

UNITED STATES OF AMERICA, Plaintiff,

v.

BOONCHAN YANG, Defendant.

[Case No. 3:14-cr-00069-SLG-DMS.](#)

United States District Court, D. Alaska.

September 1, 2021.

REPORT AND RECOMMENDATION REGARDING SUPERSEDING PETITION TO REVOKE SUPERVISED RELEASE

DEBORAH M. SMITH, District Judge.

(Doc. 107)

I. INTRODUCTION

The question before the Court is whether Boonchan Yang violated his conditions of release by using methamphetamine and opiates in July, August, and September 2020. Mr. Yang consented to a two-day evidentiary hearing before Magistrate Judge Deborah M. Smith. (Docs. 147, 148.)

II. STATEMENT OF FACTS

On July 7, 2015, Yang was sentenced to 72 months imprisonment followed by five years of supervised release for Distribution of Methamphetamine and Possession with the Intent to Distribute Methamphetamine. His supervision began February 10, 2020. On October 9, 2020, a second superseding petition to revoke supervised release was filed against Boonchan Yang, alleging seven violations of his conditions of release:

- 1) The defendant's sweat patch worn between July 22-29, 2020 tested positive for methamphetamine and opiates;
- 2) The defendant's sweat patch worn between July 29-August 6, 2020 tested positive for methamphetamine and opiates;
- 3) The defendant's sweat patch worn between August 6-14, 2020 tested positive for methamphetamine;
- 4) The defendant's sweat patch worn between August 31-September 8, 2020 tested positive for methamphetamine and opiates;
- 5) On September 24, 2020 the defendant was arrested for Driving While Under the Influence;

- 6) The defendant's sweat patch worn between September 8-18, 2020 tested positive for methamphetamine and opiates; and
- 7) The defendant's sweat patch worn between September 18-29, 2020 tested positive for methamphetamine and opiates.^[1]

The presence of drugs allegedly violated the mandatory condition of supervision requiring the defendant to refrain from the use of any unlawful controlled substance and the alleged DUI was an impermissible new law violation (Doc. 114).

Yang denied any drug use when speaking with his probation officer (Doc. 148 at 20, 31). Prior to the hearing, the government moved to dismiss Violation 5, alleging commission of a DUI (Doc. 148 at 4-5).

At the hearing, the government presented two witnesses: Benjamin Schmidt, United States Probation Officer for the District of Alaska, and Dr. Jared Kabulski, with the Clinical Reference Laboratory (CRL). Dr. Kabulski is a board-certified forensic toxicologist with a doctorate in pharmaceutical and pharmacological sciences. He has worked at CRL for over five years and oversees the certification department, the group responsible for the review of all drug testing results before they are sent to the client (Doc. 147-7). It is a forensic drug testing laboratory, which analyzes the PharmChek sweat patches to determine if drugs are present (Doc. 147-5). The laboratory is independent of PharmChek. (Doc. 147-6). Probation Officer Schmidt received online training from PharmChek about the proper procedures to be used when applying and removing sweat patches. PharmChek requires the probation officer to pass a test before being certified as an observer. (Doc. 148-10)^[2].

While failing to object to the admission of the test results during the hearing, the defense consistently challenged the reliability of the results, focusing most questions on the chain of custody for the six sweat patches analyzed by the CRL. The defense did not present any witnesses.

United States Probation Officer Benjamin Schmidt identified Yang and reported Yang was informed of the condition of supervision prohibiting the use of illegal drugs when he began his supervision (Doc. 148 at 17). Officer Schmidt stated methamphetamine and opiates are illegal controlled substances and that Yang had no medical prescription for either type of drug. (Doc. 148-19).

A. What is a Sweat Patch and How Does it Work?

The District of Alaska Probation and Pretrial Services Office utilizes sweat patches provided by PharmChek to monitor individuals on probation for illegal substance use. (Doc. 148-10). The patches are then analyzed at the Clinical Reference Laboratory (CRL). Dr. Jarod Kabulski described how the sweat patch works.

[1]If the human body consumes, in this example, methamphetamine, methamphetamine is ingested by different routes. Once it is in the bloodstream, from the blood it then can get

transferred into the skin or into the sweat. The sweat patch, then will absorb the sweat. Once it is locked or sealed in the sweat patch, we are able to then extract it later in the process.

