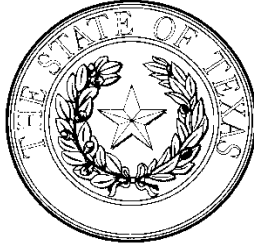


Opinion issued November 20, 2014.



In The  
**Court of Appeals**  
For The  
**First District of Texas**

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NO. 01-13-00505-CR

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**KARL FREDERICK SCHULTZ, Appellant**

**V.**

**THE STATE OF TEXAS, Appellee**

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**On Appeal from the County Criminal Court at Law No. 1  
Harris County, Texas  
Trial Court Case No. 1802555**

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**CONCURRING AND DISSENTING OPINION**

Are test results from a breathalyzer machine that has been reliably used for many years in a fixed location still reliable when the machine is moved into a police van, jostled through the streets of Houston, and used in admittedly varying ambient air conditions? It depends. While it is possible that the breathalyzer's test

results may be reliable in a mobile environment, the State in this case did not make a sufficient showing of reliability to meet its burden to establish admissibility of the mobile test results under Rule 702. I, therefore, respectfully dissent. But I concur in the Court's conclusion that the test results did not violate article 38.23 of the Texas Code of Criminal Procedure.

### **Factual Background**

The Houston Police Department has used breathalyzer machines, known as Intoxilyzer 5000s, at its police station for many years to measure the alcohol concentration in suspects' breath samples. At some point, the police chose to relocate the Intoxilyzer 5000s into police vans known as Breath Alcohol Testing vans (BAT vans). The Intoxilyzer 5000s are mounted inside the vans to be used on location at vehicle stops.

In January 2012, Schultz was detained for suspicion of drunk driving, and a BAT van was summoned. The police moved Schultz to a nearby gas station, where the BAT van met them and Schultz's blood alcohol content was tested. The mobile Intoxilyzer 5000 measured Schultz's alcohol concentration at considerably higher than the concentration sufficient to support a conviction.

Before trial, Schultz made an oral motion to suppress the results of the test. The court set it for a hearing. Schultz objected that the scientific predicate for admissibility of the breath test had not been satisfied under Rules 702 and 705 of

the Texas Rules of Evidence. He also objected that the test results were inadmissible under article 38.23 because they were in violation of DPS standard operating guidelines. *See* TEX. CODE CRIM. PROC. ANN. art. 38.23 (West 2005). He concluded that the State could not “establish the predicate or the admissibility of the breath test in this case.”

At the hearing, the trial court heard evidence regarding the protocol for administering a breath test on a suspect. Officer Ciers, who is a certified operator, observed Schultz for the required 15 minutes before administering the breath test. Officer Ciers then submitted the machine to a circuitry test, which it passed. He also tested the level of identifiable interferents in the ambient air, which the machine measured at 0.00 four times. Officer Ciers took two breath samples from Schultz; before each, he purged the system with ambient air.

There also was testimony concerning prior testing and maintenance on the Intoxilyzer 5000 that Officer Ciers used to measure Schultz’s alcohol concentration. Technical Supervisor Oliver testified that he had inspected the machine one week before Schultz’s arrest, in accordance with a monthly inspection schedule. He checked the machine’s filter for interferents—four substances that could contaminate a breath sample and possibly elevate the alcohol reading. The inspection protocol does not test for all possible interferents, only those four

specified substances. Oliver verified that the interferent detection system was properly operating and none of the four interferents were inside the machine.

The State did not offer evidence of the relocation history of the machine. We do not know when the machine was relocated to the BAT van. Nor was there evidence of whether it was moved only once or repeatedly between the police station and the van or between vans.

Before Schultz's test, the machine had not been recalibrated for six months. The machine was not recalibrated when it was moved into the van, and therefore had been relocated at least once without further recalibration.

The State concedes that under *State v. Esparza*, 413 S.W.3d 81 (Tex. Crim. App. 2013), it bore the burden under the Rules of Evidence to “prove the evidentiary predicate for the admissibility of [this] scientific evidence.”

