#### IN THE SUPERIOR COURT OF THE STATE OF DELAWARE

STATE OF DELAWARE,	)	
	)	
V.	)	I.D. No. 2403014753
	)	
	)	
LAMBERT A. BROWN,	)	
	)	
Defendant.	)	

Date Submitted: September 8, 2025 Date Decided: December 3, 2025

### **OPINION AND ORDER**

Upon Defendant's Motion to Suppress – Denied Upon the State's Motion in Limine – Granted

Barzilai K. Axelrod, Esquire, Nicoli Goncalves, Esquire, Department of Justice, attorneys for the State.

Brain J. Chapman, Esquire, Law office of Brian J. Chapman, *attorney for Lambert A. Brown*.

#### I. Introduction

#### A. Motion to suppress

After his arrest and indictment for driving under the influence,<sup>1</sup> Defendant Lambert A. Brown ("Brown") moves to suppress the results of his Intoxilyzer 9000 (or "I-9000") breath test ("Brown's Motion"). Brown argues that Corporal Agnor ("Agnor")—Brown's arresting officer—did not have the requisite probable cause to compel a chemical breath test, and accordingly, the results of the test must be suppressed. The State argues that Agnor's observations and the results of various field tests are more than sufficient to establish probable cause.

The breath test followed Agnor observing Brown committing several driving violations, interacting with Brown during the traffic stop, and Brown showing indications of impairment during multiple roadside field tests. Under the totality of the circumstances, the Court finds probable cause existed to administer the breath test. Accordingly, Brown's Motion is DENIED.

#### B. Motion in Limine

In January 2024, the Delaware State Police Crime Laboratory (the "DSPCL") deployed a new evidentiary breath testing device—the Intoxilyzer 9000. The State's Motion in *Limine* seeks two rulings on the admissibility of the Intoxilyzer 9000 test

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<sup>&</sup>lt;sup>1</sup> D.I. 50.

results. First, the State contends that the Intoxilyzer 9000's results are admissible under Delaware Rule of Evidence 702 because the new device is scientifically reliable. The I-9000 uses the same tested-technology used by its predecessor, the Intoxilyzer 5000 (or "I-5000") and thus the evidence is properly admissible under Rule 702 and *Daubert*.

Second, the State seeks a ruling that the test results are admissible because the device used to test Brown was in proper working order (as shown by the calibration records), and Agnor was properly trained. The State bears the burden to establish the admissibility of the test results.

Brown contends that the State has offered insufficient evidence to establish such reliability and therefore, failed to satisfy its burden.

Guided by *Daubert*, the Court finds that the State has established the I-9000's reliability. The Intoxilyzer 9000 uses the same infrared spectrometry technology as the I-5000, a device previously validated and used by the DSPCL for thirty-six years before upgrading to the I-9000. The I-9000 provides enhanced features that further ensure reliable results and provides a user-friendly, step-by-step process.

The Court finds that the State also satisfied its burden to admit Brown's test results. The State detailed Agnor's training and provided evidence of the device's calibration certifications. Accordingly, the State's Motion in *Limine* is GRANTED.

# II. Factual background<sup>2</sup>

# A. Agnor's background and training<sup>3</sup>

Agnor is a 19-year veteran of the Delaware State Police.<sup>4</sup> He was initially trained and certified to serve as a Delaware State Trooper, then he worked in the K-9 unit, and at the time of the events at issue, he served as a patrol officer.<sup>5</sup> Agnor estimates that he has conducted several thousand traffic stops,<sup>6</sup> including over 100 driving under the influence ("DUI") investigations.<sup>7</sup>

Agnor's training began at the Delaware State Police academy—a full-time, six-month, live-in academy.<sup>8</sup> While at the academy, Agnor completed a 40-hour, week-long DUI detection training class.<sup>9</sup> This training included education on observable driver behaviors that indicate an impaired physical or mental state, and how to administer several tests to determine driver impairment.<sup>10</sup>

Agnor was trained to recognize clues the National Highway Transportation Safety Administration ("NHTSA") has deemed to be common effects of a driver's

<sup>&</sup>lt;sup>2</sup> This decision cites to the evidentiary hearing transcript on March 25, 2025 ("Mar. 25 Tr.") and March 26, 2025 ("Mar. 26 Tr."), the parties' pre-evidentiary hearing briefing D.I. 21 (Mot. in *Limine*), D.I. 28 ("Brown's Mot."), D.I. 30 ("State Resp."), the parties' post evidentiary hearing briefing D.I. 36 ("State Op."), D.I. 37 ("State Reply"), and D.I. 38 ("Brown's Ans."), and exhibits submitted by the State during the evidentiary hearing ("State Ex." number).

<sup>&</sup>lt;sup>3</sup> The facts are derived from Agnor's testimony during the evidentiary hearing on March 25, 2025.

<sup>&</sup>lt;sup>4</sup> Mar. 25 Tr. at 8.

<sup>&</sup>lt;sup>5</sup> *Id.* at 8–9.

<sup>&</sup>lt;sup>6</sup> *Id.* at 10.

<sup>&</sup>lt;sup>7</sup> *Id*.

<sup>&</sup>lt;sup>8</sup> *Id.* at 11.

<sup>&</sup>lt;sup>9</sup> *Id.* at 11–12.

<sup>&</sup>lt;sup>10</sup> *Id*.

impaired physical or mental state.<sup>11</sup> As Agnor explained, there are four NHTSA categories: (1) failure to maintain lane; (2) speed and breaking issues, including driving at a speed slower than 10 miles below the speed limit; (3) judgment issues; and (4) vigilance problems.<sup>12</sup>

Agnor was trained in pre-exit or pre-arrest tests.<sup>13</sup> Agnor utilizes these tests at the outset of a DUI investigation to gain information about the possible impaired state of the driver.<sup>14</sup> The tests include the counting test, the finger dexterity test, and the alphabet test.<sup>15</sup>

Similarly, Agnor was trained to administer Standardized Field Sobriety Tests ("SFSTs"). SFSTs include the Horizontal Gaze Nystagmus ("HGN"), Walk and Turn ("WAT"), and One Leg Stand test ("OLS"). Leach of the SFSTs consist of standardized procedures that help law enforcement identify validated indications of impairment. Agnor also received a certification in Advance Roadside Impaired Driving Enforcement ("ARIDE"), a federal program sponsored by NHTSA, which consists of a two-day 16-hour course. During his ARIDE training, Agnor received a refresher on SFSTs and training on the lack of convergence ("LOC") test. Legislation in SFSTs and training on the lack of convergence ("LOC") test.

<sup>&</sup>lt;sup>11</sup> *Id.* at 12.

<sup>&</sup>lt;sup>12</sup> *Id.* at 12–13.

<sup>&</sup>lt;sup>13</sup> Agnor used "pre-exit" and "pre-arrest" interchangeable when referring to these tests.

<sup>&</sup>lt;sup>14</sup> *Id.* at 14.

<sup>&</sup>lt;sup>15</sup> *Id.* at 14–15.

<sup>&</sup>lt;sup>16</sup> *Id.* at 15–16.

<sup>&</sup>lt;sup>17</sup> *Id.* at 17.

<sup>&</sup>lt;sup>18</sup> *Id*.

Additionally, Agnor received training and subsequent certification on the use of two Intoxilyzer devices. At the academy, he was trained on the Intoxilyzer 5000 and in 2022, Agnor was trained on the now-deployed Intoxilyzer 9000.<sup>19</sup> The trainings consisted of instruction on use of the device and hands-on experience, directed by a state chemist.<sup>20</sup>

# B. Agnor observes Brown's driving.

The State played Agnor's motor vehicle recorder ("MVR") and body-worn camera ("BWC") video recordings during the hearing, <sup>21</sup> with Agnor providing additional commentary. The following facts are derived from the videos and Agnor's testimony.

Around 8:00 p.m. on March 28, 2024, Agnor was travelling southbound on Route 13 when he noticed a car (operated by Brown), travelling approximately 37–45 miles per hour ("MPH") in a 55 MPH zone.<sup>22</sup> This portion of Route 13 consists of two lanes in the southbound direction, bounded with yellow lines and separated by a dotted white line.<sup>23</sup> There was very little traffic on the road.<sup>24</sup>

<sup>&</sup>lt;sup>19</sup> *Id.* at 19, 95.

 $<sup>^{20}</sup>$  Id

<sup>&</sup>lt;sup>21</sup> State Ex. 1 (MVR recording); State Ex. 2 (BWC recording).

<sup>&</sup>lt;sup>22</sup> Mar. 25 Tr. at 24.

<sup>&</sup>lt;sup>23</sup> *Id.* at 24–25.

<sup>&</sup>lt;sup>24</sup> *Id.* at 25. Agnor testified that Brown was impeding traffic due to his slow driving. A review of the MVR video reveals that any possible impediment created by Brown would be, at most, minimal as there was very little traffic on the road.

Agnor continued to observe the vehicle, watching it change lanes from the right lane to the left lane, without signaling.<sup>25</sup> The driver had significant difficulty maintaining the vehicle in one lane—the vehicle crossed the left yellow line, drifted back across toward the center line, then touched or crossed the dotted lane line several times, only to drift back over the yellow line.<sup>26</sup>

#### C. The traffic stop

After observing the vehicle for a period of time, Agnor activated the marked police vehicle's emergency lights to initiate a traffic stop.<sup>27</sup> Despite the emergency lights, the driver continued, making no indication that he was aware of the police vehicle behind him.<sup>28</sup> While some drivers continue driving in order to pull over in a well-lit area, they usually signal this intent to the officer in some manner—such as giving a wave or engaging the car's hazard lights.<sup>29</sup> Brown, however, failed to acknowledge the need to stop his vehicle. Agnor followed the vehicle for approximately half a mile before it signaled, pulled into a gas station, and came to a stop.<sup>30</sup>

<sup>25</sup> *Id.* at 27.

<sup>&</sup>lt;sup>26</sup> *Id.* at 27–28.

<sup>&</sup>lt;sup>27</sup> *Id.* at 28.

<sup>&</sup>lt;sup>28</sup> *Id.* at 29.

<sup>&</sup>lt;sup>29</sup> *Id*.

<sup>&</sup>lt;sup>30</sup> *Id*.

Upon contact with Brown, Agnor observed that Brown's eyes were glassy, watery, and bloodshot.<sup>31</sup> As standard procedure, Agnor asked Brown for his license, registration, and proof of insurance. Brown refused to provide these items.<sup>32</sup> Agnor then asked Brown to step out of the vehicle.

#### 1. The pre-arrest tests

After a brief escalation,<sup>33</sup> during which Agnor detected a faint smell of alcohol emanating from Brown's breath,<sup>34</sup> Agnor continued his investigation. Starting with the pre-arrest tests, Agnor administered the alphabet test, directing Brown to recite the alphabet starting with "E" and stopping at "R."<sup>35</sup> Brown transposed and missed letters.<sup>36</sup>

Agnor then moved to the counting test, instructing Brown to count down from 57 to 43.<sup>37</sup> Brown transposed a couple of numbers and continued counting to 40.<sup>38</sup>

<sup>&</sup>lt;sup>31</sup> *Id.* at 39.

<sup>&</sup>lt;sup>32</sup> Brown later provided the requested information.

<sup>&</sup>lt;sup>33</sup> When Brown exited the vehicle, Agnor asked Brown if he had any weapons on him. Brown said nothing but turned to raise his shirt to show the officer that he had a work knife in his pocket. Not knowing what Brown was intending, Agnor saw Brown's move towards his waist as threatening and placed Brown in handcuffs. After further discussion, the situation de-escalated and Agnor removed the cuffs to continue the investigation. Brown was cooperative thereafter.

<sup>&</sup>lt;sup>34</sup> *Id.* at 41.

<sup>&</sup>lt;sup>35</sup> *Id.* at 52.

<sup>&</sup>lt;sup>36</sup> Id. at 54–55. Brown went from "H" directly to "R."

<sup>&</sup>lt;sup>37</sup> *Id.* at 55.

