WHAT'S THE REAL COST OF "LOW-COST" GC COLUMNS?

The Measure of Confidence

*"Bargain" GC columns are **not** a bargain if they cost you productivity, data, and column life.*

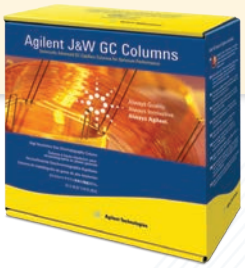
But with Agilent J&W GC columns, you can count on low column bleed, consistent selectivity, superior inertness, and high efficiency. In short – the best results, *period.*

Skeptical? We selected head-to-head comparisons between **Agilent J&W GC columns** and two other leading brands.

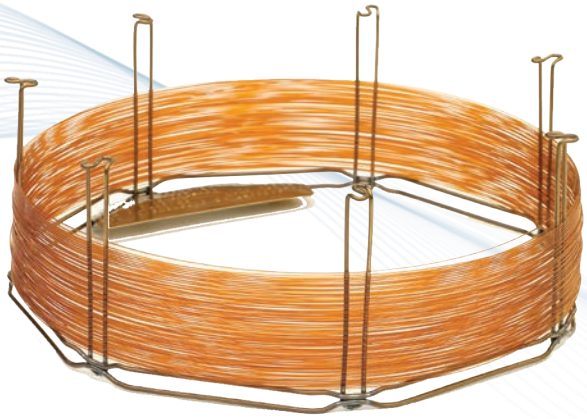
The results speak for themselves, so we've featured some of them on the back of this flyer. For even more column-to-column comparisons, visit **agilent.com/chem/compareGC**

Agilent J&W GC columns surpass the competition in four critical areas:

1. **The right results the first time** for less repetition of suspect analyses
2. **Confident analysis** of active compounds
3. **Versatility** so that you can do more with the resources you have
4. **Inertness and bleed standards** that give your lab a competitive edge



Bottom line: no other column gives you better lifetime value. See the proof



Agilent Technologies

A LOW-COST GC COLUMN COULD COST YOU *RESULTS*

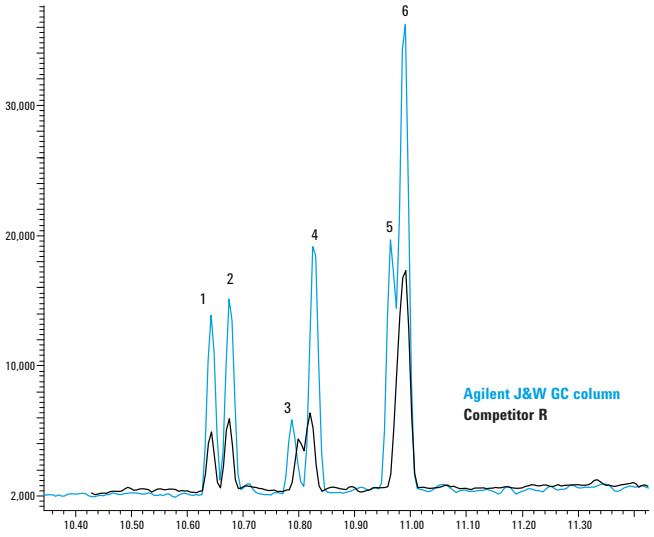
Simply put, any GC column that hinders your lab with questionable results and time-consuming rework isn't a good value – *regardless of price.*

But at Agilent, we *never* compromise on factors such as column inertness, quality standards, and application support. So *you* won't have to compromise on your data.

Here's proof of how Agilent compares to other leading brands

Enhanced signal and resolution for challenging pesticides

Here, only the Agilent J&W GC column (blue) successfully resolved pentachlorophenol from terbuphos. In addition, better peak resolution was seen between chlorthalonil and phenanthrene-d10 using an Agilent J&W DB-UI 8270D column. A stronger signal and sharper peaks were also observed for triazine herbicides, simazine, and atrazine.

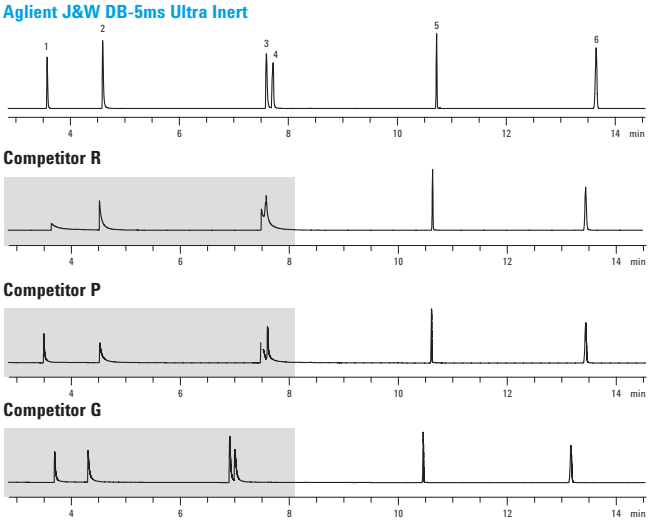


1. Simazine
2. Atrazine
3. Pentachlorophenol
4. Terbuphos
5. Tetrachloroisophthalonitrile
6. Phenanthrene-d10

Column:	Agilent J&W DB-UI 8270D, 20 m Å~ 0.18 mm, 0.36 µm (P/N 121-9723)
Carrier Gas:	Helium, 48.5 cm/s (1.2 mL/min) set at 32 °C, EPC constant flow
Oven Temp:	32 °C (2.5 min hold), 25 °C/min to 320 °C (4.8 min hold)
Inj. Vol.:	0.5 µL splitless 230 °C, purge flow on at 1.42 min
Detector:	MSD SCAN Mode 40 to 450 amu, 300 °C source temp, 150 °C quad temp, 320 °C transfer line
Gas purifier:	Gas Clean GC/MS 1/8 inch kit (P/N CP17974)
Inlet:	Split/splitless w/ inert shell and top weldments (P/N G3452-60570 and G3452-60586)
Liner:	Agilent Ultra Inert single taper w/ wool (P/N 5190-2293)
Gold seal:	Agilent Ultra Inert gold seal (P/N 5190-6144 UI)
Syringe:	5 µL Blue line (P/N G4513-80206)
Ferrules:	UltiMetal Plus Flexible Metal ferrule at inlet (P/N G3188-27501), MS (P/N 5188-5361)
Column nut:	Universal column nut, 1/16' hex, 2 pk (P/N 5181-8830) for inlet
MS nut:	MS interface column nut (P/N 05988-20066)
MSD ferrule:	85/15 Vespel/graphite (P/N 5062-3508)

Better peak shape for basic compounds

In this analysis, noticeable peak tailing was observed with the Competitor P. Conversely, excellent peak shapes were obtained for the compounds of interest with the Agilent J&W DB-5ms Ultra Inert column.



Tailing factor (T_f)

	DB-5ms Ultra Inert	Competitor P	Competitor G	Competitor R
1. Triethylamine	1.5	7.1	7.7	44
2. Pyridine	2.4	17	5.1	10
3. 4-Methylpyridine	1.7	4.2	4.7	6.1
4. N,N-dimethylacetamide	0.95	3.9	4.6	1.5
5. 2,4-Dimethylaniline	0.95	1.0	1.0	0.99
6. Dicyclohexylamine	0.87	0.98	1.1	1.0

WANT TO SEE MORE?

Go to **agilent/com/chem/compareGC**

More than 15 chromatograms in all!

Printed in the USA, August 14, 2014
5991-5076EN

Agilent Technologies