

IN THE SUPREME COURT  
OF THE  
STATE OF SOUTH DAKOTA

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STATE OF SOUTH DAKOTA,

Plaintiff and Appellee,

v.

JOHN GARANG YUEL,

Defendant and Appellant.

\* \* \* \*

APPEAL FROM THE CIRCUIT COURT OF  
THE SECOND JUDICIAL CIRCUIT  
MINNEHAHA COUNTY, SOUTH DAKOTA

\* \* \* \*

THE HONORABLE ROBIN J. HOUWMAN  
Judge

\* \* \* \*

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CONSIDERED ON BRIEFS  
ON FEBRUARY 12, 2013

OPINION FILED **11/26/13**

GILBERTSON, Chief Justice

[¶1.] Officer Campbell stopped John Garang Yuel after watching Yuel make an improper left turn at an intersection. There were both open and unopened beer containers in the vehicle. When Officer Treadway arrived at the scene, he began a DUI investigation. After conducting multiple field sobriety tests, Officer Treadway arrested Yuel for DUI. The results of Yuel's blood test indicated Yuel's blood alcohol content (BAC) was over 0.08 percent at the time of the stop. Yuel exercised his right to a jury trial on the DUI charges and was found guilty. He appeals the trial court's admission of certain testimony regarding the Horizontal Gaze Nystagmus (HGN) test,<sup>1</sup> which Officer Treadway conducted during the stop, and the trial court's denial of his motion for judgment of acquittal.

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1. In *State v. Hullinger*, a nystagmus and the HGN test were described as follows:

Nystagmus is an involuntary jerking of the eyeball. [The involuntariness differentiates it from other field sobriety tests.] The jerking may be aggravated by central nervous system depressants such as alcohol or barbiturates. Horizontal gaze nystagmus is the inability of the eyes to maintain visual fixation as they are turned to the side. In the HGN test the driver is asked to cover one eye and focus the other on an object (usually a pen) held by the officer at the driver's eye level. As the officer moves the object gradually out of the driver's field of vision toward his ear, he watches the driver's eyeball to detect involuntary jerking. The test is repeated with the other eye. By observing (1) the inability of each eye to track movement smoothly, (2) pronounced nystagmus at maximum deviation and (3) onset of the nystagmus at an angle less than 45 degrees in relation to the center point, the officer can estimate whether the driver's blood alcohol content (BAC) exceeds the legal limit . . . .

2002 S.D. 83, ¶ 10, 649 N.W.2d 253, 256 (alteration in original) (citation omitted).

## FACTS

[¶2.] At approximately 6:23 p.m. on July 25, 2011, Officer Campbell was observing the intersection of 10th Street and Franklin Avenue in Sioux Falls, South Dakota. Two “no left turn” signs were posted at the intersection, which was under construction. While watching the intersection, Officer Campbell observed Yuel make an improper left turn. Officer Campbell proceeded to initiate a traffic stop of the vehicle. There were a total of four individuals in the vehicle. Upon making contact with the vehicle and requesting Yuel’s driver’s license and registration, Officer Campbell saw an unopened beer can fall out of the front passenger’s pocket. Additionally, he noticed two unopened beer containers in the console of the vehicle. At this point, Officer Campbell called three additional officers to the scene to assist with the stop. Following his arrival at the scene, one of the officers noticed an open container in the backseat of the vehicle. Another open container was found under Yuel’s seat.

[¶3.] Yuel was unable to provide Officer Campbell with a valid driver’s license. When Officer Campbell checked the status of Yuel’s license, he discovered that it had been revoked. After issuing Yuel several citations, Officer Campbell turned the investigation over to Officer Treadway so that Officer Treadway could perform a DUI investigation.<sup>2</sup> Upon making contact with Yuel, Officer Treadway noticed the smell of alcohol coming from Yuel’s breath. Additionally, he observed that Yuel had bloodshot, glossy eyes and appeared to be disoriented. Officer

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2. Officer Campbell testified that he had Officer Treadway conduct the DUI investigation because Officer Treadway was a traffic officer that essentially specialized in DUI investigations.

