



**CHB Letters of Recommendation**

**And**

**Client References**

**CHB**

**3RD PARTY INSPECTORATE**



## CANNON & HANCOCK, BIGGS & ASSOCIATES C.C.

### Refractory Inspection, Advice and Third Party Q. A.

CK 1998/036132/23

VAT REG. No. 4450176492

### Client References for Ongoing Maintenance Inspections

Refractory Shutdown Planning, Co-ordination and Third Party Inspection specializing in the following services.

✓ Consultation	✓ Quality Control Procedures
✓ Design Review	✓ Installation Procedures
✓ Lining Assessments	✓ Infra-red Inspection
✓ Repair Procedures	✓ Rope Access Inspections
✓ Third Party Quality Assurance	✓ Done Inspections
✓ Failure Analysis	✓ Remote Camera Inspections
✓ Pre-qualification of Materials & Personnel	✓ Refractory Testing, Research & Development
✓ Fabrication QA/QC	✓ Supervision
✓ Scope of Work	✓ Bill of Materials

Qualified, experienced API certified inspectors are involved in lining assessments and recommendations on maintenance shutdowns as well as Third Party Quality Assurance on new projects. **Industrial Rope Access** trained inspectors, **Drones** and **Remote Cameras**, means scaffolding is not necessary for routine statutory inspection.

Third party inspection clients include: *Chevron, Petronas, Total, Shell, PetroSA, Sasol, Qatar Petroleum, RASGAS (Qatar), ADNOC LNG & Fertiliser (UAE), Stone & Webster (SHAW), PERTAMINA (Indonesia), SPRC (Thailand), SRC (Singapore) and Quartis to name a few.*

CHB have on-going investigations into refractory failure analysis for installers and end users in almost every industry. Any samples from such failures are tested at our independent refractory testing laboratory in Sasolburg, South Africa. Results are reviewed in-house by a PhD in refractories.

**CHB INSPECTORS ARE API 936 CERTIFIED (AMERICAN PETROLEUM INSTITUTE)**

## HPI & Petrochemical References for Ongoing Maintenance and Project Inspections

Item	Client	Contract years	Description
1.	SAPREF (Shell & BP)	18 years	FCCU, SRU, Heaters, Boilers and Ducting's
2.	SASOL (Secunda)	17 years	Reformers, Waste Heat Boilers, Rotary Kilns, Arc Furnaces, FCCU, SRU, Heaters, Boilers and Ducting's
3.	SASOL 1 (Sasolburg)	12 years	Reformers, Waste Heat Boilers, Heaters, Incinerators, Ethylene Crackers, Ductings
4.	TOTAL	21 years	FCCU, SRU, Heaters, Boilers and Ducting's
5.	CHEVRON	21 years	FCCU, SRU, Heaters, Boilers and Ducting's, Reformers, Waste Heat Boilers, Incinerators
6.	PETROSA	21 years	Reformers, Waste Heat Boilers, Heaters, Ductings
7.	ENGEN (PETRONAS)	14 years	FCCU, SRU, Heaters, Boilers and Ducting's
8.	QP REFINERY (Qatar)	14 years	RCCU, SRU, Heaters, Boilers and Ducting's
9.	ADNOC (UAE)	15 years	SRU, Heaters, Boilers, Incinerators, Ductings
10.	SPRC (Thailand)	5 years	RCCU, SRU, Heaters, Boilers and Ducting's
11.	SRC (Singapore)	5 years	RCCU, SRU, Heaters, Boilers and Ducting's

### Other Industries Work In :

#### **Cement and Lime**

- Rotary Kiln : Alpha Lime
- Vertical Lime Shaft Kiln : Trans Hex Mining
- New cement plant (Pre-heaters, Rotary Kiln, Cooler, Ducting etc.) : Ewekoro/Nigeria

#### **Aluminium**

- Hillside Pot Furnaces - Site QA for J.R. Dickinson
- On going consultancy

## **Platinum**

- Consultancy - Impala Platinum
- Arc Furnace – Impala Platinum - Failure Analysis
- Arc Furnace – Lonmin Platinum – Failure Analysis

## **Iron and Steel**

- Hoogovens Project - Blast Furnace & Stove Reline : Iscor Vanderbijlpark – Material - Expeditor
- Roller Hearth Furnace : Saldanha Steel - QA
- DR Kiln - Scaw Metals

## **Glass**

- Glass Tank - Nampak Glass - Failure Analysis
- PFG Glass - Material Recommendations

## **Clients include:**

- Fluor Daniel
- Hatch Africa
- KBR
- Silicon Smelters
- Crawford & Co. (Insurance loss adjusters)
- Tan Rajah & Cheah (Insurance loss adjusters Singapore)

*CHB* are frequently involved in major revamps and expansion projects with engineering firms such as *FLUOR, FOSTER WHEELER, KBR*.

*CHB* frequently do *refractory failure analysis* on behalf of insurance companies and end users.

