard schedule of commercial rates, which is calculated based on time charges for work carried out, and is not contingent on the outcome of this report. Fees arising from the preparation of this report are in the order of $11,000 to $15,000.

The relationship with Plymouth is solely one of professional association between client and independent consultant. None of the individuals employed or contracted by Ravensgate are officers, employees or proposed officers of Plymouth or any group, holding or associated companies of Plymouth.

This report has been compiled based on information available up to and including the date of this report. The statements and opinions are based on the reference date of 16 October 2015 and could alter over time depending on exploration results, mineral prices and other relevant market factors.

2.6 Consent

Ravensgate consents to this report being distributed, in full, in the form and context in which the technical assessment is provided, for the purpose for which this report was commissioned. Ravensgate provides its consent on the understanding that the assessment expressed in the individual sections of this report will be considered with, and not independently of, the information set out in full in this report.

2.7 Principal Sources of Information

The principal sources of information used to compile this report comprise technical reports and data variously compiled by Plymouth and their partners or consultants, publically available information such as ASX releases, government reports and discussions with Plymouth's technical and corporate management personnel. A listing of the principal sources of information is included in the references attached in Section 7.

Ravensgate has endeavoured, by making all reasonable enquiries, to confirm the authenticity, accuracy and completeness of the technical data upon which this report is based. A final draft of this report was also provided to Plymouth prior to finalisation by Ravensgate, requesting that Plymouth identify any material errors or omissions prior to its final submission. Ravensgate does not accept responsibility for any errors or omissions in the data and information upon which the opinions and conclusions in this report are based, and does not accept any consequential liability arising from commercial decisions or actions resulting from errors or omissions in that data or information.

2.8 Competent Persons Statement

The information in this report that relates to Exploration Results is based on information compiled by Mr. Samuel Ulrich, an independent Consultant Geologist with over 20 years of experience. Mr. Ulrich who is member of the Australasian Institute of Mining and Metallurgy (AusIMM) and the Australian Institute of Geoscientists (AIG) has sufficient experience, which is relevant to the style of mineralisation under consideration and to the activity being undertaken to qualify as a “Competent Person”, as defined in the 2012 Edition of the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves and consents to the inclusion in this report of the matters based on information in the form and context in which they appear.

2.9 Background Information

The projects discussed in this report are located in in the country of Gabon in Africa. A locality map of the projects is presented in Figure 1 below. An overview of Gabon and potash is provided in Sections 3 and 4, respectively. A brief overview of the Mamana and Banio projects are outlined in Sections 5 and 6, respectively. A summary of the tenement details are listed in Sections 5.2.1 and 6.2.1 of this report. Report file references and a glossary of terms are also included at the end of this report. Ravensgate understands that the Mamana project tenement is presently under application and that the Banio project tenement is granted.

Figure 1 Location of Plymouth's Gabon Potash Projects

Source: Supplied by Plymouth, 2015

3. GABON COUNTRY PROFILE

3.1 Introduction

Gabon (officially the Gabonese Republic) is a sovereign state on the west coast of Central Africa. Located on the equator, Gabon is bordered by Equatorial Guinea to the northwest, Cameroon to the north, the Republic of the Congo on the east and south and the Gulf of Guinea to the west. It has an area of nearly 270,000km^2 and its population is estimated at 1.5 million people. Its capital and largest city is Libreville.

Since its independence from France in 1960, Gabon has had three presidents. In the early 1990s, Gabon introduced a multi-party system and a new democratic constitution that allowed for a more transparent electoral process and reformed many governmental institutions. Gabon was also a non-permanent member of the United Nations Security Council for the 2010–2011 term.

Low population density, abundant petroleum and foreign private investment have helped make Gabon one of the most prosperous countries in sub-Saharan Africa, with the 4th highest Human development index and the third highest Gross Domestic Product (GDP) per capita (after Equatorial Guinea and Botswana) (Wikipedia, 2015).

3.2 Geopolitical Environment

Extract below from Control Risks from SNL.com (2015).

Political (Risk – Medium)

Following the death of the long-standing president Omar Bongo (1967-2009) in June 2009, his son Ali Ben Bongo and the ruling Gabonese Democratic Party (PDG) secured victory in the August 2009 presidential poll. Bongo has lacked the popular acquiescence that characterised his father's tenure, and his different ruling style has generated divisions within the PDG. In particular, his efforts to assert his authority and reallocate patronage structures while overseeing an ambitious reform agenda have generated political resistance from the old guard of politicians who enjoyed greater influence under his father’s rule. Despite persistent tensions and rising factionalism within the PDG, the ruling party secured 114 of 120 seats in the December 2011 legislative elections, which the opposition boycotted. This sweeping majority and Bongo's move to replace members of his father's inner circle with his own network of ministerial allies have created a relatively strong power base through which the president can face down popular and political opposition. However, challenges to this authority are likely to increase in the run-up to the 2016 presidential election, with high-profile defections from the PDG providing the opposition with a stronger political platform (SNL, 2015).

Operational (Risk – Medium)

The operating environment is broadly positive, though investors face a number of obstacles, including a shortage of skilled labour, high levels of political interference in the private sector, a lack of private sector business experience, and poor infrastructure outside the capital Libreville and the main oil hub Port-Gentil. Travel by air between Libreville and the interior is frequently the only feasible transport option for personnel, though most airlines are blacklisted. There are serious deficiencies in power generation and many rural areas in the south-east remain without electricity. The government plans to increase power generation from 374MW in 2013 to 1,200MW in 2020, principally through hydro projects. However, despite efforts to increase power generation capacity, growing demand and the wide deficit in public energy production will continue to challenge operators, particularly given poor electricity transmission and distribution infrastructure. The constitution recognises judicial independence, but corruption and the politicisation of judicial appointments render the court system unreliable for adjudicating commercial disputes. Nevertheless, international arbitration is available through Gabon's membership of various international arbitration bodies. Although Bongo has vowed to root out corruption, high levels of bureaucratic complexity, the absence of effective oversight, and a history of corruption and fraud at the highest levels of the state will continue to facilitate endemic graft at all levels of the administration. The employment of non-Gabonese African nationals is heavily regulated, and trade unions are active and influential, particularly in the oil sector. A number of international and domestic NGOs address environmental issues (SNL, 2015).

Security (Risk - Low)

The security environment for business is generally benign. Gabon has been largely free of the chronic insecurity that has engulfed several of its neighbours. Although armed crime is increasing as economic prospects decline, particularly in Libreville, overall, crime levels remain low. Periodic bouts of politically motivated civil unrest pose a security risk in Libreville, while the opposition stronghold of Port-Gentil has also witnessed politically motivated riots and protests against job cuts in the oil sector. Bongo's election victory, and subsequent legislative developments and constitutional amendments have triggered riots in several cities, including Libreville and Port-Gentil. Politically motivated violence will persist amid mounting frustration with Bongo and the PDG. However, such violence does not typically pose a significant risk to foreign operations (SNL, 2015).

Terrorism (Risk - Insignificant)

Gabon has no recent history of terrorism and there are no local terrorist groups. The risk of transnational extremist groups targeting foreign interests is insignificant (SNL, 2015).

3.3 Political System

The Gabon Chief of State is the President Ali Bongo Ondimba who has held this position since the 16th October 2009. The Head of government is the Prime Minister Daniel Ona Ondo who has held this position since 27th January 2014.

The cabinet is known as the Council of Ministers which is appointed by the Prime Minister in consultation with the president.

Elections for the office of the president are undertaken by simple majority popular vote for a 7-year term with no number of term limits. The last election was held on the 30th August 2009 with the next election to be held in 2016. The Prime Minister is appointed by the president (CIA, 2015).

Legislative branch

The parliament is a bicameral Parliament consisting of the Senate (102 seats; members indirectly elected by municipal councils and departmental assemblies by absolute majority vote in two rounds; members serve 6-year terms) and the National Assembly (120 seats; members elected in single-seat constituencies by absolute majority vote in two rounds if needed; members serve 5-year terms) (CIA, 2015).

Senate elections were to be held in the January 2015. The National Assembly elections were last held on the 17th December 2011. The next election will be held in December 2016 (CIA, 2015).

3.4 Legal System

Gabon has a mixed legal system of French civil law and customary law.

Judicial branch

The highest courts in Gabon are the Supreme Court and the Constitutional Court. Subordinate courts are the Courts of Appeal; Court of State Security; county courts and military courts (CIA, 2015).

3.5 Economy

Gabon enjoys a per capita income four times that of most sub-Saharan African nations, but owing to income inequality, a large proportion of the population remains poor. Gabon depended on timber and manganese until oil was discovered offshore in the early 1970s. The economy was reliant on oil for about 50% of its GDP, about 70% of revenues, and 87% of goods exports for 2010, although some fields have passed their peak production. A rebound of oil prices from 1999 to 2013 helped growth, but declining production has hampered Gabon from fully realising potential gains. Gabon signed a 14-month Stand-By Arrangement with the International Monetary Fund (IMF) in May 2007, and later that year issued a $1 billion sovereign bond to buy back a sizable portion of its Paris Club debt. Gabon continues to face fluctuating prices for its oil, timber, and manganese exports. Despite the abundance of natural wealth, poor fiscal management has stifled the economy. However, President Bongo has made efforts to increase transparency and is taking steps to make Gabon a more attractive investment destination to diversify the economy. Bongo has attempted to boost growth by increasing government investment in human resources and infrastructure. GDP grew nearly 6% per year over the 2010-2014 period (CIA, 2015). The GDP per capita in Gabon for 2014 was recorded at US$7195.74 (Trading economics, 2015).

3.6 Climate and Physiography

Gabon is located on the Atlantic coast of central Africa, on the equator, between latitudes 3°N and 4°S, and longitudes 8° and 15°E. Gabon generally has an equatorial climate with an extensive system of rainforests covering 85% of the country (Wikipedia, 2015). The average temperature is 25 ℃. The rainy season is from October to mid-December and mid-February to May when flooding occurs. During this period some roads may become impassable without the use of a four-wheel drive vehicle (Smart Traveller, 2015).

Gabon has three distinct geographical regions: the coastal plains (ranging between 20 to 300km from the ocean's shore), the mountains (the Cristal Mountains to the northeast of Libreville, the Chaillu Massif in the centre), and the savanna in the east. Gabon's largest river is the Ogooué which is 1,200km long. Gabon has three karst areas where there are hundreds of caves located in the dolomite and limestone rocks (Wikipedia, 2015). The Mamana and Banio projects are located in the coastal plains geographic region.

3.7 Infrastructure

Despite substantial investment in the Trans-Gabonais railway and foreign backing for road development in the 1990s, the surface transportation system is still limited. Until 1979, there were no railways except for the cableway link between the Congo border and the Moanda Manganese Mine. The main rivers are navigable for the last 80 to 160km of their course to the Atlantic Ocean.

The road network is limited and much of it is unusable during the rainy seasons. There are nearly 7,518km of road, but only 614km are tarred. Most of the country consists of impenetrable rainforest and the roads are generally of a poor standard.

There is no road connection between the second-largest city of Port Gentil and Libreville, but ferries operate between Libreville and Port Gentil (World Travel Guide, 2015).

By 1989 the railway line linking Libreville and Franceville, which is located in the southeast area of the country, was fully operational. The main port for petroleum exports is Port Gentil, which also handles logs (floated down the Ogooue River). Owendo, the principal mineral port, also handles timber. A third deep water port operates at Banio, in the south.

Air transport plays an important role in the economy, particularly because of the dense forest that covers much of the country and makes other modes of transport impracticable. There are international airports at Libreville and Port-Gentil and scheduled internal services link these to a number of domestic airfields. Gabon has a total of 61 airports within its borders, 11 of which have paved runways. The national carrier, Air Gabon, is 80% state owned.

The installed capacity for electricity production was 1.02 billion kilowatt hours (kWh) in 1995. Power generation is both hydroelectric and thermal (gas fired), with 72% of total capacity hydroelectric. There are proven crude petroleum reserves estimated in 1997 at 1.34 billion barrels. Production in 1996 was 135 million barrels. Natural gas production in 1995 was 102 million cubic meters (Nations Encyclopedia, 2015).

3.8 Mining Policy and Legal Framework

The Mining Code (Law No. 17/2014 of 30 January 2015), administered by the Ministry of Mines, has been sourced from www.africanlawbusiness.com. The new Mining Code applicable since 29 May 2015, applies to all mining activities and operations, in particular prospecting, exploration, appraisal, exploitation, development, construction, operation, extraction, storage, treatment, processing, cargo, transportation and marketing of mineral substances (mines and quarries), save for liquid or gaseous hydrocarbons or gaseous and underground waters which are regulated by other specific Gabonese legislation.