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Treadway asked Yuel if he had consumed any alcohol, and Yuel initially responded that he had not. However, Yuel later told Officer Treadway that he “drank one beer a minute ago.”

[¶4.] Based on his observations, Officer Treadway conducted various field sobriety tests. These included the walk-and-turn test, the one-leg-stand test, and the HGN test. Officer Treadway determined that his observations concerning Yuel’s physical characteristics and Yuel’s performance during the field sobriety tests indicated that Yuel was impaired and that Yuel’s BAC was above a 0.08 percent. As a result, Officer Treadway placed Yuel under arrest for DUI. Yuel was then transported to the Minnehaha County Jail and a blood test was performed. Yuel’s blood was drawn at 7:06 p.m., which was approximately 40 minutes after he was stopped. The blood test results revealed that Yuel’s BAC was 0.112 percent. The forensic specialist from the Sioux Falls Police Department who tested the blood determined that Yuel’s BAC would have been approximately 0.109 percent at the time of the stop.

[¶5.] Yuel was charged by Information with: driving while under the influence of alcohol, marijuana, or any controlled substance, in violation of SDCL 32-23-1(2); driving while having 0.08 percent or more by weight of alcohol in the blood, in violation of SDCL 32-23-1(1); driving with a revoked license, in violation of SDCL 32-12-65(1); and driving with a suspended license, in violation of SDCL 32-12-65(2). In a Part II Information, Yuel was charged with a fifth or subsequent offense of driving while under the influence, in violation of SDCL 32-23-4.7. Yuel pleaded not guilty to the charges and proceeded to trial. Before the jury trial

commenced, Yuel pleaded guilty to driving with a revoked license in exchange for the State dismissing the charge of driving with a suspended license. Yuel did not testify at trial and did not call any witnesses. At the conclusion of the trial, the jury found Yuel guilty of driving while under the influence of alcohol and driving while having 0.08 percent or more by weight of alcohol in the blood.

[¶6.] At sentencing, Yuel admitted to the Part II Information.<sup>3</sup> As to the DUI, Yuel was sentenced to serve 10 years in the South Dakota State Penitentiary, with two years suspended and credit for the 170 days he had previously served. As to the driving with a revoked license charge, Yuel was sentenced to serve 180 days in jail, with 170 days suspended. Additionally, he was given credit for 10 days previously served. This sentence was to run concurrent with Yuel's DUI sentence. Yuel appeals, arguing: (1) the trial court erred in allowing Officer Treadway to testify about the accuracy of HGN testing; and (2) the trial court erred in denying Yuel's motion for judgment of acquittal.

### ANALYSIS AND DECISION

[¶7.] 1. **Whether the trial court erred in allowing Officer Treadway to testify about the reliability of HGN testing and the correlation between an individual's performance on an HGN test and the individual's BAC.**

[¶8.] South Dakota has adopted the *Daubert* test, which is set forth in *Daubert v. Merrell Dow Pharmaceuticals, Inc.*, 509 U.S. 579, 113 S. Ct. 2786, 125 L. Ed. 2d 469 (1993), to be used in determining whether expert testimony is admissible. *State v. Hofer*, 512 N.W.2d 482, 484 (S.D. 1994). "The *Daubert*

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3. This was Yuel's eighth DUI conviction within 10 years.

standard requires the trial court to ensure that an expert's testimony both 'rests on a reliable foundation and is relevant to the task at hand. Pertinent evidence based on scientifically valid principles will satisfy those demands.'" *State v. Loftus*, 1997 S.D. 131, ¶ 21, 573 N.W.2d 167, 173 (quoting *Kuper v. Lincoln-Union Elec. Co.*, 1996 S.D. 145, ¶ 40, 557 N.W.2d 748, 760). "The trial court's evidentiary rulings are presumed correct and will not be overturned absent a clear abuse of discretion." *St. John v. Peterson*, 2011 S.D. 58, ¶ 10, 804 N.W.2d 71, 74 (citation omitted). "An evidentiary ruling will not be overturned unless error is demonstrated and shown to be prejudicial error." *Id.* (citation omitted).

