

REQUEST FOR INFORMATION

RFI NUMBER:	JW RFI 15 07 2024	CLOSING DATE:	22 July 2024 @ 4h00
DESCRIPTION:	CALIBRATION OF LABORATORY EQUIPMENT AT VARIOUS LABORATORIES OF JOHANNESBURG WATER FOR A PERIOD OF 36 MONTHS		
ISSUE DATE	15 July 2024		
Submit via Email to:	sinna.hlongwane@jwater.co.za		

ENQUIRIES MAY BE DIRECTED TO:

Bidding procedure enquiries <u>must</u> be sent to		Technical enquiries must be directed to	
CONTACT PERSON	Sinna Hlongwane	CONTACT PERSON	Thandeka Mamabolo
TELEPHONE NUMBER	011 688 1410	TELEPHONE NUMBER	011 688 4447
E-MAIL ADDRESS (Submissions must be made to this address)	sinna.hlongwane@jwater.co.za	E-MAIL ADDRESS	Thandeka.mamabolo@jwater.co.za

SUPPLIER INFORMATION

NAME OF BIDDER			
STREET ADDRESS			
TELEPHONE NUMBER	CODE		NUMBER
CELLPHONE NUMBER			
E-MAIL ADDRESS			
VAT REGISTRATION NUMBER			
CENTRAL SUPPLIER DATABASE No:	MAAA		
MANUFACUTER OR THIRD PARTY			

1. PURPOSE OF THE REQUEST FOR INFORMATION

To assist the organization with business decision-making purposes for an as and when Request for Tender with regards to budget, cost-effectiveness, risk assessment, specific goals to include in the tender, award, and allocation strategy to incorporate, non-firm prices, pricing schedule, and special conditions of the tender.

2. BACKGROUND

Johannesburg Water invites service providers to respond to a Request for Information for the calibration of laboratory equipment at various laboratories of Johannesburg Water for a period of 36 months. This RFI is strictly to solicit market-related information from potential bidder(s) for the calibration of laboratory equipment at various laboratories of Johannesburg Water for a period of 36 months. This RFI does not constitute; an offer; or any impression none so ever to do business with Johannesburg Water.

3. SCOPE OF WORK AND SPECIFICATIONS

REQUIREMENT

Johannesburg Water seeks responses from interested parties for the CALIBRATION OF LABORATORY EQUIPMENT AT VARIOUS LABORATORIES OF JOHANNESBURG WATER FOR A PERIOD OF 36 MONTHS

GENERAL DESCRIPTION

Johannesburg Water has a laboratory, Cydna located in Houghton, comprised of a microbiological, chemistry and water laboratory. There are also two satellite laboratories, one each at Northern Works and Goudkoppies Wastewater Treatment Plant.

Laboratories of Johannesburg Water conform to ISO17025 requirements to ensure traceability and credibility of results. Part of the requirements of ISO 17025 is calibration of measuring equipment (clause 6.4 Equipment) and measurement traceability clause 6.5 Measurement Traceability). In order to meet these requirements, the laboratories of Johannesburg Water require service providers who are SANAS accredited in their respective fields to calibrate measuring equipment at the laboratories.

LOCATION OF SITES

The equipment are located at the following laboratories:

Laboratories

- Cydna laboratories are situated at No. 75 4th St, Houghton Extend, Johannesburg, 2192.
- Goudkoppies Wastewater Treatment Works Laboratory, Cnr East & Gibbs road, Devland, Eldorado Park, Johannesburg

- Northern Works Laboratory , Northern Wastewater Treatment Plant, 388 JR, Rietfontein, Diepsloot Farm

SPECIFICATION & SCOPE OF WORK

Calibrate the equipment for 36 months at Cydna Laboratories, Goudkoppies Satellite laboratory and Northern works satellite laboratory on annual basis. The work consists of the following:

- Mass calibration (balances and mass pieces)
- Temperature calibration (autoclaves, digestion blocks, drying ovens, incubators, thermometers, thermocouples, data loggers)
- Calibration of UV light meter
- Volume calibration (auto pipettes and manual pipettes)
- Calibrations to be carried out on site by SANAS accredited facility where transportation of the equipment is either not feasible or transportation would invalidate the calibration (e.g. balances)
- Calibration units will be grams, milligrams, micro liters, milliliters, or degrees Celsius.
- Calibration certificates to be submitted to the Quality Assurance Manager within two weeks after calibration.
- All calibrations will be carried out annually.