An Exploration Permit is issued for a three year period to conduct mineral exploration and evaluation and allows the holder with concessions to renew the permit twice for the same duration. Any exploration permit holder can only hold three exploration permits limited to a surface of 1,500 km^2 each (except in the case of diamonds). If deposits are known, the State may decide that the granting of the exploration permit will be after a tendering process.

The exploration permit has to be completed within three months of its granting by a mining convention, providing for, notably: technical, legal, tax, economic, customs and financial conditions; commitments of parties regarding in particular minimum work; and budget commitments and restoration of sites, according to a model of the mining convention complying with the new Mining Code.

In the event of commercial discovery of mineral substances within the scope of the exploration permit, this holder, only, can be granted an exploitation permit or a concession.

Exploitation of mines in Gabon is done according to a mining title, which differs according to the size of the mines discovered and the expected duration of the mine's operation:

- exploitation permit for 10 years of exploitation, renewable for a period of five years; and
- concession for 25 years of exploitation, renewable for a period of 10 years.

Each of these exploitation titles is granted by Presidential Decree for maximum surface areas of 1,500km^2 in conditions to be detailed within implementation decrees (yet to be adopted) and in any case after feasibility and environmental impact studies.

Small mines are reserved for national companies and companies which are controlled by Gabonese persons, while others are offered to any applicant who can demonstrate their technical and financial capabilities.

There is, however, a requirement for any applicant to a mining title to incorporate a local subsidiary in Gabon and any foreign investor controlling a mining company is requested to apply for an investment authorisation to be granted by the Gabonese Minister in charge of finances as well as submit a prior declaration for foreign investment according to foreign exchange regulations applicable in Gabon (African Law Business, 2015).

3.8.1 Processing and Beneficiation

In order to develop local content, the new Mining Code provides that mining conventions to be signed with the State have to provide for a plan for local processing of extracted mineral substances as well as using, as a priority, local SMEs in order to further the industrialisation of the mining sector. Some specific tax and customs advantages may be granted to incentivise local content.

The new Mining Code provides that, in order to promote local content and processing of mineral substances, export of some mineral resources is liable for exit duties at a rate of between 0 and 5% on a reverse sliding scale basis, depending on the level of local processing.

The list of mineral resources which have to be processed locally and which may face the above mentioned exit duties have to be provided by an implementation decree (not yet adopted) (African Law Business, 2015).

3.8.2 Taxes and Royalties

Mining companies carrying out mining activities in Gabon are subject to both specific mining fixed rate fees, royalties and duties which may vary in accordance with the mining activity phase and types of mineral resources in question.

Mining companies are also liable to the common tax regime (corporate income tax of 35%, withholding tax, distribution tax, VAT, land contributions, tax on wages, stamp and registration duties, harbour fees, etc.), although the Mining Code may provide specific rules and may provide for certain tax holiday periods.

Some specific mining taxes apply to both exploration and mining titles (fixed fees and surface royalty payments), while others apply only to mining titles (proportional mining tax) according to rates which vary from 3% to 5% with the substances in question and the period in question.

As part of social responsibility and local content requirements, the new Mining Code also requires a mining title holder to contribute to certain funds:

- mines support fund financed by the provision for mining investments;
- training fund for the personnel of the Mining Administration;

- provisions for social responsibility (local content, protection of environment, promotion of SMEs, etc.); and
- provision for diversified investments, which need to be completed by implementation decrees (to be adopted) (African Law Business, 2015).

3.9 Regional Geology

The understanding of the regional geology and tectonics that led to the formation of the salt deposits has mostly come from early petroleum exploration studies. Early studies were done by Brink (1974) and de Ruiter (1979), with more recent studies completed by Brownfield *et al.*, (2006) and Chen *et al.*, (2013).

The Aptian salt basin along west Africa extends from Cameroon in the north, to Namibia in the south (Figure 2).The Aptian salt basin is comprised of a number of smaller basins; the Douala, Kribi-Campo, Rio Muni, Gabon, Congo, Kwanza, Benguela and Namibe Basins. These basins are aligned north to south and delimited by an east-west trending fault system and other structural arches and highs related to syn-rift tectonics. The Aptian salt basin formed during the breakup of North America, Africa and South America at the end of the Late Jurassic to Early Cretaceous, during rifting of an extensive Paleozoic basin (Brownfield *et al.*, 2006).

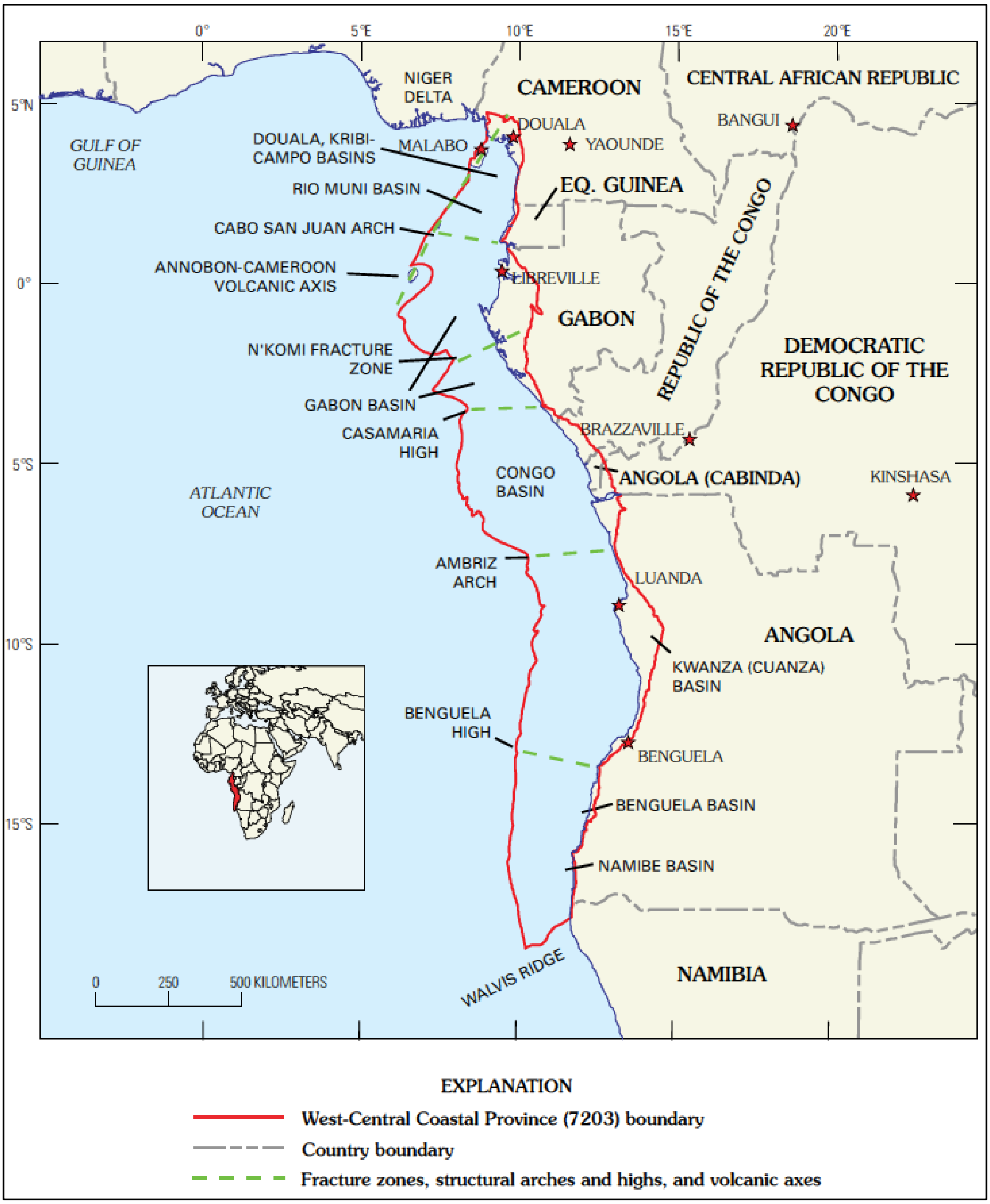
The Aptian salt basin has undergone a complex development history than can be divided into three stages:

1. Pre-rift stage (Late Proterozoic to Late Jurassic);
2. Syn-rift stage (Late Jurassic to Early Cretaceous); and
3. Post-rift stage (Late Cretaceous to Holocene).

More detail is provided on these stages in the following sections.

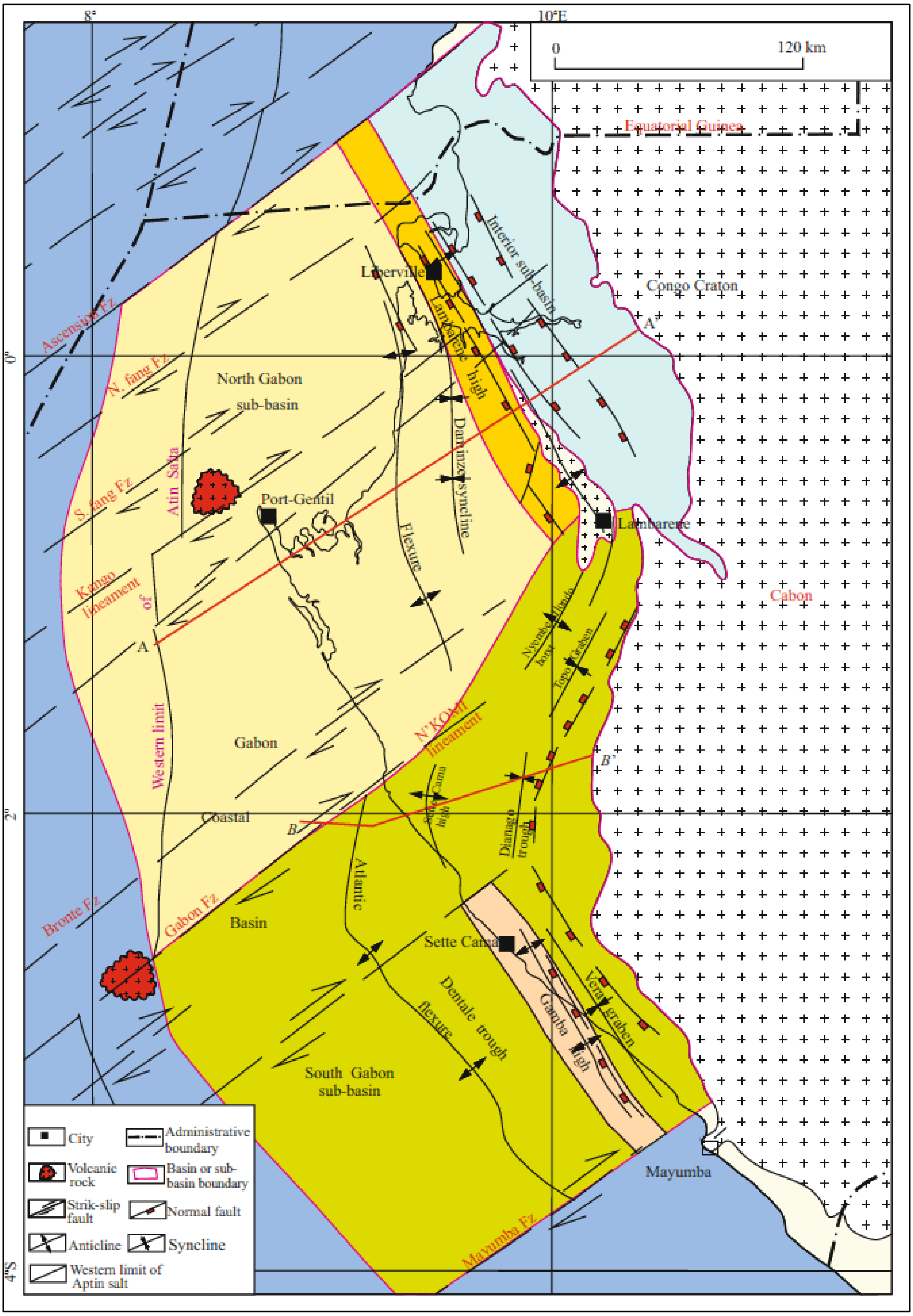
The Gabon Basin is divided into three sub basins; the Interior, North Gabon and South Gabon sub basins (Figure 3). The northern Fang fracture zone forms the northern boundary of the Gabon Basin with the Mayumba fracture zone forming the southern boundary. The Enkomi fracture zone is the division between the North Gabon and South Gabon sub basins (Chen *et al.*, 2013).

Figure 2 Location of Central West African Aptian Salt Basin



Source: Brownfield et al., 2006.
Notes: The West-Central Coastal Province (7203) boundary is analogous to the Aptian Salt Basin.