### **The Intoxilyzer 5000**

The Intoxilyzer 5000 utilizes infrared spectrophotometry to measure ethyl alcohol in breath samples. It has been used by police departments across the country for years and, when its test results have been challenged in court, repeatedly found to be sufficiently reliable. *See, e.g., State v. Anderson*, 175 P.3d 788, 794 (Idaho 2008) (“[T]he Intoxilyzer 5000 was approved by the Idaho State Police almost two decades ago and is still in use.”). Until recently, the Houston Police Department has used the Intoxilyzer 5000 at a fixed location—inside the

police station. And the test results from the immobile Intoxilyzer 5000 have been used in Harris County courts for years as evidence of the ethyl alcohol concentration in suspects' breath samples, stated as a numerical percentage. *See, e.g., Heath v. State*, No. 01-94-00975-CR, 1997 WL 212268, at \*2 (Tex. App.—Houston [1st Dist.] 1997, no pet.) (mem. op., not designated for publication).

By contrast, portable breathalyzers—known as Passive Alcohol Sensors—traditionally have been used only to confirm the presence of alcohol in a suspect's breath sample; the portable machines have not been determined to reliably measure the concentration of alcohol in breath samples. *See Adams v. State*, 156 S.W.3d 152, 156 (Tex. App.—Beaumont 2005, no pet.); *Fernandez v. State*, 915 S.W.2d 572, 576 (Tex. App.—San Antonio 1996, no pet.).

By moving its Intoxilyzer 5000 into a mobile van, the police might achieve the best of both worlds: portability and admissible alcohol concentration results. But no Texas appellate court—nor any other appellate court that I have located—has addressed whether the Intoxilyzer 5000 can produce reliable results when removed from its fixed location or, if it can, the conditions required to obtain reliable test results.

Technical Supervisor Oliver testified that the manufacturer does not produce any literature or instructions regarding use of the Intoxilyzer 5000 in a mobile environment. There was evidence that members of HPD have raised questions

about the reliability of the Intoxilyzer 5000 results when used in a mobile environment. Those questions specifically concerned the effect of heat on the machine. Oliver testified that, at the request of the Harris County District Attorney's office, he ran a "variety of tests" on four BAT vans for excessive heat using breath samples with four different levels of alcohol concentration. He ran close to 250 tests on the machines. Oliver testified that the results were valid; the machines would not allow testing when it got too hot because they would fail the circuitry check. When the temperature was "just below whatever the temperature is [that causes the machines not to produce test results]," the machines would produce "slightly lower results than what they should have been." When the machines were overheated and subsequently cooled, they did not produce false positives.

The State did not introduce these test results nor did Oliver provide details on the different test conditions. Oliver did not indicate whether he tested the machine to evaluate the effect of varying ambient air conditions on the accuracy of the test results. Nor did Oliver identify any published literature on the effect of ambient air temperatures or varying ambient air conditions on the machines. The Intoxilyzer 5000 used in Schultz's test was not one of the machines involved in Oliver's tests.

During the hearing, Schultz presented evidence that there is another breathalyzer available to police departments: the Intoxilyzer 8000, which also is manufactured by the same company. It is marketed as a mobile Intoxilyzer specifically designed for use in police vans. While it utilizes infrared spectrophotometry like the 5000 model does, the marketing brochure describes the 8000 machine as a more advanced model than the Intoxilyzer 5000.<sup>1</sup>

### **Admissibility Under Article 38.23**

Article 38.23 of the Texas Code of Criminal Procedure prohibits the introduction of evidence obtained in violation of the Constitution or laws of the United States or the State of Texas in a criminal trial. TEX. CRIM. PROC. CODE ANN. art. 38.23 (West 2005). The Court of Criminal Appeals in *Atkinson* stated that compliance with DPS regulations—which the Court also called rules—is mandatory for admissibility of the alcohol tests under article 38.23. *Atkinson v. State*, 923 S.W.2d 21, 23 (Tex. Crim. App. 1996) *abrogated on other grounds by Motilla v. State*, 78 S.W.3d 352 (Tex. Crim. App. 2002). I agree with the Court that the DPS regulations function as a set of rules and compliance with them is

