ANNEXURE A

SCHEDULE OF ACCREDITATION

Facility Number: **T0122**

Permanent Address of Laboratory:

Talbot Laboratories (Pty) Ltd
A Division of Talbot Group (Pty) Ltd
20 Pentrich Road
Pietermaritzburg
3200

Technical Signatories:

Ms J Winchester (Only Microbiology Methods)
Ms D Naidoo (1B,,2B, 2A, 5,41, 59, 3, 39, 10, pH Method,1, 4, 83A,10G, 16G, 18G, 64G, 65Ga-c, 66G, 67G, 68G, 231, 232, 233, 234, 40A, 91, 92, 93, 94, All Calculations)
Mr S Mgabhi ((1pH Methods, 1B, 2B, 2A, 5,41, 59, 3, 39, 10, 4, 83A, 10G, 16G, 18G, 64G, 65Ga-c, 66G, 67G, 68G, 231, 232, 233, 234, 40A, 91, 92, 93, 94, All Calculations)
Ms K Deepnarain (31, 32, 34)
Ms S Chohan (CTS) (100, 101 & 104)
Mr D Daphne (TLM 31, TLM 32, TLM 227, TLM 223, TLM 224, TLM 225)
Ms S Lushaba (TLM 227, TLM 223, TLM 224, TLM 225)
Mr W Mbokazi (100, 101 & 104)
Mr M Nkwnyane (100, 101 & 104)
Mr M Sigcau (1B,,2B, 2A, 5,41, 59, 3, 39, 10, pH Method,1, 4, 83A,10G, 16G, 18G, 64G, 65Ga-c, 66G, 67G, 68G , 231, 232, 233, 234, 40A, 91, 92, 93, 94, All Calculations)

Postal Address:

PO Box 22598
Pietermaritzburg
3200

Nominated Representative:

Ms D Naidoo

Tel: (033) 346-1444
Fax: (033) 346-1445
E-mail: Denise.Naidoo@talbot.co.za

Issue No.: 30
Date of Issue: 19 November 2024
Expiry Date: 31 July 2026

Material or Products Tested	Type of Tests / Properties Measured, Range of Measurement	Standard Specifications, Techniques / Equipment Used
CHEMICAL		
Water (Raw, Potable, Waste)	Determination of pH at 25°C - Electrometric	1 (Based on SANS 5011)
	Determination of pH at 25°C - Electrometric	1B (Based on Standard Methods for the Examination of Water and Wastewater, APHA, AWWA, WEF, 20 th Edition)
	Determination of Electrical Conductivity at 25°C-Conductimetric	Method 2A (Based on SANS 7888)
	Determination of Electrical Conductivity at 25°C - Conductimetric	2B (Based on SANS 7888)

	Determination of Suspended Solids at 105°C - Gravimetric	5 (Based on SANS 6049)
	Determination Total Solids at 105°C - Gravimetric	59 (Based on Standard Methods for the Examination of Water and Wastewater, APHA, AWWA, WEF, 20 th Edition)
	Determination of Total Dissolved Solids at 180°C - Gravimetric	41 (Based on SANS 5213)
	Determination of Turbidity - Nephelometric	4 (Based on Standard Methods for the Examination of Water and Wastewater, APHA, AWWA,WEF 20 th Edition)
	Determination of Chemical Oxygen Demand - Titrimetric (Dichromate Reflux)	3 (Based on Government Gazette 2512
	Determination of Oxygen Absorbed - Titrimetric	39 (Based on SANS 5220)
	Determination of Alkalinity - Titrimetric	10 (Based on Standard Methods for the Examination of Water and Wastewater, APHA, AWWA, WEF 20 th Edition)
	Determination of Li, Be, B, Al, Ti, V, Cr, Mn, Fe, Co, Ni, Cu, Zn, As, Se, Sr, Mo, Ag, Cd, Sn, Sb, Ba, Tl, Pb, U, Hg by ICP-MS	No.83A (Based on Standard Methods for the Examination of Water and Wastewater, APHA, AWWA, WEF, 20 th Edition and EPA 200.8)
Water (Raw, Potable, Waste)	Determination of Alkalinity	10G (Gallery Plus)
	Determination of Chloride	16G (Gallery Plus)
	Determination of Fluoride	18G (Gallery Plus)
	Determination of Ammonia	64G (Gallery Plus)
	Determination of Nitrate & Nitrite	65Ga (Gallery Plus)
	Determination of Nitrite	65Gb (Gallery Plus)
	Determination of NITRATE	65Gc (Gallery Plus)
	Determination of Orthophosphate	66G (Gallery Plus)
	Determination of Sulphate	67G(Gallery Plus)
	Determination of Hexavalent Chromium	68G (Gallery Plus)
	Determination of Total Phosphorous, Total Silica, Total Sulphur	91 (ICP-OES 5110)
	Determination of Arsenic, Antimony, Selenium and Mercury	92 (ICP-OES 5110)
	Determination of Calcium, Magnesium, Potassium and Sodium	93 (ICP-OES 5110)
	Determination of Al, B, Ba, Be, Cd, Co, Cr, Cu, Fe, Li, Mn, Mo, Ni, Pb, Sr, Sn, Ti, Tl, U, V, Zn and Zr	94 (ICP-OES 5110
Water (Raw, Potable & Waste)	Determination of Total Phosphate, Total Sulphur and Total Silica	TLM 231 (ICP-OES-Prodigy)

