

Chairman's Report

17TH ANNUAL GENERAL MEETING OF THE SOUTHERN AFRICAN GRAIN LABORATORY NPC



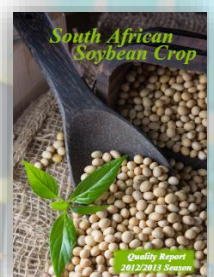
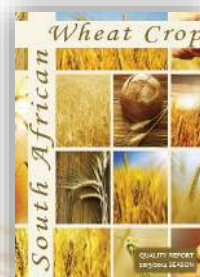
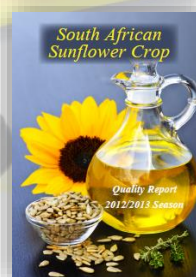
INTRODUCTION

It is an honour to deliver the 17th Chairperson's Report of the SAGL for the financial year 2013/2014. Quality assurance to provide reliable measurements is essential since these measurements forms the basis of the different phases within the grain value chain. Grain is traded and processed based on grades, specific quality attributes are therefore evaluated according to a set of agreed standards. The continued emphasis on food safety, quality and security confirms the extent of the need for accurate measurements on grain and associated products to direct agricultural research as well as formulate policies for science and technology.

Confident decision-making is based on reliable quality data over different seasons and production regions. Quality of locally produced grain can be compared with imported grain over several seasons to provides useful information in developing strategies to improve local competitiveness. SAGL applies globally accepted methods with international traceability for all testing done. The results generated over different seasons and regions with the Crop Quality Surveys as well as the Imported Quality Survey analysis can therefore be compared.

SAGL is a laboratory dedicated to perform reference measurements to the benefit of the grain and oilseed industries in South Africa. In this capacity, SAGL also provides training and testing services into the rest of Africa.

CROP QUALITY REPORTS



MR. BOIKANYO MOKGATLE
CHAIRPERSON 2013/2014

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MR. JANNIE DE VILLIERS
VICE CHAIRMAN



MR. BOIKANYO MOKGATLE
CHAIRMAN



MR. DE WET BOSHOFF
EXECUTIVE COMMITTEE MEMBER

EXECUTIVE COMMITTEE MEMBERS

DR. CHRISTÉL COETZEE
PROCESSING

DR. WILLEM BOSHOFF
BREEDING: WHEAT

MR. KEVIN CLARKE
PROCESSING: WHEAT

MS. MARIANA PURNELL
STORAGE

DR. MARINDA VISSER
PRODUCTION: MAIZE

MR. GEOFF PENNY
BAKING

MR. MARCEL KOEKEMOER
BREEDING: MAIZE

MR. HANNES HAASBROEK
PRODUCTION: SOYBEAN

DR. ERIC MOROJELE
RESEARCH

BOARD OF DIRECTORS 2013/2014



MS. SYLVIA DU PREEZ
CUSTOMER LIAISON



MS. PAULINA MODIBA
SENIOR ANALYST/QUALITY CONTROL



MS. HANNALIEN MEYER
TECHNICAL SPECIALIST



MS. WIANA LOUW
GENERAL MANAGER



MS. BEATRIX LÖTTER-MOOLMAN
PA TO THE GM / IT SPECIALIST



MS. JOLANDA NORTJÉ
MANAGER LABORATORY



MS. MARIE MEYER
MANAGER FINANCE

MANAGEMENT TEAM



DR. CORINDA ERASMUS
TECHNICAL SPECIALIST
PROJECT CONSULTANT

STAFF COMPONENT



"Everyone has been made for some particular work, and the desire for that work has been put in every heart." ~ Rumi

Quality is our Passion

COMMITTEES

Employment Equity Committee



Ms. MAMSY MOTLANTHE



Ms. MARIE MEYER
MANAGER FINANCE



Ms. WIANA LOUW
GENERAL MANAGER



Ms. LEBOGANG MALAHLELA



Ms. MAPHELA RAMARE



Mr. THABANG NKODIMO

Employment equity and skills development remain focal areas in working towards achievement of the SAGL's transformation goals. The members of the Employment Equity Committee received external training in addition to the in-house training provided. The Employment Equity Plan of the SAGL was refined during the committee meetings held on a regular basis. Feedback from the Employment Equity Committee at monthly personnel meetings.

Health & Safety Committee



Ms. MAMSY MOTLANTHE
CO-OPTED MEMBER OF
HEALTH & SAFETY TEAM



Ms. JULIA NTIMANE
FIRST AID OFFICER



Ms. WIANA LOUW
GENERAL MANAGER



Ms. DUDU MOLEKE
HEALTH & SAFETY
REPRESENTATIVE



Ms. JIANNI KRUGER
HEALTH & SAFETY
REPRESENTATIVE



Mr. JAPHTA MODISE
FIRE MARSHALL – FIRE
FIGHTING OFFICE



Mr. LIEB BADENHORST
SUPERVISOR MILLING AND
PHYSICAL ANALYSES /
GRADER



Ms. HANNA LIEN MEYER
TECHNICAL SPECIALIST



Mr. DANIEL MSIZA
FIRST AID OFFICER



Ms. JOLANDA NORTJÉ
MANAGER LABORATORY



Mr. JOHANNES MKASI
FIRE MARSHALL

Monthly Health and Safety Inspections are conducted by the safety team and followed up with OHS team meetings. The members of the team received external training and internal training sessions are a standing item on the agenda of the monthly personnel feedback sessions.

"By being yourself, you put something wonderful in the world that was not there before." ~ Edwin Elliot

VISION, AIM & VALUE STATEMENTS

VISION To be recognized as market leader in grain analysis and related services in Southern Africa.

AIM To deliver accurate quality analyses to the grain industry

VALUE Accurate measurements, agricultural prosperity, social responsibility and good governance

CORE BUSINESS

The range of laboratory services offered by the SAGL is determined by the needs of the broader grain industry. More than 75% of the total food intake in South Africa comes from grains and the aim of the South African National Policy on Food and Nutrition Security is to ensure access to sufficient, safe and nutritious food at all times, for all South Africans, in order to meet the dietary requirements for a healthy life. SAGL strives towards alignment with this policy. The emphasis is also on strengthening international competitiveness for new export opportunities. A relatively new and developing focus in our activities is involvement in collaborative research studies with tertiary education institutes and commercial processing companies which require a larger focus on research support beyond the traditional routine quality testing.

The scope of testing services currently offered include more than 75 different testing methods in the categories illustrated in Figure 1.

