Method parameters

Method . . . . AB445 - ASTM D6971 & ASTM D6810 - Amine & Phenol

Method saving date . . . . 2024-03-27 09:20:45 UTC+1

Method version 1

Method group . . . . Main group

Method status . . . . original

Method saved by (full name) . . . . Metrohm International Headquarters

Method saved by (short name) . . . . Metrohm

START   **Main track**

General

Workplace view

    Current view . . . . on

Track view for live window

    Live display 1 . . . . Main track

    Live display 2 . . . . Main track

    Electrode check . . . . off

Application note

- Measure 1 g sand into the sample vial. - Place a stirrer bar in the sample vial. - Add 0.2 mL – 0.6 mL standard/sample into the sample vial (volume depends on sample). - Place the sample vial on the rack of the sample changer.   In the «Run» window: Select sample type «Standard» to run a calibration or «Sample» to determine the remaining antioxidant in a sample. Under «Sample position» specify the position of standard/sample on the rack and enter the exact volume of standard/sample under «Sample amount».

Sample data variables

Name	Type	Assignment	Fixed value	Comment	Monitoring
ID1	Text	ID1		Sample identification 1	off
ID2	Text	ID2		Sample identification 2	off
ID3	Text	ID3		Sample identification 3	off
Sample type	Text	Sample type		Sample type	off
Sample position	Number	Sample position		Sample position number	off
Sample amount	Number	Sample amount		Sample amount	off
Sample amount unit	Text	Sample amount unit	mL	Sample amount unit	off

Name **ID1**

Type . . . . Text

Assignment . . . . on ID1

Fixed value . . . . off . . . .

Check at start . . . . on

Comment . . . . Sample identification 1

Name **ID2**
Type . . . . Text
Assignment . . . . on ID2
Fixed value . . . . off . . . .
Check at start . . . . on
Comment . . . . Sample identification 2

Name **ID3**
Type . . . . Text
Assignment . . . . on ID3
Fixed value . . . . off . . . .
Check at start . . . . on
Comment . . . . Sample identification 3

Name . . . . **Sample type**
Type . . . . Text
Assignment . . . . on . . . . Sample type
Fixed value . . . . off . . . .
Check at start . . . . on
Comment . . . . Sample type

Name . . . . **Sample amount unit**
Type . . . . Text
Assignment . . . . on . . . . Sample amount unit
Fixed value . . . . on . . . . mL
Check at start . . . . on
Comment . . . . Sample amount unit

Name . . . . **Sample position**
Type . . . . Number
Assignment . . . . on . . . . Sample position
Fixed value . . . . off . . . .
Check at start . . . . on
Comment . . . . Sample position number
Variable monitoring . . . . off
Lower limit . . . .
Upper limit . . . .
Message . . . .
Display message . . . . on
Record message . . . . on
Message by e-mail . . . . off
    E-mail template . . . .
    Subject . . . . Message from viva - method 'AOx - BP 2197' - command 'Main track'
Acoustic signal . . . . off

	License ID	1955606	Program version	viva 3.0 - 69
viva	Client ID	001-nbk-02849		
	User	Metrohm	2024-03-27	09:24:49 UTC+1

Action . . . . off

Cancel determination . . . . on

Cancel determination and series . . . . off

Name . . . . **Sample amount**

Type . . . . Number

Assignment . . . . on. . . . . Sample amount

Fixed value . . . . off. . . . .

Check at start . . . . on

Comment . . . . Sample amount

Variable monitoring . . . . off

Lower limit . . . .

Upper limit . . . .

Message . . . .

Display message . . . . on

Record message . . . . on

Message by e-mail . . . . off

    E-mail template . . . .

