

For any queries please contact the following relevant persons.

Regional Manager	Gerrit Fouche	GerritF@Setpoint.co.za
Technical Manager	Thelma Horsfield	ThelmaS@Setpoint.co.za
Client Relations Manager	Rudi Scharneck	RudiS@Setpoint.co.za
Accounts	Accounts section	Marlize@torreindustries.com

Dear Customer

Thank you for your request to submit a quotation for the analysis of your samples. **Set Point Laboratories is an ISO17025 accredited laboratory.**

Please refer to section 4 of this quotation for the methods used and ranges covered under the scope of ISO 17025 accreditation. Should you require more information about the methods, please let me know.

Set Point Laboratories is committed to produce quality results within the shortest possible turn around time. Set Point Laboratories operates according to a strict quality control system (refer to point 7 below) and set procedures. Should you require further information about our quality system or procedures we will be happy to accommodate you. Our quote for the services which we are able to offer you ("quote") is set out below and is subject to the terms and conditions referred to in this document and specifically Section 2 thereon.

Should you decide to accept our quote and submit samples to us for analysis, please complete the section "Sample Submission" (last page), sign in the space indicated and return with the samples. Your acceptance of this quotation shall create a binding contract between the customer and Set Point Laboratories as stipulated in the contract terms below and in our Standard Terms and Conditions available on request.

### 1. Procedures and basic charges \*

The charges for the services provided by Set Point Laboratories and the basic fees charged in respect of such services are listed in Table 1.

#### Payment Terms

In consideration for the services rendered by Set Point Laboratories to the customer in terms of this agreement, the client shall pay to Set Point Laboratories the fees calculated in accordance with Table 1 above, which shall be paid within 30 days after receiving an invoice in respect thereof, if the customer has an account with Set Point Laboratories. Payment shall be made by direct electronic transfer into Set Point Laboratories' bank account, free of all bank or exchange charges and free of any set-off, withholding or deduction of any nature whatsoever. The customer shall provide Set Point Laboratories with written proof of such a transfer. New customers must pay the full amount due upfront until their account is approved.

### 2. Additional Information and Requirements

**Contract Terms :** Please refer to <http://www.setpointlabs.co.za/home/index.php/terms-a-conditions> for our terms and conditions, also available for download.

- 2.1 Before SPL will commence any services hereunder it must be in receipt of a duly authorized purchase order received from the customer. Cash customers should submit a signed submission sheet together with proof of payment.
- 2.2 inform SPL in advance of any known hazards or dangers, actual or potential, associated with any order or samples or testing including, for example, presence or risk of radiation, toxic or noxious or explosive elements or materials, environmental pollution or poisons;
- 2.3 This quote will be valid for a period of 30 days after the date on page 1 of this document.
- 2.4 The samples are to be delivered to Set Point Laboratories by the customer. The samples will be accompanied by an official order from the customer as well as the completed "Submission Sheet".
- 2.5 Set Point shall endeavour to complete the services to be performed by it
  - for water samples, within 10 working days, and
  - for solid samples, within 14 working days for batches of 200 samples, 21 working days per batch of 500
 after receipt of any sample or as agreed with customer, but it is agreed that time is not of the essence and any delay in completing such services shall not be regarded as a breach of this agreement.
- 2.6 Samples may be analysed on an "as received basis" unless otherwise requested in writing by you. Only if there is visual evidence of moisture which may hinder the analytical process, shall the sample be dried. The cost of drying will be for the customer's account.
- 2.7 Samples shall be retained only on the basis set out in Section 6 below.
- 2.8 The customer chooses the physical addresses and facsimile numbers referred to above or contained in any sample submission and instruction sheet as its domicilium et executandi ("domicilium") for all purposes relating to this agreement. The customer shall be entitled, by giving written notice to Set Point, to vary its physical domicilium or facsimile number to any other physical address (not being a post office box or poste restante) or facsimile number.