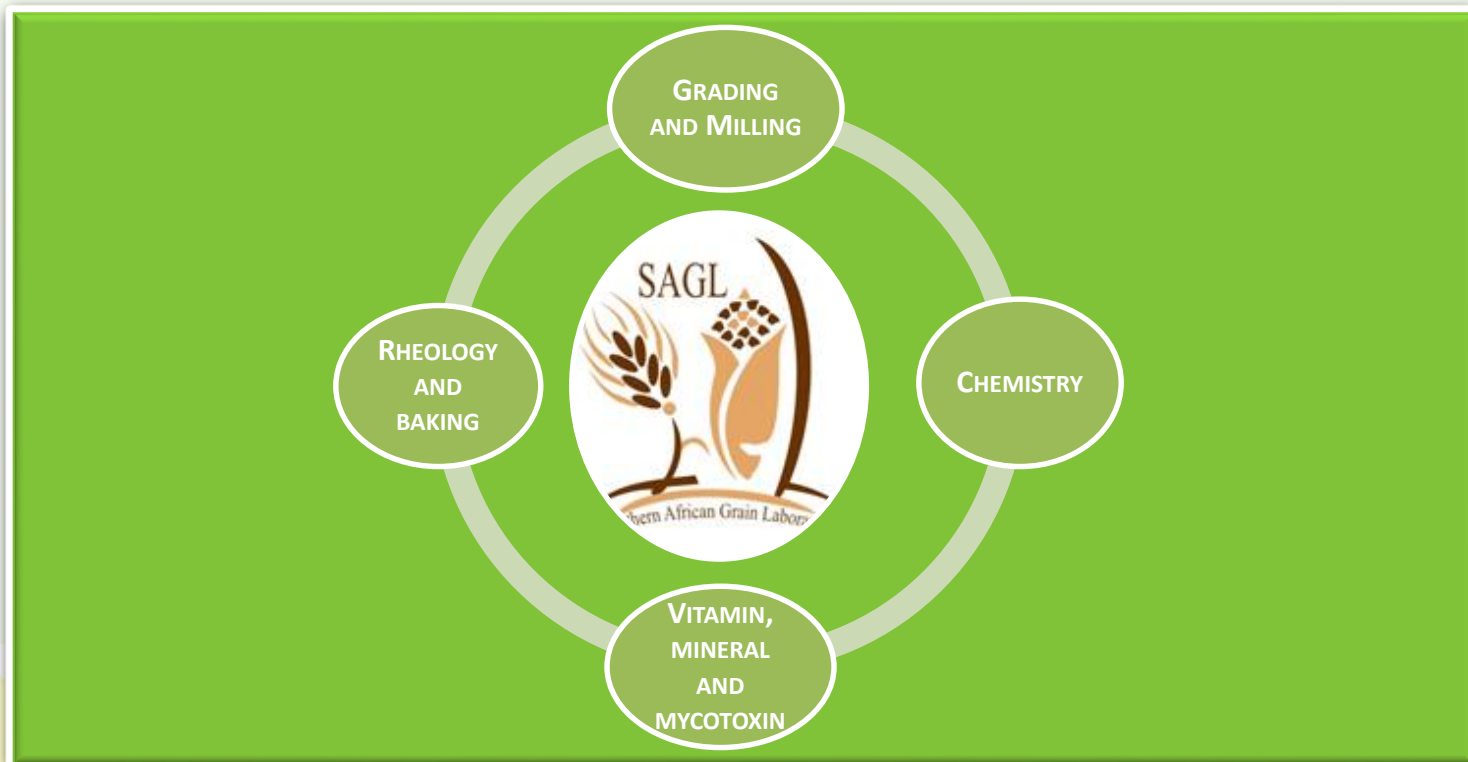


Figure 1

"If you want 1 year of prosperity, grow grain. If you want 10 years of prosperity, grow trees. If you want 100 years of prosperity, grow people." ~ Chinese Proverb

CORE BUSINESS

During the 2013/2014 financial year 56 075 analyses were performed in the four different testing areas compared to the 53 579 in the previous (2012/2013) financial year. SAGL serviced the needs of 262 customers, both locally and internationally during the 2013/2014 financial year. These customers represent different sectors of the grain and oilseed industry. Year on year, both the number of customers and the number of analyses increased.

The graph below (Figure 2) provides information on the distribution of the number of analyses performed by the different laboratories over the past two financial years.

ANALYSES PER LABORATORY 2012/2013 vs 2013/2014

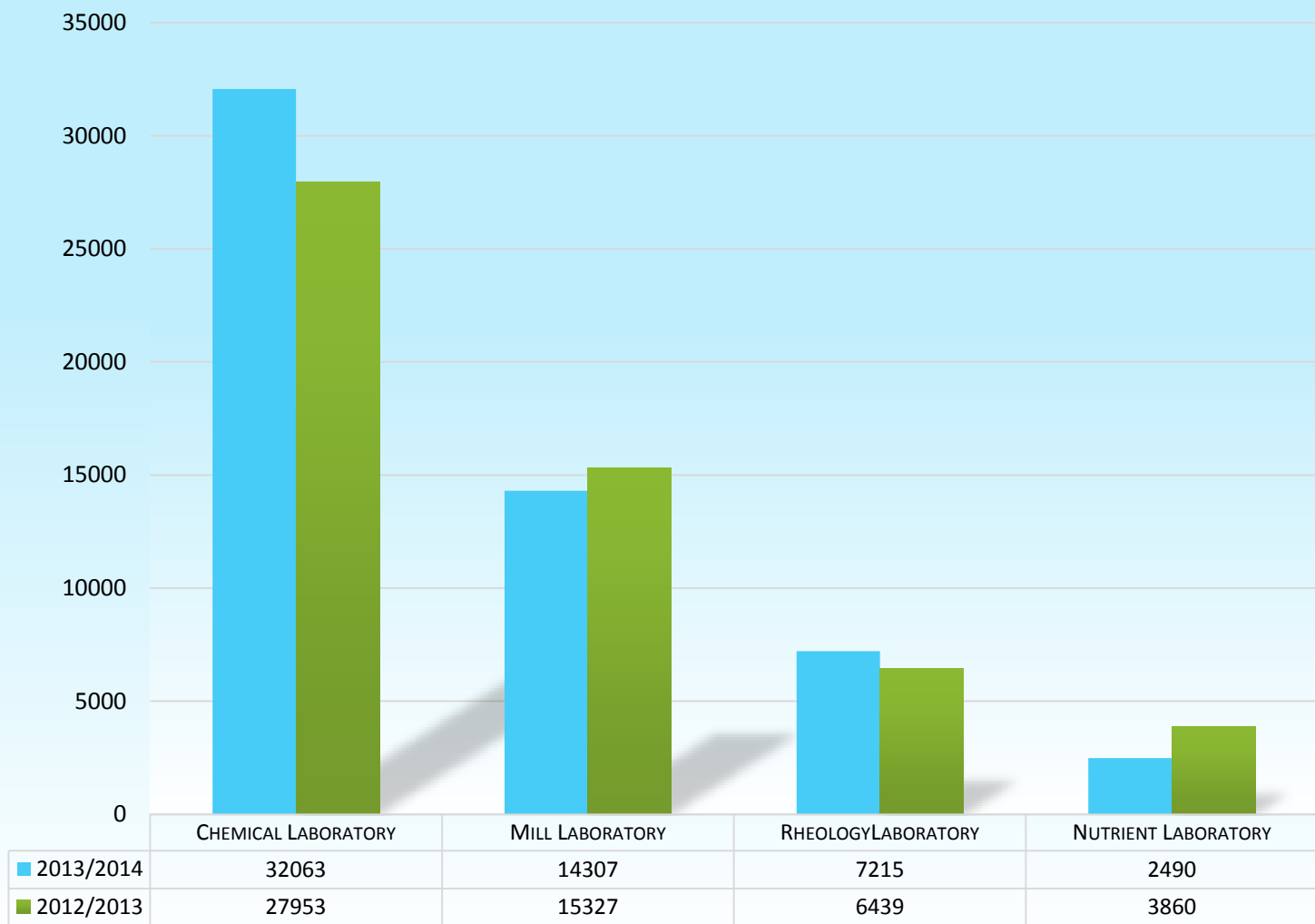


Figure 2

"If you want 1 year of prosperity, grow grain. If you want 10 years of prosperity, grow trees. If you want 100 years of prosperity, grow people." ~ Chinese Proverb

