

**COUNTY OF MONTEREY STANDARD AGREEMENT
(MORE THAN \$100,000)**

This Agreement is made by and between the County of Monterey, a political subdivision of the State of California (hereinafter "County") and:

Central Valley Toxicology, Inc.
(hereinafter "CONTRACTOR").

In consideration of the mutual covenants and conditions set forth in this Agreement, the parties agree as follows:

1.0 GENERAL DESCRIPTION.

1.01 The County hereby engages CONTRACTOR to perform, and CONTRACTOR hereby agrees to perform, the services described in **Exhibit A** in conformity with the terms of this Agreement. The goods and/or services are generally described as follows:

Provide postmortem human forensic toxicology testing services
for the Monterey County Sheriff/Coroner's Office, on an as needed basis.

2.0 PAYMENT PROVISIONS.

2.01 County shall pay the CONTRACTOR in accordance with the payment provisions set forth in **Exhibit A**, subject to the limitations set forth in this Agreement. The total amount payable by County to CONTRACTOR under this Agreement shall not exceed the sum of \$ 160,000.00.

3.0 TERM OF AGREEMENT.

3.01 The term of this Agreement is from 07/01/2018 to 06/30/2020, unless sooner terminated pursuant to the terms of this Agreement. This Agreement is of no force or effect until signed by both CONTRACTOR and County and with County signing last, and **CONTRACTOR may not commence work before County signs this Agreement.**

3.02 The County reserves the right to cancel this Agreement, or any extension of this Agreement, without cause, with a thirty day (30) written notice, or with cause immediately.

4.0 SCOPE OF SERVICES AND ADDITIONAL PROVISIONS.

4.01 The following attached exhibits are incorporated herein by reference and constitute a part of this Agreement:

Exhibit A Scope of Services/Payment Provisions

Exhibit B Guidelines for Obtaining Specimens at Post-Mortem for Analytical Toxicology - Vendor Generated Document

5.0 PERFORMANCE STANDARDS.

- 5.01 CONTRACTOR warrants that CONTRACTOR and CONTRACTOR's agents, employees, and subcontractors performing services under this Agreement are specially trained, experienced, competent, and appropriately licensed to perform the work and deliver the services required under this Agreement and are not employees of the County, or immediate family of an employee of the County.
- 5.02 CONTRACTOR, its agents, employees, and subcontractors shall perform all work in a safe and skillful manner and in compliance with all applicable laws and regulations. All work performed under this Agreement that is required by law to be performed or supervised by licensed personnel shall be performed in accordance with such licensing requirements.
- 5.03 CONTRACTOR shall furnish, at its own expense, all materials, equipment, and personnel necessary to carry out the terms of this Agreement, except as otherwise specified in this Agreement. CONTRACTOR shall not use County premises, property (including equipment, instruments, or supplies) or personnel for any purpose other than in the performance of its obligations under this Agreement.

6.0 PAYMENT CONDITIONS.

- 6.01 Prices shall remain firm for the initial term of the Agreement and, thereafter, may be adjusted annually as provided in this paragraph. The County does not guarantee any minimum or maximum amount of dollars to be spent under this Agreement.
- 6.02 Negotiations for rate changes shall be commenced, by CONTRACTOR, a minimum of ninety days (90) prior to the expiration of the Agreement. Rate changes are not binding unless mutually agreed upon in writing by the County and the CONTRACTOR.
- 6.03 Invoice amounts shall be billed directly to the ordering department.
- 6.04 CONTRACTOR shall submit such invoice periodically or at the completion of services, but in any event, not later than 30 days after completion of services. The invoice shall set forth the amounts claimed by CONTRACTOR for the previous period, together with an itemized basis for the amounts claimed, and such other information pertinent to the invoice. The County shall certify the invoice, either in the requested amount or in such other amount as the County approves in conformity with this Agreement, and shall promptly submit such invoice to the County Auditor-Controller for payment. The County Auditor-Controller shall pay the amount certified within 30 days of receiving the certified invoice.

7.0 TERMINATION.

- 7.01 During the term of this Agreement, the County may terminate the Agreement for any reason by giving written notice of termination to the CONTRACTOR at least thirty (30) days prior to the effective date of termination. Such notice shall set forth the effective date of termination. In the event of such termination, the amount payable under this Agreement shall be reduced in proportion to the services provided prior to the date of termination.

- 7.02 The County may cancel and terminate this Agreement for good cause effective immediately upon written notice to CONTRACTOR. "Good cause" includes the failure of CONTRACTOR to perform the required services at the time and in the manner provided under this Agreement. If County terminates this Agreement for good cause, the County may be relieved of the payment of any consideration to CONTRACTOR, and the County may proceed with the work in any manner, which County deems proper. The cost to the County shall be deducted from any sum due the CONTRACTOR under this Agreement.
- 7.03 The County's payments to CONTRACTOR under this Agreement are funded by local, state and federal governments. If funds from local, state and federal sources are not obtained and continued at a level sufficient to allow for the County's purchase of the indicated quantity of services, then the County may give written notice of this fact to CONTRACTOR, and the obligations of the parties under this Agreement shall terminate immediately, or on such date thereafter, as the County may specify in its notice, unless in the meanwhile the parties enter into a written amendment modifying this Agreement.

8.0 INDEMNIFICATION

- 8.01 CONTRACTOR shall indemnify, defend, and hold harmless the County, its officers, agents, and employees, from and against any and all claims, liabilities, and losses whatsoever (including damages to property and injuries to or death of persons, court costs, and reasonable attorneys' fees) occurring or resulting to any and all persons, firms or corporations furnishing or supplying work, services, materials, or supplies in connection with the performance of this Agreement, and from any and all claims, liabilities, and losses occurring or resulting to any person, firm, or corporation for damage, injury, or death arising out of or connected with the CONTRACTOR's performance of this Agreement, unless such claims, liabilities, or losses arise out of the sole negligence or willful misconduct of the County. "CONTRACTOR's performance" includes CONTRACTOR's action or inaction and the action or inaction of CONTRACTOR's officers, employees, agents and subcontractors.

9.0 INSURANCE REQUIREMENTS

9.01 Evidence of Coverage:

Prior to commencement of this Agreement, the Contractor shall provide a "Certificate of Insurance" certifying that coverage as required herein has been obtained. Individual endorsements executed by the insurance carrier shall accompany the certificate. In addition, the Contractor upon request shall provide a certified copy of the policy or policies.

This verification of coverage shall be sent to the County's Contracts/Purchasing Department, unless otherwise directed. The Contractor shall not receive a "Notice to Proceed" with the work under this Agreement until it has obtained all insurance required and the County has approved such insurance. This approval of insurance shall neither relieve nor decrease the liability of the Contractor.

9.02 Qualifying Insurers:

All coverage's, except surety, shall be issued by companies which hold a current policy holder's alphabetic and financial size category rating of not less than A- VII, according to

the current Best's Key Rating Guide or a company of equal financial stability that is approved by the County's Purchasing Manager.

