[Land & Water Law Review](https://scholarship.law.uwyo.edu/land_water)

Volume 15 | Issue 1 Article 10

1980

Breathalizers: Should the State Be Required to Preserve the Ampoules?

Marvin James Johnson

Billie Ruth Edwards

Follow this and additional works at: https://scholarship.law.uwyo.edu/land_water

Recommended Citation

Johnson, Marvin James and Edwards, Billie Ruth (1980) "Breathalizers: Should the State Be Required to Preserve the Ampoules?," *Land & Water Law Review*: Vol. 15 : Iss. 1 , pp. 299 - 321.
Available at: https://scholarship.law.uwyo.edu/land_water/vol15/iss1/10

This Comment is brought to you for free and open access by Law Archive of Wyoming Scholarship. It has been accepted for inclusion in Land & Water Law Review by an authorized editor of Law Archive of Wyoming Scholarship.

BREATHALYZERS: SHOULD THE STATE BE REQUIRED TO PRESERVE THE AMPOULES?

> Beverage alcohol is fecal matter. Alcohol is not made of grapes or grain or other attractive foods. It is these which are devoured by the ferment germ, and the germ then evacuates alcohol as its waste product. The thought of swallowing the excrement of a living organism is not an aesthetic idea but people will do such things.[1]

Whatever one's personal preferences about alcohol may be, its use has become a part of American society. In response to the problems created by intoxicated drivers, all fifty states have adopted statutes governing the conduct of the drinking, driving public.[2] The central feature in all of these statutes is the legal fiction of "implied consent" to a chemical test for intoxication. This feature has become a "well accepted part of American Law."[3]

One of the chemical tests for intoxication that has achieved wide acceptance is the breathalyzer. In 1974, the California Supreme Court shocked users of the breathalyzer by holding that the state was required to preserve the ampoules used in the test to allow defendants the opportunity to conduct an independent analysis.[4] Since that decision, several states have made their own contribution to the question of preservation of both the breath and the ampoule. The purpose of this comment is to analyze existing case law on that question. A selected bibliography is included at the end of this article.

BREATHALYZER OPERATION

An understanding of the question of preservation of the ampoules necessarily rests on an understanding of the workings of the breathalyzer. In 1960, the Washington case of

Copyright© 1980 by the University of Wyoming

1. SMITH AND HELWIE, LIQUOR:THE SERVANT OF MAN 25 (1940).
2. Lerblance, *Implied Consent to Intoxication Tests: A Flawed Concept,* 53 ST. JOHN'S L. REV. 39, 49-50 n. 1 (1978).
3. *Id.*
4. People v. Hitch, 12 Cal.2d 641, 527 P.2d 361 (1974).

State v. Baker[5] set forth a concise description of the operation of the machine:

> The breathalyzer is a machine designed to measure the amount of alcohol in the alveolar breath and is based upon the principle that the ratio between the amount of alcohol in the blood and the amount in the alveolar breath from the lungs is a constant 2100 to 1.[6] In other words, the machine analyzes a sample of breath to determine the alcoholic content of the blood. . . .
>
> To operate the machine, the subject blows into the machine through a mouthpiece until he has emptied his lungs in one breath. The machine is so designed that it traps only the last 52½ cubic centimeters of air that has been blown into it. This air is then forced, by weight of a piston, through a test ampoule containing a solution of sulphuric acid and potassium dichromate. This test solution has a yellow hue to it. As the breath sample bubbles through the test solution, the sulphuric acid extracts the alcohol, if any, therefrom, and the potassium dichromate then changes the alcohol to acetic acid, thereby causing the solution to lose some of its original yellow color. The greater the alcoholic content of the breath sample, the greater will be the loss in color of the test solution. By causing a light to pass through the test ampoule and through a standard ampoule containing the same chemical solution as the test ampoule (but through which no breath sample has passed), the amount of the change in color can be measured by photoelectric cells which are connected to a galvanometer, a reading can be obtained from a gauge which has been calibrated in terms of the percentage of alcohol in the blood.