<sup>&</sup>lt;sup>38</sup> *Id.* at 56.

Agnor next instructed Brown on the finger dexterity test, which requires the subject to touch the tip of his thumb to the tip of each of his fingers in a 1, 2, 3, 4 then 4, 3, 2, 1 sequence.<sup>39</sup> Brown correctly completed this test.<sup>40</sup>

#### 2. The SFSTs

Agnor progressed to the SFSTs.<sup>41</sup> Each of the SFSTs has a predetermined set of clues. As Agnor explained, a display of two or more clues for any one of the SFSTs indicates a high likelihood of impairment.<sup>42</sup>

Agnor began with the WAT test. For this test, Brown was to complete nine heel-to-toe steps in a straight line, with his arms to his sides, turn, and repeat the same sequence back.<sup>43</sup> Of the eight possible clues, Brown exhibited seven.<sup>44</sup> Due to the position of the BWC on the center of the officer's chest, some of the clues Agnor observed are not visible on the recording.<sup>45</sup>

Agnor then administered the OLS. For this test, Brown was to raise one foot roughly six inches off the ground, keep both legs straight, with arms to his side, and count out loud until Agnor told him to stop.<sup>46</sup> Agnor observed to see if Brown could

<sup>&</sup>lt;sup>39</sup> *Id.* at 56.

<sup>&</sup>lt;sup>40</sup> *Id.* at 57.

<sup>&</sup>lt;sup>41</sup> *Id*.

<sup>&</sup>lt;sup>42</sup> *Id.* at 61, 64, 94.

<sup>&</sup>lt;sup>43</sup> *Id.* at 59–60.

<sup>&</sup>lt;sup>44</sup> The seven clues exhibited were: (1) cannot keep balance while listening to instructions; (2) starts to soon; (3) does not touch heel-to-toe; (4) steps off the line (5); uses arms to balance; (6) improper turn; and (7) incorrect number of steps. *Id.* at 63.

<sup>&</sup>lt;sup>45</sup> *Id.* at 62.

<sup>&</sup>lt;sup>46</sup> *Id.* at 64.

hold the position for approximately 30 seconds. Brown exhibited all four possible clues: Brown hopped, used his arms to balance, put his foot down, and swayed after 7 seconds.<sup>47</sup>

Finally, Agnor attempted the HGN test, but admitted during his testimony that he failed to administer the test to the standards required by NHTSA.<sup>48</sup>

#### 3. Additional roadside tests

As a final physical test, Agnor administered the LOC test. This test measures the ability of a subject to focus on an object held in front of the person, then moving it towards the subject's eyes.<sup>49</sup> It tests whether the eyes converge on the stimulus to focus on it. Brown's eyes did not converge, but Agnor did not provide any testimony on how the test was administered.

Having finished the physical tests, Agnor asked Brown if he had anything to drink recently. While previously indicating he had not drunk alcohol, Brown now admitted that he had.<sup>50</sup> With that admission, Agnor administered a preliminary breath test ("PBT") to gain an indication of Brown's blood alcohol content ("BAC") through the use of the portable device.<sup>51</sup> The device was Agnor's on-scene partner's,

<sup>&</sup>lt;sup>47</sup> *Id.* at 65.

<sup>&</sup>lt;sup>48</sup> Agnor asserted that he did observe nystagmus in Brown but cannot be sure of the exact amount because he went through the test "really quickly." *Id.* at 66–67.

<sup>&</sup>lt;sup>49</sup> *Id.* at 67.

<sup>&</sup>lt;sup>50</sup> *Id.* at 68.

<sup>&</sup>lt;sup>51</sup> *Id.* at 69.

but Agnor administered the test.<sup>52</sup> Calibration records, admitted through Agnor, show that the device was calibrated on March 10, 2024 (before Brown's March 28 arrest) and again on April 7, 2024.<sup>53</sup> Agnor was not present for the calibrations. Both records show that the PBT was properly functioning.

To obtain a BAC measurement, Brown had to blow into the device through a straw. It appeared to Agnor that Brown was attempting to avoid blowing into the device.<sup>54</sup> After some difficulty, Brown provided a proper exhale. Brown's reading was 0.13, above the 0.08 legal limit.<sup>55</sup>

### D. Agnor's inventory search

After the PBT result, Agnor detained Brown and began an inventory search of his vehicle.<sup>56</sup> Agnor discovered two open bottles of alcohol.<sup>57</sup> Brown would later admit that he recently purchased one of the bottles at a nearby liquor store. Other than this admission, Agnor acknowledged he did not know how long the bottles had been in the vehicle.<sup>58</sup>

<sup>&</sup>lt;sup>52</sup> *Id.* at 69, 72.

<sup>&</sup>lt;sup>53</sup> State Ex. 3 (PBT calibration log). Willey testified that the PBTs are calibrated monthly using a dry gas standard. *Id*.at 12.

<sup>&</sup>lt;sup>54</sup> Brown was sucking in air instead of blowing into the straw.

<sup>&</sup>lt;sup>55</sup> *Id.* at 72–73.

<sup>&</sup>lt;sup>56</sup> *Id.* at 73

<sup>&</sup>lt;sup>57</sup> *Id.* at 73–74.

<sup>&</sup>lt;sup>58</sup> *Id.* at 74.

#### E. Brown's Intoxilyzer 9000 test

Having determined that Brown exhibited numerous indications of a high probability of impairment, Agnor transported Brown to Troop 9 for testing on the Intoxilyzer 9000.<sup>59</sup> Agnor started the I-9000, which began with internal diagnostics. Agnor scanned the barcode on his certification card—which he obtained after completing the Intoxilyzer 9000 training—and the barcode on Brown's license.<sup>60</sup> After Brown's information was inputted through the license scan, the device's internal twenty-minute timer began.<sup>61</sup>

Agnor observed Brown<sup>62</sup> for the twenty-minute period to ensure that the results could not be skewed or contaminated by any extraneous factors.<sup>63</sup> Agnor then administered the test, following the step-by-step, on-screen instructions—taking two samples, two minutes apart.<sup>64</sup> Both samples registered a BAC of 0.122.<sup>65</sup> Brown was arrested and charged with driving under the influence, a minimum speed violation, failure to maintain lane, and failure to signal, among other charges.

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<sup>&</sup>lt;sup>59</sup> *Id.* at 74–75.

<sup>&</sup>lt;sup>60</sup> *Id.* at 155.

<sup>&</sup>lt;sup>61</sup> *Id*.

<sup>&</sup>lt;sup>62</sup> The entire testing process was captured on Agnor's BWC.

<sup>&</sup>lt;sup>63</sup> Mar. 25 Tr. at 156.

<sup>&</sup>lt;sup>64</sup> A more detailed description of the test is discussed below.

<sup>&</sup>lt;sup>65</sup> State Ex. 7 (Brown's Intoxilyzer 9000 chemical test report).

### III. Motion to Suppress

## A. The parties' contentions

Brown seeks to suppress the Intoxilyzer 9000 breath test results, <sup>66</sup> arguing that Agnor did not have the requisite probable cause to subject him to the chemical test. <sup>67</sup> To support his contention, Brown asserts Agnor's bases for the initial stop (the traffic violations) are not indicative of impairment. <sup>68</sup> Brown further asserts that the HGN test results are insufficient to show probable cause due to an eye condition from which he suffers. Thus, the test has no evidentiary value. <sup>69</sup> He also argues his deficiency on the other field tests, based on the totality of circumstances, does not rise to the level of probable cause for two reasons. First, the pre-arrest tests are not scientifically validated by NHTSA. <sup>70</sup> Second, Agnor's BWC did not capture the entirety of the WAT test and therefore, he urges the Court to consider this in weighing the evidence. <sup>71</sup>

<sup>&</sup>lt;sup>66</sup> See generally Brown's Mot.; Brown's Ans.

<sup>&</sup>lt;sup>67</sup> Brown's Mot. ¶ 4; Brown's Ans. ¶ 11.

<sup>&</sup>lt;sup>68</sup> *Id*.

<sup>&</sup>lt;sup>69</sup> Brown's Mot. ¶ 4. Brown submits that he has a detached retina in his right eye that affected his ability to follow the stimulus. The State argues that Brown has shown no evidence of such a condition or that it would invalidate the test on both eyes. *Id.* In any event, the State does not rely on the HGN test for a finding of probable cause. State Reply ¶ 29. The Court will not consider this test in deciding Brown's Motion.

<sup>&</sup>lt;sup>70</sup> Brown's Ans. ¶ 12.

<sup>&</sup>lt;sup>71</sup> *Id.* ¶ 13.

Brown challenges the PBT results based on Agnor not personally calibrating the device.<sup>72</sup>

Finally, Brown argues that the bottles of alcohol found during the inventory search are not relevant because the search occurred *after* Brown's arrest.<sup>73</sup> And, because the State did not establish when or if Brown consumed alcohol from these bottles, the presence of the bottles did not tend to show that Brown was driving impaired.<sup>74</sup>

The State responds that under the totality of the circumstances, Agnor had probable cause to administer the Intoxilyzer test.<sup>75</sup> The State points to Brown's driving violations, which Agnor was trained to recognize as clues of impaired driving.<sup>76</sup> The State contends that the results of the pre-arrest tests are valid for a finding of probable cause, even though not scientifically validated by NHTSA.<sup>77</sup> Further, that Agnor's camera did not capture all aspects of the WAT test does not invalidate the test or its results.<sup>78</sup> Finally, the inventory search was conducted while the investigation was still ongoing, so it is proper to consider the alcohol bottles in

<sup>72</sup> *Id.* ¶ 7.

<sup>&</sup>lt;sup>73</sup> *Id.* ¶ 14.

<sup>&</sup>lt;sup>74</sup> *Id*.

<sup>&</sup>lt;sup>75</sup> State Reply ¶ 18.

<sup>&</sup>lt;sup>76</sup> *Id.* ¶¶ 21–26.

<sup>&</sup>lt;sup>77</sup> *Id.* ¶¶ 27–31.

<sup>&</sup>lt;sup>78</sup> *Id.*  $\P$  31.

the totality of the circumstances. Even excluding the bottles, the State concludes, there is sufficient evidence to support a finding of probable cause.<sup>79</sup>

### B. Standard of review

An Intoxilyzer breath test is a search subject to Fourth Amendment requirements and procedures.<sup>80</sup> Accordingly, an officer must first have "probable cause to believe that the person was driving under the influence of alcohol" before administering the test.<sup>81</sup> "Probable cause exists where the facts and circumstances within the police officer's knowledge, and of which the police officer had reasonably trustworthy information, are sufficient in themselves to warrant a person of reasonable caution to believe that an offense has been or is being committed."<sup>82</sup> Probable cause is measured "not by precise standards, but rather by the totality of the circumstances."<sup>83</sup> Fundamentally, probable cause is a "common-sense determination"<sup>84</sup> and allows officers to rely on "their training, experience, their investigation, and rational inferences drawn therefrom[.]"<sup>85</sup> It is the State's burden to establish probable cause.<sup>86</sup>

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<sup>&</sup>lt;sup>79</sup> *Id.* ¶ 32.

<sup>&</sup>lt;sup>80</sup> State v. Wilson, 2024 WL 4719651, at \*4 (Del. Super. Nov. 8, 2024); Bease v. State, 884 A.2d 495, 498 n.4 (Del. 2005).

<sup>81</sup> Wilson, 2024 WL 4719651, at \*4 (quoting Bease, 884 A.2d at 498).

<sup>&</sup>lt;sup>82</sup> *Id*.

<sup>&</sup>lt;sup>83</sup> State v. Speicher, 2022 WL 2339865, at \*2 (Del. Super. June 9, 2022) (internal citations and quotations omitted).

<sup>&</sup>lt;sup>84</sup> *Id.* (quoting *Edwards v. State*, 320 A.2d 701, 703 (Del. 1974)).

<sup>85</sup> Speicher, 2022 WL 2339865, at \*2 (quoting State v. Maxwell, 624 A.2d 926, 930 (Del. 1993)).