- 9.03 **Insurance Coverage Requirements:** Without limiting CONTRACTOR's duty to indemnify, CONTRACTOR shall maintain in effect throughout the term of this Agreement a policy or policies of insurance with the following minimum limits of liability:

Commercial General Liability Insurance, including but not limited to premises and operations, including coverage for Bodily Injury and Property Damage, Personal Injury, Contractual Liability, Broad form Property Damage, Independent Contractors, Products and Completed Operations, with a combined single limit for Bodily Injury and Property Damage of not less than \$1,000,000 per occurrence.

(Note: any proposed modifications to these general liability insurance requirements shall be attached as an Exhibit hereto, and the section(s) above that are proposed as not applicable shall be lined out in blue ink. All proposed modifications are subject to County approval.)

Business Automobile Liability Insurance, covering all motor vehicles, including owned, leased, non-owned, and hired vehicles, used in providing services under this Agreement, with a combined single limit for Bodily Injury and Property Damage of not less than \$1,000,000 per occurrence.

(Note: any proposed modifications to these auto insurance requirements shall be attached as an Exhibit hereto, and the section(s) above that are proposed as not applicable shall be lined out in blue ink. All proposed modifications are subject to County approval.)

Workers' Compensation Insurance, if CONTRACTOR employs others in the performance of this Agreement, in accordance with California Labor Code section 3700 and with Employer's Liability limits not less than \$1,000,000 each person, \$1,000,000 each accident and \$1,000,000 each disease.

(Note: any proposed modifications to these workers' compensation insurance requirements shall be attached as an Exhibit hereto, and the section(s) above that are proposed as not applicable shall be lined out in blue ink. All proposed modifications are subject to County approval.)

Professional Liability Insurance, if required for the professional services being provided, (e.g., those persons authorized by a license to engage in a business or profession regulated by the California Business and Professions Code), in the amount of not less than \$1,000,000 per claim and \$2,000,000 in the aggregate, to cover liability for malpractice or errors or omissions made in the course of rendering professional services. If professional liability insurance is written on a "claims-made" basis rather than an occurrence basis, the CONTRACTOR shall, upon the expiration or earlier termination of this Agreement, obtain extended reporting coverage ("tail coverage") with the same liability limits. Any such tail coverage shall continue for at least three years following the expiration or earlier termination of this Agreement.

(Note: any proposed modifications to these insurance requirements shall be attached as an Exhibit hereto, and the section(s) above that are proposed as not applicable shall be lined out in blue ink. All proposed modifications are subject to County approval.)

9.04 Other Requirements:

All insurance required by this Agreement shall be with a company acceptable to the County and issued and executed by an admitted insurer authorized to transact Insurance business in the State of California. Unless otherwise specified by this Agreement, all such insurance shall be written on an occurrence basis, or, if the policy is not written on an occurrence basis, such policy with the coverage required herein shall continue in effect for a period of three years following the date CONTRACTOR completes its performance of services under this Agreement.

Each liability policy shall provide that the County shall be given notice in writing at least thirty days in advance of any endorsed reduction in coverage or limit, cancellation, or intended non-renewal thereof. Each policy shall provide coverage for Contractor and additional insureds with respect to claims arising from each subcontractor, if any, performing work under this Agreement, or be accompanied by a certificate of insurance from each subcontractor showing each subcontractor has identical insurance coverage to the above requirements.

Commercial general liability and automobile liability policies shall provide an endorsement naming the County of Monterey, its officers, agents, and employees as Additional Insureds with respect to liability arising out of the CONTRACTOR'S work, including ongoing and completed operations, and shall further provide that such insurance is primary insurance to any insurance or self-insurance maintained by the County and that the insurance of the Additional Insureds shall not be called upon to contribute to a loss covered by the CONTRACTOR'S insurance. The required endorsement form for Commercial General Liability Additional Insured is ISO Form CG 20 10 11-85 or CG 20 10 10 01 in tandem with CG 20 37 10 01 (2000). The required endorsement form for Automobile Additional Insured endorsement is ISO Form CA 20 48 02 99.

Prior to the execution of this Agreement by the County, CONTRACTOR shall file certificates of insurance with the County's contract administrator and County's Contracts/Purchasing Division, showing that the CONTRACTOR has in effect the insurance required by this Agreement. The CONTRACTOR shall file a new or amended certificate of insurance within five calendar days after any change is made in any insurance policy, which would alter the information on the certificate then on file. Acceptance or approval of insurance shall in no way modify or change the indemnification clause in this Agreement, which shall continue in full force and effect.

CONTRACTOR shall at all times during the term of this Agreement maintain in force the insurance coverage required under this Agreement and shall send, without demand by County, annual certificates to County's Contract Administrator and County's Contracts/Purchasing Division. If the certificate is not received by the expiration date, County shall notify CONTRACTOR and CONTRACTOR shall have five calendar days to send in the certificate, evidencing no lapse in coverage during the interim. Failure by CONTRACTOR to maintain such insurance is a default of this Agreement, which entitles County, at its sole discretion, to terminate this Agreement immediately.

10.0 RECORDS AND CONFIDENTIALITY.

- 10.01 Confidentiality. CONTRACTOR and its officers, employees, agents, and subcontractors shall comply with any and all federal, state, and local laws, which provide for the confidentiality of records and other information. CONTRACTOR shall not disclose any confidential records or other confidential information received from the County or prepared in connection with the performance of this Agreement, unless County specifically permits CONTRACTOR to disclose such records or information. CONTRACTOR shall promptly transmit to County any and all requests for disclosure of any such confidential records or information. CONTRACTOR shall not use any confidential information gained by CONTRACTOR in the performance of this Agreement except for the sole purpose of carrying out CONTRACTOR's obligations under this Agreement.
- 10.02 County Records. When this Agreement expires or terminates, CONTRACTOR shall return to County any County records which CONTRACTOR used or received from County to perform services under this Agreement.
- 10.03 Maintenance of Records. CONTRACTOR shall prepare, maintain, and preserve all reports and records that may be required by federal, state, and County rules and regulations related to services performed under this Agreement. CONTRACTOR shall maintain such records for a period of at least three years after receipt of final payment under this Agreement. If any litigation, claim, negotiation, audit exception, or other action relating to this Agreement is pending at the end of the three year period, then CONTRACTOR shall retain said records until such action is resolved.
- 10.04 Access to and Audit of Records. The County shall have the right to examine, monitor and audit all records, documents, conditions, and activities of the CONTRACTOR and its subcontractors related to services provided under this Agreement. Pursuant to Government Code section 8546.7, if this Agreement involves the expenditure of public funds in excess of \$10,000, the parties to this Agreement may be subject, at the request of the County or as part of any audit of the County, to the examination and audit of the State Auditor pertaining to matters connected with the performance of this Agreement for a period of three years after final payment under the Agreement.
- 10.05 Royalties and Inventions. County shall have a royalty-free, exclusive and irrevocable license to reproduce, publish, and use, and authorize others to do so, all original computer programs, writings, sound recordings, pictorial reproductions, drawings, and other works of similar nature produced in the course of or under this Agreement. CONTRACTOR shall not publish any such material without the prior written approval of County.