Marketing Initiatives

Recently a new portable rapid test kit (iCheck™ FLUORO) was developed to measure Vitamin A in various fortified food samples such as wheat flour. In a collaborative study our team at the Southern African Grain Laboratory (SAGL) compared the performance of this rapid test with the HPLC Vitamin A reference method. The iCheck™ FLUORO Vitamin A method shows a good agreement with the HPLC method and good repeatability for wheat flour. With the financial support of the Sasol Agricultural Trust, this work was presented in a poster at the Micronutrient Forum Global Conference in June 2014 in Addis Ababa, Ethiopia. During the 2013/2014 production season, the annual crop quality surveys were expanded when the SAGL was approached to design a series of quality tests on sorghum cultivars for food processing. A fund application for the proposal submitted to the Sorghum Trust was successful.

SAGL developed the capability to screen sorghum cultivars to determine their suitability for bioethanol production. The evaluation process uses a selection of simple grain quality characteristics including the fermentable sugar profiles, which can be used as markers for good bioethanol production quality.

The Southern African Trade Hub (SATH) funded by USAID approached the SAGL to develop a training programme for delegates from the SADC Region with specific focus on grain grading and ISO 17025 compliance. A successful strategic partnership grant concept note was submitted and the training will be presented during the first half of 2015.

During 2014, SAGL implemented a new improved method for the determination of Amino Acids using UPLC technology creating new opportunities in the animal feed industry.

A laboratory assessment at the Central Veterinary Laboratory in Dar Es Salaam was performed on behalf of the US Grains Council during April 2014 to assist with infrastructure development in the rest of Africa. During June 2014 SAGL was involved in an investigation on the potential constraints for monitoring and enforcement of fortified foods in Kenya. This investigation included a laboratory assessment and was funded by GAIN.

With the financial support of the Maize Trust, SAGL conducted a data mining study on the Maize Crop Quality Data generated over the last eleven seasons. The goal of the study was to identify unique South African trends and the outcomes of the study is now being communicated with the industry to refine it for the different applications.



“Ever as the archer loves the arrow that flies, so too he loves the bow that remains constant in his hands.”
~ Nigerian Proverb

PRESENTATIONS & FEEDBACK

- National Chamber of Milling Annual General Meeting (March 2014) - The latest developments relating to the Milling Index Project - Dr Corinda Erasmus
- Agri Laboratory Association of Southern Africa (AgriLASA) AGM (March 2014) - The role of the SAGL in the grain industry - Jolanda Nortjé. The AgriLASA members and delegates were taken on a tour through the SAGL laboratories.
- Grain SA Sorghum Specialist Working Group (May 2014) – Feedback presentation on screening of grain sorghum cultivars for bioethanol potential – Wiana Louw
- Microsep Technology Conference and Expo (July 2014) - Chromatography and Mass Spectrometry in the Grain Value Chain – Wiana Louw
- Grain Silo Industry - Mini Symposium (August 2014) - Continuous improvement - Ideas, best practice and innovation - Services and research to promote grain quality management – Wiana Louw
- Maize Forum Steering Committee: Research Network Group (August 2014) – SAGL Feedback on maize mycotoxin monitoring 2010 – 2013 – Hannalien Meyer and Wiana Louw
- New Voices in Cereal Science and Technology Symposium (September 2014) – Interactions between fumonisins in maize and lactobacilli used to ferment mageu – Theresa de Beer

- New Voices in Cereal Science and Technology Symposium (September 2014) – Optimization of extraction method for fumonisins (free and hidden) in maize – Zanele Skhosana
- NLA Test and Measurement Conference (October 2014) – Ring tests – a valuable tool for quality assurance in the grain value chain – Wiana Louw
- Maize Forum, Wheat Forum and Sorghum Forum (October 2014) – Feedback on SAGL's work conducted on behalf of the Trusts – Wiana Louw

POPULAR ARTICLES

During the period under review, six articles were published in local publications.

- ✓ *Food fortification and vitamin A analysis*, FST Magazine, May 2014
- ✓ *'n Kwaliteit-oorsig van die 2012/2013-seisoen se mielie-oes*, SA Graan/Grain, July 2014
- ✓ *Plaaslike kwaliteit van die 2012/2013-sojaboones bekyk*, SA Graan/Grain, August 2014
- ✓ *'n Blik op die kwaliteit van die 2012/2013-sonnblomoes*, SA Graan/Grain, October 2014
- ✓ *Die 2013/14-koringoes se kwaliteit*, Wheat Focus, September/October 2014
- ✓ *Food fortification – Rapid test for Vitamin A in Flour*, Wheat Focus, October/November 2014

"Care for the land, Care for the people, Go forward." ~ Maori Proverb

PROFESSIONAL AFFILIATIONS

SAGL is represented on the following committees/associations:

- ✓ CST-SA: Cereal Science and Technology
- ✓ SAAFoST: South African Association for Food Scientists
- ✓ GOSA: Grain Handling Organisation of South Africa
- ✓ ChromSA: Chromatographic Society of South Africa
- ✓ Wheat Focus Editorial Committee
- ✓ NLA: National Laboratory Association of South Africa
- ✓ SAAMS: South African Association for Mass Spectrometry
- ✓ AgriLASA: Agri Laboratory Association of South Africa
- ✓ Campden BRI, UK's largest independent membership-based organisation carrying out research and development for the food and drinks industry worldwide
- ✓ Technical Committees of the Winter Cereal Trust
- ✓ Maize Trust Mycotoxin Research Review Panel
- ✓ Co-opted for specific discussion points at the Technical Committees of the Animal Feed Manufacturers Association (AFMA), National Chamber of Milling (NCM) and National Chamber of Baking (SACB)



INTERNATIONAL VISITS / DELEGATIONS

- Prof Florian Schweigert, the founder of BioAnalyt in Germany visited the laboratory during November 2013.
- During February 2014 the Osnabrück University of Applied Sciences visited the SAGL in order to find new opportunities for close collaborations regarding research and further education opportunities.
- A delegation from Chopin in France visited the laboratory during the first week of April 2014 to investigate options for possible collaborative projects.
- On the 24th of June 2014, Mr. Frédéric Brognart and Mr. Fabrice Roux from AIT Ingredients in France, Mr Emmanuel Graille from Lyven Enzyme Company also in France and Mr. Bill Porter of AIT South Africa visited the SAGL. The Soufflet group, one of the biggest milling groups in Europe, is the parent company of AIT and Lyven.
- The 1st SA- TAIWAN Joint Working Group Meeting took place on 20 – 24 October 2014. As part of the meeting, the delegation visited the SAGL laboratory on 21 October 2014.

Human Capital

Central to SAGL's business initiatives stands the attraction and retention of scarce technical and scientific skills. A job grading and salary benchmarking process was conducted to ensure that salaries are competitive relative to the market, so as to assist the SAGL with staff retention and the attraction of new talent. A report was compiled and submitted for consideration. Effective skills development to strengthen the knowledge base helps the SAGL to stay abreast of new technological development.