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<sup>1</sup> The brochure describes the Intoxilyzer 8000 as “fully mobile” and specifically advertises its “rugged case.” Neither attribute is advertised on the brochure for the Intoxilyzer 5000. The trial court erroneously refused to admit the brochure for the limited purpose of the Rule 104(a) hearing. I refer to it as part of the procedural history of the case. I do not rely on it to reach the conclusion that the State did not meet its burden of proof.

mandatory.<sup>2</sup> See *Scillitani v. State*, 343 S.W.3d 914, 922 (Tex. App.—Houston [14th Dist.] 2011, pet. ref’d) (holding Intoxilyzer’s results were admissible because they were obtained in conformity with governing regulations); *Scherl v. State*, 7 S.W.3d 650, 652 (Tex. App.—Texarkana 1999, pet. ref’d) (“[I]ntoxilyzer test results are admissible when performed in accordance with the Transportation Code and the Texas Department of Public Safety regulations.”).

I concur with the Court that the test results were admissible under article 38.23. Under subsection (a) of Rule 19.4 of Title 37 of the Texas Administrative Code, the use of the Intoxilyzer 5000 for breath-alcohol testing must be approved by the Scientific Director. 37 TEX. ADMIN. CODE § 19.4(a). Proof of that approval is therefore necessary for breath-alcohol testing “to be used for evidentiary purposes.” *Id.* (“All breath alcohol testing techniques, methods and programs to be used for evidential purposes must have the approval of the scientific director.”).

The Scientific Director’s approval is not the only condition for admissibility. If the Scientific Director’s approval ends the inquiry, the State would not have to

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<sup>2</sup> In addition to the reasons cited by the Court, this result is consistent with *Atkinson*, which held that the State had to comply with DPS’s requirement that a technician must continuously observe the person tested for at least 15 minutes before administering the test. 923 S.W.2d at 23. Normally, non-compliance with a regulatory rule would not require automatic exclusion, but the statute in question specifically requires compliance with DPS “rules.” *Id.* at n. 1. The 15-minute delay provision is found in section 19.4(c)(1) of the Administrative Code.



comply with the remainder of the regulations. Such a rule would be contrary to *Atkinson*'s holding that the tests must comply with a 15-minute waiting period.

Therefore, we must also examine whether DPS's "guidelines," like DPS's regulations, operate as rules within the meaning of section 724.016 of the Texas Transportation Code, and therefore must be satisfied as a condition of admissibility. *Atkinson* does not answer this question; it addresses DPS regulations. The State argues that these "guidelines" are merely internal policies that do not appear in the Administrative Code or the Texas Register. According to the State, only those regulations reflected in the Administrative Code constitute "laws" under article 38.23 or "rules" under section 724.016 of the Texas Transportation Code.

Schultz argues that sections 1.1 and 1.2 of the "Standard Operating Guidelines for Technical Supervisors" (SOGs) are mandatory and should be treated as DPS "rules" and "laws." Section 1.1 states that the technical supervisor's "official inspection . . . can only be conducted at the evidential testing location. Each part of the inspection shall occur at the testing location and includes not only the instrument, but the associated equipment and the testing environment as a whole." Section 1.2 provides that the technical supervisor "shall" conduct a "complete inspection . . . each time an instrument is placed into service or returned to service at a testing location." Both are mandatory.

The SOGs are adopted pursuant to Rule 19.4(f) of the Administrative Code, which grants the Scientific Director power to issue “directives, orders and policies.” A footnote on the first page of the SOGs equates the guidelines with “policies.” The title, “guidelines,” suggests they are not rules, but the word is modified by the adjective “standard” suggesting that they are mandatory rules. Looking to the content of the only page in the record, some provisions contain mandatory language, but other sections contain permissive language.<sup>3</sup>

Given this language, and in absence of the remainder of the SOGs indicating a contrary interpretation, I would not treat the SOGs as “rules” for purposes of section 724.016 of the Texas Transportation Code or as “laws” for purposes of article 38.23. In conclusion, admissibility of breath-alcohol tests under article 38.23 requires compliance with DPS regulations and therefore requires approval from the Scientific Director of the testing procedure, but does not require compliance with the guidelines.