11.0 NON-DISCRIMINATION.

- 11.01 During the performance of this Agreement, CONTRACTOR, and its subcontractors, shall not unlawfully discriminate against any person because of race, religious creed, color, sex, national origin, ancestry, physical disability, mental disability, medical condition, marital status, age (over 40), or sexual orientation, either in CONTRACTOR's employment practices or in the furnishing of services to recipients. CONTRACTOR shall ensure that the evaluation and treatment of its employees and applicants for employment and all persons receiving and requesting services are free of such discrimination. CONTRACTOR and any subcontractor shall, in the performance of this Agreement, fully comply with all federal,

state, and local laws and regulations which prohibit discrimination. The provision of services primarily or exclusively to such target population as may be designated in this Agreement shall not be deemed to be prohibited discrimination.

12.0 COMPLIANCE WITH TERMS OF STATE OR FEDERAL GRANTS.

12.01 If this Agreement has been or will be funded with monies received by the County pursuant to a contract with the state or federal government in which the County is the grantee, CONTRACTOR will comply with all the provisions of said contract, to the extent applicable to CONTRACTOR as a subgrantee under said contract, and said provisions shall be deemed a part of this Agreement, as though fully set forth herein. Upon request, County will deliver a copy of said contract to CONTRACTOR, at no cost to CONTRACTOR.

13.0 INDEPENDENT CONTRACTOR.

13.01 In the performance of work, duties, and obligations under this Agreement, CONTRACTOR is at all times acting and performing as an independent contractor and not as an employee of the County. No offer or obligation of permanent employment with the County or particular County department or agency is intended in any manner, and CONTRACTOR shall not become entitled by virtue of this Agreement to receive from County any form of employee benefits including but not limited to sick leave, vacation, retirement benefits, workers' compensation coverage, insurance or disability benefits. CONTRACTOR shall be solely liable for and obligated to pay directly all applicable taxes, including federal and state income taxes and social security, arising out of CONTRACTOR's performance of this Agreement. In connection therewith, CONTRACTOR shall defend, indemnify, and hold County harmless from any and all liability which County may incur because of CONTRACTOR's failure to pay such taxes.

14.0 NOTICES.

14.01 Notices required under this Agreement shall be delivered personally or by first-class, postage pre-paid mail to the County and CONTRACTOR'S contract administrators at the addresses listed below:

FOR COUNTY:	FOR CONTRACTOR:
<p style="text-align: center;">Nina Ryan, Management Analyst II</p> <hr/> <p style="text-align: center;">Name and Title</p>	<p style="text-align: center;">Robert Torres, General Manager</p> <hr/> <p style="text-align: center;">Name and Title</p>
<p style="text-align: center;">Monterey County Sheriff/Coroner's Office 1414 Natividad Road Salinas, CA 93906</p> <hr/> <p style="text-align: center;">Address</p>	<p style="text-align: center;">Central Valley Toxicology, Inc. 1580 Tollhouse Road Clovis, CA 93611</p> <hr/> <p style="text-align: center;">Address</p>
<p style="text-align: center;">ryann1@co.monterey.ca.us 831-755-3708</p> <hr/> <p style="text-align: center;">Phone</p>	<p style="text-align: center;">rtorres@cvtox.com 559 323-9940</p> <hr/> <p style="text-align: center;">Phone</p>

15.0 MISCELLANEOUS PROVISIONS.

- 15.01 Conflict of Interest. CONTRACTOR represents that it presently has no interest and agrees not to acquire any interest during the term of this Agreement, which would directly, or indirectly conflict in any manner or to any degree with the full and complete performance of the services required to be rendered under this Agreement.
- 15.02 Amendment. This Agreement may be amended or modified only by an instrument in writing signed by the County and the CONTRACTOR.
- 15.03 Waiver. Any waiver of any terms and conditions of this Agreement must be in writing and signed by the County and the CONTRACTOR. A waiver of any of the terms and conditions of this Agreement shall not be construed as a waiver of any other terms or conditions in this Agreement.
- 15.04 Contractor. The term "CONTRACTOR" as used in this Agreement includes CONTRACTOR's officers, agents, and employees acting on CONTRACTOR's behalf in the performance of this Agreement.
- 15.05 Disputes. CONTRACTOR shall continue to perform under this Agreement during any dispute.
- 15.06 Assignment and Subcontracting. The CONTRACTOR shall not assign, sell, or otherwise transfer its interest or obligations in this Agreement without the prior written consent of the County. None of the services covered by this Agreement shall be subcontracted without the prior written approval of the County. Notwithstanding any such subcontract, CONTRACTOR shall continue to be liable for the performance of all requirements of this Agreement.
- 15.07 Successors and Assigns. This Agreement and the rights, privileges, duties, and obligations of the County and CONTRACTOR under this Agreement, to the extent assignable or delegable, shall be binding upon and inure to the benefit of the parties and their respective successors, permitted assigns, and heirs.
- 15.08 Compliance with Applicable Law. The parties shall comply with all applicable federal, state, and local laws and regulations in performing this Agreement.
- 15.09 Headings. The headings are for convenience only and shall not be used to interpret the terms of this Agreement.
- 15.10 Time is of the Essence. Time is of the essence in each and all of the provisions of this Agreement.
- 15.11 Governing Law. This Agreement shall be governed by and interpreted under the laws of the State of California.
- 15.12 Non-exclusive Agreement. This Agreement is non-exclusive and both County and CONTRACTOR expressly reserve the right to contract with other entities for the same or similar services.

- 15.13 Construction of Agreement. The County and CONTRACTOR agree that each party has fully participated in the review and revision of this Agreement and that any rule of construction to the effect that ambiguities are to be resolved against the drafting party shall not apply in the interpretation of this Agreement or any amendment to this Agreement.
- 15.14 Counterparts. This Agreement may be executed in two or more counterparts, each of which shall be deemed an original, but all of which together shall constitute one and the same Agreement.
- 15.15 Authority. Any individual executing this Agreement on behalf of the County or the CONTRACTOR represents and warrants hereby that he or she has the requisite authority to enter into this Agreement on behalf of such party and bind the party to the terms and conditions of this Agreement.
- 15.16 Integration. This Agreement, including the exhibits, represent the entire Agreement between the County and the CONTRACTOR with respect to the subject matter of this Agreement and shall supersede all prior negotiations, representations, or agreements, either written or oral, between the County and the CONTRACTOR as of the effective date of this Agreement, which is the date that the County signs the Agreement.
- 15.17 Interpretation of Conflicting Provisions. In the event of any conflict or inconsistency between the provisions of this Agreement and the Provisions of any exhibit or other attachment to this Agreement, the provisions of this Agreement shall prevail and control.

-----*This section left blank intentionally*-----

16.0 SIGNATURE PAGE.

IN WITNESS WHEREOF, County and CONTRACTOR have executed this Agreement as of the day and year written below.