With the technical expertise acquired during 2012, SAGL was able to give special attention to in-house on-the-job training to improve the skills base. All the laboratory personnel received in-house training during the period under review.

NEW APPOINTMENTS

Ms Paulina Modiba was appointed as Senior Analyst/Quality Control during December 2013. She has extensive experience in the field of residue testing under the requirements of both ISO 17025 and the OECD principles of GLP.

As part of collaborative research projects with the Technical University of Tshwane (TUT) two M Tech students, Ms Zanele Skhozana and Mr Nemiah Mhembe are working on Internship Programmes in the SAGL Laboratory.

During April 2014 Dr Paul Williams completed his Post Doctoral Fellowship programme at the SAGL and is currently lecturing at the University of Stellenbosch. In this capacity he is still involved in chemometrix training programmes at the SAGL with the financial support of the Maize Trust.



MS. PAULINA MODIBA
SENIOR ANALYST/QUALITY
CONTROL



MS. ZANELE SKHOZANA



MR. NEMIAH MHEMBE

*"All the knowledge I possess everyone else can acquire, but my heart is all my own."
~ Johann Wolfgang von Goethe*

EXTERNAL TRAINING

In an effort to increase the technical capability of the laboratory personnel, SAGL supports Ms. Lebogang Malahlela financially with her studies towards a diploma in Analytical Chemistry.

External training courses, both technical and administrative, are carefully selected. Refer to the figure below for the external training summary (2013/2014).

SUMMARY OF EXTERNAL TRAINING FOR THE PERIOD NOVEMBER 2013 TO NOVEMBER 2014



Figure 3: 21 out of the 30 employees received external training during 2013/2014 at 12 different events. 8 local conferences and workshops were attended and a total of 3 people attended 2 international conferences.

"We must teach our children to dream with their eyes open." ~ Harry Edwards

Events at SAGL

COMMUNITY OUTREACH PROJECT

SAGL used its 16th Birthday Celebration in November 2013 to give something back to the community. As part of a team building exercise we prepared and delivered gift boxes for the inhabitants of the Avril Elizabeth Home taking care of differently abled people.



FINANCIAL SKILLS WORKSHOP

Ms. Nkele Yvonne Lechaba presented a Financial Skills Workshop at the SAGL on 25 February 2014.

- ✓ Managing my money
- ✓ Saving and Investing
- ✓ Credit
- ✓ Considering Risks – Insuring

As a follow-on of the workshop, Ms Lechaba used the questionnaires as part of her MBA studies which she completed with distinction during August 2014.

NAMPO HARVEST DAY

In May 2014 the SAGL an excursion to the NAMPO Harvest Day. This provided the employees with a better understanding of the grain value chain of which the laboratory testing form an integral and important part.



TRAINING PRESENTED

SAGL provide training to participants from South Africa as well as trainees from the rest of Africa. The training courses focus on theoretical aspects, but more importantly, also provide the participants with the exposure to hands-on practical training in the laboratory. One of the major focus areas is the requirements of compliance with ISO 17025 accreditation and general good laboratory practices.

6 x 3 day wheat and flour training course
(only 3 courses in previous years)

- Total of **32** trainees + 1 administrative personnel member of SAGL

2 x 1 day wheat and flour training course

- Total of **4** trainees

1 x 5 day US Wheat - wheat and flour training course

- Total of **12** trainees, **6** technical and **6** sales personnel

1 x 2 day Maize and maize meal training course

- Total of **2** trainees



RING TESTS OFFERED

Support to the grain in oilseed industry in a reference laboratory capacity involves the offering of a range of ring tests. These ring tests can be a useful tool for equipment verification, method optimization, confirmation of accuracy and benchmarking against other laboratories, including SAGL. The main purpose of ring tests is to ensure measurement equivalence in the Industry. SAGL acts as the Expert Laboratory for the East African Proficiency Scheme for the last three years. The ring tests offered are detailed in the table below:

Table I

Description	# per year	Interval	Product Information	Local Participants	International Participants	International Participants	Total
SAGL Annual Pre-Harvest Maize Grading Ring Test	1	Per Season	Maize	62	-	-	62
SAGL Kent Jones Colour Ring Test	6	Bi-monthly	Wheat flour	8	2	Lesotho & Namibia	10
SAGL Minolta Dry Colour Ring Test	6	Bi-monthly	Wheat flour	8	-	-	8
SAGL Maize Grading Ring Test	4	Quarterly	3 x White Maize 1 x Yellow Maize	8	2	Lesotho & Namibia	10
SAGL Maize Meal Quality Ring Test	4	Quarterly	2 x Super Maize Meal 2 x "Special" Maize Meal	2	3	Swaziland, Lesotho & Namibia	5
SAGL Vitamin Ring Test	4	Quarterly	1 x Wheat Flour & Rice Flour 2 x Maize Meal & Wheat Flour 1 x Premix & Maize Meal	1	1	Kenya	2
SAGL Wheat and Flour Ring Test	4	Quarterly	Wheat and Wheat flour	20	6	Ghana, Nigeria, Lesotho, Swaziland, Senegal & Namibia	26
SAGL Wheat Grading Ring Test	4	Quarterly	Wheat	22	1	Namibia	23

Accreditation

Accurate and reliable analytical results are achieved through the maintenance of SAGL's accreditation status under the International Organization for Standardization (ISO) 17025. In addition to the 18-month surveillance audit cycle, SANAS (South African National Accreditation System) also has to perform re-assessment audits in a five year cycle. From 21 - 23 July 2014, such a re-assessment audit was conducted on the SAGL Laboratory. Continued accreditation was recommended by the SANAS Assessment team.

During this three day assessment, additional technical signatories were also assessed to be added to the SAGL's expanded scope of accreditation. The successful new technical signatories are:



Ms. PAULINA MODIBA
9 METHODS –
CHEMISTRY LABORATORY



Ms. MAMSY MOTLANTHE
2 METHODS –
NUTRIENTS AND CONTAMINANT LABORATORY



Ms. HANNALIEN MEYER
WHEAT AND MAIZE GRADING
GRADING AND MILLING LABORATORY



MR. LIEB BADENHORST
WHEAT AND MAIZE GRADING
GRADING AND MILLING LABORATORY

Although participation in international proficiency schemes is a requirement of ISO 17025, SAGL also uses this wide range of international and local proficiency schemes as an ongoing proof of technical competence.

Figures 4 and 5 below illustrate the comprehensive range of different test methods on different matrices covered to confirm traceability to international standards across the entire range of analyses offered to the industry.