    Subject . . . . Message from viva - method 'AOx - BP 2197' - command 'Main track'

Acoustic signal . . . . off

Action . . . . off

Cancel determination . . . . on

Cancel determination and series . . . . off

Command comment

    ASTM D6971 & ASTM D6810 - Determination of Amine (neutral) & Phenol (alkaline) - fully automated system

CALL   **Call prepare sample**

Call text	Track name	Sample type		Condition
Call prepare sample	Prepare sample	off	Sample	off

CALL   **Empty measuring vessel**

Call text	Track name	Sample type		Condition
Drain	Drain	off	Sample	off

CALL   **Calibration or sample**

Call text	Track name	Sample type		Condition
Call sample	Sample	on	Sample	off
Call calibration	Calibration curve	on	Standard	off

CALL Rinse needle

viva

License ID	1955606	Program version	viva 3.0 - 69
Client ID	001-nbk-02849		
User	Metrohm	2024-03-27	09:24:49 UTC+1

CALL

Call text	Track name	Sample type	Condition
Rinse needle	Go to rinsing position	off Sample	off

CALL **CALL Final rinsing**

Call text	Track name	Sample type	Condition
Rinsing cycle	Rinsing cycle	off Sample	off

VA TRACK **VA track neutral**

Return immediately . . . . off

DP **Sweep neutral**

General/Hardware

Device

Device name . . . . 884_1

Device type . . . . 884 Professional VA

Sensors/Electrodes

Working electrode . . . . RDE

Sensor type . . . . RDE/SSE

Reference electrode . . . . Reference electrode

Auxiliary electrode . . . . Auxiliary electrode

Electrode check . . . . off

Stirrer

Stirring rate . . . . 2000 min^{-1}

Hydrodynamic measurement . . . . off

Pretreatment

Stirring time . . . . 5.0 s

Cyclovoltammetric pretreatment

Start potential . . . . 0 V

Vertex potential . . . . 1 V

Sweep rate . . . . 1 V/s

Cycles 1

Duration . . . . 2.00 s

Potentiostatic pretreatment

Potential 1 . . . . off V

Waiting time 1 . . . . 0.0 s

Potential 2 . . . . off V

Waiting time 2 . . . . 0.0 s

Potential 3 . . . . off V

Waiting time 3 . . . . 0.0 s

Potential 4 . . . . off V

Waiting time 4 . . . . 0.0 s

Potential 5 . . . . off V

Waiting time 5 . . . . 0.0 s

Equilibration time . . . . 5.0 s

Sweep

Start potential . . . . 0 V

End potential . . . . 1.3 V

Potential step . . . . 0.012 V

Potential step time . . . . 0.1 s

Sweep rate . . . . 0.120 V/s

Pulse amplitude . . . . 0.05 V

Pulse time . . . . 0.04 s

Measuring time . . . . 0.02 s

Sweep duration . . . . 10.83 s

Post-treatment

Cleaning

Cleaning potential . . . . off V

Cleaning time . . . . 0.0 s

Standby potential

Standby potential . . . . off V

Potentiostat

Current measuring range

Highest range . . . . 2 mA

Lowest range . . . . 20 µA

Automatically select optimum current measuring range . . . . on

VA TRACK **VA track alkaline**

Return immediately . . . . off

DP **Sweep alkaline**

General/Hardware

Device

Device name . . . . 884_1

Device type . . . . 884 Professional VA

Sensors/Electrodes

Working electrode . . . . RDE

Sensor type . . . . RDE/SSE

Reference electrode . . . . Reference electrode

Auxiliary electrode . . . . Auxiliary electrode

Electrode check . . . . off

Stirrer

Stirring rate . . . . 2000 min⁻¹

Hydrodynamic measurement . . . . off

Pretreatment

Stirring time . . . . 5.0 s

Cyclovoltammetric pretreatment

Start potential . . . . 0 V

Vertex potential . . . . 1 V

Sweep rate . . . . 1 V/s

Cycles 1
Duration . . . . 2.00 s

Potentiostatic pretreatment

Potential 1 . . . . off V
Waiting time 1 . . . . 0.0 s
Potential 2 . . . . off V
Waiting time 2 . . . . 0.0 s
Potential 3 . . . . off V
Waiting time 3 . . . . 0.0 s
Potential 4 . . . . off V
Waiting time 4 . . . . 0.0 s
Potential 5 . . . . off V
Waiting time 5 . . . . 0.0 s
Equilibration time . . . . 5.0 s