Figure 3 Gabon Sub Basins Showing Fault Systems and Tectonic Units

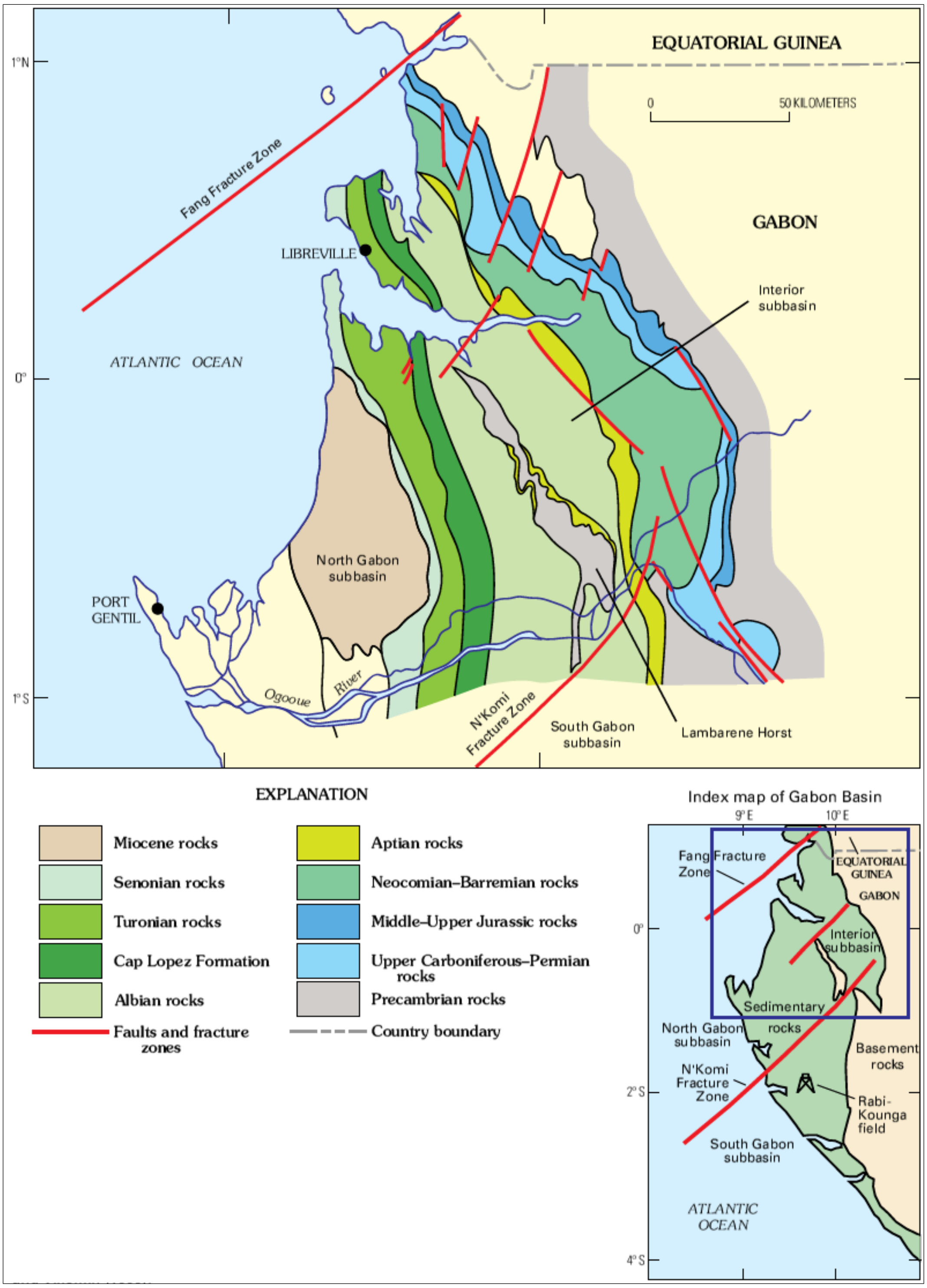


Source: After Chen et al., 2013.

3.9.1 Pre-Rift Stage

The pre-rift geology consists of rocks of Precambrian to Jurassic age that are exposed in the Interior sub-basin of the Gabon Basin (Figure 4) and exist in the eastern part of the Congo Basin. The pre-rift stage consisted of several phases of intracratonic faulting and downwarping lasting through to the Late Jurassic. The Interior sub-basin is separated from the North Gabon sub-basin by the Lambarene Horst (Figure 4).

Figure 4 Schematic Geology of the Interior and North Gabon Basins



Source: Brownfield et al., 2006.

3.9.2 Syn-Rift Stage

Initial rifting in the Aptian salt basin formed a series of asymmetrical horst and graben basins trending parallel to the present day coast line. Deposition into the basins was characterised by thick sequences of fluvial and lacustrine rocks.

3.9.3 Post-Rift Stage

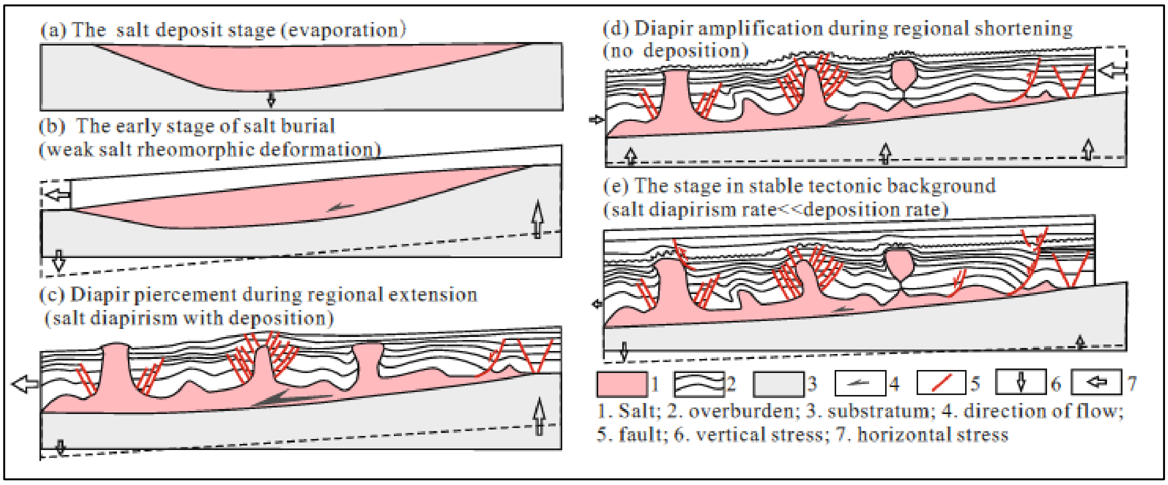
Post-rift rocks range in age from Aptian to Holocene and represent the initial opening of the Atlantic Ocean. The initial post-rift rocks are of Early to Mid Aptian age and consist of continental, fluvial, and lagoonal rocks that were deposited as rifting ceased. This was followed by a period of extensive deposition of evaporite units - mainly salt. Younger post-rift rocks were generally deposited in two distinct regimes (Brownfield *et al.*, 2006):

1. As transgressive units consisting of shelf clastic and carbonate rocks, followed by progradational units along the continental margin.
2. As open ocean deep water units.

3.9.4 Salt Deposition

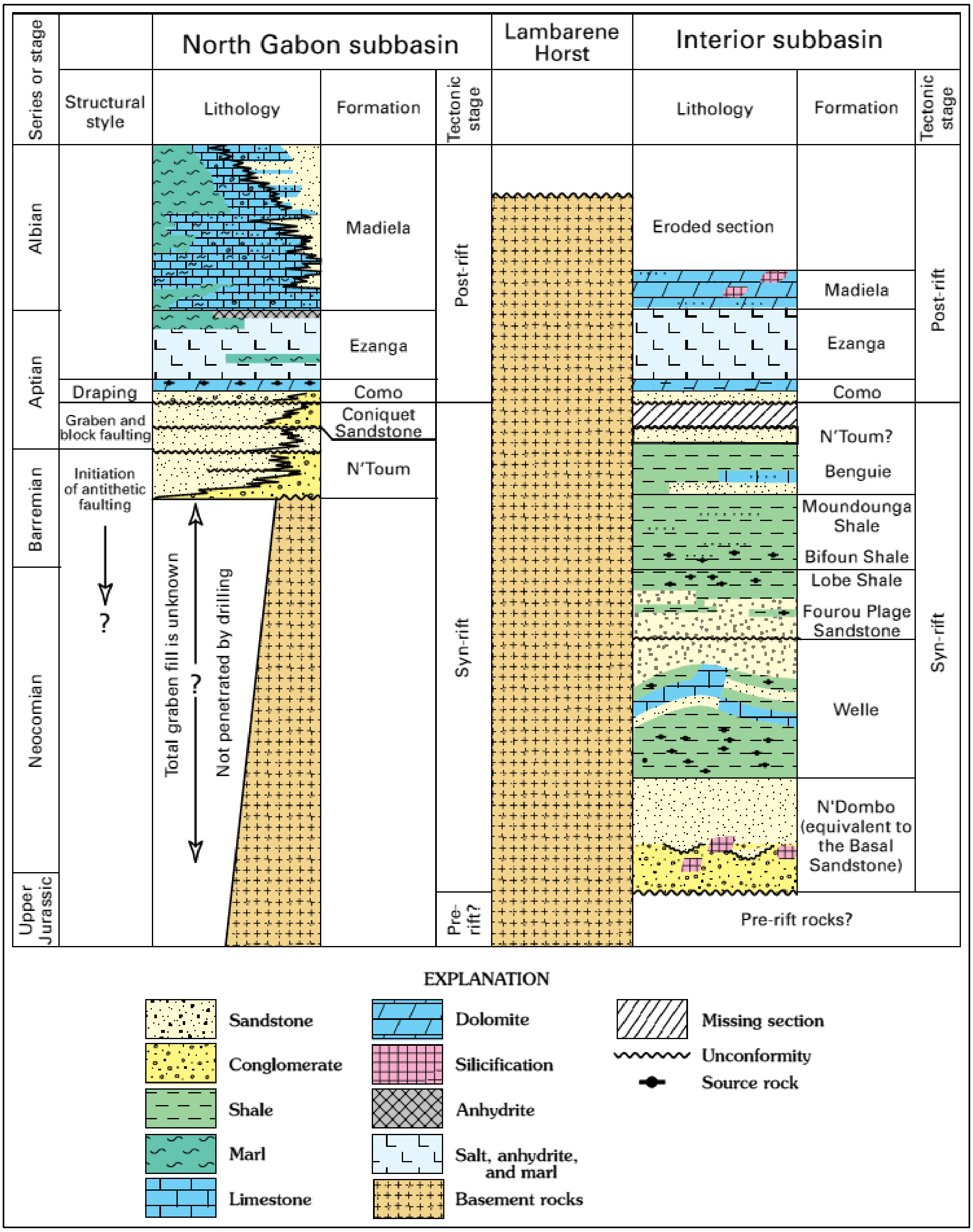
Salt was deposited during the Late Aptian throughout the basins of the Aptian salt basin. The extent of the salt basin was limited by the Walvis Ridge in the south and the Annobon-Cameroon volcanic axis, also called the Cameroon Fracture Zone in the north (Figure 2). The Ezanga Formation is the name of this region's wide salt unit in the Interior, North Gabon (Figure 6) and South Gabon sub basins (Figure 7). The Ezanga Formation is as much as 800m thick onshore and up to 1,000m thick offshore. Its true thickness is difficult to estimate because of extensive salt deformation. Deformation of the Ezanga Formation evaporites occurred during the deposition of the overlying Madiela Formation. Salt rocks have a plastic rheology and are likely to undergo plastic flow during burial. Seismic and petroleum well data reveal that flow deformation of the Ezanga Formation formed a large number of tectonic structures, including salt domes and diapirs (Chen *et al.*, 2013). A model for the evolution of the Ezanga Formation is presented in Figure 5. The Ezanga Formation is characterised by a high volume of potash and magnesium salts (de Ruiter, 1979) comprised mainly of carnallite and minor amounts of bischofite and halite.