<sup>&</sup>lt;sup>86</sup> Wilson, 2024 WL 4719651, at \*4.

In the context of a DUI, the relevant inquiry is whether the totality of circumstances suggest "a fair probability that the driver is under the influence."<sup>87</sup> Probable cause to compel a breath test may be supported by a variety of factors including, the "commission of a traffic offense, odor of alcohol,"<sup>88</sup> bloodshot glassy eyes, the defendant's admission to drinking alcohol, rapid speech, a confused demeanor, multiple traffic violations, trouble standing, a dazed appearance, evasive answers, slurred speech, and failing field tests.<sup>89</sup> In isolation, any one of these factors may be insufficient, however, taken some of them together under the totality of circumstances, may establish probable cause.<sup>90</sup>

The existence of probable cause sufficient to compel a chemical test "is generally decided by the arresting officer's observations." Routinely, these observations include the quality of the driver's performance on NHTSA developed SFSTs.<sup>92</sup> While deviation from strict compliance with NHTSA standardized procedures for administering the SFSTs does not automatically invalidate the results,<sup>93</sup> it is the role of the court "to take note of the deficiencies...when giving weight and value to the tests performed."<sup>94</sup>

<sup>&</sup>lt;sup>87</sup> Speicher, 2022 WL 2339865, at \*2 (quoting Rybicki v. State, 119 A.3d 663, 670 (Del. 2015)).

<sup>&</sup>lt;sup>88</sup> Wilson, 2024 WL 4719651, at \*4.

<sup>&</sup>lt;sup>89</sup> Speicher, 2022 WL 2339865, at \*5 (collecting cases).

<sup>&</sup>lt;sup>90</sup> Wilson, 2024 WL 4719651, at \*4.

<sup>&</sup>lt;sup>91</sup> *Id.* (quoting *Lefebvre v. State*, 19 A.3d 287, 293 (Del. 2011)).

<sup>&</sup>lt;sup>92</sup> *Lefebvre*, 19 A.3d at 293.

<sup>&</sup>lt;sup>93</sup> Wilson, 2024 WL 4719651, at \*5.

<sup>&</sup>lt;sup>94</sup> *Id.* (citation omitted).

## C. Analysis

# 1. Sufficiency of the probable cause evidence

Brown's argument focuses on a failure to change lanes without signaling and traveling at a low speed. To be sure, a traffic violation (even with an odor of alcohol), alone, is not sufficient to find probable cause. But the MVR shows multiple traffic violations. Brown's vehicle touched the yellow line at least eight times and touched or crossed the dotted line at least three times. In the context of a DUI, Delaware courts have repeatedly considered the commission of traffic offenses among the factors that support a finding of probable cause. Brown's traffic offenses are properly considered in the totality of circumstances.

Further, after Agnor initiated the traffic stop, Brown continued driving for half a mile, with no indication he was preparing to pullover. Brown may have had an innocent justification for the delayed stop, but "[h]ypothetically innocent explanations for facts learned during an investigation do not preclude probable cause." Agnor reasonably inferred that Brown's inattentiveness indicated he was impaired.

Brown next attacks the pre-arrest tests results because they are not scientifically validated. The results of pre-arrest tests, however, "have been looked

<sup>&</sup>lt;sup>95</sup> *Id.* at \*4.

<sup>&</sup>lt;sup>96</sup> See Bease, 884 A.2d at 499–500; see also Wilson, 2024 WL 4719651, at \*6.

<sup>&</sup>lt;sup>97</sup> Stafford v. State, 59 A.3d 1223, 1229 (Del. 2012).

to for probable cause in countless decisions in Delaware and across the country."<sup>98</sup> While Brown passed the finger dexterity test, the counting and alphabet test left several clues of impairment.<sup>99</sup> Brown was unable to correctly recite the alphabet or count as directed by Agnor. "[A]n inability to count [or recite the alphabet] hardly needs scientific rigor to confirm the absence of one's full attention to detail."<sup>100</sup>

Because Agnor provided no explanation of how the LOC test was administered and admitted that the HGN test was not properly administered, the Court will not consider these tests in its probable cause analysis.

Brown's attack on the SFSTs is not persuasive. The State bears the burden of establishing probable cause by a fair probability; a *prima facie* showing is not necessary. Simply because the BWC did not capture Brown's feet during the "heel-to-toe" portion of the WAT test does not require that the results be disregarded. With Agnor's testimony and the BWC video of the WAT test, there is a sufficient basis to find that Agnor determined that 7 clues were present. Additionally, Agnor found 4 clues on the OLS test.

Turning to the PBT, the calibration records show that the device was calibrated both shortly before and shortly after Brown's arrest. The records were

<sup>&</sup>lt;sup>98</sup> Speicher, 2022 WL 2339865, at \*5; see, e.g., Perrera v. State, 852 A.2d 908, 2004 WL 1535815, at \*1 (Del. June. 25, 2004) (TABLE); State v. Iubatti, 2017 WL 3396493, at \*2 (Del. Super. Aug. 7, 2017); State v. Lackford, 2014 WL 1230765, at \*1, \*4 (Del. Super. Jan. 29, 2014).

<sup>&</sup>lt;sup>99</sup> *Perrera*, 2004 WL 1535815, at \*1.

<sup>&</sup>lt;sup>100</sup> Speicher, 2022 WL 2339865, at \*5.

<sup>&</sup>lt;sup>101</sup> Stafford, 59 A.3d at 1229.

admitted into evidence without objection. Brown does not take issue with the validity of the calibration tests, but argues that the Court should consider Agnor's lack of personal knowledge when weighing the evidence.<sup>102</sup>

"[B]efore admitting PBT results, the State must lay a proper foundation" that the device was calibrated. With the proper foundation, the calibration records are admitted as business records. Thus, the testifying officer need not personally calibrate (or witness the calibration of) the device to properly admit the calibration records. Here, Agnor's testimony demonstrated familiarity with the calibration logs and the procedures through which the logs were created, which is all that is necessary to be a qualified witness." The calibration records are properly admitted and the State has carried its burden to show that the PBT was properly functioning when Brown was tested.

Contrary to Brown's argument, the bottles of alcohol were located during the inventory search *before* Brown was arrested. The Court, however, need not wrestle

<sup>&</sup>lt;sup>102</sup> Browns's Ans.¶ 7.

<sup>&</sup>lt;sup>103</sup> *Miller v. State*, 4 A.3d 371, 374 (Del. 2010) (excluding PBT results because the officer was unaware of the last time a PBT device had been calibrated).

<sup>&</sup>lt;sup>104</sup> *McCoy v. State*, 89 A.3d 477, 2014 WL 1357317, at \*1 (Del. Apr. 3, 2014) (TABLE) (calibration records "can be introduced through the business records exception to the hearsay rule.").

<sup>&</sup>lt;sup>105</sup> See Maulo v. State, 27 A.3d 551, 2011 WL 3849498, at \*3 (Del. Aug. 30, 2011) (TABLE) (holding a proper foundation laid for the admission of a PBT result when the officer testified "that his department calibrated the PBT device 'once a month.'").

<sup>&</sup>lt;sup>106</sup> Mar. 25 Tr. at 70, 101 (Agnor describing his on-scene partner's record keeping as "meticulous").

<sup>&</sup>lt;sup>107</sup> *McCoy*, 2014 WL 1377317, at \*2.

any further with the import of the bottles. As explained below, probable cause existed even if the bottles of alcohol are excluded from the analysis.

### 2. Agnor had probable cause to administer the Intoxilyzer test.

The admissible evidence, considered in the totality, establishes that Brown:

(1) drove erratically, committing multiple traffic violations; (2) failed to immediately stop when Agnor activated the emergency lights or at least acknowledge the need to stop; (3) had bloodshot, glassy, and watery eyes; (4) had a faint smell of alcohol emanating from his breath; (5) exhibited multiple clues on the pre-arrest tests; (6) exhibited multiple clues on two SFSTs—the OLS and WAT; (7) had a BAC above the legal limit, as indicated on the PBT; and (8) admitted to recently drinking.

In *Bease v. State*, the court found probable cause based on the officer's observations that the defendant "spoke in a rapid manner..., smelled of alcohol, admitted [to] consuming alcoholic beverages the night before, had bloodshot and glassy eyes, and had just committed a traffic violation by making an improper lane change in an abrupt manner." 108

Similarly, in *State v. Speicher*, the court found probable cause where the defendant "(1) violated two traffic laws...; (2) exuded an odor of alcohol; (3)

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<sup>&</sup>lt;sup>108</sup> 884 A.2d at 499–500.

[admitted he] had been drinking; (4) failed three [pre-arrest tests]; (5) had bloodshot and glassy eyes; and (6) spoke with a slur."<sup>109</sup>

Consistent with *Bease* and *Speicher*, the Court finds probable cause existed here. In light of the numerous factors that indicated Brown was driving under the influence, Agnor had sufficient trustworthy factual information to warrant a person of reasonable caution to conclude probable cause of a DUI offense existed. Accordingly, Brown's Motion to Suppress is DENIED.

# IV. Additional factual background<sup>110</sup>

### A. Delaware transitions to the Intoxilyzer 9000

The DSPCL oversees both the breath and blood alcohol DUI testing programs for all Delaware law enforcement agencies. Julie Willey ("Willey") has been its director since 2007. When the Intoxilyzer 5000 was nearing the end of its lifecycle, Willey helped lead the selection of the new device.<sup>111</sup>

Since 1973 Delaware courts have recognized the scientific reliability of infrared ("IR") spectrometry Intoxilyzer devices for use in evidentiary breath testing ("EBT"). In that same year, NHTSA established industry standards for EBT

<sup>&</sup>lt;sup>109</sup> 2022 WL 2339865, at \*3.

 $<sup>^{110}</sup>$  The following facts are taken from the testimony of Julie Willey, Jon Grantham, and Corporal Agnor.

<sup>&</sup>lt;sup>11</sup> See 21 Del. C. § 4177(c)(4) ("Chemical test'...shall include any form or method of analysis of a person's...breath...for the purposes of determining alcohol concentration which is approved by...the [DSPCL.]").

<sup>&</sup>lt;sup>112</sup> State v. Moore, 307 A.2d 548, 550 (Del. Super. 1973).

devices and in 1974, began maintaining a corresponding Conforming Products List (the "CPL") of devices that meet those standards. NHTSA's 1993 Model Specifications provide the current Precision and Accuracy requirements for EBT devices to be included on the CPL. 114

For thirty-six years, beginning in 1988 until 2024, the Intoxilyzer 5000<sup>115</sup> and its enhanced version, the Intoxilyzer 5000EN, <sup>116</sup> was Delaware law enforcement's choice EBT device.

In January 2024, the DSPCL deployed the Intoxilyzer 9000. The catalyst for the transition came eleven years earlier, in 2013, when CMI, Inc. ("CMI"), the manufacture of the Intoxilyzer series of devices, notified the DSPCL that the Intoxilyzer 5000 was nearing its end-of-life due to unavailability of repair parts and the inability to build new devices. In other words, the DSPCL would soon be unable to rely on CMI when it needed replacement parts for its Intoxilyzer 5000s or to purchase new devices—a successor was needed.

The process to identify a successor EBT device began with the CPL. CMI, the State's decades-long partner, offered two devices subsequent to the I-5000 that met NHTSA's standards for inclusion on the CPL; the newest device is the

 $<sup>^{113}</sup>$  NHTSA sets the minimum standards for approval for use in the United States. Mar. 26 Tr. at 15.

<sup>&</sup>lt;sup>114</sup> State Ex. 8 (Model Specifications for Evidential Breath Alcohol Measurement Devices 58 Fed. Reg. 48705 (Sept. 17, 1993).

<sup>&</sup>lt;sup>115</sup> See State v. Malloy, 1988 WL 40021, at \*1 (Del. Super. Apr. 22, 1988).

<sup>&</sup>lt;sup>116</sup> See State v. Valle, 2001 WL 34075421, at \*2 (Del. Com. Pl. Dec. 5, 2001).

