TEXAS FORENSIC SCIENCE COMMISSION

Justice Through Science

FINAL REPORT ON LABORATORY SELF-DISCLOSURE NO. 21.72, BRAZORIA COUNTY SHERIFF'S OFFICE CRIME LABORATORY (BLOOD ALCOHOL)



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I. COMMISSION BACKGROUND

A. History and Mission of the Texas Forensic Science Commission

The Texas Forensic Science Commission (Commission) was created during the 79th Legislative Session in 2005 with the passage of HB1068. The Act amended the Code of Criminal Procedure to add Article 38.01, which describes the composition and authority of the Commission.¹ During subsequent legislative sessions, the Texas Legislature further amended the Code of Criminal Procedure to clarify and expand the Commission's jurisdictional responsibilities and authority.²

The Commission has nine members appointed by the Governor of Texas.³ Seven of the nine commissioners are scientists or medical doctors and two are attorneys (one prosecutor nominated by the Texas District and County Attorney's Association and one criminal defense attorney nominated by the Texas Criminal Defense Lawyer's Association).⁴ The Commission's Presiding Officer is Jeffrey Barnard, MD. Dr. Barnard is the Chief Medical Examiner of Dallas County and Director of the Southwestern Institute of Forensic Sciences in Dallas.

B. Commission Jurisdiction

1. Investigations of Professional Negligence or Professional Misconduct Resulting from Complaints and Laboratory Self-Disclosures

¹Act of September 1, 2005, 79th Leg., R.S., ch. 1224, § 1 (codified at Tex. Code of Crim. Proc. art. 38.01)

² See e.g., Act of June 14, 2013, 83rd Leg., R.S., ch. 782, §§ 2-4; Act of September 1, 2015, 84th Leg., R.S., ch. 1215, §§ 8-9; Act of September 1, 2015, 84th Leg., R.S., ch. 1276, §§ 1-7.

³ Tex. Code of Crim. Proc.art. 38.01 § 3.

⁴ *Id*.

Texas law requires the Commission to "investigate in a timely manner, any allegation of professional negligence or professional misconduct that would substantially affect the integrity of the results of a forensic analysis conducted by crime laboratory." The term "forensic analysis" is defined as a medical, chemical, toxicological, ballistic, or other examination or test performed on physical evidence, including DNA evidence, for the purpose of determining the connection of the evidence to a criminal action. The statute excludes certain types of analyses from the "forensic analysis" definition, such as latent print analysis, a breath test specimen, and the portion of an autopsy conducted by a medical examiner or licensed physician.

Crime laboratories must also report professional negligence or professional misconduct to the Commission.⁸ The statute does not define the terms "professional negligence" and "professional misconduct." The Commission has defined those terms in its administrative rules.⁹

2. Accreditation Jurisdiction

The Commission is charged with accrediting crime laboratories and other entities that conduct forensic analyses of physical evidence for use in criminal proceedings.¹⁰ The term "crime laboratory" includes a public or private laboratory or other entity that conducts a forensic analysis subject to this article.¹¹

⁵ Tex. Code of Crim. Proc.art. 38.01 § 4(a)(3).

⁶ Tex. Code of Crim. Proc.. art. 38.35(a)(4).

⁷ For a complete list of statutory exclusions, see, Tex. Code of Crim. Proc. art 38.35 (a)(4)(A)-(F) and (f).

⁸ *Id.* at § 4(a)(1)-(2). Additionally, pursuant to the Forensic Analyst Licensing Program Code of Professional Responsibility, members of crime lab management shall make timely and full disclosure to the Texas Forensic Science Commission of any non-conformance that may rise to the level of professional negligence or professional misconduct. *See*, 37 Tex. Admin. Code § 651.219(c)(5) (2020)(Tex. Forensic Science Comm'n, Code of Professional Responsibility).

⁹ 37 Tex. Admin. Code §§ 651.302(7), (8) (2020)(Tex. Forensic Science Comm'n, Definitions).

¹⁰ Tex. Code of Crim. Proc.. art. 38.01 § 4-d(b).

¹¹ Tex. Code of Crim. Proc. art. 38.35 § (a)(1)

3. Licensing Jurisdiction

Under Texas law, a person may not act or offer to act as a forensic analyst unless the person holds a Forensic Analyst License issued by the Commission.¹² While accreditation is granted to the entities that perform forensic analysis, licensing is a credential obtained by the individuals who practice the forensic analysis. The licensing program took effect on January 1, 2019.

The law defines the term "forensic analyst" as "a person who on behalf of a crime laboratory [accredited by the Commission] that technically reviews or performs a forensic analysis or draws conclusions from or interprets a forensic analysis for a court or crime laboratory.¹³

Pursuant to its licensing authority, the Commission may take disciplinary action against a license holder or applicant for a license on a determination by the Commission that a license holder or applicant for a license has committed professional misconduct or has violated Texas Code of Criminal Procedure Article 38.01 or an administrative rule or other order by the Commission.¹⁴ Disciplinary proceedings and the process for appealing a disciplinary action by the Commission are governed by the Judicial Branch Certification Commission.¹⁵

C. Jurisdiction Applicable to this Complaint

The subject laboratory of this complaint, the Brazoria County Sheriff's Office Crime Laboratory (BCSOCL) is accredited by the ANSI-ASQ National Accreditation Board (ANAB) under the International Organization for Standardization (ISO) accreditation standard 17025: 2017. This report is the result of an investigation based on BCSOCL's January 2022 self-disclosure to the Commission. Laboratory self-disclosure is required under the Texas Code of

¹² Tex. Code of Crim. Proc. art. 38.01§ 4-a(b); 37 Tex. Admin Code § 651.203 (2018)(Tex. Forensic Science Comm'n, Forensic Subject to Comm'n Licensing; Categories of Licensure).

¹³ Tex. Code of Crim. Proc. art. 38.01 § 4-a(a)(2).

¹⁴ Tex. Code of Crim. Proc.. art. 38.01 § 4-c; 37 Tex. Admin Code § 651.216(b) (2019) (Tex. Forensic Science Comm'n, Disciplinary Action).

¹⁵ Tex. Code of Crim. Proc.. art. 38.01 § 4-c(e); 37 Tex. Admin. Code § 651.216(f) (2021)(Tex. Forensic Science Comm'n, Disciplinary Action).

Criminal Procedure as well as the investigative and accreditation rules of the Commission, and the Texas Code of Professional Responsibility for Forensic Analysts and Crime Laboratory Managers.¹⁶

D. Limitations of this Report

The Commission's authority contains important statutory limitations. For example, no finding by the Commission constitutes a comment upon the guilt or innocence of any individual.¹⁷ The Commission's written reports are not admissible in civil or criminal actions nor does the Commission have the authority to subpoena documents or testimony.¹⁸ Information the Commission receives during any investigation is dependent upon the willingness of stakeholders to submit relevant documents and respond to questions. The information gathered in this report is not subject to the standards for admission of evidence in a courtroom. For example, no individual testified under oath, was limited by either the Texas or Federal Rules of Evidence (e.g., against the admission of hearsay) or was subject to cross-examination under a judge's supervision.

II. BACKGROUND AND SUMMARY OF DISCLOSURE

A. Disclosure and Investigative Decision by the Commission

This report contains observations and recommendations regarding a self-disclosure filed by the BCSOCL. (*See* **Exhibit A**). In November 2021, the laboratory director became aware of serious concerns regarding the laboratory's approach to blood alcohol calibration and related data interpretation. At the time, the laboratory director had recently assumed his position upon retirement of the former director, who had served in that capacity for decades. The Commission

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¹⁶ Tex. Code of Crim. Proc., art. 38.01 § 4-a(a)(2); 37 Tex. Admin Code § 651.219 (2020)(Code of Professional Responsibility).

 $^{^{17}}$ *Id*. at § 4(g)

¹⁸ *Id.* at § 11.

accepted the disclosure for investigation and formed an investigative panel at its April 22, 2022 quarterly meeting. The Investigative Panel consists of Sarah Kerrigan, Ph.D., Jasmine Drake, Ph.D., and Mark Daniel, Esq.

B. Summary of the Disclosure

On or about November 16, 2021, the Jefferson County Crime Laboratory Director contacted the BCSOCL to express concern regarding blood alcohol cases Jefferson County was in the process of technically reviewing for the BCSOCL. At the time, BCSOCL outsourced the technical review of blood alcohol cases to Jefferson County because the laboratory only had one qualified and licensed forensic toxicologist on staff. The concerns raised by Jefferson County centered around whether the laboratory was properly evaluating the variation between blood alcohol samples to ensure compliance with the SOP provision requiring variation to not exceed 10%. In summary, the laboratory disclosure states the following:

- 1. The laboratory ran blood alcohol samples in triplicate. The applicable standard operating procedure (SOP) stated that individual case sample results from the triplicate injections must agree within ten percent of each other. If the analyst observed variation greater than 10% between samples, results could not be reported out and the samples needed to be re-analyzed.
- 2. However, a different provision of the SOP stated that an analyst could opt to consider *only four of the six* values resulting from the triplicate run in assessing whether sufficient agreement was present. The SOP provided *no guidance as to which values could be dropped* in assessing whether the 10% variation cutoff was met. Nor did the SOP provide a scientific justification for the practice of disregarding data generated by the triplicate run.
- 3. When the laboratory director and quality manager reviewed practices in casework, they discovered that there was no consistent approach to which of the data points were dropped in assessing agreement, though in most cases affected the analyst chose to ignore outlier data to stay within the 10% requirement. The new lab management recognized immediately that disregarding outlier data is a scientifically unacceptable practice.
- 4. The SOP also stated that when assessing variation, the value should be truncated to no less than three decimal places. The laboratory observed that

this truncation rule was not being followed where the inter-sample variation fell between 10-11%.

After conducting an internal review of cases dating from 2018, the laboratory identified 42 samples from 41 cases that fell outside the 10% sample variation requirement. These samples fall into the following categories:

- 1. Nine (9) cases had data entry errors.
 - a. Seven in which, once the correct values were inputted, the variation was found to fall within the 10% requirement.
 - b. One outside the 10% requirement, but the sample was destroyed.
 - c. One outside the 10% requirement, but no final report was issued.
- 2. Ten (10) cases were reported as either ethanol less than .0025 g/100mL or no ethanol detected.
- 3. Five (5) cased were destroyed, and thus the blood could not be reanalyzed (including those described in 1.b above).
- 4. Seven (7) cases had data that did not meet the 10% requirement, and the blood samples were still available for re-analysis.
- 5. Twelve (12) cases included reports that had not yet been issued (including the sample described in 1.c above).

Of the seven previously reported cases sent to Quality Forensic Toxicology for re-analysis (item 4 above), six had amended results lower than what the BCSOCL had originally reported. One of the cases had a higher blood alcohol concentration. All seven cases sent for re-analysis had results that exceeded the legal limit for blood alcohol concentration.

Of the twelve cases where reports had not yet been issued (item 5 above), the Texas Department of Public Safety (DPS) regional crime laboratory in Houston analyzed five of the cases. Three cases had lower results than what BCSOCL would have reported, and two cases had higher results. BCSOCL is currently awaiting instruction from the Brazoria County District Attorney's Office regarding DPS re-analysis of the remaining seven (7) cases.

All 41 cases have a corrective action report detailing the issues observed in the case file. (*See* Exhibit B). In addition, the BCSOCL disclosed the issues and affected cases to the Brazoria County District Attorney's Office (*See* Exhibit C) and created a website where the corrective action report regarding the issues in blood alcohol analysis is accessible to criminal justice partners and members of the public. ¹⁹ The BCSOCL has also included subsequent unrelated corrective action reports (CARs) on the website to increase transparency for stakeholders.

III. INVESTIGATION

Commission staff reviewed extensive documentation provided by the laboratory, including relevant standard operating procedures, quality documents and data demonstrating the issues described in the self-disclosure. On February 17, 2022, Commission staff and Dr. Sarah Kerrigan met with BCSOCL leadership to discuss the issues involved in the disclosure and to ensure a complete and accurate understanding of the data presented by the laboratory. Commission staff had multiple follow-up telephone conferences with laboratory leadership to monitor progress during the retroactive case review process for blood alcohol.

IV. COMMISSION FINDINGS

A. Professional Misconduct or Professional Negligence

The Commission finds no evidence to support a finding of "professional negligence" or "professional misconduct" as those terms are defined in the Texas Administrative Code.²⁰ The previous laboratory director is no longer available to interview regarding historical decision-

²⁰ Definitions of "professional negligence" and "professional misconduct" may be found in the Commission's administrative rules here:

https://texreg.sos.state.tx.us/public/readtac\$ext.TacPage?sl=R&app=9&p_dir=&p_rloc=&p_tloc=&p_ploc=&pg=1 &p_tac=&ti=37&pt=15&ch=651&rl=302

¹⁹ https://brazoriacountytx.gov/departments/sheriff-s-office/crime-lab

making, the laboratory suspended toxicology casework and the laboratory's sole toxicologist announced his retirement during this investigation. Upon recognizing the laboratory's scientifically unsupportable practices in blood alcohol analysis, the current BCSOCL lab director took proactive measures to disclose and correct the issues identified.

The Commission observes that BCSOCL's decision to suspend blood alcohol and drug toxicology analysis pending evaluation of prior practices and an overhaul of the laboratory's toxicology SOP is the most prudent course of action for the laboratory given available resources.

The Commission commends the current BCSOCL scientific leadership, as well as the Jefferson County Regional Crime Laboratory director who originally identified and alerted BCSOCL to the problematic issues in blood alcohol analysis described here, for approaching the matter with appropriate diligence, including disclosure to affected criminal justice partners.