Figure 5 Model for the Evolution of the Ezanga Formation in the Gabon Basin



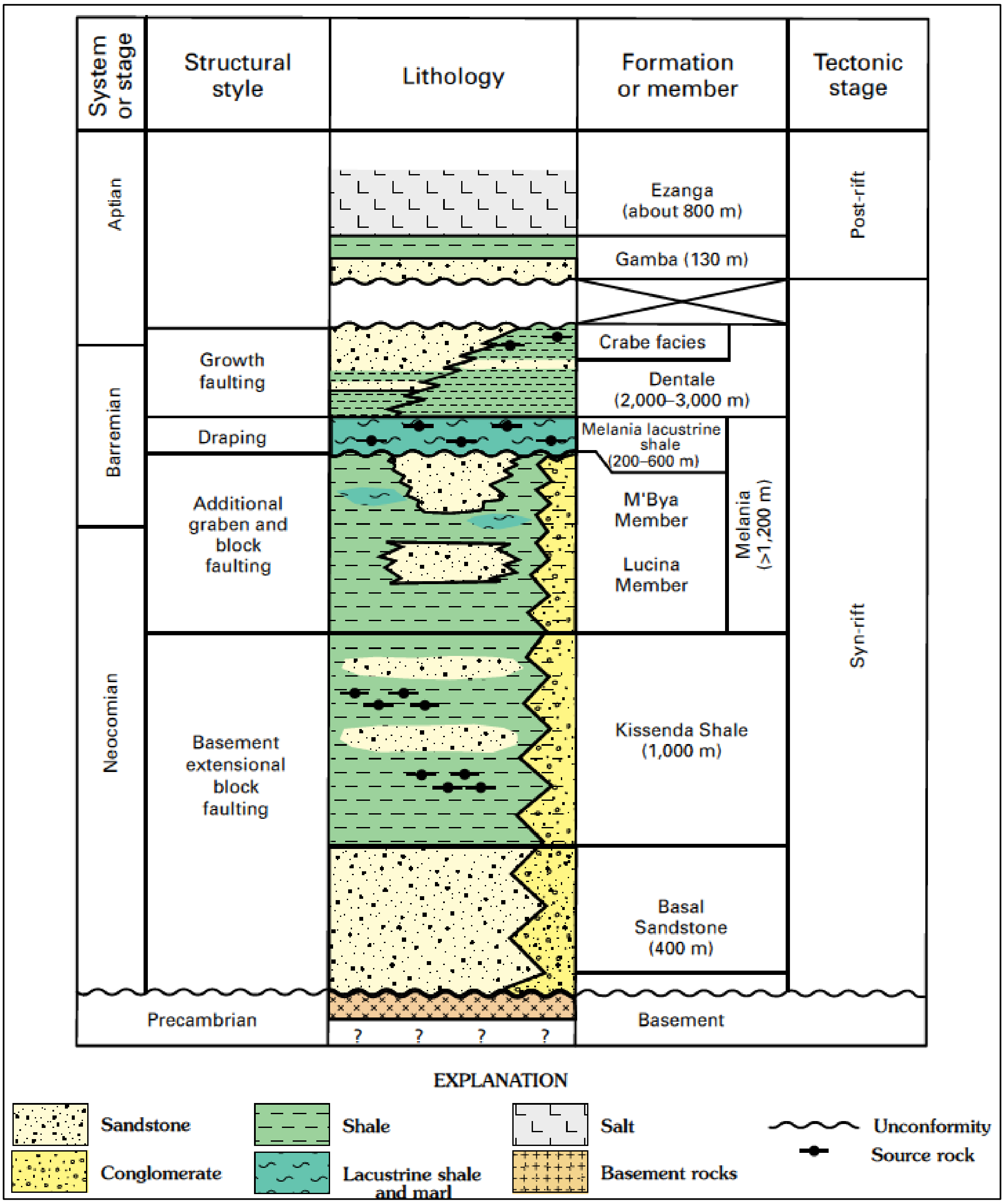
Source: After Chen et al., 2013.

Figure 6 Generalised Stratigraphy of the Interior and North Gabon Sub Basin



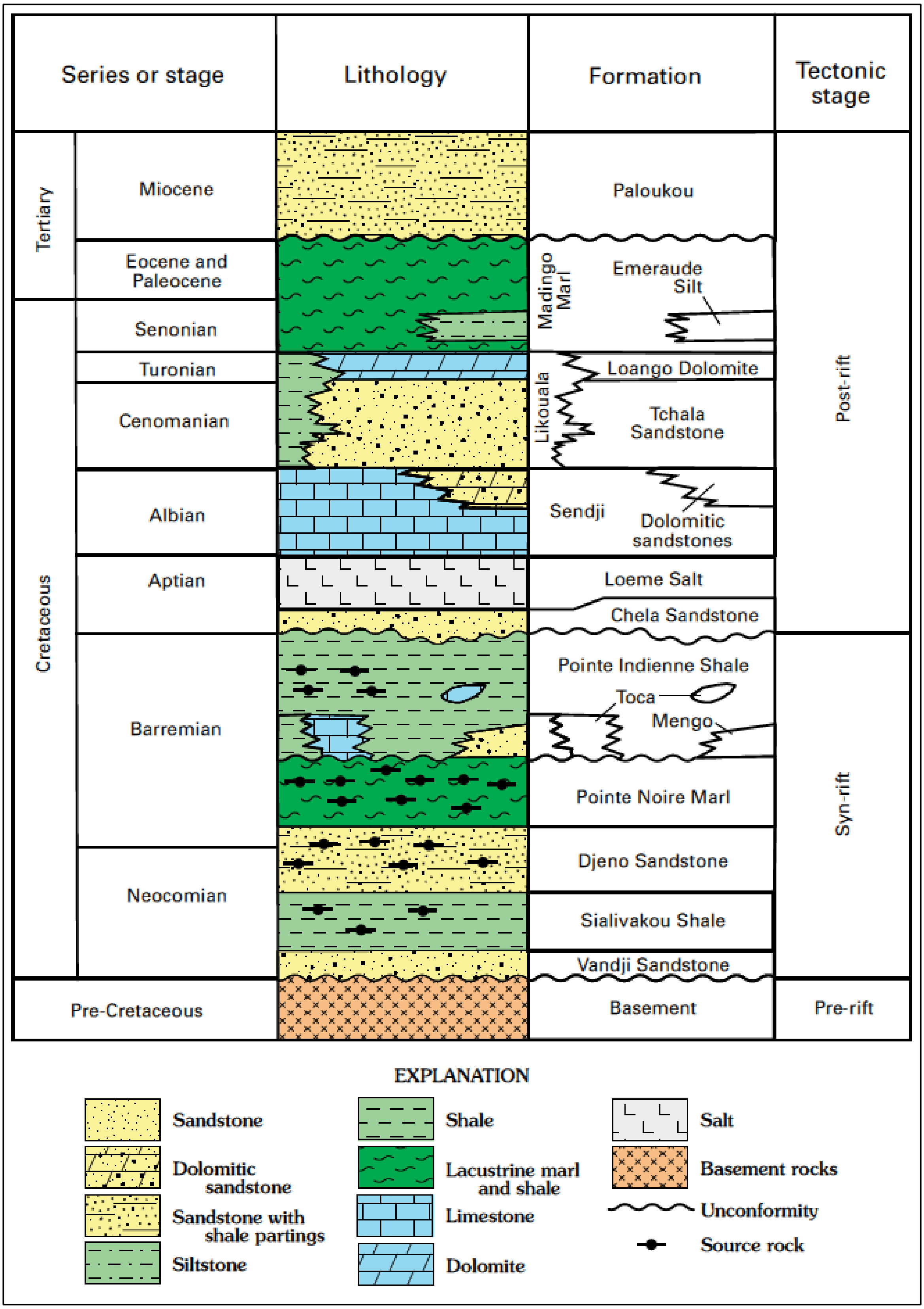
Source: Brownfield et al., 2006.

Figure 7 Generalised Stratigraphy South Gabon Sub Basin



Source: Brownfield et al., 2006.

Figure 8 Generalised Stratigraphy Congo Basin



Source: Brownfield et al., 2006.

4. POTASH OVERVIEW

4.1 Introduction

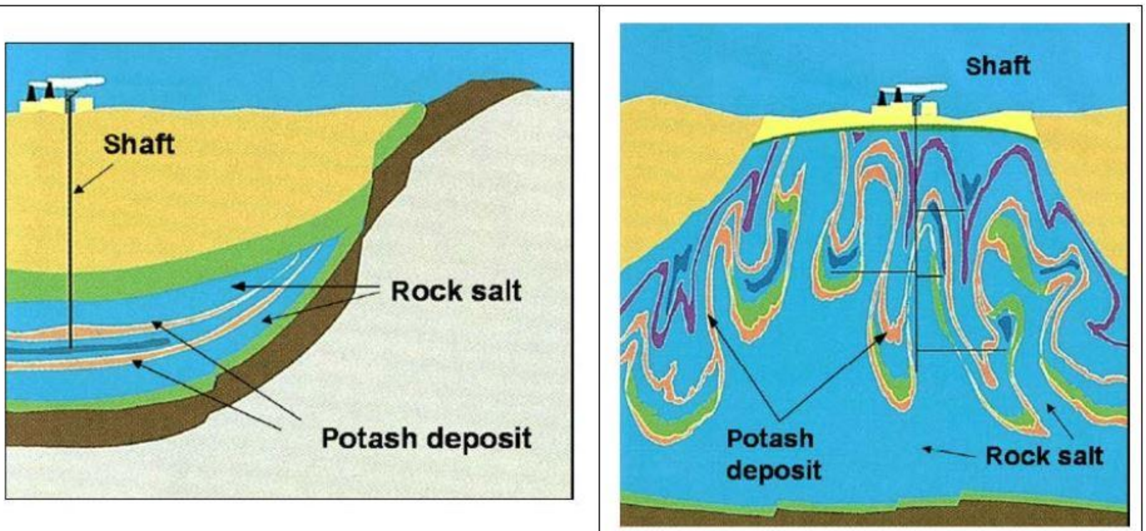
The word potash is a contraction of the term *muriate of potash* (MoP) widely applied to naturally occurring potassium-bearing salts and their manufactured products. It is often expressed by the chemical formula KCl (potassium chloride). Although several salt species are classified as potash minerals, sylvite (KCl) is the natural form of the principal ore mineral; therefore the typical potash ore dominated by sylvite is called sylvinite. One tonne of chemically pure KCl contains an equivalent of 0.63 tonnes of K_2O (potassium oxide), which permits comparison of the nutrient levels in various forms of potash. Specifying K_2O is a common way to indicate the amount of potassium in ore, or fertilizer. Potash has historically been used in the manufacturing of many industrial and commercial materials including soaps, glass, and textiles. The most common use for potash is as a primary ingredient in the production of crop fertilisers around the world.

4.2 Potash Deposits

Potash deposits are a type of industrial mineral deposit that occurs primarily within sequences of salt-bearing evaporite sedimentary units. Evaporite bodies are usually laterally extensive, layered and tabular geometries, although they can be structurally deformed and folded to varying degrees syn/post burial. As they share a common formative genesis, potash mineral accumulations are hosted within the bedded halite layers of these evaporitic sequences, and are typically confined to relatively narrow stratiform intervals within the depositional sequence.

There are two major potash deposit styles, a simplified schematic of the two end member types of deposits can be seen in Figure 9. The stratabound 'Canadian' style (a) tend to be flat lying and the halokinetic 'German' style (b), can be slightly deformed to complexly folded. Stratabound potash bearing deposits tend to be relatively flat lying salt deposits with interbedded potash mineralisation that formed through a process of evaporation. Halokinetic potash bearing salt deposits form from stratabound deposits through deformation of salt layers into salt structures such as anticlines, domes and diapirs. In these deposits the thickness of the potash bearing layers varies along different parts of structures, or can pinch out completely, with bedding commonly highly contorted (Orris *et al.*, 2014).

Figure 9 Schematic of Potash Deposit Styles



(a) Flat Potash - "Canadian Style"	(b) Folded Potash - "German Style"

Source: IMEx Consulting, Arundell, 2013.

The morphology of the Canadian style allows for underground mining by continuous miners or by solution mining in deeper deposits. The German style deposits are generally mined by cut and fill or open hole stoping techniques. Where German style deposits occur at the crest of an anticline they can be mined by continuous miners.

The extreme solubility of potash salts results in their formation in highly restricted settings, precipitating towards the end of the carbonate-evaporite depositional series (Warren, 2006).

Potash salts are precipitated from saturated potassic brines as chemical sediments deposited at, or very near, the depositional surface as the basin approaches desiccation. Their geologic provenance therefore dictates that, excluding deformation, erosion, and other post-depositional destructive processes, nearly all potash deposits will exhibit some degree of lateral continuity. Potash grade may vary greatly between deposits. As described by Warren (2006), two controls (or combination of) to determine potash grade are currently proposed:

1) Sylvinite and carnallite are precipitated from solution at or within a few metres of the depositional surface by the actions of brine reflux and brine cooling. Potash grade and mineralogical character are directly related to and controlled by original brine chemistry as well as the geological mechanisms affecting the deposit at the time of deposition; or

2) As the absence of primary sylvite in modern day analogues suggests, potash grade is controlled by the post-depositional alteration and replacement of primary carnallite bearing sediments to sylvite. The character of the deposit continually evolves while it is in contact with diagenetic fluids.