Sweep

Start potential . . . . -0.1 V
End potential . . . . 0.7 V
Potential step . . . . 0.012 V
Potential step time . . . . 0.1 s
Sweep rate . . . . 0.120 V/s
Pulse amplitude . . . . 0.05 V
Pulse time . . . . 0.04 s
Measuring time . . . . 0.02 s
Sweep duration . . . . 6.67 s

Post-treatment

Cleaning

Cleaning potential . . . . off V
Cleaning time . . . . 0.0 s

Standby potential

Standby potential . . . . off V

Potentiostat

Current measuring range

Highest range . . . . 2 mA
Lowest range . . . . 20 µA
Automatically select optimum current measuring range . . . . on

TRACK   **Sample**

Return immediately . . . . off
Delete old data . . . . off

CALL   **Call dose electrolyte sam**

Call text	Track name	Sample type	Condition
Dose electrolyte	Electrolyte blank off	Sample	off

Call blank sample

CALL BLANK

Call text . . . . Call blank sample
Track name . . . . VA track neutral

Condition . . . . off

CALL   **Empty vessel sample**

Call text	Track name	Sample type		Condition
Empty vessel sample	Drain	off	Sample	off

CALL   **Transfer sample**

Call text	Track name	Sample type		Condition
Transfer sample	Transfer from autosampler	off	Sample	off

ADD SAMPLE   **Add sample**

Addition
    Add manually . . . . off
    Already added . . . . on
    Add with dosing device . . . . off

STIR & PURGE   **Stir sample**

Device
    Device name . . . . 884_1
    Device type . . . . 884 Professional VA
Stir
    Stirring rate 2000   min⁻¹
    Switch on . . . . off
    Switch off . . . . off
    Duration . . . . on
    Time 5   s
Purge
    Switch on . . . . off
    Switch off . . . . on
    Duration . . . . off

CALL COND   **Call cond sample**

Call text . . . . Call cond sample
Track name . . . . VA track neutral
Stop criteria
    Evaluation quantity . . . . off
    Number of runs . . . . on
      Number of runs 1
      Action . . . . Cancel command
    Run time . . . . off
    Condition . . . . off

LOOP   **Replications sample**

Stop criteria

Max. run number . . . . on

Max. run number 2

Maximum run time . . . . off

Signal assessment for DT . . . . off

Condition . . . . off

CALL VA   **Sample neutral**

Call text . . . . Measure sample neutral

Track name . . . . VA track neutral

Condition . . . . off

CALL   **Add alkaline sample**

Call text	Track name	Sample type	Condition
Add alkaline solution	Alkaline solution off	Sample	off

CALL
COND   **Cond sample alkaline**

Call text . . . . Call cond sample alkaline

Track name . . . . VA track alkaline

Stop criteria

Evaluation quantity . . . . off

Number of runs . . . . on

Number of runs 1

Action . . . . Cancel command

Run time . . . . off

Condition . . . . off

LOOP   **Replications sample alkal**

Stop criteria

Max. run number . . . . on

Max. run number 2

Maximum run time . . . . off

Signal assessment for DT . . . . off

Condition . . . . off

CALL VA   **Sample alkaline**

Call text . . . . Measure sample alkaline

Track name . . . . VA track alkaline

Condition . . . . off

TRACK   **Calibration curve**

Return immediately . . . . off

Delete old data . . . . off

CALL   **Call dose electrolyte std**

Call text	Track name	Sample type		Condition
Dose electrolyte	Electrolyte blank	off	Sample	off

CALL BLANK **Call blank calibration**

Call text . . . . Call blank calibration

Track name . . . . VA track neutral

Condition . . . . off

CALL **Empty vessel standard**

Call text	Track name	Sample type		Condition
Empty vessel standard	Drain	off	Sample	off

CALL **Transfer standard**

Call text	Track name	Sample type		Condition
Transfer sample	Transfer from autosampler	off	Sample	off