	Determination of Arsenic, Antimony, Selenium and Mercury	TLM 232 (ICP-OES-Prodigy)
	Determination of Ca, Mg, K and Na	TLM 233 (ICP-OES-Prodigy)
	Determination of Al, Ba, B, Cd, Co, Cr, Cu, Fe, Li, Mn, Mo, Ni, Pb, Sn, Sr, Ti, V, Zn	TLM 234 (ICP-OES-Prodigy)
	Determination of Arsenic Antomony, Selenium and Mercury	TLM 232 (ICP-OES-Prodigy)
	Determination of Ba, B, Cd, Co, Cr, Cu, Mn, Mo, Ni, Pb, V, Zn	TLM 234 (ICP-OES-Prodigy)
	Calculations:	
	Calcium Hardness	
	Magnesium Hardness	
	Total Hardness	
	Sodium Adsorption Ratio (SAR)	
	Total dissolved solids (From EC in mS/m)	
	Orthophosphate as PO_4	
	Nitrate as NO_3	
	Nitrite as NO_2	
	Free/unionised Ammonia as N or NH_3	
	Saline/ionised Ammonium as N or NH_4	
	Total Inorganic Nitrogen (TIN)	
	Saturated pH (pHs)	
	Ryznar Salturation index (RSI)	
	Langelier Saturate Index (LSI)	
	Aggressiveness Index (AI)	
	Corrosively Index (CI)	
	Ion Balance	
	Alkalinity Relationships (Hydroxide alkalinity as $CaCO_3$, Hydroxide alkalinity as OH, Carbonate alkalinity as $CaCO_3$, Carbonate alkalinity as CO_3, Bicarbonate alkalinity as CaCO3 & Bicarbonate alkalinity as HCO_3)	
~~Soil and Sludge~~	~~Determination of Mercury~~	~~86 (ICP-OES)~~
	~~Determination of Be, Cd, Cr, Co, Cu, Pb, Mn, Mo, Ni, V , Zn, Ba, Sn~~	~~87 (ICP-OES)~~
	~~Determination of Selenium and Arsenic~~	~~88 (ICP-OES)~~
	~~Determination of Antimony~~	~~89 (ICP-OES)~~
	~~Determination of Total Phosphate~~	~~90 (ICP-OES)~~ **Suspended on the 12 June 2024)**

Water (Raw, Potable, Waste) Soil, Sludge and Sediment)	Determination of TPH by GC-FID(C_6-C_{40})	101 (GC-FID)
	Determination of VOC`s	100 (Purge+ Trap+ GC-MS)
Water (Raw, Potable, Waste)	Total Organic Carbon and Soluble Organic Carbon	104 (TOC Analyser)
	Determination of Colour	40 A (Photometer)
MICROBIOLOGY		
Water (Raw, Potable and Waste)	Standard Plate Count	31(based on SANS 5221:2018)
	Enumeration of Total Coliforms and *Escherichia coli*	32 (Colilert-defined substrate technology)
	Enumeration of *Legionella pneumophila*	34 (Legiolert)