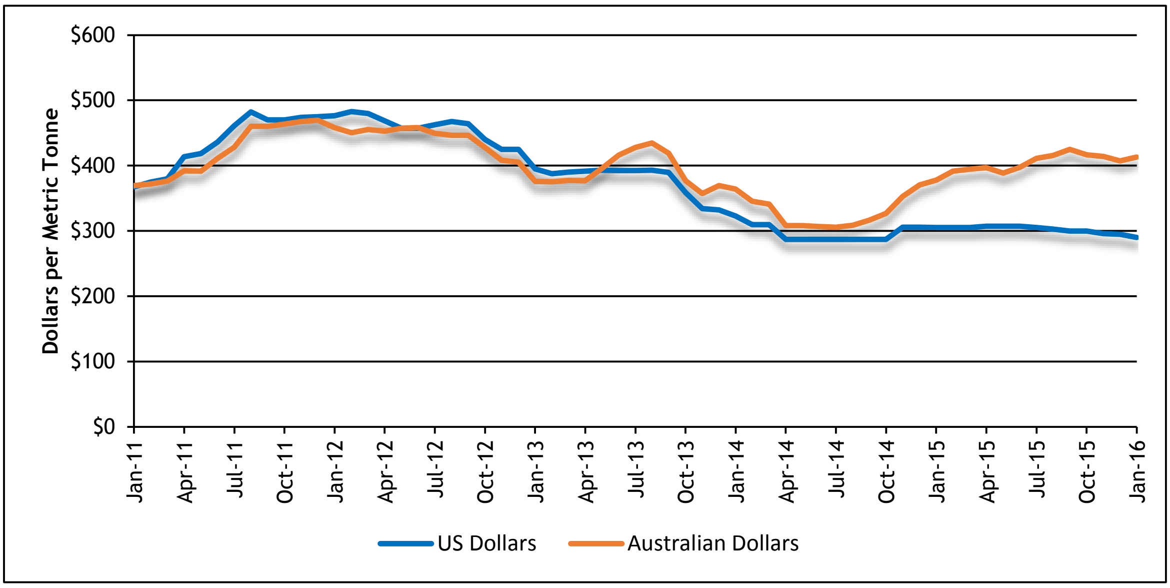
Potash deposits can also be described as being of either *simple* or *complex* mineralogical character. In general, a *simple* potash deposit is considered to be any deposit characterised by sylvinite dominated ore with variable concentrations of impurities including halite, carnallite ($KMgCl_3·6H_2O$), and insolubles. The potash deposits underlying the plains of Saskatchewan, Canada can also be considered a mineralogically *simple* potash deposit.

Deposits with ores bearing mixtures of various bittern potash salts and other exotic contaminant species are considered to be of a *complex* nature. The potash deposits mined at Carlsbad, New Mexico contain sylvite dominated ores with minor langbeinite ($2MgSO_4·K_2SO_4$), polyhalite ($2CaSO_4·MgSO_4·K2SO_4·2H_2O$) and variable proportions of insoluble contaminants, and can therefore be considered an example of a *complex* deposit. A summary of the various potash minerals and ores (after Warren, 2006) is shown in Appendix One.

4.3 Potash Market

The largest use of potash is as fertiliser for agricultural food production. The price of potash varies on its origin and destination. Figure 10 shows the five year monthly average standard grade spot MoP price free on board (FOB) Vancouver, Canada.

Figure 10 Five Year Monthly Average Muriate of Potash Price



Source: Index Mundi, Muriate of Potash standard grade spot FOB Vancouver.

4.4 Historical Potash Exploration in Gabon

The first salt deposits of Gabon were discovered in 1935 during early petroleum exploration. Potash was first intersected in 1948, with the systematic search for potash in the Gabon Basin launched in 1954 by a French consortium called the Syndicat de Recherché de Potasse au Gabon (SRPG). The SRPG identified five salt zones in Gabon: Mamana, Mayumba, Madiela, Agouma and Akodjo, however the Gabon Basin proved disappointing because of a high degree of salt doming (de Ruiter, 1979).

Plymouth's Mamana and Banio projects are located in the Mamana and Mayumba salt zones, respectively.

5. MAMANA PROJECT

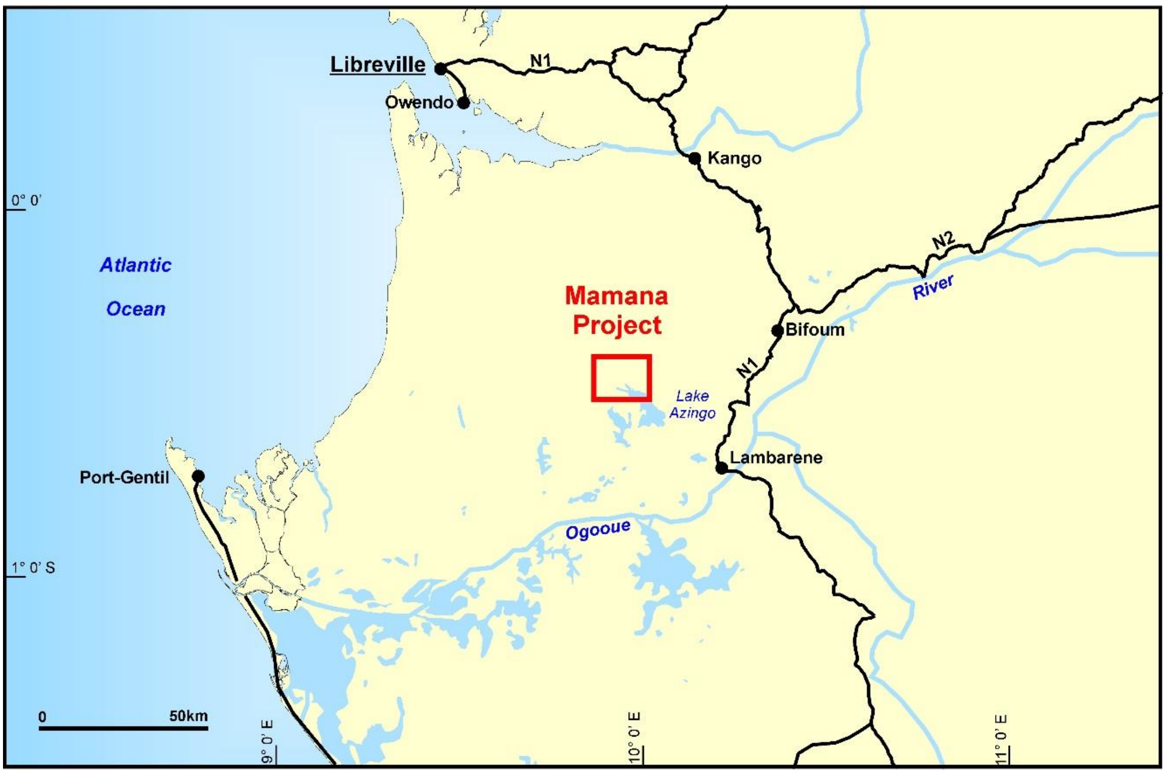
5.1 Introduction

The Mamana project is also referred to as the Azingo project in the historical literature. Initial exploration in the area was conducted for oil in the 1930s (Arundel, 2013). The project lies over the Gabon sedimentary basin along the coast of Gabon. The project is located within Gabon's coastal plain and exhibits subdued relief. The project covers an area of 219km^2.

5.1.1 Project Location

The Mamana project (Figure 11) is located approximately 120km southeast of Libreville, the capital of Gabon (Arundel, 2013) and approximately 10km from the navigable Ogooué River (Britannica, 2015). Part of the Mamana project is covered by the Wonga-Wongué Presidential Reserve. Development is allowed within the reserve with presidential approval.

Figure 11 Location of the Mamana Project in Gabon



Source: Supplied by Plymouth, 2015.

5.1.2 Access

Access is via a series of roads and tracks crossing the concession, and an airstrip is located near Lake Azingo (Arundel, 2013). The N1 road links Libreville to Lambaréné. Lambaréné is located approximately 35km to the southeast of the Mamana project. Domestic flights connect Libreville with Lambaréné (Chimanya *et al.*, 2012). Ferries run along the coast from Libreville to Port Gentil, journey time is approximately four hours. Riverboats are also available along the Ogooué River from Port Gentil to Lambaréné (journey time, 10 to 24 hours) (World Travel Guide, 2015).

5.1.3 Supporting Infrastructure

The Ogooué River is utilised for the transportation of timber and other cargo by barge to Port Gentil on the Gabon Atlantic coast (Britannica, 2015). The N1 road network exists from Lambaréné to Libreville.

No additional details regarding infrastructure for the project is currently available. A review of the country infrastructure has been detailed in Section 3.7.

5.2 Ownership and Tenure

5.2.1 Project Ownership and Relevant Interests

The project is currently held by Equatorial Potash Pty Ltd's wholly owned subsidiary company Mayumba Potasse SARL (Gabon). Plymouth has a 90 day period to conduct due diligence, which can be extended for a further 90 days to verify compliance of licences. At any point during this option period, Plymouth, at its sole discretion may elect to exercise the option to proceed with the acquisition. Upon successful completion of due diligence and exercise of the option, the total consideration for both the Mamana and Banio projects including all milestone payments would be 50,000,000 shares in Plymouth (Plymouth, 2015a).

5.2.2 Agreements

Plymouth has entered into a Binding Heads of Agreement to acquire a 100% interest in the Mamana and Banio potash projects through the purchase of Equatorial Potash Pty Ltd (Equatorial). Equatorial and its wholly owned subsidiary company Mayumba Potasse SARL (Gabon) which holds 100% of the Mamana exploration permit application (application number from DGPEM: No. 651) in Gabon (Plymouth, 2015a).

The 50,000,000 share consideration for both the Mamana and Banio projects is through the issue of 25,000,000 ordinary shares (Initial shares) and 25,000,000 performance shares which convert to ordinary shares upon completion of certain milestones (Performance shares). The Initial shares are issued subsequent to meeting all the Conditions Precedent (which are the granting of at least one tenement application, satisfaction of due diligence, obtaining all regulatory and shareholder approvals) and will be escrowed for a period of 12 months. The Performance shares are issued and 15,000,000 will convert upon completion and announcement of an Indicated Mineral Resource of 60Mt @ > 14%K_2O in accordance with the JORC Code (2012 Edition) or an Inferred Resource of 200Mt @ > 14%K_2O in accordance with the JORC Code (2012 Edition) within two years of acquisition (Plymouth, 2015a).

Upon announcing a Pre-feasibility study which delivers a >25% Internal Rate of return (IRR) for either of the Banio or Mamana projects, within a four year period after the acquisition, 10,000,000 Performance shares will convert. In the event of Performance shares converting, they will be subject to a minimum voluntary escrow period of 12 months but not longer than 18 months from the date of shareholder approval (Plymouth, 2015a).

The terms and conditions relating to Performance shares will require regulatory approval. All shares are subject to voluntary escrow provisions of between 12 and up to 18 months from the date of shareholder approval. In the event of a takeover of Plymouth, whilst the Projects are the principal assets of Plymouth, all Performance shares will convert immediately and all voluntary escrow will be removed (Plymouth, 2015a).

5.2.3 Royalties and Taxes

There are no non-government royalties and taxes applicable to the Mamana Project.

5.3 History

5.3.1 Exploration History

The first exploration conducted in the area of the Mamana salt zone was in the 1930s, with a series of three drill holes completed (MC1 to MC3), however all were too shallow to intersect the salt sequence (Arundell, 2013). The SRPG drilled a total of seven drill holes (MM1 to MM7) for a total of 5,955m between 1954 and 1959. Table 1 shows a summary of all the holes completed at Mamana. Based on the technical well logs for MM1 to MM7 the Ezanga Formation was intercepted in all holes, details are provided in Table 2 below, with the results and mineralogy of this drilling presented in Table 3. Figure 12 shows the location of the drill holes with results.

The potash mineralisation intersected in MM1 was considered to be deformed showing strong diapiric structures in the potash beds, However the mineralisation in drill holes MM2 and MM3 show significantly less deformation with relatively shallow dips, indicating that this mineralisation may have been preserved relatively in place at the crest of the Mamana Dome anticline (Arundell, 2013).

Table 1 Summary of Mamana Drilling

Hole	East	North	RL	Depth	Azimuth	Dip	Company
MM1	599,954	9,949,100	62	927.3	0	-90	SRPG
MM2	600,093	9,947,397	42	912.5	0	-90	SRPG
MM3	600,965	9,946,458	42	955.6	0	-90	SRPG
MM4	599,387	9,945,901	41	1,050.0	0	-90	SRPG
MM5	601,118	9,948,121	57	690.0	0	-90	SRPG
MM6	604,328	9,946,490	35	551.5	0	-90	SRPG
MM7	601,631	9,951,647	76	868.0	0	-90	SRPG
MC1	598,965	9,949,099	49	No Results Available			SPAEF
MC2	598,083	9,949,176	42	No Results Available			SPAEF
MC3	599,701	9,953,738	85	No Results Available			SPAEF

Notes: Coordinates are in UTM Zone 32 South. Holes MC1-MC3 were reportedly shallow and did not intersect the salt formation.