Breakdown of equipment to be serviced and calibrated, equipment summary:

SPECIFICATION

Table 1: Balance calibration points

Description	Serial No.	Resolution	Calibration points
Analytical balance Sartorius A 200S	39040379	0-200g at 0.0001g	0.1g, 1.0g, 5g, 10g, 20g, 50g, 100g, 150g, 200g
Top pan balance Sartorius L 420D	36040034	0-420g at 0.01g	0.1g, 5g, 10g, 20g, 40g, 100g, 200g, 300g, 400g
Analytical balance 210g Ohaus PA 214	8731394745	0-210g at 0.0001g	0.1g, 1.0g, 5g, 10g, 20g, 50g, 100g, 150g, 200g
Analytical balance 410g Ohaus PA413	8731170888	0-410g at 0.001g	0.1g, 1.0g, 5g, 10g, 20g, 50g, 100g, 150g, 200g
Analytical balance Mettler AG 245	1115203650	0-210g at 0.1mg	100mg, 500mg, 1000mg, 50g, 100g
		0-41g at 0.01mg	10mg, 50mg, 100mg, 500mg, 1000mg
Sartorius B610	40110027	0-600g at 0.01g	60g, 150g, 300g, 500g, 600g

Analytical balance HL571 Sartorius B120S	10701862	0.1-100g at 0.0001g	0.1g, 1g, 5g, 10g, 20g, 50g, 100g
Radwag PS 600/C/2	346875/12	1-600 at 0.001g	1g, 5g, 10g, 20g, 50g, 100g, 150g, 600g
Top pan balance Mettler BB240	97172	1-200g at 0.001g	1g, 5g, 10g, 20g, 50g, 100g, 150g, 200g
Top pan balance Modern: EAW	17904	0.5-12kg at 0.001kg	0.5kg, 1kg, 2kg, 5kg, 10kg, 12kg
Analytical Balance Radwag AG AS 310/C/2	346869/12	0.1-310g at 0.0001g	0.1g, 1g, 5g, 10g, 20g, 50g, 100g, 200g, 300g
Analytical balance HL 223 Sartorius	3405083	0-200g at 0.0001g	0.1g, 0.2g, 0.5g, 1g, 2g, 5g, 10g, 15g, 20g, 25g
Analytical balance Radwag AS 220	256274/09	0-220g at 0.0001g	0.1g, 0.2g, 0.5g, 0.7g, 1.0g, 5.0g, 15g, 20g, 25g
Top pan balance HL 548 Sartorius B310S	40110169	1-300g at 0.001g	0.5g, 1.0g, 2.0g, 4.0g, 5.0g, 20g, 50g, 150g, 200g, 300g
Top pan balance HL621 Sartorius PT2100	20220228	0-2000g at 0.1g	2.5g, 10g, 15g, 20g, 25g, 50g, 100g, 250g, 400g, 500g
Top pan balance Mettler PB 8001-S	1121140356	0.5 - 8kg at 0.0001kg	100g, 200g, 500g, 700g, 1000g, 2000g, 4000g, 6000g, 8000g
Mettler Toledo	215025088	1.0 -200 g	1.0g, 2.0g, 4.0g, 5.0g, 20g, 50g, 150g, 200g
Top pan balance Sartorius HL/204	3308243	1-300g at 0.01g	0.5g, 1.0g, 2.0g, 4.0g, 5.0g, 20g, 50g, 150g, 200g, 300g
Analytical balance Radwag AS 220/C/2	261533/09	0-220g at 0.0001g	0.1g, 0.2g, 0.5g, 0.7g, 1.0g, 5.0g, 15g, 20g, 25g
Top pan balance Radwag PS600.R2	431661	0-6000g at 0.01g	0.5, 1.0g, 5.0g, 15g, 20g, 25g, 50g, 100g, 150, 200g, 250g
Top pan balance Radwag PS600	431658	0-6000g at 0.01g	5g, 10g, 15g, 20g, 25g, 50g, 100g, 200g, 300g, 400g, 500g, 1000g
Top pan balance Mettler PE3000	E98991	0-3000g at 0.1g	5g, 10g, 15g, 20g, 25g, 50g, 100g, 200g, 300g, 400g, 500g, 1000g
Radwag PS200/2000 PT	448498	0-2000 at 0.001g	0.1g, 1g, 5g, 10g, 20g, 50g, 100g, 200g