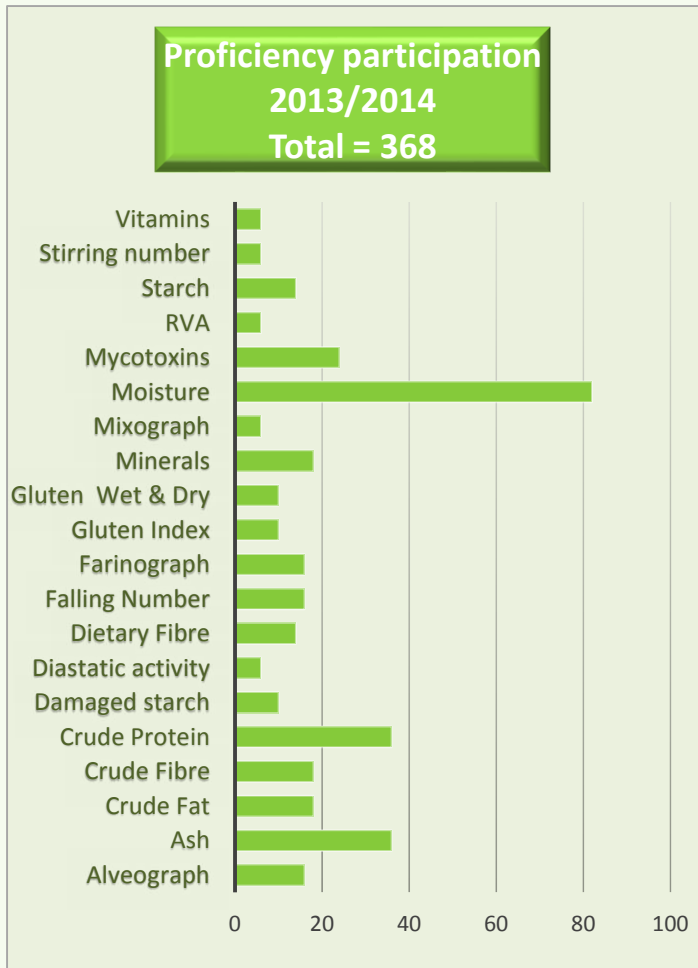


Figure 4

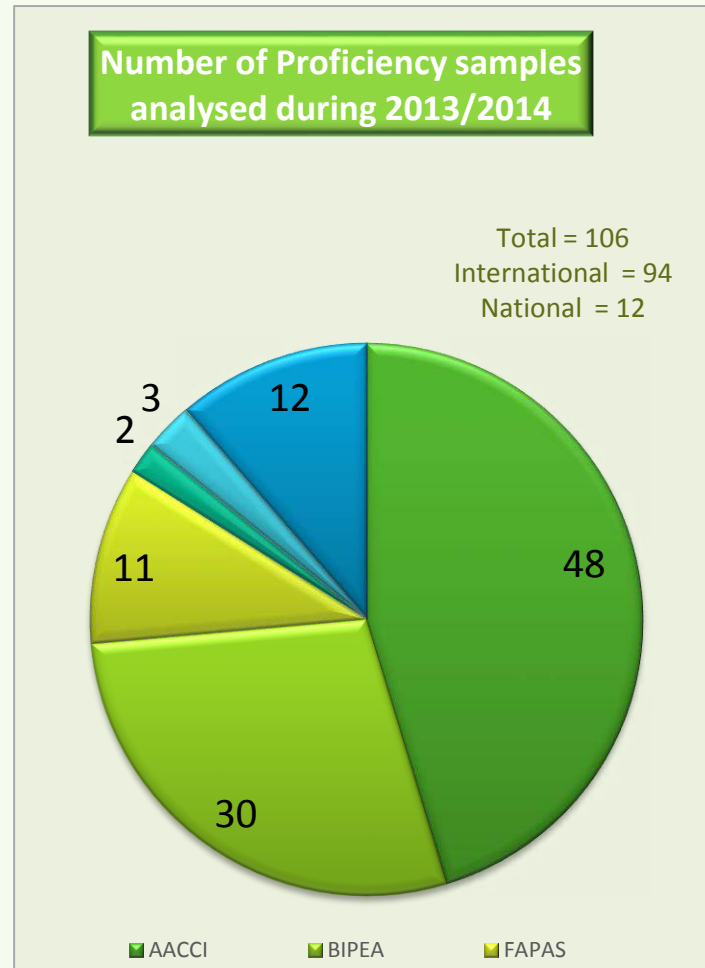


Figure 5

ACCREDITATION CERTIFICATE - ISO 17025



CERTIFICATE OF ACCREDITATION

In terms of section 21(2) (b) of the Accreditation for Conformity Assessment, Calibration and Good Laboratory Practice Act, 2006 (Act 19 of 2006), read with sections 21(1), (2) and (3) of the said Act, I hereby certify that:-

SOUTHERN AFRICAN GRAIN LABORATORY NPC
Cin. Reg. No.: 1997/018518/08

Facility Accreditation Number: **T0116**

is a South African National Accreditation System accredited Testing laboratory provided that all SANAS conditions and requirements are complied with

This certificate is valid as per the scope as stated in the accompanying schedule of accreditation Annexure "A", bearing the above accreditation number for

CHEMICAL AND PHYSICAL ANALYSIS

The facility is accredited in accordance with the recognised International Standard

ISO/IEC 17025:2005

The accreditation demonstrates technical competency for a defined scope and the operation of a laboratory quality management system.


While this certificate remains valid, the Accredited Facility named above is authorised to use the relevant SANAS accreditation symbol to issue facility reports and/or certificates


Mr R Joubert
 Chief Executive Officer
 Effective Date: 01 November 2014
 Certificate Expires: 31 October 2019

ANNEXURE A

SCHEDULE OF ACCREDITATION

Facility Number: T0116


<p>Permanent Address of Laboratory: Southern African Grain Laboratory (NPC) Grain Building 477 Willemse Road The Willows 0040</p> <p>Postal Address: Postnet Suite # 391 Private Bag X 1 The Willows 0041</p> <p>Tel: (012) 807-4019 Fax: (086) 216-7872 E-mail: info@saglab.co.za</p>	<p>Technical Staff: Ms J Nortje (AI) Ms M Fourie (In-House Method 012) Ms M Hammes (Chemical) Ms E Vorster (Rheological) Ms A de Jager (Nutrients & Contaminants) Ms W Louw (In-House Methods 001, 002, 003, 010, and 025) Ms D Moleke (Rheological) Ms I Torkianche (Rheological) Ms H Meyer (Chemical, Nutrients & Contaminants and Grading) Ms J Kruger (Chemical, excluding in-House Method 012) Mr L Badenhorst (Grading) Ms P Mubwa (Chemical) Ms M Mollathe (In-house method 001 & 003)</p> <p>Nominal Representative: Ms S du Preez</p> <p>Management Representative: Ms W Louw</p> <p>Issue No.: 21 Date of Issue: 17 October 2014 Expiry Date: 31 October 2019</p>															
<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 40%;">Materials / Products Tested</th> <th style="width: 30%;">Type of Tests / Properties Measured, Range of Measurement</th> <th style="width: 30%;">Standard Specifications, Equipment / Technique Used</th> </tr> </thead> <tbody> <tr> <td colspan="3">CHEMICAL</td> </tr> <tr> <td>Ground Barley</td> <td>Moisture (Oven Method)</td> <td>Analytical EBC Method 3.2, Latest Edition (2 hour, 130°C)</td> </tr> <tr> <td>Cereal and cereal products specifically- wheat, rice, (hulled paddy), barley, millet, rye and oats as grains, semolina and flour</td> <td>Moisture (Oven Method)</td> <td>ICC Std No 1101, Latest Edition (90 minutes, 130°C) (2 hour, 130°C)</td> </tr> <tr> <td>Flour, semolina, bread, all kind of grains and cereal products, and food products (except those that are sugar coated)</td> <td>Moisture (Oven method)</td> <td>AACCI 44-15.02, Latest Edition (1 hour, 130°C) (72 hour, 103°C)</td> </tr> </tbody> </table>	Materials / Products Tested	Type of Tests / Properties Measured, Range of Measurement	Standard Specifications, Equipment / Technique Used	CHEMICAL			Ground Barley	Moisture (Oven Method)	Analytical EBC Method 3.2, Latest Edition (2 hour, 130°C)	Cereal and cereal products specifically- wheat, rice, (hulled paddy), barley, millet, rye and oats as grains, semolina and flour	Moisture (Oven Method)	ICC Std No 1101, Latest Edition (90 minutes, 130°C) (2 hour, 130°C)	Flour, semolina, bread, all kind of grains and cereal products, and food products (except those that are sugar coated)	Moisture (Oven method)	AACCI 44-15.02, Latest Edition (1 hour, 130°C) (72 hour, 103°C)	<p>Original Date of Accreditation: 01 November 1999</p> <div style="text-align: right;">  Field Manager </div> <p style="text-align: right;">Page 1 of 3</p>
Materials / Products Tested	Type of Tests / Properties Measured, Range of Measurement	Standard Specifications, Equipment / Technique Used														
CHEMICAL																
Ground Barley	Moisture (Oven Method)	Analytical EBC Method 3.2, Latest Edition (2 hour, 130°C)														
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Flour, semolina, bread, all kind of grains and cereal products, and food products (except those that are sugar coated)	Moisture (Oven method)	AACCI 44-15.02, Latest Edition (1 hour, 130°C) (72 hour, 103°C)														