Table 2 Intervals of Ezanga Formation in Wells MM1 to MM7

Hole	Top of Ezanga Fm (m)	Bottom of Ezanga Fm (m)
MM1	371.5	894
MM2	375	900
MM3	607	919
MM4	595	>1,050
MM5	415	684.6
MM6	363	551
MM7	420	839

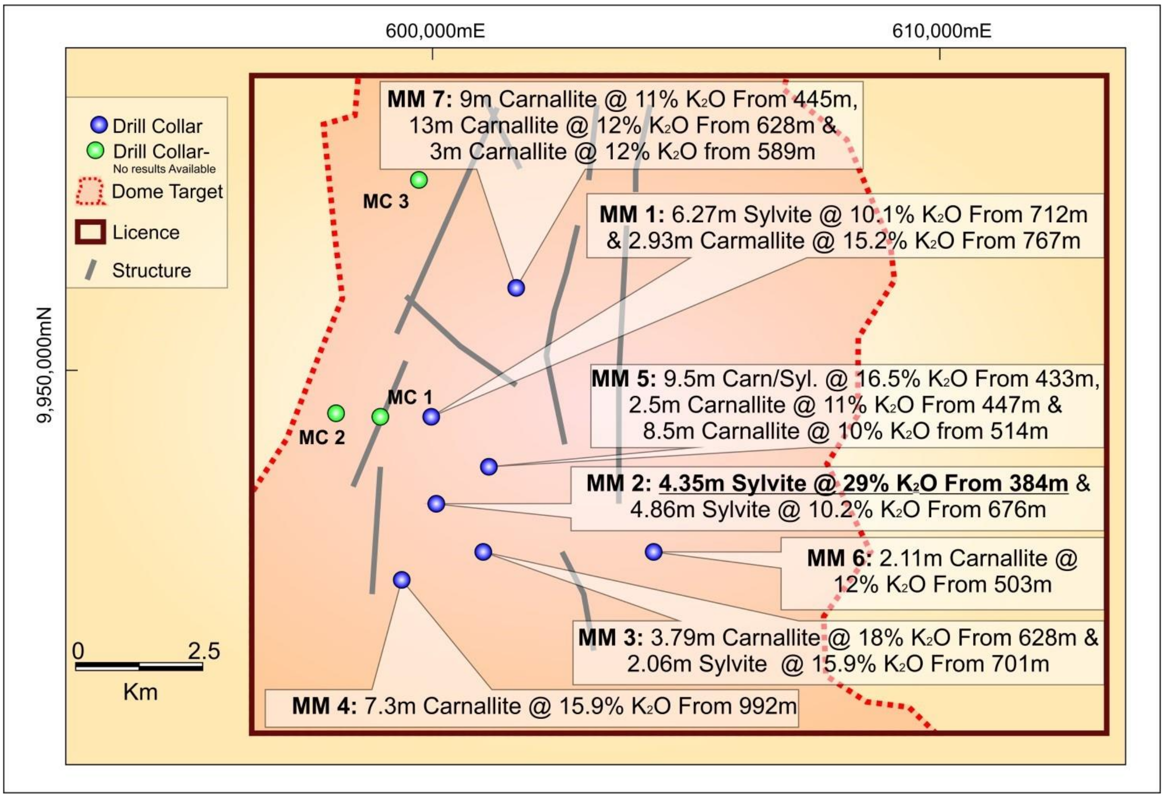
Source: SRPG 1954a, SRPG 1954b, SRPG 1956a, SRPG 1956b, SRPG1959a, SRPG1959b and SRPG 1959c.

Table 3 Mamana Drilling Results and Mineralogy

Hole	From (m)	Interval (m)	K_2O (%)	KCl (%)	Mineralogy
MM1	712	6.27	10.1	16.0	Sylvite
	767	2.93	15.2	24.0	Carnallite
MM2	384	4.35	29.1	46.1	Sylvite
	676	4.86	10.2	16.1	Sylvite
MM3	628	3.79	18.0	28.5	Carnallite
	701	2.06	15.9	25.2	Sylvite
MM4	992	7.30	15.9	25.2	Carnallite
MM5	433	9.50	16.5	26.1	Sylvite+Carnallite
	447	2.50	11.0	17.4	Carnallite
	514	8.50	10.0	15.4	Carnallite
MM6	503	2.11	12.0	19.0	Carnallite
MM7	445	9.00	11.0	17.4	Carnallite
	589	3.00	12.0	19.0	Carnallite
	628	13.00	12.0	19.0	Carnallite

Notes: Conversion of K_2O to KCl is done by the following calculation K_2O x 1.58 = KCl.

Figure 12 Mamana Drill Hole Locations and Results



Source: Plymouth, 2015a.

No recent exploration for potash has been undertaken on the Mamana licence area.

5.3.2 Previous Production

There is no previously recorded production of potash from the project area.

5.4 Exploration Potential

5.4.1 Exploration Targets

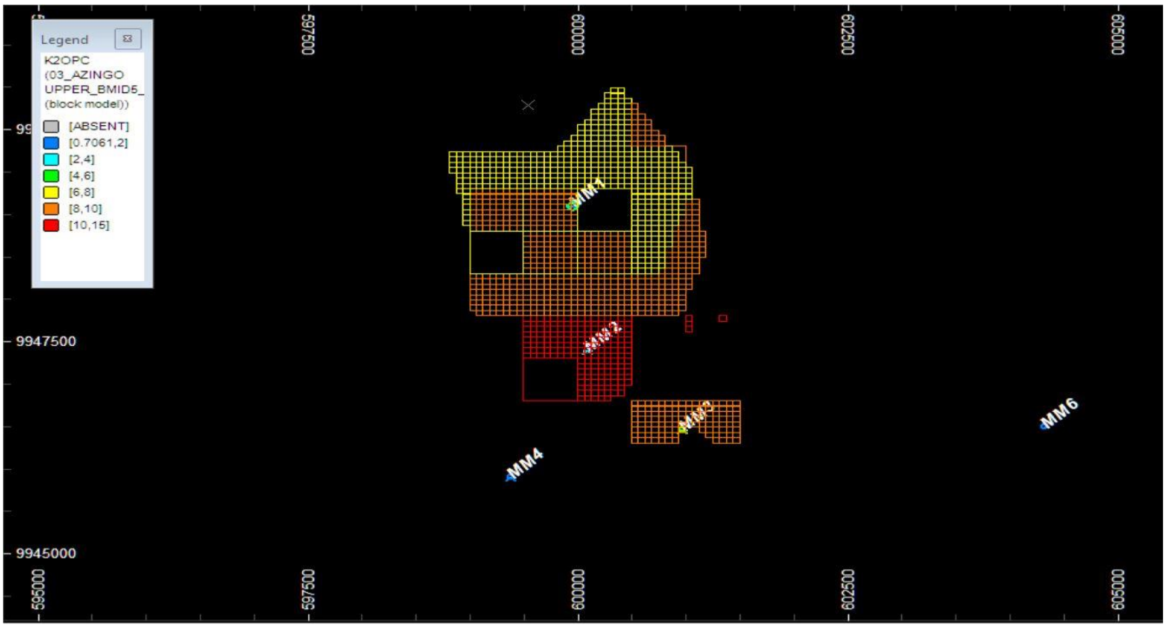
Two separate Exploration Target estimates have been undertaken at Mamana, the first in 2012 by Coffey Mining Pty Ltd (Coffey) and the second by IMEx Consulting (IMEx) in 2013. With an Exploration Target it is important to note that the potential quality and grade is conceptual in nature, that there has been insufficient exploration to estimate a Mineral Resource and that it is uncertain if further exploration will result in the estimation of a Mineral Resource.

Coffey Exploration Target

In 2012 Coffey estimated an Exploration Target of 545Mt @ 13-14% KCl (Chimanya *et al.*, 2012). Coffey based its Exploration Target on a review of the SRPG drilling from the 1950s. Based on the historical assay results recorded in this drilling, Coffey postulated that Mamana may have two layers of salt, with potassium and/or potassium-magnesium bearing salts, measuring between 100m and 150m thick. Coffey stated that "It is too early to determine the actual deposit morphology because of the impacts of the dips and the likely presence of salt domes in this area." (Chimanya *et al.*, 2012).

Coffey created a preliminary block model using blocks measuring 500m x 500m x 25m. This modelling suggested that there could be specific high grade layers that may be correlated along sections (see Figure 13). The blocks shown in Figure 13 carry an average grade >7.8% KCl and have at least 50% of the material above 7.8% KCl.

Figure 13 Coffey Exploration Target



Source: Coffey, Chimanya et al., 2012.

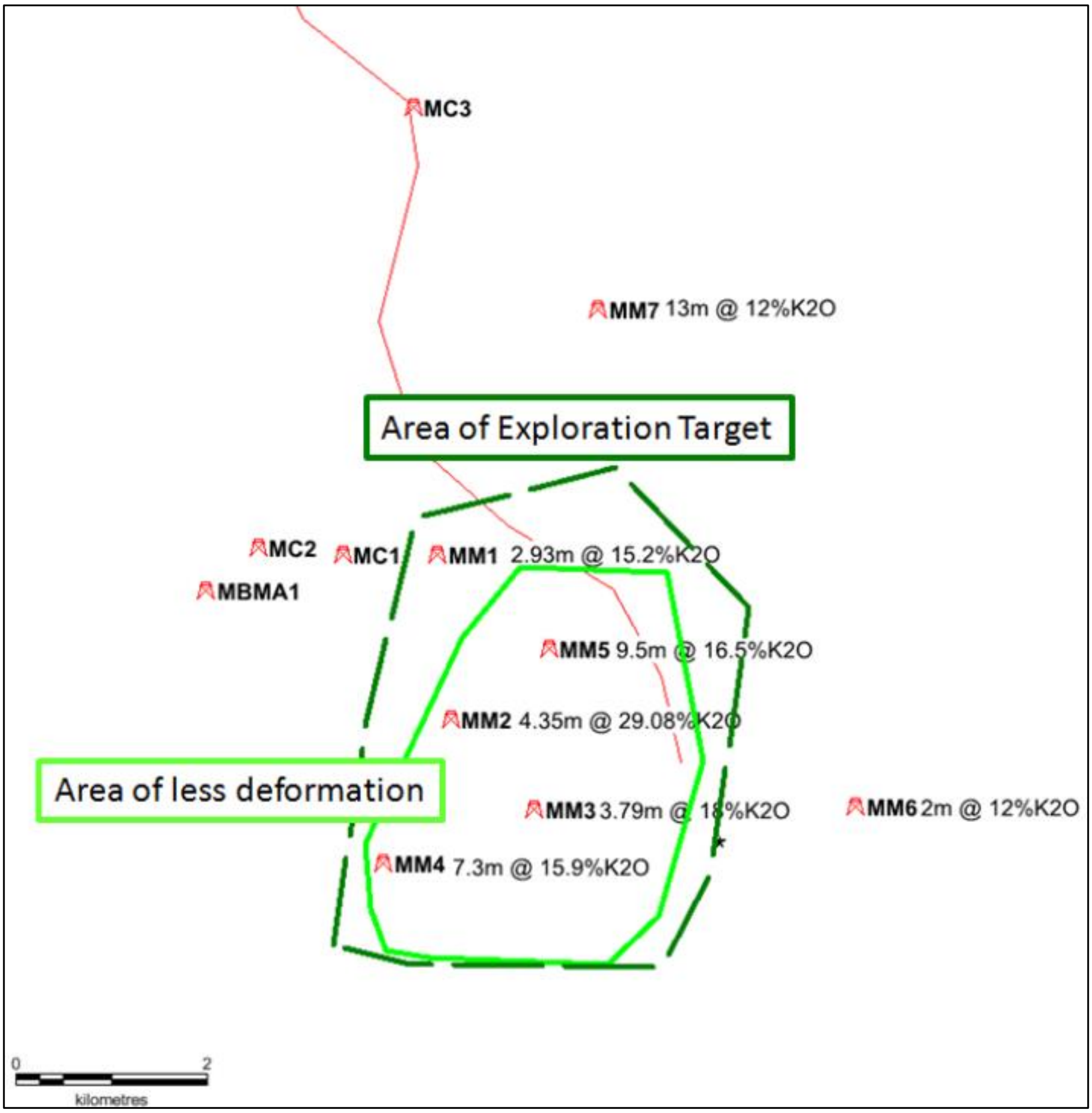
IMEx Exploration Target

In 2013 IMEx estimated an Exploration Target of 200-250Mt @ 12-14% K_2O (19-22% KCl), (Arundell, 2013). The Exploration Target was estimated using the intersections from the SRPG drilling from the 1950s. IMEx compiled the mineralised intersections in plan and combined this with an assessment of the local geology to develop the Exploration Target. The estimation was based on:

- All intersections of potash with >10% K_2O from drill holes MM1, MM2, MM3, MM4 and MM5;

- Tonnage equalling the volume of the total rock based on drilling intersections detailed in Table 3 and a radius of influence of 1,000m multiplied by the rock density, assumed at 1.6g/cm^3, based on the density of carnallite;
- The estimated K_2O percentage range was determined by calculating the weighted average percentage of K_2O from drill holes MM1 to MM5; and
- IMEx selected an area that it thought reasonable based on their level of confidence in geology and historical data (see Figure 14).