(Doc. 147-12).

B. Application of the Sweat Patch

The sweat patches are applied to the shoulder of the defendant by the Probation Officer, who has received online training in the appropriate methodology from PharmChek (Doc. 148-10). Plastic gloves are worn by the probation officer. The skin is wiped with an alcohol wipe first by the defendant and then by the Probation Officer. The patch is placed on the shoulder and held in place with an adhesive overlay. A second adhesive overlay is then applied. (Doc. 148 at 40). A picture is taken of the patch following application and maintained in the Probation Office. (Doc. 148-11).

The probation officer also fills out a chain of custody form. A blank chain of custody form was admitted as Gov. Ex. 7 for demonstration purposes. This is a three-page form. The probation officer completes the left side of the form on Ply 1 (the first page). Among other information, this provides the defendant's name, observer (probation officer) name, and the date the patch is applied. Both the observer and the defendant/donor initial the date of the application. The probation officer signs the form as the observer. The patch is usually worn for 7-14 days without removal. (Doc. 148-12).

C. Removal of the Sweat Patch

When the defendant returns to the probation office, the officer verifies the sweat patch number. The officer again wears one-time-use plastic gloves. The defendant initially peels back one corner of the overlay, so the white patch is exposed. The officer then uses one-time-use plastic tweezers to peel back the adhesive completely and extract the white patch. The patch is visually inspected by the probation officer. It is immediately placed in a clear plastic bag, while the defendant watches (Doc. 148-12).

On Ply 1 of the chain of custody form, there are three small stickers with a bar code and a nine-digit number starting with "7", the slip ID. There is also a long security seal with the same number on it and a place for the defendant-donor to initial and for the observer/officer to initial. The security seal has the instruction on it to "Place Over Top of Specimen Bag" (Gov. Ex. 7-Boxes 23, 24 and 25).

Probation officers are trained to place one of the bar code stickers on the small plastic bag holding the patch and to place a second bar code sticker on a larger clear plastic bag (Doc. 147-76). This testimony was corroborated by the "PharmChek Sweat Patch Chain of Custody Instructions" on the back of Ply 3 (third page) of the form. Under instructions for the proper usage of barcode stickers provided in Boxes 23 and 24 on Ply 1, it states, "Barcode sticker to be used on the specimen bag" and "Barcode sticker to be used on the transport bag." Regarding the barcode sticker in Box 25, it states: "Extra barcode sticker, may or may not be used." (Gov. Ex.

7). This is important because if these instructions are properly followed, after the specimen is sent to the laboratory, at most one barcode sticker should remain on Ply 1.

The probation officer then fills out the right side of the chain of custody form, providing the date the patch was removed, which is initialed by the officer and donor-defendant. There is also a Box 16, which inquires "Did PharmChek appear to be tampered with or compromised?" accompanied with an option to check "No" or "Yes, If yes, how: _____." (Gov. Ex. 7.) In accord with their training, the probation officer examines the patch for any signs of tampering, such as the presence of needle marks. (Doc. 148-32).

The chain of custody forms contained in Gov. Ex. 1 and 4 were filled out by Officer Schmidt. These forms provided answers in Box 16, reporting on Gov. Ex. 1: "Donor stated he scratched, it started to peel." Officer Schmidt testified that he examined the patches and found no issue with the patch itself based on his training, so he forwarded Gov. Ex. 1 patch for testing (Doc. 148 at 32-33).

The form related to Gov. Ex. 4 stated, "Patch was broken up, adhesive seemed to be peeled." Dr. Kabulski testified that it was still possible to obtain a valid test result when the patch was broken up. (Doc. 148-37).

The forms associated with Gov. Ex. 2, 3, 5 and 6 provided no information in Box 16. (Gov. Ex. 2, 3, 5 and 6).

Importantly, the donor-defendant signs a certification and consent, on the right side of the form, Ply 1:

I certify that the specimen accompanying this form is my own. Further, I certify that the specimen container was sealed with a tamperproof seal in my presence and that the information provided on this form and on the label is correct. Also, I consent to the analysis of the specimen accompanying this form by the laboratory and to the release by the laboratory of the results of the analysis as well as the information recorded on this form to the organization and/or individual listed on this form.