B. Additional Observations and Recommendations for BCSOCL

The Commission makes the following additional observations and recommendations regarding the investigation and the future direction of the laboratory:

a. <u>Unsupportable Approach to Analysis of Drugs in Blood</u>. One of the most concerning discoveries made by the BCSOCL director in the process of addressing the blood alcohol issue was the approach the laboratory used for the testing of drugs in blood. The laboratory's practice was to perform an immunoassay test first. The laboratory then compared the retention times in gas chromatography (GC) against a known standard to support the identification of any one of five categories of controlled substances in blood.²¹ For samples where the immunoassay test was negative, the laboratory would report results based on GC retention times alone. They did not perform any separate, independent test. This approach was used for all five categories of substances for which analysis was requested by submitting agencies.

The BCSOCL should identify any cases affected by the inadequate drug toxicology method described above and take corrective action as needed to ensure the integrity of results. Future attempts to reintroduce drug

²¹ The five categories were: cocaine; benzodiazepines; opioids; tetrahydrocannabinol; and methamphetamine.

- toxicology to the laboratory's service offerings must be preceded by the rigorous validation of scientifically supportable analytical methods.
- b. <u>Pipetting Errors</u>. While some variation between samples run in duplicate (or triplicate) is expected, significant or frequent variation may be due to errors in pipetting. The Commission encourages BCSOCL to pay particular attention to sound pipetting practice and related training when reintroducing blood alcohol and toxicology casework.
- c. Role of Accreditation for Blood Alcohol Cases. The Commission contacted ANAB to determine why they did not assess a non-conformity for the blood alcohol variation discrepancies. (See, Exhibit D). ANAB responded that none of the (42) identified cases had been sampled or reviewed by ANAB during assessment activities. The laboratory processes about 100 cases per month and the ANAB sampling size did not capture an affected case. Additionally, there were no blood alcohol proficiency tests observed during the accreditation cycle that would have alerted ANAB to a potential issue.
- d. Role of Accreditation for Toxicology (Drugs in Blood) Cases. ANAB flagged the blood drug methodology issues described in this report during the laboratory's accreditation assessment in 2015. The remediation in 2015 was to require revisions to the laboratory SOP. ANAB evaluated the new manual as acceptable and resolved the nonconformance. ANAB was not aware that the problem persisted in casework because the cases sampled for review during assessment activities did not yield any evidence that the laboratory was not following their revised procedure and instead reporting drugs based on retention time alone.
- e. <u>Lab Culture</u>. In conducting interviews with employees of the laboratory, the BCSOCL director observed that analysts felt they could not challenge the decisions of the previous laboratory director, especially when doing so would suggest a change from "the way the laboratory has always done things." The BCSOCL director expressed his view that creating an environment in which suggestions and concerns are taken seriously is critically important. The director expressed his intention to encourage open communication and feedback from all members of the BCSOCL staff.
- f. <u>Lab Resources</u>. The Commission has no control over the allocation of local resources and recognizes that counties have competing demands. However, it will be difficult (if not impossible) for the laboratory to meet the needs of criminal justice partners, including local law enforcement, the District Attorney's office, defense attorneys, and the courts, without additional investment in personnel, instrumentation, and training. This is true in both toxicology and seized drugs. Currently the laboratory only has two licensed seized drugs analysts one of whom is the laboratory director. Additional

- qualified personnel must be hired to improve laboratory turnaround times (TAT) and meet the needs of the criminal justice system.²²
- g. Organization of Scientific Area Committees in Forensic Science (OSAC)
 Registry of Standards Implementation. BCSOCL leadership recognizes the importance of complying with the toxicology and seized drugs standards published by national standards development organizations and approved for the OSAC Registry of Standards. The Commission will work with BCSOCL to provide technical resources that will allow staff to effectively assess gaps between historical approaches and the principles set forth in applicable seized drugs and forensic toxicology standards.

Finally, while the Commission believes that all laboratories would benefit from reading this report and considering whether any of the observations are applicable to their own operations, the Commission declines to issue any universally applicable recommendations for accreditation checklist purposes at this time.

²² In 2022, the BCSOCL received 1,607 submissions for seized drugs analysis. The laboratory analyzed 912 cases, resulting in a backlog of 700 cases. With respect to in-jail submissions, the laboratory has a TAT of two weeks (once a case is assigned to an analyst, they close within ten days). With respect to cases in which the defendant is not detained, the TAT is approximately one month (or 22.5 days to close).

EXHIBIT A



Please complete this form and return to:

Texas Forensic Science Commission 1700 North Congress Avenue, Suite 445 Austin, Texas 78701 Email: info@fsc.texas.gov [P] 1.888.296.4232

[F] 1.888.305.2432

The Texas Forensic Science Commission ("FSC") is legislatively mandated to require crime laboratories that conduct forensic analyses to report professional negligence or professional misconduct to the Commission. (See Tex. Code Crim. Proc. 38.01 as amended by Tex. S.B. 1238, 83rd Leg., R.S. (2013)).

Please keep in mind that the FSC investigates matters subject to its statutory authority only. The term "forensic analysis" includes any medical, chemical, toxicological, ballistic, or other examination or test performed on physical evidence, including DNA evidence, for the purpose of determining the connection of the evidence to a criminal action. The term does not include the portion of an autopsy conducted by a medical examiner or other forensic pathologist who is a licensed physician. The term "crime laboratory" is defined in Article 38.35 of the Texas Code of Criminal Procedure to include "a public or private laboratory or other entity that conducts a forensic analysis subject to this article."

The FSC will examine the details of your disclosure to determine what level of review to perform, if any. All disclosures are taken seriously. Because of the complex nature and number of complaints and disclosures received by the FSC, we cannot give you any specific date by which that review may be completed. However, we aim to resolve all disclosures in a timely and expeditious manner, and to minimize disruption in the laboratory.

The Commission's statute allows it to withhold from disclosure information submitted in the context of an investigation but only until the final report is released. Upon release of the final report, all information provided to the Commission is subject to disclosure under the Texas Public Information Act ("PIA") (Texas Government Code Chapter 552).

IMPORTANT: If your disclosure involves a pending criminal matter(s), please be sure to indicate that on the form below because certain PIA exceptions may apply.

1. PERSON COMPLETING THIS FORM

Name: Aleia Winters

Laboratory: Brazoria County Sheriff's Office Crime Lab

Address: 3602 CR 45

City: Angleton

State: TX Zip Code: 77515

Home Phone: N/A

Work Phone: (979) 864 - 2310

Email Address (if any): aleiaw@brazoria-county.com

2. SUBJECT OF DISCLOSURE

List the full name, address of the laboratory, facility or individual that is the subject of this disclosure:

Individual/Laboratory: Brazoria County Sheriff's Office Crime Lab
Address: 3602 CR 45
City: Angleton
State: TX Zip Code: 77515
Year Laboratory Accreditation Obtained: 2019

Name of National Accrediting Agency: ANAB

Date of Examination, Analysis, or Report: *see spreadsheet

Type of Forensic Analysis: blood alcohol

Laboratory Case Number (if known): *see spreadsheet

Is the forensic analysis associated with any law enforcement investigation, prosecution or criminal litigation?

Yes No

- * If you answered "Yes" above, provide the following information (if possible):
- * Name of Defendant: *see spreadsheet
- * Case Number/Cause Number: *see spreadsheet (if unknown, leave blank)
- * Nature of Case: *see spreadsheet (e.g burglary, murder, etc.)
- *The county where case was investigated, prosecuted or filed: Brazoria County
- *The Court: Brazoria County Courts
- *The Outcome of Case:

*see spreadsheet

* Names of attorneys in case on both sides (if known):

*see spreadsheet for defendant attorneys

3. WITNESSES

Provide the following about any person with factual knowledge or expertise regarding the facts of the disclosure. Attach separate sheet(s), if necessary.

First Witnes	ss (if any):
Name:	Derek Sanders
Address:	3602 CR 45 Angleton, TX 77515
Daytime Pl	none: (979) 864-2349
Evening Ph	one:
Fax:	
Email Addr	ess: dsanders@brazoria-county.com
Second Wit	eness (if any):
Name:	Dr. Samuel Wyllie
Address:	3602 CR 45 Angleton, TX 77515
Daytime Pl	none: (979) 864-2059
Evening Ph	one:
Fax:	
Email Addr	ess: samuelw@brazoria-county.com
Third Witn	ess (if any):
Name:	
Address:	
Daytime Pl	none:
Evening Ph	one:
Fax:	
Email Addr	ess:

4. DESCRIPTION OF DISCLOSURE

Please write a brief statement of the event(s), acts or omissions that are the subject of the disclosure. See Page 6 of this form for guidance on what information should be disclosed to the Commission.

There was an irregularity discovered with the analysis of blood alcohol samples. Blood alcohol
samples were found to not be calculated and reported according to our Standard Operating
Procedures. Due to only having one Toxicologist, our blood alcohol cases have been sent out to
Jefferson County Regional Crime Laboratory for technical and administrative review. One of the
contracted analysts questioned how the final result from the triplicate samples was calculated and,
if only taking four instead of six values into account, how to determine which values to drop, as
well as notifying the lab we were outside of the 10% allowed variation. While answering their
questions, inconsistencies and nonconformance of our own SOP TOX-C-01-06 were found,
specifically regarding the allowed 10% sample variation between samples and which sample
results may be used. Section 8.2.1 states that the values of the triplicate sampling of each column
shall agree within 10% of each other. The SOP later states in section 9.1.4 that four of the six
values may be used to achieve a sample variation of 10% or less; however, there are no written
guidelines as to which values may be dropped. TOX-C-01-06 also states in 8.2.2 that the variation will be truncated to no less than three decimal places. Cases between 10% and 11%
were not being truncated to three decimal places – only to the whole number.
were not being truncated to three declinar places - only to the whole number.

5. DESCRIPTION OF CORRECTIVE ACTION TAKEN

Please describe any corrective actions or corrective action plans the laboratory has developed to address the issues discussed in this disclosure. Please attach copies of the actions taken and/or future corrective plan to this disclosure form.

Please let the Commission know if any other agencies (e.g., Texas Rangers, local district attorney, Inspector General's Office, etc.) are also conducting an investigation of the matter in question. If possible, provide a contact name and phone number for the individual responsible for any other investigation(s).

All casework performed since the beginning of 2018 has been re-calculated using the equation in
TOX-C-01-06 8.2.2 to ensure the triplicate samples of each column are within 10.000% of each
other. There were 42 samples (41 cases) identified to be outside the 10.000% sample variation:
eight from 2018, three from 2019, 11 from 2020, and 20 from 2021. See the supplemental
spreadsheet for more detailed information.
The current SOP is in the process of being revised.
Re-analysis of the cases in Draft Complete will occur under the revised SOP.
Samples in which a report has already been issued and the sample not destroyed will be sent out for third-part reanalysis and an amended report issued.
Document control systems are being reviewed in order to set one up so that an annual exam with
a signature requirement acknowledging SOP standards and methods is put into place
The current blood EtOH spreadsheet is being reformatted to better highlight samples outside of
variance and make that spreadsheet available to the technical reviewer.
No other agencies are conducting an investigation at this time.

6. EXHIBITS AND ATTACHMENT(S)

Whenever possible, disclosures should be accompanied by readable copies (NO ORIGINALS) of any laboratory reports, relevant witness testimony, affidavits of experts about the forensic analysis, or other documents related to your disclosure. Please list and attach any documents that might assist the Commission in evaluating the disclosure. Documents provided will NOT be returned. List of attachments:

2021-11_CAP_EtOH Sample Variations (including Analyst 1's letter)
2021-11 Laboratory Director Letter
2018-2021 EtOH Sample Variation Calculations - TFSC Copy
TOX-C-01-06 Analysis of Ethanol in Biological Specimens
TAX AND COMMENT OF THE PROPERTY OF THE PROPERT
7. Your Signature and Verification

By signing below, I certify that the statements made by me in this disclosure are true. I also certify that any documents or exhibits attached are true and correct copies, to the best of my knowledge.

Signature:	Chin	Work
Date Signe	d: Jan.	5,2022

TEXAS FORENSIC SCIENCE COMMISSION GUIDELINES FOR LABORATORY SELF-DISCLOSURE

One of the Commission's statutory duties is to "require a crime laboratory that conducts forensic analyses to report professional negligence or professional misconduct to the Commission." TEX. CODE CRIM. PROC. § 38.01, Sec. 4(a)(2).

This document is designed to provide guidance to laboratories in determining whether they should disclose particular events to the Commission under the statute. Any questions regarding these guidelines should be directed to the Commission's General Counsel at (512) 936-0770.

Self-Disclosure Categories:

- <u>Probation:</u> If the national accrediting body responsible for accrediting your laboratory and/or the Department of Public Safety notifies you that it intends to put your laboratory on probation, you should inform the Commission as soon as possible, but no later than five (5) business days from receiving notification from the accrediting body.
- <u>Suspension of Accreditation:</u> If the national accrediting body responsible for accrediting your laboratory and/or the Department of Public Safety notifies you that it intends to suspend your laboratory's accreditation for any reason, you should inform the Commission as soon as possible, but no later than five (5) business days from receiving notification from the accrediting body.
- <u>Significant Irregularity in the Laboratory:</u> Laboratories shall disclose any irregularity that may rise to the level of professional negligence or misconduct using the disclosure form on the Commission's website. The disclosure should be submitted to the Commission as soon as possible, but no later than thirty (30) days after the irregularity is discovered. If the laboratory needs a longer period to submit its disclosure, it should contact the Commission's General Counsel with an explanation and a request for additional time.

Please note that the outcome of any particular criminal case should not be a consideration in your decision regarding whether to disclose an issue to the Commission. You should disclose any significant laboratory irregularity regardless of the criminal case outcome, and regardless of whether the quality controls in the laboratory caught the issue of concern before a final report was issued to the customer. When using the term "significant irregularity," we refer to facts that if true, would indicate the existence of negligence or misconduct such that the integrity of the forensic examination, the individual forensic examiner, or the laboratory as a whole would be called into question.