ANNEXURE A

Facility No.: T0116
Date of Issue: 17 October 2014
Expiry Date: 31 October 2019

Materials / Products Tested	Type of Tests / Properties Measured, Range of Measurement	Standard Specifications, Equipment / Technique Used
All flours, cereal grains, oilseeds and animal feeds	Nitrogen and protein (Combustion method - Dumas)	AACCI 46-30.01, Latest Edition
Food stuff	Dietary fibre (total)	In-House Method 012
Food stuff and feeds	Carbohydrates (by difference) (calculation) Energy value (calculation) Total digestible nutrition value (calculation)	SOP MC 23
Food stuff and feeds	Determination of ash	In-House Method 011
Wheat kernels	Moisture (Oven method)	Government Gazette Wheat Grading Regulation, Latest Edition (72 hour, 103°C)
Flours of grains, e.g. barley, oats, triticale, maize, rye, sorghum and wheat, oilseeds like soybeans and sunflower, feeds and mixed feeds and foodstuffs	Crude Fat (Ether extraction by Soxhlet)	In-House Method 024
Meal and flour of wheat, rye, barley, other grains, starch containing and malted products	Falling number	ICC No 1071, Latest Edition
NUTRIENTS & CONTAMINANTS		
Vitamin fortified food and feed products and fortification mixes grain based	Vitamin A as all trans Retinol (Saponification) (HPLC)	In-House Method 001
Vitamin fortified food and feed products and fortification mixes grain based	Thiamine Mononitrate (HPLC) Riboflavin (HPLC) Nicotinamide (HPLC) Pyridoxine Hydrochloride (HPLC)	In-House Method 002
Vitamin fortified food and feed products and fortification mixes grain based	Folic Acid (HPLC)	In-House Method 003

Original Date of Accreditation: 01 November 1999


Field Manager

Page 2 of 3


ANNEXURE A

Facility No.: T0116
Date of Issue: 17 October 2014
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Materials / Products Tested	Type of Tests / Properties Measured, Range of Measurement	Standard Specifications, Equipment / Technique Used
Grain based food and feed products (fortified and unfortified) and fortification mixes	Total sodium (Na) Total Iron (Fe) Total zinc (Zn)	In-House Method 010
Food and feed	Multi-Mycotoxin: - Aflatoxin G ₁ , B ₁ , G ₂ , B ₂ and total - Deoxynivalenol (DON), 15-ADON - Fumonisins B ₁ , B ₂ , B ₃ - Ochratoxin A - T ₂ , HT-2 - Zearalenone	In-House Method 026
GRADING		
Maize	Defective kernels (white maize/yellow maize)	Government Gazette Maize Regulation, Latest Edition
Cereal as grains (wheat, barley, rye and oats)	Hectolitre mass (Ken222)	ISO 7971-3, Latest Edition
Wheat	Screenings	Government Gazette Wheat Grading Regulation, Latest Edition
RHEOLOGICAL		
Wheat flour	Alveograph (Rheological properties)	ICC No 121, Latest Edition
Flours	Farnograph (Rheological properties)	AACCI 54.02, Latest Edition (Rheological behaviour of Flour Farnograph Constant Flour Weight procedure)
Hard, soft and durum wheat, (flour and whole wheat flour)	Mixograph (Rheological properties)	Industry Accepted Method 020 (based on AACCI 54-40.02, Latest Edition Mixograph Method)

Original Date of Accreditation: 01 November 1999


ISSUED BY THE SOUTHERN AFRICAN NATIONAL ACCREDITATION SYSTEM



Field Manager


Page 3 of 3

"Tell me and I'll forget; show me and I may remember; involve me and I'll understand." ~ Chinese Proverb

Quality is our Passion

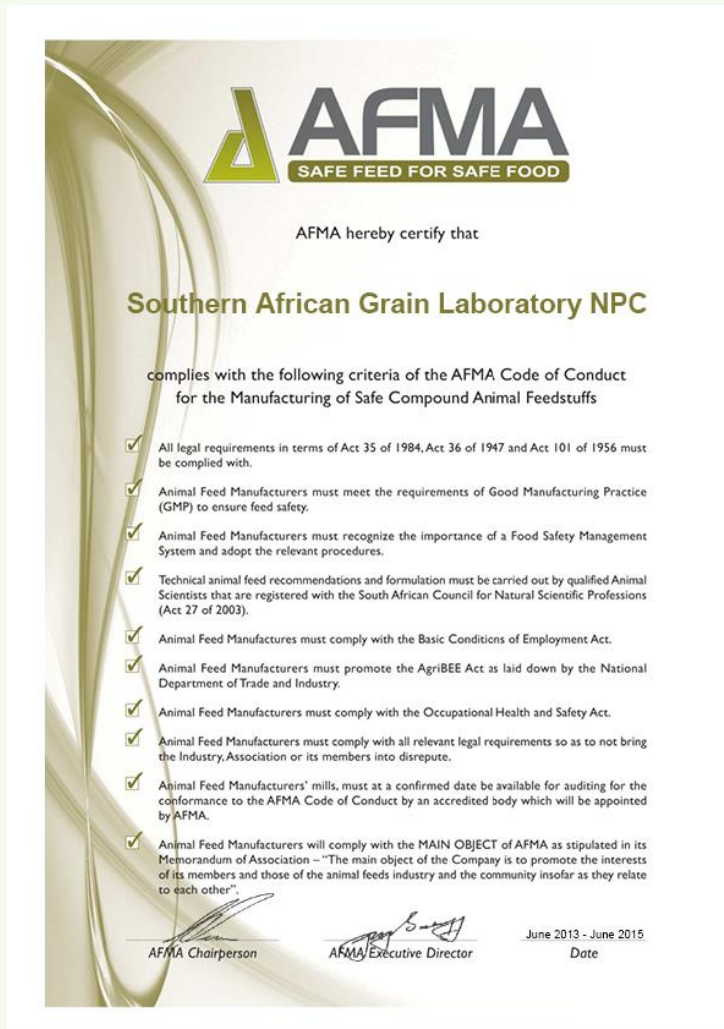






Members of
Campden BRI

ACCREDITATION CERTIFICATES





AFMA
SAFE FEED FOR SAFE FOOD

AFMA hereby certify that

Southern African Grain Laboratory NPC

complies with the following criteria of the AFMA Code of Conduct for the Manufacturing of Safe Compound Animal Feedstuffs