Gov. Ex. 7.

The observer/officer also signs a certification:

I certify that I removed PHARMCHEK identify by PHARMCHEK number on this form in accordance with the required procedures. I certify that I applied the numbered security seal and barcode label to the specimen bag in the Donor's presence. I have verified that the specimen number on the form, the barcode label and the security seal are identical.

Gov. Ex. 7.

Ply 2 of the chain of custody form is placed in the large plastic bag, also referred to as the transport bag, with the specimen bag containing the patch. (Doc. 147-54). The security sticker placed on the large transport bag is initialed by the defendant (Doc. 147-52, 58; Gov. Ex. 7).

D. Shipping of the Sweat Patch to the Laboratory

The sweat patches are maintained in a drawer in the Probation Office lab until they are shipped by Federal Express by the administrative staff of the U.S. Probation Office approximately once a week. Only Probation Office employees have access to the office lab and no defendants are ever left alone in the lab, according to Officer Schmidt (Doc. 147-78). The administrative staff keeps track of the Fed Ex tracking number for each package and places the package into the Federal Express drop box within the federal building (Doc. 147 at 78-79).

There are lines on Ply 2 of the chain of custody form that ask for the name of the person shipping, airbill number and date shipped. Dr. Kabulski testified that on the Ply 2 forms in the custody of the CRL, those lines were blank for each of the six sweat patches in question (Doc. 147 at 25-28). Officer Schmidt acknowledged this and testified that the barcode number appearing on the security seal of the larger, transport bag is compared to the barcode number on the specimen bag, and on the chain of custody form, thus insuring an appropriate chain of custody (Doc. 147 at 56-57).

Officer Schmidt (Doc. 148-14) testified that the CRL will not test any patch if the security seal is not intact. On Ply 2, there are lines for the lab to indicate the person in the lab who received the specimen, the date received, whether the seal was intact and whether the labels matched. (Gov. Ex. 7.) Dr. Kabulski testified that on all six chain of custody forms at issue in this case, Ply 2 reported that the security seal on the bag was intact when received by the lab. (Doc. 147-46).

E. Testing of the Sweat Patch at the CRL

First, the lab collector inspects each patch for any evidence of tampering during the transportation of the patch. The lab will not test any patch without chain of custody paperwork, or with adhesive still on it. (Doc. 147 at 7-8). They also won't test any patch exposed during transport or any patch in a bag with the security seal broken (Doc. 147 at 8-9). The lab relies on the examination of the patch by the probation officer at the time of removal to determine if there was any tampering or exposure sufficient to invalidate the test results prior to transportation to the lab (Doc. 147 at 7-8). Each patch is visually inspected prior to testing.

If it passes inspection, the patch is placed in a capped tube. Every time the tube is uncapped in the lab, it is tracked "to minimize any potential external contamination from within the laboratory, which is highly unlikely" (Doc. 147-9). Once placed in the tube, the specimen received an internal lab number, and it is transferred for initial screening. There a buffer is applied to the tube to extract any drugs from the patch. (Doc. 147-10).

Sweat patches are tested in two ways: first there is the initial, screening test utilizing ELISA technology. The initial screening looks for classes of drugs such as methamphetamine or opiates.

If a positive result is received, a confirmation test is undertaken to identify the individual drugs and the quantity of drugs present "based on the cut-offs determined by PharmChem." (Doc. 147 at 6-7). The confirmation testing is accomplished with mass spec liquid chromatography (Doc. 147-9). According to Dr. Kabulski, "This is the gold standard for drug testing. The technology essentially is able to identify specific drugs, as well as eliminate the potential of interferences or interfering compounds that could potentially look like the drug that is trying to be identified in the assay" (Doc. 147-9).

Dr. Kabulski stated that before reporting a positive test result for methamphetamine, he looks for the presence of methamphetamine and its metabolite, amphetamine.

