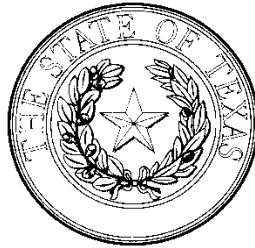


Opinion issued July 28, 2011.



In The
Court of Appeals
For The
First District of Texas

NO. 01-10-00428-CR

THE STATE OF TEXAS, Appellant
V.
RODOLFO DOMINGUEZ, JR., Appellee

On Appeal from the 400th District Court
Fort Bend County, Texas
Trial Court Case No. 49886

OPINION

In this capital murder case, the State seeks to introduce the testimony of its expert witness who opines that his three dogs have identified the defendant's scent to be present on items recovered from the crime scene, based on a later police-

constructed scent-discrimination lineup. The State challenges the trial court's pretrial ruling excluding this testimony as unreliable. The State contends that the trial court abused its discretion in excluding the scent-discrimination testimony because the court's material findings of fact are unsupported by the record, and the court overstepped its gate-keeping function. The State alternatively maintains that it established the reliability of the expert testimony by a preponderance of the evidence, and it urges that this court adopt a preponderance-of-the-evidence standard of review for assessing the reliability of scientific evidence.

We hold that the record supports the trial court's findings of fact. We further hold that the trial court acted within its discretion in excluding the scent-discrimination testimony because sufficient evidence supports the trial court's decision that the lineup performed in this case was not reliable scientific evidence. We decline to adopt a preponderance-of-the-evidence standard for the reliability of scientific evidence in criminal cases, as the Texas Court of Criminal Appeals has settled on a clear-and-convincing-evidence standard. We therefore affirm.

Background

The offense and the scent lineup

A grand jury indicted Rodolfo Dominguez, Jr., the appellee, for the 2008 offense of capital murder by intentionally and knowingly shooting two individuals with a firearm. The alleged date of the offense was April 5, 2008. At the crime

scene, officers used sterile gauze pads to collect scent samples from several objects associated with the murders. The objects included four pillows, two cell phone cases, and .45 shell casing. The officers believed that the assailant had touched these items.

Dominguez gave the police investigators a scent sample. Beginning on April 10, 2008, five days after the offense, Fort Bend County Sheriff's Deputy Keith Pikett conducted a scent lineup with three of his bloodhounds over the course of two days. Deputy Pikett asked his three dogs to compare the scent of gauze pads swiped with the objects at the scene to "a scent lineup" of six other gauze pads, one of which contained Dominguez's scent sample. The other five pads contained the scent of "foils", who were individuals of the same race and gender as Dominguez, collected at an unknown earlier point in time. A police officer placed the six pads in coffee cans. Deputy Pikett did not know the location of Dominguez's scent pad, but the other officer present at the scene of the lineup did know. The officer changed the position of Dominguez's pad for each of the objects. Deputy Pikett testified that his three bloodhounds alerted to the pad containing Dominguez's scent for each pad corresponding to an object associated with the murders. Deputy Pikett interpreted his dogs' actions as indicating that a scent relationship existed between those objects and Dominguez's scent. The lineup was not recorded, and there is no evidence that Dominguez's lawyer was

present during it. Dominguez moved for a pre-trial *Kelly* hearing, seeking to exclude the scent-lineup evidence. *See Kelly v. State*, 824 S.W.2d 568, 573 (Tex. Crim. App. 1992).

Summary of the testimony

At the hearing, Deputy Pikett testified that he was a retired peace officer and had been a canine handler with the Fort Bend Sheriff's Department for twelve years. He had attended 225 hours of seminars and lectures on dog handling; some of these seminars and lectures dealt specifically with scent lineups. In addition, he said that three older dog handlers had trained and advised him. The older handlers observed Pikett's dog handling and generally approved of his techniques. Deputy Pikett admitted, however, that the two who had witnessed his scent lineups on previous occasions did not agree with his methods because he used multiple dogs during the lineups. Deputy Pikett also testified that five of his law enforcement colleagues, of unknown qualifications with regard to scent lineups, had reviewed a checklist of his methodologies and had approved of them.