If your self-disclosure involves a pending criminal case, or you believe that anyone involved in the disclosure may be the subject of criminal investigation, please alert the Commission when submitting your disclosure, as certain law enforcement exceptions to the Public Information Act may apply to the information submitted.

EXHIBIT B

2018 – 2021 EtOH Sample Variation Calculation Spreadsheet

Pages 1-7 consists of the totality of discovered cases from 2018 to 2021 in which the sample variation was or exceeded 10%.

Pages 8-9 consists of input errors only.

Pages 10-12 consist of cases under 0.025g/100mL but still outside the 10% variation.

Pages 13-14 consists of cases outside the 10% variation but already destroyed.

Pages 15-16 consists of cases outside the 10% variation with a laboratory report issued but which need to be reanalyzed.

Pages 17-18 consists of cases outside the 10% variation but a final laboratory report has yet to be issued and cases need to be reanalyzed.

2018 % Sample Variation Calculations Outside 10%

		Retention	Retention						0/ E+	% Rear	
		Time	Time	Value	Value	Recovery	Recovery			% Real	
		Front	Rear	Front	Rear	Front	Rear				
	•	Column	Column						vanation	Variation	
MM	3/5/2018 BCCL-18-0096	1.180	1.292	0.286	0.285			0.019	5.9259	5.9480	Highest and middle
	3/5/2018 BCCL-18-0096	1.179	1.290	0.244	0.243				10.6557	10.6996	Middle and lowest
	3/5/2018 BCCL-18-0096	1.179	1.290	0.270	0.269	0.2775	0.0189		17.2131	17.2840	All three
PVD	4/25/2018 BCCL-18-0006	1.181	1.292	0.017	0.017			0.0008	5.8824		Highest and middle
	4/25/2018 BCCL-18-0006	1.181	1.292	0.017	0.016				0.0000		Middle and lowest
	4/25/2018 BCCL-18-0006	1.181	1.291	0.018	0.018	0.0172	0.0012		5.8824	12.5000	All three
PVD	5/18/2018 BCCL-18-1055	1.183	1.294	0.004	0.004			0.0005	0.0000		Highest and middle
	5/18/2018 BCCL-18-1055	1.183	1.294	0.004	0.005				0.0000	25.0000	Middle and lowest
<u> </u>	5/18/2018 BCCL-18-1055	1.183	1.294	0.004	0.005	0.0043	0.0003		0.0000	25.0000	All three
PVD	5/18/2018 BCCL-18-0996	1.179	1.290	0.486	0.487			0.001			Highest and middle
•	5/18/2018 BCCL-18-0996	1.179	1.290	0.487	0.488						Middle and lowest
	5/18/2018 BCCL-18-0996	1.179	1.291	0.485	0.486	0.4865	0.0331		0.4124	0.4115	All three
PVD	5/22/2018 BCCL-18-0996 - Diluted (50uL blood)	1.179	1.290	0.408	0.409			0.0184	4.1860	4.3981	Highest and middle
	5/22/2018 BCCL-18-0996 - Diluted (50uL blood)	1.179	1.289	0.448	0.451				5.3922	5.6235	Middle and lowest
	5/22/2018 BCCL-18-0996 - Diluted (50uL blood)	1.179	1.290	0.430	0.432	0.4198	0.0285		9.8039	10.2689	All three
MR	6/5/2018 BCCL-18-1243	1.182	1.294	0.007	0.007			0.0005	0.0000	16.6667	Highest and middle
	6/5/2018 BCCL-18-1243	1.182	1.292	0.006	0.006				16.6667	0.0000	Middle and lowest
	6/5/2018 BCCL-18-1243	1.182	1.294	0.007	0.006	0.0065	0.0004		16.6667	16.6667	All three
MR	8/2/2018 BCCL-18-1592	1.184	1.297	0.003	0.002			0.0005	0.0000	0.0000	Highest and middle
	8/2/2018 BCCL-18-1592	1.184	1.297		0.002				50.0000		Middle and lowest
	8/2/2018 BCCL-18-1592	1.184	1.296		0.002	0.0023	0.0002		50.0000	0.0000	All three
						Physical Process					
MR	8/14/2018 BCCL-18-1637	1.183	1.296	0.006	0.006			0.0004	0.0000	0.0000	Highest and middle
	8/14/2018 BCCL-18-1637	1.182	1.295	0.006	0.005				0.0000	20.0000	Middle and lowest
	8/14/2018 BCCL-18-1637	1.182	1.295	0.006	0.006	0.0058	0.0004		0.0000	20.0000	All three

2018 % Sample Variation Calculations Outside 10%

MM	1/3/2018 BCCL-17-2476	1.182	1.293	0.185 0.185			0.5435	0.5435	Highest and middle
	1/3/2018 BCCL-17-2476	0.000	0.000	0.000 0.000			#DIV/0!	#DIV/0!	Middle and lowest
	1/3/2018 BCCL-17-2476	1.182	1.293	0.184 0.184	0.1845	0.0125	#DIV/0!	#DIV/0!	All three

2019 - 2021 % Sample Variation Calculations Outside 10%

		Retention Time Front Column	Retention Time Rear Column	Front	Rear	Recovery Front	Recovery Rear		% Front Sample Variation		
MR	8/21/2019 BCCL-19-1546	1.179	1.291		0.159			0.00804	2.5316	1.8868	Highest and middle
	8/21/2019 BCCL-19-1546	1.179	1.291		0.145				8.9655	9.6552	Middle and lowest
L	8/21/2019 BCCL-19-1546	1.179	1.290	0.162	0.162	0.1518	0.0099		11.7241	11.7241	All three
MR	9/23/2019 BCCL-19-1763	1.179	1.291	0.216	0.217			0.01217	3.7037	3.6866	Highest and middle
	9/23/2019 BCCL-19-1763	1.179	1.291	0.224	0.225				9.0909	9.5960	Middle and lowest
	9/23/2019 BCCL-19-1763	1.179	1.291	0.198	0.198	0.2073	0.0135		13.1313	13.6364	All three
SW	12/4/2019 BCCL-19-2089	1.178	1.289	0.075	0.076				2.4390	2.4390	Highest and middle
	12/4/2019 BCCL-19-2089	1.178	1.289	0.082	0.082				9.3333	7.8947	Middle and lowest
	12/4/2019 BCCL-19-2089	1.178	1.289	0.084	0.084	0.0805	0.0052		12.0000	10.5263	All three
SW	4/2/2020 BCCL-20-0388	1.182	1.294	0.009	0.009			0.00041	11.1111	0.0000	Highest and middle
	4/2/2020 BCCL-20-0388	1.183	1.295	0.010	0.009				0.0000	0.0000	Middle and lowest
	4/2/2020 BCCL-20-0388	1.182	1.294	0.009	0.009	0.0092	0.0006		11.1111	0.0000	
							-				
SW	6/2/2020 BCCL-20-0628	1.180	1.292	0.142	0.143			0.00639	2.1127	2.0979	Highest and middle
	6/2/2020 BCCL-20-0628	1.179	1.290	0.131	0.133				8.3969	7.5188	Middle and lowest
	6/2/2020 BCCL-20-0628	1.180	1.291	0.145	0.146	0.1400	0.0095		10.6870	9.7744	All three
SW	7/10/2020 BCCL-20-0748	1.180	1.291	0.054	0.056			0.21041	1.8519	917.8571	Highest and middle
	7/10/2020 BCCL-20-0748	1.180	1.291	0.053	0.055				1.8868	1.8182	Middle and lowest
	7/10/2020 BCCL-20-0748	1.180	1.291	0.055	0.570	0.1405	0.0096		3.7736	936.3636	All three
SW	7/27/2020 BCCL-20-0891	1.180	1.290	0.670	0.070			0.24504	857.1429	4.2857	Highest and middle
	7/27/2020 BCCL-20-0891	1.180	1.291						4.4776	1.4493	Middle and lowest
	7/27/2020 BCCL-20-0891	1.180	1.290	0.067	0.069	0.1698	0.0115		900.0000	5.7971	All three
			, .,								
	7/27/2020 BCCL-20-0904	1.179	1.290	0.157	0.264	,		0.03792	1.1494	45.0549	Highest and middle

2019 - 2021 % Sample Variation Calculations Outside 10%

	7/27/2020 BCCL-20-0904	1.179	1.290	0.174	0 179				10.8280	1.6760	Middle and lowest
	7/27/2020 BCCL-20-0904	1.180	1.290	0.176		0.1887	0.0128		12.1019		All three
L	.,,	2.200	1.2.0		0.202		0.012.0				
SW	8/10/2020 BCCL-20-0849	1.182	1.295	0.006	0.005			0.00082	0.0000	0.0000	Highest and middle
	8/10/2020 BCCL-20-0849	1.182	1.295	0.006					0.0000	25.0000	
	8/10/2020 BCCL-20-0849	1.183	1.295		0.004	0.0053	0.0004		0.0000		All three
											
SW	8/31/2020 BCCL-20-1000	1.180	1.288	0.101	0.099			0.0078	17.4419	16.4706	Highest and middle
	8/31/2020 BCCL-20-1000	1.180	1.288	0.085					1.1765	1.1905	Middle and lowest
	8/31/2020 BCCL-20-1000	1.179	1.289	0.086	0.085	0.0900	0.0061		18.8235	17.8571	All three
	8/31/2020 BCCL-20-1013	1.180	1.288		0.102			0.00662	10.3774		Highest and middle
	8/31/2020 BCCL-20-1013	1.180	1.289	0.106	0.105				2.9126	2.9412	Middle and lowest
	8/31/2020 BCCL-20-1013	1.180	1.288	0.117	0.116	0.1082	0.0074		13.5922	13.7255	All three
SW	10/23/2020 BCCL-20-1371	1.179	1.288	0.152	0.150			0.0154	18.9542	19.0789	Highest and middle
	10/23/2020 BCCL-20-1371	1.179	1.288		0.152				0.6579	1.3333	Middle and lowest
	10/23/2020 BCCL-20-1371	1.182	1.295	0.182	0.181	0.1617	0.0110		19.7368	20.6667	All three
SW	11/19/2020 BCCL-20-1545	1.180	1.289		0.152			0.01188	17.8295	17.8295	Highest and middle
	11/19/2020 BCCL-20-1545	1.180	1.288		0.129				0.0000	0.0000	Middle and lowest
L	11/19/2020 BCCL-20-1545	1.180	1.290	0.129	0.129	0.1367	0.0089		0.9091	0.9009	All three
D) (D)											
PVD	12/9/2020 BCCL-20-1819	1.180	1.288		0.101			0.0045	3.9604	3.9604	Highest and middle
	12/9/2020 BCCL-20-1819	1.180	1.290		0.095	0.4.000	0.0055		6.3158	6.3158	Middle and lowest
<u></u>	12/9/2020 BCCL-20-1819	1.180	1.289	0.105	0.105	0.1003	0.0065	<u></u>	10.5263	10.5263	All three
SW	3/12/2021 BCCL-20-1990	1.183	1.292	0,009	0.009			0.00055	0.0000	11 1111	Highest and middle
	3/12/2021 BCCL-20-1990	1.183	1.292		0.010			0.0000	11.1111	0.0000	Middle and lowest
	3/12/2021 BCCL-20-1990	1.183	1.293		0.009	0.0095	0.0006		11.1111		All three
L											
	3/12/2021 BCCL-21-0172	1.181	1.288	0.196	0.196			0.01448	2.5510	2.0408	Highest and middle
	3/12/2021 BCCL-21-0172	1.181	1.288	0.170	0.171				15.2941	14.6199	Middle and lowest
•											

2019 - 2021 % Sample Variation Calculations Outside 10%

	3/12/2021 BCCL-21-0172	1.181	1.288	0.201	0.200	0.1890	0.0123		18.2353	16.9591	All three
SW	4/1/2021 BCCL-21-0366	1.180	1.288	0.293	0.292			0.05223	1.0135	0.6849	Highest and middle
	4/1/2021 BCCL-21-0366	1.180	1.288	0.296				0.00	1.0239		Middle and lowest
	4/1/2021 BCCL-21-0366	1.180	1.288	0.299		0.2735	0.0186		2.0478	76.0479	All three
<u> </u>											
	4/1/2021 BCCL-21-0381	1.180	1.288	0.169	1.680	******		0.61735	0.5952	905.9880	Highest and middle
	4/1/2021 BCCL-21-0381	1.180	1.288	0.168	0.167				0.0000	0.0000	Middle and lowest
	4/1/2021 BCCL-21-0381	1.180	1.288	0.168	0.167	0.4198	0.0273		0.5952	905.9880	All three
	4/16/2021 BCCL-21-0368	1.184	1.293	0.005	0.005			0.00041	0.0000	20.0000	Highest and middle
	4/16/2021 BCCL-21-0368	1.184	1.293	0.005	0.006				0.0000	0.0000	Middle and lowest
	4/16/2021 BCCL-21-0368	1.184	1.294	0.005	0.005	0.0052	0.0003		0.0000	20.0000	All three
	5/18/2021 BCCL-21-0629	1.181	1.288	0.123	1.220		*	0.44752	0.0000	883.8710	Highest and middle
	5/18/2021 BCCL-21-0629	1.181	1.288	0.124					0.8130		Middle and lowest
	5/18/2021 BCCL-21-0629	1.181	1.288	0.124	0.124	0.3065	0.0208		0.8130	883.8710	All three
	6/4/2021 BCCL-21-0001	1.180	1.288	0.236	0.236			0.01121	4.8889	4.8889	Highest and middle
	6/4/2021 BCCL-21-0001	1.180	1.288	0.211					6.6351	6.6351	Middle and lowest
L	6/4/2021 BCCL-21-0001	1.181	1.289	0.225	0.225	0.2240	0.0146		11.8483	11.8483	All three
	6/4/2021 BCCL-21-0166	1.181	1.288	0.270	0.270			0.02485	3.8462	4.2471	Highest and middle
	6/4/2021 BCCL-21-0166	1.180	1.288	0.218	0.217				19.2661	19.3548	Middle and lowest
	6/4/2021 BCCL-21-0166	1.181	1.289	0.260	0.259	0.2490	0.0162		23.8532	24.4240	All three
	6/4/2021 BCCL-21-0336	1.181	1.289	0.113	0.112			0.0048	6.6038	6.6667	Highest and middle
	6/4/2021 BCCL-21-0336	1.181	1.288	0.102	0.102				3.9216	2.9412	Middle and lowest
	6/4/2021 BCCL-21-0336	1.181	1.288	0.106	0.105	0.1067	0.0069		10.7843	9.8039	All three
	6/4/2021 BCCL-21-0765	1.180	1.288	0.182	0.181			0.00896	6.4327	5.8480	Highest and middle
	6/4/2021 BCCL-21-0765	1.181	1.288	0.162	0.161				5.5556	6.2112	Middle and lowest