**SEE LIST OF CLIENT RECOMMENDATIONS BELOW**

**Should you require any additional information, please contact us.**



# Singapore Refining Company Private Limited

Company Registration No: I97900084K

1 Merlimau Road  
Singapore 628260  
Tel : (65) 6357 0100  
Fax : (65) 6867 7182

Direct Line : (65) 6357 0585  
Direct Fax : (65) 6867 7182

Date: 10-Aug-2016

Mr. Darrol Biggs,  
CHB 3<sup>rd</sup> Party Inspectorate,  
P.O. Box 2795, Vereeniging, 1930  
13 Uranus Street, Sasolburg, 1947, South Africa.

Mr. Darrol,

I am writing to let you know that how much SRC appreciate the outstanding refractory inspection service that your team including *yourself* and *Mr. Aubrey Mc. Leod* provided during our Nov-2015 RCC revamp project and Major Turn Around.

Your team was attentive and helpful. Especially Mr. Darrol, you, was very knowledgeable about refractory inspection and always recommended us the repair method without compromising the refractory integrity. Even when the schedule was tight at the end of the TAR, your team had ensured the refractory work reinstatement was met to the quality requirement. Refractory integrity was important to RCC unit, and ensured SRC had no unwanted shut down due to refractory failure.

Because of team efforts, I was pleased to say that SRC RCC unit had no reported hot spot after start up.

I and my colleagues were glad to have opportunity to work with your team. You have put together a great team that give us a successful TAR.

I look forward to working with your team again in the future.

Regards,

Wymond Liang  
SRC Lead Inspection Engineer



**Qatar Petroleum  
Refinery**



مصفاة  
قطر للبتروول

**REFINING DIRECTORATE  
SITE SERVICES - FACILITIES DEPARTMENT**  
P.O. Box: 50033, Mesaieed – Qatar, Tel.: 40144823 – Fax: 40139438

**To :** CHB – Third Party Inspectorate      **Date :** 2nd December 2013  
**Attn :** Mr Darrol Biggs      **Pages :**  
**From :** FMS/4 (R)      **Ref. # :** FMS/4-TPI- 0112/13

**Letter of Recognition**

This is to recognize the services of CHB as a Third Party Refractory Inspectorate during plant shutdowns.

CHB have been contracted to QP Refinery over the past 4 shutdowns of Refinery 1 & 2 and RFCC; as TPI for refractory works. The services provided meet international standards and the knowledge and expertise of CHB's inspectors have been recognized.

Thank you for your contributions to shutdown maintenance.

Best Regards,

**Nadeem Shakir  
Senior Project Engineer**



☆☆☆☆☆ we are green ☆☆☆☆☆





STAR PETROLEUM REFINING PUBLIC COMPANY LIMITED

บริษัท สตาร์ ปิโตรเลียม รีไฟน์นิ่ง จำกัด (มหาชน)

เลขทะเบียนนิติบุคคล 0107555000155

Our Ref.: SPRC-IR-OUT14-7

June 16, 2014

Attention: CHB Refractory Inspection Company

Subject: 2014 T&I - Supplier Performance Evaluation

We, Star Petroleum Refining Public Company Limited (hereinafter referred to as "COMPANY") have arranged the yearly Supplier Performance Evaluation based on product quality and on time delivery to support COMPANY business during Major Turnaround and Inspection (February 2014 to March 2014 )

CHB has provided an excellent service and performance on their derivable such as technical skill, Refractory inspection, Repair and recommendation, quality control and reporting. After start up, SPRC did not find a major defect or detect any hot spot.

SPRC would like to take this opportunity to thank you for your excellent contribution and cooperation to the COMPANY during our recent T&I which contributed to a successful shutdown and RFCCU Revamp Project. We hope that you will continue to provide an excellent quality of product and all services to support the COMPANY in the future.

Yours Sincerely,

Mr. Kittipong Nokdara

Integrity and Rotating Equipment Manager



31 July 2013

Cannon Hancock Biggs and Associates.

Dear Mr. Darrol Biggs

This is to express our heartfelt thank you for your exceptional services during our 2013TA. We strongly believe that the continued involvement by CHB's Refractory Shutdown Manager, Alwyn Spencer and your inspection team, played a crucial role in ensuring the correct repair techniques were followed to ensure quality during the execution of our critical path activity which was the refractory replacement inside our FCCU Regenerator Cyclones.

We at SAPREF are proud and thankful that you and your team were part and parcel of our success in completing the total reline to the Secondary Cyclones and 70% reline to the Primary Cyclones (240 m<sup>2</sup>) in our FCCU Regenerator in record time. This was a first for Shell Globally and was achieved with the intensive input from all involved.

Thank you and your team for this dedication.

Kind Regards

 ETI 31/7/13  
**CHRIS KALABA**



**recognition certificate**

**The goal  
is zero**



**Presented to:**  
**DARROL BIGGS**  
**CHB**

**Thank you for your  
excellent behaviour in  
living out our Value of  
Excellence In All We Do  
(positive recommendation  
made for installing skin  
couples on B26001)**

  
\_\_\_\_\_  
LAS VAN WYK  
MANAGER, ENGINEERING DEPARTMENT

*11 January 2007*  
\_\_\_\_\_  
DATE