Talbot Laboratory (Pty) Ltd
The Innovation Hub No.1
Sydney Brenner Street
Pretoria

MICROBIOLOGY		
Water (Potable , Raw and Waste)	Standard Plate Count	TLM 31 (based on SANS 5221: 2018)
	Enumeration of Total Coliforms and *Escherichia coli*	TLM 32 (Colilert-defined substrate technology)
CHEMISTRY		
Water (Raw, Potable and Waste)	Determination of pH at 25 °C	TLM 227
	Determination of Turbidity-Nephelometric	TLM 224
	Determination of Electrical conductivity at 25°C	TLM 223
	Determination of color (True and Apparent)	TLM 225

Original Date of Accreditation: 01 August 2001

ISSUED BY THE SOUTH AFRICAN NATIONAL ACCREDITATION SYSTEM

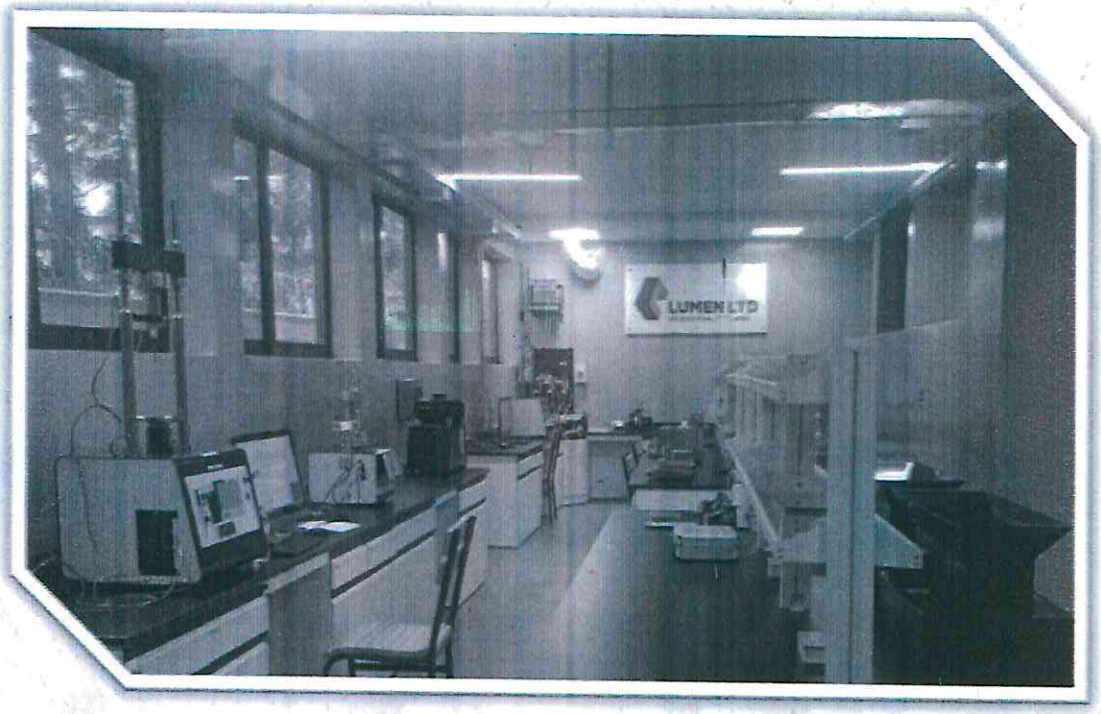
Accreditation Manager

SN	PARAMETERS	SAMPLE QTY FOR 2YR PERIOD	Unit cost	Extended cost
1	pH	564	7,500.00	4,230,000.00
2	Electrical conductivity	564	7,500.00	4,230,000.00
3	Total dissolved solids	564	7,500.00	4,230,000.00
4	Total suspended solids	564	7,500.00	4,230,000.00
5	Aluminum	564	14,986.00	8,452,104.00
6	Calcium	564	14,986.00	8,452,104.00
7	Fluoride as F	564	7,500.00	4,230,000.00
8	Total alkalinity as CaCO3	564	7,500.00	4,230,000.00
9	Chloride as Cl	564	12,962.00	7,310,568.00
10	Sulphate as SO4	564	10,065.00	5,676,660.00
11	Arsenic	564	22,000.00	12,408,000.00
12	Nitrate as N	564	9,828.00	5,542,992.00
13	Ammonia	564	18,000.00	10,152,000.00
14	Potassium	564	19,255.00	10,859,820.00
15	Nickel	564	22,000.00	12,408,000.00
16	Manganese	564	13,919.00	7,850,316.00
17	Magnesium	564	14,986.00	8,452,104.00
18	Iron	564	8,723.00	4,919,772.00
19	Copper	564	10,065.00	5,676,660.00