[¶9.] In *Hullinger*, this Court held that testimony regarding HGN testing evidence is relevant to the issue of whether a person is driving while under the influence of alcohol. 2002 S.D. 83, ¶ 15, 649 N.W.2d at 259. We also recognized that HGN testing, when conducted by a properly trained officer, is nationally recognized as a reliable field-sobriety testing method. *Id.* ¶ 19. Thus, under *Daubert*, the reliability of HGN testing as an indicator of whether a person is under the influence of alcohol need not be established through expert testimony if adequate foundation is laid to establish that the officer was trained to administer the test and that the officer administered the test properly. *Id.* A defendant may refute the State's HGN-test-result evidence through cross-examination and by presenting rebuttal evidence of causes, other than alcohol ingestion, of physical abnormalities detected by an HGN test. *Id.* ¶ 15.

[¶10.] At trial, Yuel challenged the admissibility of the entirety of Officer Treadway's testimony regarding the HGN test. The trial court conducted a hearing

outside of the presence of the jury to determine whether Officer Treadway's testimony about HGN testing was admissible. The trial court concluded that the State provided sufficient foundation to establish that Officer Treadway was trained to administer and interpret the HGN test and that he administered the HGN test properly. As a result, the trial court ruled that Officer Treadway's testimony regarding HGN testing was admissible.

[¶11.] On appeal, Yuel does not challenge the trial court's determination that Officer Treadway was trained to administer the HGN test or that he administered the test properly. Regardless, Yuel asks us to conclude that *all evidence* related to the HGN test should have been excluded in this case. Yuel asserts several problems with the testimony, including that Officer Treadway was not qualified to opine that Yuel's performance on the HGN test "necessarily showed that he was over .08 BAC."<sup>4</sup> To support this argument, Yuel points to Justice Amundson's concurrence in *Hullinger*, which opined that "officers who do not have a scientific background to adequately explain nystagmus causation should not be allowed to testify to its causation; rather, they should have their testimony limited to observations only." *See* 2002 S.D. 83, ¶¶ 26, 649 N.W.2d at 262 (Amundson, J., concurring specially). Yuel also asserts that the State did not provide sufficient foundation to establish that Officer Treadway was qualified to offer this testimony.

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4. Contrary to Yuel's argument, Officer Treadway did not testify that the HGN test results "necessarily" meant Yuel had a .08 or greater BAC, but rather that a person exhibiting a certain number of clues usually indicates a BAC of .08 or higher.

In addition, Yuel argues that Officer Treadway’s testimony was not supported by any data or research and that he failed to provide sources for this testimony.<sup>5</sup>

[¶12.] We first note that the language Yuel quotes from Justice Amundson’s concurrence in *Hullinger* has never been adopted by a majority of this Court. Nor does our analysis in *Hullinger* offer much guidance as to whether the testimonial evidence presented by Officer Treadway, in whole, is admissible under *Daubert*, 509 U.S. 579, 113 S. Ct. 2786, 125 L. Ed. 2d 469. *Hullinger* addressed whether HGN test results were *relevant* in an “under the influence” of alcohol case under SDCL 32-23-1(2), and whether the officer conducting the HGN test was sufficiently trained. 2002 S.D. 83, ¶¶ 8, 15, 17, 649 N.W.2d at 255, 259-60. *Hullinger* did not consider what specific types of police officer “HGN evidence” are admissible under *Daubert*.<sup>6</sup>

[¶13.] Courts in other jurisdictions have examined—and come to very different opinions—as to whether police testimony about HGN testing may be admitted to prove: (1) that a defendant was impaired or under the influence of

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5. The arguments Yuel makes in support of his claim are unclear. Although Yuel challenges the admissibility of Officer Treadway’s testimony, Yuel’s challenge may be more appropriately considered as a challenge to the weight of the evidence, which can be adequately addressed by cross-examination.

