TRACE™ GC 2000

Gas Chromatograph

Preventive Maintenance Schedule

Log Book

TRACE GC 2000 Serial Number _____

Volume Number _____

Dates from _____ to _____

This book contains 86 pages excluding front matter and appendix.

ThermoQuest CE INSTRUMENTS

ISO REGISTERED COMPANY 9001

Preventive Maintenance Schedule
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Reference to system configurations and specifications supersede all previous information and are subject to change without notice.

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WARNING! Use of the TRACE GC 2000 in a manner other than that specified by ThermoQuest could impair the instrument's safety features and result in serious injury.

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About This Manual

Overview

This document provides a recommended schedule of preventive maintenance and a 52-week instrument log for recording all maintenance performed on the TRACE GC.

This manual contains the following parts:

Suggested Maintenance Schedule lists the recommended maintenance schedule for the TRACE GC.

52 weeks of *Daily/Weekly Maintenance Logs* with *Notes* and *Supplies Needed* pages

Two *Semiannual Maintenance Logs*

One *Annual Maintenance Log*

One *Biannual Maintenance Log*

Two *Service Records*

The logs list the recommended maintenance items and leave spaces for you to record additional procedures.

Appendix **A**, *Customer Communication*, contains contact information for ThermoQuest offices worldwide. Use the *Reader Survey* in this section to give us feedback on this manual and help us improve the quality of our documentation.

Using the TRACE GC Document Set

The TRACE GC Document Set (PN 31709300) serves as your library for information about the TRACE GC hardware and software. If one of the manuals is missing from your set, use this list to notify customer service for a replacement.

ThermoQuest part numbers (PN) are provided for each book title.

Site Preparation and Installation Manual (PN31709190)
This manual describes how to set up a workspace for the TRACE GC and how to connect the TRACE GC to the gas supplies and peripheral devices. It also contains a list of spare parts. An online help version of this manual is provided also.

Acceptance Package (PN 31709220)
This folder contains required shipping documents and quality report forms.

Getting Started (PN 31709230)
This guide contains procedures for checking configuration, installing detectors, and making a first analysis with the TRACE GC.

Operating Manual (PN 31709170)
This manual provides descriptions of the TRACE GC hardware and software and instructions for their use. It also contains the instrument warranty.

Quick Reference Template (PN 31709240)
This reference card contains guidelines for carrier gas use and injection procedures.

K-Factor Quick Reference (P/N 317 09241)
This reference card contains information to interpretate results from a Column Evaluation.

Preventive Maintenance Schedule (PN 31709280)
This document provides a list of recommended scheduled maintenance and a year-long log book to record maintenance, observations, supply lists, and service records.

Maintenance and Troubleshooting Guide (PN 31709180)
This manual contains instructions for diagnosing and resolving operational problems.

Standard Operating Procedures (PN 31709200)
This guide contains instructions for determining the quality of the TRACE GC's performance.

Spare Parts Catalog (PN 31709210)
This catalog contains the list of the spare parts for the TRACE GC System.

Suggested Maintenance Schedule

This chapter lists the recommended maintenance schedule for the TRACE GC. Preventive maintenance keeps your instruments running at peak performance. The recommended maintenance schedule shown in Table 1-1 on page 2 is based on a GC running multiple samples in an 8-hour day. You may need to adapt the schedule to your situation depending on:

- the number of analyses per day
- how clean the samples are
- condition of the autosampler syringe needle
- environmental conditions such as dirt and ambient temperature

Septa degrade over time. Different types will degrade at varying rates. Factors affecting septa life include:

- number of samples injected
- injector temperature
- condition of the syringe needle

Our recommendations for septa replacement are based 200 injections in a ThermoQuest standard septum. Septa from other manufacturers may show different rates of degradation.

Make sure you not only perform each scheduled item, but that you record it as well, along with any observations about instrument performance. Your records and notes can be invaluable when trying to trace a service problem.

In addition to the routine and preventive maintenance that you perform, we recommend annual inspections by ThermoQuest customer service engineers. These yearly checkups ensure that your instrument remains in peak condition.

Table 1-1. Standard Maintenance Schedule

Frequency	Task
Daily	Run leak test. Run performance check standard as required by method. Run calibration curve as required by method. Note gas pressure when the weekly pressure check shows it to be below 5000 kPa (50 bar or 750 psig).
Weekly	Change injector liner. Check pressure of gas cylinders. Replace the cylinder when its pressure drops below 3500 kPa (35 bar or 500 psig). Change **S/SL** septum. Change **PTV** septum. Change **OC** septum (AS 2000).
Monthly	Check for leaks from the primary gas supply to the GC.
Semiannually	Regenerate the **S/SL** inlet vent line trap. Regenerate the **PTV** inlet vent line trap. Replace **FID** jet. Clean **FPD** windows and stainless steel mirror. Clean **PID** cell and UV lamp window. Replace **NPD** source and clean collector. Clean or replace **ECD** collector. Recondition or replace internal and external traps.
Annually	Clean **FID** collector. Replace **PID** lamp.
Biannually	Replace **FPD** photomultiplier. Clean or replace **ECD** source.[1]
As required by local law	Perform wipe test on **ECD**.