### **Admissibility Under Rule 702**

#### **A. The test for admissibility of breath test results**

Under Texas law, the State must prove that breath-test results “accurately reflect the subject’s alcohol concentration at the time of the offense.” *Stewart v. State*, 129 S.W.3d 93, 98 (Tex. Crim. App. 2004) (quoting *Bagheri v. State*, 119

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<sup>3</sup> See, e.g., SOG § 1.1.3 (“A Technical Supervisor may conduct additional tests or checks of the instrument and simulator as he/she deems necessary.”).

S.W.3d 755, 760 (Tex. Crim. App. 2003)). To be admissible, the Intoxilyzer 5000's test results must satisfy the requirements of *Kelly v. State*, 824 S.W.2d 568, 573 (Tex. Crim. App. 1992), as modified by the Texas Transportation Code and *Reynolds v. State*, 204 S.W.3d 386, 389–91 (Tex. Crim. App. 2006).

In *Kelly*, the Court of Criminal Appeals held that the State must demonstrate by clear and convincing evidence three criteria for scientific evidence to be sufficiently reliable to be admissible: (1) the underlying scientific theory must be valid; (2) the technique used to apply the theory must be valid; and (3) the technique must have been properly applied on the occasion in question. *Kelly*, 824 S.W.2d at 573. *Kelly* also provided a list of seven non-exclusive factors for examining reliability.<sup>4</sup> *Id.* Later, in *Hartman v. State*, 946 S.W.2d 60, 62 (Tex. Crim. App. 1997), the Court held that the multi-factor *Kelly* reliability test applies to Intoxilyzer test results.

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<sup>4</sup> The *Kelly* Court identified the following non-exclusive list of relevant factors for consideration: 1) the extent to which the underlying scientific theory and technique are accepted as valid by the relevant scientific community if such community can be ascertained; 2) the existence of literature supporting or rejecting the underlying scientific theory and technique; 3) the clarity with which the underlying scientific theory and technique can be explained to the court; 4) the potential rate of error of the technique; 5) the availability of other experts to test and evaluate the technique; 6) the qualifications of the expert testifying; and 7) the experience and skill of the person(s) who applied the technique on the occasion in question. *Kelly v. State*, 824 S.W.2d 568, 573 (Tex. Crim. App. 1992).

In *Reynolds*, the Court harmonized Rule 702’s requirements under *Kelly* with the Texas Transportation Code. 204 S.W.3d at 390–91. The Texas Transportation Code requires a breath specimen obtained by a police officer to “be taken and analyzed under rules of the department by an individual possessing a certificate issued by the department certifying that the individual is qualified to perform the analysis.” TEX. TRANSP. CODE ANN. § 724.016(a) (West 2011). It also provides that DPS may adopt rules approving satisfactory analytical methods. *Id.* § 724.016(b). The Court in *Reynolds* held that the State did not have to show that the state trooper who conducted the breath test “was familiar with the science and technology that underlie the test.” 204 S.W.3d at 387. The Court rejected the contention that this requirement existed under its precedents on breath tests or under *Kelly*. *Id.* at 389.

*Reynolds* also went beyond the narrow question before it and held that the first *Kelly* prong does not apply to breath-alcohol test results because “the Legislature has already determined that the underlying science is valid.” *Id.* at 390. The Court modified the second *Kelly* prong—the prong that examines the validity of the application of the theory—to examine whether the specimen was analyzed by “individuals certified by, and using methods approved by the rules of, DPS.” *Id.* The Court also modified the third *Kelly* prong—the “properly applied” inquiry—into whether the technique was properly applied in accordance with DPS’s rules.

*Id.* at 391. The reason for the elimination of the first *Kelly* prong and the modification of the last two *Kelly* prongs was that “the Legislature has already determined” the validity of “the underlying science.” *Id.* at 390; *see also id.* at 391 (stating that Legislature has determined that “the underlying scientific theory” for measuring alcohol concentration by analysis of breath specimens is “valid.”).