20	Lead	564	22,000.00	12,408,000.00
21	Sodium	564	9,395.00	5,298,780.00
22	**SAMPLING CHARGES FOR THE 24 MONTHS** **Mine** **1. Trinity Musha Mine** **2.Trinity Nyakabingo Mine** **3.Rutongo Mines** **each mine having mothly sampling for 24 months of the contract**	24	450,000.00	10,800,000.00
SUB TOTAL				**162,047,880.00**
VAT				**29,168,618.40**
GRAND TOTAL				**191,216,498.40**

TURN AROUND TIME	3-7 WORKING DAYS UP ON SAMPLING
SAMPLING CHARGES COVER THE FOLLOWING	1. Sampling bottles 2. Cooler boxes 3. Sampling Vehicle 4. Personnel 5. Personal Protective Equipment

LUMEN LTD
WE BUILD LEGACIES FOR AGES.

FINANCIAL PROPOSAL FOR LABORATORY TESTING AND REPORTING OF SURFACE AND GROUNDWATER SAMPLES



24 KG 607 St +250 787 100 805 lumen.cons@gmail.com www.lumenltd.rw Lumen Ltd

Date: 28/02/2025
Ref No: 128/LUMEN/2025

RE: Laboratory Testing and Reporting of Surface and Groundwater Samples

To,
Sam Ryumugabe
Sustainability Manager
Trinity Metals
sam.ryumugabe@trinity-metals.com

Dear Sir,

Subject: Financial Proposal Submission Letter

We are writing to submit the financial proposal for the **Laboratory Testing and Reporting of Surface and Groundwater Samples for Rutongo Mine (tin); Trinity Nyakabingo Mine (tungsten); and Trinity Musha Mine (tin and tantalum, with lithium exploration),** as per your request for proposal dated February 25th, 2025 totalling amount of Three hundred forty-two million, seven hundred forty-nine thousand, four hundred eight Rwandan Francs Only **(342,749,408RWF) all taxes inclusive.**

Thank you for considering our proposal.