1. Only a licensed laboratory can perform this operation.

Your Contacts

Local Sales Office _____

ThermoQuest Service Engineer _____

_____

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Notes

Log

Week of _____

	Maintenance	M	T	W	T	F	S	S	Operator
Daily	Run leak test.								
	Run performance check standard as required by method.								
	Run calibration curve as required by method.								
	Note gas when below 5000 kPa/50 bar/750 psig.								
Weekly	Check gas pressure at cylinder.								
	Change injector liner.								
	Change S/SL septum.								
	Change PTV septum.								
	Change OC septum.								

Comments/Observations

_____

_____

Log, Week #2

Week of _____

	Maintenance	M	T	W	T	F	S	S	Operator
Daily	Run leak test.								
	Run performance check standard as required by method.								
	Run calibration curve as required by method.								
	Note gas when below 5000 kPa/50 bar/750 psig.								
Weekly	Check gas pressure at cylinder.								
	Change injector liner.								
	Change S/SL septum.								
	Change PTV septum.								
	Change OC septum.								

Comments/Observations

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Week of _____

	Maintenance	M	T	W	T	F	S	S	Operator
Daily	Run leak test.								
	Run performance check standard as required by method.								
	Run calibration curve as required by method.								
	Note gas when below 5000 kPa/50 bar/750 psig.								
Weekly	Check gas pressure at cylinder.								
	Change injector liner.								
	Change S/SL septum.								
	Change PTV septum.								
	Change OC septum.								

Comments/Observations

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Log, Week #4

Week of _____

	Maintenance	M	T	W	T	F	S	S	Operator
Daily	Run leak test.								
	Run performance check standard as required by method.								
	Run calibration curve as required by method.								
	Note gas when below 5000 kPa/50 bar/750 psig.								
Weekly	Check gas pressure at cylinder.								
	Change injector liner.								
	Change S/SL septum.								
	Change OC septum.								
	Change PTV septum.								
	Monthly Maintenance:	**Checkpoints & Dates**							
	Check for leaks from primary gas supply to GC.								

Comments/Observations

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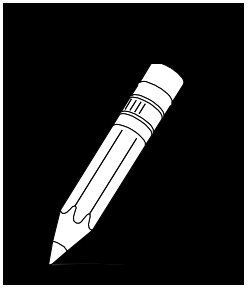

Notes

Supplies Needed

Log

Week of

	Maintenance	M	T	W	T	F	S	S	Operator
Daily	Run leak test.								
	Run performance check standard as required by method.								
	Run calibration curve as required by method.								
	Note gas when below 5000 kPa/50 bar/750 psig.								
Weekly	Check gas pressure at cylinder.								
	Change injector liner.								
	Change S/SL septum.								
	Change OC septum.								
	Change PTV septum.								

Comments/Observations

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Log, Week #6

Week of _____

	Maintenance	M	T	W	T	F	S	S	Operator
Daily	Run leak test.								
	Run performance check standard as required by method.								
	Run calibration curve as required by method.								
	Note gas when below 5000 kPa/50 bar/750 psig.								
Weekly	Check gas pressure at cylinder.								
	Change injector liner.								
	Change S/SL septum.								
	Change PTV septum.								
	Change OC septum.								

Comments/Observations

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Week of _____

	Maintenance	M	T	W	T	F	S	S	Operator
Daily	Run leak test.								
	Run performance check standard as required by method.								
	Run calibration curve as required by method.								
	Note gas when below 5000 kPa/50 bar/750 psig.								
Weekly	Check gas pressure at cylinder.								
	Change injector liner.								
	Change S/SL septum.								
	Change PTV septum.								
	Change OC septum.								

Comments/Observations

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Log, Week #8

Week of _____

	Maintenance	M	T	W	T	F	S	S	Operator
Daily	Run leak test.								
	Run performance check standard as required by method.								
	Run calibration curve as required by method.								
	Note gas when below 5000 kPa/50 bar/750 psig.								
Weekly	Check gas pressure at cylinder.								
	Change injector liner.								
	Change S/SL septum.								
	Change PTV septum.								
	Change OC septum.								
	Monthly Maintenance:	**Checkpoints & Dates**							
	Check for leaks from primary gas supply to GC.								

Comments/Observations

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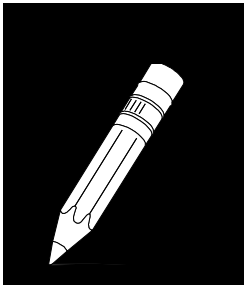

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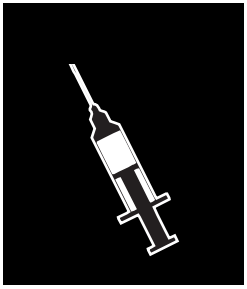

Supplies Needed

Log

Week of _____

	Maintenance	M	T	W	T	F	S	S	Operator
Daily	Run leak test.								
	Run performance check standard as required by method.								
	Run calibration curve as required by method.								
	Note gas when below 5000 kPa/50 bar/750 psig.								
Weekly	Check gas pressure at cylinder.								
	Change injector liner.								
	Change S/SL septum.								
	Change PTV septum.								
	Change OC septum.								