ADD STD **Add standard**

Standard

Solution . . . . Standard

Addition increments

Number 1

Addition volume 1 . . . . = 'SD.Sample amount' * 1000   mL

Addition

Add manually . . . . off

Already added . . . . on

Add with dosing device . . . . off

STIR & PURGE **Stir calibration**

Device

Device name . . . . 884_1

Device type . . . . 884 Professional VA

Stir

Stirring rate . . . . 2000 min^{-1}

Switch on . . . . off

Switch off . . . . off

Duration . . . . on

Time 5   s

Purge

Switch on . . . . off

Switch off . . . . on

Duration . . . . off

CALL COND **Call cond calibration**

Call text . . . . Call cond calibration

Track name . . . . VA track neutral

Stop criteria

    Evaluation quantity . . . . off

    Number of runs . . . . on

        Number of runs 1

        Action . . . . Cancel command

    Run time . . . . off

    Condition . . . . off

LOOP **Replications calibration**

Stop criteria

    Max. run number . . . . on

    Max. run number 2

    Maximum run time . . . . off

    Signal assessment for DT . . . . off

    Condition . . . . off

CALL VA **Calibration neutral**

Call text . . . . Measure calibration neutral

Track name . . . . VA track neutral

Condition . . . . off

CALL **Add alkaline calibration**

Call text	Track name	Sample type		Condition
Add alkaline solution	Alkaline solution	off	Sample	off

CALL COND **Cond calibration alkaline**

Call text . . . . Call cond calibration alkaline

Track name . . . . VA track alkaline

Stop criteria

    Evaluation quantity . . . . off

    Number of runs . . . . on

        Number of runs 1

        Action . . . . Cancel command

    Run time . . . . off

    Condition . . . . off

LOOP **Replications calibr alkal**

Stop criteria

    Max. run number . . . . on

    Max. run number 2

    Maximum run time . . . . off

    Signal assessment for DT . . . . off

    Condition . . . . off

CALL VA   **Calibration alkaline**

         Call text . . . . Measure calibration alkaline

         Track name . . . . VA track alkaline

         Condition . . . . off

TRACK   **Electrolyte blank**

         Return immediately . . . . off

         Delete old data . . . . off

LQH   **Dose electrolyte blank**

        General/Hardware

        Dosing device

         Dosing unit . . . . Electrolyte neutral

        Parameters

         Function . . . . Dosing

         Port 3

         Volume 5   mL

         Rate . . . . maximum   mL/min

STIR &
PURGE   **Stir electrolyte**

        Device

         Device name . . . . 884_1

         Device type . . . . 884 Professional VA

        Stir

         Stirring rate 2000   min^{-1}

         Switch on . . . . off

         Switch off . . . . off

         Duration . . . . on

         Time 10   s

        Purge

         Switch on . . . . off

         Switch off . . . . on

         Duration . . . . off

TRACK   **Alkaline solution**

         Return immediately . . . . off

         Delete old data . . . . off

STIR &
PURGE   **Stir ON**

        Device

         Device name . . . . 884_1

         Device type . . . . 884 Professional VA

        Stir

         Stirring rate 2000   min^{-1}

         Switch on . . . . on

         Switch off . . . . off

         Duration . . . . off

        Purge

Switch on . . . . off
Switch off . . . . on
Duration . . . . off

LQH   **Add alkaline solution**
General/Hardware
Dosing device
    Dosing unit . . . . Electrolyte alkaline
Parameters
    Function . . . . Dosing
    Port 3
    Volume 2   mL
    Rate . . . . maximum   mL/min

ADD AUX   **Volume alkaline solution**
Auxiliary solution
    Solution . . . . Electrolyte alkaline
    Volume . . . . = 'Add alkaline solution.VOL' * 1000   mL
    Include volume in calculation . . . . on
Addition
    Add manually . . . . off
    Already added . . . . on
    Add with dosing device . . . . off

STIR &   **Stir alkaline**
PURGE   Device
    Device name . . . . 884_1
    Device type . . . . 884 Professional VA
Stir
    Stirring rate 2000   min^{-1}
    Switch on . . . . off
    Switch off . . . . off
    Duration . . . . on
    Time 30   s
Purge
    Switch on . . . . off
    Switch off . . . . on
    Duration . . . . off