I would not read *Reynolds* so rigidly as to foreclose the application of the *Kelly* factors when breathalyzers are used under new conditions that have not been tested by DPS and are not regulated by any specific DPS rules. Section 724.016 provides that compliance with any DPS rules is a *necessary* condition for the admissibility of the test results but does not indicate that it is a *sufficient* condition for admissibility. Common sense suggests that approved equipment used under new conditions may require testing to ensure that it is continuing to produce valid results. For example, calibration every six months may be perfectly reliable under normal conditions but not if an earthquake has shaken the foundation of the building where an Intoxilyzer 5000 is maintained.

The requirement that Intoxilyzer test results are admissible only when conducted in accordance with DPS rules first requires the existence of rules that govern the particular application of the Intoxilyzer. In the absence of rules for a new and untested condition, there can be no compliance with the rules. To give an example, if a new scientific method of measuring alcohol concentration from

breath specimens is developed and a new piece of equipment is manufactured to implement this new scientific method, the results would not be valid until DPS developed rules governing the new equipment. The same is true here where a well-established piece of equipment is used under new and potentially significantly different test conditions.

In the earlier section on article 38.23, I have demonstrated that there are no rules for use of the Intoxilyzer 5000 in a BAT van. The State agrees; in its arguments regarding article 38.23, it contends that there are no DPS rules that specifically govern the use of the Intoxilyzer 5000 in a mobile environment. The Court is willing to allow the existing, general rules regarding the frequency of recalibrations and re-inspections to apply in this new context. I disagree.

In my view, moving the Intoxilyzer from its fixed, indoor testing location to a mobile application raises an issue that the existing DPS rules do not address. In the absence of rules for this new application, it is impossible to conclude that the equipment was properly used “in accordance with the department’s rules.” But the absence of rules does not necessarily mean the application was unreliable. Therefore, the *Kelly* factors should be reviewed in determining whether the State demonstrated the reliability of the test results.

There is a second reason that I believe the *Kelly* reliability inquiry should apply here: the issue of the reliability of the Intoxilyzer 5000 in a mobile

environment has trans-case scientific implications. Therefore, the *Kelly* factors should be applied to determine whether a mobile application of an Intoxilyzer 5000 presents a reliable methodology.

Under Texas law, the State had the burden to demonstrate reliability by clear and convincing evidence through the application of the *Kelly* factors. It did not.

**B. The State failed to satisfy its burden of showing that the Intoxilyzer 5000 was reliable under *Kelly***

Schultz contends that the Intoxilyzer results were inadmissible under the non-exclusive, flexible factors identified in *Kelly*. He asserts that those factors apply not only to the general methodology underlying the Intoxilyzer 5000 (i.e., infrared spectrometry to measure ethyl alcohol), but also to the methodology of using that piece of equipment in a mobile environment.

The State identifies no evidence that the theory in question—applying the Intoxilyzer 5000 in a mobile environment—is accepted in the relevant scientific community. It offered no literature demonstrating the reliability of the machine under new test conditions, i.e., in a mobile environment. It did not offer any marketing material or literature from the manufacturer suggesting it could be reliably used in those conditions. The State did not offer any test results from which a rate of error could be determined for breath test results from the machine after it has been driven on the road.

The only evidence from the State was Oliver’s testimony that there is no evidence that placing the Intoxilyzer 5000 inside a van would change its calibration. But that misplaces the burden of proof. The State had to show that a mobile environment—with a jostling van—will not affect the machine’s calibration. If the police maintain records of the recalibration analyses performed on its mobile Intoxilyzer 5000 units, that evidence could have been offered to demonstrate that mobile Intoxilyzer 5000s have not required more frequent or greater recalibrations than immobile machines. However, no such evidence was offered. On balance, the State has not shown by clear and convincing evidence that the *Kelly* factors demonstrate the reliability of the Intoxilyzer 5000 in a mobile environment.