6. *Hullinger* did involve evidence of a correlation between HGN test results and a BAC exceeding the legal limit. See 2002 S.D. 83, ¶¶ 7, 13, 649 N.W.2d at 255, 257-58. But this evidence was offered by an optometrist expert witness, who provided additional foundational evidence as to the effects of alcohol on the central nervous system. See *id.* ¶¶ 7, 18 (“A minority of jurisdictions require additional foundational evidence regarding the correlation between HGN test results and alcohol impairment. This additional foundational evidence was presented to the trial court by an expert witness at the suppression hearing.” (internal citations omitted)).

alcohol based on an HGN test; (2) that the BAC of a defendant was above or below the legal limit based on an HGN test; (3) that there is a correlation between HGN test results and a BAC exceeding the legal limit; (4) that based on the officer's experience, a failed HGN test indicates a BAC over the legal limit; and (5) that the HGN test results suggest a specific BAC. This list of potential uses is not exhaustive. In this case, Officer Treadway's testimony arguably included the first four purposes.

[¶14.] Courts considering the admissibility of HGN evidence for each of these purposes have reached different results.<sup>7</sup> Some courts have adopted a very restrictive view, allowing virtually no officer testimony about HGN test results in relation to the defendant's BAC or impairment. *See, e.g., Young v. City of Brookhaven*, 693 So. 2d 1355, 1360-61 (Miss. 1997) (limiting testimony about HGN test results to prove probable cause to arrest and administer breath or blood test). Other courts have adopted an intermediate approach that permits qualified officers to testify to HGN test results for the limited purpose of establishing circumstantial evidence that a person was under the influence of or impaired by alcohol. *See Whitson v. State*, 863 S.W.2d 794, 798 (Ark. 1993); *Cooper v. State*, 761 N.E.2d 900, 903 (Ind. Ct. App. 2002); *State v. Just*, 926 A.2d 1173, 1176 (Me. 2007); *State v. Rose*, 86 S.W.3d 90, 100 (Mo. Ct. App. 2002); *State v. Baue*, 607 N.W.2d 191, 204 (Neb. 2000). Other courts go further, permitting qualified officers to estimate that a person had a BAC over the legal limit based on HGN test results. *See Hughes v.*

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7. *See generally* John P. Ludington, Annotation, *Horizontal Gaze Nystagmus Test: Use in Impaired Driving Prosecution*, 60 A.L.R.4th 1129 (1988).

*State*, 943 So. 2d 176, 192 (Fla. Dist. Ct. App. 2006) (permitting officer to rely on the Tharpe’s Equation after performing the HGN test in estimating the defendant’s BAC); *Kirkland v. State*, 559 S.E.2d 161, 163 (Ga. Ct. App. 2002) (allowing an officer to testify to his opinion about a correlation between HGN test results and BAC). However, some courts allow this type of evidence only if, like the case we consider today, there is also a chemical analysis. *See, e.g., State ex rel. Hamilton v. City Court of Mesa*, 799 P.2d 855, 858 n.2 (Ariz. 1990). Finally, some courts have rejected attempts by officers to testify that, in their experience, a failed HGN test indicates a BAC over the legal limit. *See Rose*, 86 S.W.3d at 99-100 (ruling officer testimony inadmissible in which officer testified, “Six scores, in my experience, they’ve always been above the legal limit [of] .10. I’ve never had one that scored six below.”) (alteration in original).

[¶15.] These divergent views on admissibility of each of these purposes highlight the problem of simply holding, as Yuel suggests, that all evidence “related to the HGN test” should be excluded in this case. The parties have not briefed or argued which of the prevailing views this Court should adopt and apply to each of various parts of Officer Treadway’s testimony, in part because the majority of Yuel’s arguments seem to go to the weight of the evidence, rather than its admissibility, and in part because Yuel has argued that *all evidence* related to the HGN test should be excluded. However, we need not resolve these more complex issues—nor adopt any new parameters for the admissibility of these types of statements—in order to resolve this specific case. Given the significant other evidence of guilt presented in this case, including a blood test indicating that Yuel had a BAC above

.08, we conclude that the jury verdict would have been the same, regardless of whether Officer Treadway testified about the HGN test results. Thus, even if there were error in admitting Officer Treadway's testimony, any error was harmless.