TRACK   **Prepare sample**
    Return immediately . . . . off
    Delete old data . . . . off

SWING   **Swing waste pos**
Device
    Device name . . . . 858 Sample Processor
    Device type . . . . 858.0020 Professional Sample Processor
Target

Tower 1

Swing . . . . External position

Number 2

Parameters

Swing rate . . . . 55 °/s

LIFT   **Lift waste pos**

Device

Device name . . . . 858 Sample Processor

Device type . . . . 858.0020 Professional Sample Processor

Target

Tower 1

Lift position . . . . Work position mm

Parameters

Lift rate . . . . 25 mm/s

ADD AUX   **Fill needle electrolyte**

Auxiliary solution

Solution . . . . Electrolyte neutral

Volume . . . . 1 mL

Include volume in calculation . . . . off

Addition

Add manually . . . . off

Already added . . . . off

Add with dosing device . . . . on

Dosing rate . . . . 10 mL/min

Filling rate . . . . maximum mL/min

MOVE   **MOVE to sample**

Device

Device name . . . . 858 Sample Processor

Device type . . . . 858.0020 Professional Sample Processor

Target

Tower 1

Move . . . . Sample position

Beaker test

Display message . . . . on

Cancel determination . . . . off

Cancel determination and series . . . . off

Parameters

Shift rate . . . . 20 °/s

Shift direction . . . . auto

Swing rate . . . . 55 °/s

LIFT   **Needle → special position**

Device

Device name . . . . 858 Sample Processor

Device type . . . . 858.0020 Professional Sample Processor

Target

    Tower 1

    Lift position . . . . Special position   mm

Parameters

    Lift rate 25   mm/s

STIR   **Stir sample ON**

Device

    Device name . . . . 858 Sample Processor

    Device type . . . . 858.0020 Professional Sample Processor

Stirrer

    Stirrer 1

    Stirrer type . . . . unknown

    Stirring rate 11

Action

    Switch on . . . . on

    Switch off . . . . off

    Duration . . . . off

    Time 1   min

ADD AUX   **Add electrolyte**

Auxiliary solution

    Solution . . . . Electrolyte neutral

    Volume 10   mL

    Include volume in calculation . . . . on

Addition

    Add manually . . . . off

    Already added . . . . off

    Add with dosing device . . . . on

        Dosing rate 10   mL/min

        Filling rate . . . . maximum   mL/min

STIR   **Stir sample OFF**

Device

    Device name . . . . 858 Sample Processor

    Device type . . . . 858.0020 Professional Sample Processor

Stirrer

    Stirrer 1

    Stirrer type . . . . unknown

    Stirring rate 11

Action

    Switch on . . . . off

    Switch off . . . . off

    Duration . . . . on

    Time 20   s

viva

License ID	1955606	Program version	viva 3.0 - 69
Client ID	001-nbk-02849		
User	Metrohm	2024-03-27	09:24:49 UTC+1

TRACK   **Transfer from autosampler**

     Return immediately . . . . off

     Delete old data . . . . off

LIFT   **Needle → Work position**

   Device

     Device name . . . . 858 Sample Processor

     Device type . . . . 858.0020 Professional Sample Processor

   Target

     Tower 1

     Lift position . . . . Work position   mm

   Parameters

     Lift rate 25   mm/s

CALL   **Transfer solution**

Call text	Track name	Sample type		Condition
Peristaltic pump ON	Peristaltic pump	off	Sample	off