Comments/Observations

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Log, Week #10

Week of _____

	Maintenance	M	T	W	T	F	S	S	Operator
Daily	Run leak test.								
	Run performance check standard as required by method.								
	Run calibration curve as required by method.								
	Note gas when below 5000 kPa/50 bar/750 psig.								
Weekly	Check gas pressure at cylinder.								
	Change injector liner.								
	Change S/SL septum.								
	Change PTV septum.								
	Change OC septum.								

Comments/Observations

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Week of _____

	Maintenance	M	T	W	T	F	S	S	Operator
Daily	Run leak test.								
	Run performance check standard as required by method.								
	Run calibration curve as required by method.								
	Note gas when below 5000 kPa/50 bar/750 psig.								
Weekly	Check gas pressure at cylinder.								
	Change injector liner.								
	Change S/SL septum.								
	Change PTV septum.								
	Change OC septum.								

Comments/Observations

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_____

Log, Week #12

Week of _____

	Maintenance	M	T	W	T	F	S	S	Operator
Daily	Run leak test.								
	Run performance check standard as required by method.								
	Run calibration curve as required by method.								
	Note gas when below 5000 kPa/50 bar/750 psig.								
Weekly	Check gas pressure at cylinder.								
	Change injector liner.								
	Change S/SL septum.								
	Change OC septum.								
	Monthly Maintenance:	**Checkpoints & Dates**							
	Check for leaks from primary gas supply to GC.								

Comments/Observations

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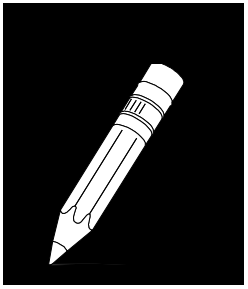

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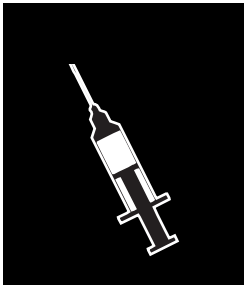

Supplies Needed

Log

Week of

	Maintenance	M	T	W	T	F	S	S	Operator
Daily	Run leak test.								
	Run performance check standard as required by method.								
	Run calibration curve as required by method.								
	Note gas when below 5000 kPa/50 bar/750 psig.								
Weekly	Check gas pressure at cylinder.								
	Change injector liner.								
	Change S/SL septum.								
	Change PTV septum.								
	Change OC septum.								

Comments/Observations

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_____

Log, Week #14

Week of _____

	Maintenance	M	T	W	T	F	S	S	Operator
Daily	Run leak test.								
	Run performance check standard as required by method.								
	Run calibration curve as required by method.								
	Note gas when below 5000 kPa/50 bar/750 psig.								
Weekly	Check gas pressure at cylinder.								
	Change injector liner.								
	Change S/SL septum.								
	Change PTV septum.								
	Change OC septum.								

Comments/Observations

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Week of _____

	Maintenance	M	T	W	T	F	S	S	Operator
Daily	Run leak test.								
	Run performance check standard as required by method.								
	Run calibration curve as required by method.								
	Note gas when below 5000 kPa/50 bar/750 psig.								
Weekly	Check gas pressure at cylinder.								
	Change injector liner.								
	Change S/SL septum.								
	Change PTV septum.								
	Change OC septum.								

Comments/Observations

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Log, Week #16

Week of _____

	Maintenance	M	T	W	T	F	S	S	Operator
Daily	Run leak test.								
	Run performance check standard as required by method.								
	Run calibration curve as required by method.								
	Note gas when below 5000 kPa/50 bar/750 psig.								
Weekly	Check gas pressure at cylinder.								
	Change injector liner.								
	Change S/SL septum.								
	Change PTV septum.								
	Change OC septum.								
	Monthly Maintenance:	**Checkpoints & Dates**							
	Check for leaks from primary gas supply to GC.								

Comments/Observations

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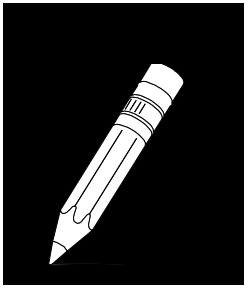

Notes

Supplies Needed

Log

Week of

	Maintenance	M	T	W	T	F	S	S	Operator
Daily	Run leak test.								
	Run performance check standard as required by method.								
	Run calibration curve as required by method.								
	Note gas when below 5000 kPa/50 bar/750 psig.								
Change PTV septum.	Check gas pressure at cylinder.								
	Change injector liner.								
	Change S/SL septum.								
	Change PTV septum.								
	Change OC septum.								

Comments/Observations

_____

_____

Log, Week #18

Week of _____

	Maintenance	M	T	W	T	F	S	S	Operator
Daily	Run leak test.								
	Run performance check standard as required by method.								
	Run calibration curve as required by method.								
	Note gas when below 5000 kPa/50 bar/750 psig.								
Weekly	Check gas pressure at cylinder.								
	Change injector liner.								
	Change S/SL septum.								
	Change PTV septum.								
	Change OC septum.								

Comments/Observations

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_____

_____

Week of _____

	Maintenance	M	T	W	T	F	S	S	Operator
Daily	Run leak test.								
	Run performance check standard as required by method.								
	Run calibration curve as required by method.								
	Note gas when below 5000 kPa/50 bar/750 psig.								
Weekly	Check gas pressure at cylinder.								
	Change injector liner.								
	Change S/SL septum.								
	Change PTV septum.								
	Change OC septum.								