"Error is harmless when 'the jury verdict would not have been different if the challenged testimony were excluded.'" *State v. Guthrie*, 2001 S.D. 61, ¶ 43, 627 N.W.2d 401, 419.

[¶16.]           **2.       Whether the trial court erred in denying Yuel's motion for judgment of acquittal.**

[¶17.]           Yuel argues the trial court erred in denying his motion for judgment of acquittal because there was not sufficient evidence to prove that Yuel had a BAC of 0.08 percent or higher or that he was under the influence of alcohol. Challenges to the sufficiency of evidence are reviewed de novo. *State v. Plenty Horse*, 2007 S.D. 114, ¶ 5, 741 N.W.2d 763, 764 (citing *State v. Tofani*, 2006 S.D. 63, ¶ 35, 719 N.W.2d 391, 400). However, an appellate court is not required to "ask itself whether it believes that the evidence at the trial established guilt beyond a reasonable doubt." *Id.* ¶ 5 (quoting *Jackson v. Virginia*, 443 U.S. 307, 318-19, 99 S. Ct. 2781, 2789, 61 L. Ed. 2d 560 (1979)). "Instead, the relevant question is whether, after viewing the evidence in the light most favorable to the prosecution, any rational trier of fact could have found the essential elements of the crime beyond a reasonable doubt." *Id.* (quoting *Jackson*, 443 U.S. at 318-19, 99 S. Ct. at 2789). Thus, this Court reviews the evidence "in the light most favorable to the verdict." *State v. Swan*, 2008 S.D. 58, ¶ 9, 753 N.W.2d 418, 420 (citing *Plenty Horse*, 2007 S.D. 114, ¶ 5, 741 N.W.2d at 764-65). Consequently, the evidence is insufficient only when "no rational trier of fact could find guilt beyond a reasonable doubt."

*Plenty Horse*, 2007 S.D. 114, ¶ 5, 741 N.W.2d at 765 (quoting *Jackson*, 443 U.S. at 318-19, 99 S. Ct. at 2789). Further, in reviewing the sufficiency of the evidence on appeal, this Court “will not usurp the jury’s function in resolving conflicts in the evidence, weighing credibility, and sorting out the truth.” *Swan*, 2008 S.D. 58, ¶ 9, 753 N.W.2d at 420 (quoting *State v. Pugh*, 2002 S.D. 16, ¶ 9, 640 N.W.2d 79, 82).

[¶18.] At trial, the forensic specialist who tested Yuel’s blood testified that when she tested Yuel’s blood at 7:06 p.m., Yuel’s BAC was 0.112 percent. Given that Yuel was stopped approximately 40 minutes before his blood sample was obtained, the forensic specialist used a mathematical formula<sup>8</sup> to determine what Yuel’s BAC would have been at the time he was stopped. Based upon her calculations, the forensic scientist estimated that Yuel’s BAC was 0.109 percent at the time of the stop. In arriving at this number, the forensic specialist took into account the fact that Yuel claimed he drank one beer one minute prior to the stop. Ultimately, the forensic specialist testified that she believed Yuel’s BAC was over 0.08 at the time he was stopped.

[¶19.] With regard to his claim that the evidence was insufficient to support the verdict, Yuel first attacks the forensic specialist’s opinion that Yuel’s BAC was over 0.08 percent at the time he was stopped. For example, Yuel argues that the average absorption and elimination rates the forensic specialist used in her

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8. The mathematical formula utilized average alcohol absorption and elimination rates. The forensic specialist explained that the average rates were obtained from a scientific study conducted in the 1920s, in which the average test subject was a 150 pound Caucasian male, and testified that these rates were generally accepted as reliable within the scientific community.

calculations were based on a 150 pound Caucasian male, whereas Yuel is a 144 pound African American male. Additionally, Yuel notes that the forensic specialist's calculations used the alcohol content for an average beer, and did not account for the fact that some beers have more alcohol than others. Further, Yuel argues that the forensic specialist's calculations did not take into account other factors such as what Yuel ate that day, when he ate it, whether Yuel used nicotine, etc.<sup>9</sup>