Radwag PS200/2000 PT	448497	0-2000 at 0.001g	0.1g, 1g, 5g, 10g, 20g, 50g, 100g, 200g
Mettler AE240	1113503809	0-120 at 0.0001g	0.001g, 0.05g, 0.1g, 0.5g, 1g, 5g, 10g, 20g, 30g

Table 2: Mass Pieces

Description/Serial no.	Mass pieces
SET JWC1	0.1g; 1g; 10g; 50g; 100g; 200g
GK Set 1	200g; 500g; 1kg; 2kg; 5kg
GK Set 2	20mg; 100mg; 200mg; 1g; 2g; 5g; 10g; 20g; 50g; 100g
Brown Box	1 kg; 2 kg; 5 kg; 10 kg
Black capsules	100mg; 1g; 5g; 10g; 20g; 50g; 100g; 200g
OL-01	100mg; 200mg; 20g; 100g; 200g; 500g; 1kg
OL-02	100mg; 200mg; 20; 100g; 200g; 500g; 1kg
CL SET 02	0.1mg; 1g; 10g
143956577	0.1g; 1g; 5g; 10g; 25g; 50g; 100g; 200g
Set 377	0.001g; 0.002g; 0.002g; 0.005g; 0.01g; 0.02g; 0.02g; 0.05g; 0.1g; 0.2g; 0.2g; 0.5g; 1g; 2g; 2g; 5g; 10g; 20g; 20g; 50g

Table 3: UV Light Meter Calibration Points

Description/Model	Serial No.	Calibration Points
Model UV-340A	L1203046	365-366nm

Table 4: Auto Pipette Calibration Points

Description/Model	Serial No.	Calibration points (μL)
P10ML	LD70531	1000; 5000; 10000
P10ML	LC72242	1000; 5000; 10000
P10ML	LC72239	1000; 5000; 10000
P10ML	LD70530	1000; 5000; 10000
Pipetman P10mL	SH71137	500;1000; 5000;8000;9000; 10000
EP1000	127955	1000
SOCF250	143940524	250
RP10ML	BO805729A	1000; 5000; 10000
EF500	666097	500
Ranin LTS	B0805716A	5000
Acura 835	25021303	5000
Acura 825	25071983	250, 500, 1000
Acura 835	24081114	1000, 5000
Pipetman P10mL	Pipeman C (SH71141)	2000; 4000; 8000
Pipetman P10mL	Pipeman C (SH71144)	2000; 4000; 8000
RP10ML	BO805751A	1000; 5000; 10000
Pipette C	J16413131	2000; 2500; 8000
Pipetman P10mL	SH71153	1000; 2000; 5000; 9000
EP100	021523D	10; 50; 100
EP100	O18142D	10; 50; 100
EP10	N29091D	0.5; 5; 10

EP10	N29245D	0.5; 5; 10
Labopette 10ml Fixed	12556446	10000
EP200	N35499D	20; 100; 200
EP200	N35036D	20; 100; 200
EP20	O21309D	2; 10; 20
EP20	O21399D	2; 10; 20
Pipetman P10mL	SH71139	1000; 5000; 10000
Labopette 5ml	TA07023	5000uL
Labopette 1ml	SN 07144	1000uL
Labopette 10ml	12556435	10000uL
Labopette 10ml	SK73131	10000uL
Labopette 1ml	SL74576	1000uL
Labopette 1ml	SL74597	1000uL
Labopette 1ml	SG 07125	1000uL
Labopette 1ml	SN07147	1000ul
Labopette 1ml	SN07142	1000ul
Labopette 5ml	TA07026	5000ul
Labopette 10ml	SN73380	10000uL
Labopette 5ml	SK73652	5000uL
Labopette 1ml	12021600	1000uL
P10ML	LD70531	1000; 5000; 10000
P10ML	LC72242	1000; 5000; 10000
P10ML	LC72239	1000; 5000; 10000
P10ML	LD70530	1000; 5000; 10000
Pipetman P10mL	SH71137	500;1000; 5000;8000;9000; 10000
		1000
		250
		1000; 5000; 10000

Table 5: Dosimat Calibration Points

Description/Model	Serial No.	Calibration Points (mL)
Dosimat 665	2LO/384 10720735	5mL ,10mL ,15mL ,20mL
Dosimat 776	550090	5mL ,10mL ,15mL ,20mL
Dosimat 876	1876001011181	5mL ,10mL ,15mL ,20mL
Dosimat 776	1776001010112	5mL ,10mL ,15mL ,20mL
798 MPT Titrino	44780	5mL ,10mL ,15mL ,20mL
876 Dosimat Plus	10201172	5mL ,10mL ,15mL ,20mL

