



NMS Labs

CONFIDENTIAL

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Toxicology Report

Report Issued 01/15/2019 17:11

Patient Name GOMEZ-ALONZO FELIPE
Patient ID 2018-07403
Chain 103085
Age 8 Y DOB 05/19/2010
Gender Male
Workorder 19005483

To: 20141
New Mexico Office of Medical Investigators
Attn: Yvonne A. Villalobos
1101 Camino de Salud NE- Ste B
Albuquerque, NM 87102

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Positive Findings:

Table with 4 columns: Compound, Result, Units, Matrix Source. Row 1: Diphenhydramine, 100, ng/mL, 001 - Femoral Blood

See Detailed Findings section for additional information

Testing Requested:

Table with 2 columns: Analysis Code, Description. Rows: 8052B Postmortem, Expanded, Blood (Forensic); 8050U Postmortem, Urine Screen Add-on (6-MAM Quantification only)

Specimens Received:

Table with 5 columns: ID, Tube/Container, Volume/Mass, Collection Date/Time, Matrix Source, Miscellaneous Information. Rows: 001 Gray Top Tube 10.85 mL 12/26/2018 Femoral Blood; 002 Gray Top Tube 10 mL 12/26/2018 Heart Blood; 003 White Plastic Container 9 mL 12/26/2018 Urine

All sample volumes/weights are approximations.

Specimens received on 01/08/2019.



Detailed Findings:

Analysis and Comments	Result	Units	Rpt. Limit	Specimen Source	Analysis By
Diphenhydramine	100	ng/mL	50	001 - Femoral Blood	LC-MS/MS

Other than the above findings, examination of the specimen(s) submitted did not reveal any positive findings of toxicological significance by procedures outlined in the accompanying Analysis Summary.

Reference Comments:

- Diphenhydramine (Benadryl®; Ingredient of Benylin and Panadol; Nytol; Unisom) - Femoral Blood:  
 Diphenhydramine is an antihistamine with sedative and anti-emetic effects. It is rapidly absorbed following oral administration; however, it is frequently given IV. Patients taking this medication are usually warned against the operation of complicated machinery, because of its strong sedative effects.  
 Following a single 50 mg oral dose of diphenhydramine, peak plasma concentrations at 2.3 hr averaged 66 ng/mL.  
 Signs and symptoms of acute diphenhydramine toxicity include tremor, seizures, fever, respiratory depression and cardiac arrhythmias. The average blood diphenhydramine concentrations reported in fatal overdoses were 1400 ng/mL in infants, 4400 ng/mL in children and 15000 ng/mL in adults.  
 The blood to plasma concentration ratio for diphenhydramine is approximately 0.80.

Sample Comments:

001 Physician/Pathologist Name: Lori Proe, DO

Chain of custody documentation has been maintained for the analyses performed by NMS Labs.

Unless alternate arrangements are made by you, the remainder of the submitted specimens will be discarded six (6) weeks from the date of this report; and generated data will be discarded five (5) years from the date the analyses were performed.

Workorder 19005483 was electronically signed on 01/15/2019 16:08 by:

Jolene J. Bierly, M.S.F.S., D-ABFT-FT  
Forensic Toxicologist

Analysis Summary and Reporting Limits:

All of the following tests were performed for this case. For each test, the compounds listed were included in the scope. The Reporting Limit listed for each compound represents the lowest concentration of the compound that will be reported as being positive. If the compound is listed as None Detected, it is not present above the Reporting Limit. Please refer to the Positive Findings section of the report for those compounds that were identified as being present.

Acode 52441B - Diphenhydramine Confirmation, Blood - Femoral Blood

-Analysis by High Performance Liquid Chromatography/ Tandem Mass Spectrometry (LC-MS/MS) for:

Compound	Rpt. Limit	Compound	Rpt. Limit
Diphenhydramine	50 ng/mL		

Acode 8050U - Postmortem, Urine Screen Add-on (6-MAM Quantification only)

-Analysis by Enzyme Immunoassay (EIA) for:

Compound	Rpt. Limit	Compound	Rpt. Limit
Amphetamines	500 ng/mL	Barbiturates	0.30 mcg/mL



**Analysis Summary and Reporting Limits:**

<u>Compound</u>	<u>Rpt. Limit</u>	<u>Compound</u>	<u>Rpt. Limit</u>
Benzodiazepines	50 ng/mL	Methadone / Metabolite	300 ng/mL
Cannabinoids	50 ng/mL	Opiates	300 ng/mL
Cocaine / Metabolites	150 ng/mL	Oxycodone / Oxymorphone	100 ng/mL
Fentanyl / Metabolite	2.0 ng/mL	Phencyclidine	25 ng/mL

Acode 8052B - Postmortem, Expanded, Blood (Forensic) - Femoral Blood

-Analysis by Enzyme-Linked Immunosorbent Assay (ELISA) for:

<u>Compound</u>	<u>Rpt. Limit</u>	<u>Compound</u>	<u>Rpt. Limit</u>
Barbiturates	0.040 mcg/mL	Salicylates	120 mcg/mL
Cannabinoids	10 ng/mL		

-Analysis by Headspace Gas Chromatography (GC) for:

<u>Compound</u>	<u>Rpt. Limit</u>	<u>Compound</u>	<u>Rpt. Limit</u>
Acetone	5.0 mg/dL	Isopropanol	5.0 mg/dL
Ethanol	10 mg/dL	Methanol	5.0 mg/dL

-Analysis by High Performance Liquid Chromatography/Time of Flight-Mass Spectrometry (LC/TOF-MS) for: The following is a general list of compound classes included in this screen. The detection of any specific analyte is concentration-dependent. Note, not all known analytes in each specified compound class are included. Some specific analytes outside these classes are also included. For a detailed list of all analytes and reporting limits, please contact NMS Labs.

Amphetamines, Anticonvulsants, Antidepressants, Antihistamines, Antipsychotic Agents, Benzodiazepines, CNS Stimulants, Cocaine and Metabolites, Hallucinogens, Hypnosedatives, Hypoglycemics, Muscle Relaxants, Non-Steroidal Anti-Inflammatory Agents, Opiates and Opioids.