Deputy Pikett described his experience in working with bloodhounds and his dogs' experience in detecting scents. He testified that his three dogs used in the Dominguez case had each participated in over one thousand scent-pad identification lineups. According to Deputy Pikett, the three dogs have different alerts to indicate a match. Deputy Pikett admitted that the dogs' alerts are neither

obvious for everyone to see nor always consistent. He conceded that his task in interpreting the dogs' alerts is subjective in nature, but if he is uncertain about whether the dog is alerting him to a match, he finds no alert. According to Deputy Pikett, 29.5 percent of the time the dogs do not hit on any position in a scent lineup. He kept training records for the dogs, but these records were for his own purposes—another person could not evaluate or re-create the dogs' performances from these records.

Deputy Pikett stores all of his "foil" scent samples that he uses for scent lineups in a duffle bag. He divides the samples by race and gender and keeps each group in a one gallon Ziploc bag. Each individual sample then is stored in a smaller Ziploc bag within the gallon bag. Deputy Pikett testified that his informal experiments showed that samples did not leak through to contaminate each other. He also said that his informal experiments demonstrated that differences in the age of the samples did not affect the dog's ability to identify the correct sample in a lineup, but that dogs can differentiate between old and new samples.

Dr. Kenneth Furton also testified as an expert on behalf of the State. Furton is a professor of chemistry and biochemistry. He has published numerous articles, including several articles on scent identification.¹ In addition, he is the founding

¹ Furton's curriculum vitae lists 62 articles published in the last ten years, but it does not indicate which have been "accepted" by a peer review journal. Of the 62

director of the Scientific Working Group on Dogs and Orthogonal Detector Guidelines (“the Working Group”), which has drafted best practice guidelines for the training, certification, and documentation of canines who participate in tracking or scent-discrimination lineups. Furton stated that the draft guidelines are “the first attempt” to formulate a national set of best practices in this area.

According to Furton, the scientific literature supports the theory that each human has an individual odor. He said an individual’s odor is a combination of primary, secondary, and tertiary odor chemicals. The human body produces primary and secondary odor chemicals. Primary chemicals are stable over time, and diet and environmental factors affect secondary chemicals. He also said that soaps and perfumes are tertiary chemicals which affect human odor. In his own research, Furton tries to identify and differentiate individuals based on their primary odors with the same machine used to analyze the composition of drug samples and explosives. He stated that so far his results support a theory that each human has an individual odor which remains the same or very similar for weeks, months and even years.

Furton testified that the scientific literature supports the theory that dogs can differentiate individuals with a high degree of reliability because of their strong sense of smell. He stated that specially trained dogs can accurately differentiate

articles, 15 appear related to canine-scent detection of explosives, accelerants, drugs or humans or to human-scent science.

between human scents in a scent-discrimination lineup. Furton admitted that scent-lineup evidence should always be used in corroboration with other evidence. He cautioned that the results of a scent-discrimination lineup are not like the results of DNA fingerprinting because there is a “limitation to their reliability.” According to Furton, scent-discrimination lineups are an investigative tool and more often useful as a tool to exclude persons as suspects than as evidence of identity.

To assess the reliability of Deputy Pikett’s methodology, Furton reviewed the following materials: (1) Deputy Pikett’s credentials; (2) information about Deputy Pikett’s dogs; (3) training reports concerning the dogs; (4) a full offense report for Dominguez’s case; (4) transcripts of Deputy Pikett’s testimony from other recent trials; (5) reports and videos of scent-discrimination lineups from two previous cases, and (6) letters of reference from some of Deputy Pikett’s peers who reviewed his methodological checklist. Furton also watched Deputy Pikett and his dogs run a scent-discrimination lineup. He stated that during the first three runs the dogs failed to alert at the correct sample, but during the fourth run, all three dogs alerted at the correct sample. Furton and Deputy Pikett believed that the wind caused the dogs to fail in the first three runs.

