

GC housekeeping - monthly task sheet

Agilent-focused laboratory record for routine care between planned maintenance visits

Month / year	Laboratory / site	Instrument ID				Location				Owner		SOP / reference			
DAILY CHECK															
Gas supply, pressures and accessible leak indicators															
Inlet, autosampler and consumable condition															
Chromatography / system-suitability performance															
End-of-run housekeeping completed as applicable															

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WEEKLY CHECKS - complete once each week

Septum, liner, O-ring and inlet cleanliness reviewed

W1

W2

W3

W4

Syringe, wash vials, column fittings and detector area reviewed

W1

W2

W3

W4

MONTHLY REVIEW

☐

Gas traps, column condition, inlet seal and recurring performance trends reviewed.

POST-MAINTENANCE / RETURN TO USE

☐

Leak check, flows, blank or test mix and record completed.

Concerns / task reference:

GC housekeeping - task guidance

What to check, what to notice and when to investigate

Annual maintenance is one important control - not a year-round maintenance strategy.

GC condition changes with every injection. Apply current Agilent instructions, the method and the laboratory SOP.

DAILY

Gas and pressure

Confirm carrier/detector gas availability, stable pressure or flow, and no accessible indication of leakage.

DAILY

Inlet and sampling

Check the syringe, wash vials, septum area and inlet for residue, damage or unexpected contamination.

WEEKLY

Inlet consumables

Review septum, liner and seals using injection count, sample cleanliness and symptoms - not calendar alone.

WEEKLY

Column and detector

Inspect accessible fittings and detector consumables; leak-check whenever a connection has been disturbed.

MONTHLY

Gas quality and trends

Review trap indicators, column history, consumable use and recurring retention, response or baseline changes.

AS NEEDED

After a sequence

Remove residues, review blanks and inlet condition, replenish wash solvent and record any corrective action.

SHUTDOWN

Use the current Agilent procedure; cool safely and protect the column and gas paths.

POST-MAINTENANCE

Leak-check disturbed connections, verify flows and run an appropriate blank or test mix.

FREQUENCY

Act sooner when samples are dirty, injection load is high or performance begins to change.

PAUSE AND INVESTIGATE WHEN YOU SEE

• **Retention shift**

Check flow, leaks, column condition and method state.

• **Ghost peaks**

Investigate syringe, inlet, column and sample carryover.

• **Peak shape change**

Tailing/fronting may indicate inlet, column or activity issues.

• **Noise or drift**

Check gas quality, detector condition, contamination and leaks.

• **Response loss**

Review inlet discrimination, leaks, detector and consumables.

• **Pressure instability**

Stop and investigate supply, restrictions or leakage.

MONTH-END REVIEW

Reviewed by: _____

Date: _____

Outcome / follow-up: _____

FDA GLP | 21 CFR 58.63