# SECURE CHAIN OF CUSTODY PROCEDURES FOR THOROUGHBRED RACING TEST SPECIMENS

BEFORE VIEWING THIS PRESENTATION, THE VISTOR IS ENCOURAGED TO CLICK THE RED BUTTON AT THE BOTTOM OF THE "ABOUT US" SECTION ON THE HOME PAGE

WHAT MAKES A SIGNAKEY SPECIAL

- Highly encrypted 2-D code – not in the public domain.

- Every Signakey is unambiguously unique.

- Easy to decode with IOS or Droid based Smartphones.

- App is free - but must be registered to each device.

- User must be approved by Commission.

- Highly secure, permissions based, fixed length blockchain.

SignaKey
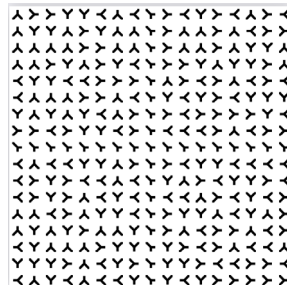
KHRC AND LESSON LEARNED

Dr. Bruce Howard, Equine Medical Director, KHRC

"KHRC has never won litigation for use of forbidden substances from a big purse race"

Because of:

- Inadequate chain-of-custody procedure and practices.
- Underfunded legal team - versus owners like Amr Zedan - Medina Spirit

BETTER C-O-C FOR TXRC AND TVMDL

REQUIREMENTS:

- KEEP ALL CURRENT PROCEDURES AND SUPPLIES.
- ADD THREE NEW TAMPER EVIDENT SEAL BAGS PER HORSE
- VETS WILL NEED IOS DEVICES WITH SIGNAKEY RACE-TRACK APP
- LAB AND SPC WILL NEED WEBCAMS & SIGNAKEY SOFTWARE
- SIGNAKEY WILL SUPPLY APP, WEBCAMS, SOFTWARE & TRAINING