COUNTY OF MONTEREY

CONTRACTOR

By: _____
Contracts/Purchasing Officer

Date: _____

By: _____
Department Head (if applicable)

Date: _____

By: _____
Board of Supervisors (if applicable)

Date: _____

Approved as to Form¹
By: _____

Date: 4/09/2018
County Counsel

Approved as to Fiscal Provisions²
By: _____

Date: 4-10-18
Auditor/Controller

Approved as to Liability Provisions³
By: _____

Date: _____
Risk Management

Central Valley Toxicology, Inc.
Contractor's Business Name*

By: 
(Signature of Chair, President, or Vice-President)*

ROBERT TORRES, Vice President - GM
Name and Title
Date: 3/29/2018

By: _____
(Signature of Secretary, Asst. Secretary, CFO, Treasurer or Asst. Treasurer)*

Date: _____
Name and Title

County Board of Supervisors' Agreement Number: _____, approved on (date): _____

*INSTRUCTIONS: If CONTRACTOR is a corporation, including limited liability and non-profit corporations, the full legal name of the corporation shall be set forth above together with the signatures of two specified officers. If CONTRACTOR is a partnership, the name of the partnership shall be set forth above together with the signature of a partner who has authority to execute this Agreement on behalf of the partnership. If CONTRACTOR is contracting in an individual capacity, the individual shall set forth the name of the business, if any, and shall personally sign the Agreement.

¹Approval by County Counsel is required

²Approval by Auditor-Controller is required

³Approval by Risk Management is necessary only if changes are made in paragraphs 8 or 9

EXHIBIT-A

EXHIBIT-A

To Agreement by and between
Monterey County Sheriff's Office, hereinafter referred to as "County"
AND
Central Valley Toxicology, Incorporated, hereinafter referred to as "CONTRACTOR"

Scope of Services / Payment Provisions

A. SCOPE OF SERVICES

- A.1 CONTRACTOR shall provide services and staff, and otherwise do all things necessary for or incidental to the performance of work, as set forth below:

Post-Mortem toxicology and forensic analysis of specimens shipped to CONTRACTOR'S laboratory by County. Some laboratory test may need to be shipped to an alternative location by CONTRACTOR for processing, and additional send out fees shall apply for this additional level of processing.

All specimens shall be collected in accordance with CONTRACTOR's guidelines, attached to this AGREEMENT as Exhibit B.

A.2 REPORTS

CONTRACTOR shall produce all written reports in the form of toxicology test results within ten (10) days of receipt of the specimens. It is understood by County that send out tests result make take more time.

All written reports required under this AGREEMENT must be delivered to the Monterey County Coroner's Office, 1414 Natividad Road, Salinas, CA 93906 in accordance with the schedule above.

B. PAYMENT PROVISIONS

B.1 COMPENSATION/ PAYMENT

County shall pay an amount not to exceed \$160,000.00 for the performance of all things necessary for or incidental to the performance of work as set forth in the Scope of Work. Prices for each test are listed on the fee schedule on Page 4 of this Exhibit.

Central Valley Toxicology, Inc.
Amount: \$160,000.00
Term: 07/01/2018 to 06/30/2020

EXHIBIT-A

ALL TAXABLE ITEMS SHOULD BE CLEARLY IDENTIFIED. It is preferable to state the tax rate applied in parenthesis and all taxes should be listed as a separate line item.

There shall be no travel reimbursement allowed during this Agreement.

CONTRACTOR warrants that the cost charged for services under the terms of this contract are not in excess of those charged any other client for the same services performed by the same individuals.

B.2 CONTRACTORS BILLING PROCEDURES

Invoicing shall occur monthly. It is preferable to submit statements electronically to the County's invoice tracking system at:

MCSOSheriff.Fiscal@co.monterey.ca.us

If CONTRACTOR lacks the ability to use this system, hard copy invoices will be accepted via mail addressed to the following location:

Monterey County Sheriff/Coroner's Office
Attention: Fiscal Unit Accounts Payable
1414 Natividad Road
Salinas, CA 93906

County may, in its sole discretion, terminate the contract or withhold payments claimed by CONTRACTOR for services rendered if CONTRACTOR fails to satisfactorily comply with any term or condition of this Agreement.

No payments in advance or in anticipation of services or supplies to be provided under this Agreement shall be made by County.

County shall not pay any claims for payment for services submitted more than twelve (12) months after the calendar month in which the services were completed.

DISALLOWED COSTS: CONTRACTOR is responsible for any audit exceptions or disallowed costs incurred by its own organization or that of its subcontractors.

Central Valley Toxicology, Inc.

Amount: \$160,000.00

Term: 07/01/2018 to 06/30/2020

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EXHIBIT-A

CORONER'S FEE SCHEDULE

CORONER'S COMPLETE PANEL (INCLUDES CONFIRMATION/LEVELS):	Comprehensive screening with confirmation and quantification of abused drugs, alcohol and other drugs that are in a range of high therapeutic to overdose levels. Includes prescription and over-the-counter drugs, over 350 drugs and metabolites. Does not include Marijuana.	\$198.00
ADDITIONAL SAMPLE:	Each additional sample add	\$55.00
ROUTINE PANEL (INCLUDES CONFIRMATION/LEVELS):	Ethyl Alcohol, Acetone, Cocaine, Opiates, PCP, Amphetamines, Barbiturates, Benzodiazepines, Methadone, Fentanyl, Tricyclic Antidepressants, and Carisoprodol.	\$155.00
ABUSED DRUG SCREEN:	Cocaine, Opiates, PCP, and Amphetamines; one price includes four individual drug screens. (Qualitative Screen Only)	\$46.00
GENERAL DRUG SCREEN:	Includes prescription and over-the-counter drugs, over 350 drugs and metabolites. (Qualitative Screen Only)	\$83.00
SPECIFIC DRUG SCREEN/CONFIRM/LEVEL:	Screening for a specific drug from a biological matrix with determination and quantitative concentration of primary drug and metabolite when applicable (Quantitative)	\$78.00
BLOOD ALCOHOL:	Blood Ethyl Alcohol with Confirmation in secondary sample (vitreous humor, urine, etc.) when available	\$45.00
SOLVENT/VOLATILE:	Methyl Alcohol, Isopropyl Alcohol, Acetone, Benzene, Chloroform, Toluene, etc. with Confirmation in secondary sample (vitreous humor, urine, etc.) when available	\$78.00
VITREOUS PANEL:	Sodium, Potassium, Chloride, Glucose	\$78.00
UREA NITROGEN:	Urea Nitrogen (Vitreous humor, VUN)	\$30.00
CREATININE:	Creatinine (Vitreous humor)	\$30.00
CARBOXYHEMOGLOBIN:	%Saturation of blood by CO	\$78.00
SUBSTANCE ID:	Identification and confirmation of drugs in capsules, powders, tablets, fluids, organic material.	\$105.00
TISSUE PREP:	Mincing/liquefying preparation of tissue sample.	\$38.00
CORONER'S CAP:	A maximum fee of \$550.00 is charged when the individual test fees are in excess of \$550.00 for a final toxicology report. A cap does not include fees charged by an outside lab or other send outs or additional testing after a final report has been issued.	\$550.00

SEND OUTS: Shipping Costs to CVT will be included in Send Out Charges (Heavy Metals, Lithium, Hep C, HIV, etc.) At Cost

July 1, 2018 through June 30, 2020



Central Valley Toxicology, Inc.