Table 6: Autoclave Calibration Points

Description/Model	Serial No.	Calibration Points (°C)
Sturdy SAT 500	181207016-001	121°C
Hirayama HV-85	30411071152	121 °C
Hirayama HV-110	30513111330	121 °C
BKQ-B120II	BKQB1201121060009	121 °C
Sturdy 252F-Auto 09	210513021-008	118 °C and 121 °C

Table 7: Digestion Blocks Calibration Points

Description/Model	Serial No.	Calibration Points (°C)
ABH 450 BU	F5165-0513	150
ABH-BV	F1620-1207	150
ABH 450 BU	F5163-0513	160; 380
ABH-BV	F1627-1207	150
ABH 450 BU	F4325-0112	140; 150; 160
ABH 450 BU	F4226-0112	140; 150; 160
CR25	179250-22-BBAF009	
ABH 450 134	F 4325-0112	140; 150; 160
	HT 03/933	140; 150; 160

ABH 450 134	F 4328-0112	140; 150; 160
	HL 190A	140; 150; 160
ABH 450 B4/ A12H 450 TC	F 4324-0112	150
ABH 450 BU	F5165-0513	150
ABH-BV	F1620-1207	150
ABH 450 BU	F5163-0513	160; 380
ABH-BV	F1627-1207	150
ABH 450 BU	F4325-0112	140; 150; 160

Table 8: Drying Oven Calibration Points

Description/Model	Serial No.	Calibration Points (°C)
Ecotherm	0100020612277R00	105; 110;140;150;160;180;250
H481	5576	110
H481	JW5057 to 3332	110
275	0500026312275R00	110
275	0500026012275R00	110
CN 40/ Model:276	0400047811276R00	100; 105; 110; 120; 130; 150; 160
ND 545/5016LA	HL 1009/JW 1720	105; 110; 150
ND 545/5016LA	HL 1008/JW 1335	105; 110; 150
5016LA	HL 1007/JW 1317	105; 110; 160
276	HL 1006/JW 1336	105; 110; 160

Table 9: Data Logger Calibration Points _ Temperature

Description/Model	Serial No.	Calibration Points (°C)
EL-USB-1	87830 WL 1	0; 5; 7; 20; 25; 50; 60
EL-USB-1	87686 WL 2	0; 5; 7; 20; 25; 50; 60
SSN-11	WL 10215	0; 4; 7; 20; 25; 50; 60
SSN-11	WL 10216	0; 4; 7; 20; 25; 50; 60
SSN-11	WL 10229	0; 4; 7; 20; 25; 50; 60
SSN-11	WL 10231	0; 4; 7; 20; 25; 50; 60
SSN-11	WL 10235	0; 4; 7; 20; 25; 50; 60
SSN-11	WL 10238	0; 4; 7; 20; 25; 50; 60
SSN-11	WL 10242	0; 4; 7; 20; 25; 50; 60
SSN-11	WL 10255	0; 4; 7; 20; 25; 50; 60
SSN-11	10264	0; 4; 7; 20; 25; 50; 60
SSN-11	10268	0; 4; 7; 20; 25; 50; 60
EL-USB-1	Chem cold room	4
EL-USB-1	THM Fridge	5
EL-USB-1	CL Freezer	25-; 10-
Testo	58901290	0; 4; 6; 8; 10
Testo	58900061	0; 4; 6; 8; 10
Testo	37378166	15; 20; 25; 30
TESTO	37377799	15; 20; 25; 30
TESTO	37382205	15; 20; 25; 30
TESTO	37378205	15; 20; 25; 30
TESTO	37378188	15; 20; 25; 30
TESTO	37378256	15; 20; 25; 30
TESTO	37378200	15; 20; 25; 30
TESTO	37335431	15; 20; 25; 30