Furton testified that Deputy Pikett’s methodology was reliable. According to Furton, Deputy Pikett’s records indicated that the initial training and the

maintenance training of the dogs was extensive. He said it was common protocol to use scent samples from five foils and a suspect, and to use foils of the same race and sex. He stated that Deputy Pikett's use of single-blind lineup and the movement of the suspect's scent sample during the testing of several objects helped to ensure reliability. According to Furton, the use of multiple dogs for testing each object was common practice in some other countries.

Furton's testimony, however, also revealed weaknesses in Deputy Pikett's scent-discrimination lineups. First, Furton testified that he could not tell that the dogs were alerting Deputy Pikett on the videos that he viewed from prior cases. He added that he saw the alerts when he viewed Deputy Pikett and the dogs in person, but admitted that, even then, variations existed in their alerts. Furton testified that the handler alone is the one who decides whether the dog gives an alert. He nonetheless concluded that the alerts were reliable.

Second, Furton testified that Deputy Pikett had deviated from the draft guidelines for best practices in the following ways: (1) Deputy Pikett did not undergo a structured curriculum in dog handling (2) Deputy Pikett and his dogs were not certified and did not receive annual evaluation and certification; (3) Deputy Pikett had no review or oversight of his work by an outside authority; and (4) Deputy Pikett stored his scent samples in Ziploc bags as opposed to glass containers. Furton testified that he was unaware of any group, such as the National

Police Bloodhound Association, that had ever evaluated Deputy Pikett's methods. He was also unaware that any structured curriculum currently existed in the United States. He thought it was implausible that storage in the Ziploc bags could lead to any cross-contamination but would need to test that hypothesis to verify it. No published literature or research exists on the topic. The FBI uses glass containers. Third, although he believed that Deputy Pikett and his dogs were trained and qualified in the field of scent-discrimination lineups, Furton conceded that it was uncommon to see one-hundred percent success in so many tests, as Deputy Pikett testified had occurred in the Dominguez case.

Dominguez offered Dr. I. Lehr Brisbin as an expert to rebut Furton and Deputy Pikett's opinion testimony. Brisbin is an emeritus senior research scientist in ecology. He has published several articles on the ability of dogs to differentiate human scents and has thirty years of dog-handling experience, working with various law enforcement agencies and correctional facilities, and advising the National Police Bloodhound Association. Brisbin argued that it is well accepted in the scientific community that a genetic basis exists for individual human odors. He also argued that a properly-trained dog has the ability to discriminate between various human odors, and the scientific community accepts this theory. According to Brisbin, a properly-trained dog should be able to alert to a particular human odor

in a scent lineup, but the science and detection methods are not reliable enough to say that a certain individual was in fact the subject of the identification.

Brisbin testified that Deputy Pikett's methodology was unreliable, for several reasons. First, Deputy Pikett used a leash on the dogs during the lineups, thus creating the risk that he, as their handler, cued the dogs and their alerts. Second, Deputy Pikett's scent-discrimination lineups were not double blind. Although another officer places the samples in the lineup, this officer uses Deputy Pikett's foil scents and remains present during the lineup. Brisbin testified this other officer could also unintentionally cue Deputy Pikett or the dogs to the suspect's scent. Third, Deputy Pikett uses multiple dogs during the lineup. Brisbin stated that one should not use multiple dogs because, assuming the first dog is correct in his determination, the handler may cue the subsequent dogs to alert at the same point as the first one. Fourth, Deputy Pikett does not use negative runs in his lineups, in which the suspects' scent is left out completely. This is important to determine whether an alert is accurate. Fifth, an outside auditor should evaluate Deputy Pikett's results. The Working Group's draft guidelines require that the dogs undergo a double-blind assessment and that there be negative runs.