Amount: \$160,000.00

Term: 07/01/2018 to 06/30/2020



Central Valley Toxicology

**GUIDELINES FOR OBTAINING SPECIMENS AT
POST-MORTEM FOR ANALYTICAL TOXICOLOGY**

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These guidelines have been written in order to assist pathologists in the selection of appropriate specimens of body fluids and tissues for post-mortem biochemical and toxicological analysis. They are adapted, with the kind permission of the copyright holders, from those developed by the NHS Regional Laboratory for Toxicology in Birmingham, U.K. [<http://www.toxlab.co.uk/>]. More detailed guidelines for pathologists have been published elsewhere (Forrest 1993; Knight, 1996). It is particularly important to obtain samples from the anatomical sites stated in the following guidelines. This will assist in the interpretation of the results by reducing the problems caused by **post mortem drug redistribution**. In addition to indicating the exact site of specimen collection, it is also important to provide any relevant available details regarding the medical and drug history of the deceased as well as the circumstances of the death. The **CVT Toxicology Requisition** should be completed insofar as possible (see Documentation).

POST MORTEM REDISTRIBUTION OF DRUGS

Following death there can be rapid changes in cellular biochemistry as autolysis proceeds, and drugs and other poisons may be released from their binding sites in tissues and major organs; unabsorbed drug may also diffuse from the stomach. Special care should always be taken in the selection of blood and tissue sampling site(s), the method of collection of samples, and the labeling of sample containers. There is substantial published evidence to show that for most drugs and poisons, including alcohol, there are important differences in their concentration in blood according to the time of specimen collection after death, choice of sampling site, method of sampling and volume of blood collected (Pounder and Jones 1990; Pounder 1993). It is common to observe tenfold differences in the concentration of certain drugs and some chemical poisons in post-mortem blood taken from different sites. Specimens taken from "central" sites, e.g. heart, tend to give particularly "high" values for most analytes. Moreover, certain commonly used "peripheral" sites, such as subclavian, may sometimes give results closer to "central" sites such as the heart. The most consistent quantitative findings are obtained in blood taken from the **femoral vein**, which is the recommended site of specimen collection. It is also possible to observe differences in the concentration of certain drugs obtained from different tissue sampling sites for liver and lung.

TRANSPORT OF SPECIMENS

For general post mortem toxicological analysis at Central Valley Toxicology the submission of **blood, urine, and/or vitreous humor** samples is strongly recommended, should they be available. Appropriate **tissue** (liver *etc.*) and stomach contents should be collected at post mortem but **will not normally be required** by the Laboratory unless special investigations are required; however, they should be retained. It is preferable to send specimens to the Laboratory via a reputable courier service (provided in certain localities by Central Valley Toxicology), or by Federal Express Overnight Service, Monday through Thursday. (The Laboratory is not regularly staffed on weekends.) This is important not only to preserve the physical integrity of the specimens, but also to maintain the chain of custody.

Specimens should be tightly sealed in their respective containers, placed in plastic biohazard bags and securely packaged. Refrigerant is generally advisable; it can be **very hot** in the San Joaquin Valley during the summer, and post mortem samples (particularly those from decomposed bodies) may ferment in transit at any time of year.

SPECIMEN CONTAINERS

Central Valley Toxicology is able to provide appropriate containers for the collection of specimens at post mortem, where cases are submitted to CVT for investigation. Please contact the Laboratory if this service is required. In general, use containers appropriate to the specimen volumes with secure closures. Evacuated blood collection tubes with rubber stoppers are generally satisfactory *as long as they are not overfilled*. Plastic screw-cap containers such as those used for urine or tissue samples in clinical and histology laboratories are often inadequate for long-distance transport.

LABELING AND STORAGE OF SAMPLES

All specimen containers should be clearly labeled with the full name of the deceased, date of collection, the type of specimen and post mortem or reference number. The standard labels affixed to antemortem samples collected in hospitals are normally adequate, but it may be necessary to peel back one or two labels to reveal all the information; please do not affix additional coroner's labels on top of the hospital labels. In the case of post mortem blood specimens, the specific site of sampling should always be given.

All specimens should be stored at 4°C before and during transport to the Laboratory. Each specimen container should be securely sealed to prevent leakage, and packaged in sealed plastic biohazard bags to contain any leakage that might occur. Inclusion of an absorbent inside the biohazard bag is strongly recommended.

Please note that antemortem blood specimens collected from hospital laboratories may lack the original rubber stoppers; they may have plastic snap caps (with or without plastic cups in the top), serum filter tubes, or in the case of hematology specimens metal capillaries with plastic feet designed to make preparation of slides convenient. Such "closures" are **not** satisfactory for transport; they almost always leak, and application of Parafilm® hardly helps. In order to prevent loss of specimen, they must be removed, and the tube closed with a rubber stopper; the cost of discarding a new evacuated tube to get the stopper is trivial, especially when compared to the value of an irreplaceable specimen. If there is serum in a serum separator tube or a cup in the top of the original tube, pour it back into the specimen tube before inserting the stopper.

TRANSPORT**Central Valley Toxicology****SUMMARY OF PREFERRED SPECIMEN CONTAINERS**

BLOOD: Two 6- or 7-ml fluoride/oxalate (gray-top) tubes. Additional blood or blood collected without preservative may be submitted, but will not often be required.

URINE: A 6- or 7-ml tube of urine, with or without preservative, will generally be more than enough. Only a few rare tests (*e.g.* anabolic steroids) will require more. A good screw-cap container is satisfactory if the cap is screwed down **hard**.

VITREOUS HUMOR: Place in an appropriate size of vial. Do not add preservative; vitreous humor is among the last body fluids to be contaminated by microbiota, and preservatives interfere with tests for electrolytes and lithium. If there is sufficient specimen it may be divided between two smaller containers, one with preservative for alcohol testing and one without.

TISSUES: Use a good screw-cap container and screw the cap down **hard**. If available, liver is preferred because more interpretive information is available for liver than for any other solid tissue. Do not fill the container; fermentation can cause the container to break, and a piece of tissue the size of a walnut should be more than enough for all testing.

SPECIMENS

Central Valley Toxicology

BLOOD Specimens (Ideally free-flowing blood)

Importance of site and method of sampling

The sites and methods of blood sampling are important; care taken at this stage will often be rewarded by more reliable and confident interpretation of toxicological findings. The concentrations of some drugs, notably common compounds such as tricyclic antidepressants and opiates, are much more likely to be "falsely" elevated in blood from thoracic and abdominal vessels than in "peripheral" vessels such as femoral veins. Moreover, even blood from these sites is easily contaminated by blood drawn from contiguous, more central vessels if large specimens are taken without ligation. The procedure recommended below for the collection of femoral venous blood should minimize these effects.