- ✓ All legal requirements in terms of Act 35 of 1984, Act 36 of 1947 and Act 101 of 1956 must be complied with.
- ✓ Animal Feed Manufacturers must meet the requirements of Good Manufacturing Practice (GMP) to ensure feed safety.
- ✓ Animal Feed Manufacturers must recognize the importance of a Food Safety Management System and adopt the relevant procedures.
- ✓ Technical animal feed recommendations and formulation must be carried out by qualified Animal Scientists that are registered with the South African Council for Natural Scientific Professions (Act 27 of 2003).
- ✓ Animal Feed Manufacturers must comply with the Basic Conditions of Employment Act.
- ✓ Animal Feed Manufacturers must promote the AgriBEE Act as laid down by the National Department of Trade and Industry.
- ✓ Animal Feed Manufacturers must comply with the Occupational Health and Safety Act.
- ✓ Animal Feed Manufacturers must comply with all relevant legal requirements so as to not bring the Industry, Association or its members into disrepute.
- ✓ Animal Feed Manufacturers' mills, must at a confirmed date be available for auditing for the conformance to the AFMA Code of Conduct by an accredited body which will be appointed by AFMA.
- ✓ Animal Feed Manufacturers will comply with the MAIN OBJECT of AFMA as stipulated in its Memorandum of Association – "The main object of the Company is to promote the interests of its members and those of the animal feeds industry and the community insofar as they relate to each other".

 AFMA Chairperson
  AFMA Executive Director
 June 2013 - June 2015
 Date



BiPea
Partner of your Quality

CERTIFICATE OF PARTICIPATION

This certificate is awarded to:

SOUTHERN AFRICAN GRAIN LABORATORY
THE WILLOWS - PRETORIA - SOUTH AFRICA

for its participation in BIPEA interlaboratory comparisons for the annual series 2013-2014.

BIPEA Member May 14, 2014 - Gennevilliers France BIPEA Director

Certificate n° 13-14 / 11119

PROFICIENCY TESTING PROGRAMS

AWARDS



Ms. HANNALIEN MEYER

CHROMSA CHROMATOGRAPHER OF THE YEAR AWARD - 2013/2014

"Interesting chromatograms in the application laboratory"

ADDITIONAL AUDITS

- On 24 March 2014 the Department of Labour conducted an inspection on the SAGL in terms of the Occupational Health and Safety Act, Act 85 of 1993 and Regulations. Based on the recommendation of the audit, an Occupational Hygiene Survey was conducted during May 2014 and the necessary interventions implemented.
- One of the requirements of the Memorandum of Agreement between the dti and the NRF on THRIP funding is a Technical Audit. On the 15th of April 2014, the SAGL - TUT collaborative research project on Bound and masked fumonisins in maize products was audited by the National Research Foundation (NRF).

Financial Position

The annual financial statements were prepared on the basis of accounting policies applicable to a going concern. This basis presumes that funds will be available to finance future operations and that the realisation of assets and the settlement of liabilities, contingent obligations and commitments will occur in the ordinary course of business.

The Directors believe that the company has adequate financial resources to continue in operation for the foreseeable future and accordingly the financial statements have been prepared on a going concern basis. The Independent Auditors' Report indicates no material inconsistencies between the Directors' Report and the audited financial statements.

The figures below provides details on the financial position of the SAGL since the 2009/2010 financial year and the sources of revenue.