The Court concludes that the Standard Operating Guidelines are relevant to determining compliance with the *Kelly* factor that requires the specimen to be analyzed using methods approved by the DPS rules. The Court then concludes that only two SOG requirements are at issue—the requirements that DPS technical supervisors perform inspections at specified times (including each time the equipment is placed into service at a testing location) and periodically calibrate the equipment—and both were satisfied.

The SOGs do not specifically cover procedures for a mobile environment. But they do contain general provisions that support the conclusion that the test



results were not in compliance and, therefore, are not reliable. Specifically, SOG 1.02 requires that “a complete inspection” be performed each time an instrument “is placed into or returned into service at a testing location.” Technical Supervisor Oliver testified that he believed this requirement would mandate a complete re-inspection if the machine was simply moved a few feet across the room. Schultz’s expert, a former DPS technical supervisor, agreed. Under that standard, an inspection was required when the machine was initially placed in the BAT van and then again if it was removed from and returned to the van. Thus, even if I were to accept the proposition that the phrase “testing location” in SOG 1.2 refers to the van, there is no evidence of when it was last moved into the van or whether it was inspected at the time. The inspection the week before Schultz’s arrest was pursuant to a monthly inspection schedule, not in response to the machine being moved. There is simply no evidence of where that inspection occurred. And without any evidence concerning whether the machine was moved into the van following that scheduled inspection, we cannot know if SOG 1.02 was met, even when reading it to refer to the van as the “testing location.”

The State also did not present any evidence whether the machine remained in the van after the prior week’s inspection; it may have been moved back and forth into the office or between vans. The State offered no evidence of how many miles the van(s) had driven with the machine inside after the inspection or where

the machine had been used while in the field. I would conclude that the State did not demonstrate compliance with SOG 1.2. And to the extent these general SOGs are relevant to a determination of reliability in a new, untested condition, I would conclude they do not support the Court's conclusion that the SOGs were adequately satisfied to admit this evidence.

More problematic, though, is limiting the phrase "testing location" to mean the BAT van, ignoring that the van is driven around to various testing locations. SOG 1.1 states that a technical supervisor's official inspection must be conducted at "the evidential testing location." We should adopt the logical and textual meaning of the phrase "testing location." The location where the test results are obtained for evidentiary purposes is where the breath sample is submitted and tested. The testing location here was where the officer tested Schultz: the gas station.

The State failed to offer any evidence regarding the reliability of the Intoxilyzer 5000 when used in a mobile environment. Because the State did not meet its burden under *Kelly* to establish that the technique of collecting and testing a breath sample using an Intoxilyzer 5000 in a mobile application is reliable and, as a result, did not establish the reliability of the resulting data, I would conclude that the breath results were inadmissible and that the trial court erred by denying Schultz's motion to suppress that evidence.

## **Conclusion**

The evidence here raises questions, but no assurances, regarding the reliability of the Intoxilyzer 5000 in a mobile environment. The State did not show how long the machine had been in the BAT van in question. We do not know if it was moved from the van or within the van after it was initially placed there. There is no evidence that the machine's calibration was ever tested in the BAT van. As a result, we simply do not know if the jostling that every moving vehicle experiences may have caused the machine to become mis-calibrated, resulting in unreliable test results. It may not have; perhaps the mounting in the BAT van provides sufficient stability. We do not know, and the State does not tell us.

We also do not know whether the list of interferences tested for in the pre-sample protocol is adequate to ensure reliable test results in a mobile application versus a single, fixed testing location with a consistent source of ambient air. We only know that the machine tests for four specifically identified interferences, none of which were found in the BAT van at the Shell station. While the machine did not find any of the tested-for interferences, that is no assurance of reliability here. The issue here is not those interferences but other air contaminants that might be encountered at a gas station but would not be anticipated in a fixed, controlled environment. It is possible that the ambient air at the gas station had no effect on the reliability of the test results, but again we do not know.

The State may yet, in other cases, show that a mobile application is reliable, but it has not done so here. Accordingly, I respectfully dissent to the Court's holding on Rule 702.

Harvey Brown  
Justice

Justice Brown, dissenting from the judgment.

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