

## **Forensic Research Literature:**

## Crime Scene short term evidence storage (Pre Laboratory Analyses (short term) to Post Laboratory Analyses (Long Term) Freeze Dry

### Refrigerated Forensic Evidence Systems Built For:

- Crime Scene Processing
- Short Term Storage
- Long Term Storage
- Security
- Temperature Monitoring
- Forced Air Circulation
- Stainless Steel Construction
- Environmentally Friendliness





RTF Evidence Storage Systems meet and exceed guidance from Forensic Research Literature: Crime Scene short term evidence storage (Pre Laboratory Analyses (short term) to Post Laboratory Analyses (Long Term) Freeze Dry



#### RTF Provides the BEST way to store and preserve biological evidence for the short and long term

### **Optimizing Storage and Handling of DNA Extracts**

# REFERENCE: Lee SB, Crouse CA. Kline MC: Optimizing storage and handling of DNA extracts; Forensic Sci Rev 22: 131; 2010.

ABSTRACT: Nucleic acid sample storage is of paramount importance in forensic science as well as in epidemiological, clinical. and genetic laboratories. Millions of biological samples, including cells, viruses, and DNA/ RNA are stored every year for diagnostics, research, and forensic science. PCR has permitted the analysis of minute sample quantities. Samples such as bone, teeth, touch samples, and some sexual assault evidence may yield only low-quality and low-quan1ity DNA/RNA. Efficient storage of the extracted DNA/RNA is needed to ensure the stability of the sample over time for retesting of the CODIS STRs, mtDNA, YSTRs, mRNA, and other future marker-typing systems.

Amplification of some or all of these markers may fail because the biological material has been highly degraded contains inhibitors, is too low in quantity, or is contaminated with contemporary DNA. Reduction in recovery has been observed with refrigerated liquid DNA extracts and also those exposed lo multiple freeze-thaw cycle . <u>Therefore, the development of optimal storage</u> and amplification methods is critical for successful recovery of profiles from these types of samples since, in many cases, retesting is necessary