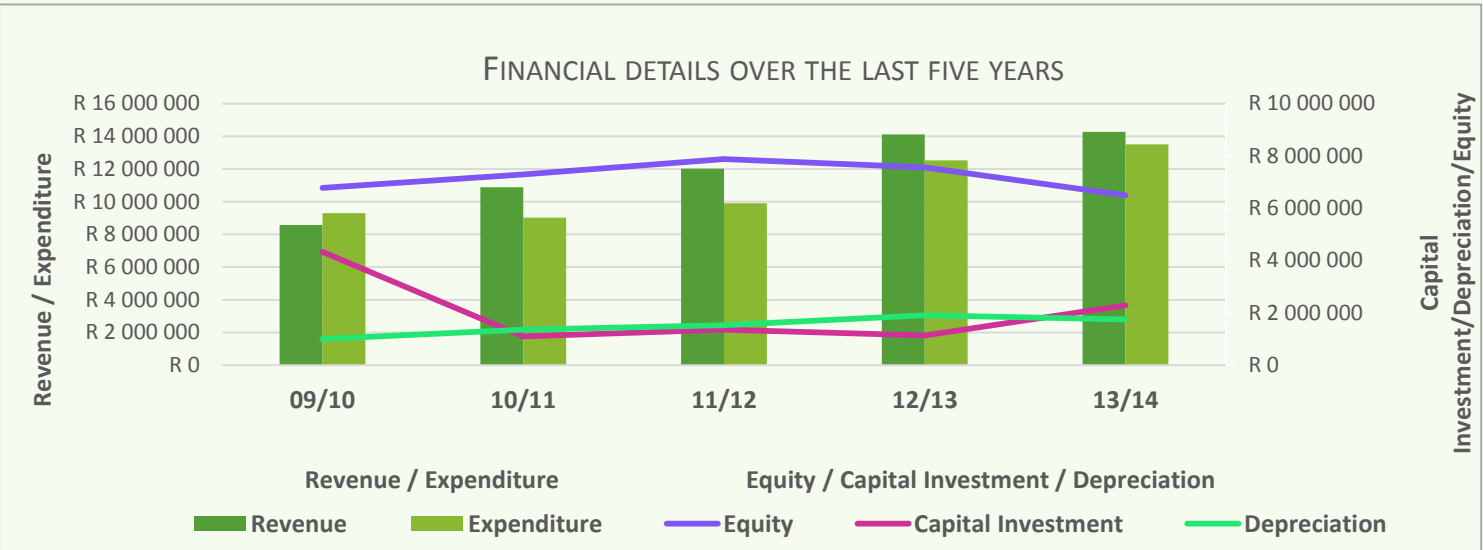


Figure 6

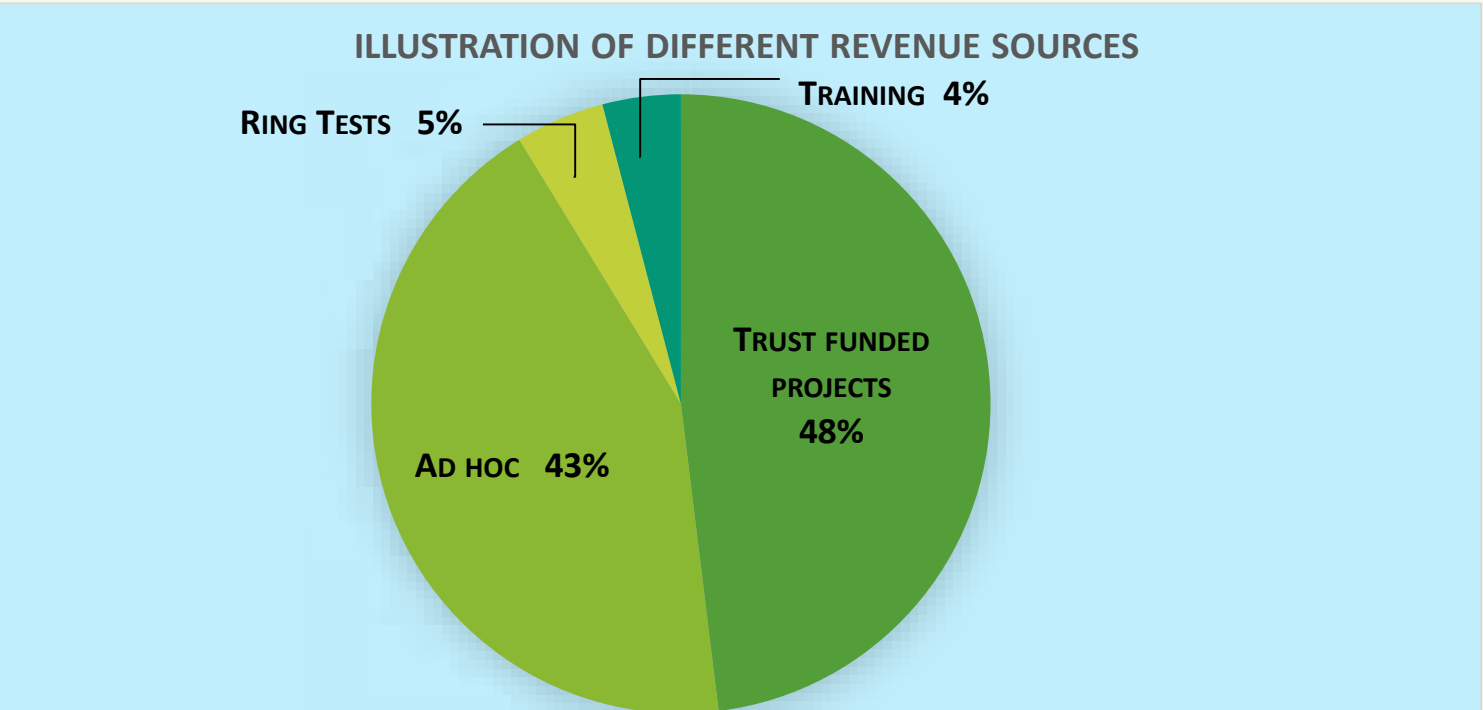


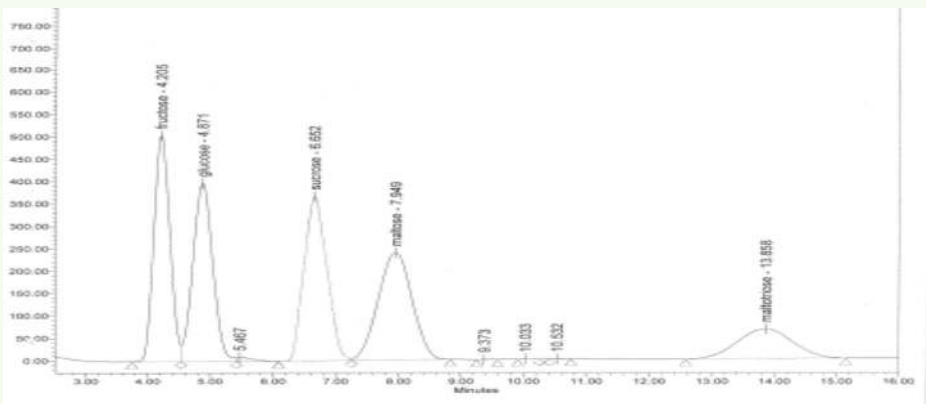
Figure 7

Quality is our Passion

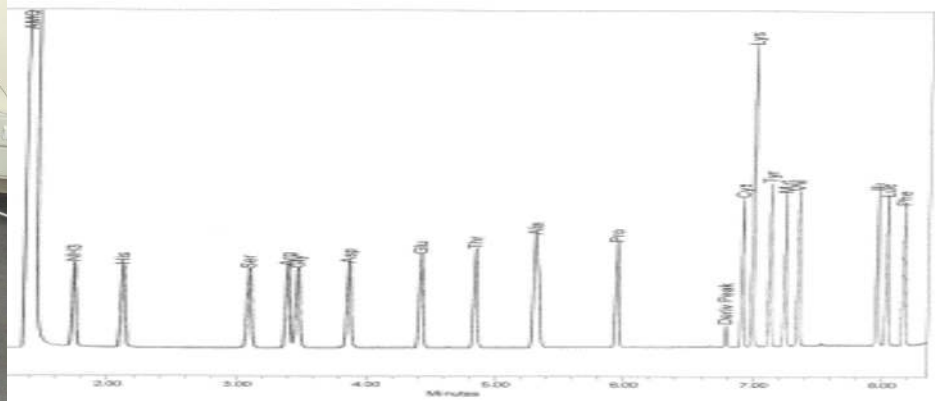
Additional Capacity

NEW SERVICES BASED ON NEW CAPITAL EQUIPMENT

The Refractive Index Detector made the development of a method for the determination of fermentable sugars applicable to the evaluation of grain sorghum for bioethanol potential possible. Sugar profile analysis is also important for other applications in the food and feed industries.



On the new UPLC system the Amino Acid Profile analyses could be improved to ensure shorter turnaround times and even better accuracy. This improved technology will also be used for other applications in the laboratory.



"Be not afraid of going slowly; be only afraid of standing still." ~ Chinese Proverb

Conclusion

Through several successful initiatives to ensure an operational structure and service profile aligned with the changing needs of the South African Grain Industry, SAGL once again confirmed its position as a reference laboratory of choice for the Industry. SAGL remains focused on supporting the Grain Industry to be internationally competitive.

Acknowledgements

I would like to thank the Board of Directors for their support and commitment and in particular the Executive Committee, Jannie de Villiers and De Wet Boshoff. I also would like to extend a special word of thanks to the SAGL management team for their specific inputs.

The dedication and level of excellence delivered by the Board, management team and the personnel of the SAGL made a significant contribution to the SAGL achieving its goals during the 2013/2014 financial year.

The results of everybody's contribution and hard work are reflected in this strong enterprise with real benefits to the Grain Industry in South Africa.

MR. BOIKANYO MOKGATLE
CHAIRPERSON 2013/2014

19 NOVEMBER 2014



Winter Cereal Trust : Wintergraantrust

The Maize Trust

SORGHUM TRUST

OIL AND PROTEIN SEEDS DEVELOPMENT TRUST

SASOL AGRICULTURE TRUST

"Each of us feels that we are just a drop in the ocean, but the ocean would be less without that missing drop."
~ Mother Teresa

Quality is our Passion