### 3. Comments on Set Point Laboratories' ability to perform the requested work

ITEM	COMMENTS
Capability	All staff are suitably qualified to perform the analysis
Resources	Appropriate laboratory equipment is available

### 4. Methods used, tests subcontracted and accredited ranges:

Determinand	Method Code	Accredited	Ave. Uncertainty	Technique	Limit of Detection	Analytical Range
pH value at 25°C	M460	Yes	< 1%	Electrometric	0.2	0.2 - 14
Conductivity at 25°C	M461	Yes	< 1%	Electrometric	1 mS/m	1 - 20000 mS/m
Alkalinity	M463	Yes	< 1%	Titration	10mg CaCO3/L	10 - 2000 mg CaCO3L
Ammonia Nitrogen	M464	Yes	17.8 % < 2.6 mg/L > 1 %	Automated Photometric	0.1 mg NH3-N/L	0.1 - 77.6 mg NH3-N/L
Nitrate	M465	Yes	Calculated from M467/466	Calculation	0.1mg NO-3/L	Calculated from M467/466
Nitrite Nitrogen	M466	Yes	20.4%	Automated Photometric	0.1 mg NO2-N/L	0 - 2 mg NO2-N/L
Nitrate and Nitrite Nitrogen	M467	Yes	3.4%	Automated Photometric	0.1 mg NO3+NO2-N/L	0.1 - 10 mg NO3+NO2-N/L

\* Pricing and the pricing structure is not part of the ISO accreditation.

Orthophosphate Phosphorus	M468	Yes	8.8%	Automated Photometric	0.1 mg o-PO4-P/L	0.1 - 5 mg o-PO4-P/L
Chloride	M469	Yes	3.0%	Automated Photometric	3 mg Cl/L	3 - 100 mg Cl/L
Fluoride	M475	Yes	25.5%	Automated Photometric	0.1 mg F/L	0.1 - 2 mg F/L
Sulphate	M476	Yes	1.1%	Automated Photometric	3 mg SO4/L	3 - 100 mg SO4/L
Hexavalent Chromium	M471	Yes	27.7%	Automated Photometric	0.005 mg Cr6+/L	0.005 - 0.2 mg Cr6+/L
Al	M474	Yes	3.3%	ICP-OES	Al 0.15 mg/L	Al 0.15 - 15 mg/L
Ag	M474	Yes	0.32 ug/L	ICP-MS	Ag 0.50 ug/L	Ag 0.50 - 50 ug/L
As	M474	Yes	3.7%	ICP-OES	As 0.10 mg/L	As 0.10 - 15 mg/L
As	M474	Yes	0.33 ug/L	ICP-MS	As 0.50 ug/L	As 0.50 - 50 ug/L
B	M474	Yes	4.4%	ICP-OES	B 0.35 mg/L	B 0.35 - 15 mg/L
Ba	M474	Yes	3.5%	ICP-OES	Ba 0.01 mg/L	Ba 0.01 - 15 mg/L
Ba	M474	Yes	0.30 ug/L	ICP-MS	Ba 0.30 ug/L	Ba 0.30 - 100 ug/L
Be	M474	Yes	4.9%	ICP-OES	Be 0.02 mg/L	Be 0.02 - 15 mg/L
Be	M474	Yes	0.37 ug/L	ICP-MS	Be 0.10 ug/L	Be 0.10 - 50 ug/L
Ca	M474	Yes	2.7%	ICP-OES	Ca 0.50 mg/L	Ca 0.50 - 15 mg/L
Cd	M474	Yes	4.5%	ICP-OES	Cd 0.02 mg/L	Cd 0.02 - 15 mg/L