Description/Model	Serial No.	Calibration Points (°C)
TESTO	58900061	15; 20; 25; 30
EL-USB-1	GK DL 1	0; 5; 7; 20; 25; 50; 60
174H	37378245	0; 4; 7; 20; 25; 50; 60
174H	37382240	0; 4; 7; 20; 25; 50; 60
174H	37378266	0; 4; 7; 20; 25; 50; 60
174H	37378283	0; 4; 7; 20; 25; 50; 60
174T	58900136	0; 4; 6; 8; 10
174T	58900147	0; 4; 6; 8; 10
174T	58901777	0; 4; 6; 8; 10
174H	37378176	
TESTO 174 H	37378260	20;25
TESTO 174 H	58913081	44;45
TESTO 174T	58901299	35
TESTO 174T	58901325	37
TESTO 174T	58900116	0; 4; 10
TESTO 174T	58907499	37
TESTO 174T	58901310	60
TESTO 174T	37382253	20;25
TESTO 174T	37378203	20;25
TESTO 174T	58901756	0;4;10
TESTO 174T	58900141	37
TESTO 174T	37173756	0;4;10
TESTO 174T	37381881	20;25
TESTO 174T	37378216	0; 4; 25; 30
TESTO 174T	37378237	20;25
TESTO 174T	58902520	26;32
TESTO 174T	37382039	20;25

Description/Model	Serial No.	Calibration Points (°C)
TESTO 174T	37382216	20;25
TESTO 174T	58900149	25;35
TESTO 174T	58901779	0;4;10
TESTO 174T	58901302	0; 4 ; 6 & 10
TESTO 174 H	37382213	18; 22;24;25; 26 & 28
TESTO 174 H	37378184	18; 22;24;25; 26 & 28
TESTO 174 H	37378221	18; 22;24;25; 26 & 28
TESTO 174T	58917083	2; 4 ; 6 & 8
TESTO 174T	58903002	2; 4 ; 6 & 8
TESTO 174 H	37378221	18; 22;24;25; 26 & 28
EL-USB-1	87830 WL 1	0; 5; 7; 20; 25; 50; 60
EL-USB-1	87686 WL 2	0; 5; 7; 20; 25; 50; 60
SSN-11	WL 10215	0; 4 ; 7; 20; 25; 50; 60
SSN-11	WL 10216	0; 4 ; 7; 20; 25; 50; 60
SSN-11	WL 10229	0; 4 ; 7; 20; 25; 50; 60
SSN-11	WL 10231	0; 4 ; 7; 20; 25; 50; 60
SSN-11	WL 10235	0; 4 ; 7; 20; 25; 50; 60
SSN-11	WL 10238	0; 4 ; 7; 20; 25; 50; 60
SSN-11	WL 10242	0; 4 ; 7; 20; 25; 50; 60
SSN-11	WL 10255	0; 4 ; 7; 20; 25; 50; 60
SSN-11	10264	0; 4 ; 7; 20; 25; 50; 60
SSN-11	10268	0; 4 ; 7; 20; 25; 50; 60
EL-USB-1	Chem cold room	4
EL-USB-1	THM Fridge	5
EL-USB-1	CL Freezer	25-; 10-
Testo	58901290	0; 4; 6; 8; 10
Testo	58900061	0; 4; 6; 8; 10

Description/Model	Serial No.	Calibration Points (°C)
Testo	37378166	15; 20; 25; 30
TESTO	37377799	15; 20; 25; 30
TESTO	37382205	15; 20; 25; 30
TESTO	37378205	15; 20; 25; 30
TESTO	37378188	15; 20; 25; 30
TESTO	37378256	15; 20; 25; 30
TESTO	37378200	15; 20; 25; 30
TESTO	37335431	15; 20; 25; 30
TESTO	58900061	15; 20; 25; 30
EL-USB-1	GK DL 1	0; 5; 7; 20; 25; 50; 60
174H	37378245	0; 4 ; 7; 20; 25; 50; 60
174H	37382240	0; 4 ; 7; 20; 25; 50; 60
174H	37378266	0; 4 ; 7; 20; 25; 50; 60
174H	37378283	0; 4 ; 7; 20; 25; 50; 60
174T	58900136	0; 4; 6; 8; 10
174T	58900147	0; 4; 6; 8; 10
174T	58901777	0; 4; 6; 8; 10
174H	37378176	
TESTO 174 H	37378260	20;25
TESTO 174 H	58913081	44;45
TESTO 174T	58901299	35
TESTO 174T	58901325	37
TESTO 174T	58900116	0; 4; 10
TESTO 174T	58907499	37
TESTO 174T	58901310	60
TESTO 174T	37382253	20;25
TESTO 174T	37378203	20;25