- PILOT DURATION 12 WEEKS

TAMPER-EVIDENT SEAL SPECIMEN BAGS

SAMPLE ID LABEL
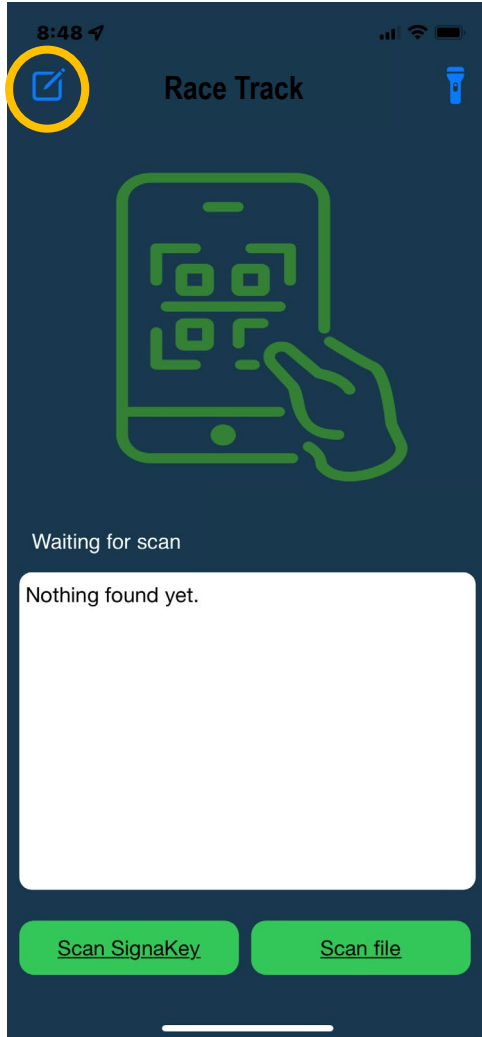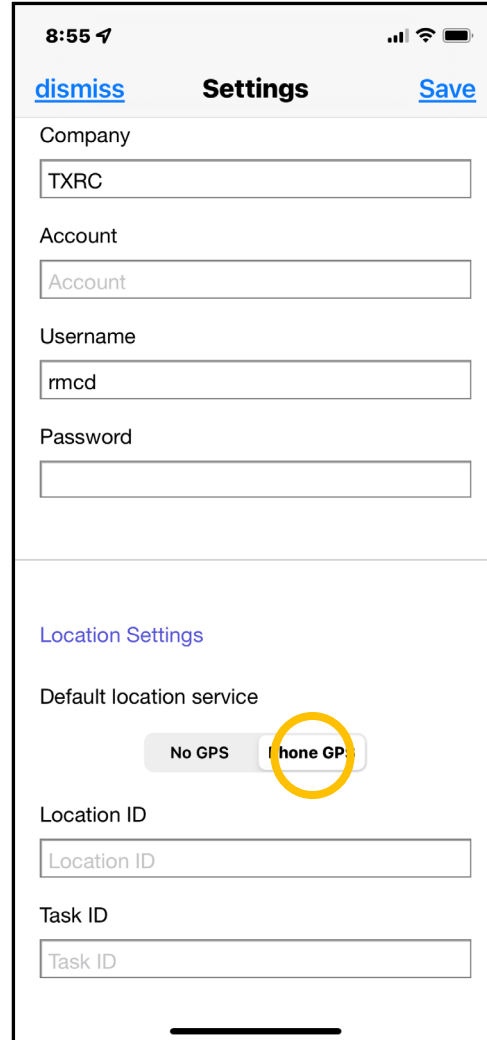
TAMPER EVIDENT SEAL
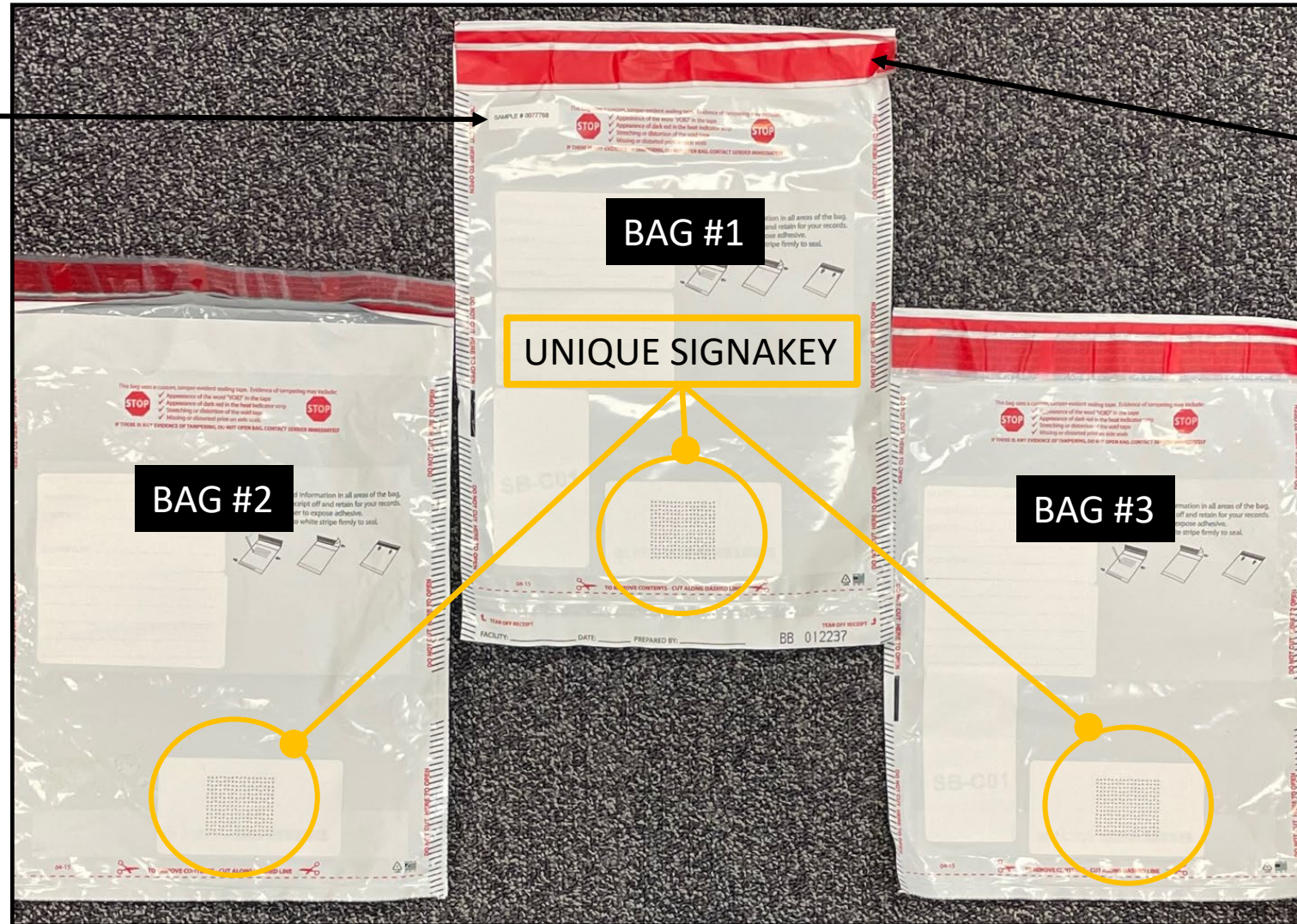
BAG #1