Intoxilyzer 9000.<sup>117</sup> In addition, the DSPCL looked to other jurisdictions that similarly needed to transition, such as Georgia.

Leading the transition process, the Georgia Bureau of Investigation ("GBI"), identified three potential replacements, and concluded that the Intoxilyzer 9000 was the best option. GBI later published its findings supporting its conclusion. The DSPCL followed GBI's lead and similarly selected the Intoxilyzer 9000 to replace the Intoxilyzer 5000.

# B. The Intoxilyzer 9000

# 1. Intoxilyzer devices and IR spectrometry

Jon Grantham, CMI's engineering manager from 2014 until 2024, provided testimony on the Intoxilyzer 9000.<sup>120</sup>

An Intoxilyzer device is designed to measure the level of ethanol in a subject's breath. To do so, the Intoxilyzer brand of devices utilizes a scientific methodology called IR spectrometry.<sup>121</sup> In simple terms, IR spectrometry measures the difference

<sup>120</sup> As engineering manager, Grantham was responsible for all aspects of the hardware and software of an instrument. Thus, Grantham had personal knowledge of "all aspects of the hardware and software of the Intoxilyzer 9000 instrument." Mar. 26 Tr. at 15.

<sup>&</sup>lt;sup>117</sup> The Intoxilyzer 8000 was also available. The I-9000 has been on the CPL since 2012.

<sup>&</sup>lt;sup>118</sup> Mar. 25 Tr. at 138.

<sup>&</sup>lt;sup>119</sup> *Id*.

<sup>&</sup>lt;sup>121</sup> Spectrometry is the measurements and spectroscopy is the science behind it. *Id.* at 13. The terms are often used interchangeably.

between a known amount of IR light and the absorption of that light through the introduction of matter. 122

A subject tested on the Intoxilyzer 9000 blows through a breath tube where the breath sample is cycled into an environment-controlled sample cell. 123 At one end of the cell is an IR light source and at the other end, an IR detector. If ethanol is present in the subject's breath, the IR light is absorbed, the IR detector measures the resulting change in light frequency, and the amount of ethanol present is calculated.<sup>124</sup> The more IR light that is absorbed—because the amount of light absorbed is directly proportional to the presence of ethanol in a subject's breath sample—the higher the subject's BAC. 125

NHTSA Model Specifications for Calibrating Units for Breath Alcohol Testers and Conforming Products List of Calibrating Units for Breath Alcohol Testers, 72 Fed. Reg. 34742, at 34743 (June 25, 2007).

<sup>&</sup>lt;sup>122</sup> NHTSA explains IR spectroscopy testing as follows:

<sup>[</sup>w]hen infra-red spectroscopy is used, the [] sample to be analyzed is passed into a chamber through which infra-red radiation is transmitted. The wavelength of the transmitted radiation is chosen so that some of it is absorbed by alcohol. According to the Beer-Lambert Law of absorption of radiation, the amount of energy absorbed by the sample in the chamber is proportional to the concentration of the alcohol in the sample. By measuring the amount of radiation transmitted when the sample chamber is empty and the amount transmitted when the sample is present, the concentration of the alcohol in the sample can be determined.

<sup>&</sup>lt;sup>123</sup> Mar. 26 Tr. at 13. The I-9000 is taking approximately 20 independent samples per second. *Id.* at 28.

<sup>&</sup>lt;sup>124</sup> *Id*.

<sup>&</sup>lt;sup>125</sup> *Id.* at 25–26.

#### 2. The Intoxilyzer 5000 versus the Intoxilyzer 9000

Both the Intoxilyzer 5000 and the Intoxilyzer 9000 use IR spectrometry to measure a subject's BAC—the science has not changed. There are, however, notable differences between the two devices. First, the I-5000 utilized an IR light bulb, with a single detector and a filter wheel that rotated between the IR source and the detector to measure the difference in frequencies. The I-9000 uses a solid-state IR source, not a filament bulb, with a detector package of four independent detectors. Therefore, the I-9000 is able to measure four different points, whereas the I-5000 could only measure one. Next, unlike the Intoxilyzer 5000, the I-9000 uses a dry gas calibration that runs with every test. This allows for regular calibration checks against a known standard.

Further, the Intoxilyzer 9000 allows for a built-in observation time clock, effectively locking the device until a jurisdiction's respective observation period is completed.<sup>132</sup> With the Intoxilyzer 5000, the start of an observation period had to be determined by the officer and manually tracked, creating opportunities for timing

<sup>&</sup>lt;sup>126</sup> *Id.* at 33.

<sup>&</sup>lt;sup>127</sup> *Id*.

<sup>&</sup>lt;sup>128</sup> *Id.* This is also beneficial because there are fewer wearable parts in the machine.

<sup>129 &</sup>quot;[T]his allows us excellent ethanol specificity in order to say that, yes, what I'm measuring in this sample is ethanol and not some other compound, such as acetone..." *Id.* at 26.

<sup>&</sup>lt;sup>130</sup> The customer has a choice between a dry gas and a wet bath simulator for calibration checks. *Id.* at 50. Delaware uses the dry gas standard.

<sup>&</sup>lt;sup>131</sup> *Id.* at 39.

<sup>&</sup>lt;sup>132</sup> *Id.* at 67–68.

errors.<sup>133</sup> The I-9000 also comes equipped "with a user-friendly interface" that requires the operator to complete a step-by-step process via a touch screen to test the subject and has an external printer that uses standard copy paper.<sup>134</sup>

Finally, with a Windows touch-screen operating system, the Intoxilyzer 9000 devices are networked, allowing for remote monitoring and testing of the devices. The technological upgrades also come with significant storage capacity, so an officer can access previous Intoxilyzer 9000 test results performed on that device, at any time. And because the I-9000s are networked, they can be accessed remotely by state offices to add or delete operators, troubleshoot a device, or download its data, among other things. 137

### 3. NHTSA approves the Intoxilyzer 9000.

The Intoxilyzer 9000 gained entry on NHTSA's CPL list in 2012 when it satisfied certain minimum requirements (the "Model Specifications"). <sup>138</sup> The Model

<sup>&</sup>lt;sup>133</sup> See id. at 68–70.

<sup>&</sup>lt;sup>134</sup> *Id.* at 71. The I-5000 had an internal printer that required a special card for printing. *Id.* 

 $<sup>^{133}</sup>$  *Id*. at 52.

<sup>&</sup>lt;sup>136</sup> *Id.* at 71-72. Other differences include improvements in electronics that reduce the amount of energy needed and greater flexibility of energy source, and the ability to interface with a barcode scanner.

<sup>&</sup>lt;sup>137</sup> *Id.* at 73.

<sup>&</sup>lt;sup>138</sup> State Ex. 8 (Model Specifications for Evidential Breath Alcohol Measurement Devices 58 Fed. Reg. 48705 (Sept. 17, 1993)); Mar. 26 Tr. at 22–23.

Specifications require the EBT device to pass a series of eight tests. Failure of any test precludes an EBT device from being included on the CPL. 139

Test 1 - Accuracy and Precision.<sup>140</sup> A variety of samples ranging from 0.02 BAC to 0.160 BAC were processed through the I-9000.<sup>141</sup> Although a "passing" tolerance range was 0.005,<sup>142</sup> the I-9000's standard deviation was only 0.003.<sup>143</sup>

Test 2 - Acetone Interference. This test measures the device's susceptibility to acetone interference. Acetone is an organic compound produced by the human body that can be inadvertently measured as ethanol by some EBT devices, causing

Accuracy is used to define how close we are to hitting the target that we're aiming for. So, in the case of Test 1.1, they would introduce a sample of a 0.020 BAC into the instrument. And we would have to hit that target within a tolerance range of .005, which they would consider a reading between 0.015 and 0.025 to be accurate. That would be a single sample.

Precision is introducing a series of samples into that and assuming that all of those samples are tightly grouped together, which they'll calculate a standard deviation for how close each of those samples are to each other. So accuracy is how close we are to the target. Precision is how close we are to each repeatable sample.

In order to meet their requirements for accuracy and precision, we would have to hit all of those targets across that entire test rank.

<sup>&</sup>lt;sup>139</sup> NHTSA maintains an independent lab that tests instruments to ensure its standards are met before the instrument may be placed on the CPL. *Id.* at 15–16. An instrument cannot be sold in the United States unless it appears on the CPL. *Id.* 

<sup>&</sup>lt;sup>140</sup> State Ex. 8 (Model Specifications for Evidential Breath Alcohol Measurement Devices 58 Fed. Reg. 48705 (Sept. 17, 1993)). Grantham explained:

Mar. 26 Tr. at 17.

<sup>&</sup>lt;sup>141</sup> State Ex. 8 (Model Specifications for Evidential Breath Alcohol Measurement Devices 58 Fed. Reg. 48705 (Sept. 17, 1993)). The tested samples are 0.00 BAC, 0.02 BAC, 0.04 BAC, 0.08 BAC, and 0.160 BAC.

 $<sup>^{142}</sup>$  For example, at the 0.02 BAC test, the device would have to measure a BAC between 0.015 and 0.025.

<sup>&</sup>lt;sup>143</sup> Mar. 26 Tr. at 45.

<sup>&</sup>lt;sup>144</sup> State Ex. 8 (Model Specifications for Evidential Breath Alcohol Measurement Devices 58 Fed. Reg. 48705 (Sept. 17, 1993)).

interference.<sup>145</sup> To test that possibility, NHTSA takes "an ethanol standard, add[s] acetone to it, and ensure[s] the reading is not affected or that the instrument can detect that acetone or another interferent is present" and abort the test.<sup>146</sup>

Test 3 - Blank Reading.<sup>147</sup> This test ensures that no residual sample is left in the device that could affect a subsequent reading. For this test, an air blank—clean air—is pumped through the breath hose, into the sample cell to clear the entire air path, and exhausted out of the machine.<sup>148</sup> The air blank must read 0.000 BAC.<sup>149</sup>

Test 4 - Breath Sampling. This tests both the volume and air flow. <sup>150</sup> This test ensures that the subject is blowing the minimum time, the minimum volume, and at the minimum flow rate. <sup>151</sup> As a subject exhales into a breath hose, often the BAC reading will change over the course of the breath—lower at first when the air comes from the mouth and then higher when the air comes from the lungs. <sup>152</sup> For this test, the simulated breath sample increases from 0.048, to 0.072, to 0.080 BAC. To be accurate, the slope of the reading must ultimately level out. <sup>153</sup>

<sup>145</sup> Mar. 26 Tr. at 18.

<sup>&</sup>lt;sup>146</sup> *Id.* When the I-9000 detects an interferent, like acetone, an audible alert is triggered and a message appears on the display screen to notify the operator and the test is aborted. *Id.* at 27.

<sup>&</sup>lt;sup>147</sup> State Ex. 8 (Model Specifications for Evidential Breath Alcohol Measurement Devices 58 Fed. Reg. 48705 (Sept. 17, 1993)).

<sup>&</sup>lt;sup>148</sup> Mar. 26 Tr. at 19.

<sup>149</sup> Id

<sup>&</sup>lt;sup>150</sup> State Ex. 8 (Model Specifications for Evidential Breath Alcohol Measurement Devices 58 Fed. Reg. 48705 (Sept. 17, 1993)); Mar. 26 Tr. at 21.

<sup>&</sup>lt;sup>151</sup> Mar. 26 Tr. at 21.

<sup>&</sup>lt;sup>152</sup> *Id.* at 29–30.

<sup>&</sup>lt;sup>153</sup> State Ex. 8 (Model Specifications for Evidential Breath Alcohol Measurement Devices 58 Fed. Reg. 48705 (Sept. 17, 1993)); Mar. 26 Tr. at 21.