Comments/Observations

_____

_____

_____

Log, Week #20

Week of _____

	Maintenance	M	T	W	T	F	S	S	Operator
Daily	Run leak test.								
	Run performance check standard as required by method.								
	Run calibration curve as required by method.								
	Note gas when below 5000 kPa/50 bar/750 psig.								
Weekly	Check gas pressure at cylinder.								
	Change injector liner.								
	Change S/SL septum.								
	Change PTV septum.								
	Change OC septum.								
	Monthly Maintenance:	**Checkpoints & Dates**							
	Check for leaks from primary gas supply to GC.								

Comments/Observations

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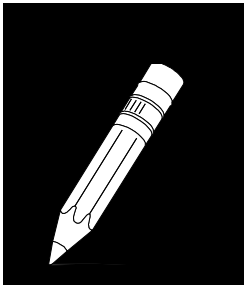

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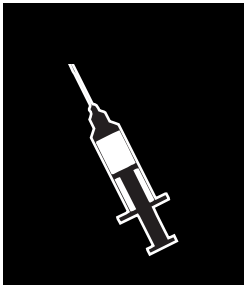

Supplies Needed

Log

Week of _____

	Maintenance	M	T	W	T	F	S	S	Operator
Daily	Run leak test.								
	Run performance check standard as required by method.								
	Run calibration curve as required by method.								
	Note gas when below 5000 kPa/50 bar/750 psig.								
Weekly	Check gas pressure at cylinder.								
	Change injector liner.								
	Change S/SL septum.								
	Change PTV septum.								
	Change OC septum.								

Comments/Observations

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_____

Log, Week #22

Week of _____

	Maintenance	M	T	W	T	F	S	S	Operator
Daily	Run leak test.								
	Run performance check standard as required by method.								
	Run calibration curve as required by method.								
	Note gas when below 5000 kPa/50 bar/750 psig.								
Weekly	Check gas pressure at cylinder.								
	Change injector liner.								
	Change S/SL septum.								
	Change PTV septum.								
	Change OC septum.								

Comments/Observations

_____

_____

_____

Week of _____

	Maintenance	M	T	W	T	F	S	S	Operator
Daily	Run leak test.								
	Run performance check standard as required by method.								
	Run calibration curve as required by method.								
	Note gas when below 5000 kPa/50 bar/750 psig.								
Weekly	Check gas pressure at cylinder.								
	Change injector liner.								
	Change S/SL septum.								
	Change PTV septum.								
	Change OC septum.								

Comments/Observations

_____

_____

_____

Log, Week #24

Week of _____

	Maintenance	M	T	W	T	F	S	S	Operator
Daily	Run leak test.								
	Run performance check standard as required by method.								
	Run calibration curve as required by method.								
	Note gas when below 5000 kPa/50 bar/750 psig.								
Weekly	Check gas pressure at cylinder.								
	Change injector liner.								
	Change S/SL septum.								
	Change PTV septum.								
	Change OC septum.								
	Monthly Maintenance:	**Checkpoints & Dates**							
	Check for leaks from primary gas supply to GC.								

Comments/Observations

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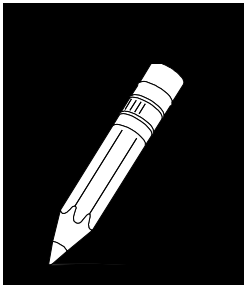

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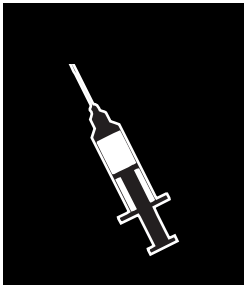

Supplies Needed

Log

Week of _____

	Maintenance	M	T	W	T	F	S	S	Operator
Daily	Run leak test.								
	Run performance check standard as required by method.								
	Run calibration curve as required by method.								
	Note gas when below 5000 kPa/50 bar/750 psig.								
Weekly	Check gas pressure at cylinder.								
	Change injector liner.								
	Change S/SL septum.								
	Change PTV septum.								
	Change OC septum.								

Comments/Observations

_____

_____

Log, Week #26

Week of _____

	Maintenance	M	T	W	T	F	S	S	Operator
Daily	Run leak test.								
	Run performance check standard as required by method.								
	Run calibration curve as required by method.								
	Note gas when below 5000 kPa/50 bar/750 psig.								
Weekly	Check gas pressure at cylinder.								
	Change injector liner.								
	Change S/SL septum.								
	Change PTV septum.								
	Change OC septum								

Comments/Observations

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Log
Semiannual

	Semiannual Maintenance	Date	Operator
Standard Semiannual	Regenerate the **S/SL** inlet vent line trap.		
	Regenerate the **PTV** inlet vent line trap.		
	Replace **FID** jet.		
	Clean **FPD** windows and stainless steel inner cell surface.		
	Clean **PID** cell and UV lamp window.		
	Replace **NPD** source and clean collector.		
	Replace **ECD** collector.		
	Recondition or replace internal and external traps.		
Customized Semiannual			
	Perform wipe test on **ECD** when required by local law.		

