ANNEXURE A

SCHEDULE OF ACCREDITATION

Facility Number: T0013

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**Technical Signatories:**
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- Mr JJ Groenewald (Mechanical & Metallurgical)
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- Mr EM Seedat (Chemistry)
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- Ms PR Khumalo (Chemistry)
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- Mr HJ Lamprecht (Mechanical & Metallurgical)
- Mr K Nkosi (Chemistry)
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<table>
<thead>
<tr>
<th>Material or Products Tested</th>
<th>Type of Tests / Properties Measured, Range of Measurement</th>
<th>Standard Specifications, Techniques / Equipment Used</th>
</tr>
</thead>
<tbody>
<tr>
<td>SPECTROCHEMICAL</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Stainless Steel</td>
<td>Determination of Co, Cr, Cu, Mn, Mo, Nb, Ni, P, S, Si, V, Ti by XRF Spectroscopy</td>
<td>ILB-TEST-219</td>
</tr>
<tr>
<td></td>
<td>Determination of Al, B, Sn, C, N, Spark Emission Spectroscopy</td>
<td>ILB-TEST-219</td>
</tr>
<tr>
<td></td>
<td>Determination of C by Leco</td>
<td>ILB-TEST-221</td>
</tr>
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<td>Determination of N by Leco</td>
<td>ILB-TEST-222</td>
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<tr>
<td>High Carbon Ferrochromium</td>
<td>Determination of C and S by Leco</td>
<td>ILB-TEST-221</td>
</tr>
<tr>
<td>CHEMICAL</td>
<td></td>
<td></td>
</tr>
<tr>
<td>High Carbon Ferrochromium</td>
<td>Determination of Al₂O₃, Fe, Mn, Si by ICP</td>
<td>WLB-TEST-205</td>
</tr>
<tr>
<td></td>
<td>Determination of Cr by Autotitrination</td>
<td>WLB-TEST-347</td>
</tr>
</tbody>
</table>
Process/boiler effluent and Pollution

Determination of Chemical Oxygen Demand (COD)  WLB-TEST-009
Determination of Conductivity by Autotitrations  WLB-TEST-311
Determination of pH by Autotitrations  WLB-TEST-313

Control Water

Determination of Fluoride by Autotitrations  WLB-TEST-312
Determination of Cr, Mn, Na, Mg by ICP  WLB-TEST-016
Determination of Cl⁻, NO₃⁻, PO₄³⁻ and SO₄²⁻ by Ion Chromatography  WLB-TEST-310

Determination of the following using Aquakem:

NO₂⁻  WLB-TEST-337
NO₃⁻  WLB-TEST-336
Cr²⁺  WLB-TEST-341
SO₄²⁻  WLB-TEST-335
PO₄³⁻  WLB-TEST-340
Cl⁻  WLB-TEST-334

MECHANICAL

Metallic materials

Austenitic & Ferritic

Tensile Testing (up to 250KN)
(At ambient temperature)
(At elevated temperature to 200°C)
0.2% Proof Stress
1.0% Proof Stress
UTS
Elongation
Impact Charpy (up to 406J)

ISO 6892-1, ASTM E8 M
ISO 6892-2, ASTM E21

Hardness Testing (Laboratory)

Vickers method
Rockwell method

ISO 6507-1, ASTM E384
ISO 6508-1, ASTM E18

METALLURGICAL

Metallic material

Grain Size & Microstructure
ASTM E112 (comparison method)

Austenitic, Ferritic & Duplex Stainless Steels

Inter-granular corrosion test-Austenit
ASTM A262 (practice A & E)

Inter-granular corrosion test-Ferritic
ASTM A763 (practice W & Z)

Detrimental Intermetallic Phase in Duplex

Original Date of Accreditation: 01 November 1992

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