Brisbin also critiqued Deputy Pikett's records. He said that the records of one of Deputy Pikett's lineups did not correspond to what he observed on a video

of the lineup. Brisbin stated that the records indicated that the dog successfully alerted by baying, but contrary to the recorded observations, he saw the dog baying at every can. He also testified that the records were very brief and incomplete. He noted that Deputy Pikett's records indicated that the dogs had a low failure rate and were almost perfect. He said that this figure was likely not accurate and showed that Deputy Pikett did not understand what he was observing.

The trial court's rulings

At the close of the hearing, the trial court granted Smith's motion to suppress the scent-lineup evidence. In response to the State's request, the trial court entered the following findings of fact:

....

4. Based on his testimony and curriculum vitae, Dr. Kenneth Furton is qualified to testify as an expert on human scent identification.
5. Based on his testimony and curriculum vitae, Dr. I[.] Lehr Brisbin is qualified to testify as an expert on human scent identification.
6. Experts agree that human odor can be affected by diet or cologne.
7. The concept that each human has a distinct odor that can be distinguished from all other human odors has not been accepted by all experts in the field who have studied this matter.
8. The ability to compare and/or match human scent through the use of instruments such as a solid phase micro-extraction gas chromatograph mass spectrometer is not yet refined.

9. The results of comparisons of human scent by solid phase micro-extraction gas chromatograph mass spectrometer instruments cannot be verified.
10. Canine scent identification is an emerging field of expertise in the United States.
11. Guidelines are being drafted by a national group for working dogs for canine trailing and scent lineups and have been sent out for comment by its members, but the guidelines have not yet been established.
12. Likewise, no national standards for detection dog certification have been established.
13. Unlike canine units used for locating bombs, drugs, and cadavers (whose accuracy of alerts can be verified immediately at the scene) the matching of persons to scent samples made by human scent units cannot be verified.
14. The alert or match of unknown human scent samples by a dog is subjective, totally dependent on the handler of the canine unit, and cannot be independently verified by a different handler.
15. Canine scent identification is not junk science, but it has not yet been developed to the point that it is accurate, repeatable, verifiable and reliable to the extent that it should be used as evidence in court.
16. Retired Fort Bend County Sheriff's Deputy Keith Pikett has extensive experience in using dogs for trailing and scent lineups.
17. Pikett is self-taught in the area of dog trailing and scent lineups and has trained his own dogs.
18. Pikett's methods of training his dogs and of conducting the scent lineups have not been reviewed or approved by any authority in the field.
19. The alert or match of unknown human scent samples to known human scent samples made by Deputy Pikett's canine units in other cases were not evident in the video recordings of the lineups conducted.

20. Properly conducted double-blind canine scent lineups can raise reasonable suspicion, but can be likened to a drug field test that must be verified by a laboratory analysis, except that there is not a laboratory analysis that can verify the canine scent lineup.
21. Canine scent lineups, alone, should not be used as the basis for the identification of a suspect in a criminal case.
22. Because the results of human scent identification lineups cannot be verified or repeated, the results are not sufficiently reliable to be admitted in evidence in a criminal trial.
23. Evidence related to identification of human scent by canine units should be suppressed and excluded from evidence in the trial of this cause.

The trial court made the following conclusions of law:

1. The science of human scent identification and/or comparison is not sufficiently reliable to be admitted in evidence in a criminal trial. *See Kelly v. State*, 824 S.W.2d 568, 573 (Tex. Crim. App. 1992).
2. Human scent identification by a canine is not sufficiently reliable to be admitted in evidence in a criminal trial. *See Nenno v. State*, 970 S.W.2d 549, 561 (Tex. Crim. App. 1992).

The trial court entered an order excluding evidence relating to the scent lineup.