Best regards,

Yours sincerely,

+250 787 100 805 LUMEN LTD TIN: 102899425

Yilkal Endeshaw Yeshaneh
Managing Director
Lumen Ltd

S/N	DESCRIPTION	UNIT	QUANTITY	UNIT PRICE	COST
1	SUPPLY OF KITS/BOTTLES FOR SAMPLE COLLECTION				
1.1	20L Bottle/ Kit for samples collections	Nos	312	10,000	3,120,000
	Subtotal				3,120,000
2	TEST DETERMINANTS ON ONE SAMPLE				
2.1	PH	Mg/L	1	16,000	16,000
2.2	Electrical conductivity	Mg/L	1	18,000	18,000
2.3	Total dissolved solids	Mg/L	1	17,500	17,500
2.4	Total suspended solids	Mg/L	1	22,000	22,000
2.5	Aluminum	Mg/L	1	28,000	28,000
2.6	Calcium	Mg/L	1	17,000	17,000
2.7	Fluoride as F	Mg/L	1	23,000	23,000
2.8	Total alkalinity as CaCO3	Mg/L	1	18,500	18,500
2.9	Chloride as Cl	Mg/L	1	23,300	23,300
2.10	Sulphate as SO4	Mg/L	1	22,500	22,500
2.11	Arsenic	Mg/L	1	40,700	40,700
2.12	Nitrate as N	Mg/L	1	23,000	23,000
2.13	Ammonia	Mg/L	1	27,000	27,000
2.14	Manganese	Mg/L	1	25,000	25,000
2.15	Magnesium	Mg/L	1	16,000	16,000
2.16	Iron	Mg/L	1	22,500	22,500
2.17	Copper	Mg/L	1	23,500	23,500
2.18	Lead	Mg/L	1	40,900	40,900
	Subtotal price @1sample with all tests Determinants				**RWF 424,400**
3	LABORATORY TESTING ON RUTONGO MINE				
3.1	6 Samples Monthly @1year surface water	No	12	2,546,400	30,556,800
3.2	8 Samples Quarterly @1year surface water	No	4	3,395,200	13,580,800
3.3	7 Samples Monthly @6months Ground water	No	6	2,970,800	17,824,800
3.4	7 Samples Quarterly @6months Ground water	No	2	2,970,800	5,941,600
3.5	6 Samples @1year Mine water	No	2	2,546,400	5,092,800
	Transport, Mobilization & Demobilization	LS	1	2,400,000	2,400,000
	Subtotal One year Laboratory tests on samples from Rutongo Mines				**RWF 75,396,800**
4	LABORATORY TESTING ON TRINITY NYAKABINGO MINE				
4.1	4 Samples Monthly @1year surface water	No	12	1,697,600	20,371,200
4.2	2 Samples Monthly @6months Ground water	No	6	848,800	5,092,800
4.3	2 Samples Quarterly @6months Ground water	No	2	848,800	1,697,600
4.4	2 Samples Quarterly @1year Mine water	No	4	848,800	3,395,200
	Transport, Mobilization & Demobilization	LS	1	2,400,000	2,400,000
	Subtotal One year Laboratory tests on samples from Nyakabingo Mines				**RWF 32,956,800**
5	LABORATORY TESTING ON TRINITY MUSHA MINE				

5.1	4 Samples Quarterly @1year surface water	No	4	1,697,600	6,790,400
5.2	6 Samples Monthly @6months Ground water	No	6	2,546,400	15,278,400
5.3	6 Samples Quarterly @6months Ground water	No	2	2,546,400	5,092,800
5.4	2 Samples Half a year @1year Mine water	No	2	848,800	1,697,600
	Transport, Mobilization & Demobilization	LS	1	2,400,000	2,400,000
	Subtotal One year Laboratory tests on samples from Musha Mines				**31,259,200**
	Test report preparation Charges				**2,500,000**
	Subtotal One year Laboratory tests on all mines samples				**145,232,800**
	18% VAT				**26,141,904**
	Total Cost @1 year Laboratory tests on all mines samples tax include				**171,374,704**
	Total Cost @2 years Laboratory tests on all mines samples tax include				**342,749,408**

Amounts in Words: Three hundred forty-two million, seven hundred forty-nine thousand, four hundred eight Rwandan Francs Only

Payment and Other Terms & Conditions:

1. This Quotation is purely based on this particular project.
2. The quote value of test is based on number of test provided in terms of references
3. This Quotation is valid for 30 days period starting from the date of quote
4. Advance Payment for Mobilization Charges of Manpower and Equipment is 50% from the total bill value after signing of Contract Agreement
5. After Full collection of Test Samples, again 20% payment need to release within 7 days.
6. After submitting draft report, again 20% payment need to release within 7 days.
7. Balance or Remaining 10% payment need to release after 7days from the Final Report and Invoice copy submitted
8. Total amount should be adjusted after site visit.
9. Site readiness and samples containers should be client, it should be done before mobilization to the site.
10. Access road should have enough width due to our drilling machines

CONCLUSION:

Here we are mentioned our laboratory testing service details and we are quoted best offer for laboratory testing of Surface and Groundwater Samples for Rutongo Mine; Trinity Nyakabingo Mine; and Trinity Musha Mine. We are waiting for your positive response with work order (PO) for further process of testing work.

AUTHORIZED SIGNATURE & SEAL:

Authorized Signature	
Authorized Person Name	Yitbarek Endeshaw Teshaneh
Designation	Managing Director – Lumen Ltd
Date	28/02/2025
Tender Reference No	LMN/2025/QUOTATION/2025/128