Our current recommendation for an **ideal** set of blood specimens for toxicological investigations is as follows:

Blood should be obtained from a peripheral site, preferably a femoral vein, taken with care so as not to draw a large volume containing blood from more central vessels. **The sampling site must be indicated on the label if more than one site is used.** Femoral blood can be taken by cutting the external iliac vein proximal to the inguinal ligament and milking the distal cut end into a plain disposable container, from which it can be transferred into two (volume permitting) fluoride-oxalate tubes. The balance may be retained or submitted to the lab. If femoral blood is not available or is not available in sufficient volume, the order of preference is subclavian, heart, and cavity blood. A total blood volume of at least 12 ml is desired, divided into at least two (appropriately sized) containers lest one should break in transit. (Breakage is now unusual because of the general change from glass to plastic evacuated blood collection tubes, but the possibility of a stopper coming out due to overfilling or fermentation remains.)

URINE

Advances in blood testing have rendered urine specimens far less important for post mortem drug testing than they once were, but if available they should be submitted. Occasionally urine specimens will be useful for glucose or drug testing, but their principal importance is now as a complementary specimen in the quantitative analysis of alcohol. If other specimens are **very** limited in amount, screening may sometimes be done on urine to spare blood or vitreous humor for such quantitative analyses as may be indicated. Urine specimens may be submitted in fluoride-oxalate tubes or in plain containers.

VITREOUS HUMOR

Advances in analytical methodology have made a sample of vitreous humor so potentially valuable that it should be collected and forwarded to the Laboratory whenever possible. This specimen is especially useful for certain biochemical tests such as urea, creatinine, glucose, acetone and electrolytes; for verification of blood alcohol test results; and for investigation of high levels of drugs in blood that may result from postmortem redistribution. More information on the collection of vitreous humor can be found in the recent reviews of Forrest (1993) and Knight (1995, 2002).

DEATHS IN HOSPITAL

For deaths which have occurred in hospital, the hospital pathology laboratory should be contacted as soon as possible to see if any antemortem specimens of urine, blood, serum, or plasma are available, and these should also be sent for analysis. Unless advised to the contrary, analysts will assume that the earliest hospital specimens are the most significant.

The standard labels affixed to antemortem samples collected in hospitals are normally adequate, but it may be necessary to peel back one or two labels to reveal all the information; please do not affix additional coroner's labels on top of the hospital labels.

Please note that antemortem blood specimens collected from hospital laboratories may lack the original rubber stoppers; they may have plastic snap caps (with or without plastic cups in the top), serum filter tubes, or in the case of hematology specimens metal capillaries with plastic feet designed to make preparation of slides convenient. Such "closures" are *not* satisfactory for transport; they almost always leak, and application of Parafilm® hardly helps. In order to prevent loss of specimen, they must be removed, and the tube closed with a rubber stopper; the cost of discarding a new evacuated tube to get the stopper is trivial, especially when compared to the value of an irreplaceable specimen. If there is serum in a serum filter tube or a cup in the top of the original tube, pour it back into the specimen tube before inserting the stopper.

COLLECTION OF OTHER SPECIMENS

Other types of specimen will not normally be required, but they may be valuable in the investigation of certain cases and should be retained. All retained tissues should be placed in separate, clearly labeled, sample containers to remove any chance of cross-contamination. A preservative such as formalin must not be used on specimens for potential toxicological evaluation. Refrigeration, or freezing for long-term storage, is recommended.

Liver

This tissue may be useful in certain complex poisoning cases or when satisfactory samples of body fluids are not available. It is usual to take a portion of the **right lobe** of liver since it should be uncontaminated with bile and less affected by drug diffusion from the stomach; a portion the size of a walnut will be more than sufficient for analytical purposes. The particular value of liver is that more interpretive data are available for liver than for any other solid tissue.

Gastric contents

These materials may be useful in the investigation of oral cyanide poisoning, or in cases of rapid death where relatively large amounts of unabsorbed drug may be found in the stomach. In such cases a representative sample of the gastric contents should be retained, and the total volume recorded. If distinct tablets or capsules are observed in the stomach contents, these should be carefully extracted and put into a separate container. Identification of such material may be carried out by reference to a database of pharmaceutical products, or by direct analysis at the Laboratory.

Brain, lung, spleen, muscle, bile, etc.

These specimens do not generally add any useful information, and are only indicated when more desirable specimens (blood, urine, vitreous humor, liver) are not available. Occasionally decomposition fluids may be little but oil; these are not satisfactory for testing.

INVESTIGATION OF SPECIFIC DRUGS AND POISONS**Alcohol (ethanol)**

Where there has been putrefaction or extensive injury to the body or several days between death and autopsy, it is advisable to take both blood and urine specimens for alcohol analysis. It is also advisable to take a specimen of vitreous humor if available, unless the body has been immersed in water for an extended period of time. Ethanol can sometimes be lost or generated from blood specimens if they have become contaminated by bacteria or fungi. It is the policy of Central Valley Toxicology to test an alternative fluid (if available) whenever alcohol is detected in a post mortem blood sample; there is no need to request this precaution. While fluoride preservative is very strongly recommended for blood samples, it is discouraged for vitreous humor samples unless there is sufficient sample to divide into two portions, one with preservative and one without. Acetone is detected in the course of alcohol tests by gas chromatography (the only method used at CVT), and if more than traces are noted in blood it will be quantitated; it will also be measured in vitreous humor or urine if available. If indicated, further testing will be done for glucose and yeast. (If the subject's history or the circumstances indicate, it is still best to specifically request testing for glucose and ketones in vitreous humor.) In cases where the decedent suffered a blow to the head (e.g., from a fall) with subsequent formation of a **subdural hematoma**, the alcohol level in the subdural blood (or clot) may more accurately reflect the alcohol level at the time of the blow than would any other specimen, particularly if death did not come for some time.

Carbon Monoxide (CO)

Carbon monoxide concentrations tend to decrease with time; blood specimens should be submitted promptly and in containers without excessive headspace; fluoride preservative is recommended. Please note that specimens other than whole blood are of very little or no utility for carbon monoxide testing. If blood is not available carbon monoxide poisoning must be diagnosed by the appearance of the body and the circumstances of death.

Opiates

The standard screening test for opiates will readily detect morphine, codeine, and hydrocodone; it *may* detect oxycodone, but the latter will be more reliably detected by a specific immunoassay. For this reason it is important to advise the Laboratory if oxycodone was available to the decedent or is otherwise suspected. It is the custom of CVT to measure and report *total* morphine, because that is normally sufficient, and because far more interpretive information is available for *total* than for free morphine. In some cases it is appropriate to test for both total and free morphine in blood, and in rare cases it may even be necessary to measure free and total morphine in vitreous humor. 6-monoacetylmorphine (6-MAM) indicates heroin use, but it is rapidly metabolized and is unstable in blood. If seen it is reported.

Cocaine

Cocaine is relatively unstable in blood due to the presence of viable metabolically active enzymes even in post mortem blood. Therefore it is recommended that in cases where cocaine ingestion is suspected, blood specimens should be placed in fluoride/oxalate tubes. It is also advisable to store the specimens at 4°C immediately after collection and to deliver them to the Laboratory promptly. Cocaethylene, formed in the body when cocaine and ethanol are taken together, is routinely tested for as part of the cocaine confirmation procedure, and if detected it is noted on the report.