TRACK   **Peristaltic pump**

     Return immediately . . . . off

     Delete old data . . . . off

PUMP   **Peristaltic pump ON**

   Device

     Device name . . . . 858 Sample Processor

     Device type . . . . 858.0020 Professional Sample Processor

   Pumps

     Tower 1

     Pump(s) . . . . Peristaltic

     Rate 5

   Action

     Switch on . . . . off

     Switch off . . . . off

     Duration . . . . on

     Time 150   s

TRACK   **Go to rinsing position**

     Return immediately . . . . off

     Delete old data . . . . off

CALL   **Emtpy vessel**

Call text	Track name	Sample type		Condition
Drain	Drain	off	Sample	off

   Swing rinse needle

SWING   Device

        Device name . . . . 858 Sample Processor

        Device type . . . . 858.0020 Professional Sample Processor

        Target

            Tower 1

            Swing . . . . External position

            Number 1

        Parameters

            Swing rate . . . . 55 °/s

LIFT   **Needle → Rinse position**

        Device

        Device name . . . . 858 Sample Processor

        Device type . . . . 858.0020 Professional Sample Processor

        Target

            Tower 1

            Lift position . . . . Work position mm

        Parameters

            Lift rate . . . . 25 mm/s

LQH   **Rinse needle**

        General/Hardware

        Dosing device

            Dosing unit . . . . WashStation

        Parameters

            Function . . . . Dosing

            Port 1

            Volume . . . . 7 mL

            Rate . . . . maximum mL/min

CALL   **CALL WashStation**

Call text	Track name	Sample type		Condition
Refill WashStation	Refill WashStation	off	Sample	off

STIR & PURGE   **Stirrer ON**

        Device

        Device name . . . . 884_1

        Device type . . . . 884 Professional VA

        Stir

            Stirring rate . . . . 3000 min⁻¹

            Switch on . . . . on

            Switch off . . . . off

            Duration . . . . off

        Purge

Switch on . . . . off

Switch off . . . . on

Duration . . . . off

CALL **Transfer rinsing solution**

Call text	Track name	Sample type	Condition
Peristaltic pump ON	Peristaltic pump off	Sample	off

LIFT **Lift needle**

Device

Device name . . . . 858 Sample Processor

Device type . . . . 858.0020 Professional Sample Processor

Target

Tower 1

Lift position . . . . Home position   mm

Parameters

Lift rate 25   mm/s

PUMP **Dose rinse EtOH**

Device

Device name . . . . 858 Sample Processor

Device type . . . . 858.0020 Professional Sample Processor

Pumps

Tower 1

Pump(s) 2

Action

Switch on . . . . off

Switch off . . . . off

Duration . . . . on

Time 3   s

PUMP **Empty tube**

Device

Device name . . . . 858 Sample Processor

Device type . . . . 858.0020 Professional Sample Processor

Pumps

Tower 1

Pump(s) . . . . Peristaltic

Rate 5

Action

Switch on . . . . off

Switch off . . . . off

Duration . . . . on

Time 30   s

Refill WashStation

TRACK   Return immediately . . . . on

Delete old data . . . . off

WAIT   **WAIT 40 s**
Wait
Stop track and waiting for [Continue] . . . . off
Stop all tracks and waiting for [Continue] . . . . off
Waiting time . . . . on
Time 40
Unit . . . . s
Message
Record message . . . . off
Message by e-mail . . . . off
Acoustic signal . . . . off

LQH   **Refill**
General/Hardware
Dosing device
Dosing unit . . . . WashStation
Parameters
Function . . . . Dosing
Port 1
Volume 3   mL
Rate 4   mL/min

TRACK   **Rinsing cycle**
Return immediately . . . . off
Delete old data . . . . off

LOOP   **LOOP Rinsing**
Stop criteria
Max. run number . . . . on
Max. run number 2
Maximum run time . . . . off
Signal assessment for DT . . . . off
Condition . . . . off