[¶20.] Additionally, in challenging the sufficiency of the evidence, Yuel argues that the evidence was insufficient due to “the lack of indicators of intoxication exhibited by [Yuel].” For example, Yuel notes that he was not swerving or driving in an erratic manner, and that Officer Campbell testified that nothing

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9. Although Yuel frames these arguments as challenges to the sufficiency of the evidence, they seem to be more related to the reliability/foundation of the forensic specialist's methods and the overall admissibility of her testimony. This Court has previously addressed similar challenges in the context of the admissibility of expert testimony and has rejected such challenges. *See State v. Lemler*, 2009 S.D. 86, ¶¶ 34-35, 774 N.W.2d 272, 284-85 (In considering the defendant's challenge to the admissibility of expert testimony due to the fact that different variables could affect the expert's conclusion, this Court stated that “[a] party who offers expert testimony is not[, however,] required to prove to a judge in a *Daubert* hearing that the expert's opinion is correct: all that must be shown is that expert's testimony rests upon ‘good grounds, based on what is known.’ Any other deficiencies in an expert's opinion or qualifications can be tested through the adversary process at trial.” (second alteration in original) (quoting *Burley v. Kyttec Innovative Sports Equip., Inc.*, 2007 S.D. 82, ¶ 24, 737 N.W.2d 397, 406)); *State v. Fode*, 452 N.W.2d 779, 781-82 (S.D. 1990) (in rejecting the defendant's claim that the expert's extrapolation testimony lacked foundation and was inadmissible because the expert did not know what type of alcohol the defendant was drinking, when he last ate, etc., this Court explained, “[T]he ‘essential’ facts [the defendant] claims are missing were not obtained due to his own conduct. If a party refuses to testify, the jury must make a decision based upon the evidence it has available. In a case such as this, an expert will not know such things . . . unless [such things are] disclosed to him.”).

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about Yuel's behavior when he exited the car suggested Yuel was intoxicated. Yuel also argues that the fact that he failed all of the field sobriety tests cannot be used to support the verdict because no accommodations were made for him despite his claim that he had a problem with his right foot, and because at least one of the clues Officer Treadway claimed he observed was later shown to be invalid.

[¶21.] In pointing to these and other similar examples to support his claim that the evidence was insufficient to support the jury's verdict, Yuel fails to recognize that all of this evidence was presented to the jury at trial in the form of Yuel's cross-examination of the State's witnesses. The jury was charged with resolving the conflicts in the evidence and with weighing the testimony and credibility of the witnesses. The fact that the jury chose to convict Yuel indicates that the jury was not convinced by Yuel's attempt to attack the testimony of the State's witnesses, and instead found that the State met its burden of proving Yuel's guilt beyond a reasonable doubt. This Court will not usurp the function of the jury by re-weighing the evidence on appeal. Further, with regard to Yuel's claim that his behavior lacked indicators of intoxication, this Court has previously determined that a defendant need not display easily observable signs of intoxication in order for a DUI conviction to be sustained. *See State v. Motzko*, 2006 S.D. 13, ¶¶ 6-13, 710 N.W.2d 433, 436-39 (concluding that evidence was sufficient to support the jury's verdict despite the fact that the only obvious signs of alcohol use were that the defendant smelled of alcohol and admitted to consuming wine earlier in the evening).

[¶22.] In reviewing the evidence in the light most favorable to the jury's verdict, we cannot say that no rational trier of fact could find guilt beyond a reasonable doubt. The State presented substantial evidence to support the jury's verdict. For example, the State presented evidence that Yuel made an improper left turn at the intersection, there were both open and unopened beer containers in the vehicle when Yuel was stopped, Officer Treadway smelled alcohol on Yuel's breath and observed that Yuel's eyes were glassy and bloodshot, Yuel admitted he had consumed alcohol, Yuel's performance on the field sobriety tests indicated he was impaired, and Yuel's BAC was 0.112 percent approximately 40 minutes after the stop, etc. Overall, there was sufficient evidence from which the jury could find Yuel guilty beyond a reasonable doubt. Therefore, the trial court did not err in denying Yuel's motion for judgment of acquittal.