2019 - 2021 % Sample Variation Calculations Outside 10%

	6/4/2021 BCCL-21-0765	1.180	1.288	0.171 0.171	0.1713	0.0111		12.3457	12.4224	All three
	6/4/2021 BCCL-21-0774	1.180	1.288	0.181 0.180			0.00783	7.1006	7.1429	Highest and middle
	6/4/2021 BCCL-21-0774	1.180	1.288	0.164 0.163				3.0488	3.0675	Middle and lowest
	6/4/2021 BCCL-21-0774	1.180	1.288	0.169 0.168	0.1708	0.0111		10.3659	10.4294	All three
	6/4/2021 BCCL-21-0887	1.181	1.288	0.214 0.213			0.01294	11.4583	10.9375	Highest and middle
	6/4/2021 BCCL-21-0887	1.180	1.288	0.186 0.186				3.2258		Middle and lowest
	6/4/2021 BCCL-21-0887	1.180	1.288	0.192 0.192	0.1972	0.0128		15.0538	14.5161	All three
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	6/17/2021 BCCL-21-0685	1.180	1.288	0.181 0.180		<u> </u>	0.00763	4.6243	4.6512	Highest and middle
	6/17/2021 BCCL-21-0685	1.181	1.289	0.164 0.163				5.4878	5.5215	Middle and lowest
<u> </u>	6/17/2021 BCCL-21-0685	1.181	1.289	0.173 0.172	0.1722	0.0112		10.3659	10.4294	All three
	6/29/2021 BCCL-21-1006	1.180	1.288	0.160 0.159			0.00906	0.5650	0.5682	Highest and middle
	6/29/2021 BCCL-21-1006	1.180	1.288	0.177 0.176				10.6250	10.6918	Middle and lowest
	6/29/2021 BCCL-21-1006	1.180	1.288	0.178 0.177	0.1712	0.0111		11.2500	11.3208	All three
	7/23/2021 BCCL-21-1174	1.180	1.288	0.160 0.159			0.00906	0.5650	0.5682	Highest and middle
	7/23/2021 BCCL-21-1174	1.180	1.288	0.177 0.176				10.6250	10.6918	Middle and lowest
	7/23/2021 BCCL-21-1174	1.180	1.288	0.178 0.177	0.1712	0.0111		11.2500	11.3208	All three
	8/16/2021 BCCL-21-0893	1.180	1.288	0.214 0.213			0.01235	2.3923	2.4038	Highest and middle
	8/16/2021 BCCL-21-0893	1.180	1.288	0.188 0.187				11.1702	11.2299	Middle and lowest
	8/16/2021 BCCL-21-0893	1.180	1.288	0.209 0.208	0.2032	0.0132		13.8298	13.9037	All three
						·				
	10/22/2021 BCCL-21-1631	1.181	1.288	0.156 0.155			0.01487	0.6410	1.2903	Highest and middle
	10/22/2021 BCCL-21-1631	1.181	1.288	0.128 0.127				21.8750	22.0472	Middle and lowest
	10/22/2021 BCCL-21-1631	1.181	1.288	0.157 0.157	0.1467	0.0095		22.6563	23.6220	All three
	10/22/2021 BCCL-21-1645	1.183	1.291	0.011 0.011	- Land Light		0.00041			
	10/22/2021 BCCL-21-1645	1.183	1.291	0.010 0.011						

2019 - 2021 % Sample Variation Calculations Outside 10%

10/22/2021 BCCL-21-1645	1.183	1.291	0.011	0.011	0.0108	0.0007		10.0000	0.0000	
11/10/2021 BCCL-21-1676	1.180	1.288	0.184	0.182			0.00794	3.9548	4.0000	Highest and middle
11/10/2021 BCCL-21-1676	1.181	1.289	0.166	0.165				6.6265	6.0606	Middle and lowest
11/10/2021 BCCL-21-1676	1.181	1.288	0.177	0.175	0.1748	0.0114		10.8434	10.3030	All three
11/10/2021 BCCL-21-1718	1.181	1.288	0.094	0.093			0.00484	3.9604	3.0000	Highest and middle
11/10/2021 BCCL-21-1718	1.181	1.288	0.101	0.100				7.4468	7.5269	Middle and lowest
11/10/2021 BCCL-21-1718	1.181	1.288	0.105	0.103	0.0993	0.0065		11.7021	10.7527	All three

% Sample Variation Calculations Outside 10% Input Errors

		Retention Time Front Column	Retention Time Rear Column	Value Front		Recovery Front	Recovery Rear		% Front Sample Variation	% Rear Sample Variation		REPORTED
MM	1/3/2018 BCCL-17-2476	1.182	1.293	0.185	0.185				0.5435	0.5435	Highest and middle	0.183 ± 0.012
	1/3/2018 BCCL-17-2476	0.000	0.000	0.000	0.000				#DIV/0!	#DIV/0!	Middle and lowest	g per 100mL
	1/3/2018 BCCL-17-2476	1.182	1.293	0.184	0.184	0.1230	0.0084		#DIV/0!	#DIV/0!	All three	g per roome
		CORRECTE	ED FRONT &	0.181	0.182							
			VALUES	0.183	0.183							
		KEAK	VALUES	0.184	0.185	0.1830	0.0124		1.6575	1.6484	All three	
												1
SW	7/10/2020 BCCL-20-0748	1.180	1.291	0.054	0.056			0.2104	1.8519	917.8571	_	0.055 ± 0.004
	7/10/2020 BCCL-20-0748	1.180	1.291	0.053	0.055				1.8868	1.8182	Middle and lowest	g per 100mL
	7/10/2020 BCCL-20-0748	1.180	1.291	0.055	0.570	0.1405	0.0096		3.7736	936.3636		9 000 00000
		CORRECTED	REAR VALUE		0.057	0.0550	0.0037		3.7736	3.6364	All three	
CIAL	7/27/2020 BCCL 20 0001	4 100	4 200	0.670	0.070			0.045	057.4.400	4 2057	High set and middle	1
SW	7/27/2020 BCCL-20-0891	1.180	1.290	0.670	0.070			0.245	857.1429	4.2857	Highest and middle	0.069 ± 0.004
	7/27/2020 BCCL-20-0891	1.180	1.291	0.070	0.073	0.1600	0.011		4.4776	1.4493	Middle and lowest	g per 100mL
L	7/27/2020 BCCL-20-0891	1.180 CORRECTED F	1.290	0.067	0.069	0.1698	0.0115		900.0000 4.4776	5.7971 5.7971	All three All three	
		CORRECTED	RONT VALUE	0.067		0.0690	0.0047		4.4770	3.7371	All tillee	l
SW	4/1/2021 BCCL-21-0366	1.180	1.288	0.293	0.292	**************************************		0.0522	1.0135	0.6849	Highest and middle	0.005
	4/1/2021 BCCL-21-0366	1.180	1.288	0.296	0.294			0.0022	1.0239	74.8503	Middle and lowest	0.295 ± 0.019
	4/1/2021 BCCL-21-0366	1.180	1.288	0.299	0.167	0.2735	0.0186		2.0478	76.0479	All three	g per 100mL
<u> </u>			REAR VALUE		0.298	0.2953	0.0201		2.0478	2.0548	All three	
												ı
sw	4/1/2021 BCCL-21-0381	1.180	1.288	0.169	1.680			0.6174	0.5952	905.9880	Highest and middle	0.167 ± 0.011
1	4/1/2021 BCCL-21-0381	1.180	1.288	0.168	0.167				0.0000	0.0000	Middle and lowest	g per 100mL
	4/1/2021 BCCL-21-0381	1.180	1.288	0.168	0.167	0.4198	0.0273		0.5952	905.9880	All three	g per roomic
		CORRECTED	REAR VALUE		0.168	0.4200	0.0286		0.5952	0.5988	All three	
												•
sw	5/18/2021 BCCL-21-0629	1.181	1.288	0.123	1.220			0.4475	0.0000	883.8710	Highest and middle	0.123 ± 0.008
	5/18/2021 BCCL-21-0629	1.181	1.288	0.124	0.124				0.8130	0.0000	Middle and lowest	g per 100mL
Ĺ	5/18/2021 BCCL-21-0629	1.181	1.288	0.124	0.124	0.3065	0.0208		0.8130	883.8710	All three	g per rounte
		CORRECTED	REAR VALUE		0.122	0.3062	0.0208		0.8130	1.6393	All three	

	SW	7/23/2021 BCCL-21-1174 7/23/2021 BCCL-21-1174 7/23/2021 BCCL-21-1174	1.180 1.180 1.180	1.288 1.288 1.288		0.159 0.176 0.177	0.1712	0.0111	0.0091	0.5650 10.6250 11.2500	10.6918	Highest and middle Middle and lowest All three	0.056 ± g per 1
_			CORRECTED FRONT & REAR VALUES		0.057	0.056	And a small						
						0.054						A 11 - 11	
					0.058	0.057	0.0560	0.0038		7.4074	5.5556	All three	1

0.056 ± 0.004 g per 100mL

% Sample Variation Calculations Outside 10% <0.025 g per 100mL

			Retention Time Rear Column	Value Front		Recovery Front	Recovery Rear		% Front Sample Variation	% Rear Sample Variation		REPORTED
PV E F3 83	4/25/2018 BCCL-18-0006 4/25/2018 BCCL-18-0006 4/25/2018 BCCL-18-0006	1.181 1.181 1.181	1.292 1.292 1.291	0.017 0.017 0.018	0.017 0.016 0.018	0.0172	0.0012	0.0008	5.8824 0.0000 5.8824	5.8824 6.2500 12.5000	Highest and middle Middle and lowest All three	<0.025 g per 100mL
	Agency DPS Freeport Subject Earls, Crystal Cause No. 238541 Lead Attorney No Counsel		Offense Date DOB Plea/No Plea Status	12/31 10/10 Aban	/2017 /1991 doned osed						Reported Plea	4/27/2018 2/7/2020
PVI D	5/18/2018 BCCL-18-1055 5/18/2018 BCCL-18-1055 5/18/2018 BCCL-18-1055 Agency Angleton PD Subject Smith, Stormy T Cause No. 236733 Lead Attorney No Counsel	1.183 1.183 1.183 erell	1.294 1.294 1.294 Offense Date DOB Plea/No Plea Status	2/13, Aban	0.004 0.005 0.005 /2018 /1978 doned osed	0.0043	0.0003	0.0005	0.0000 0.0000 0.0000	0.0000 25.0000 25.0000	Highest and middle Middle and lowest All three Reported Plea Destroyed	NOT DETECTED 5/22/2018 1/31/2020 10/1/2019
MR D	6/5/2018 BCCL-18-1243 6/5/2018 BCCL-18-1243 6/5/2018 BCCL-18-1243 Agency Angleton PD Subject Bachelder, Jason Cause No. 85122-CR Lead Attorney Hughes, Dallas C		1.294 1.292 1.294 Offense Date DOB Plea/No Plea Status	12/4 Plea	0.007 0.006 0.006 /2018 /1979 - Amend osed	0.0065 Probation	0.0004	0.0005	0.0000 16.6667 16.6667	16.6667 0.0000 16.6667	Highest and middle Middle and lowest All three Reported Plea Destroyed	NOT DETECTED 6/7/2018 12/3/2018 10/1/2019
MR F3 87	8/2/2018 BCCL-18-1592 8/2/2018 BCCL-18-1592 8/2/2018 BCCL-18-1592 Agency DPS Angleton Subject Woods, Maxie Le Cause No. DT18-003777 Lead Attorney	1.184 1.184 1.184 ee Jr.	1.297 1.297 1.296 Offense Date DOB Plea/No Plea Status	4/21	0.002 0.002 0.002 /2018 /1977 Plea - F	0.0023 ined	0.0002	0.0005	0.0000 50.0000 50.0000	0.0000 0.0000 0.0000	Highest and middle Middle and lowest All three Reported Plea	NOT DETECTED 8/6/2018 10/23/2018