UNIQUE SIGNAKEY

BAG #2
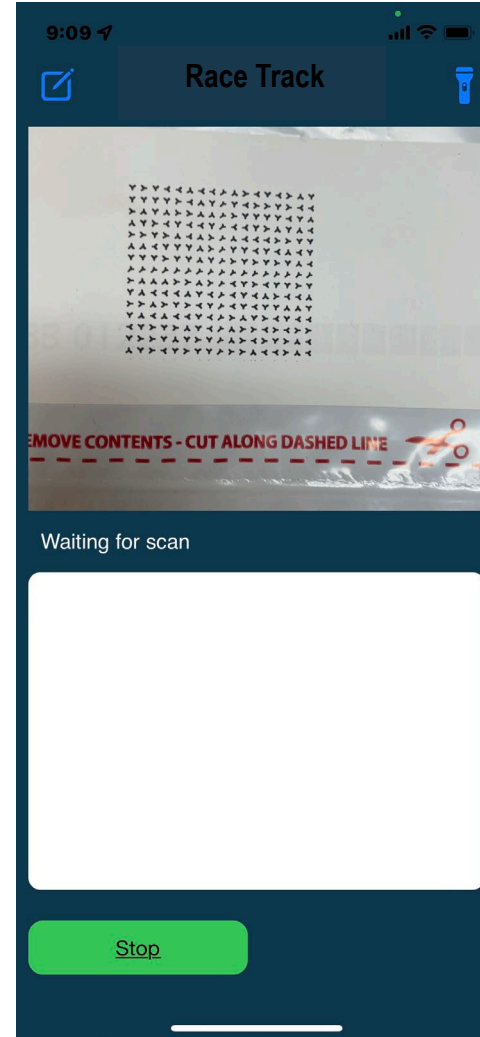
BAG #3

STEPS FOR SCANNING A SIGNAKEY

Open APP - GoTo Settings for Profile

Enter Credentials Enable Phone GPS

Center Object and App will Scan Signakey

Results Summary after Scanning Signakey

8:48

Race Track

Waiting for scan

Nothing found yet.

Scan SignaKey   Scan file

8:55

dismiss   **Settings**   Save

Company

TXRC

Account

Account

Username

rmcd

Password

Location Settings

Default location service

No GPS   Phone GPS

Location ID

Location ID

Task ID

Task ID

9:09

Race Track

REMOVE CONTENTS - CUT ALONG DASHED LINE

Waiting for scan

Stop

8:49

Race Track

[1] Camera decode, [1] Web decode

Race-Track
Result: Authentic Signakey
Key: 1-130-1-2

Scan SignaKey   Scan file

IN THE TEST BARN

- USE ALL EXISTING PROCEDURES TO COLLECT 1 URINE & THEN 4 BLOOD SAMPLES.