### CONCLUSION

[¶23.] Error, if any, in admitting Officer Treadway's testimony regarding HGN testing was harmless given the other evidence presented in this case. Additionally, when viewing the evidence in the light most favorable to the jury's verdict, there was sufficient evidence from which the jury could have convicted Yuel of DUI beyond a reasonable doubt. Therefore, we affirm.

[¶24.] KONENKAMP, ZINTER, and WILBUR, Justices, concur.

[¶25.] SEVERSON, Justice, concurs specially.

SEVERSON, Justice (concurring specially).

[¶26.] I concur but write specially. We have acknowledged that the HGN test is “nationally recognized as a reliable field sobriety test” and if the test is “properly administered by a trained officer,” the evidence may be admitted at trial, along with evidence of other field sobriety tests. *Hullinger*, 2002 S.D. 83, ¶ 19, 649 N.W.2d at 261. Based on the evidence, it was error to allow Officer Treadway’s testimony as to Yuel’s specific BAC on the basis of the HGN test. However, I concur, as the error was harmless because, in this case, there was enough evidence, specifically a blood test, to establish a BAC level.

[¶27.] In *Hullinger*, we cited cases from a number of jurisdictions and stated that “[m]ost courts permit the admission of HGN test evidence by arresting officers who have been adequately trained in conducting the test and can show that the test in the particular case at bar was conducted in substantial accordance with that training.” *Id.* ¶ 12. Prior to allowing testimony about the HGN test and other field sobriety tests, we require that the witness offering testimony is properly trained and qualified in administering the test. *Id.* ¶ 19. Here, the trial court conducted a hearing outside the presence of the jury to determine whether Officer Treadway’s testimony regarding the HGN test was admissible. Officer Treadway offered evidence of his extensive training and experience administering the HGN test and other field sobriety tests.

[¶28.] However, whether a witness may testify that the HGN test indicates a specific BAC level is another matter. In *Hullinger*, we relied on a Nebraska case, *State v. Baue*, 607 N.W.2d 191 (Neb. 2000), where the Nebraska Supreme Court

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determined that a majority of courts that have reviewed the HGN test allow the arresting officer to testify to the administration of the test. *Hullinger*, 2002 S.D. 83, ¶ 12, 649 N.W.2d at 258. In *Baue*, the Nebraska Supreme Court went on to hold that:

[T]he HGN field sobriety test meets the *Frye* standard for acceptance in the relevant scientific communities, and when the test is given in conjunction with other field sobriety tests, *the results are admissible for the limited purpose of establishing that a person has an impairment which may be caused by alcohol.*

607 N.W.2d at 204 (emphasis added). When reviewing the same issue, the Indiana Court of Appeals held that “the results of a properly administered HGN test are admissible to show impairment which may be caused by alcohol and, when accompanied by other evidence, will be sufficient to establish probable cause to believe a person may be intoxicated.” *Cooper*, 761 N.E.2d at 903. The Arizona Supreme Court, one of the courts to consider use of the HGN test earliest, stated that the test:

[M]ay be admitted in evidence to corroborate or attack, but not to quantify, the chemical analysis of the accused’s blood alcohol content. It may not be used to establish the accused’s level of blood alcohol in the absence of a chemical analysis showing the proscribed level in the accused’s blood, breath or urine.

*State v. Super. Ct.*, 718 P.2d 171, 182 (Ariz. 1986).

[¶29.] Another court, surveying the breadth of HGN test cases, found that “most of the states that have ruled that HGN evidence is admissible have not allowed it to be used to prove specific BAC but instead only as circumstantial proof of intoxication or impairment.” *United States v. Horn*, 185 F. Supp. 2d 530, 551 (D.

Md. 2002). The Kansas Supreme Court also reviewed a number of cases and determined that:

[C]ourts generally agree that there is a dividing line between admitting field sobriety test results as circumstantial evidence of intoxication, which is admissible, and the use of such results to assert or imply a specific level of intoxication, which is not admissible unless an appropriate scientific opinion foundation has been laid.

*Shadden*, 235 P.3d at 450-51.