% Sample Variation Calculations Outside 10% <0.025 g per 100mL

MR D	8/14/2018 BCCL-18-1637 8/14/2018 BCCL-18-1637 8/14/2018 BCCL-18-1637 Agency Angleton PD Subject Saldivar, Jeffrey Cause No. 237316 ead Attorney Gonzalez, Steve O.	1.183 1.182 1.182	1.296 1.295 1.295 Offense Date DOB Plea/No Plea Status	0.006 0.006 0.006 7/21/ 10/11 Aband Disp	/1992 doned	0.0058	0.0004	0.0004	0.0000 0.0000 0.0000	0.0000 20.0000 20.0000	Highest and middle Middle and lowest All three Reported Plea Destroyed	NOT DETECTED 8/17/2018 9/11/2019 10/15/2020
SW 1 52	4/2/2020 BCCL-20-0388 4/2/2020 BCCL-20-0388 4/2/2020 BCCL-20-0388 Agency BCSO Subject Blanco, Samuel Cause No.	1.182 1.183 1.182	1.294 1.295 1.294 Offense Date DOB Plea/No Plea Status		0.009 0.009 0.009 2020 (1980	0.0092	0.0006	0.0004	11.1111 0.0000 11.1111	0.0000 0.0000 0.0000	Highest and middle Middle and lowest Reported	NOT DETECTED 4/8/2020
SW 1 62	8/10/2020 BCCL-20-0849 8/10/2020 BCCL-20-0849 8/10/2020 BCCL-20-0849 Agency DPS Manvel Subject Castillo, Jesus Mand Cause No.	1.182 1.182 1.183 dujano	1.295 1.295 1.295 Offense Date DOB Plea/No Plea Status	0.006 0.006 0.006 6/19, 8/2/	0.005 0.005 0.004 72020 1978	0.0053	0.0004	0.0008	0.0000 0.0000 0.0000	0.0000 25.0000 25.0000	Highest and middle Middle and lowest All three Reported	NOT DETECTED 8/11/2020
5 10	3/12/2021 BCCL-20-1990 3/12/2021 BCCL-20-1990 3/12/2021 BCCL-20-1990 Agency DPS Manvel Subject Breitenfeldt, Lisa Fa Cause No. 249567 Lead Attorney Yoakum, Gerald R.	1.183 1.183 1.183	1.292 1.292 1.293 Offense Date DOB Plea/No Plea Status	Plea -	/1958	0.0095 ranting Com	0.0006 munity Sup	0.0005 ervision	0.0000 11.1111 11.1111	11.1111 0.0000 11.1111	Highest and middle Middle and lowest All three Reported Plea	DETECTED 3/15/2021
SW 6 2	4/16/2021 BCCL-21-0368 4/16/2021 BCCL-21-0368 4/16/2021 BCCL-21-0368 Agency Angleton PD Subject Broadway, William Cause No. 249081 Lead Attorney No Counsel	1.184 1.184 1.184	1.293 1.293 1.294 Offense Date DOB Plea/No Plea Status	11/8, Dism	0.005 0.006 0.005 /2021 /1981 issed	0.0052	0.0003	0.0004	0.0000 0.0000 0.0000	20.0000 0.0000 20.0000	Highest and middle Middle and lowest All three Reported Dismissed	DETECTED 10/25/2021

% Sample Variation Calculations Outside 10% <0.025 g per 100mL

SW BIO	10/22/2021 BCCL-21-1645 10/22/2021 BCCL-21-1645	1.183 1.183	1.291 1.291	0.011 0.010	0.011 0.011			0.0004			Highest and middle Middle and lowest	NOT DETECTED
	10/22/2021 BCCL-21-1645	1.183	1.291	0.011	0.011	0.0108	0.0007		10.0000	0.0000	All three	DETECTED
	Agency BCSO		Offense Date	8/25,	/2021						Reported	DRAFT
	Subject Varnado, Joseph		DOB	12/17	/1964						Keporteu	COMPLETE
	Cause No.		Plea/No Plea									
1	Lead Attorney		Status									

% Sample Variation Calculations Outside 10% Should have been Reanalyzed but Already Destroyed

		Retention Time Front Column	Retention Time Rear Column	Value Front		Recovery Front	Recovery Rear		% Front Sample Variation	% Rear Sample Variation		REPORTED
MM	3/5/2018 BCCL-18-0096 3/5/2018 BCCL-18-0096	1.180 1.179	1.292 1.290	0.286	0.285			0.01897	5.9259 10.6557	5.9480 10.6996	Highest and middle Middle and lowest	0.277 ± 0.019
	3/5/2018 BCCL-18-0096	1.179	1.290		0.269	0.2775	0.0189		17.2131	17.2840	All three	g per 100mL
 	Agency DPS Manvel		Offense Date	1/12	/2018				J. C.		Reported	3/7/2018
	Subject Espey, Jacob Ma	tthew	DOB	7/7/	1977						Plea	9/7/2018
	Cause No. 233697		Plea/No Plea	Ple	a - Orde	r Granting (Community S	ervice			Destroyed	3/22/2019
	Lead Attorney Bass, Brooks Lea	2	Status	Disp	osed	- Marie Michael - Hamadan y Mil Parthuration in the Mi	- Propins of the Contract of t	users and it. In the entertainment of the self-industry on the Pa				
PVD	5/18/2018 BCCL-18-0996	1.179	1.290	0.486	0.487			0.00105	0.2062	0.2058	Highest and middle	
1, 45	5/18/2018 BCCL-18-0996	1.179	1,290	0.487	0.488			0.00103	0.4124	0.4115	Middle and lowest	
	5/18/2021 BCCL-18-0996	1.179	1.291	0.485	0.486	0.4860	0.0330		0.4124	0.4115	All three	
PVD			1.290	0.408	0.409	0.1000	0.0330	0.0184	4.1860	4.3981	Highest and middle	0 440 + 0 000
	5/22/2018 BCCL-18-0996 -		1.289	0.448	0.451			0.0.0.	5.3922	5.6235	Middle and lowest	0.419 ± 0.028
	5/22/2018 BCCL-18-0996 -		1.290	0.430	0.432	0.4198	0.0285		9.8039	10.2689	All three	g per 100mL
L	Agency DPS Angleton		Offense Date		/2018		010.200				Reported	5/24/2018
	Subject Wilson, Langstor	n Rashad	DOB		3/1982						Plea	1/7/2020
	Cause No. 235290		Plea/No Plea	Ple	ea - Prot	ation or Def	erred Adjudi	cation			Destroyed	7/9/2019
	Lead Attorney Bass, Brooks Lea	2	Status	Disp	osed							
MR	8/21/2019 BCCL-19-1546	1.179	1.291	0.158	0.159			0.00804	2.5316	1.8868	Highest and middle	0.151 ± 0.010
	8/21/2019 BCCL-19-1546	1.179	1.291	0.145	0.145				8.9655	9.6552	Middle and lowest	g per 100mL
	8/21/2019 BCCL-19-1546	1.179	1.290	0.162	0.162	0.1518	0.0099		11.7241	11.7241	All three	9 pc/ 100///2
	Agency DPS West Colum	ıbia	Offense Date	8/11	/2019						Reported	8/23/2019
	Subject Flores, Pablo E.		DOB		/1998						Plea	
	Cause No. 242239		Plea/No Plea	and the second s		er Granting (Community S	ervice			Destroyed	9/4/2020
	Lead Attorney Griffin, Jayne M.		Status	Disp	osed							
SW	6/2/2020 BCCL-20-0628	1.180	1.292	0.142	0.143			0.00639	2.1127	2.0979	Highest and middle	0.140 ± 0.009
	6/2/2020 BCCL-20-0628	1.179	1.290	0.131	0.133				8.3969	7.5188	Middle and lowest	g per 100mL
	6/2/2020 BCCL-20-0628	1.180	1.291	0.145	0.146	0.1400	0.0095		10.6870	9.7744	All three	g per roome
	Agency DPS Freeport		Offense Date	5/3/	2020						Reported	
	Subject Mcdonald, Britta	ny	DOB		/1995						Plea	
	Cause No. 245774		Plea/No Plea			er Granting (Community S	ervice			Destroyed	8/18/2021
	Lead Attorney No Counsel		Status	Disp	osed							

% Sample Variation Calculations Outside 10% Should have been Reanalyzed but Already Destroyed

SW	7/27/2020 BCCL-20-0904	1.179	1.290	0.157	0.264			0.03792	1.1494	45.0549	Highest and middle	
	7/27/2020 BCCL-20-0904	1.179	1.290	0.174	0.179				10.8280	1.6760	Middle and lowest	0.177 ± 0.012
	7/27/2020 BCCL-20-0904	1.180	1.290	0.176	0.182	0.1887	0.0128		12.1019	47.4860	All three	g per 100mL
		CORRECTE	D REAR VALUE		0.162	0.1717	0.0117		12.1019	12.3457	All three	
	Agency DPS Freeport		Offense Date	6/28	/2020						Reported	7/29/2020
	Subject Billeau, John Ma	arcus	DOB	11/18	3/1972						Plea	9/18/2020
	Cause No. 246363		Plea/No Plea	Market State State of	Plea:	: Judgment v	vith Days Jail				Destroyed	8/13/2021
	Lead Attorney Selleck, Tom		Status	Disp	osed							
SW	8/31/2020 BCCL-20-1000	1.180	1.288	0.101	0.099			0.0078	17.4419	16.4706	Highest and middle	0.085 ± 0.006
1	8/31/2020 BCCL-20-1000	1.180	1.288	0.085	0.084				1.1765	1.1905	Middle and lowest	g per 100mL
	8/31/2020 BCCL-20-1000	1.179	1.289	0.086	0.085	0.0900	0.0061		18.8235	17.8571	All three	g per rooms
	Agency DPS Manvel		Offense Date	7/19	/2020						Reported	9/2/2020
	Subject Swango, Presto	n Taylor	DOB	11/28	3/1995						Plea	5/27/2021
							and the second s					
	Cause No. 246784		Plea/No Plea		Plea	 Judgment 	with Days Jail	on one trade advantes were bringer and deleges to			Destroyed	9/21/2021
	Cause No. 246784 Lead Attorney Morin, Phillip J.,	. III	Plea/No Plea Status		Plea oosed	- Judgment	with Days Jail	na para kalain alakan kanan kanan kanan ka			Destroyed	9/21/2021

% Sample Variation Calculations Outside 10% TO BE REANALYZED

		Retentior Time Front Column	Retention Time Rear Column	Value Front		Recovery Front	Recovery Rear		% Front Sample Variation	% Rear Sample Variation		REPORTED
MR	9/23/2019 BCCL-19-1763	1.179	1.291	0.216	0.217			0.01217	3.7037	3.6866	Highest and middle	0.207 ± 0.013
3	9/23/2019 BCCL-19-1763	1.179	1.291	0.224	0.225				9.0909	9.5960	Middle and lowest	g per 100mL
9	9/23/2019 BCCL-19-1763	1.179	1.291	0.198	0.198	0.2073	0.0135		13.1313	13.6364	All three	
	Agency Pearland PD		Offense Date	9/15/	/2019						Reported	9/25/2019
	Subject Alvarado, Arturo)	DOB	2/26/							Plea	9/30/2020
	Cause No. 88672-CR		Plea/No Plea		/	Convicted, G	uilty Plea	and the state of t				
	Lead Attorney Stambaugh, Fran	nk	Status	Disp	osed							
SW	12/4/2010 PCCL 10 2000	1 170	1 200	0.075	0.076				2 4200	2.4390	Highest and middle	
3	12/4/2019 BCCL-19-2089 12/4/2019 BCCL-19-2089	1.178 1.178	1.289		0.076 0.082				2.4390 9.3333	7.8947	Highest and middle Middle and lowest	0.078 ± 0.003
15	• •	1.178	1.289			0.0005	0.0053		12.0000		All three	g per 100mL
13	12/4/2019 BCCL-19-2089 Agency DPS Angleton	1.1/8	1.289 Offense Date		0.084 /2019	0.0805	0.0052		12.0000	10.5263	Reported	12/9/2019
	Subject Langhoff, Robert	t Mayna	DOB		1972						Plea	9/17/2020
	Cause No. 245498	t wayne	Plea/No Plea			Order Amen	ding Probatio	าที			Fied	3/17/2020
	Lead Attorney No Counsel		Status		osed	Order Ameri	anig 110bacı					
			Status	2.00								
SW	8/31/2020 BCCL-20-1013	1.180	1.288	0.103	0.102			0.00662	10.3774	10.4762	Highest and middle	0.104 ± 0.007
2	8/31/2020 BCCL-20-1013	1.180	1.289	0.106	0.105				2.9126	2.9412	Middle and lowest	g per 100mL
66	8/31/2020 BCCL-20-1013	1.180	1.288	0.117	0.116	0.1082	0.0074		13.5922	13.7255	All three	g per roomic
	Agency Pearland PD		Offense Date	7/16,	/2020						Reported	9/2/2020
	Subject Corona Guzman	, Julio Cesar	DOB	7/21/	/1989						Plea	6/4/2021
	Cause No. 247204		Plea/No Plea	Ple	a - Orde	er Granting (Community S	ervice				
	Lead Attorney Caldwell, Clay		Status	Disp	osed							
Г <u>а.</u>												i .
SW	, , ,	1.179	1.288		0.150			0.0154	18.9542	19.0789	Highest and middle	0.151 ± 0.010
2	10/23/2020 BCCL-20-1371	1.179	1.288		0.152				0.6579	1.3333	Middle and lowest	g per 100mL
76	10/23/2020 BCCL-20-1371	1.182	1.295		0.181	0.1617	0.0110		19.7368	20.6667	All three	
	Agency Angleton PD		Offense Date		/2020						Reported	
	Subject Cantu, Matthew			12/17	•	tige of the second sections of the					Trial	1/24/2022
	Cause No. 247130		Plea/No Plea			1 L	-					
	Lead Attorney Sharp, David		Status	Fil	led							