Discussion

Standard of Review

We review a trial court's ruling on the admissibility of scientific evidence for an abuse of discretion. *Russeau v. State*, 171 S.W.3d 871, 881 (Tex. Crim. App. 2005) (citing *Weatherred v. State*, 15 S.W.3d 540, 542 (Tex. Crim. App. 2000)). The trial court is the sole judge of the weight and credibility of the

evidence presented at the suppression hearing. *See Weatherred*, 15 S.W.3d at 542. As a reviewing court, we consider the trial court's ruling in light of the evidence presented at the time of the trial court's ruling. *See id.*

When a trial court expressly finds facts in ruling on a motion to suppress, a reviewing court views the evidence in a light most favorable to the trial court's ruling and determines whether the evidence, when viewed in that light, supports the fact findings. *State v. Kelly*, 204 S.W.3d 808, 818 (Tex. Crim. App. 2006). The reviewing court reviews the trial court's legal ruling de novo unless the explicit fact findings, as supported by the record, are also dispositive of the legal ruling. *Kelly*, 204 S.W.3d at 818. Unless the trial court abused its discretion by making a finding that is not supported by the record, we defer to the trial court's fact findings and leave them undisturbed on appeal. *See Cantu v. State*, 817 S.W.2d 74, 77 (Tex. Crim. App. 1991). A reviewing court must uphold the trial court's ruling if it was within the zone of reasonable disagreement. *Weatherred*, 15 S.W.3d at 542. We consider whether the trial court acted without reference to guiding rules or principles or whether the trial court acted arbitrarily or unreasonably in so ruling. *Montgomery v. State*, 810 S.W.2d 372, 380 (Tex. Crim. App. 1990) (op. on reh'g).

Does the record support the trial court's findings of fact?

In its first issue on appeal, the State contends that the trial court abused its discretion in excluding the scent-lineup evidence because some of the trial court's material findings of fact related to the reliability of the evidence are unsupported by the record. The State challenges findings 6–10, 13–15, 17–20, and 22–23.

We reject the State's contention. The record supports the challenged findings. Finding 6 states that diet and cologne affect human odor. Furton testified that human odor is composed of primary, secondary, and tertiary chemicals. Diet affects secondary chemicals, and soaps and perfumes are tertiary chemicals, which also affect human odor. Thus, the record supports Finding 6. Finding 7 states that all experts in the field do not accept that each human has a distinct odor that can be distinguished from all other human odors. Findings 8 and 9 state the ability to compare and match human scents through machines is not yet refined and cannot be verified. Both experts in this case testified that the scientific literature supports the general theory that each human has a distinct odor. Furton, however, testified that he is still investigating the exact chemicals that make up each human's individual odor so that he can distinguish between individuals, and he has tested only about two hundred people. Although at least one-peer-reviewed article, offered by the State, found that a trained dog can "trail" a human scent up to 48 hours old, no evidence was offered that a consensus of experts in the field or

even *any* expert in a peer reviewed publication agree that one can distinguish each individual's odor from all other human odors in the context of a scent-discrimination lineup. No expert has reached such a conclusion in the context of a controlled-scent lineup that is comparable to this one, where a dog is asked to compare six different scent swabs of varying age with each other, and with other swabs from crime scene evidence and the defendant. Thus, the record supports Findings 7, 8 and 9. Finding 10 states that scent identification is an emerging field in the United States. There is neither any published national guidelines nor any structured curriculum for scent-discrimination lineups in the United States. Furton testified that the United States is behind Europe in the development of reliable methods to evaluate scent-lineup evidence and use it in courts of law. Thus, the record supports Finding 10.