CALL   **CALL Drain**

Call text	Track name	Sample type		Condition
Drain	Drain	off	Sample	off

CALL   **CALL Rinse**

Call text	Track name	Sample type	Condition
Rinse	Rinse	off Sample	off

TRACK   **Drain**

     Return immediately . . . . off

     Delete old data . . . . off

PUMP   **PUMP Drain**

     Device

       Device name . . . . 858 Sample Processor

       Device type . . . . 858.0020 Professional Sample Processor

     Pumps

       Tower 1

       Pump(s) 1

     Action

       Switch on . . . . off

       Switch off . . . . off

       Duration . . . . on

       Time 15   s

TRACK   **Rinse**

     Return immediately . . . . off

     Delete old data . . . . off

PUMP   **PUMP Rinse**

     Device

       Device name . . . . 858 Sample Processor

       Device type . . . . 858.0020 Professional Sample Processor

     Pumps

       Tower 1

       Pump(s) 2

     Action

       Switch on . . . . off

       Switch off . . . . off

       Duration . . . . on

       Time 5   s

TRACK   **Fill DU neutral**

     Return immediately . . . . off

     Delete old data . . . . off

LQH   **DU Electrolyte neutral**

     General/Hardware

     Dosing device

       Dosing unit . . . . Electrolyte neutral

     Parameters

Function . . . . Fill

Port 2

Rate . . . . maximum mL/min

TRACK   **Fill DU alkaline**

Return immediately . . . . off

Delete old data . . . . off

LQH   **DU Electrolyte alkaline**

General/Hardware

Dosing device

Dosing unit . . . . Electrolyte alkaline

Parameters

Function . . . . Fill

Port 2

Rate . . . . maximum mL/min

TRACK   **Fill DU WashStation**

Return immediately . . . . on

Delete old data . . . . off

LQH   **DU WashStation**

General/Hardware

Dosing device

Dosing unit . . . . WashStation

Parameters

Function . . . . Fill

Port 2

Rate . . . . maximum mL/min

TRACK   **Shut off**

Return immediately . . . . off

Delete old data . . . . off

PUMP   **PUMPS Rinse OFF**

Device

Device name . . . . 858 Sample Processor

Device type . . . . 858.0020 Professional Sample Processor

Pumps

Tower 1

Pump(s) . . . . 1+2

Action

Switch on . . . . off

Switch off . . . . on

Duration . . . . off

Time . . . . 8.0 s

PUMP   **PUMP Peri OFF**

Device

Device name . . . . 858 Sample Processor

Device type . . . . 858.0020 Professional Sample Processor

Pumps

    Tower 1

    Pump(s) . . . . Peristaltic

    Rate 10

Action

    Switch on . . . . off

    Switch off . . . . on

    Duration . . . . off

    Time . . . . 300.0 s

STIR   **STIR OFF**

Device

    Device name . . . . 858 Sample Processor

    Device type . . . . 858.0020 Professional Sample Processor

Stirrer

    Stirrer 1

    Stirrer type . . . . unknown

    Stirring rate 11

Action

    Switch on . . . . off

    Switch off . . . . on

    Duration . . . . off

    Time . . . . 10.0 s

STIR &   **STIR & PURGE OFF**

PURGE   Device

    Device name . . . . 884_1

    Device type . . . . 884 Professional VA

Stir

    Stirring rate . . . . 2000 min^{-1}

    Switch on . . . . off

    Switch off . . . . on

    Duration . . . . off

Purge

    Switch on . . . . off

    Switch off . . . . on

    Duration . . . . off

EXIT   **Exit track**

CALL   **Exit shut off**

License ID   1955606   Program version   viva 3.0 - 69
Client ID   001-nbk-02849
User   Metrohm   2024-03-27   09:24:49 UTC+1

Call text	Track name	Sample type		Condition
Exit shut off	Shut off	off	Sample	off

CALL   **Call fill DU**

Call text	Track name	Sample type		Condition
Fill DU neutral	Fill DU neutral	off	Sample	off
Fill DU alkaline	Fill DU alkaline	off	Sample	off
Fill DU WashStation	Fill DU WashStation	off	Sample	off

LIFT   **Needle → Home position**

Device
    Device name . . . . 858 Sample Processor
    Device type . . . . 858.0020 Professional Sample Processor
Target
    Tower 1
    Lift position . . . . Home position mm
Parameters
    Lift rate . . . . 25 mm/s

ERROR   **Error track**

CALL   **Error shut off**

Call text	Track name	Sample type		Condition
Error shut off	Shut off	off	Sample	off