% Sample Variation Calculations Outside 10% TO BE REANALYZED

SW 2	11/19/2020 BCCL-20-1545 11/19/2020 BCCL-20-1545	1.180 1.180	1.289 1.288	0.152 0.129	0.152 0.129			0.01188	17.8295 0.0000	17.8295 0.0000	Highest and middle Middle and lowest	0.129 ± 0.000
81	11/19/2020 BCCL-20-1545	1.180	1.290	0.129	0.129	0.1367	0.0089		17.8295	17.8295	All three	g per 100mL
	Agency Lake Jackson PD		Offense Date	10/19	/2020						Reported	
	Subject Baker, David Mich	nael	DOB		1958						Dismissed	5/25/2021
	Cause No. 247515		Plea/No Plea	Dismiss	al Order	- Other						
	Lead Attorney Bass, Brooks		Status	Dism	issed							
PVD	12/9/2020 BCCL-20-1819	1.180	1.288	0.101	0.101			0.0045	3.9604	3.9604	Highest and middle	
5	12/9/2020 BCCL-20-1819	1.180	1.290	0.095				0.00.0	6.3158	6.3158	Middle and lowest	0.100 ± 0.001
4	12/9/2020 BCCL-20-1819	1.180	1.289	0.105	0.105	0.1003	0.0065		10.5263	10.5263	All three	g per 100mL
<u> </u>	Agency DPS Freeport		Offense Date								Reported	12/11/2020
	Subject Ganstine, Kaylie R	₹ae	DOB	10/9/	1996						Trial	4/4/2022
	Cause No. 91907-CR		Plea/No Plea	FUNETE:	TRIA	L						
	Lead Attorney Bass, Brooks		Status		ed	And the second s						
SW	3/12/2021 BCCL-21-0172	1.181	1.288	0.196	0.196			0.01448	2.5510	2.0408	Highest and middle	
5	3/12/2021 BCCL-21-0172	1.181	1.288		0.171			0.07110	15.2941	14.6199	Middle and lowest	0.190 ± 0.013
15	3/12/2021 BCCL-21-0172	1.181	1.288	0.201		0.1890	0.0123		18.2353	16.9591	All three	g per 100mL
10	Agency DPS Freeport	1.101				0.1090	0.0123		10.2333	10.3331		2/15/2021
	• ,		Offense Date								Reported	
	Subject Mendoza, Jesus M	lanuel	DOB		/1986						Hearing	1/6/2022
	Cause No. 248802		Plea/No Plea		IKIAL	IEAKING						
	Lead Attorney		Status									

% Sample Variation Calculations Outside 10% DRAFT COMPLETE: TO BE REANALYZED

		Retention Time Front Column	Retention Time Rear Column	Wallie		Recovery Front	Recovery Rear		% Front Sample Variation	% Rear Sample Variation		TO BE REPORTED
SW	6/4/2021 BCCL-21-0001	1.180	1.288	0.236	0.236			0.01121	4.8889	4.8889	Highest and middle	0.218 ± 0.014
5	6/4/2021 BCCL-21-0001	1.180	1.288	0.211	0.211				6.6351	6.6351	Middle and lowest	g per 100mL
10_	6/4/2021 BCCL-21-0001	1.181	1.289	0.225	0.225	0.2240	0.0146		11.8483	11.8483	All three] g per roome
SW	6/4/2021 BCCL-21-0166	1.181	1.288	0.270	0.270			0.02485	3.8462	4.2471	Highest and middle	0.264 ± 0.017
5	6/4/2021 BCCL-21-0166	1.180	1.288	0.218	0.217				19.2661	19.3548	Middle and lowest	g per 100mL
15	6/4/2021 BCCL-21-0166	1.181	1.289	0.260	0.259	0.2490	0.0162		23.8532	24.4240	All three	g per roomic
	· · · · · · · · · · · · · · · · · · ·	CORRECTED	REAR VALUE		0.269	0.2507	0.0170		23.8532	23.9631	All three	
												-
SW	6/4/2021 BCCL-21-0336	1.181	1.289	0.113	0.112			0.0048	6.6038	6.6667	Highest and middle	0.106 ± 0.007
6	6/4/2021 BCCL-21-0336	1.181	1.288	0.102	0.102				3.9216	2.9412	Middle and lowest	g per 100mL
1	6/4/2021 BCCL-21-0336	1.181	1.288	0.106	0.105	0.1067	0.0069		10.7843	9.8039	All three] g po. 1002
SW	6/4/2021 BCCL-21-0765	1.180	1.288	0.182	0.181			0.00896	6.4327	5.8480	Highest and middle	0.166 ± 0.011
6	6/4/2021 BCCL-21-0765	1.181	1.288	0.162	0.161				5.5556	6.2112	Middle and lowest	g per 100mL
12	6/4/2021 BCCL-21-0765	1.180	1.288	0.171	0.171	0.1713	0.0111		12.3457	12.4224	All three	g per roome
SW	6/4/2021 BCCL-21-0774	1.180	1.288	0.181	0.180			0.00783	7.1006	7.1429	Highest and middle	0.170 ± 0.011
6	6/4/2021 BCCL-21-0774	1.180	1.288	0.164	0.163				3.0488	3.0675	Middle and lowest	g per 100mL
13	6/4/2021 BCCL-21-0774	1.180	1.288	0.169	0.168	0.1708	0.0111		10.3659	10.4294	All three	g per roome
SW	6/4/2021 BCCL-21-0887	1.181	1.288	0.214	0.213			0.01294	11.4583	10.9375	Highest and middle	0.189 ± 0.012
6	6/4/2021 BCCL-21-0887	1.180	1.288	0.186	0.186				3.2258	3.2258	Middle and lowest	I '
15	6/4/2021 BCCL-21-0887	1.180	1.288	0.192	0.192	0.1972	0.0128		15.0538	14.5161	All three	g per 100mL
			1		***************************************							-
SW	6/17/2021 BCCL-21-0685	1.180	1.288	0.181	0.180			0.00763	4.6243	4.6512	Highest and middle	0.172 ± 0.011
6	6/17/2021 BCCL-21-0685	1.181	1.289	0.164	0.163				5.4878	5.5215	Middle and lowest	g per 100mL
11	6/17/2021 BCCL-21-0685	1.181	1.289	0.173	0.172	0.1722	0.0112		10.3659	10.4294	All three	J g bei 100ilir

% Sample Variation Calculations Outside 10% DRAFT COMPLETE: TO BE REANALYZED

SW F6 18	6/29/2021 BCCL-21-1006 6/29/2021 BCCL-21-1006 6/29/2021 BCCL-21-1006	1.180 1.180 1.180	1.288 1.288 1.288	0.160 0.159 0.177 0.176 0.178 0.177	0.1712	0.0111	0.00906	0.5650 10.6250 11.2500	0.5682 10.6918 11.3208	Highest and middle Middle and lowest All three	0.177 ± 0.012 g per 100mL
SW F6 15	8/16/2021 BCCL-21-0893 8/16/2021 BCCL-21-0893 8/16/2021 BCCL-21-0893	1.180 1.180 1.180	1.288 1.288 1.288	0.214 0.213 0.188 0.187 0.209 0.208	0.2032	0.0132	0.01235	2.3923 11.1702 13.8298	2.4038 11.2299 13.9037	Highest and middle Middle and lowest All three	0.211 ± 0.014 g per 100mL
SW BIO	10/22/2021 BCCL-21-1631 10/22/2021 BCCL-21-1631 10/22/2021 BCCL-21-1631	1.181 1.181 1.181	1.288 1.288 1.288	0.156 0.155 0.128 0.127 0.157 0.157	0.1467	0.0095	0.01487	0.6410 21.8750 22.6563	1.2903 22.0472 23.6220	Highest and middle Middle and lowest All three	0.156 ± 0.010 g per 100mL
SW BIO	11/10/2021 BCCL-21-1676 11/10/2021 BCCL-21-1676 11/10/2021 BCCL-21-1676	1.180 1.181 1.181	1.288 1.289 1.288	0.184 0.182 0.166 0.165 0.177 0.175	0.1748	0.0114	0.00794	3.9548 6.6265 10.8434	4.0000 6.0606 10.3030	Highest and middle Middle and lowest All three	0.170 ± 0.011 g per 100mL
SW BIO	11/10/2021 BCCL-21-1718 11/10/2021 BCCL-21-1718 11/10/2021 BCCL-21-1718	1.181 1.181 1.181	1.288 1.288 1.288	0.094 0.093 0.101 0.100 0.105 0.103	0.0993	0.0065	0.00484	3.9604 7.4468 11.7021	3.0000 7.5269 10.7527	Highest and middle Middle and lowest All three	0.097 ± 0.006 g per 100mL

LOG-19-02-A Page 1 of 2

Corrective Action Plan EtOH Sample Variations Outside 10%

Incident Date: Multiple. Identified November 14, 2021.

Incident Type: Procedural

Incident Description: Blood alcohol samples were not calculated and reported according

to our Standard Operating Procedures.

Due to only having one Toxicologist, our blood alcohol cases have been sent out to Jefferson County Regional Crime Laboratory for technical and administrative review. One of the contracted analysts at Jefferson County Regional Crime Laboratory on November 14 and November 18 questioned how the final result from the triplicate samples was calculated and, if only taking four instead of six values into account, how to determine which values to drop, specifically in cases BCCL-21-0001 and BCCL-21-0166. They also stated that BCCL-21-0336 and BCCL-21-0774 were outside of the 10% allowed variation.

While answering their questions, inconsistencies and nonconformance of our own SOP TOX-C-01-06 were found. Direct conflict within the SOP was specifically found in sections 8.2.1 and 9.1.4 regarding the allowed 10% sample variation between samples and which sample results may be used. Section 8.2.1 states that the values of the triplicate sampling of each column *shall* agree within 10% of each other. The SOP later states in section 9.1.4 states that four of the six values may be used to achieve a sample variation of 10% or less; however, there are no written guidelines as to which values may be dropped. Inconsistencies regarding how many values to use were also found between TOX-C-01-06 and TG-TOX-03-04. TOX-C-01-06 also states in 8.2.2 that the variation will be truncated to no less than three decimal places. Cases between 10% and 11% were not being truncated to three decimal places – only to the whole number.

During the root cause investigation, it was found to be a historical repetition of verbal confirmation during training. During multiple interviews with Analyst 1 regarding workflow and analysis of casework, it was found that the training contradicted the SOPs. Past versions of SOPs were viewed to determine if/when policies were changed. Archived SOPs dating back to 2013 showed the same wording that each result "shall" agree within 10% of each other.

TOX-C-01-06 Analysis of Ethanol in Biological Specimens

"8.2.1 Individual case sample results from the triplicate injections shall agree within 10% of each other.

Approval Date: November 30, 2021 Effective Date: November 30, 2021 8.2.2 This 10% variation will be calculated using the highest and lowest results from a single column, truncated to no less than three decimal places and the following equation: [(High value-Low value) / Low value] \times 100

8.3.1 If two of the three samples do not meet the above specifications, the sample preparation and analysis shall be repeated once.

9.1.4 If two samples (four values) are within 10% of each other, those samples shall be averaged to report the value."

TG-TOX-03-04 GC/FID for Ethanol Quantitation

'6.4 The three responses from each detector (for a total of six) should be averaged together to determine the alcohol content. If there is an outlier it should be dropped. Use this formula to determine outliers: (High-Low)/ (Low) x 100%. A response is considered an outlier if the high and low responses do not agree within 10% of each other. Note: The high and low responses used must come from the same detector."

Proposed Corrective Action(s):

- 1. Revise the current SOPs, including the training guide, to correlate with one another, as well as clarify the language.
- 2. Create an annual exam with signature requirement acknowledging SOP standards and methods.
- 3. Look back at previous cases to determine if other cases were affected.
- 4. Discuss possible changes to both <u>TOX-C-01 Analysis of Ethanol in Biological Specimens</u> and <u>TG-TOX-03 GC/FID for Ethanol Quantitation</u>, including but not limited to the following:
 - a. Whether or not blood alcohol specimens will continue to be analyzed in triplicate
 - b. If the 10% variation will be calculated using all three values from each column
 - c. If not using all three values from each column, which set of values will be dropped
 - d. Determine if the allowed sample variation will continue to be 10%, truncated to no less than three decimal places

Timeframe for Corrective Action(s): two weeks from signature date

Comment(s): Analyst 1 has written a note in conjunction with	this Corrective Action Plan.
216~	11/(3/21
Applicable Analyst / Discipline	Date
a har	12/13/2021
Lab Quality Manager	Date
Deel Suls	12 Decle
Laboratory Director	Date

Approval Date: November 30, 2021 Effective Date: November 30, 2021

Issuing Authority: Upper Management Authorized for Distribution by Laboratory Director

Analyst 1 Note:

Analyst 1 would like to preface this note with the acknowdgement that Analyst 1 did not write, have any input, or exercised any judgment for the final decisions made for the Blood Alcohol Concentration (BAC) Standard Operating Procedures (SOP) TOX-C-01-06. TOX-C-01-06 was created and modified solely by Analyst 2 and several QC Managers over the years. However, Analyst 1 does not agree that 8.2.1 ("Individual case sample results from the triplicate injections shall agree within 10% of each other") explicitly states that only 6 values shall be used to calculate the final BAC. The current interpretation infer that 8.2.1 states that only 6 values shall be used to calculate the final BAC. This conclusion requires an assumption and can only be reached if 8.2.1 is taken in isolation.

Analyst 1 interpretation of 8.2.1 is that it is a declarative sentence that explicitly state that the 6 values shall be within 10% but does not explicitly state that only 6 values shall be used to calculate the final BAC. In addition, the intent of Analyst 2 is clear, that four values within 10% may be used to calculate the final BAC. This is readily appreciated in 8.2.2 ("This 10% variation will be calculated using the highest and lowest results from a single column, truncated to no less than three decimal places and the following equation: [High value-Low value/Low value] x 100 ") which dictates how the 10% is calculated, and 9.1.4 which states "If (two samples) four values are within 10% of each other, those samples shall be averaged to report the value".

Although Analyst 2 was not granular in stating how the four values should be derived, the laboratory policy was that 4 values may be used to calculate the final BAC, with the benefit going to the the source of the blood (by using the lowest four values when possible, but not at the cost of reanalysis).

Finally, Analyst 1 is in full agreement that truncation of the 10% calculation did not follow the directive of the TOX-C-01-06.

12/13/21

November 29, 2021

Brazoria County Sheriff's Office Bo Stallman, Sheriff Varon Snelgrove, Chief Deputy Special Investigations Command Chris Reioux, Captain

Dear Sir:

On Wednesday, November 17, 2021, I was made aware of an issue with the technical review of Brazoria County Sheriff's Office (BCSO) Crime Lab blood alcohol cases by the Jefferson County Crime Lab. An email forwarded to me by the Quality Director of the BCSO Crime Lab, Aleia Winters, contained a conversation between BCSO Crime Lab analyst Sam Wylie and Jefferson County Crime Lab Director Emily Esquivel. Essentially that conversation centered around two main issues: First, a calibrator from batch run 06-04-2021 did not appear to meet the ten percent acceptance criterion and an explanation as to how that should be interpreted was queried. Secondly, the ten percent acceptance criterion for case samples BCCL-21-0001, BCCL-21-0166 and BCCL-21-0336 was raised due to only four ethanol results being averaged instead of the normal six results.