Comments/Observations

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_____

Service Record

User/Operator _____

Service Person _____

Instrument Serial # _____Date_____

Service Issue

_____

_____

Actions Taken

_____

_____

Results

_____

_____

Parts Used

Part Description	Part #	Rev./Date Code	Serial #

Log

Week of _____

	Maintenance	M	T	W	T	F	S	S	Operator
Daily	Run leak test.								
	Run performance check standard as required by method.								
	Run calibration curve as required by method.								
	Note gas when below 5000 kPa/50 bar/750 psig.								
Weekly	Check gas pressure at cylinder.								
	Change injector liner.								
	Change S/SL septum.								
	Change PTV septum.								
	Change OC septum.								

Comments/Observations

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_____

Log, Week #28

Week of _____

	Maintenance	M	T	W	T	F	S	S	Operator
Daily	Run leak test.								
	Run performance check standard as required by method.								
	Run calibration curve as required by method.								
	Note gas when below 5000 kPa/50 bar/750 psig.								
Weekly	Check gas pressure at cylinder.								
	Change injector liner.								
	Change S/SL septum.								
	Change PTV septum.								
	Change OC septum.								
	Monthly Maintenance:	**Checkpoints & Dates**							
	Check for leaks from primary gas supply to GC.								

Comments/Observations

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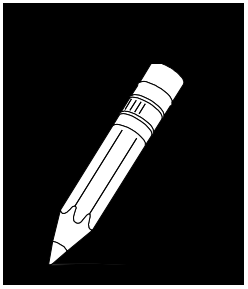
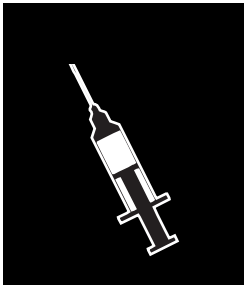


Notes



Supplies Needed

Log

Week of _____

	Maintenance	M	T	W	T	F	S	S	Operator
Daily	Run leak test.								
	Run performance check standard as required by method.								
	Run calibration curve as required by method.								
	Note gas when below 5000 kPa/50 bar/750 psig.								
Weekly	Check gas pressure at cylinder.								
	Change injector liner.								
	Change S/SL septum.								
	Change PTV septum.								
	Change OC septum.								

Comments/Observations

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Log, Week #30

Week of _____

	Maintenance	M	T	W	T	F	S	S	Operator
Daily	Run leak test.								
	Run performance check standard as required by method.								
	Run calibration curve as required by method.								
	Note gas when below 5000 kPa/50 bar/750 psig.								
Weekly	Check gas pressure at cylinder.								
	Change injector liner.								
	Change S/SL septum.								
	Change PTV septum.								
	Change OC septum.								

Comments/Observations

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Week of _____

	Maintenance	M	T	W	T	F	S	S	Operator
Daily	Run leak test.								
	Run performance check standard as required by method.								
	Run calibration curve as required by method.								
	Note gas when below 5000 kPa/50 bar/750 psig.								
Weekly	Check gas pressure at cylinder.								
	Change injector liner.								
	Change S/SL septum.								
	Change PTV septum.								
	Change OC septum.								

Comments/Observations

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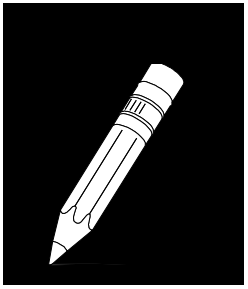
Log, Week #32

Week of _____

	Maintenance	M	T	W	T	F	S	S	Operator
Daily	Run leak test.								
	Run performance check standard as required by method.								
	Run calibration curve as required by method.								
	Note gas when below 5000 kPa/50 bar/750 psig.								
Weekly	Check gas pressure at cylinder.								
	Change injector liner.								
	Change S/SL septum.								
	Change PTV septum								
	Change OC septum.								
	Monthly Maintenance:	**Checkpoints & Dates**							
	Check for leaks from primary gas supply to GC.								

Comments/Observations

_____



Notes

Supplies Needed

Log

Week of _____

	Maintenance	M	T	W	T	F	S	S	Operator
Daily	Run leak test.								
	Run performance check standard as required by method.								
	Run calibration curve as required by method.								
	Note gas when below 5000 kPa/50 bar/750 psig.								
Weekly	Check gas pressure at cylinder.								
	Change injector liner.								
	Change S/SL septum.								
	Change PTV septum.								
	Change OC septum.								

Comments/Observations

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Log, Week #34

Week of _____

	Maintenance	M	T	W	T	F	S	S	Operator
Daily	Run leak test.								
	Run performance check standard as required by method.								
	Run calibration curve as required by method.								
	Note gas when below 5000 kPa/50 bar/750 psig.								
Weekly	Check gas pressure at cylinder.								
	Change injector liner.								
	Change S/SL septum.								
	Change PTV septum.								
	Change OC septum.								

Comments/Observations

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_____

Week of _____

	Maintenance	M	T	W	T	F	S	S	Operator
Daily	Run leak test.								
	Run performance check standard as required by method.								
	Run calibration curve as required by method.								
	Note gas when below 5000 kPa/50 bar/750 psig.								
Weekly	Check gas pressure at cylinder.								
	Change injector liner.								
	Change S/SL septum.								
	Change PTV septum								
	Change OC septum.								