Figure 14 IMEx Consulting Exploration Target



Source: IMEx Consulting, Arundell 2013
Note: Drill Hole MBMA1 is a previously planned hole that has not been drilled.

IMEx also stated that the Exploration Target should be considered by taking into account the following limitations (Arundell, 2013):

- Lack of seismic data – continuity between drill holes cannot be guaranteed;
- Original drill analytical data not located;
- Original drill core not located;
- Methodology of original assays not determined;

- Deviation of drill holes largely unknown;
- Structural repetition of the potash beds possible, not known how likely this is; and
- Drill core not orientated, bedding dip directions are unknown.

5.4.2 Mamana Exploration Potential

Ravensgate has concluded that the Mamana project is of merit and worthy of further exploration. Based on the historical drilling, the depth to the top of the potash hosting Ezanga Formation is generally shallow (<1,000m) ranging from 363m to 607m. Based on the historical drilling results and Exploration Targets, the Mamana project has good potential for defining additional potash mineralisation and future Mineral Resources with additional infill drilling and/or further seismic section interpretation or acquisition of seismic data. Areas of specific interest would be those interpreted to be less deformed part of the Mamana Dome anticline as identified in holes MM2 and MM3.

6. BANIO PROJECT

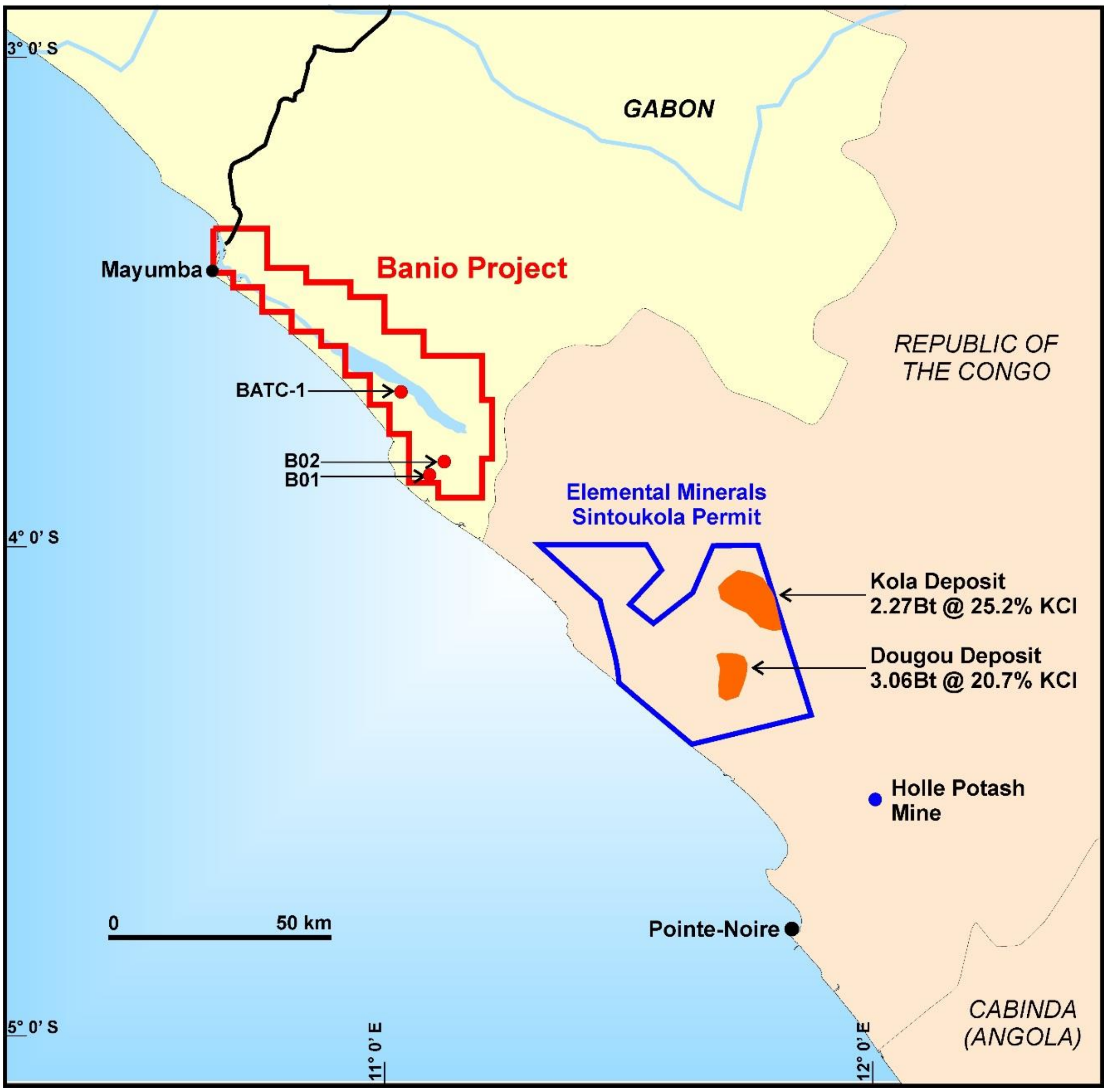
6.1 Introduction

The Banio project lies over the Congo sedimentary basin along the west coast of Gabon. Numerous oil wells have been drilled in the off-shore zone of the Gabon Basin, beyond the Mayumba Nature Reserve with some wells showing positive indications of hydrocarbons and a zone of potash mineralisation (Arundel, 2013). The project is located within Gabon's coastal plain and displays subdued relief. The project has an extent of 1,238km^2.

6.1.1 Project Location

The Banio project is located (Figure 15) approximately 450km southeast of Libreville (Arundel, 2013). The southern extent of the project is located approximately 5km north of the border between Gabon and the Republic of the Congo with the western extent of the project running parallel to the Gabon coast.

Figure 15 Location of the Banio Project in Gabon



Source: Supplied by Plymouth, 2015. Kola and Dougou Mineral Resource values (Elemental, 2015a).

6.1.2 Access

Access is limited with few roads and tracks crossing the concession, mostly near the coast. There is a major airport located at Mayumba (Arundel, 2013). Domestic flights connect Libreville with Mayumba. There is a road linking Lambaréné and Mayumba (Chimanya *et al.*, 2012). The road to Mayumba is sealed (ANGT, 2015).

6.1.3 Supporting Infrastructure

A road links Mayumba to Lambaréné (Chimanya *et al.*, 2012) see Figure 16. No additional details regarding infrastructure for the project is currently available. A review of the country infrastructure is detailed in Section 3.7.

Figure 16 New Bridge within Banio Project Area

Source: Supplied by Plymouth 2015.

6.2 Ownership and Tenure

6.2.1 Project Ownership and Relevant Interests

The project is currently held by Equatorial Potash Pty Ltd's wholly owned subsidiary company Mayumba Potasse SARL (Gabon). Plymouth has a 90 day period to conduct due diligence, which can be extended for a further 90 days to verify compliance of licences. At any point during this option period, Plymouth, at its sole discretion may elect to exercise the option to proceed with the acquisition. Upon successful completion of due diligence and exercise of the option, the total consideration for both the Mamana and Banio projects including all milestone payments would be 50,000,000 shares in Plymouth (Plymouth, 2015a).

6.2.2 Agreements

Plymouth has entered into a Binding Heads of Agreement to acquire a 100% interest into the Banio and Mamana potash projects through the purchase of Equatorial Potash Pty Ltd (Equatorial). Equatorial and its wholly owned subsidiary company Mayumba Potasse SARL (Gabon) which holds 100% of the granted Banio exploration permit (G5-595) in Gabon.

The terms and conditions of the agreement are the same as those detailed in Section 5.2.2.

6.2.3 Tenure

The Banio project consists of one granted exploration permit G5-595, tenement details are provided in Table 4 below.

Table 4 Banio Project Granted Tenement Details

Tenement	Area km^2	Grate Date	Expiry Date	Registered Holder
G5-595	1,238	23 Feb 2016	22 Feb 2019*	Mayumba Potasse SARL

**The tenement may be renewed twice for an additional three years.*

6.2.4 Royalties and Taxes

Refer to Section 5.2.3.

6.3 History

6.3.1 Exploration History

Two petroleum exploration holes were drilled in the 1970s - Banio 1 (BO1) in 1972 and Banio 2 (BO2) in 1975. Both of these holes are located in the south of the project (Figure 15). In 1991, an additional hole, BATC-1 was planned, however only a well planning report dated 1991 is available and it is unclear if this hole was ever drilled, though the hole appears on later maps. A summary of the drilling at Banio is presented in Table 5 below.

Table 5 Summary of Banio Drilling

Hole	East	North	RL	Depth	Azimuth	Dip	Company
BO1	732,561	9,572,093	50	2,440	0	-90	ELF (Gabon Petroleum)
BO2	733,155	9,575,354	50	1,207[1]	0	-90	ELF (Gabon Petroleum)
*BATC-1	725,630	9,592,235	50	1,500	0	-90	ELF (Gabon Petroleum)

**BATC-1 information taken from a well planning report, 1,500m was the planned depth, it is unclear if this hole was ever drilled, though the hole does appear on later maps.*

1. The actual depth of BO2 is unknown and 1,207m is the maximum known depth.

BO1 intersected the salt formation from 580m to 1,175m with it being labeled as the Loeme Formation containing anhydrite, salt and potash. The Loeme Formation is the name given to the salt formation in the Congo sub basin (Figure 8), which is the equivalent of the Ezanga Formation in the North Gabon, South Gabon and Interior sub basins.

BO2 intersected the salt formation from 454m to 1,207m. Within the salt formation, nine intervals of greater than 10m in length and greater than 90% salt were recorded (Table 6). Selective spot samples were taken from some of these intervals and analysed by XRD detailing the individual constituents of the salt interval (Table 7). Of note are the samples at depths 528.45m, 536.1m, 542.1m, 707m, 738m, 1,017m and 1,040m which show high carnallite and/or sylvite percentages.

Table 6 BO2 Significant Salt Intervals

From (m)	To (m)	Interval (m)
454	499	45
590	687	97
725	736	11
773	785	12
816	856	40
1,021	1,038	17
1,128	1,148	20
1,168	1,203	35

Source: Mathieu, 1976.
Notes: Intervals >10m with >90% salt content.

Table 7 BO2 Reported Spot Sampling Results from Drilling

Sample Depth (m)	Anhydrite (%)	Halite (%)	Carnallite (%)	Sylvite (%)	Hematite (%)	Insoluble (%)
457		100				0
461		96		1.5		1.8
465	X	99				0.6
466	X	100				0
469	24	76				0
469.85	3	95	0.5	X		1.5
528.45		9	65	15	10	0.8
536.1		11	30	45	11	2.7
542.1		10	25	48	12	2.6
707		54	11	28	5	0
718		100				0
723	X	95	2	X		2.8
725	X	99				0.4
734	X	99				0.8
738		1	78	4	12	2.7
1008	X	97		1		1.7
1017		16	40	32	9	2.5
1023		92				6.3
1025	1	95				3.4
1025.75		97				2.8