Description/Model	Serial No.	Calibration Points (°C)
TESTO 174T	58901756	0;4;10
TESTO 174T	58900141	37
TESTO 174T	37173756	0;4;10
TESTO 174T	37381881	20;25
TESTO 174T	37378216	0; 4; 25; 30
TESTO 174T	37378237	20;25
TESTO 174T	58902520	26;32
TESTO 174T	58900116	0;4;10
TESTO 174T	37382039	20;25
TESTO 174T	37382216	20;25
TESTO 174T	58900149	25;35
TESTO 174T	58901779	0;4;10
TESTO 174T	58901302	0; 4 ; 6 & 10
TESTO 174 H	37382213	18; 22;24;25; 26 & 28
TESTO 174 H	37378184	18; 22;24;25; 26 & 28
TESTO 174 H	37378221	18; 22;24;25; 26 & 28
TESTO 174T	58917083	2; 4 ; 6 & 8
TESTO 174T	58903002	2; 4 ; 6 & 8
TESTO 174 H	37378221	18; 22;24;25; 26 & 28
174H	37378245	0; 4 ; 7; 20; 25; 50; 60
174H	37382240	0; 4 ; 7; 20; 25; 50; 60
174H	37378266	0; 4 ; 7; 20; 25; 50; 60
174H	37378283	0; 4 ; 7; 20; 25; 50; 60
174T	58900136	0; 4; 6; 8; 10
174T	58900147	0; 4; 6; 8; 10
174T	58901777	0; 4; 6; 8; 10
174H	37378176	0; 4; 6; 8; 10

Description/Model	Serial No.	Calibration Points (°C)
TESTO 174 H	37378260	20;25
TESTO 174 H	58913081	44;45
TESTO 174T	58901299	35
TESTO 174T	58901325	37
TESTO 174T	58900116	0; 4; 10
TESTO 174T	58907499	37
TESTO 174T	58901310	60
TESTO 174T	37382253	20;25
TESTO 174T	37378203	20;25
TESTO 174T	58901756	0;4;10
TESTO 174T	58900141	37
TESTO 174T	37173756	0;4;10
TESTO 174T	37381881	20;25
TESTO 174T	37378216	0; 4; 25; 30
TESTO 174T	37378237	20;25
TESTO 174T	58902520	26;32
TESTO 174T	58900116	0;4;10
TESTO 174T	37382039	20;25
TESTO 174T	37382216	20;25
TESTO 174T	58900149	25;35
TESTO 174T	58901779	0;4;10
TESTO 174T	58901302	0; 4 ; 6 & 10
TESTO 174T	58917083	2; 4; 6 & 8
TESTO 174T	58903002	2; 4; 6 & 8
TESTO 174T	58917083	2; 4; 6 & 8
TESTO 174T	58903002	2; 4; 6 & 8

Table 10: Data Logger Calibration Points _ Temperature and Humidity

Description/Model	Serial No.	Calibration Points (°C)	Humidity (%rh)
TESTO 174 H	37382213	18; 22;24;25; 26 & 28	Humidity points: 30; 40; 50 and 80
TESTO 174 H	37378184	18; 22;24;25; 26 & 28	Humidity points: 30; 40; 50 and 80
TESTO 174 H	37378221	18; 22;24;25; 26 & 28	Humidity points: 30; 40; 50 and 80
TESTO 174 H	37378221	18; 22;24;25; 26 & 28	Humidity points: 30; 40; 50 and 80
TESTO 174 H	37382213	18; 22;24;25; 26 & 28	Humidity points: 30; 40; 50 and 80

Table 11: Incubator Calibration Point

Description/Model	Serial No.	Calibration Points (°C)
Labcon	L9969	60
Labcon	JW 016547	37
Binder	12-03838	37
Binder	12-03459	35
Prolab	P1470	44.5
Memmert	428-55	37
Binder	S/N 20190000010671	37
Incubator S	638045	26
Labcon	L9969	60
Labcon	JW 016547	37