Comments/Observations

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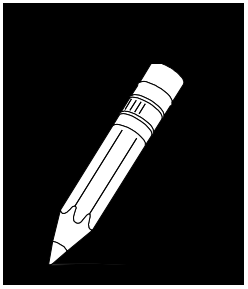
Log, Week #36

Week of _____

	Maintenance	M	T	W	T	F	S	S	Operator
Daily	Run leak test.								
	Run performance check standard as required by method.								
	Run calibration curve as required by method.								
	Note gas when below 5000 kPa/50 bar/750 psig.								
Weekly	Check gas pressure at cylinder.								
	Change injector liner.								
	Change S/SL septum.								
	Change PTV septum.								
	Change OC septum.								
	Monthly Maintenance:	**Checkpoints & Dates**							
	Check for leaks from primary gas supply to GC.								

Comments/Observations

_____



Notes

Supplies Needed

Log

Week of

	Maintenance	M	T	W	T	F	S	S	Operator
Daily	Run leak test.								
	Run performance check standard as required by method.								
	Run calibration curve as required by method.								
	Note gas when below 5000 kPa/50 bar/750 psig.								
Weekly	Check gas pressure at cylinder.								
	Change injector liner.								
	Change S/SL septum.								
	Change PTV septum.								
	Change OC septum.								

Comments/Observations

_____

_____

Log, Week #38

Week of _____

	Maintenance	M	T	W	T	F	S	S	Operator
Daily	Run leak test.								
	Run performance check standard as required by method.								
	Run calibration curve as required by method.								
	Note gas when below 5000 kPa/50 bar/750 psig.								
	Check gas pressure at cylinder.								
	Change injector liner.								
	Change S/SL septum.								
	Change OC septum.								

Comments/Observations

_____

_____

_____

Week of _____

	Maintenance	M	T	W	T	F	S	S	Operator
Daily	Run leak test.								
	Run performance check standard as required by method.								
	Run calibration curve as required by method.								
	Note gas when below 5000 kPa/50 bar/750 psig.								
Weekly	Check gas pressure at cylinder.								
	Change injector liner.								
	Change S/SL septum.								
	Change PTV septum.								
	Change OC septum.								

Comments/Observations

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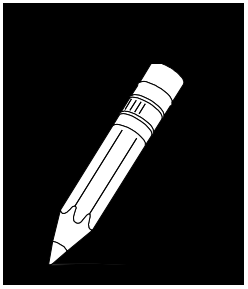
Log, Week #40

Week of _____

	Maintenance	M	T	W	T	F	S	S	Operator
Daily	Run leak test.								
	Run performance check standard as required by method.								
	Run calibration curve as required by method.								
	Note gas when below 5000 kPa/50 bar/750 psig.								
Weekly	Check gas pressure at cylinder.								
	Change injector liner.								
	Change S/SL septum.								
	Change PTV septum.								
	Change OC septum.								
	Monthly Maintenance:	**Checkpoints & Dates**							
	Check for leaks from primary gas supply to GC.								

Comments/Observations

_____



Notes

Supplies Needed

Log

Week of _____

	Maintenance	M	T	W	T	F	S	S	Operator
Daily	Run leak test.								
	Run performance check standard as required by method.								
	Run calibration curve as required by method.								
	Note gas when below 5000 kPa/50 bar/750 psig.								
Weekly	Check gas pressure at cylinder.								
	Change injector liner.								
	Change S/SL septum.								
	Change PTV septum.								
	Change OC septum.								

Comments/Observations

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Log, Week #42

Week of _____

	Maintenance	M	T	W	T	F	S	S	Operator
Daily	Run leak test.								
	Run performance check standard as required by method.								
	Run calibration curve as required by method.								
	Note gas when below 5000 kPa/50 bar/750 psig.								
Weekly	Check gas pressure at cylinder.								
	Change injector liner.								
	Change S/SL septum.								
	Change PTV septum.								
	Change OC septum.								

Comments/Observations

_____

_____

_____

Week of _____

	Maintenance	M	T	W	T	F	S	S	Operator
Daily	Run leak test.								
	Run performance check standard as required by method.								
	Run calibration curve as required by method.								
	Note gas when below 5000 kPa/50 bar/750 psig.								
Weekly	Check gas pressure at cylinder.								
	Change injector liner.								
	Change S/SL septum.								
	Change PTV septum.								
	Change OC septum.								

Comments/Observations

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_____

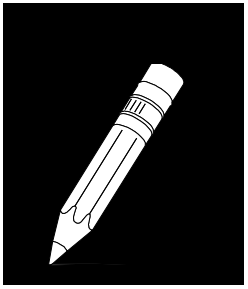
Log, Week #44

Week of _____

	Maintenance	M	T	W	T	F	S	S	Operator
Daily	Run leak test.								
	Run performance check standard as required by method.								
	Run calibration curve as required by method.								
	Note gas when below 5000 kPa/50 bar/750 psig.								
Weekly	Check gas pressure at cylinder.								
	Change injector liner.								
	Change S/SL septum.								
	Change PTV septum.								
	Change OC septum.								
	Monthly Maintenance:	**Checkpoints & Dates**							
	Check for leaks from primary gas supply to GC.								

