



LAS VEGAS METROPOLITAN POLICE DEPARTMENT
Sheriff Kevin McMahon

Las Vegas Metropolitan Police Department (LVMPD) Forensic Laboratory



LVMPD Forensic Laboratory

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Sheriff Kevin McMahon

Cassandra Robertson, Director of Laboratory Services
LVMPD Criminalistics Bureau

Kimberly Murga, Executive Director
LVMPD Criminalistics Bureau



LVMPD Forensic Laboratory

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- Largest Forensic Laboratory in Nevada
 - 87 laboratory personnel to include administrative staff

| 6 Details | | |
|--|---|--|
| Biology/DNA (34 laboratory personnel) | Chemistry (7 laboratory personnel) | Firearms (16 laboratory personnel) |
| Latent Print (8 laboratory personnel) | Toxicology (13 laboratory personnel) | Administrative/Quality (9 laboratory personnel) |





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- **Biology/DNA**

- *Casework Unit*
- *Combined DNA Index System (CODIS)/Database Unit*
- 2023 Statistics
 - Casework Unit received over 2,400 requests and completed over 3,000 cases
 - Database Unit received over 11,900 convicted offenders and arrestee samples and completed over 12,000 convicted offenders and arrestee samples
 - Entered over 13,000 samples into CODIS and generated over 470 hits





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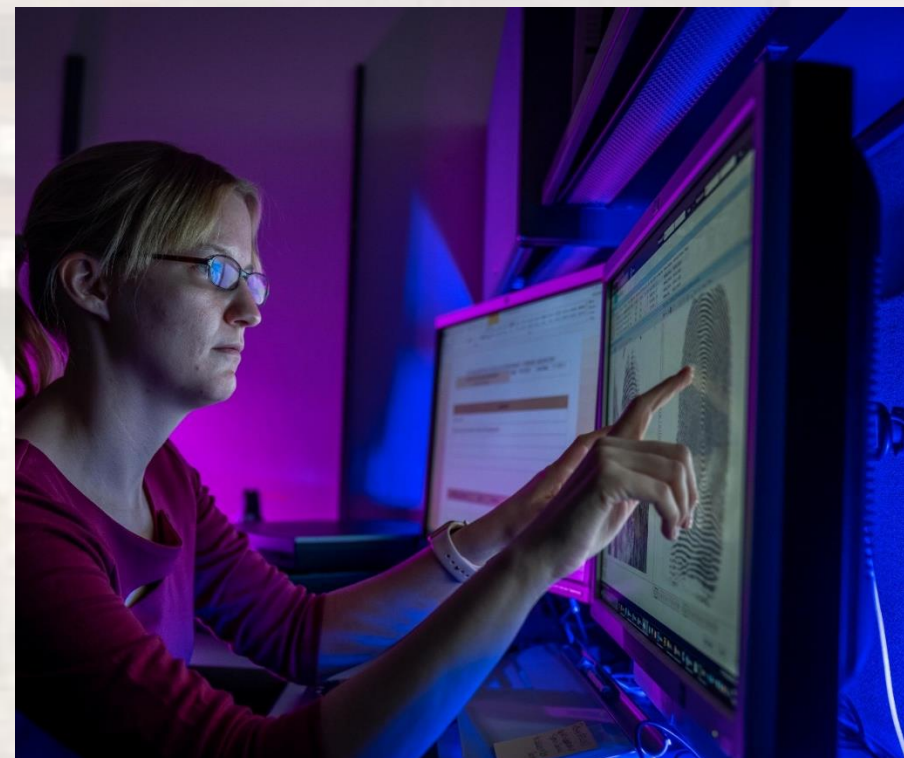
- **Firearms**
 - *Casework Unit*
 - *National Integrated Ballistic Information Network (NIBIN) Unit*
 - 2023 Statistics
 - Received over 7,000 requests and completed over 8,200 cases.
 - Entered over 8,400 samples into NIBIN and generated over 3,200 leads



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- **Latent Print**
 - Processing
 - Comparison
 - Automated Fingerprint Identification (AFIS)
 - 2023 Statistics
 - Received over 240 requests and completed over 280 cases
 - Entered over 500 samples into AFIS and generated over 1,000 hits





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- **Toxicology**

- *Blood Alcohol and Drug Screen/Confirmation Unit*

- *Breath Alcohol Unit*

- **2023 Statistics**

- Received over 6,900 requests and completed over 7,200 cases for Blood Alcohol
- Received over 5,000 requests and completed over 5,400 cases for Drug Screen/Confirmation cases
- Performed over 190 calibrations on Intoxilizer 8000 instruments and performed over 1,500 breath alcohol tests