- PLACE ALL SAMPLES IN TAMPER EVIDENT BAG #1 AND SECURE SEAL.

- USING iPhone WITH RACE-TRACK APP – SCAN SIGNAKEY **ALL WHILE IN THE STALL AREA.**

- **THE SCAN BEGINS THE SECURE CHAIN-OF-CUSTODY FOR THE SPECIMENS**.

- ATTACH THE ID STICKER TO BAG #1 AND MOVE IT TO THE SAMPLE PREPARATION CENTER.

TE BAG #1 WITH LARGE URINE SAMPLE & 4 VIALS

TAMPER EVIDENT SEAL BAG WITH PREPRINTED TEXT COVERED BY LABELS FOR DEMONSTRATION
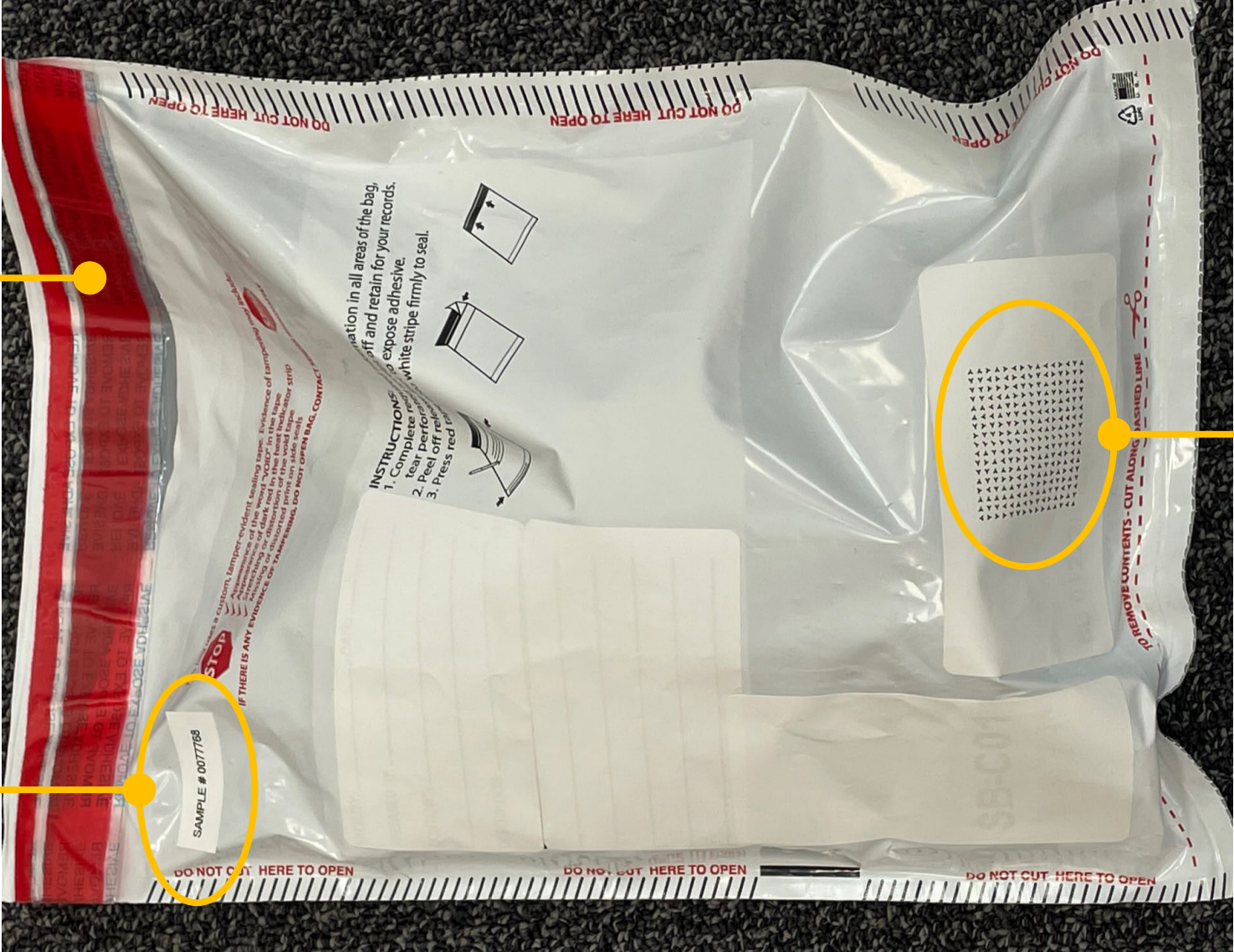
SIGNAKEY LABEL