Table 12: Liquid in Glass (LIG) Thermometer Calibration Points

Description/Model	Serial No.	Calibration Points (°C)
10.5- TO 60°C	1080 WL	0; 4; 5; 7; 20; 25; 50; 60
	98319-10	0; 4; 5; 7; 20; 25; 50; 60
10- TO 60°C	2102. 16WL	0; 4; 5; 7; 20; 25; 50; 60
	98319-13	0; 4; 5; 7; 20; 25; 50; 60
10-TO 110°C	1070 WL	0; 4; 5; 7; 20; 25; 50; 60
	98319-21	0; 4; 5; 7; 20; 25; 50; 60
	33913982	0; 4; 5; 7; 20; 25; 50; 60
	98319-22	0; 4; 5; 7; 20; 25; 50; 60
10.5- TO 60°C	1068 WL	0; 4; 5; 7; 20; 25; 50; 60
	98319-28	0; 4; 5; 7; 20; 25; 50; 60
10- TO 150°C	101722-3	0; 4; 5; 7; 20; 25; 50; 60
	101722-4	0; 4; 5; 7; 20; 25; 50; 60
	101722-5	0; 4; 5; 7; 20; 25; 50; 60
	101722-9	0; 4; 5; 7; 20; 25; 50; 60
	101722-11	6
	NW1 (NW LIG 1)	100; 105; 110; 120
	101722-11	6
	98319-20	103; 105; 120; 140
	101722-19	103;104 & 105
	101722-14	18; 24; 25; 26 & 28
	NW2 (NW LIG 2)	0; 5; 7; 20; 25; 50; 60
	98319-19	103; 104; 105; 120; 140 & 150
	NW3 (NW LIG 3)	4; 10; 100; 105; 110; 120
	98319-23	103;104; 105; 120; 140; 150
14- TO 112°C	ET01/ 41022011	0; 25;35; 37; 50

Description/Model	Serial No.	Calibration Points (°C)
14- TO 112°C	ET02/ 41022011	0; 4; 25;35; 37; 50
	98319-2	0; 4;8;25; 35; 37;60
10- TO 200 °C	ET04	0; 4;25; 35; 37; 50;60;110
14- TO 50°C	ET05	0; 4;25; 35; 37; 50
	98319-6	0; 4; 20; 25; 32; 37
	ET06	0; 4;25; 35; 37; 50
10- TO 200 °C	JW 72833	0; 4; 35; 37; 50; 60
	101722-25	0, 4, 25, 35, 37, 50
	98319-26	0, 4, 25, 35, 37, 50
	10722-27	0, 4, 25, 25, 35, 37, 50
10.5- TO 60°C	1080 WL	0; 4; 5; 7; 20; 25; 50; 60
	98319-10	0; 4; 5; 7; 20; 25; 50; 60
10- TO 60°C	2102. 16WL	0; 4; 5; 7; 20; 25; 50; 60
	98319-13	0; 4; 5; 7; 20; 25; 50; 60
10-TO 110°C	1070 WL	0; 4; 5; 7; 20; 25; 50; 60
	98319-21	0; 4; 5; 7; 20; 25; 50; 60
10-TO 110°C	33913982	0; 4; 5; 7; 20; 25; 50; 60
	98319-22	0; 4; 5; 7; 20; 25; 50; 60
10.5- TO 60°C	1068 WL	0; 4; 5; 7; 20; 25; 50; 60
	98319-28	0; 4; 5; 7; 20; 25; 50; 60
10- TO 150°C	101722-3	0; 4; 5; 7; 20; 25; 50; 60
10- TO 150°C	101722-4	0; 4; 5; 7; 20; 25; 50; 60
10- TO 150°C	101722-5	0; 4; 5; 7; 20; 25; 50; 60
10- TO 150°C	101722-9	0; 4; 5; 7; 20; 25; 50; 60
	101722-11	6
	98319-20	103; 105; 120; 140
	101722-19	103;104 & 105

	101722-14	18; 24; 25; 26 & 28
	101722-6	2;4 & 6
	NW2 (NW LIG 2)	0; 5; 7; 20; 25; 50; 60
	98319-15	4; 6; 18; 25; 28; 103; 105
	98319-19	103; 104; 105; 120; 140 & 150
	NW3 (NW LIG 3)	4; 10; 100; 105; 110; 120
	98319-23	103;104; 105; 120; 140; 150
8.5 TO 110 °C	ET03/ 41024071	0; 4;25; 35; 37; 50;60
	98319-6	0; 4;25; 35; 37; 50;60
	101722-1	0; 4;25; 35; 37; 50;60
	98319-17	0; 4;25; 35; 37; 50;60
	T1 CLA	0; 4; 5; 7; 20; 25; 50; 60
	98319-29	0; 4; 5; 7; 10; 20; 25; 30
10- TO 60°C	ONDR 01	0; 4; 8
10- TO 60°C	ONOL 01	0; 4; 8
10- TO 60°C	ONGK 01	0; 4; 8
10- TO 60°C	ONGK 02	0; 4; 8
10- TO 60°C	T3 Olifantsvlei	0.00; 4.0; 8.0
14- TO 112°C	ET01/ 41022011	0; 25;35; 37; 50
14- TO 112°C	ET02/ 41022011	0; 4; 25;35; 37; 50
	98319-2	0; 4;8;25; 35; 37;60
10- TO 200 °C	ET04	0; 4;25; 35; 37; 50;60;110
14- TO 50°C	ET05	0; 4;25; 35; 37; 50
14- TO 50°C	98319-6	0; 4; 20; 25; 32; 37
14- TO 50°C	ET06	0; 4;25; 35; 37; 50