Finding 14 states that whether a dog alerts to a match is a subjective determination, and Finding 19 states that the dog's alerts were not evident from the video of Deputy Pikett's lineups from other cases. Deputy Pikett conceded that his dogs' alerts are neither obvious for everyone to see nor always consistent. Deputy Pikett stated his task in interpreting the dogs' alerts is subjective in nature. Furton stated it is up to the handler to decide whether the dog "alerted." Neither Furton nor Brisbin could discern the dog signals identifying an alert in a video demonstration of Deputy Pikett's scent-discrimination lineup. Thus, the record

supports Findings 14 and 19. Finding 13 states that, unlike a dog's alert to a bomb or to drugs, the matching of a scent in a lineup is not verifiable. Likewise, Finding 20 states that no laboratory analysis can verify the scent-discrimination lineup. The undisputed evidence at the hearing was that no analysis or instrument currently exists to verify the results of a scent-discrimination lineup, and that only the handler can verify that the dog has alerted to the correct scent. Accordingly, the record supports Finding 13 and 20.

Finding 17 states that no authority in the area has reviewed and approved of Deputy Pikett's methods in training his dogs and conducting scent-discrimination lineups. Deputy Pikett is not certified by any authority in scent identification. Both experts critiqued Deputy Pikett because his work lacked scientific oversight by an outside authority. Furton was unaware that any group, such as the National Police Bloodhound Association, had evaluated Deputy Pikett's methods. The State points to Deputy Pikett's colleagues who evaluated his methods and to Furton, its hired expert. But the State adduced no evidence that Pikett's colleagues were experts or authorities in the field, and Furton conceded that Pikett's methods conflicted with several of his organization's best practices. Accordingly, the record supports Finding 17.

Finding 18 states that Deputy Pikett is self-taught in dog tracking and scent-discrimination lineups. Although Deputy Pikett has attended seminars and lectures

on dog handling and has received informal training from older handlers, Furton reported that Deputy Pikett did not undergo any structured curriculum in dog handling. Accordingly, the record supports Finding 18.

Findings 15 and 22 state that scent-lineup evidence is currently not accurate, repeatable, and verifiable. Brisbin stated that science and detection methods are not so reliable that we can tell the identity of a person based on a scent-discrimination lineup. Furton—the State’s own expert—conceded that scent-lineup identifications have limited reliability and are more useful as an exclusionary tool. Accordingly, the record supports findings 15 and 22. Finding 23 is a legal conclusion that the evidence should be suppressed. Accordingly, we do not consider it to be a factual basis for the trial court’s ruling. We hold that the trial court’s valid findings support its suppression of the scent-lineup evidence.

Did the trial court abuse its gate-keeping function?

In its second issue on appeal, the State maintains that the trial court abused its discretion in excluding the scent-lineup evidence because the court overstepped its gate-keeping function.

Texas Rule of Evidence 702 allows a qualified expert to provide evidence about a subject that requires specialized knowledge, but the trial court must “determine whether the testimony is sufficiently reliable and relevant to help the

jury in reaching accurate results.” *Kelly v. State*, 824 S.W.2d 568, 572 (Tex. Crim. App. 1992); *see also* TEX. R. EVID. 702.

Issues of credibility and reliability are not the same. *See Vela v. State*, 209 S.W.3d 128, 134 (Tex. Crim. App. 2006). A jury should evaluate a witness’s credibility, but unreliable scientific evidence should never reach the jury. *See id.* at 135–36. As a gatekeeper, the trial court is tasked with assessing the reliability of particular testimony. *See id.* at 134. Although an inquiry as to reliability is flexible, the proponent of the evidence must establish some foundation for the reliability of an expert’s opinion. *Id.* Reliability centers on principles and methodology, and not on conclusions an expert generates by using those principles or methodology. *See id.* at 136 (citing *Daubert v. Merrell Dow Pharmaceuticals, Inc.*, 509 U.S. 579, 595, 113 S. Ct. 2786, 125 L.Ed.2d 469 (1993)). A trial court should not admit an expert’s opinion if that opinion is connected to existing data only by the expert’s own assertions. *Id.* If a trial court properly concludes that an analytical gap exists between the data and the expert’s proffered opinion, it may exclude that expert’s opinion. *Id.*