We're looking for both. So, in order to report a positive methamphetamine, we will find methamphetamine. There also needs to be the presence of amphetamine. Amphetamine is the metabolite of methamphetamine. So, your body naturally breaks methamphetamine down into amphetamine. The reason that we report a positive methamphetamine in the presence of amphetamine is it shows that the human body converted this methamphetamine to amphetamine in the absence of, say, a prescription of Adderall.

Doc. 147-11.

The metabolite for the opiate heroin is 6-Monoacetylmorphine (6-AM) and this is what would be present if the body ingested heroin, according to Dr. Kabulski. (Doc. 147-13).

Dr. Kabulski reviewed the test results for the six sweat patches in dispute contained in Gov. Exhibits 1-6 and reported he was confident about the accuracy of the reports. In each test reported in Gov. Exhibits 1-5, the test was positive for methamphetamine and the metabolite, amphetamine was present at the level between 2 nanograms to 9.9 nanograms per milliliter. (Doc. 147-15). The test reported in Gov. Ex. 6, related to Violation 7, was positive for methamphetamine and positive for amphetamine, at a level of 15 ng/ml. Dr. Kabulski also stated that the amount of amphetamine present indicated the drug was not present due to a transfer by touch (Doc. 147-42).

The tests reported in Gov. Exhibits 1, 4 and 6 were positive for opiates and showed the presence of 6-AM, the metabolite for heroin. The tests reported in Gov. Ex. 2 and 5 were positive for opiates and the presence of morphine was detected during the confirmation testing. As noted, Dr. Kabulski stated he was confident the test results were accurate.

Gov. Ex. 1, related to Violation 1, states the sweat patch was removed July 22, 2021 but was not received by the CRL until August 25, 2021. Dr. Kabulski could not explain the reason for the delay but said it would have been analyzed within a day of its receipt in the lab. He said it is difficult to determine the potential degradation of the drug over that time but that the delay could not result in a false positive result, but rather could have resulted in a higher reading if the specimen had been tested earlier. (Doc. 147 at 47-48).

III. APPLICABLE LAW

A. Legal Standard

A term of supervised release may be revoked by the Court "if it finds by a preponderance of the evidence that the defendant violated a condition of supervised release." 18 U.S.C. Section 3583(3); see also [*United States v. Lettieri*, 910 F.2d 1067, 1068 \(2d Cir. 1990\)](#) ("The district court does not have to be convinced beyond a reasonable doubt, but instead must only be reasonably satisfied, that the probationer has failed to comply with the probationary conditions.")

The rules of evidence do not apply to evidentiary hearings related to the revocation of supervised release. Fed. R. Evid. 1101(d)(3). The Supreme Court ruled in [*Morrissey v. Brewer*, 408 U.S. 471, 488-89 \(1972\)](#) that during revocation hearings, defendants do not enjoy the same procedural protections provided during trial. The Court recommended a flexible process be employed "to consider evidence, including letters, affidavits, and other material, that would not be admissible in an adversary criminal trial." *Id.* at 489.

B. Case Law Related to Chain of Custody and Drug Test Results

Courts have found that small discrepancies between the relevant testing procedure and the procedure utilized in administering the drug tests in question do not create sufficient doubt under a preponderance of evidence standard when the probation officer/observer testifies that the irregular procedure did not impact the reliability of the result.

In *United States v. Burton*, the Eighth Circuit found the chain of custody was adequate because the urine samples in question retained an identification label from receipt from the defendant to arrival at the lab, even though normal procedures were not followed. 866 F.2d 1057, 1059 (8th Cir. 1989). The normal procedure "consist[ed] of filling out a processing label and attaching it to the bottle on forms supplied by the laboratory, then recording the client's name and assigned specimen number . . . [and] mail[ing] them the next morning." *Id.* at 1058. However, the Court learned from the Multi Resource Case Manager, "[a]t the time of taking the sample from [the defendant], the [probation office] had run out of its supply of PharmChem forms and also PharmChem mailing boxes" and therefore the probation officer "instead retained the sample in the refrigerator at the [testing site] with the yellow stickie attached" identifying the sample as the defendant's. *Id.* Though the Eighth Circuit Court was not thrilled by this process (they were particularly troubled that the sample remained in the unlocked, unattended refrigerator for 20 days), the court upheld the district court's determination that the chain of custody was sufficient and that the results established that the defendant had violated probation by a preponderance of the evidence. *Id.* at 1059.