Test 5 Power Input. The I-9000 is designed to be both a stationary and mobile platform, meaning it can be used in a police vehicle. This test ensures that the Intoxilyzer 9000 can function properly under both provided options of power—110 volt AC (for stationary) and 12 volt DC (for mobile platforms).<sup>154</sup>

Test 6 - Ambient Temperature. Because the I-9000 can be deployed in various environmental conditions (extreme heat or cold), this test exposes the device to a variety of temperatures to ensure that temperature does not have a measurable effect on its reading.<sup>155</sup>

Test 7 - Vibration Stability.<sup>156</sup> Because the I-9000 can be deployed in a mobile application, this test ensures that vibrations from the vehicle do not affect the accuracy and precision of the instrument.<sup>157</sup>

Test 8 - Electrical Safety Inspection. This test is to ensure that the operator and the subject are safe and protected from an electrical shock.<sup>158</sup>

<sup>&</sup>lt;sup>154</sup> State Ex. 8 (Model Specifications for Evidential Breath Alcohol Measurement Devices 58 Fed. Reg. 48705 (Sept. 17, 1993)).

<sup>&</sup>lt;sup>155</sup> *Id.*; Mar. 26 Tr. at 20.

<sup>&</sup>lt;sup>156</sup> State Ex. 8 (Model Specifications for Evidential Breath Alcohol Measurement Devices 58 Fed. Reg. 48705 (Sept. 17, 1993)).

<sup>&</sup>lt;sup>157</sup> Mar. 26 Tr. at 22.

<sup>&</sup>lt;sup>158</sup> State Ex. 8 (Model Specifications for Evidential Breath Alcohol Measurement Devices 58 Fed. Reg. 48705 (Sept. 17, 1993)); Mar. 26 Tr. at 22.

As evidenced by its placement on the CPL in 2012,<sup>159</sup> the Intoxilyzer 9000 performed satisfactorily on each of the eight tests and was ultimately approved by NHTSA.<sup>160</sup>

Once approved and placed on the CPL, CMI was able to market and sell the Intoxilyzer 9000 to law enforcement agencies. Currently, at least 25 states and multiple countries have approved its use as an EBT device, including: Georgia, Arizona, Colorado, Hawaii, Pennsylvania, Kansas, New York, Montana, Rhode Island, Texas, and Canada.

## 4. Customization of the Intoxilyzer 9000

CMI works with state program offices to tailor the Intoxilyzer 9000 to the needs of the jurisdiction. The flexibility offered by CMI, however, is not without limits. The customer-controlled functions do not extend to the Model Specifications set by NHTSA.

While a customer may request modifications of certain parameters to match the procedures and protocols established by that jurisdiction, CMI controls the

<sup>&</sup>lt;sup>159</sup> State Ex. 9 (Conforming Products List of Evidentiary Breath Alcohol Measurement Devices, 82 Fed. Reg. 50940 (Nov. 2, 2017)).

<sup>&</sup>lt;sup>160</sup> CMI submits the I-9000 to NHTSA every few years to ensure that any changes have not affected the minimum approval requirements. Mar. 26 Tr. at 24. At the time of the hearing in March 2025, another NHTSA review was underway. *Id.* at 63. The typical review schedule was impacted by the NHTSA being shut down during Covid. *Id.* Grantham could not recall the date of the last NHTSA approval. *Id.* 

<sup>&</sup>lt;sup>161</sup> *Id.* at 55-56.

<sup>&</sup>lt;sup>162</sup> This list is not exhaustive.

 $<sup>^{163}</sup>$  Mot. in *Limine* ¶ 37 (collecting cases, statutes, and regulations).

software of the Intoxilyzer 9000.<sup>164</sup> That is, the I-9000's source code can only be changed by CMI.<sup>165</sup> Some of the customizable features include setting the minimum volume of air required for a completed breath sample, defining the scope of the subject's information to input, requiring one or two breath samples (and if the two do not "agree", requiring a third sample), running self-diagnostics before each test, or having a built-in observation period.<sup>166</sup> But a customer cannot change the method by which the I-9000 calculates a subject's BAC—through IR spectrometry.

### C. The DSPCL deploys the Intoxilyzer 9000

# 1. Willey is trained on the Intoxilyzer 9000

As head of the DSPCL, Willey received extensive instruction on the Intoxilyzer 9000, starting in 2015, when CMI provided training for three days onsite at the DSPCL. CMI provided Willey and her team with training on using the software, how to calibrate and maintain the device, and troubleshooting issues that may arise. Upon completion of this training, Willey became a qualified Intoxilyzer 9000 trainer. 169

<sup>&</sup>lt;sup>164</sup> Grantham cross: Q: "CMI is not willing to in any way alter something that affects the NHTSA minimal requirements, correct?" A. "That is correct." Mar. 26 Tr. at 57.

<sup>&</sup>lt;sup>165</sup> *Id.* at 62.

<sup>&</sup>lt;sup>166</sup> *Id.* at 50-51.

<sup>&</sup>lt;sup>167</sup> Mar. 25 Tr. at 134–35.

<sup>&</sup>lt;sup>168</sup> *Id*.

<sup>&</sup>lt;sup>169</sup> State Ex. 11 (Willey's Intoxilyzer 9000 certificate); Mar. 25 Tr. at 134–35.

In 2024, Willey attended CMI's annual Intoxilyzer user group meeting. During this three-day meeting, CMI makes presentations and provides training sessions.<sup>170</sup> In addition to receiving additional training, Willey interacted with officials from other jurisdictions and learned of procedures and practices implemented by them.<sup>171</sup> Willey used this knowledge to tailor procedures and practices to meet Delaware's needs.<sup>172</sup>

### 2. Delaware's Intoxilyzer 9000 features

The replacement EBT device process began in 2013 and the DSPCL's final approval of the I-9000 came in 2020.<sup>173</sup> During this period, approximately 15 revisions were made to Delaware's version of the software.<sup>174</sup> Delaware's customization included imbedding a mandatory twenty-minute observation period.<sup>175</sup> Mouth alcohol typically dissipates in 9 to 11 minutes and therefore, the general recommendation is to wait 15 minutes before starting the test.<sup>176</sup> Delaware takes a more cautious approach and requires a twenty-minute observation period.<sup>177</sup>

<sup>&</sup>lt;sup>170</sup> Mar. 26 Tr. at 44; Mar. 25 Tr. at 135–36.

 $<sup>^{171}</sup>$  Id.

<sup>&</sup>lt;sup>172</sup> See Mar. 25 Tr. at 135–36.

<sup>&</sup>lt;sup>173</sup> Mar. 26 Tr. at 67.

<sup>&</sup>lt;sup>174</sup> *Id.* During her testimony, Willey discussed these customizations, why they were important to Delaware, and Grantham testified as to CMI's involvement in those customizations.

<sup>&</sup>lt;sup>175</sup> *Id.* at 68–69. Willey testified to the modifications Delaware required.

<sup>&</sup>lt;sup>176</sup> *Id.* at 68.

<sup>&</sup>lt;sup>177</sup> *Id*.

Delaware's I-9000s cannot begin the breath test until the internally timed twenty-minute observation period is completed.<sup>178</sup>

Taking advantage of the operating platform, the DSPCL also required that the I-9000 be programmed so that the operator had to proceed step-by-step through the test, acknowledging compliance on the touch-screen before the device would advance to the next step.<sup>179</sup>

The DSPCL also opted to have the I-9000 require an operator card to gain access to the program *via* a bar code scanner<sup>180</sup> to ensure the operator was certified.<sup>181</sup> The bar code scanner also inputs the subject's information.<sup>182</sup> Additionally, the DSPCL selected the networking option,<sup>183</sup> including the storage feature to allow test results to be printed at a later time.

The DSPCL selected the two breath samples<sup>184</sup> option and elected to utilize a dry gas external standard, set to 0.08 BAC.<sup>185</sup> The instrument conducts two air gas tests with the dry gas standard during testing on each breath sample to verify that it

<sup>&</sup>lt;sup>178</sup> *Id.* at 70.

<sup>&</sup>lt;sup>179</sup> *Id.* at 70.

<sup>&</sup>lt;sup>180</sup> The officer can also manually input his or her credentials.

<sup>&</sup>lt;sup>181</sup> *Id.* at 71.

<sup>&</sup>lt;sup>182</sup> *Id*.

<sup>&</sup>lt;sup>183</sup> DSPCL can remotely ensure all instruments' software is up to date. *Id.* at 74. Since the software was "locked" with final approval in 2020, DSPCL has not requested any software updates. *Id.* at 67, 74.

<sup>&</sup>lt;sup>184</sup> More than 75% of states use a two-breath test. *Id.* at 125.

<sup>&</sup>lt;sup>185</sup> The dry gas has an expiration date. With the networking option, the DSPCL can monitor the dry gas standard inventory. Delaware's I-9000 is programmed to inactivate the instrument if the dry gas runs out or expires. *Id.* at 73–75.

is accurately reading 0.08 BAC at the time of the subject's test. And the two samples produced by the subject are required to be within 0.02 BAC of each other, giving further confidence in the results. 187

While Delaware's Intoxilyzer 9000 has the capability of collecting two samples, Willey testified that two samples are not required by Delaware law or the DSPCL. Thus, a test on a single breath is still a valid result. 189

### 3. Training and testing on the Intoxilyzer 9000

In anticipation of fielding the I-9000, in 2022 the DSPCL started training Delaware law enforcement officers on the device. I-9000 training became part of the curriculum at the police academy. Officers previously trained on the I-5000 received in-service training on the I-9000, which included hands-on experience and instruction on the changed procedures. Trained officers are certified for a three-year period.

To begin the testing process, the officer must scan his/her operator card using the 2D barcode scanner, which allows the officer to move to the next step—scanning

<sup>&</sup>lt;sup>186</sup> *Id.* at 74–75.

<sup>&</sup>lt;sup>187</sup> *Id.* at 76.

<sup>&</sup>lt;sup>188</sup> *Id.* at 76.

<sup>&</sup>lt;sup>189</sup> *Id.* A single breath sample is a valid result because it is surrounded by the air blanks, the diagnostics, and calibrations. *Id.* 

<sup>&</sup>lt;sup>190</sup> Mar. 25 Tr at 136, 146–47.

<sup>&</sup>lt;sup>191</sup> *Id.* at 136, 145–46.

<sup>&</sup>lt;sup>192</sup> *Id.* at 148.

the subject's driver's license or inputting the information manually. Next, the Intoxilyzer 9000 runs internal diagnostics, and after successful completion, the twenty-minute observation period begins.

During the observation period, the officer observes the subject to ensure the elimination of mouth alcohol and that no contaminates are introduced. Before taking a breath sample, the officer is to ask if the subject is wearing dentures and if so, the DSPCL recommends removal before administering the test. Failure to remove dentures does not, however, invalidate test results.

After the observation, the device prompts the officer to place a mouthpiece <sup>198</sup> on the I-9000's breath hose and the officer instructs the subject on how to perform a

193 Requiring a barcode scan ensures that only certified operators can perform the test. Mar. 26 Tr. at 49.

<sup>&</sup>lt;sup>194</sup> The diagnostics check the power supply, the temperature of the cell and breath hose, the electronic components, and conducts an internal test procedure which simulates a test reading. "So it's checking the full IR pass before it will even go into a ready mode before it allows an operator to run a test." *Id.* at 37.

The I-9000 is designed to avoid radio frequency interference ("RFI"), which is an electrical energy generated by electronics in the vicinity. The I-9000 contains a detection circuit, which will send an alarm and displace a message if RFI is detected and the test will be aborted. *Id.* at 31.

<sup>&</sup>lt;sup>195</sup> As mentioned, the twenty-minute observation period is to ensure mouth ethanol dissipates. When mouth alcohol is present, the slope rises very rapidly as the mouth ethanol vapors pass through the cell and then drops as lung air reaches the sample cell. In a test with no mouth alcohol, the slope will rise and then level off. If mouth alcohol is present in a sample, the I-9000 will send an audible signal and a message would appear on the screen. *Id.* at 30. <sup>196</sup> *Id.* at 118.