In *Kelly*, the Texas Court of Criminal Appeals set forth a three-prong reliability test and identified seven non-exclusive factors for courts to consider in assessing reliability of scientific evidence. 824 S.W.2d at 573. Factors that could affect a trial court’s determination of reliability include, but are not limited to: (1)

the extent to which the underlying scientific theory and technique are accepted as valid by the relevant scientific community, if such a community can be ascertained; (2) the qualifications of the testifying expert(s); (3) the existence of literature supporting or rejecting the underlying scientific theory and technique; (4) the potential rate of error of the technique; (5) the availability of other experts to test and evaluate the technique; (6) the clarity with which the underlying scientific theory and technique can be explained to the court; and (7) the experience and skill of the person(s) who applied the technique on the occasion in question. *Id.* at 573.

In *Nenno v. State*, the Texas Court of Criminal Appeals held that when addressing fields that are based upon experience or training as opposed to scientific methods, the appropriate questions for assessing reliability are (1) whether the field of expertise is a legitimate one, (2) whether the subject matter of the expert's testimony is within the scope of the field, and (3) whether the expert's testimony properly relies upon or utilizes the principles involved in the field. 970 S.W.2d 549, 561(Tex. Crim. App. 1998).

2) Analysis

In *Winfrey v. State*, the Texas Court of Criminal Appeals rejected the rationale that scent-discrimination lineups are a legitimate scientific field because they are similar to scent tracking, noting that there are "significant scientific differences among the various uses of scenting." 323 S.W.3d 875, 882–83 (Tex.

Crim. App. 2010) (quoting Andrew E. Taslitz, *Does the Cold Nose Know? The Unscientific Myth of Dog Scenting*, 42 Hastings L.J. 15, 42 (1990)). The *Winfrey* court held that scent-discrimination lineups, used alone or as the primary evidence in a case, are legally insufficient to support a conviction. *Id.* at 883–84. The court, however, did not address the admissibility of scent-lineup evidence under either *Kelly* or *Nenno*. *See id.* at 885 (Cochran, J., concurring). *But see Pate v. State*, No. 13-09-00112-CR, 2010 WL 3921177, * 16, fn. 19 (Tex. App.—Corpus Christi Oct. 7, 2010, pet. ref’d) (mem. op., not designated for publication) (holding that Deputy Pikett’s field of expertise—scent-discrimination lineups—was legitimate scientific field and distinguishing *Winfrey* because inculpatory evidence existed other than scent lineup).

In this case, the State proffered both Deputy Pikett and an expert, Furton, who opined that Deputy Pikett’s methods, records and results were reliable. In contrast, the defendant’s expert, Brisbin, found them unreliable. But both experts critiqued the reliability of Deputy Pikett’s lineup, his training and methods, and lack of oversight and verification of his test results. Deputy Pikett did not undergo a structured curriculum in dog handling, and he and his dogs did not receive annual certification. Deputy Pikett carries his “foil” samples in Ziploc bags all together inside a duffle bag as opposed to sealed glass containers, with the defendant’s fresher sample not similarly stored. Although Furton surmised that this storage

technique did not affect the results, he admitted that he had neither tested nor verified this theory. No outside authority audits the work of Deputy Pickett or his dogs. Brisbin described Deputy Pickett's records as brief and incomplete. The descriptions of scent-discrimination lineups in the records did not correspond to what Brisbin observed on corresponding videotapes of these lineups. Even Deputy Pickett admitted that another person could not evaluate the dogs' performances from his records. Brisbin was skeptical of the low failure rate indicated by the records, and Furton said the "perfect results" like those recorded in the scent-discrimination lineup for Dominguez were uncommon. Brisbin stated that Deputy Pickett should not use multiple dogs in the lineups, and all lineups should be double blind to ensure that no one could cue the dogs to alert. He also said that Deputy Pickett should do negative runs during the lineups, in which the suspect's scent is not present, to ensure reliability. Deputy Pickett stated that his dogs can differentiate between old and new scents, but he uses older foil samples against the suspect's more recent sample. The scent swabs collected from the scene also were days old.

