

# Application Report 404

## US EPA Method 608, 8081, OLM04.2 Organochlorine Pesticides on the 20 m x 0.18 mm I.D., 0.36 µm SLB-5ms

This is the analysis of a 22-component standard containing 20 pesticides and 2 surrogate compounds commonly analyzed by US EPA Method 8081. The greater efficiency of a 0.18 mm I.D. versus wider bore columns, allowed resolution of all 22 compounds in less than 20 minutes. The stability of the SLB-5ms at high temperature enabled the run to be taken to 325 °C to decrease the elution time of the last surrogate (decachlorobiphenyl).

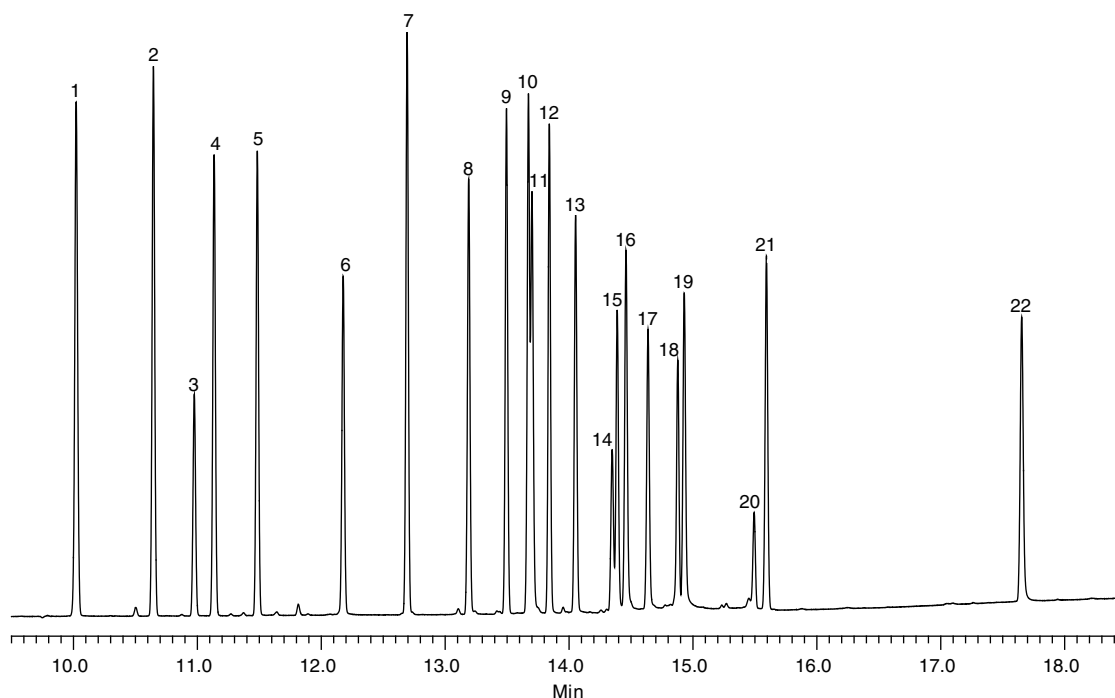
### Key Words

organochlorine pesticides, US EPA Method 8081, US EPA Method 608, SLB-5ms, 28576-U, 46845-U

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Acquisition System: 9499

Notebook Reference: 1569-040



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### Conditions

column: SLB-5ms, 20 m x 0.18 mm I.D., 0.36 µm (28576-U)  
oven: 100 °C (2 min.), 15 °C/min. to 325 °C (3 min.)  
inj.: 250 °C  
det.: micro-ECD, 325 °C  
carrier gas: helium, 0.5 mL/min., constant flow  
injection: 1.0 µL, splitless (0.75 min.)  
liner: 4 mm I.D., single taper  
sample: chlorinated pesticide standard (46845-U), diluted to 50 ppb in n-hexane

### Peak IDs

1. 2,4,5,6-tetrachloro-m-xylene (surr.)	12. 4,4'-DDE
2. α-BHC	13. Dieldrin
3. β-BHC	14. Endrin
4. γ-BHC	15. 4,4'-DDD
5. δ-BHC	16. Endosulfan II
6. Heptachlor	17. Endrin aldehyde
7. Aldrin	18. 4,4'-DDT
8. Heptachlor epoxide	19. Endosulfan sulfate
9. γ-chlordane	20. Methoxychlor
10. Endosulfan I	21. Endrin ketone
11. α-chlordane	22. Decachlorobiphenyl (surr.)