SAMPLE # LABEL

IN THE SAMPLE PREPARATION CENTER

- CHECK BAG #1 SEAL IS SECURE. GET PHOTO.

- IF YES – **SCAN SIGNAKEY** USING COMPUTER **WEB-CAM**

- **NEXT STEP IN THE CHAIN-OF-CUSTODY PROCESS.**

- OPEN BAG #1 REMOVE CONTENTS.

- CENTRIFUGE VIALS - SPLIT URINE IN 2 EQUAL SAMPLES

- FOLLOW ALL ESTABLISHED SAMPLE PREP PROCEDURES.

- 3 BLOOD & 1 URINE SAMPLES GO INTO THE LAB BAG

- 1 BLOOD & 1 URINE SAMPLE GO INTO SPLIT BAG

- SECURE TE SEAL ON EACH BAG - **SCAN BOTH SIGNAKEY.**

- **NEXT STEP IN THE CHAIN OF CUSTODY PROCESS**

- PUT LAB BAG IN SHIPPING CONTAINER IN LOCKING FRIDGE

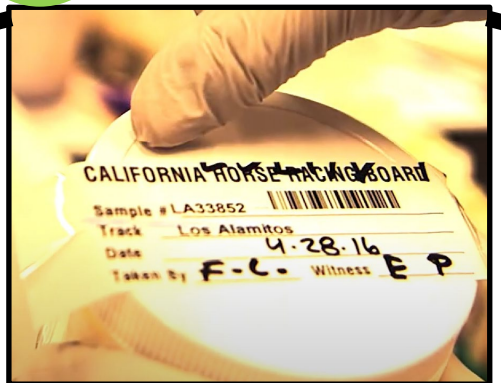- SPLIT SAMPLE BAGS GOES INTO SECURE LOCKING FREEZER.
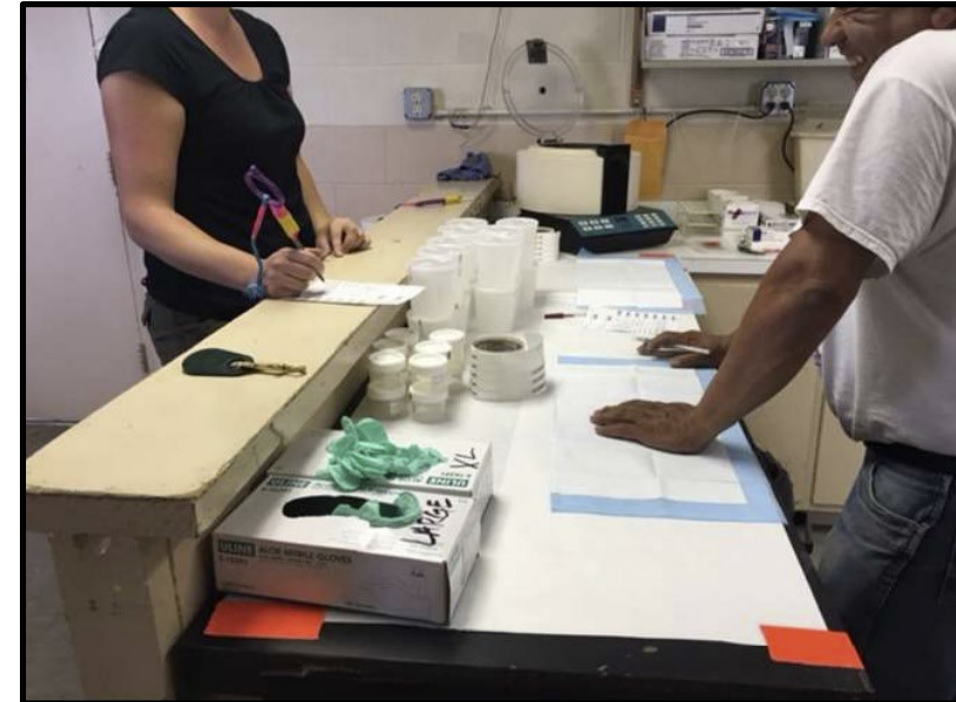
IN SPC - FILL IDENTICAL SAMPLE BAGS
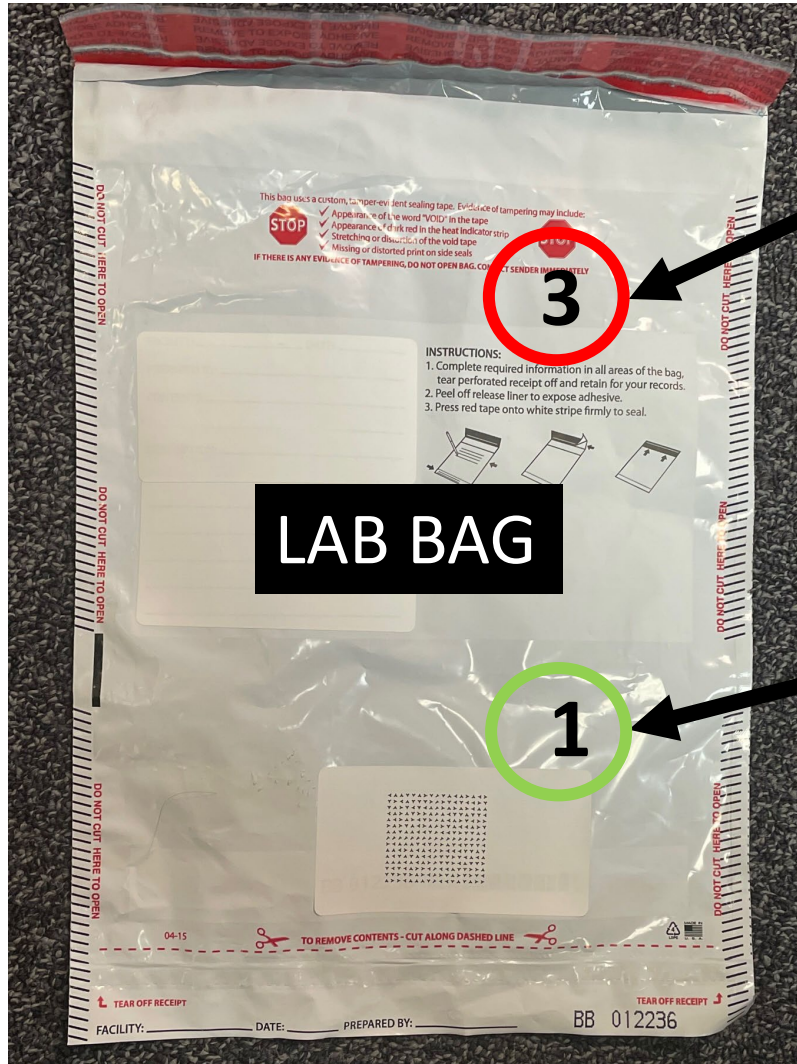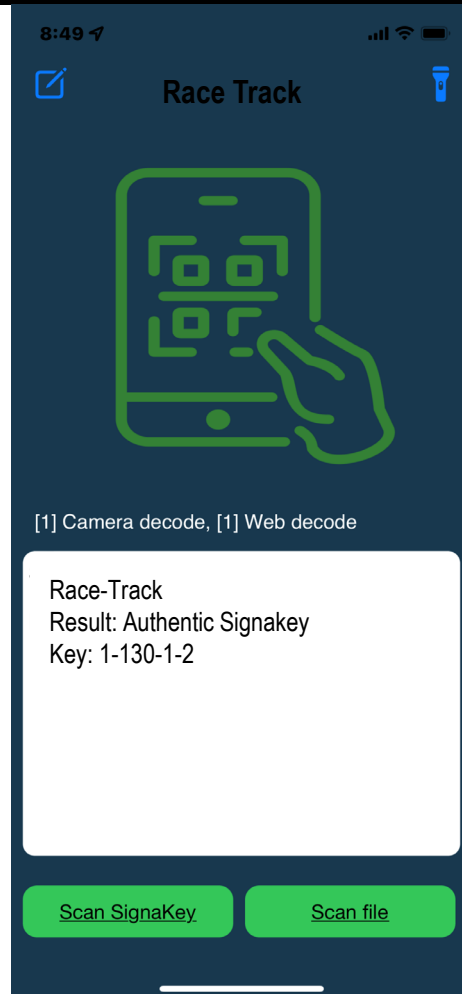
GET **4** BLOOD VIALS