The totality of the two experts' opinions as to the inadequacies of the methodology that Pickett uses to perform scent-discrimination lineups reveal an analytical gap between the scent data and the ultimate opinion here—that Dominguez's scent was present on a cell phone, pillow cases, and gun casing found at the crime scene. *See Vela*, 209 S.W.3d at 134 (quoting *Gen. Elec. Co. v.*

Joiner, 522 U.S. 136, 146, 118 S. Ct. 512 (1997)) (“But we also agree that a trial judge need not ‘admit opinion evidence which is connected to existing data only by the *ipse dixit* of the expert. A court may conclude that there is simply too great an analytical gap between the data and the opinion proffered.’”). As a proponent of the expert testimony, the State had the burden of proving by clear and convincing evidence that Deputy Pikett’s testimony was relevant and reliable. See *Weatherred*, 15 S.W.3d at 542. We hold that the trial court, in suppressing Deputy Pikett’s testimony, reasonably could have concluded that his opinion was not reliable because of the inadequacies in his protocol, training and methods, and lack of oversight and verification of his test results. See *Smith v. State*, 335 S.W.3d 706, 712 (Tex. App.—Houston [14th Dist.] 2011, pet. filed) (holding that trial court did not abuse its discretion in excluding Deputy Pikett’s testimony because State failed to prove by clear and convincing evidence reliability of testimony regarding a scent-discrimination lineup in that case). But see *Powell v. State*, 14-09-00398-CR, 2011 WL 1579734 (Tex. App.—Houston [14th Dist.] Apr. 21, 2011, no pet.) (mem. op., not designated for publication) (holding that trial court did not abuse its discretion in admitting Deputy Pikett’s testimony about scent lineup, where defendant claimed that Deputy Pikett’s measures did not prevent subliminally cuing of his dogs, because defendant cited no evidence that officer, who placed the samples for Deputy Pikett, could have subliminally cued dogs to

defendant's sample). The trial court did not abuse its discretion in excluding the evidence.

Should this court adopt a preponderance-of-the-evidence standard of review for scientific evidence?

In its third issue on appeal, the State contends that it established the reliability of the expert testimony by a preponderance of the evidence, and it urges that this court adopt a preponderance-of-the-evidence standard of review for the reliability of scientific evidence. As an intermediate court of appeals, we are bound to follow the precedent of the Texas Court of Criminal Appeals. *Purchase v. State*, 84 S.W.3d 696, 701 (Tex. App.—Houston [1st Dist.] 2002, pet. ref'd); see TEX. CONST. art. V, § 5(a) (declaring that court of criminal appeals is final authority for criminal law in Texas). The Texas Court of Criminal Appeals has held that “the proponent of scientific evidence must demonstrate to the trial court, by clear and convincing evidence, that the scientific evidence is reliable.” *Russeau*, 171 S.W.3d at 881 (citing *Weatherred*, 15 S.W.3d at 542). Accordingly, we overrule the State's third issue.²

² We note, however, given the conflicting testimony and the lack of supporting research, the State has not shown that the trial court's ruling is against the great weight and preponderance of the evidence even when measured under a preponderance-of-the-evidence standard.

Conclusion

We hold that the record evidence supports the trial court's findings of fact. The trial court acted within its discretion in excluding the scent-lineup evidence because it reasonably could have concluded that the State failed to carry its burden of showing that Deputy Pikett's scent-lineup evidence was reliable. We decline to adopt a preponderance-of-the-evidence standard of review for the reliability of scientific evidence in abrogation of the Texas Court of Criminal Appeals' precedent. We therefore affirm the order of the trial court.

Jane Bland
Justice

Panel consists of Justices Jennings, Bland, and Massengale.

Publish. TEX. R. APP. P. 47.2(b).