OVERVIEW OF PROSECUTION'S DUTY TO DISCLOSE

The question raised by defense counsel in drunk driving cases is whether important evidence has been suppressed by

5. 56 Wash.2d 846, 355 P.2d 806, 809 (1960).
6. *But see*, Comment, *Breath Alcohol Analysis: Can It Withstand Modern Scientific Scrutiny*, 5 N. KY. L. REV. 207-218 (1978) which questions the invariability of this ratio.

the usual police practice of destroying the test ampoule. The seminal cases in the area of the state's duty to disclose evidence are *Brady v. Maryland*[7] and *United States v. Agurs.*[8] Both cases provide that the touchstone as to whether the state should disclose certain evidence is whether the defendant was afforded a fair trial, a substantive due process formulation. To that end, *Brady* held that 'the suppression by the prosecution of evidence favorable to an accused upon request violates due process where the evidence is material either to guilt or punishment, irrespective of the good faith or bad faith of the prosecution."[9] Examination of this holding discloses that to establish a violation of the *Brady* rule, an accused must show: (1) evidence which is favorable to him; (2) such evidence was in the possession of the prosecution at some time; (3) the evidence was suppressed and not made available to the accused on his request therefor; and (4) the evidence was material either to the issue of the accused's guilt or punishment.[10]

In general, elements two and three of this reformulation of *Brady* are easily met by an accused. The police conduct many of the breathalyzer tests, and the prosecution is responsible for information known by the police and other investigators directly connected with the prosecutor's office.[11] As for element three, "suppress" is defined as "to put a stop to a thing actually existing."[12] Thus, according to this definition, the ampoule, by its destruction, has been suppressed. Evolving case law since *Brady* indicates that "[s]uppression has consistently been used synonymously with nondisclosure."[13] Since the *Brady* holding applies "irrespective of the good faith or bad faith of the prosecution,"[14] it seems clear that even where the prosecution

7. Brady v. Maryland, 373 U.S. 83 (1962).
8. United States v. Agurs, 427 U.S. 97 (1976).
9. Brady v. Maryland, *supra* note 7, at 87.
10. Edwards v. Oklahoma, 429 F. Supp. 668, 671 (W.D. Okla. 1976).
11. WHITEBREAD, CONSTITUTIONAL CRIMINAL PROCEDURE 281 (1978). Note that the prosecution may not be responsible for information known by law enforcement agencies of another governmental entity. *Id.*
12. BLACK'S LAW DICTIONARY 1291 (5th ed. 1979).
13. WHITEBREAD, *supra* note 11, at 281, citing Evans v. Janing, 489 F.2d 470, at 474 (8th Cir. 1973).
14. Brady v. Maryland, *supra* note 7, at 87. Note also WHITEBREAD, *supra* note 11, at 282 n. 26.

destroys the ampoule in good faith, it has been "suppressed." The other elements of *Brady*, however, are not so easily met by an accused.

The Requirement That The Evidence Be Favorable To The Accused

The result of the breathalyzer test is not conclusive of the guilt of the accused, but only raises a rebuttable presumption of intoxication. Assuming that the ampoule was saved and given to the defense, the only use that could be made of it would be to impeach the credibility of the breathalyzer, or possibly the operator. The question then arises as to whether impeaching evidence is "favorable" evidence. The South Dakota Supreme Court answered the question in the negative in the 1979 case of *State v. Helmer*,[15] when it construed the "favorable" requirement to mean that the evidence must be exculpatory. It then defined "exculpatory" as "evidence which tends to negate the guilt or support the innocence of the accused," as distinguished from "evidence which is merely collateral or impeaching."[16] Given this construction of "favorable," an accused could never meet this requirement. While *Helmer* did not make this distinction, perhaps the better rule would be to allow impeaching evidence of this type to meet the requirement where the *only* evidence against an accused is the result of the breathalyzer test.

The Requirement Of Materiality

The United States Supreme Court explained its understanding of materiality in *United States v. Agurs*.[17] The Court stated that "[t]he mere possibility that an item of undisclosed information might have helped the defense, or might have affected the outcome of the trial, does not establish 'materiality' in the constitutional sense."[18] Thus, the accused must do more than indulge in idle speculation as to the benefits to be gained by attempting to retest the ampoule.

15. State v. Helmer, ___ S.D. ___, 278 N.W.2d 808 (1979).
16. *Id.* at 811-812.
17. United States v. Agurs, *supra* note 8, at 109-110.
18. *Id.*

Furthermore, constitutional error is not committed when evidence is excluded unless it would have created a reasonable doubt that did not otherwise exist.[19] In *Edwards v. State of Oklahoma*[20] the court held that, under *Agurs*, impeaching evidence would not rise to the level of creating a reasonable doubt that did not otherwise exist where there was other evidence of the defendant's guilt. Therefore, it would seem that to establish materiality, the defendant must show some probable benefit to be gained by obtaining the evidence, and that it would create a reasonable doubt that did not otherwise exist. Following *Edwards*, that burden could not be met where there was evidence of defendant's guilt other than the results of the breathalyzer.