Amphetamines

Methamphetamine and amphetamine are routinely screened for, and while the screening tests will also detect MDMA and its metabolite, MDA, it is helpful to advise the Laboratory if MDMA is suspected. Post mortem blood samples not infrequently give false positive immunoassay screening tests for amphetamines due to beta-phenethylamine, and if the history does not seem consistent with methamphetamine use specimens will be further screened by LCMS before proceeding to confirmation and quantitation by GCMS. CVT routinely differentiates between *d*- and *l*-methamphetamine by stereospecific GCMS and reports the *d*- isomer; there is no need to specially request the differential analysis.

BIOCHEMICAL INVESTIGATIONS

Biochemical investigations carried out on post mortem blood are generally of limited value. Biochemical analysis of vitreous humor can sometimes be useful but the interpretation of potassium and sodium concentrations is complex. The presence of **acetone** in blood and vitreous humor or urine may be an indication of alcoholic or diabetic ketoacidosis. Low **glucose** levels in post mortem vitreous humor are common due to continued cellular metabolism after death, and are not an indicator of perimortem hypoglycemia. If the injection of an **insulin** overdose is suspected, post mortem blood and even vitreous humor are not suitable for analysis of insulin and C-peptide. Due to the instability of these products and the lack of any comparative data, the interpretation of the findings would be very difficult, even if a clinical laboratory were found that would agree to do the test(s). For cases where **lithium** may be involved (*i.e.*, the patient had been prescribed lithium), antemortem serum or unpreserved vitreous humor are preferred because very high potassium levels interfere with measurement by the ion selective electrode method used at CVT; in case of such interference samples will be referred for measurement by atomic absorption.

ANALYSIS

Central Valley Toxicology

ANALYTICAL METHODS

The Laboratory uses a wide range of modern methods to analyze biological specimens for the presence of drugs and poisons, including:

- Enzyme immunoassay (EIA)
- Gas chromatography (GC)
- Gas chromatography-mass spectrometry (GCMS)
- Liquid chromatography-mass spectrometry (LCMS)
- Liquid chromatography-tandem mass spectrometry (LCMS-MS)

GENERAL ANALYTICAL WORK FLOW

Limited requests for drug and alcohol testing will be handled in an appropriately simplified manner; the general procedure for coroners' "complete" drug screens is of course more extensive. Specimens arriving in the morning (generally by 10:00 AM) will be tested beginning the same day; specimens received later may be processed on the following business day. Appropriate immunoassays and alcohol tests are performed on the first day; extracts for general drug screens by LCMS are prepared simultaneously and chromatography begun in the afternoon so that the data can be reviewed the following business day. Individual report templates are prepared by the clerical section with appropriate specimen descriptions, billing and reporting information on the first day of testing. On the second business day samples are distributed for appropriate further testing as indicated in the original request or by the results already obtained. Many drugs are satisfactorily identified and quantitated by the original LCMS procedure; some are better or more efficiently confirmed and quantitated by specific chromatographic tests. Most such specific chromatographic tests are performed at least once a week; some low volume tests may be performed less frequently in order to consolidate several samples into a single run. Rare tests (e.g. psilocin, kavain) will be done on an as-needed basis because there is little chance of having more than one sample in two weeks. When no further testing is indicated, the job order is delivered to the clerical section for completion of written reports. Reports are proofread and checked against the original data by at least one Laboratory Director before they are signed and released.

The usual screening procedures at Central Valley Toxicology will generally detect *unsuspected* pharmaceutical and illicit drugs at high therapeutic to toxic levels, but drugs present at low levels, whether because the decedent was noncompliant and the levels declined into the subtherapeutic range (e.g., anticonvulsants), or because the drugs are active at very low levels (e.g., LSD or fentanyl), may be overlooked. For this reason it is vitally important to advise the lab of any drugs that were available or are suspected. Inspection of the chromatographic data for a specific drug can be done to a significantly higher level of sensitivity than for drugs in general.

ANALYTICAL REPORT AND INTERPRETATION

Median completion time, from specimen receipt to completed report, is five to six calendar days, and even the most complicated cases rarely take more than two weeks. Verbal reports of initial screening and alcohol test results may be available in late afternoon for specimens that arrive by 10:00 AM Monday through Friday, and **will** be available by the following business day.

Completion times of more than two weeks are generally due to follow-on requests for more extensive testing, submission of supplementary samples, or referral of specialty tests (e.g., anabolic steroids or heavy metals) to other laboratories. On occasion it may take a very long time to obtain certified standards for new or highly unusual drugs. In case of unusual delays a preliminary written report will be issued, with the completed report to follow.

Interpretation of findings can present a problem where there is little background information concerning the case, or where specimen collection has been inadequate. It is difficult to provide any valid comment on the significance of quantitative measurements carried out on a single blood specimen from an unknown site. Interpretation of findings can also be difficult in drug abusers where the likely degree of "tolerance" to a drug is unclear because of inadequate history. In addition, much of the published literature on forensic toxicology relating to so-called "fatal" blood concentrations can be misleading in certain circumstances. It is a common misconception that the concentration of a drug (or poison) found in post mortem blood is equivalent to that obtained in the blood or plasma of the deceased at the time of death. Interpretation of findings will always need to take account of possible changes in drug distribution after death. The recent history, age and state of health of the deceased are also important factors to be taken into account in the interpretation of findings. **The Laboratory is always happy to discuss individual cases or give further advice on the interpretation of findings.**

Central Valley Toxicology customarily includes drug level reference ranges on its reports, but some clients prefer that they be omitted in order to avoid misinterpretation by the less knowledgeable. A call to the Laboratory will take care of this.

Reports are most often delivered by fax or E-mail, followed by two hard copies via U.S. Mail or courier. Some clients prefer simpler arrangements, which are easily made by a telephone call.

Toxicology Requisition Forms

The following documentation is desirable in every case:

- Name of the submitting agency.
- Subject's full name, age, sex and date of death.
- Investigator, pathologist, and agency case number.
- Specimens submitted; the specimens received will be compared to those listed on the requisition form.
- The apparent cause of death.
- Drugs and poisons available, if known.
- Current drug therapy, if known.
- Drugs administered by emergency personnel, if any.
- Comments/Circumstances of death.
- Tests requested.

All of the above information is required to enable the Laboratory to provide efficient service and reliable interpretation of results.

Toxicology requisition forms are available from the Laboratory, and if completed in full will provide us with the necessary information. The forms may be customized if desired.

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CONTACTS**Central Valley Toxicology**

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(Leave a voice message after hours.)