GET **2** URINE SAMPLES

LAB BAG

SPLIT BAG

3

1

1

1

TAKE POST-RACE SPECIMENS IN TEST BARN AND PLACE IN THE TAMPER EVIDENT BAG #1

FROM BARN

LOGIN WITH SMARTPHONE TO ESTABLISH THE USER

8:49

Race Track

[1] Camera decode, [1] Web decode

Race-Track
Result: Authentic Signakey
Key: 1-130-1-2

Scan SignaKey   Scan file

SCANNING AT EACH LOCATION CAPTURES TIMESTAMP & GEOSPATIAL COORDINATES

TO LAB

CONFIRM SEAL INTACT THEN SCAN SIGNAKEY BEFORE OPENING BAG

TEST BAR

DO NOT CUT HERE TO OPEN

UN-CUSTOMIZED DATABASE TEMPLATE

BAG #1 ID

TRACK DATA

HORSE DATA

PRIMARY BAG #2

SPLIT BAG #3

File   Action   Help

Thursday, 24 Mar 2022 15:15:56 UTC-04:00

Configure   TXRC.Bill   Log Out

Network   Camera   Decode   Record   Camera   Tries   Database: Element:
Web   Texas Racing Commision Test Tracking   Case

Read   Create   Update   Delete   Verify   SignaKey   History

Key   New: Decode   Idle   Clear

Status   New:

Venue   New:

Geolocation   New:

Horse

Name   New:

Image   New: Upload   Browse   Browse to File

Registration   New:

Image   New: Upload   Browse   Browse to File

Primary

Seal   New: Decode   Idle   Clear

Lab   New:

Geolocation   New:

Report   New: Upload   Browse   Browse to File

Split

Seal   New: Decode   Idle   Clear

Lab   New:

Geolocation   New:

Report   New: Upload   Browse   Browse to File

Reset

08:16:43   SignaKey Cloud Client, Version 1.12.41.0, ® 2022 SignaKey
08:16:44   Initialization complete.
08:17:09   Manually logged in as TXRC.Bill
08:17:14   Opened database Texas Racing Commision Test Tracking, owned by TXRC

Do Create   Cancel

AT THE LAB

✓ CHECK THAT BAG SEAL IS SECURE – TAKE CONFIRMING PHOTO.

✓ IF NO – REFUSE DELIVERY.

✓ IF YES – **SCAN SIGNAKEY WITH WEB-CAM – CONFIRMS C-O-C**

✓ OPEN SAMPLE BAG – REMOVE SPECIMENS – SAVE SAMPLE BAG.

✓ GENERATE ACCESSION NUMBER AND CREATE SAMPLE STICKERS

✓ PERFORM ALL TESTS USING NORMAL PRESCRIBED METHODS.

✓ OPEN RACE-TRACK SOFTWARE

✓ SCAN SIGNAKEY ON SAMPLE BAG WITH WEBCAM.