Cd	M474	Yes	0.36 ug/L	ICP-MS	Cd 0.10 ug/L	Cd 0.10 - 50 ug/L
Co	M474	Yes	3.0%	ICP-OES	Co 0.02 mg/L	Co 0.02 - 15 mg/L
Co	M474	Yes	0.36 ug/L	ICP-MS	Co 0.20 ug/L	Co 0.20 - 50 ug/L
Cr	M474	Yes	3.0%	ICP-OES	Cr 0.05 mg/L	Cr 0.05 - 15 mg/L
Cr	M474	Yes	0.36 ug/L	ICP-MS	Cr 3.0 ug/L	Cr 3 - 100 ug/L
Cu	M474	Yes	3.1%	ICP-OES	Cu 0.10 mg/L	Cu 0.10 - 15 mg/L
Cu	M474	Yes	0.36 ug/L	ICP-MS	Cu 1.0 ug/L	Cu 1 - 100 ug/L
Fe	M474	Yes	3.2%	ICP-OES	Fe 0.10 mg/L	Fe 0.30 - 15 mg/L
Hg	M474	Yes	0.04 ug/L	ICP-MS	Hg 0.50 ug/L	Hg 0.50 - 5 ug/L
K	M474	Yes	4.2%	ICP-OES	K 0.04 mg/L	K 0.04 - 15 mg/L
Mg	M474	Yes	2.9%	ICP-OES	Mg 0.05 mg/L	Mg 0.05 - 15 mg/L
Mn	M474	Yes	3.8%	ICP-OES	Mn 0.02 mg/L	Mn 0.02 - 15 mg/L
Mn	M474	Yes	0.40 ug/L	ICP-MS	Mn0.25 ug/L	Mn 0.25 - 50 ug/L
Mo	M474	Yes	3.2%	ICP-OES	Mo 0.02 mg/L	Mo 0.02 - 15 mg/L
Mo	M474	Yes	0.36 ug/L	ICP-MS	Mo 1.0 ug/L	Mo 1.0 - 50 ug/L
Na	M474	Yes	7.7%	ICP-OES	Na 0.20 mg/L	Na 0.20 - 15 mg/L
Ni	M474	Yes	3.0%	ICP-OES	Ni 0.02 mg/L	Ni 0.02 - 15 mg/L
Ni	M474	Yes	0.33 ug/L	ICP-MS	Ni 1.0 ug/L	Ni 1.0 - 100 ug/L
Pb	M474	Yes	3.0%	ICP-OES	Pb 0.05 mg/L	Pb 0.05 - 15 mg/L
Pb	M474	Yes	0.37 ug/L	ICP-MS	Pb 1.0 ug/L	Pb1.0 - 100 ug/L
Si	M474	Yes	6.8%	ICP-OES	Si 0.25 mg/L	Si 0.25 - 15 mg/L
Sb	M474	Yes	0.35 ug/L	ICP-MS	Sb 0.50 ug/L	Sb 0.50 - 50 ug/L
Se	M474	Yes	0.35 ug/L	ICP-MS	Se 2.0 ug/L	Se 2.0 - 50 ug/L
Sn	M474	Yes	0.41 ug/L	ICP-MS	Sn 0.20 ug/L	Sn 0.20 - 50 ug/L
Sr	M474	Yes	5.6%	ICP-OES	Sr 0.01 mg/L	Sr 0.01 - 15 mg/L
Sr	M474	Yes	0.32 ug/L	ICP-MS	Sr 0.50 ug/L	Sr 0.50 - 50 ug/L
Th	M474	Yes	0.35 ug/L	ICP-MS	0.20 ug/L	0.20 - 50 ug/L
Tl	M474	Yes	0.29 ug/L	ICP-MS	0.10 ug/L	0.10 - 50 ug/L
U	M474	Yes	0.30 ug/L	ICP-MS	U 0.20 ug/L	U 0.20 - 50 ug/L
V	M474	Yes	2.9%	ICP-OES	V 0.10 mg/L	V 0.10 - 15 mg/L
V	M474	Yes	0.36 ug/L	ICP-MS	V 0.20 ug/L	V 0.20 - 50 ug/L
Zn	M474	Yes	4.9%	ICP-OES	Zn 0.06 mg/L	Zn 0.06 - 15 mg/L
Zn	M474	Yes	0.37 ug/L	ICP-MS	5.0 ug/L	5.0 - 100 ug/L
COD	M462	Yes	<5.2%	Closed reflux/ colourimetric	10mgO2/L	10-1500mg O2/L
Total Suspended Solids	M472	Yes	4.2%	Gravimetric	10mg TSS/L	10-1500mg TSS/L
Total Dissolved Solids	M473	Yes	2.8%	Gravimetric	10mg TDS/L	10-100 000mg TDS/L