<sup>&</sup>lt;sup>197</sup> *Id.* The concern with dentures is that mouth alcohol could be trapped in the dentures. But, I-9000 is programmed to detect mouth alcohol so otherwise valid test resulted are not invalidated for failure to remove dentures. *Id.* at 119-21. The State also introduced into evidence peer reviewed articles that conclude that dentures do not impact the validity of the test. *Id.* at 120–23.

<sup>&</sup>lt;sup>198</sup> The mouthpieces are individually wrapped. The I-9000 requests a new mouthpiece be used for each breath sample. *Id.* at 117–18.

satisfactory test.<sup>199</sup> The breath sample must meet a certain threshold of time, airflow, and volume.<sup>200</sup> If the subject does not meet that threshold, the device will not accept the sample.<sup>201</sup> If the sample is valid, the I-9000 continues with the reading.

After the first test, a new mouthpiece is installed and the device performs an air blank to purge any residual ethanol.<sup>202</sup> Then, after a two minute-wait period, a second sample is taken.<sup>203</sup>

The Delaware I-9000's sequencing after the observation period is as follows:

Air blank
Diagnostic check
Air blank
Dry Gas Standard
Air blank
Subject Sample 1
Air blank
Two Minute Wait
Air blank
Subject Sample 2
Air blank
Dry Gas Standard
Air blank
Diagnostic check
Air blank<sup>204</sup>

At the completion of the test, the results are printed.<sup>205</sup>

<sup>&</sup>lt;sup>199</sup> *Id.* at 146.

<sup>&</sup>lt;sup>200</sup> *Id.* at 40, 146.

<sup>&</sup>lt;sup>201</sup> *Id.* at 146.

<sup>&</sup>lt;sup>202</sup> *Id.* at 140.

<sup>&</sup>lt;sup>203</sup> *Id.* at 133, 136.

<sup>&</sup>lt;sup>204</sup> State Ex. 7; Mar. 26. Tr. at 101.

<sup>&</sup>lt;sup>205</sup> See State Exs. 7, 15–17.

The I-9000 also indicates when a test cannot be completed. For example, if a subject refuses a second breath sample, the instrument will run the remainder of the sequence and the printout will show an asterisk in the Sample 2 line and explain the event:<sup>206</sup>

TEST	BAC g/210L	TIME
Air Blank	0.000	14:13:42
Diagnostic Check	PASS	14:14:17
Air Blank	0.000	14:14:55
Dry Gas Standard	0.080	14:15:16
Air Blank	0.000	14:15:56
Subject Sample 1	0.000	14:16:27
Air Blank	0.000	14:17:08
Two Minute Wait		14:19:12
Air Blank	0.000	14:19:49
Subject Sample 2	*	14:21:55
Air Blank	0.000	14:22:34
Dry Gas Standard	0.079	14:22;55
Air Blank	0.000	14:23:35
Diagnostic Check	PASS	14:24:10
Air Blank	0.000	14:24:47

\*Subject Refused -Operator pressed the refusal button.

If the subject refuses the first sample, the I-9000 will continue with the air blanks, dry gas standard and diagnostics, but will not proceed to the second sample:<sup>207</sup>

TEST	BAC g/210L	TIME
Air Blank	0.000	14:06:33
Diagnostic Check	PASS	14:07:08
Air Blank	0.000	14:07:45
Dry Gas Standard	0,079	14:08:07
Air Blank	0.000	14:08:46
Subject Sample 1	*	14:09:00
Air Blank	0.000	14:09:39
Dry Gas Standard	0.079	14:10:01
Air Blank	0.000	14;10:40
Diagnostic Check	PASS	14:11:16
Air Blank	0.000	14:11:53

\*Subject Refused -Operator pressed the refusal button.

<sup>207</sup> State Ex. 16.

<sup>&</sup>lt;sup>206</sup> State Ex. 15.

When two breaths are properly sampled, for results to be valid the samples must be within 0.02 BAC. If they are not, the printed report shows an asterisk for the samples and explains the event:<sup>208</sup>

TEST	BAC g/210L	TIME
Air Blank	0.000	00:04:15
Diagnostic Check	PASS	00:04:50
Air Blank	0.000	00:05:27
Dry Gas Standard	0.081	00:05:49
Air Blank	0.000	00:06:29
Subject Sample 1	0.254*	00:07:12
Air Blank	0.000	00:08:11
Two Minute Wait		00:10:14
Air Blank	0.000	00:10:51
Subject Sample 2	0.217*	00:11:49
Air Blank	0.000	00:12:47
Dry Gas Standard	0.078	00:13:09
Air Blank	0.000	00:13:48
Diagnostic Check	PASS	00:14:24
Air Blank	0.000	00:15:01

\*No 0.020 Agreement ~

Subject samples are outside the 0.020 agreement,

If the samples are within 0.02 and no asterisks appear, the lower reading is recorded at the bottom of the printout as the valid result:<sup>209</sup>

Subject's BAC 0.122 g/210L If a BAC appears in the box and the standards are without asterisked exceptions, it is a validated result. When two samples are tested, the lowest validated BAC is the reported result.

Dry Gas Lot #: 302-402691653

Expiration Date: 03/17/2025

<sup>&</sup>lt;sup>208</sup> State Ex. 17. The I-9000 will similarly indicate when an air blank fails to properly purge. When this occurs, the instrument will send another air blank to attempt to resolve the issue. If not resolved, the test will be aborted. Mar. 26 Tr. at 110-12. The same process would occur if the dry gas standard was out of tolerance. *Id.* at 113.

<sup>&</sup>lt;sup>209</sup> State Ex. 7; Mar. 26 Tr. at 97.

### 4. Calibration procedures

A DSPCL chemists perform calibration tests on each I-9000 every six to seven weeks.<sup>210</sup> The calibration check uses three certified solutions, 0.05 BAC, 0.10 BAC, and an acetone solution.<sup>211</sup> Thus, the check is ensuring that the instrument is reading the correct BAC level and detecting the presence of acetone. 212 Additionally, the chemist provides two breath samples (which are processed through the sequencing shown above) to ensure the instrument is operating properly.<sup>213</sup> At the completion of the calibration check, a Calibration Check Report is generated, which reflects the raw data from the check and is signed by the chemist performing the check.<sup>214</sup> A CMI Intoxilyzer 9000 Certification Sheet is also generated, which reflects the date, time, and results, and certifies that the instrument is properly calibrated.<sup>215</sup> The chemist performing the check signs the sheet certifying and attesting that the document was made by a person with knowledge and in the ordinary course of business.<sup>216</sup>

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<sup>&</sup>lt;sup>210</sup> CMI does not have a recommended calibration schedule. When to conduct calibrations is left to the customer. Mar. 26 Tr. at 61. On a set date in each county, all I-9000 instruments are brought to the designated troop for calibration testing. *Id.* at 90.

<sup>&</sup>lt;sup>211</sup> *Id.* at 79–80, 85. The results must be within .005 of the target value. *Id.* at 92.

<sup>&</sup>lt;sup>212</sup> *Id*.

<sup>&</sup>lt;sup>213</sup> *Id.* at 80–84.

<sup>&</sup>lt;sup>214</sup> State Ex. 5; Mar. 26 Tr. at 78. The I-9000 prints three documents: the test results, the raw data, and the certification of calibration. Mar. 26 Tr. at 78.

<sup>&</sup>lt;sup>215</sup> State Ex. 5.

<sup>&</sup>lt;sup>216</sup> *Id*.

In addition to its own calibration checks, the DSPCL participates in a "proficiency testing program" with Intoximeters—an external vendor. As participants in the program, the DSPCL is sent an unknown sample of a dry gas tank. Using the I-9000, the DSPCL analyzes the blind sample and reports their results to Intoximeters. Intoximeters then grades DSPCL's performance—the DSPCL has passed all proficiency tests.

# D. Brown's Intoxilyzer 9000 test.<sup>218</sup>

Brown was taken to Troop 9's Intoxilyzer room on March 28, 2024. Agnor followed the procedures outlined above: he scanned his operator card and Brown's driver's license;<sup>219</sup> Agnor sat with Brown and observed him during the twenty-minute period to ensure Brown did not drink, smoke, throw up, burp, or introduce anything into his oral cavity that could interfere with the test sample;<sup>220</sup> after the observation period, a mouthpiece was placed on the breath hose;<sup>221</sup> Brown was instructed on how to provide the breath sample; an adequate first breath sample was collected; after a two-minute wait period, a fresh mouthpiece was placed on the breath hose; and Brown provided an acceptable second sample.

<sup>&</sup>lt;sup>217</sup> Mar. 25 Tr at 114–15.

<sup>&</sup>lt;sup>218</sup> The following facts are derived from Agnor's BWC and his accompanying testimony.

<sup>&</sup>lt;sup>219</sup> Id. at 160.

<sup>&</sup>lt;sup>220</sup> *Id.* at 156.

<sup>&</sup>lt;sup>221</sup> *Id*.

Both samples measured 0.122, with no asterisked line-items, reporting a valid test. 222

Brown was tested on the Intoxilyzer 9000 bearing serial number 90-001862.<sup>223</sup> This instrument was calibration tested by Willey on March 4, 2024,<sup>224</sup> and April 22, 2024.<sup>225</sup> The Calibration Check Reports reflect that it was properly functioning.

#### V. Motion in Limine

## A. The parties' contentions

Brown argues that the State has failed to establish the admissibility of the Intoxilyzer 9000's results as required by Delaware Uniform Rules of Evidence ("DRE") 702. Brown asserts that the State's failure to produce the I-9000's source code and documentation relating to the DSPCL's customizations preclude the Court from finding the device reliable.<sup>226</sup>

The State responds first that DRE 702 does not require an examination of the I-9000's source code to meet admissibility requirements. It argues that seeking an inspection of the source code now amounts only to a "procedural fishing expedition" that ignores the I-9000's independent verification.<sup>227</sup> Next, the State argues that the

<sup>&</sup>lt;sup>222</sup> State Ex. 7 (Brown's Intoxilyzer 9000's DUI chemical test results).

 $<sup>^{223}</sup>$  Id

<sup>&</sup>lt;sup>224</sup> State Ex. 5 (March 4, 2024, calibration report and certification).

<sup>&</sup>lt;sup>225</sup> State Ex. 6 (April 22, 2024, calibration report and certification).

<sup>&</sup>lt;sup>226</sup> Brown's Ans. ¶¶ 30–37.

<sup>&</sup>lt;sup>227</sup> State Reply ¶¶ 38-39.

customizations made by the DSPCL are unrelated to the I-9000's scientific reliability. This is because the customizations offered are available only to help jurisdictions meet its breath testing program requirements, but they cannot change the scientific methodology of the I-9000 or alter an aspect of the I-9000 that would compromise its ability to meet the Model Specifications.<sup>228</sup>

### B. Standard of review

DRE 702 and *Daubert* govern the admissibility of scientific evidence.<sup>229</sup> The trial court is to act as a gatekeeper to ensure scientific evidence is both relevant and reliable.<sup>230</sup> The proponent of the evidence bears the burden of proving relevance and reliability.<sup>231</sup> The court must preclude evidence if it is either irrelevant or unreliable.<sup>232</sup>

To be relevant, the evidence must relate to an issue in the case and "assist the trier of fact to understand the evidence or to determine a fact issue." <sup>233</sup>

"To determine reliability under *Daubert*, a trial court may consider a non-exhaustive list of factors, including:"<sup>234</sup>

 $<sup>^{228}</sup>$  *Id.* ¶¶ 42–43.

<sup>&</sup>lt;sup>229</sup> In re Zantac (Ranitidine) Litig., 342 A.3d 1131, 1143–44 (Del. 2025); see also United States v. Gissantaner, 990 F.3d 457, 463 (6th Cir. 2011) ("Rule 702...sets the framework for determining whether to admit scientific and other technical evidence...in...criminal cases.").

<sup>&</sup>lt;sup>230</sup> In re Zantac (Ranitidine) Litig., 342 A.3d at 1143–44.

<sup>&</sup>lt;sup>231</sup> *Id*. at 1147.