SigNaKey

COMPLETE RECORD FORMAT

AT THE LAB

✓ SCAN OF LAB BAG SIGNAKEY BRINGS UP CORRECT FILE.

✓ SCAN ALSO INFORMS SOFTWARE OF PENDING STATUS CHANGE.

✓ UPLOAD ALL TEST RESULTS FROM LIM INTO RACE-TRACK.

✓ IF ALL TESTS ARE NEGATIVE – DISCARD SAMPLE BAG.

✓ IF TESTS ARE POSITIVE – RETAIN BAG WITH CASE FILE EVIDENCE.

✓ SELECTED SPLIT LAB TO BE INFORMED BY TXRC OF REQUIREMENTS.

IN OOC SETTING OPTION

✓ SCHEDULE WITH TRAINER & TXRC VET OR VET TECH.

✓ NEED TE SAMPLE BAG/4 VIALS/URINE CUP/HAIR COMB & BAG.

✓ CHECK FOR iPHONE SIGNAL COVERAGE.

✓ USE ALL SAME PROCEDURES AS BARN PLUS HAIR IF NO URINE.

✓ PUT SAMPLES IN BAG, SECURE SEAL, SCAN SIGNAKEY.

✓ COMPLETE SIGNATURE CARD WITH TRAINER WITNESS.

✓ RETURN BAG TO SPC, SCAN SAME AS RACE DAY FOR C-O-C.

COMPLETE RECORD FORMAT

Network	Camera	Decode	Record	Camera	Tries	Database:	Element:
●	●	●	●	Web		Texas Racing Commision Test Tracking	Case

Read   Create   Update   Delete   Verify   SignaKey   History

➕ Add a filter or read all Case elements. ☐ Counts Only   Fields

SignaKey Cloud Client Read Results
— □ ✕

Export   1 of Case

				Horse				Primary				Split			
Key	Status	Venue	Geolocation	Name	Image	Registration	Image	Seal	Lab	Geolocation	Report	Seal	Lab	Geolocation	Report
1-130-1-1	Failed	Houston Race	29.76045, -95.36978	Trigger	Image	12345	Image	1-130-2-1000	TVMDL		PDF	1-130-2-1001	Split Test Lab		PDF

TEXAS A&M
TVMDL
VETERINARY MEDICAL
DIAGNOSTIC LABORATORY

DRUG TESTING LABORATORY
480 Agronomy Road, TAMU, College Station, TX; (888) 646-5623

CASE FILE

Customer	TX Racing Commission	Accession #	C202160001
Sample ID	RP045528	Date Collected	07/30/2020
Matrix	Urine	Date Received	08/03/2020
Drug(s) Confirmed	**Morphine**	Date Reported	08/25/2020

Jim Blodgett
Director of Investigations
Texas Racing Commission
8505 Cross Park Drive, Suite 110
Austin, TX 78754

Received: 2020-09-03
Laboratory No.: EACL-200903-4
External ID: RP045528
Sample No: 411136
No. of Samples: 1

INVESTIGATION: Split Sample: Morphine

One urine sample submitted from the Texas Racing Commission, RP045528, was delivered on September 3rd 2020.

The urine sample was subjected to qualitative analysis for the presence of morphine and morphine-3-glucuronide. Detection and identification were performed utilizing liquid chromatography - mass spectrometry. Morphine and morphine glucuronide were detected in the sample. No further testing has been assigned.

If you have any questions or require additional information, please don't hesitate to contact me.

The remainder of the original sample will be stored at the Maddy Lab and disposed of after 2 months.

STATUS SUMMARY

- SAMPLE BAGS ARE GENERIC – SHOULD BE TXRC CUSTOMIZED.

- DATA BASE WORKS – BUT NEEDS TO BE CUSTOMIZED.

- PHONE APP "RACE-TRACK" DESIGNED BUT NOT YET FULLY PROGRAMED

- 12 WEEK PILOT THRU JUNE 59 RACE DAYS - APR 22 THRU JUNE 30.

- EVERYTHING DESIGNED TO BE HISA COMPLIANT