In *United States v. Crandall*, the court found by a preponderance of the evidence that urine tests established that the defendant used drugs and therefore violated probation, despite evidence that the probation officers did not rigidly follow their testing procedures. No. 1:10-CR-0036-FJS, 2016 WL 10566658, at *2 (N.D.N.Y. Feb. 17, 2016). "On cross-examination, [the probation officer] admitted that some of the procedures for testing had not been rigidly followed, including placing a barcode for paperwork and specimen tracking on the preliminary urinalysis report . . .

[and] [the second probation officer] acknowledged that there were procedures that he did not follow, including requiring Defendant to date the form he signed" among other variances from the testing procedures. *Id.* The court found that "while these arguments raise, at best, some doubt that the results of the tests are both accurate and probative, the reliability of the urinalysis samples taken by [the probation officers] is nevertheless proven by a preponderance of the evidence." *Id.*

In *United States v. Lofton*, the Sixth Circuit dismissed the defendant's assertion that "the government failed to demonstrate a valid chain of custody for the urine specimen" and that there were "irregularities on the specimen container," instead finding that the government established that the defendant used cocaine, in violation of his probation. 810 F. App'x 436, 442 (6th Cir. 2020). "In testimony that the district court found credible, [two probation officers] expressed their 'confidence' in the chain of custody documentation because there was no 'indication of tampering whatsoever.'" *Id.*

IV. DISCUSSION

As noted, *supra*, Officer Schmidt testified about the condition of the patches and adhesive overlays of the two specimens he removed (Gov. Ex. 1 and 4) and explained that while he reported the overlays had been tampered with, and one patch was broken, both patches appeared appropriate for valid testing based upon his training, so he forwarded them to CRL (Doc. 148 at 32-33). As in *United States v. Lofton*, the Court finds testimony of the probation officer and Dr. Kabulski credible. Thus, the government has established the appropriate chain of custody and reliability of test results related to Violations 1 and 4.

However, the evidence related to Violations 2, 3, 6, and 7 reveals some laxity in the documentation of probation officers' observations at the time of removal of the sweat patches. The chain of custody forms related to Violation 2 (Gov. Ex. 2), Violation 3 (Gov. Ex. 3), Violation 6 (Gov. Ex. 5) and Violation 7 (Gov. Ex. 6) provide no information in Box 16 about whether the patch appeared compromised or tampered with at the time it was removed. This is an important step because the CRL relies upon the officer to observe if there is any irregularity with the patch at the time of removal that could compromise the test result (Doc. 147 at 17, 30)^[3]. Officer Schmidt acknowledged this was an error (Doc. 148 at 30-31).

In addition, the government was unable to produce Ply 1 of the chain of custody form related to Violation 2. The government only provided Ply 2 (Gov. Ex. 2). Box 14 of Ply 2 asks:

If donor did not complete wear period, did PharmChek _____ Fall off _____ Was taken off:
_____ By Staff _____ By Donor.

The Probation Officer checked "Was taken off" and then drew an arrow to Box 17, which calls for "Comments," writing: "R.Arm". Gov. Ex. 2, Ply 2 does not disclose whether the patch was removed by staff or the donor and does not answer Box 15, "Why was it removed?" or Box 16 "Did PharmChek appear to be tampered with or compromised?"

The probation officers who removed the patches related to Violations 2, 3, 6, and 7 were not called by the government to testify about their observations or the training they received from PharmChek. The record is silent about the condition of the patches when forwarded to the laboratory. The government presented no documentation or testimony to establish that the patches involved had not been tampered with or compromised before being sent to the CRL. Unlike the cases cited above, *supra*, no testimony of the probation officers/observers, who removed the patches, labeled them and forwarded them to the CRL was provided for Violations 2, 3, 6, and 7.

Dr. Kabulski made clear that his laboratory rejects patches for testing only in very narrow circumstances. The lab relies upon the probation officer to inspect and reject any damaged patch before sending it on to CRL (Doc. 147 at 7-8). The failure to report the condition of the patch upon removal, either through documents or testimony, calls the reliability of the test results into question.^[4] The government failed to establish Violations 2, 3, 6, and 7 by a preponderance of the evidence.