<sup>&</sup>lt;sup>232</sup> Tumlinson v. Advanced Micro Devices, Inc., 81 A.3d 1264, 1268 (Del. 2013).

<sup>&</sup>lt;sup>233</sup> *Id.* (citation omitted).

<sup>&</sup>lt;sup>234</sup> In re Zantac (Ranitidine) Litig., 342 A.3d at 1144.

(1) whether a theory or technique has been tested; (2) whether it has been subject to peer review; (3) whether a technique had a known or potential rate of error and whether there are standards controlling its operation; and (4) whether the theory or technique enjoys general acceptance within a relevant scientific community.<sup>235</sup>

The inquiry into reliability is flexible<sup>236</sup> and "must be tied to the facts of a particular case."<sup>237</sup>

#### C. Discussion

### 1. Daubert factors

## a. Is the Intoxilyzer 9000 testable?

Testability is of particular significance to reliability "because testing a hypothesis separates science from other fields of human inquiry."<sup>238</sup> And "if there is no way to show whether a technology is testable, there is no way to demonstrate whether it works or to accord it scientific status."<sup>239</sup>

NHTSA sets the standards for EBTs in the United States. Before an EBT can be sold, it must appear on the CPL, which means it meets NHTSA's Model Specifications. The Intoxilyzer 9000 was added to the CPL in 2012, thereby satisfying the eight tests that examined the I-9000's ability to accurately measure

<sup>&</sup>lt;sup>235</sup> Bowen v. E.I DuPont de Nemours & Co., Inc., 906 A.2d 787, 794 (Del. 2006) (citing Daubert v. Merrell Dow Pharmaceuticals, Inc., 509 U.S. 590–94 (1993)); see also in re Zantac (Ranitidine) Litig., 342 A.3d 1131, 1144 (Del. 2025).

<sup>&</sup>lt;sup>236</sup> In re Zantac (Ranitidine) Litig., 342 A.3d at 1144.

<sup>&</sup>lt;sup>237</sup> Bowen, 906 A.2d at 794.

<sup>&</sup>lt;sup>238</sup> *Hudson v. State*, 312 A.2d 615, 626 (Del. 2024) (internal citations and quotations omitted). <sup>239</sup> *Id.* 

BAC across a spectrum of known standards and under various scenarios. Since the I-9000's inclusion on the CPL, CMI has resubmitted the instrument to NHTSA to confirm it continues to satisfy the Model Specifications.

The testimony from CMI's former engineering manager establishes that the I-9000 is testable. Grantham testified not only to NHTSA's standards but the sequencing of the I-9000, which ensures that the reading is accurate, through self-diagnostics and air purges, among other things.

Additionally, Delaware's Intoxilyzer 9000s are subjected to the DSPCL's routine calibration checks. Every six to seven weeks each I-9000 undergoes a calibration check performed by a DSPCL chemists. And, independent of their own calibration checks, the DSPCL participates in an independent proficiency testing program. Through the program, the DSPCL runs tests on a certified, but unknown, sample of a dry gas tank and submits the results to the vendor. The vendor then grades the DSPCL's analysis of the unknown sample. Simply stated, the Intoxilyzer 9000 has been tested.

<sup>240</sup> Mar. 25 Tr. at 114–15.

 $<sup>^{241}</sup>$  Id

 $<sup>^{242}</sup>$  Id.

# b. Scrutiny of the scientific community

The key inquiry here is whether "the theory and procedures have been submitted to the scrutiny of the scientific community." The Intoxilyzer 9000 was scrutinized by NHTSA, resulting in inclusion on the CPL since 2012.

Further, before Delaware selected the I-9000 as its EBT device, Georgia conducted an in-depth analysis and published its findings. GBI's report, *Evaluation of Breath Alcohol Testing Instruments to Replace the Intoxilyzer 5000*, issued September 2012, details the evaluation plan, which was scored according to predefined, objective criteria.<sup>244</sup> The GBI concluded that the I-9000 "will accurately and reliably measure subjects' breath alcohol concentration when properly operated and maintained."<sup>245</sup>

Additionally, the Intoxilyzer 9000 is approved as an EBT device in 25-30 states and 20 countries.<sup>246</sup> In each case, the respective jurisdiction reviews and validates the Intoxilyzer 9000.<sup>247</sup>

<sup>&</sup>lt;sup>243</sup> United States v. Gissantaner, 990 F.3d 457, 464 (6th Cir. 2021).

<sup>244</sup> https://dofs-gbi.georgia.gov/sites/dofs-

gbi.georgia.gov/files/intoxilyzer%20Evaluation%20Report.pdf

<sup>&</sup>lt;sup>245</sup> *Id.* at p. 3.

<sup>&</sup>lt;sup>246</sup> Mar. <sup>2</sup>6 Tr. at 12, 44, 59.

<sup>&</sup>lt;sup>247</sup> See Mar 25. Tr. at 138–39 (Willey discussing GBI's shared research).

Finally, IR spectrometry has also been subject to extensive peer review and publication.<sup>248</sup> [P]ublication in a peer-reviewed journal alone typically satisfies [the second] *Daubert* inquiry."<sup>249</sup>

The I-9000 has been subjected to scrutiny of the scientific community.

#### c. Error rate

The third factor "looks to the error rate of the technology and to whether the scientific community has established standards that...scientists can use to mitigate the risk of error."<sup>250</sup> NHTSA's Model Specifications and CPL inclusion required the I-9000 to test four separate BAC samples—0.02, 0.04, 0.08, and 0.160—to a tolerance of 0.005.<sup>251</sup> The I-9000 held a tighter tolerance of 0.003, exceeding the minimum requirements set forth by NHTSA, resulting in a very low error rate. In addition, standards controlling the testing operation are built into the I-9000. The testing sequence begins with an internal diagnostics check, then the instrument ensures its calibration through the use of a 0.08 dry gas standard.

Finally, the device is designed to abort or invalidate a test should an interferent impact the breath sample or its procedures were not followed.

<sup>&</sup>lt;sup>248</sup> State Ex. 24 (A.W. Jones, Lars Andersson, Karin Berglund, *Interfering Substances Identified in the Breath of Drinking Drivers with Intoxilyzer 5000S*, 20 J. of Analytical Toxicology 522 (1996)).

<sup>&</sup>lt;sup>249</sup> *Hudson*, 312 A.3d at 627 (quoting *Gissantaner*, 990 F.3d at 464).

<sup>&</sup>lt;sup>250</sup> *Hudson*, 312 A.3d at 627 (quoting *Gissantaner*, 990 F.3d 457, 464 (citing *Daubert*, 509 U.S. at 594 (1993))).

<sup>&</sup>lt;sup>251</sup> State Ex. 8 (Model Specifications for Evidential Breath Alcohol Measurement Devices 58 Fed. Reg. 48705 (Sept. 17, 1993)).

The Intoxilyzer 9000 has a low error rate and designed protections against tests that fall outside the standards.

### d. General acceptance

"This inquiry focuses on whether the relevant scientific community accepts the [device]." The I-9000 was first fielded in 2012, and since then it has become an approved EBT device in several states and countries. And, its underlying scientific process, IR spectrometry, has received widespread use in EBT devices for decades. Such consistent and widespread use of the Intoxilyzer 9000 is indicative of general acceptance.<sup>252</sup>

# 2. Delaware's procedures ensure reliable application.

The DSPCL oversees the breath alcohol testing program for the State's law enforcement agencies. Therefore, it is responsible for training officers to use the I-9000 and ensuring its reliability. Before being able to access an I-9000, the officer must complete the required training course and obtain a certified operator card. Under the supervision of a state chemist, officers are instructed on the testing procedures, including hands-on experience with the device. The DSPCL requires officers be recertified every three years.

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<sup>&</sup>lt;sup>252</sup> See Hudson, 312 A.2d at 628 (reasoning that the fourth reliability factor was satisfied when the technology was "widespread in labs at the local, state, and international levels.").

Delaware's I-9000s are configured so that an officer conducting the test must follow the step-by-step procedures. The I-9000 cannot move to the next step unless and until the officer confirmed that the prior step was completed. Further, the twenty-minute observation period is built into the software and it cannot be overridden during the test.

The DSPCL calibrates each I-9000 every 6 to 7 weeks, generating calibration reports. The calibration process runs tests against certified solutions. The DSPCL chemist conducting the calibration certifies that the device is working properly and accurately.<sup>253</sup> In addition, because of the technological upgrades to the Intoxilyzer 9000, as compared to its 5000 predecessor, the DSPCL is able to monitor aspects of each device and troubleshoot remotely.

The DSPCL's oversight and training ensures that the devices are working properly and that the officers are operating them correctly.

<sup>&</sup>lt;sup>253</sup> Anderson v. State, 675 A.2d 943 (Del. 1996) (rejecting bright-line monthly testing criteria and finding that "the trial court may consider the frequency of calibration as a factor bearing on admissibility only if the offer of proof is found to be unreliable because the temporal proximity of the calibration is too remote to be reasonable under the circumstances of the case.").

### 3. Delaware's customizations do not affect the I-9000's reliability.

Grantham testified to the Intoxilyzer 9000's IR technology, the rigors of the certification testing, and its systems of accuracy checks. He also testified to the customization features offered for the I-9000.

Delaware took advantage of the offered customization. The DSPCL selections are geared towards a user-friendly operation, such as the touch-screen step-by-step requirement and built-in twenty-minute waiting period. The DSPCL selected to use dry gas samples and two-breath testing. Importantly, CMI owns the source code and it does not allow customers to make changes once the software is "locked," meaning final customization. CMI will not make requested customizations if they would impact the device's ability to satisfy NHTSA standards. None of the DSPCL chosen features impacted the science or accuracy of the testing.

Relying on *Clawson v. State* and *Hunter v. State*, Brown argues that the State cannot satisfy its burden to prove reliability because it did not produce the I-9000's source code or documentation of the DSPCL's customization selections.<sup>254</sup>

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Brown's Ans. ¶¶ 30–37. Brown also argues that the lack of resubmission of the I-9000 for NHTSA testing in the previous few years creates a further need for source code and customization documentation. *Id.* ¶ 33. NHTSA requires resubmission only when the manufacturer makes a change to the hardware, or it makes a change to the Model Specifications. State Reply ¶ 41; *see* Mar. 26 Tr at 23–24 (Grantham discussing the I-9000's resubmission process). Accordingly, the I-9000 need not be resubmitted.

The State bears the burden of establishing the admissibility of the I-9000 results by "providing an adequate evidentiary foundation."<sup>255</sup> For example, an adequate foundation has been found when the manufacturer's use requirements are followed, which "ensures the reliability of the scientific test."<sup>256</sup> There is, however, no set manner in which the State must proceed to meet its burden. Each case must be evaluated by considering all of the evidence presented.<sup>257</sup> Thus, in addition to establishing that the manufacturer's requirements were followed, adequate evidentiary foundation may be found through expert testimony.<sup>258</sup>

A source code is a set of instructions a programmer writes to create software.<sup>259</sup> Brown did not ask for the source code during discovery. He has provided no reason why the lack of a source code, alone, raises an appearance of unreliability.

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<sup>&</sup>lt;sup>255</sup> Clawson v. State, 867 A.2d 187, 191 (Del. 2005); Ayala v. State, 204 A.3d 829, 837 (Del. 2019) ("[A]s a gatekeeper, the trial court is looking for reliability, not infallibility.")

<sup>&</sup>lt;sup>256</sup> Hunter v. State, 55 A.3d 360, 365 (Del. 2012).

<sup>&</sup>lt;sup>257</sup> See id.(finding the State failed to meet its evidentiary burden because the phlebotomist deviated from the manufacturer's required protocols when handling the blood sample); *Clawson*, 867 A.2d at 191 (finding the State failed to meet its evidentiary burden because the officer did not wait the manufacturer-required 20 minutes before administering the Intoxilyzer test); *Ayala*, 204 A.3d at 837 (finding the State met its evidentiary burden even though chemist deviated from the manufacturer's non-binding guidelines).