\* Pricing and the pricing structure is not part of the ISO accreditation.

**Methods used, tests subcontracted and accredited ranges:**

Determinand	Method Code	Accredited	SubContracted	Technique	Limit of Detection	Analytical Range
Copper (Cu)	M446-1	Yes	No	Multi acid digest/ICP finish	Cu 0.001 %	Cu 0.0010 - 1.0%
Nickel (Ni)	M446-1	Yes	No	Multi acid digest/ICP finish	Ni 0.001 %	Ni 0.0010 - 1.0%
Cobalt (Co)	M446-1	Yes	No	Multi acid digest/ICP finish	Co 0.001 %	Co 0.0010 - 1.0%
Fe2O3	M451	Yes	No	XRF fused disc	Fe2O3 0.06 %	Fe2O3 0.1 - 99.75 %
MnO	M451	Yes	No	XRF fused disc	MnO 0.02 %	MnO 0.21 - 65.74 %
Cr2O3	M451	Yes	No	XRF fused disc	Cr2O3 0.07 %	Cr2O3 0.42 - 3.5 %
V2O5	M451	Yes	No	XRF fused disc	V2O5 0.23 %	V2O5 0.23 - 9.36 %
TiO2	M451	Yes	No	XRF fused disc	TiO2 0.03 %	TiO2 0.09 - 32.8 %
CaO	M451	Yes	No	XRF fused disc	CaO 0.06 %	CaO 0.14 - 70 %
K2O	M451	Yes	No	XRF fused disc	K2O 0.17 %	K2O 0.17 - 15.35 %
P2O5	M451	Yes	No	XRF fused disc	P2O5 0.02 %	P2O5 0.03 - 39.96 %
SiO2	M451	Yes	No	XRF fused disc	SiO2 0.82 %	SiO2 0.8 - 99.6 %
Al2O3	M451	Yes	No	XRF fused disc	Al2O3 0.2 %	Al2O3 0.8 - 58.8 %
MgO	M451	Yes	No	XRF fused disc	MgO 0.3 %	MgO 0.3 - 43.51 %
Copper (Cu) Merensky	M450	Yes	No	XRF pressed disc	Cu 10 ppm	Cu 10 - 5000 ppm
Nickel (Ni) Merensky	M450	Yes	No	XRF pressed disc	Ni 10ppm	Ni 10 - 9000 ppm
Copper (Cu) UG2	M450	Yes	No	XRF pressed disc	Cu 10ppm	Cu 10 - 800 ppm
Nickel (Ni) UG2	M450	Yes	No	XRF pressed disc	Ni 10ppm	Ni 10 - 3500 ppm

Note: All other tests or elements reported are not accredited unless specified otherwise

**XRF Fused Disc Analysis**

<b>Analyte</b>	Fe2O3, MnO, Cr2O3, V2O5, TiO2, CaO, K2O, P2O5, SiO2 Al2O3, MgO
<b>0 - 9.99 %</b>	2 Decimal places (e.g. 5.00 %) 1 Decimal Place (e.g. 5.0 %)
<b>10 - 99.9 %</b>	1 Decimal place 1 Decimal Place

**XRF Pressed Disc Analysis**

All levels are reported in ppm with no decimal places. For example 1 234 ppm is reported as 1 234 ppm.

**Rounding off procedure**

When the halfway point between rounded off values is reached the number is rounded up to the next number i.e. when a 5 is reached the number is rounded up. For example 4.995% rounded off to two decimals becomes 5.00% and 4.994% is rounded down to 4.99%.

**6. Sample retention:**

Water samples will be retained for a period of 1 month.

\* Bulk samples will be stored free of charge for a period of 1 month. Bulk samples must be collected or will be discarded after a period of 1 month at a cost of R 7.50 per 5kg sample. However, customer may request for the Bulk samples to be stored after this period by arranging it with us. A storage charge of R 7.50 per 5kg sample, per month will be charged.

\*\* Pulps will be stored free of charge for a period of 3 months from the date the samples were received. Thereafter all pulps must be collected or will be discarded at a cost of R 4.20 per sample. However, customer may request for the pulps to be stored after this period by indicating so on the submission sheet. A storage charge of R 4.20 per month will be charged.

\*\*\* The cost of refrigerated storage are R 6.70 per month for pulp samples and R 12.50 per month, per 5kg for Bulk samples.

\*\*\*\* Customers may request for samples to be packed and returned. A packaging charge of R 4.20 per sample will be levied.

\*\*\*\*\* Hazardous water samples should be collected after analysis and discarded safely at the client's expense

Should Setpoint need to dispose of the hazardous samples, the client is liable for the cost of subcontracting the safe disposal.

\*\*\*\*\* Radioactive samples should be collected after analysis and discarded safely at the client's expense.

**7. Quality Control:**

**Set Point Laboratories is an ISO17025 accredited laboratory.**

Quality Control is an integral part of our procedures including maintaining of monitoring statistics. Should quality control information specific to any tests be required, it may be obtained from the Set Point Laboratories' Quality Co-ordinator.

As far as possible, certified reference materials or standards that have been verified against certified reference materials shall be analysed together with all tests. The results of these standards shall be within specified limits - usually three standard deviations or realistic limits in cases where the standard deviations are negligible.

Yours sincerely



Thelma Horsfield

**For: Set Point Laboratories: A Part of Torre Industries**