Another irregularity noted during the hearing was that the specimens forwarded to the CRL for testing related to Violation 3 (Gov. Ex. 3) and Violation 6 (Gov. Ex. 5) were not properly labeled. PharmChek procedures call for a bar code sticker with the slip ID number to be placed on the specimen bag and the larger transport bag. Officer Schmidt testified the larger bag is then secured with a seal that also contains the slip ID number. At CRL, the lab determines that the seal is intact and makes certain that the bar code numbers match on the two stickers and security seal. The slip ID number is used to report the test results back to the Probation Office. If properly labeled, at most, one bar code sticker will remain on Ply 1 of the chain of custody form. Two stickers remain on Ply 1 for Gov. Ex. 3 and 5. Also, the government was unable to locate Ply 1 related to Gov. Ex. 2, so the Court was unable to determine if the barcode stickers were properly applied when this patch was forwarded to the CRL.

The government argued that as long as the slip ID number on the security seal on the transport bag matched the barcode sticker on the specimen bag, the chain of custody was reliable and thus, two barcode stickers remaining on Ply 1 was of no significance. However, this presupposes that the one barcode sticker utilized was placed on the specimen bag and not negligently placed on the transport bag, leaving the specimen bag without a slip ID number. However, it is unnecessary to resolve this issue in light of the Court's conclusion that the government has not met its burden to prove Violations 2, 3, 6, and 7 by a preponderance of the evidence.

The Court finds the test results reported in Gov. Ex. 1 and 4 to be reliable based on the documentation and testimony of Officer Schmidt and Dr. Kabulski. The Court concludes a PharmChek sweat patch worn by Yang between July 22-July 29, 2020 tested positive for methamphetamine and opiates on Aug. 28, 2020 (Gov. Ex. 1). And a PharmChek sweat patch worn by Yang between Aug. 31-Sept. 8, 2020 tested positive for methamphetamine and opiates on Sept. 20, 2020 (Gov. Ex. 4). The government has established Violations 1 and 4 by a preponderance of the evidence.

V. CONCLUSION

For the reasons stated above, this Court recommends that the District Court find Boonchan Yang guilty of Violations 1 and 4 and further, that Violations 2, 3, 5 (DUI allegation), 6 and 7 be dismissed.

This Report and Recommendation is being issued as a Final Report and Recommendation. Pursuant to Fed. R. Crim P. 59(b)(3), any objections will be considered by the District Court Judge who will accept, reject, or modify the recommendation following de novo review. Any objections must be filed within seven (7) days from the date of service of this Report and Recommendation. Fed. R. Crim P. 59(b)(2) and D. Ak. L.M.R. 6(a) authorizes the Court to alter the standard objection deadlines.

Reports and recommendations are not appealable orders. Any notice of appeal pursuant to Fed. R. App. P. 4(a)(1) should not be filed until entry of the District Court's judgment. See [Hilliard v. Kincheloe, 796 F.2d 308 \(9th Cir. 1986\)](#).

[1] The test results and chain of custody forms admitted into evidence without objection related to these allegations are as follows: Violation 1 — Gov. Ex. 1; Violation 2 — Gov. Ex. 2; Violation 3 — Gov. Ex. 3; Violation 4 — Gov. Ex. 4; Violation 6 — Gov. Ex. 5; Violation 7 — Gov. Ex. 6.

[2] Officer Schmidt applied and removed the patches related to Violations 1 and 4. The record is silent as to whether the probation officers who applied and removed the patches related to Violations 2, 3, 5 and 6 were certified PharmChek observers.

[3] Whether the document reports tampering in Box 16 or even if Box 16 is blank, the lab will test the patch (Doc. 147 at 17-18).

[4] Given the fact that the Fed. R. Evid. do not apply to revocation evidentiary hearings, it is possible for one probation officer to introduce chain of custody forms filled out by other probation officers. However, if those forms are silent about aspects of the procedure critical to establishing a reliable test result, and no testimony is provided from the probation officer who observed the patch upon removal, then the government cannot meet its burden of proof.