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Mail: 1580 Tollhouse Road
Clovis, California 93611

Web site: <http://www.centralvalleytoxicology.com/>



~A~

Acebutolol
Acetaminophen
Acetone
6-mono-acetylmorphine
Albuterol
 α -Hydroxyalprazolam
 α -Hydroxytriazolam
Alprazolam
Amantadine
7-Aminoflunitrazepam
Amiodarone
Amitriptyline
Amlodipine
Amobarbital
Amoxapine
d-Amphetamine
l-Amphetamine
Aprobarbital
Atenolol
Atropine

~B~

Baclofen
Barbital
Benzoyllecgonine
Benzphetamine
Benztropine
Brodifacoum
Bromazepam
Bupivacaine
Buprenorphine
Bupropion
Buspirone
Butabarbital
Butalbital
Butorphanol

~C~

Caffeine
Captopril
Carbamazepine
Carbon Monoxide
Carisoprodol
Celecoxib
Cetirizine
Chlordiazepoxide
Chloroform
Chlorpheniramine
Chlorpromazine
Cimetidine
Citalopram
Clomipramine
Clonazepam
Clonidine
Clorazepate
Clozapine
Cocaethylene

~C~ (cont.d)

Codeine
Coniine
Cotinine
Cyanide
Cyclobenzaprine
Cyclosporine

~D~

Demoxepam
Desalkylfurazepam
Desipramine
Desmethyldoxepin
Dextromethorphan
Diazepam
Digoxin
Dihydrokavain
Diltiazem
Dimenhydrinate
Diphenhydramine
Disopyramide
Doxapram
Doxazosin
Doxepin
Doxylamine
Droperidol

~E~

EDDP
EME
Edrophonium
Ephedrine
Estazolam
Ethchlorvynol
Ethyl Alcohol
Ethylene Glycol

~F~

Fenoprofen
Fentanyl
Fexofenadine
Flunitrazepam
Fluoxetine
Fluphenazine
Flurazepam
Fluvoxamine
Furosemide

~G~

Gabapentin
GHB
Glutethamide
Guaifenesin

~H~

Halazepam
Haloperidol

~H~ (cont.d)

Heroin
Hexobarbital
Hydrocodone
Hydromorphone
Hydroxychloroquine
Hydroxyzine

~I~

Ibuprofen
Imipramine
Indomethacin
Isoniazid
Isopropanol

~K~

Kavain
Ketamine

~L~

Lamotrigine
LAMPA
Lidocaine
Lisinopril
Lithium
Loratadine
Lorazepam
Loxapine
LSD

~M~

Maprotiline
MDA
MDMA
MDPV
Medazepam
Meperidine
Mephedrone
Mephobarbital
Meprobamate
Mesoridazine
Methadone
d-Methamphetamine
l-Methamphetamine
Methanol
Methapyrilene
Methaqualone
Methocarbamol
Methylone
Methylphenidate
Methypylon
Methylone
Metoclopramide
Metoprolol
Mexiletine
Midazolam
Mirtazapine
Morphine (Total/Free)

~N~

Naloxone
Naltrexone
NAPA
Naproxen
Nefazodone
Nicotine
Nifedipine
Nitrazepam
Norchlordiazepoxide
Norclomipramine
Nordiazepam
Nordoxepin
Norflunitrazepam
Norfluoxetine
Normeperidine
Norpropoxyphene
Nortriptyline

~O~

Olanzapine
Orphenadrine
Oxaprosin
Oxazepam
Oxycodone
Oxymorphone
Oxyphenbutazone

~P~

Papaverine
Paroxetine
PCP
Penicillin G
Pentazocine
Pentobarbital
Perphenazine
Phenacetin
Phendimetrazine
Pheniramine
Phenmetrazine
Phenobarbital
Phentermine
Phenylbutazone
Phenylephrine
Phenylpropanolamine
Phenyltoloxamine
Phenytoin
Prazepam
Prednisolone
Prednisone
Primidone
Procainamide
Procaine
Prochlorperazine
Promazine
Promethazine
Propafenone
Propoxyphene
Propranolol



~P~ (cont.d)

Protriptyline
Psilocin
Psilocybin
Pseudoephedrine
Pyrilamine

~Q~

Quazepam
Quetiapine
Quinidine
Quinine

~R~

Ranitidine
Reserpine
Risperidone

~S~

Salicylic Acid
Salicylamide
Scopolamine
Secobarbital
Selegiline
Sertraline
Sildenafil
Spironolactone
Strychnine
Sulfamethoxazole
Sulfisoxazole
Sumatriptan
Synthetic Cannabinoids

~T~

Talbutal
Temazepam
Temoxifen
Terbutaline
Terpin Hydrate
Tetracaine
 Δ^9 THC
 Δ^9 THC-OH
 Δ^9 THC-COOH
Theobromine
Theophylline
Thiopental
Thioridazine
Thiothixene
Topiramate
Toluene
Tramadol
Trazodone
Triamterene
Triazolam
Trichloroethanol
Trifluoperazine
Triflupromazine
Trihexyphenidyl

~T~ (cont.d)

Trimethobenazamide
Trimethoprim
Trimipramine
Tripeleennamine

~V~

Valproic Acid
Vardenafil
Venlafaxine
Verapamil

~W~

Warfarin

~X~

Xylazine

~Y~

Yohimbine

~Z~

Ziprasidone
Zolpiclone
Zolpidem

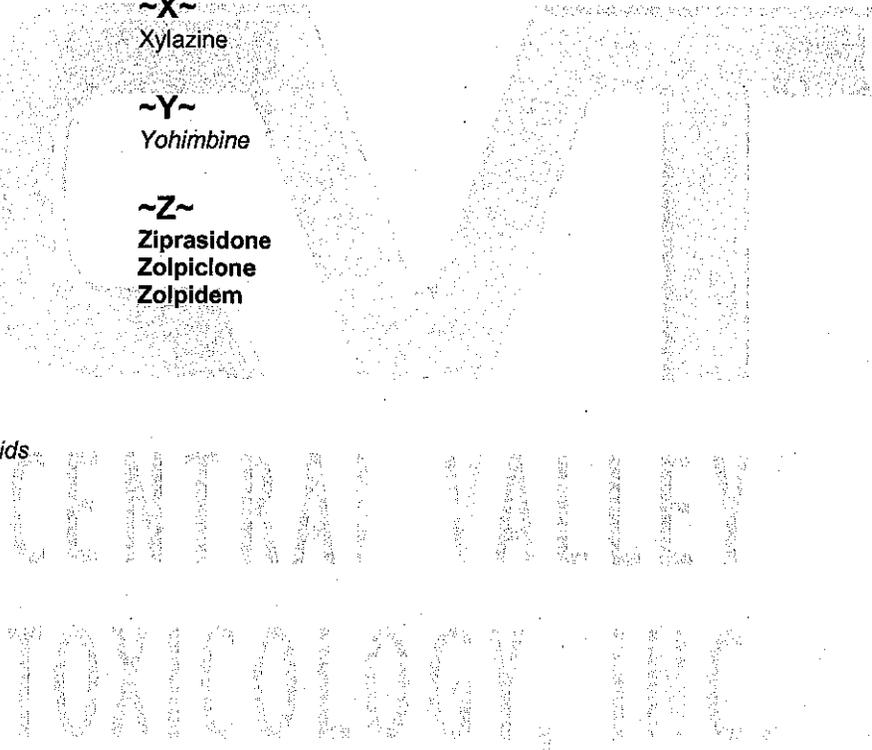


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CENTRAL VALLEY TOXICOLOGY
07/01/2018 TO 06/30/2020