Comments/Observations

_____



Notes

Supplies Needed

Log

Week of

	Maintenance	M	T	W	T	F	S	S	Operator
Daily	Run leak test.								
	Run performance check standard as required by method.								
	Run calibration curve as required by method.								
	Note gas when below 5000 kPa/50 bar/750 psig.								
Weekly	Check gas pressure at cylinder.								
	Change injector liner.								
	Change S/SL septum.								
	Change PTV septum.								
	Change OC septum.								

Comments/Observations

_____

_____

Log, Week #46

Week of _____

	Maintenance	M	T	W	T	F	S	S	Operator
Daily	Run leak test.								
	Run performance check standard as required by method.								
	Run calibration curve as required by method.								
	Note gas when below 5000 kPa/50 bar/750 psig.								
Weekly	Check gas pressure at cylinder.								
	Change injector liner.								
	Change S/SL septum.								
	Change PTV septum.								
	Change OC septum.								

Comments/Observations

_____

_____

_____

Week of _____

	Maintenance	M	T	W	T	F	S	S	Operator
Daily	Run leak test.								
	Run performance check standard as required by method.								
	Run calibration curve as required by method.								
	Note gas when below 5000 kPa/50 bar/750 psig.								
Weekly	Check gas pressure at cylinder.								
	Change injector liner.								
	Change S/SL septum.								
	Change PTV septum								
	Change OC septum.								

Comments/Observations

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_____

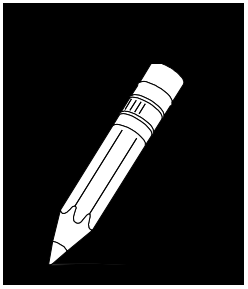
Log, Week #48

Week of _____

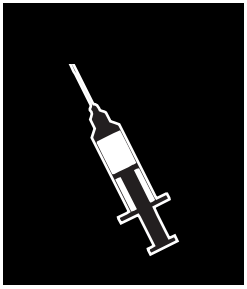
	Maintenance	M	T	W	T	F	S	S	Operator
Daily	Run leak test.								
	Run performance check standard as required by method.								
	Run calibration curve as required by method.								
	Note gas when below 5000 kPa/50 bar/750 psig.								
Weekly	Check gas pressure at cylinder.								
	Change injector liner.								
	Change S/SL septum.								
	Change PTV septum.								
	Change OC septum.								
	Monthly Maintenance:	**Checkpoints & Dates**							
	Check for leaks from primary gas supply to GC.								

Comments/Observations

_____



Notes



Supplies Needed

Log

Week of _____

	Maintenance	M	T	W	T	F	S	S	Operator
Daily	Run leak test.								
	Run performance check standard as required by method.								
	Run calibration curve as required by method.								
	Note gas when below 5000 kPa/50 bar/750 psig.								
Weekly	Check gas pressure at cylinder.								
	Change injector liner.								
	Change S/SL septum.								
	Change PTV septum.								
	Change OC septum.								

Comments/Observations

_____

_____

Log, Week #50

Week of _____

	Maintenance	M	T	W	T	F	S	S	Operator
Daily	Run leak test.								
	Run performance check standard as required by method.								
	Run calibration curve as required by method.								
	Note gas when below 5000 kPa/50 bar/750 psig.								
Weekly	Check gas pressure at cylinder.								
	Change injector liner.								
	Change S/SL septum.								
	Change PTV septum.								
	Change OC septum.								

Comments/Observations

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_____

Week of _____

	Maintenance	M	T	W	T	F	S	S	Operator
Daily	Run leak test.								
	Run performance check standard as required by method.								
	Run calibration curve as required by method.								
	Note gas when below 5000 kPa/50 bar/750 psig.								
Weekly	Check gas pressure at cylinder.								
	Change injector liner.								
	Change S/SL septum.								
	Change PTV septum.								
	Change OC septum.								

Comments/Observations

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Log, Week #52

Week of _____

	Maintenance	M	T	W	T	F	S	S	Operator
Daily	Run leak test.								
	Run performance check standard as required by method.								
	Run calibration curve as required by method.								
	Note gas when below 5000 kPa/50 bar/750 psig.								
Weekly	Check gas pressure at cylinder.								
	Change injector liner.								
	Change S/SL septum.								
	Change PTV septum.								
	Change OC septum.								
	Monthly Maintenance:	**Checkpoints & Dates**							
	Check for leaks from primary gas supply to GC.								

Comments/Observations

_____

Log
Semiannual

	Semiannual Maintenance	Date	Operator
Standard Semiannual	Regenerate the **S/SL** inlet vent line trap.		
	Regenerate the **PTV** inlet vent line trap.		
	Replace **FID** jet.		
	Clean **FPD** windows and stainless steel inner cell surface.		
	Clean **PID** cell and UV lamp window.		
	Replace **NPD** source and clean collector.		
	Replace **ECD** collector.		
	Recondition or replace internal and external traps.		
Customized Semiannual			
	Perform wipe test on **ECD** when required by local law.		