[¶30.] In order to present testimony that the HGN test may be used to determine a specific BAC level, I echo Justice Amundson's concurrence that we should require trial courts consider expert testimony via a *Daubert* hearing.

*Hullinger*, 2002 S.D. 83, ¶¶ 24-25, 649 N.W.2d at 261-62 (Amundson, J., concurring specially). See SDCL 19-15-2 (Rule 702);<sup>10</sup> *Daubert*, 509 U.S. at 592-95, 113 S. Ct. at 2796-98; *State v. Hofer*, 512 N.W.2d 482, 484 (S.D. 1994) (adopting the *Daubert* test in South Dakota). "The *Daubert* standard requires the trial court to ensure that an expert's testimony both 'rests on a reliable foundation and is relevant to the task at hand. Pertinent evidence based on scientifically valid principles will satisfy

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10. SDCL 19-15-2 (Rule 702) provides:

If scientific, technical, or other specialized knowledge will assist the trier of fact to understand the evidence or to determine a fact in issue, a witness qualified as an expert by knowledge, skill, experience, training, or education, may testify thereto in the form of an opinion or otherwise, if:

- (1) The testimony is based upon sufficient facts or data,
- (2) The testimony is the product of reliable principles and methods, and
- (3) The witness has applied the principles and methods reliably to the facts of the case.

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those demands.” *State v. Loftus*, 1997 S.D. 131, ¶ 21, 573 N.W.2d 167, 173 (quoting *Kuper v. Lincoln-Union Elec. Co.*, 1996 S.D. 145, ¶ 40, 557 N.W.2d 748, 760 (citations omitted)). See *Kumho Tire Co. v. Carmichael*, 526 U.S. 137, 147-53, 119 S. Ct. 1167, 1174-76, 143 L. Ed. 2d 238 (1999) (applying the *Daubert* factors to the testimony of engineers and other experts who are not scientists). As Justice Amundson noted:

One court stated that the HGN test “rests on scientific premises well beyond the officer’s knowledge, training, or education. Without some understanding of the processes by which alcohol ingestion produces nystagmus, how strong the correlation is, how other possible causes might be masked, what margin of error has been shown in statistical survey, and a host of other relevant factors, the officer’s opinion on causation, notwithstanding his ability to recognize the symptom, was unfounded.”

*Hullinger*, 2002 S.D. 83, ¶ 26, 649 N.W.2d at 262 (quoting *State v. Witte*, 836 P.2d 1110, 1115-16 (Kan. 1992)).

[¶31.] Here, Officer Treadway testified that finding four or more indicators in the HGN test is eighty to ninety percent accurate in determining that the suspect has a BAC of 0.08 or above. Officer Treadway cites field and laboratory studies as the basis for his statement that certain clues in the HGN test indicate a specific BAC level. But, Officer Treadway did not conduct the studies that explain the scientific basis for his statement or otherwise offer scientific foundation to support his opinion. He reported learning about the HGN field and laboratory studies during his training, but the record does not reflect that he possessed the scientific background to offer testimony about the science behind the studies, the methodology used, the reliability of the studies, or the acceptance of these studies in

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the pertinent scientific community, as is required under SDCL 19-15-2 (Rule 702), *Daubert*, and *Kumho Tire*.

[¶32.] In fact, the field and laboratory studies that Officer Treadway referred to have been questioned when subjected to scrutiny in a *Daubert* hearing. The *Horn* case includes an extensive discussion on the use of the HGN test to prove a specific BAC level and various critiques of the methodology used by the National Highway Traffic Safety Administration and others in studying the HGN test. 185 F. Supp. 2d 530.

[¶33.] Officer Treadway was qualified to offer testimony about administering the HGN test and whether the test indicated impairment in this case. Because Officer Treadway was not shown to have the appropriate scientific background under our standards in SDCL 19-15-2 (Rule 702), *Daubert*, and *Kumho Tire*, he was not a qualified expert to testify to any connection between the HGN test and a specific BAC level. For these reasons, it was error to allow Officer Treadway's testimony as to Yuel's specific BAC on the basis of the HGN test.