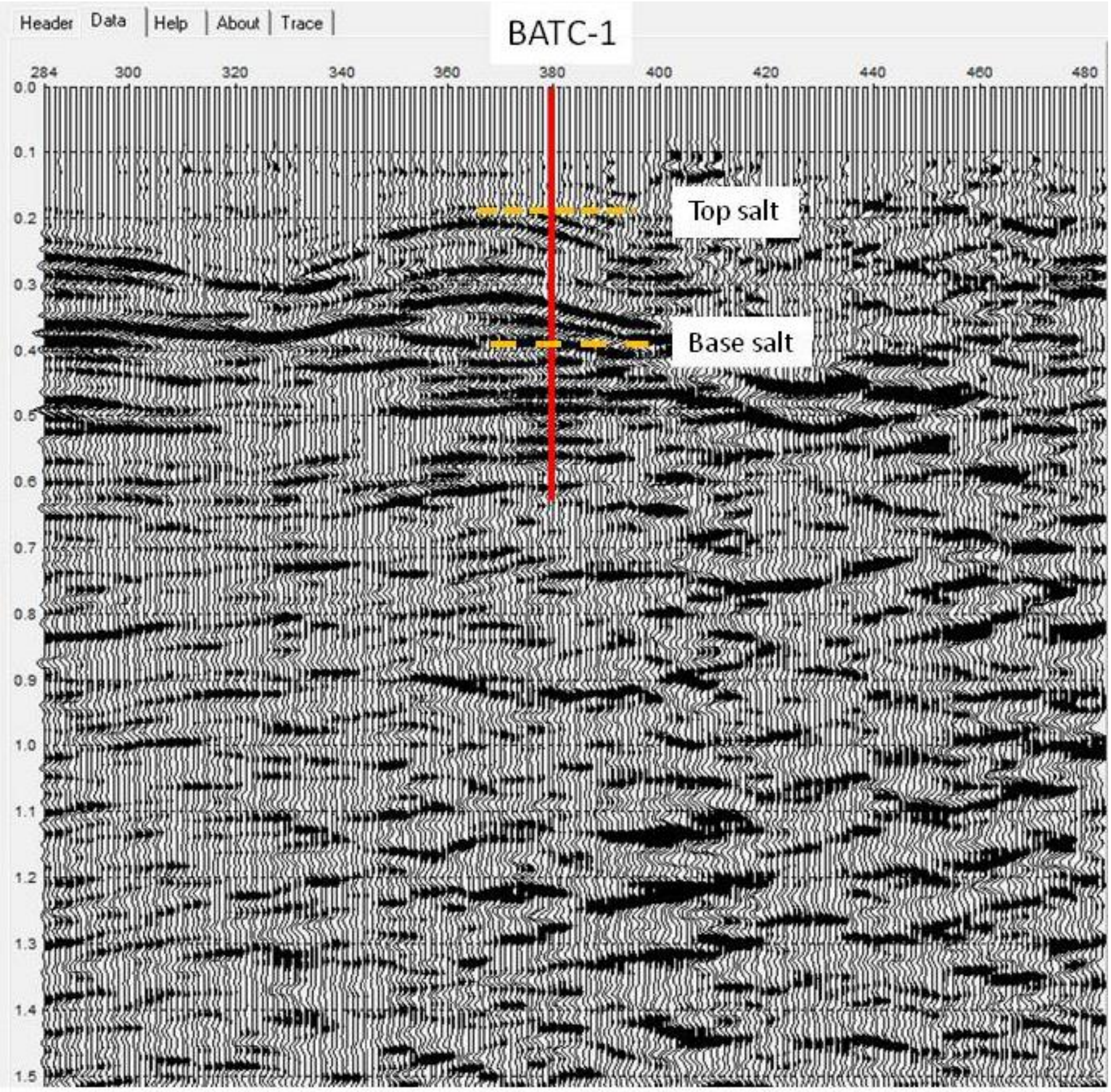
Sample Depth (m)	Anhydrite (%)	Halite (%)	Carnallite (%)	Sylvite (%)	Hematite (%)	Insoluble (%)
1032.8		97				2.3
1040		35	50	12		2.5

Source: Mathieu, 1976.

Notes: Selected spot samples were analysed utilising XRD. The precise interval where the samples were taken is not recorded.

The well planning report for BATC-1 estimated that it would intersect the Ezanga Formation from 253m to 683m (Amet *et al.*, 1991), based on analysis of seismic section line (BAN 90-05), BATC-1 (Figure 17) targeting a salt anticline (Arundell, 2013). South of the anticline the salt sequence appears to be undisturbed, whilst to the north the salt sequence shows variable deformation.

Figure 17 Interpreted Seismic Profile through BATC-1



Source: IMEx Consulting, Arundell 2013.

Ravensgate has also looked at other petroleum wells in the vicinity of the Banio project. MBNM-6H was drilled in 2004 offshore to the west of the Banio project and intersected the Ezanga Formation from 544m to 1,315m with red carnallite reported as being common (Hodgson *et al.*, 2004). DCAM-1 drilled in the early 1980s, south of the Banio project, intersected the Ezanga Formation from 660.5m to 1,297m.

6.3.2 Previous Production

There is no previously recorded production of potash from the project area.

6.4 Exploration Potential

Based on the historical petroleum drilling, the depth to the top of the prospective Ezanga Formation is generally shallow (<1,000m) ranging from 253m to 660.5m. Further analysis of the seismic data within and around the project area will aid in identifying areas of relatively undeformed salt.

The salt sequence in historic petroleum well BO1 was interpreted as the Loeme Formation, which is important in an exploration sense. This interpretation of Loeme Formation fits with the Gabon Basin interpretation by Chen *et al.*, 2013 (Figure 3). The Loeme Formation is analogous to the Ezanga Formation and is the name given to the salt sequence in the Congo Basin. The Loeme Formation is a lot simpler in terms of geometry as it is not deformed like the Ezanga Formation. This will allow for simpler exploration and easier interpretation of potash horizons between drill holes. The Loeme Formation hosts known potash Mineral Resources and the former Holle potash mine (Figure 15). The Holle potash mine produced approximately 7.4Mt of sylvinite at a grade of 28% K_2O (44.4% KCl) from 1969 to 1977 before it was flooded (Elemental 2012).

Just over 50km to the southeast of the Banio project is Elemental Mineral Resources' 93% owned Sintoukola permit containing the Kola Sylvinite deposit (1,048Mt @ 32.84% KCl), Kola Canallite deposit (1,217Mt @ 18.53% KCl) and the Dougou Carnallite deposit containing 3,056Mt @ 20.7% KCl (Elemental, 2015a); and the Yangala Exploration Target for 235Mt to 470Mt at 55% to 60% KCl (Elemental, 2015b). The potash mineralisation at Sintoukola is situated within the Loeme Formation. At Yangala the importance of horst structures has been recognised in the conversion of carnallite to sylvinite (sylvite+halite).

Ravensgate has concluded that the Banio project is of merit and worthy of further exploration.

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8. LIST OF ABBREVIATIONS

A$	Australian dollar(s)
ASX	Australian Securities Exchange
Azi	Azimuth
Fm	Formation
FOB	Free on board
IRR	Internal Rate of Return
JORC Code	2012 Edition of the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves
K	Thousand(s)
K_2O	Potassium oxide
KCl	Potassium chloride
km	kilometre(s)
km^2	Square kilometre(s)
m	Metre(s)
M	Million(s)
MAIG	Member of the Australian Institute of Geoscientists
MAusIMM	Member of the Australasian Institute of Mining and Metallurgy
mm	Millimetre(s)
MoP	Muriate of Potash
Mt	Million Tonnes.
SME	Small to medium sized enterprises
t	Tonne(s)
XRD	X-ray Diffraction

9. GLOSSARY

3D	Three dimensional.
anhydrite	Anhydrous calcium sulphate, $CaSO_4$. It is in the orthorhombic crystal system, with three directions of perfect cleavage parallel to the three planes of symmetry.
antiform	An anticline is a fold that is convex up and has its oldest beds at its core. The term is not to be confused with antiform, which is a purely descriptive term for any fold that is convex up. Therefore if age relationships between various strata are unknown, the term antiform should be used.
Aptian	The Aptian age is part of the Lower/Early epoch of the Cretaceous period from roughly 125 to 113 million years ago.
assayed	The testing and quantification metals of interest within a sample.
ASX	Australian Securities Exchange
bedrock	Any solid rock underlying unconsolidated material.
carnallite	An evaporite mineral, a hydrated potassium magnesium chloride with formula $KMgCl_3 \cdot 6(H_2O)$. It is variably coloured yellow to white, reddish, and sometimes colourless or blue.
Cretaceous	The Cretaceous is defined as the period between 145.5 and 65.5 million years ago
diamond drilling	Drilling method employing a (industrial) diamond encrusted drill bit for retrieving a cylindrical core of rock.
diaper	A type of geologic intrusion in which a more mobile and ductily deformable material is forced into brittle overlying rocks.
Epoch	A subdivision of the geologic timescale that is longer than an age and shorter than a period.
evaporite	A water-soluble mineral sediment that results from concentration and crystallisation by evaporation from an aqueous solution. There are two types of evaporate deposits: marine, which can also be described as ocean deposits, and non-marine, which are found in standing bodies of water such as lakes. Evaporites are considered sedimentary rocks.
fault	A wide zone of structural dislocation and faulting.
FOB	Free on Board, meaning that the buyer pays for transportation (shipping) of the goods.
geochemical	Pertains to the concentration of an element.
geophysical	Pertains to the physical properties of a rock mass.
graben	A depressed block of land bordered by parallel faults.
halite	Commonly known as rock salt, is the mineral form of sodium chloride (NaCl). Halite forms isometric crystals. The mineral is typically colorless or white, but may also be light blue, dark blue, purple, pink, red, orange, yellow or gray depending on the amount and type of impurities. It commonly occurs with other evaporite deposit minerals such as several of the sulfates, halides, and borates.
horst	A raised fault block bounded by normal faults or graben.
intracratonic	Within a craton.
JORC Code	2012 Edition of the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves
Jurassic	The Jurassic is defined as the period between roughly 201.3 and 145.5 million years ago
K_2O	Potassium oxide. An ionic compound of potassium and oxygen.
KCl	Potassium chloride, a metal halide salt composed of potassium and chlorine.
metamorphic	A rock that has been altered by physical and chemical processes involving heat, pressure and derived fluids.

Palaeozoic	The earliest of three geologic eras of the Phanerozoic Eon, spanning from roughly 541 to 252.2 million years ago.
potash	Any of various mined and manufactured salts that contain potassium in water-soluble form. The name derives from *pot ash*, which refers to plant ashes soaked in water in a pot, the primary means of manufacturing the product before the industrial era. The word *potassium* is derived from potash.
sedimentary	A term describing a rock formed from sediment.
Seismic (survey)	Vibrating controlled sources are one of the primary methods of underground exploration in geophysics. Controlled-source seismology has been used to map salt domes, faults, anticlines and other geologic traps in petroleum-bearing rocks, faults and rock types.
strike	Horizontal direction or trend of a geological structure.
sylvinite	The most important ore for the production of potash in North America and Russia. It is a mechanical mixture of sylvite (KCl, or potassium chloride) and halite (NaCl, or sodium chloride).
sylvite	Potassium chloride (KCl) in natural mineral form. It forms crystals in the isometric system very similar to normal rock salt, halite (NaCl).
syncline	A fold with younger layers closer to the centre of the structure. A synclinorium (plural synclinoriums or synclinoria) is a large syncline with superimposed smaller folds.
volcanics	Rocks formed or derived from volcanic activity.

APPENDIX ONE

Summary of potassium salts and their composition (after Warren, 2006)

Mineral	Composition	K_2O%	Comments
Chlorides			
Sylvite	KCl	63.2	Principal ore mineral
Carnallite	$MgCl_2.KCl.6H_20$	16.9	Ore mineral and contaminant
Kainite	$4MgSO_4.4KCl.11H_2O$	19.3	Important ore mineral
Sulphates			
Polyhalite	$2CaSO_4.MgSO_4.K_2SO_4.2H_2O$	15.6	Ore contaminant
Langbeinite	$2MgSO_4.K_2SO_4$	22.7	Important ore mineral
Leonite	$MgSO_4.K_2SO_4.4H_2O$	25.7	Ore contaminant
Schoenite (Picromerite)	$MgSO_4.K_2SO_4.6H_2O$	23.4	Accessory
Glaserite (aphthitalite)	$K_2SO_4.(NA,K)SO_4$	42.5	Accessory
Syngenite	$CaSO_4.K_2SO4.H_2O$	28.7	Accessory
Associated minerals			
Halite	$NaCl$	0	Principal ore contaminant
Anhydrite	$CaSO_4$	0	Common ore contaminant
Bischofite	$2MgCl_2.12H_2O$	0	Accessory contaminant
Bloedite (astrakanite)	$Na_2SO_4.MgSO_4.2H_2O$	0	Accessory
Loewite	$2MgSO_4.2Na_2SO_4.5H_20$	0	Accessory
Vanthoffite	$MgSO_4.3Na_2SO_4$	0	Accessory
Kieserite	$MgSO_4.H_2O$	0	Common ore contaminant
Hexahydrite	$MgSO_4.6H_20$	0	Accessory
Epsomite	$MgSO_4.7H_2O$	0	Accessory
Ores			
Sylvinite	$KCl+NaCl$	10-35	Canada, USA, Russia, Brazil, Congo, Thailand
Hartsalz	$KCl+NaCl+CaSO_4+(MgSO_4.H_2O)$	10-20	Germany
Carnallite	$MgCl_2.KCl.6H_2O+NaCl$	10-16	Germany, Spain, Thailand
Langbeinitite	$2MgSO_4.K_2SO_4+NaCl$	7-12	USA, Russia
Mischsalz	Hartsalz=Carnallite	8-20	Germany
Kainitite	$4MgSO_4.4KCl.11H_20+NaCl$	13-18	Italy