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- **Chemistry**

- *Seized Drugs Unit*
- *Trace Materials Unit*
- 2023 Statistics
 - Seized Drugs Unit received over 1,500 requests and completed over 1,300 cases
 - Trace Materials Unit received over 70 requests and completed over 60 cases





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CERTIFICATE OF ACCREDITATION

The ANSI National Accreditation Board

Hereby attests that

Las Vegas Metropolitan Police Department
Forensic Laboratory
5605 W. Badura Avenue, Suite 120B, Las Vegas, Nevada 89118 USA

Fulfills the requirements of

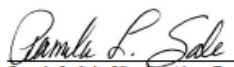
ISO/IEC 17025:2017

Accreditation Requirements for Forensic Testing and Calibration (2023)
FBI Quality Assurance Standards for Forensic DNA Testing Laboratories: 2020
FBI Quality Assurance Standards for DNA Databasing Laboratories: 2020

In the field of

Forensic Testing

This certificate is valid only when accompanied by a current scope of accreditation document.
The current scope of accreditation can be verified at www.anab.org.


Pamela L. Sale, Vice President, Forensics

Expiry Date: 31 December 2026
Certificate Number: FT-0065



- **Administrative/Quality**
 - Accredited by ANSI National Accreditation Board (ANAB)
 - Forensic Testing
 - Forensic Calibration
 - FBI Quality Assurance Standards (QAS) for Biology/DNA Casework and Database
 - Minimum Required Operating Standards (MROS) for NIBIN
 - Maintaining accreditation is a requirement to receive federal grant funding



Quantitative vs. Qualitative Analysis

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Qualitative Analysis

- Analysis in which substance(s) are identified
- Determines if a substance is present



Quantitative Analysis

- Analysis in which the amount or concentration of a substance is determined
- Determines the purity of the substance



LVMPD Seized Drugs Unit

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- Performs quantitative analysis on certain plant material samples to determine if the delta-9-tetrahydrocannabinol (THC) is above 0.3%.
 - There are minimal safety issues with performing quantitative analysis on plant material
- Does not perform quantitative analysis (purity testing) on any other controlled substance





Other Laboratories

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- **Qualitative Analysis**

- Routinely performed by over 250 forensic laboratories in the United States
- This form of analysis is generally accepted in the forensic community

- **Quantitative Analysis**

- Over 45 forensic laboratories in the United States perform quantitative analysis
- Methamphetamine is the most common type of drug analyzed quantitatively
- Most quantitative analysis is performed for Federal charges

Note: There are currently over 400 forensic laboratories in the United States existing at the municipal, county, state, and federal levels



Safety Concerns of Quantitative Analysis

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- All drug samples are ground to a fine powder which aerosolizes the sample
 - Homogenization
- For Fentanyl and its derivatives, aerosolization of the sample is extremely dangerous and requires additional extensive safety precautions
 - Separate space with dedicated HVAC/ductwork and hood required to ensure aerosolized fentanyl does not escape from dedicated space





What Labs Are Performing Fentanyl Quantitation?

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- For investigative purposes only; no criminal charges:
 - Customs and Border Patrol (CBP)
 - Drug Enforcement Administration (DEA)
- National Medical Services (NMS) Lab
 - One private laboratory quantitates fentanyl and 3 fentanyl derivatives (acetyl fentanyl, carfentanil, and sufentanil)
- No local, county or state labs perform fentanyl quantitation



Summary

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- *LVMPD Forensic Laboratory*
 - Performs qualitative analysis for over 700 controlled and non-controlled drugs
 - Performs quantitative analysis for THC on certain plant material samples
- *Other Laboratories*
 - Over 250 forensic laboratories in the United States perform qualitative analysis
 - Over 45 forensic laboratories in the United States perform quantitative analysis
 - Most cases are analyzed for Federal charges
 - Methamphetamine is most common drug analyzed
- *Safety concerns*
 - All drugs are ground into a fine powder which aerosolizes the sample
 - For Fentanyl and its derivatives, aerosolizing the sample is dangerous and can put lives at risk



LVMPD Laboratory Tour

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- The Sentencing Commission and the Joint Interim Standing Committee are welcome to tour the LVMPD Forensic Laboratory Thursday March 21 1000-1130
- An additional date can be scheduled for those who cannot attend March 21
- To RSVP and for details, please contact:
Cassandra Robertson
c14653r@lvmpd.com
702-828-3932

WELCOME TO THE
FORENSIC LABORATORY





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**ANY
QUESTIONS?**