



# Agilent CrossLab

From Insight to Outcome

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**Business Cases from Labs  
Around the World:**

**Lower Costs with  
Agilent A-Line Vials**

# Business Cases of 3 laboratories around the world: Lower Costs with Agilent A-Line Vials

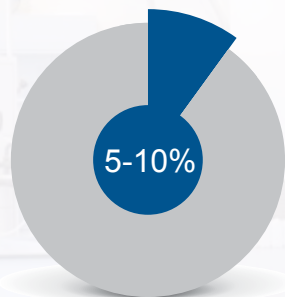
Food Safety–Australia  
Small Molecule Pharma–Europe  
Environmental–US



## Agilent Insights

Across analytical labs worldwide...

Up to **5-10% of LC/MS and GC/MS reproducibility issues** are related to vials which is especially troublesome for low-concentration analytes and trace analysis



This represents:



**100s of thousands in wasted product costs**  
(sample prep/solvent/supplies)



**100s of wasted hours**  
on troubleshooting/rework



**100s of thousands in wasted operating costs**

Bottom line:  
Troubleshooting/reruns can account for up to **25% of unplanned costs**





## Agilent Outcome Innovation in Glassware

- ✓ Eliminate reproducibility issues and unplanned costs by switching to the highest quality vials
- ✓ Highest inertness, least variability—vial to vial, lot to lot, and over time
- ✓ Highest reproducibility with low-concentration samples/trace analysis



Labs around the world are discovering...

The benefits of A-Line vials dramatically outweigh the higher cost per vial





## Business Scenario 1 A Recipe for Savings

### Situation:

An Australian food safety lab was running **200 samples per week** for a residual pesticides screening LC/MS analysis in different matrices.

- **Average cost per analysis: \$50**  
(including sample prep and operator time)
- **Average rerun rate: 2%**  
(due to the variability of duplicate/triplicate analysis)

Samples were collected using non-Agilent vials, and loaded into an autosampler for overnight analysis.





## Business Scenario 1 A Recipe for Savings

### Resolution:

When this food lab switched to Agilent A-Line vials...

- The average rerun rate **dropped from 2% to less than 0.4%**
- More than **163 reruns were eliminated**—  
**a savings of more than \$8.6K** in associated expenses
- This more than made up for the increase in vials costs (40%):
  - Initial supplier: \$2,400 per year (\$0.25 per unit)
  - A-Line vials: \$3,072 per year (\$0.32 per unit)





## Business Scenario 2

# The Right Prescription

### Situation:

A European small molecule pharma lab was running **300 samples per week** measuring a tricyclic antidepressant compound by LC/MS.

- **Average cost per analysis: \$150**  
(including sample prep and operator time)
- **Average rerun rate: 1%**  
(due to the variability of duplicate/triplicate analysis)

Samples were collected & stored using vials manufactured by a major Agilent competitor.





## Business Scenario 2

# The Right Prescription

### Resolution:

When this pharma lab switched to Agilent A-Line vials...

- The average rerun rate **dropped from 1% to less than 0.15%**
- More than **85 reruns were eliminated**—  
**a savings of more than \$21.4K** in associated expenses
- This more than made up for the increase in vials costs (6.7%):
  - Initial supplier: \$4,320 per year (\$0.30 per unit)
  - A-Line vials: \$4,608 per year (\$0.32 per unit)





## Business Scenario 3

# Protecting Air, Water, and Budget

### Situation:

A US environmental contract lab was running **1,000 samples per week** for EPA 8081 (Organochlorine Pesticides using GC-ECD) and EPA 8260 (VOCs using GC/MS).

- **Average cost per analysis: \$35**  
(including sample prep and operator time)
- **Average rerun rate: 5%**  
(due to the variability of duplicate/triplicate analysis)

Samples were collected using low-cost generic vials.





## Business Scenario 3 Protecting Air, Water, and Budget

### Resolution:

When this environmental lab switched to Agilent A-Line vials...

- The average rerun rate **dropped from 5% to less than 0.75%**
- More than **2,112 reruns were eliminated**—  
a **savings of more than \$65.8K** in associated expenses
- This more than made up for the increase in vials costs (213%):
  - Initial supplier: \$7,200 per year (\$0.15 per unit)
  - A-Line vials: \$15,360 per year (\$0.32 per unit)



# One small change can save your lab up to 25% in operating costs

Potential savings for labs running 200 samples per week (48 weeks/year)

		Premium vial users	Standard vial users	Budget vial users
Rerun rate		1%	5%	10%
Savings for 200 samples/week				
Sample cost (US \$)	\$30	\$1,200	\$6,000	\$12,000
	\$80	\$3,200	\$16,000	\$32,000
	\$150	\$6,000	\$30,000	\$60,000

\$ savings in actual operating budget and spared operator time



Agilent A-Line vials are produced from the best sourced glass in the range – type 1 borosilicate, 51 coefficient of expansion glass. This type of glass will not remove analytes from your sample matrices, meaning that Agilent A-Line vials are the ultimate solution for your precious samples.