<sup>&</sup>lt;sup>258</sup> See Malloy, 1988 WL 40021, at \*1 (finding Intoxilyzer 5000 was scientifically reliable based on expert testimony and general acceptance in the scientific community).

<sup>&</sup>lt;sup>259</sup> In re Source Code Evidentiary Hearings in Complied Consent Matters, 816 N.W.2d 525, 527 n.1 (Minn. 2012) ("[S]ource code is a human-readable set of instructions that are performed by a computer.").

Grantham provided credible expert testimony on the IR spectrometry used in the I-9000 and how it satisfies the minimum requirements established by NHTSA. Thus, Grantham's testimony established that the CMI manufactured Intoxilyzer 9000 is scientifically reliable. Willey also provided credible testimony on the customizations selected by the DSPCL. Once these selections were finalized, Grantham was clear that the customer (the DSPCL) could not make any changes to the software. Further, CMI would not make any changes to the I-9000 that would cause it to fall out of compliance with NHTSA's Model Specifications.<sup>260</sup>

The Intoxilyzer 9000 also has functions that are not a NHTSA requirement. These features meet other standards, such as the OIML specifications for breath testing.<sup>261</sup> Grantham testified that if a customer requested a modification below a CMI recommended standard, such as flow rate, CMI "would have to have a discussion that [CMI does not] recommend that...[and] warn them that it could adversely affect the accuracy and/or precision of the instrument."<sup>262</sup>

There was no testimony to suggest that any of the DSPCL's customization selections fell below CMI's recommendations. As discussed below, the source code and documentation of the DSPCL's selections are not necessary for the State to

<sup>&</sup>lt;sup>260</sup> Mar. 26 Tr. at 57.

 $<sup>^{261}</sup>$  The OIML is the International Metrology Lab. This standard checks for acetone and other interferents. *Id.* at 46–47.

<sup>&</sup>lt;sup>262</sup> *Id.* at 53.

satisfy its evidentiary burden. Brown's speculation about the State's alleged failures does not overcome the significant evidentiary weight of reliability presented by the State.<sup>263</sup>

## 4. The Intoxilyzer 9000 is relevant.

To be admissible, the I-9000 test must be relevant to an "issue in the case" and "assist the trier of fact to understand the evidence or to determine an issue of fact." There is no dispute here that the I-9000 test and its results are relevant to Brown's charge of driving under the influence. <sup>265</sup>

# 5. The Intoxilyzer 9000 is a validated technology.

As discussed above, the State presented credible testimony and evidence that the Intoxilyzer 9000 is reliable. In addition to Grantham's thorough explanation of the technology, NHTSA's requirements and standards, and upgrades to the I-9000 and Willey's testimony on the Delaware-specific features, the State introduced

<sup>&</sup>lt;sup>263</sup> See McNair v. State, 990 A.2d 398, 404 (Del. 2010) ("[M]ere suggestion, without more, is too speculative to warrant...evidentiary value.").

<sup>&</sup>lt;sup>264</sup> Council of the Village of Fountainview Condo. v. Corrozi-Fountain View LLC, 2022 WL 18865191, at \*1 (Del. Super. Nov. 21, 2022) (cleaned up).

<sup>&</sup>lt;sup>265</sup> 21 *Del. C.* § 4177 provides in relevant part:

<sup>(</sup>a) No person shall drive a vehicle:

<sup>(4)</sup> When the person's alcohol concentration is .08 or more; or

<sup>(5)</sup> When the person's alcohol concentration is, within 4 hours after the time of driving .08 or more. Notwithstanding any other provision of the law to the contrary, a person is guilty under this subsection, without regard to the person's alcohol concentration at the time of driving, if the person's alcohol concentration is, within 4 hours after the time of driving .08 or more and that alcohol concentration is the result of an amount of alcohol present in, or consumed by the person when that person was driving;

evidence that shows that Delaware's version of the I-9000 has a number of built-in safeguards to ensure the device is functioning correctly and will indicate when an error occurs.<sup>266</sup>

The Intoxilyzer 9000 has been deployed in several states and for over twelve years before Delaware moved to this device. Just as when Delaware moved from the Intoxilyzer 4011AS to the Intoxilyzer 5000 in the 1980s, the Court finds that the I-9000 is a more sophisticated version of the I-5000. <sup>267</sup> The I-9000's improvements make the test more uniform and user-friendly. The Court is convinced that the Intoxilyzer 9000 is the "product of reliable principles and methods." <sup>268</sup>

### D. Intoxilyzer 9000 - SN 90-001862

With the Intoxilyzer 9000 results admissible under *Daubert*, for Brown's test results to be admissible, the State must show that "the [Intoxilyzer] was operating properly" and that the test was properly administered.<sup>270</sup>

<sup>&</sup>lt;sup>266</sup> See State Exs. 15–20.

<sup>&</sup>lt;sup>267</sup> Mar. 25 Tr. at 116; Mar. 26 Tr. at 14 (Grantham describing IR spectrometry as "very-well established" and discussing the previous Intoxilyzer models that utilized IR spectrometry); *see Moore*, 307 A.2d at 550 (holding that the Intoxilyzer 4011, the I-5000's predecessor, is reliable); *see also State v. Vickers*, 2010 WL 2299001 (Del. Ct. Com. P. June 9, 2010) (finding the Intoxilyzer 5000EN is a reliable method to detect alcohol content).

<sup>&</sup>lt;sup>268</sup> DRE 702(c); *see also Hudson*, 312 A.3d at 628 ("In answering 'yes' to... *Daubert's* four inquiries as related to reliability, we conclude that the Superior Court properly admitted the evidence.").

<sup>&</sup>lt;sup>269</sup> Cedeno v. State, 2023 WL 6323598, at \*2 (Del. Super. 2023).

<sup>&</sup>lt;sup>270</sup> See Clawson, 867 A.2d at 192–93.

# 1. Was the Intoxilyzer 9000 SN 90-001862 functioning properly?

"[T]he prerequisite to introducing the result of an [I]ntoxilyzer test into evidence is to present the certifications of the State Chemist that the [I]ntoxilyzer machine was operating accurately before and after testing the breath of the defendant[.]"<sup>271</sup> There is no bright-line test that an EBT must be calibrated monthly or every 30 days.<sup>272</sup> Rather, the court must analyze this issue on a case-by-case basis, evaluating the evidence under Rule 403.<sup>273</sup> "Failure to test the device for an unreasonably extended period of time would render the evidence unduly prejudicial as compared to its probative value."<sup>274</sup> However, "[i]n the absence of evidence to the contrary there is a presumption that the State Chemist acted carefully and in a prudent manner[]" when calibrating an Intoxilyzer device.<sup>275</sup>

Calibration records may be admissible as an exception to the hearsay rule as a business record, under Rule 803(6). The party offering the evidence must show: "(a) the record was prepared in the regular course of business, (b) it was made 'at or near the time of the event,' (c) the information and circumstances of recordation are trustworthy, and (d) a custodian or other qualified witness is available to testify."<sup>276</sup>

<sup>&</sup>lt;sup>271</sup> McConnell v. State, 639 A.2d 74, 1994 WL 43751 (Del. Feb. 3, 1994) (TABLE).

<sup>&</sup>lt;sup>272</sup> *Anderson*, 675 A.2d 943 at 944.

<sup>&</sup>lt;sup>273</sup> *Id*.

<sup>&</sup>lt;sup>274</sup> *Id*.

<sup>&</sup>lt;sup>275</sup> *McConnell*, 1994 WL 43751, at \*1.

<sup>&</sup>lt;sup>276</sup> Talley v. State, 841 A.2d 308, 2003 WL 23104202 (Del. Dec. 29, 2003) (TABLE) (citations omitted) ("[A] qualified witness may testify regarding the records, if such witness can attest that: (1) the declarant had knowledge to make the entries in the document; (2) that the declarant's

The purpose of the exception "is to broaden the area of admissibility of relevant evidence where there is necessity and sufficient guarantee of trustworthiness." 277 "The term 'other qualified witness' should be construed broadly." [A] qualified witness only need "have familiarity with the record-keeping system" and the ability to attest to the foundational requirements of Rule 803(6). 279

CMI does not have a recommended calibration schedule.<sup>280</sup> It leaves that determination to the customer. Willey testified at length on the calibration program implemented by the DSPCL.<sup>281</sup> She is trained and certified by CMI to calibrate Intoxilyzer 9000s, as are the DSPCL chemists. The DSPCL calibrates the devices by testing three different certified solutions and using two breath samples provided by the chemist conducting the calibration. Willey personally calibrated Intoxilyzer 9000 SN 90-001862 on March 4, 2024<sup>282</sup> and April 22, 2024.<sup>283</sup> The results show the Intoxilyzer device accurately reported the BAC of the certified solutions, detected acetone interference, and was functioning properly.<sup>284</sup> Accordingly, Willey

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recording of the statements were contemporaneous with his or her actions; (3) that the declarant made the record in the regular course of business activity; and (4) that such records were regularly kept."); *Vickers*, 2010 WL 2299001, at \*3 (citing *Trawick v. State*, 845 A.2d 595 (Del. 2004)).

<sup>&</sup>lt;sup>277</sup> State v. McCoy, 2012 WL 1415698, at \*3 (Del. Super. Feb. 12, 2012).

<sup>&</sup>lt;sup>278</sup> *Id.* (citing *U.S. v. Console*, 13 F.3d 641, 657 (3d. Cir. 1993)).

<sup>&</sup>lt;sup>279</sup> *Console*, 13 F.3d at 657.

<sup>&</sup>lt;sup>280</sup> Mar. 26 Tr. at 61.

<sup>&</sup>lt;sup>281</sup> *Id.* at 82–90.

<sup>&</sup>lt;sup>282</sup> State Ex. 5.

<sup>&</sup>lt;sup>283</sup> State Ex. 6.

<sup>&</sup>lt;sup>284</sup> State Exs. 5–6.

executed a CMI Intoxilyzer Model 9000 Certification Sheet, certifying that this device was "working properly and accurately."

Additionally, during Brown's test, Agnor noted no issues with the functionality of the device and there were no error messages generated.

The Court is satisfied that the State has established that the Intoxilyzer 9000 SN 90-001862 was functioning properly at the time of Brown's test.

### 2. Was the test properly administered?

To satisfy its burden, the State must show two things. First, that the operator was certified to conduct a test on the Intoxilyzer 9000. Second, that the operator properly administered the test. Agnor was trained and certified to operate the I-9000, after which he received an operator card valid for three years. The I-9000 does not permit a test to begin until the operator confirms his or her credentials by scanning an operator card. Thus, Agnor was certified at the time of Brown's test. And as discussed above, Agnor properly administered the test on Brown.

Accordingly, the Court finds that the State has carried its burden to lay foundation for the admissibility of the Intoxilyzer 9000's results. The Motion in *Limine* is GRANTED.

VI. Conclusion

Compelling Brown to submit to a chemical breath test is subject to Fourth

Amendment protections. It is the State's burden to prove probable cause existed to

compel the test. Under the totality of the circumstances, through Agnor's

observations and the result of various field tests, the State has shown that probable

cause existed. Therefore, Brown's Motion is **DENIED**.

The Intoxilyzer 9000 is Delaware's newly deployed EBT device. It uses the

same IR technology as its predecessors, the Intoxilyzer 4011AS, 5000, and 5000EN.

This technology satisfies the rigors of DRE 702 and Daubert. The I-9000 is an

upgraded version of the I-5000 and none of the new features or customizations

implemented by the DSPCL impact the reliability of the technology. The State

satisfied its burden to demonstrate that the Intoxilyzer 9000 is reliable and relevant.

The State also satisfied its burden to show that the particular Intoxilyzer 9000

used to test Brown was working properly and that Agnor was properly trained on the

device. Accordingly, the State's Motion in *Limine* is **GRANTED**.

IT IS SO ORDERED.

/s/Kathleen M. Miller

Kathleen M. Miller, Judge

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