This conversation prompted an internal review of the Laboratory blood ethanol protocols by pertinent Laboratory staff. Concentration was focused on BCSO Crime Lab Standard Operating Procedure TOX-C-01-06 Sections 5.0, 8.0 and 9.0.

Section 5.0 – Calibrators, Controls, Internal Standards/Blanks and Volatile Mixture, subsection 5.1.5 reads as follows:

5.1.5 If any of the values of the individual calibrators are outside of the 10% requirement after reprocessing, the reprocessed calibrators may be used to determine specimen BAC if the average values of the calibrators for the raw data and the reprocessed data are both within the 10% requirement.

Section 8.0 – Evaluation of Results. Portions of Section 8.0 reads as follows:

- 8.1 Results from three separate aliquots shall be available for evaluation
- 8.2 Specification of results
 - 8.2.1 Individual case sample results from the triplicate injections shall agree within 10% of each other.
 - 8.2.2 This 10% variation will be calculated using the highest and lowest results from a single column, truncated to no less than three decimal places and the following equation [(High value Low value) / Low value] x 100

- 8.3 Conditions for reanalysis
 - 8.3.1 If two of the three samples do not meet the above specifications, the sample preparation and analysis shall be repeated once.
 - 8.3.2 If a reanalysis meets the above specifications, the new set of data shall be used for reporting.

Section 9.0 – Reporting of Ethanol Concentration. Portions of Section 9.0 reads as follows:

- 9.1 The results are reported in the following manner:
 - 9.1.4 If two samples (four values) are within 10% of each other, those samples shall be averaged to report the value.

After speaking with the analyst concerning his application of subsection 5.1.5, the averaging of the data set for the calibrators in batch 06-04-2021 did return an average within the ten percent threshold. In this particular data set, the 0.100 ethanol calibrator on the initial calibration run returned a reprocessed value of 0.088 which is outside of the ten percent requirement (the lowest this value could have been was 0.090). The other calibrators at this level returned values within the ten percent threshold. At this point, section 5.1.5 is triggered. Raw data values for the 0.100 calibrator on both channels are as follows: 0.090, 0.090, 0.102, 0.101, 0.100 and 0.100 for an average of 0.097. The reprocessed data values for the 0.100 calibrator on both channels are as follows: 0.088, 0.088, 0.102, 0.102, 0.100 and 0.100 for an average of 0.096. The averaged values of the raw and reprocessed data are then compared to each other to determine if this percentage is within ten percent. The resulting averages returned a value within the ten percent threshold. Although this application of subsection 5.1.5 allows use of the reprocessed calibrators to establish the calibration curve, it does reveal a weakness in the reporting procedures. The six calibrators are run a total of three times on both channels producing a total of 36 results. The initial twelve calibrator results are not used and the remaining twenty-four calibrators are averaged to determine the resulting calibration curve. If the initial results are not used, then why are those results then used in determining if a ten percent threshold is in effect when using subsection 5.1.5. It would make more sense to only use those results that were a factor in determining the calibration curve, the last twentyfour results. It is clear that the application of section 5.1.5 needs to be rethought.

As for sections 8 and 9, the language is ambiguous at best. Subsection 8.2.1 states that individual case sample results from the triplicate injections **shall** agree within ten percent of each other implying that to be reported out, the three results from channel 1 must agree within the ten percent threshold and the three results from channel 2 must agree within the ten percent threshold outlined in 8.2.2. Only then can the collective six results be averaged together and final blood alcohol content reported. However, the wording in subsection 9.1.4 says that if two samples (four values) are within 10% of each other, those samples **shall** be averaged to report the value. This implies that if a channel contains an outlier of the ten percent threshold, that outlier may be dropped. This statement is in direct conflict with

subsection 8.2.1. Furthermore, in the explanation of the ten percent threshold to the reviewer, it is clear that 8.2.2 is not applied correctly. The Laboratory requirement is that the threshold is truncated to three decimal places not that all decimal places are truncated to leave only the whole number. Additionally, due to the discrepancies outlined in sections 8 and 9, it is my opinion that any lab report issued using only four results to report ethanol concentration is in error. If the Laboratory requires six results for the reporting of most samples, we should not allow only four results to be used just to avoid reanalysis.

In accessing the application of sections 8 and 9 (cases in which a variance between 10.001 and 10.999 exists where the final variance was truncated to the whole number of ten and cases in which only four results were used to calculate blood alcohol content), the Laboratory has identified a total of forty-two (42) cases from 2018 to 2021 involving three analysts. These cases were identified using an excel spreadsheet that was kept in the normal course of blood alcohol analysis. The forty-two cases are divided as follows:

- 1. Seven (7) cases that were identified as spreadsheet input errors. In these cases, some of the cells reflecting alcohol results were input incorrectly thereby allowing the resulting variance to be greater than 10.001 percent. Once the actual values were input correctly, all variances were below 10.00 percent. These cases may be omitted from the corrective procedures.
- 2. Ten (10) cases that contained a variance of greater than 10.001 percent but were reported out with an alcohol concentration below 0.025 grams per 100 milliliters or no alcohol detected. In these cases, the probability of prosecution of the individual continuing only with alcohol results is minimal. Furthermore, the alcohol content for these analyses cannot be back extrapolated to a concentration greater than 0.080 grams per 100 milliliters due to pharmacokinetic dynamics. These cases may be omitted from the corrective procedures.
- 3. Twelve (12) cases currently under review guidelines that contained a variance of greater than 10.001 percent. In these cases, a final laboratory report has yet to be issued due to the technical and administrative review process. These cases should be included in the corrective procedures.
- 4. Seven (7) cases where a final laboratory report has been issued and contained a variance greater than 10.001 percent. These cases should be included in the corrective procedures.
- 5. Six (6) cases that have had a final laboratory report issued but have been destroyed by the laboratory with a variance greater than 10.001 percent. These cases should be included in the corrective procedures.

A listing of these cases can be found in the attached spreadsheet.

In investigating the root cause of the failures to follow Standard Operating Procedures (SOP's), the following causes have been identified.

- 1. The section of the Laboratory's SOP's (TOX-C-01-06) that deals with blood alcohol analysis, evaluation and reporting of results is vague at best. This vagueness has allowed for multiple interpretations by various analysts staffed throughout the years in the Toxicology section.
- 2. Interviews with Laboratory personnel has identified a largely oral tradition of conveying crucial information as it pertains to Laboratory guidelines. This oral method seems to have existed for at least a decade. A question concerning the intent of an SOP seems to have been met with the response "that this is the way it's done in this Laboratory" without adequately addressing the veracity of the SOP in question.
- 3. No system has been in place to address if pertinent SOP's are thoroughly understood. There is acknowledgement kept in personnel files that Laboratory SOP's have been read but no mechanisms to record if those SOP's are understood.
- 4. The spreadsheet used in conjunction with blood alcohol analysis does not automatically highlight when a sample should be reanalyzed. The format does not allow for the calculation of differences between results thus failing to highlight when there is a greater than ten percent difference. Additionally, a correlation coefficient is not plotted. This spreadsheet is also not made available for technical review to highlight any input errors.

To correct the above causes, the Laboratory recommends the following actions be taken immediately.

- 1. Laboratory SOP TOX-C-01-06 should be thoroughly evaluated and clarified by appropriate Laboratory personnel and new guidelines issued.
- 2. The Laboratory will implement a document control system. The Laboratory has reached out to Qualtrax for a quote on their document control system. Additionally, the BCSO uses a document control system known as PowerDMS. The Laboratory has reached out to pertinent individuals in the Sheriff's Office to ascertain if the Laboratory may evaluate this software for document control. Once the two systems are compared, the Laboratory will incorporate the most reliable software into its protocol. This will allow tracking of not only acknowledgement of SOP revisions, but also testing of personnel concerning their understanding of key SOP's. By establishing passing criteria for these exams, a true assessment of understanding may be gauged.
- 3. As not to interfere with normal colleague interactions, oral communication will not be dissuaded, but if those questions concern SOP interpretation, communication

- will be placed in written format and directed to section personnel, quality manager and Laboratory director.
- 4. A revised spreadsheet highlighting when a sample is triggered for reanalysis and the inclusion of the correlation coefficient for the calibrators used will be implemented. Additional modifications may be added to the revised spreadsheet to better highlight pertinent data. The spreadsheet will also be subjected to the technical review process.

In summary, after contracting the Jefferson County Crime Laboratory to technically and administratively review blood alcohol cases analyzed by this Laboratory, several defects were revealed in the application of BCSO Crime Lab SOP TOX-C-01-06. The application of the ten percent variance outlined in subsection 8.2.2 was not applied correctly. The Laboratory has identified five categories comprising forty-two (42) cases that fit this particular defect. Of those forty-two cases, seventeen (17) need no further actions other than documentation identifying them as part of the corrective action evaluation. Of the remaining twenty-five (25) cases, nineteen (19) cases will need to be reanalyzed to reflect proper application of the ten percent variance. Of the nineteen cases needing to be reanalyzed, twelve (12) have not had a final Laboratory report released. These twelve cases may be reanalyzed by the Laboratory. After technical and administrative review, the results of the blood alcohol analysis may be released. These Laboratory reports should reflect that a corrective action was associated with the results. The seven (7) remaining results where a Laboratory report has already been issued should be sent to an outside Laboratory for alcohol content confirmation. These results should be reflected in an amended Laboratory report also detailing the corrective action undertaken. The six (6) remaining cases that have had a final Laboratory report issued but the evidence destroyed present a difficult dilemma. Since the evidence has been destroyed making additional analysis impossible, the Laboratory cannot support the findings in the original report due to the misapplication of subsections 8.2.2 and 9.1.4. An amended Laboratory report detailing the inaccuracies in the reporting of the initial values should be drafted. The resulting corrective action should also be included in the amended report. Whether or not additional action is warranted is a matter of deliberation between the charging entity and relevant parties. Finally, due to substantial nature of these corrective measures, the Texas Forensic Science Commission must be notified. The Laboratory will make proper and timely notifications to the Commission.

Respectfully,

Derek Sanders

Lab Director

Brazoria County Sheriff's Office Crime Laboratory

Decke Inderes



TEXAS FORENSIC SCIENCE COMMISSION LAB DISCLOSURE FORM

Please complete this form and return to:

Texas Forensic Science Commission 1700 North Congress Avenue, Suite 445 Austin, Texas 78701 Email: info@fsc.texas.gov [P] 1.888.296.4232

[F] 1.888.305.2432

The Texas Forensic Science Commission ("FSC") is legislatively mandated to require crime laboratories that conduct forensic analyses to report professional negligence or professional misconduct to the Commission. (See Tex. Code Crim. Proc. 38.01 as amended by Tex. S.B. 1238, 83rd Leg., R.S. (2013)).

Please keep in mind that the FSC investigates matters subject to its statutory authority only. The term "forensic analysis" includes any medical, chemical, toxicological, ballistic, or other examination or test performed on physical evidence, including DNA evidence, for the purpose of determining the connection of the evidence to a criminal action. The term does not include the portion of an autopsy conducted by a medical examiner or other forensic pathologist who is a licensed physician. The term "crime laboratory" is defined in Article 38.35 of the Texas Code of Criminal Procedure to include "a public or private laboratory or other entity that conducts a forensic analysis subject to this article."

The FSC will examine the details of your disclosure to determine what level of review to perform, if any. All disclosures are taken seriously. Because of the complex nature and number of complaints and disclosures received by the FSC, we cannot give you any specific date by which that review may be completed. However, we aim to resolve all disclosures in a timely and expeditious manner, and to minimize disruption in the laboratory.

The Commission's statute allows it to withhold from disclosure information submitted in the context of an investigation but only until the final report is released. Upon release of the final report, all information provided to the Commission is subject to disclosure under the Texas Public Information Act ("PIA") (Texas Government Code Chapter 552).

IMPORTANT: If your disclosure involves a pending criminal matter(s), please be sure to indicate that on the form below because certain PIA exceptions may apply.

1. Person Completing This Form

Name:	Aleia Winters
Laboratory:	Brazoria County Sheriff's Office Crime Lab
Address:	3602 CR 45
City:	Angleton
State: TX	Zip Code: 77515
Home Phor	ne: N/A
Work Phon	e: (979) 864 - 2310
Email Addre	ess (if any): aleiaw@brazoria-county.com

2. Subject of Disclosure

List the full name, address of the laboratory, facility or individual that is the subject of this disclosure:

Individual/Laboratory: Brazoria County Sheriff's Office Crime Lab
Address: 3602 CR 45
City: Angleton
State: TX Zip Code: 77515
Year Laboratory Accreditation Obtained: 2019
Name of National Accrediting Agency: ANAB
Date of Examination, Analysis, or Report: 'see spreadsheet
Type of Forensic Analysis: blood alcohol
Laboratory Case Number (if known): *see spreadsheet
Is the forensic analysis associated with any law enforce-

ment investigation, prosecution or criminal litigation?

Yes No No

- * If you answered "Yes" above, provide the following information (if possible):
- * Name of Defendant: *see spreadsheet
- * Case Number/Cause Number: *see spreadsheet (if unknown, leave blank)
- * Nature of Case: *see spreadsheet (e.g burglary, murder, etc.)
- *The county where case was investigated, prosecuted or filed: Brazoria County
- *The Court: Brazoria County Courts
- *The Outcome of Case:

*see spreadsheet

* Names of attorneys in case on both sides (if known):

*see spreadsheet for defendant attorneys

3. WITNESSES

Provide the following about any person with factual knowledge or expertise regarding the facts of the disclosure. Attach separate sheet(s), if necessary.