Visit our Vials Resources page to access free whitepapers, poster, brochure, online selection tool and more:  
[www.agilent.com/chem/vialsresources](http://www.agilent.com/chem/vialsresources)





Agilent CrossLab combines the innovative laboratory services, software, and consumables competencies of Agilent Technologies and elevates service for the entire lab, delivering vital, actionable insights that drive improved economic, operational, and scientific outcomes.



## Appendix A

### Business Scenario 1 A Recipe for Savings

#### Assumptions used in calculation:

A = samples/week: 200

B = operational weeks: 48

C = cost per sample: \$50

D = % fewer reruns with A-line: 90

E = % reruns currently experienced by customer: 2

$(A) \times (B) \times (C) \times (D) \times (E) = \$8,640.00$

$\$8,640.00 - \$672.00$  (Additional cost of A-Line vials) = \$7,968.00

A-Line vials reduced costs by nearly  
\$8K/year over a competitor's vial

#### Ordering Information

Description	Part Number
A-Line crimp top vial, 2 mL, amber, with write-on spot, 100/pk	5190-9592
A-Line crimp top vial, 2 mL, clear, with write-on spot, 100/pk	5190-9591
A-Line screw top vial, 2 mL, amber, with write-on spot, 100/pk	5190-9590
A-Line screw top vial, 2 mL, clear, with write-on spot, 100/pk	5190-9589

#### Recommended caps for A-Line vials:

Description	Part Number
Screw cap, bonded, blue, PTFE/white silicone septa, 100/pk	5190-7021
Screw cap, bonded, blue, pre-slit, PTFE/white silicone septa, 100/pk	5190-7023*
Crimp cap, silver aluminum, PTFE/white silicone septa, 100/pk	5182-0552

\*Recommended for high volume injections



## Appendix B

### Business Scenario 2 The Right Prescription

#### Assumptions used in calculation:

A = samples/week: 300

B = operational weeks: 48

C = cost per sample: \$175

D = % of reruns A-line will limit: 85

E = % reruns experienced by customer: 1

$(A) \times (B) \times (C) \times (D) \times (E) = \$21,420.00$

$\$21,420.00 - \$288.00$  (Additional cost of A-Line vials) =  $\$21,132.00$

A-Line vials reduced costs by nearly  
\$21K/year over a competitor's vial

#### Ordering Information

Description	Part Number
A-Line crimp top vial, 2 mL, amber, with write-on spot, 100/pk	5190-9592
A-Line crimp top vial, 2 mL, clear, with write-on spot, 100/pk	5190-9591
A-Line screw top vial, 2 mL, amber, with write-on spot, 100/pk	5190-9590
A-Line screw top vial, 2 mL, clear, with write-on spot, 100/pk	5190-9589

#### Recommended caps for A-Line vials:

Description	Part Number
Screw cap, bonded, blue, PTFE/white silicone septa, 100/pk	5190-7021
Screw cap, bonded, blue, pre-slit, PTFE/white silicone septa, 100/pk	5190-7023*
Crimp cap, silver aluminum, PTFE/white silicone septa, 100/pk	5182-0552

\*Recommended for high volume injections



## Appendix C

### Business Scenario 3 Protecting Air, Water, and Budget

#### Assumptions used in calculation:

A = samples/week: 1000

B = operational weeks: 48

C = cost per sample: \$35

D = % of reruns A-line will limit: 88

E = % reruns experienced by customer: 5

$(A) \times (B) \times (C) \times (D) \times (E) = \$73,920.00$

$\$73,920.00 - \$8,160.00$  (Additional cost of A-Line vials) =  $\$65,760.00$

A-Line vials reduced costs by nearly  
\$65.8K/year over a competitor's vial

#### Ordering Information

Description	Part Number
A-Line crimp top vial, 2 mL, amber, with write-on spot, 100/pk	5190-9592
A-Line crimp top vial, 2 mL, clear, with write-on spot, 100/pk	5190-9591
A-Line screw top vial, 2 mL, amber, with write-on spot, 100/pk	5190-9590
A-Line screw top vial, 2 mL, clear, with write-on spot, 100/pk	5190-9589

#### Recommended caps for A-Line vials:

Description	Part Number
Screw cap, bonded, blue, PTFE/white silicone septa, 100/pk	5190-7021
Screw cap, bonded, blue, pre-slit, PTFE/white silicone septa, 100/pk	5190-7023*
Crimp cap, silver aluminum, PTFE/white silicone septa, 100/pk	5182-0552

\*Recommended for high volume injections





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