Comments/Observations

_____

_____

Service Record

User/Operator _____

Service Person _____

Instrument Serial # _____ Date_____

Service Issue

_____

_____

Actions Taken

_____

_____

Results

_____

_____

Parts Used

Part Description	Part #	Rev./Date Code	Serial #

Log

Annual

	Annual Maintenance	Date	Operator
Standard	Clean **FID** collector.		
	Replace **PID** lamp.		
Customized Annual			
	Perform wipe test on **ECD** when required by local law.		

Comments/Observations

Log

Biannual

	Biannual Maintenance	Date	Operator
Standard	Replace **FPD** photomultiplier.		
Standard	Have a licensed laboratory clean or replace **ECD** source.		
Customized Biannual			
Customized Biannual			
Customized Biannual			
Customized Biannual			
Customized Biannual			
	Perform wipe test on **ECD** when required by local law.		

Comments/Observations

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A

Customer Communication

This appendix contains contact information for ThermoQuest offices worldwide. This appendix also contains a one-page *Reader Survey*. Use this survey to give us feedback on this manual and help us improve the quality of our documentation.

How To Contact Us and Order Spare Parts

ThermoQuest provides comprehensive technical assistance worldwide and is dedicated to the quality of our customer relationships and services. Use this list to contact your local ThermoQuest office or affiliate. Please fax any spare parts orders to the fax number corresponding to your country of residence.

AUSTRALIA
ThermoQuest Australia
PO Box 239, Unit 20, 38-46 South Street
Rydalmere, NSW 2116
Tel: 2 898 1244
Fax: 2 684 4244

AUSTRIA
ThermoQuest Austria GmbH
Wehlistrasse 27 b, A-1200, Wien
Tel: 1 33350340
Fax: 1 333503426
Also serving **BULGARIA**, **CROATIA**, **CZECH REPUBLIC**, **HUNGARY**, **POLAND**, **SLOVAKIA**, **SLOVENIA**

BELGIUM
Interscience SPRL
Scientific Parc Einstein –
Avenue Jean-Etienne Lenoir 2
B-1348 Louvain-la-Neuve
Tel: 10 450025
Fax: 10 453080

CANADA
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1355 Remington Road, Suite M
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Tel: 847 310 0140
Fax: 847 310 1681

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Neolab
Sretenskii Boulevar, dom 6/1,
entrance 2, no. 16
101000 Moscow, center
Tel: 095 9264148
Fax: 095 9285378

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Louhelantie 10 – PO Box 86
FIN - 01601 Vantaa
Tel: 9 530 8000

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Hightec Sud
12 Avenue des Tropiques –
Z.A. de Courtaboeuf
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Tel: 1 6918 8810
Fax: 1 6929 9382

GERMANY
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Fax: 6103 408 290

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Tel: 22 8376701
Fax: 22 8368275

ITALY
ThermoQuest Italia S.p.A.
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20090 Rodano (Milan)
Tel: 02 95059355
Fax: 02 95059388

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2-5-8 Hatsudai, Shibuya-ku, Tokyo 151
Tel: 3 3372 3001
Fax: 3 3372 7051

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InSung Hi-Tech Co., Ltd.
InSung Bldg 89-111, Shinjung 2-dong
Yangcheon-Ku – Seoul
Tel: 2 644 19997
Fax: 2 643 4911

NETHERLANDS
Interscience B.V.
Tinstraat 16, Postbus 2148, 4823 CC Breda
Tel: 76 5411800
Fax: 76 5420088

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IT Instrument Teknikk
Skandinavia A/S – PO Box 14
Østerndalen 9-11 – N-1345 Østerås
Tel: 67 149303
Fax: 67 149302

PEOPLES REPUBLIC OF CHINA
Finnigan MAT China
Rm. 315 Hui Zhi Building
No. 68 Xue-yuan-nan-Lu,
Haidian Dist., Beijing 100081
Tel: 10 62172241, 10 62186342,
10 62186341
Fax: 10 62172240

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CE Instruments Enterprise
c/o Sintech Scientific S.E.A. Pte Ltd.
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Pantech Industrial Complex
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SMM House Kyalami Boulevard
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Finnigan MAT AB
Pyramidbacken 3
S-141 75 Huddinge
Tel: 8 680 0101
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For Canada, the USA, and Latin America:

ThermoQuest Corporation
3661 Interstate Park Road North
Riviera Beach, Florida 33404
USA
(800) 685 9535

For technical support in other areas, contact your local ThermoQuest office or affiliate.

Reader Survey

Product: TRACE™ GC 2000
Manual: Preventive Maintenance Schedule
Part No.: A31709280, Rev. C

Please help us improve the quality of our documentation by completing and returning this survey.

Circle one number for each of the statements below.

	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
The manual is well organized.	1	2	3	4	5
The manual is clearly written.	1	2	3	4	5
The manual contains all the information I need.	1	2	3	4	5
The instructions are easy to follow.	1	2	3	4	5
The instructions are complete.	1	2	3	4	5
The technical information is easy to understand.	1	2	3	4	5
Examples of operation are clear and useful.	1	2	3	4	5
The figures are helpful.	1	2	3	4	5
I was able to install the system using this manual.	1	2	3	4	5

If you would like to make additional comments, please do. (Attach additional sheets if necessary.)

_____

_____

_____

Fax or mail this form to:
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or phone (512) 251-1447

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