First Witness	(if any):
Name:	Derek Sanders
Address:	3602 CR 45 Angleton, TX 77515
Daytime Pho	one: (979) 864-2349
Evening Pho	ne:
Fax:	
Email Addres	s: dsanders@brazoria-county.com
Second Witn	ess (if any):
Name:	Dr. Samuel Wyllie
Address:	3602 CR 45 Angleton, TX 77515
Daytime Pho	one: (979) 864-2059
Evening Pho	ne:
Fax:	
Email Addres	ss: samuelw@brazoria-county.com
Third Witnes	ss (if any):
Name:	
Address:	
Daytime Pho	
Evening Pho	ne:
Fax:	
Email Addres	S:

TEXAS FORENSIC SCIENCE COMMISSION • LAB DISCLOSURE FORM (Cont.)

4. DESCRIPTION OF DISCLOSURE

Please write a brief statement of the event(s), acts or omissions that are the subject of the disclosure. See Page 6 of this form for guidance on what information should be disclosed to the Commission.

There was an irregularity discovered with the analysis of blood alcohol samples. Blood alcohol
samples were found to not be calculated and reported according to our Standard Operating
Procedures. Due to only having one Toxicologist, our blood alcohol cases have been sent out to
Jefferson County Regional Crime Laboratory for technical and administrative review. One of the
contracted analysts questioned how the final result from the triplicate samples was calculated and,
if only taking four instead of six values into account, how to determine which values to drop, as
well as notifying the lab we were outside of the 10% allowed variation. While answering their
questions, inconsistencies and nonconformance of our own SOP TOX-C-01-06 were found,
specifically regarding the allowed 10% sample variation between samples and which sample
results may be used. Section 8.2.1 states that the values of the triplicate sampling of each column
shall agree within 10% of each other. The SOP later states in section 9.1.4 that four of the six
values may be used to achieve a sample variation of 10% or less; however, there are no written
guidelines as to which values may be dropped. TOX-C-01-06 also states in 8.2.2 that the
variation will be truncated to no less than three decimal places. Cases between 10% and 11%
were not being truncated to three decimal places – only to the whole number.

TEXAS FORENSIC SCIENCE COMMISSION • LAB DISCLOSURE FORM (Cont.)

5. DESCRIPTION OF CORRECTIVE ACTION TAKEN

Please describe any corrective actions or corrective action plans the laboratory has developed to address the issues discussed in this disclosure. Please attach copies of the actions taken and/or future corrective plan to this disclosure form.

Please let the Commission know if any other agencies (e.g., Texas Rangers, local district attorney, Inspector General's Office, etc.) are also conducting an investigation of the matter in question. If possible, provide a contact name and phone number for the individual responsible for any other investigation(s).

All casework performed since the beginning of 2018 has been re-calculated using the equation in TOX-C-01-06 8.2.2 to ensure the triplicate samples of each column are within 10.000% of each
other. There were 42 samples (41 cases) identified to be outside the 10.000% sample variation: eight from 2018, three from 2019, 11 from 2020, and 20 from 2021. See the supplemental
spreadsheet for more detailed information.
The current SOP is in the process of being revised.
Re-analysis of the cases in Draft Complete will occur under the revised SOP.
Samples in which a report has already been issued and the sample not destroyed will be sent out for third-part reanalysis and an amended report issued.
Document control systems are being reviewed in order to set one up so that an annual exam with a signature requirement acknowledging SOP standards and methods is put into place
The current blood EtOH spreadsheet is being reformatted to better highlight samples outside of variance and make that spreadsheet available to the technical reviewer.
variance and make that spreadsheet available to the teermied reviewer.
No other agencies are conducting an investigation at this time.

TEXAS FORENSIC SCIENCE COMMISSION • LAB DISCLOSURE FORM (Cont.)

6. EXHIBITS AND ATTACHMENT(S)

Whenever possible, disclosures should be accompanied by readable copies (NO ORIGINALS) of any laboratory reports, relevant witness testimony, affidavits of experts about the forensic analysis, or other documents related to your disclosure. Please list and attach any documents that might assist the Commission in evaluating the disclosure. Documents provided will NOT be returned. List of attachments:

2021-11_CAP_EtOH Sample Variations (including Analyst 1's letter)
2021-11 Laboratory Director Letter
2018-2021 EtOH Sample Variation Calculations - TFSC Copy
TOX-C-01-06 Analysis of Ethanol in Biological Specimens
7. YOUR SIGNATURE AND VERIFICATION
By signing below, I certify that the statements made by me in this disclosure are true. I also certify that any documents or exhibits attached are true and correct copies, to the best of my knowledge.
Signature: Ani Worth
Date Signed: Jan. 5, 2022
- Will Space

TEXAS FORENSIC SCIENCE COMMISSION GUIDELINES FOR LABORATORY SELF-DISCLOSURE

One of the Commission's statutory duties is to "require a crime laboratory that conducts forensic analyses to report professional negligence or professional misconduct to the Commission." Tex. Code Crim. Proc. § 38.01, Sec. 4(a)(2).

This document is designed to provide guidance to laboratories in determining whether they should disclose particular events to the Commission under the statute. Any questions regarding these guidelines should be directed to the Commission's General Counsel at (512) 936-0770.

Self-Disclosure Categories:

- <u>Probation</u>: If the national accrediting body responsible for accrediting your laboratory and/or the Department of Public Safety notifies you that it intends to put your laboratory on probation, you should inform the Commission as soon as possible, but no later than five (5) business days from receiving notification from the accrediting body.
- <u>Suspension of Accreditation</u>: If the national accrediting body responsible for accrediting your laboratory and/or the Department of Public Safety notifies you that it intends to suspend your laboratory's accreditation for any reason, you should inform the Commission as soon as possible, but no later than five (5) business days from receiving notification from the accrediting body.
- <u>Significant Irregularity in the Laboratory:</u> Laboratories shall disclose any irregularity that may rise to the level of professional negligence or misconduct using the disclosure form on the Commission's website. The disclosure should be submitted to the Commission as soon as possible, but no later than thirty (30) days after the irregularity is discovered. If the laboratory needs a longer period to submit its disclosure, it should contact the Commission's General Counsel with an explanation and a request for additional time.

Please note that the outcome of any particular criminal case should not be a consideration in your decision regarding whether to disclose an issue to the Commission. You should disclose any significant laboratory irregularity regardless of the criminal case outcome, and regardless of whether the quality controls in the laboratory caught the issue of concern before a final report was issued to the customer. When using the term "significant irregularity," we refer to facts that if true, would indicate the existence of negligence or misconduct such that the integrity of the forensic examination, the individual forensic examiner, or the laboratory as a whole would be called into question.

If your self-disclosure involves a pending criminal case, or you believe that anyone involved in the disclosure may be the subject of criminal investigation, please alert the Commission when submitting your disclosure, as certain law enforcement exceptions to the Public Information Act may apply to the information submitted.

EXHIBIT C

BRIAN HRACH Criminal Division Chief



RAETHELLA JONES Chief - Civil Division

E.J. KING, JR. Chief Investigator

CRIMINAL DISTRICT ATTORNEY BRAZORIA COUNTY

February 1, 2022

Members of the Brazoria County Bar Association & Indigent Defense Counsel

RE: Brazoria County Sheriff's Office Crime Laboratory Corrective Action

Dear Counsel:

Pursuant to Rules 304 and 309 of the Texas Rules of Professional Responsibility, as well as the *Schulz* decision, I am releasing the following statements regarding allegations of improprieties or irregularities in the Brazoria County Crime Lab.

Please see attached Texas Forensic Science Commission Lab Disclosure Form, Corrective Action Plan EtOH Sample Variations Outside 10% and Brazoria County Lab Director's letter. This is regarding an internal conflict of the Crime Lab's SOP regarding EtOH samples variation and inconsistencies in how many values to use. The variation between 10% and 11% were not being truncated to the three decimal places. The laboratory identified 42 cases from 2018 to 2021 in which a variance between 10.01 and 10.999 existed where the final variance was truncated to the whole number of 10 and cases which only four results were used to calculate blood alcohol content. Corrective action is being taken.

We are sending this to you consistent with our continued disclosure duties and in the interest of laboratory transparency.

Tom Selleck

Brazoria County Criminal District Attorney

EXHIBIT D

From: Leigh Tomlin Leigh.Tomlin@fsc.texas.gov

Subject: Re: Brazoria County
Date: August 13, 2023 at 9:12 PM

To: Lynn Garcia Lynn.Garcia@fsc.texas.gov

From: Putnam, Bradford <bputnam@anab.org>

Sent: Tuesday, April 18, 2023 4:30 PM

To: Lynn Garcia < Lynn.Garcia@fsc.texas.gov>

Cc: Sale, Pamela <psale@anab.org>

Subject: Brazoria County

Lynn – I appreciated the copy of the draft report from the Texas Forensic Science Commission on Brazoria County Sheriff's Office Crime Laboratory investigation.

As you know the investigation, initiated by a self-disclosure, surrounded blood alcohol analysis procedures and the laboratory's application of the procedure to analytical work. During the in-depth investigation the TX FSC team developed a concern regarding the analysis of drugs in blood. In the "Additional Observations and Recommendations" section of the BCSOCL Report first observation was that the BSOCL "approach" to analysis of drugs in blood is unsupportable. The report identified:

"The laboratory's practice was to perform an immunoassay test first. The laboratory then compared the retention times in gas chromatography (GC) against a known standard to support the identification of any one of five categories of controlled substances in blood. For samples where the immunoassay test was negative, the laboratory would report results based on GC retention times alone."

The report also makes an observation on the role of accreditation in the third point, and asks a salient question:

It is unclear why ANAB did not assess a nonconformity during accreditation activity for either the blood alcohol variation discrepancies or the laboratory's approach to analyzing drugs in blood.

ANAB has done an investigation on the matter by reviewing all records for this CAB going back to the initial accreditation, as well as an interview with the Lab Director. The following is a history of BCSOCL:

- 2015 Initial assessment
- 2016 Surveillance visit general lead assessor only.
- 2017 Surveillance visit selected discipline seized drugs.
- 2018 Surveillance Document Review
- 2019 Reaccreditation
- 2020 Surveillance Document Review
- 2021 Surveillance Document Review (Toxicology and seized drugs both sampled)
- 2022 Surveillance Document Review

The first question I will address is the matter of the inappropriate method for reporting drugs in blood. In the initial assessment (2015) ANAB did site a nonconformity for this very issue. The nonconformity read:



"In Toxicology, the laboratory procedure allows for reporting of a drug present in the ABN GC/MS analysis that was not previously seen in the drug screening test and without comparing to a reference material tested by the laboratory. This single point criterion is insufficient for the identification of a drug in Toxicology."

The remediation was to edit section 9.3 of TOX-B-01-00 to remove the allowance without comparison to a retention time and reference material. ANAB evaluated the new manual as objective evidence of correction and resolved the nonconformity. Gathering objective evidence of conformity is difficult in situations where the CAB is NOT to allow something. The information can only be obtained by interviews or finding situation where the CAB did the thing they were not to do (i.e., confirm a controlled substance without a secondary test)

Review of the CAB manuals available to ANAB (TOX-A-04-03 "GCMS drugs in Blood", TOX-B-01-03 "Analysis of Acid, Basic and Neutral Analytes in Biologicals (ABN), and TOX-A-02-01 "screening of Blood Specimens by EMIT") Supports that "drug or drug metabolite is qualitatively identified if both the mass spectrum matches the reference material library (TOX-A-04-03 section 7.1.5.1) and the retention time matches the reference (TOX-A-04-03 section 7.1.5.2)." I can find no objective evidence that ANAB observed occurrence during our monitoring that would suggest that the CAB was not following their procedures and reporting drugs based on the retention time alone.

As for the Blood Alcohol approach, in discussion with the Laboratory Director he described the manuals as "confusing" and "hard to follow". Additionally, he indicated that the 42 cases where this 10% variance could be an issue were identified from a control chart (spreadsheet) created and retained in the normal course of analysis (I found no evidence in our records that supported our TA was offered or observed this record). The lab director guessed that the laboratory analyzed 100 cases a month on average.

In the letter attached to the disclosure Director Sanders walks through several sections of the procedure, section 5, section 8, and section 9 of toxicology procedure TOX-C-0106. He described how the misapplication of subsections 8.2.2 and 9.1.4 were detected during an external technical review. Also in this disclosure packet is information on the intent of section 8.2.2 from 2 analysts from the CAB and there seems to be a different application between the analysts solidifying the "confusion" suspicion of Director Sanders.

In review of the effected case numbers (detailed in the disclosure packet) none of these cases were sampled by ANAB. Without an example (i.e., the technical records) a convoluted procedure is difficult to understand. If the technical records reviewed were straightforward and no 10% variance or arbitrary discounting of results were identified our technical assessor may not have noticed the subtle misapplication allowed between 8.2.2 and 9.1.4.

During the accreditation cycle there were no concerns identified with Blood Alcohol Proficiency Test that would have alerted ANAB to a potential issue.

ANAB's answer to "why a nonconformity was not issued for either the unsupported analysis of drugs in blood, or the 10% application of the SOP", is because our sampling

did not detect this issue. Given the assumption of 100 cases/month Brazoria County would have work \sim 1200 case a year over the 4-year period this is 4800 cases. If 42 of the cases had an issue this is less than 1% of the cases. It was not until an outside technical reviewer was responsible for reviewing a considerable higher percentage of these cases that this misapplication of the SOP was identified. As to the inappropriate test method for the identification of drugs in blood, ANAB had already identified this issue with the laboratory's procedures and believed had been corrected. Objective evidence of the BCSOCL not following the procedures as outlined for the identification of drugs in blood, was not detected in the sampling conducted by the teams.

Please let me know if you have any additional questions, Brad

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