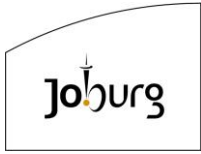
Description/Model	Serial No.	Calibration Points (°C)
10- TO 200 °C	JW 72833	0; 4; 35; 37; 50; 60
	101722-25	0, 4, 25, 35, 37, 50
	98319-26	0, 4, 25, 35, 37, 50
	10722-27	0, 4, 25, 25, 35, 37, 50
10.5- TO 60°C	1080 WL	0; 4; 5; 7; 20; 25; 50; 60
	98319-10	0; 4; 5; 7; 20; 25; 50; 60
10- TO 60°C	2102. 16WL	0; 4; 5; 7; 20; 25; 50; 60
	98319-13	0; 4; 5; 7; 20; 25; 50; 60

4. PRICE SCHEDULE

ITEM DESCRIPTION	QUANTITY	UNIT PRICE (Excl VAT) R	VAT@15% R	TOTAL PRICE (INCL VAT) R
Autoclave	1			
Auto pipette	1			
Balances	1			
Data logger	1			
Digestion blocks	1			
Dosimat	1			
Drying oven	1			
Incubator	1			
Mass piece sets	1			
Muffle furnace	1			
Thermocouples	1			
Thermometer	1			
UV Light meter	1			
Certificates	1			
Delivery of certificates and equipment				
Travelling cost (Service provider calibrating equipment on-site)				

Prices Firm / Non-Firm?
Suppliers to complete the below according to their company details.

INFORMATION FOR SPECIFIC GOALS ANALYSIS	
BUSINESS OWNED BY 51% OR MORE -BLACK PEOPLE	
1. Percentage (%) of Black Ownership)	
2. Is Black Ownership 51% or more? (Yes or No)	
BUSINESS OWNED BY 51% OR MORE – BLACK YOUTH	
1. Percentage (%) of Ownership by Black Youth	
2. Is the percentage of Black Youth Ownership 51 % or more? (Yes or No)	
BUSINESS OWNED BY 51% OR MORE-WOMEN	
1. Percentage (%) of Ownership by People who are Women	
2. Is the percentage of People who are Women 51 % or more? (Yes or No)	
BUSINESSES LOCATED WITHIN THE BOUNDARIES OF A REGION IN COJ, COJ MUNICIPALITY OR IN GAUTENG PROVINCE	
1. Is your business located in the Gauteng Province? (Yes or No)	
2. Is your business located in the COJ Municipality? (Yes or No)	
3. Is your business located within the region of the COJ? (Yes or No)	
BUSINESS OWNED BY 51% OR MORE - BLACK PEOPLE WHO ARE MILITARY VETERANS	
1. Percentage (%) of Ownership by Black People Who Are Military Veterans	
2. Is the percentage of Ownership by Black People Who Are Military Veterans 51% or more? (Yes or No)	
BUSINESS OWNED BY 51% OR MORE-BLACK PEOPLE WITH DISABILITIES	
1. Percentage (%) of Ownership by Black People With Disabilities	
2. Is the percentage of Ownership by Black People with Disabilities 51% or more? (Yes or No)	
SMME (AN EME OR QSE) OWNED BY 51% OR MORE - BLACK PEOPLE	
1. What is the Enterprise Type? EME – turnover is less than R10m QSE – Turnover between R10m and R50m Generic – Turnover is R50M or more	
JOINT VENTURE (JV), CONSORTIUM OR EQUIVALENT	
1. What is the percentage (%) of ownership for each party?	
SUBCONTRACTING WITH COMPANIES AT LEAST 51% OWNED BY HISTORICALLY DISADVANTAGED INDIVIDUAL (HDI) GROUPS MENTIONED ABOVE	



- | | |
|---|--|
| 1. What is the percentage (%) that will be sub-contracted to companies that are at least 51% owned by Historically Disadvantaged Individual (HDI) groups mentioned above? | |
|---|--|