Several courts have held that where the implied consent statute provides a presumption of intoxication upon a certain blood alcohol percentage, the ampoule is obviously material.[21] Without the ampoule, there is no way to rebut the presumption of intoxication, therefore the defendant is denied due process of law. The error in applying this analysis indiscriminately is that the state may have a provision in its implied consent law which allows the defendant to have an independent blood test or urine test which may be used to challenge the results of the breathalyzer. Wyoming's provision is found in Section 31-6-105(d) of the Wyoming Statutes.[22] Cases in states with provisions similar to Wyoming's have considered the question and held that due process only requires that the defendant have *some* method of impeaching the results. If the defendant has the right to take an independent test which can be used to impeach the results of the breathalyzer, due process is satisfied; whether the defendant actually avails himself of this provision is immaterial.[23]

The most persuasive argument that the ampoule could not be material is that any retest of the ampoule would not

19. *Id.*
20. Edwards v. Oklahoma, *supra* note 10, at 671.
21. *See e.g.*, Garcia v. Dist. Ct., ____ Colo. ____, 589 P.2d 924 (1979); Scales v. City Ct. of City of Mesa, ____ Ariz. ____, 594 P.2d 97 (1979).
22. WYO. STAT. § 31-6-105(d) (1977).
23. *See e.g.*, State v. Helmer, *supra* note 15; State v. Canaday, 90 Wash.2d 808, 585 P.2d 1185 (1978).

be admissible in court. The general standard for the admissibility of scientific evidence is what is known as the *Frye* standard, originally set out in *Frye v. United States*.[24] The test is "whether the scientific principle from which deductions are made is sufficiently established to have gained general acceptance in the scientific community."[25]

> The rationale of the *Frye* standard is that expert testimony may be permitted to reach a trier of fact only when the reliability of the underlying scientific principles has been accepted by the scientific community. . . . In other words, scientists in the field must make the initial determination whether an experimental principle is reliable and accurate.[26]

Wyoming implicitly accepted the *Frye* standard in *Cullin v. State*.[27]

Therefore, if the ampoule were given to the defendant for retesting by his expert, the method of retesting must have gained the general acceptance of the scientific community to be admissible in court. But there is no generally accepted test with regard to retesting breathalyzer ampoules. In 1975, the Committee on Alcohol and Drugs of the National Safety Council, which is composed of the leading toxicologists and other scientists in the field of chemical tests for alcohol influence, unanimously adopted the following resolution, which is still in effect:

> Some issues have been raised in the California Supreme Court's decision in *People vs. Hitch* and allied cases in which the court held that chemicals and ampoules used in breath test cases must be preserved for possible pre-trial examination and analysis by defendants should they so demand it.
>
> A review of the scientific merits of this position has been made. It is concluded that, at the present time, a scientifically valid procedure is not

24. Frye v. United States, 54 U.S. App. D.C. 46, 293 F. 1013, 1014 (1923).
25. State v. Canaday, *supra* note 23, at 1188.
26. *Id.* Note, however, that some courts apply a relevancy standard as opposed to the *Frye* standard. See, Berger, *Courts Wrestle with Standards for Admission of Scientific Advances*, Nat. L. J. Sept. 24, 1979, at 22-23.
27. Cullin v. State, 565 P.2d 445, 457-458 (Wyo. 1977).

> known to be available for the reexamination of a breathalyzer ampoule, that has been used in the breath test for ethanol, in order to confirm the accuracy and reliability of the original breath analysis.[28]

Thus, because of the inadmissibility of retest results, there could not possibly be any material information gained through retesting the ampoule. While most courts have failed to consider this issue, those that have have held that the evidence was not material for this reason.[29]

Because the evidence would not be favorable to the accused or material to his defense, *Brady* does not require that the state preserve the ampoule for retesting by the defendant.

PEOPLE V. HITCH

The defendant, Warner Hitch, was arrested for driving under the influence of intoxicating liquor. Under California's implied consent law, he chose to have a test of his breath, and the officer administered a breathalyzer test at the jail. The officer followed the standard procedures, and the machine indicated a blood alcohol reading of .20%. After the test, the officer poured the contents of the test ampoule into a glass bottle and discarded the ampoule itself. The bottle was then delivered to the Ventura County crime laboratory which, according to its established policy, eventually disposed of the contents.[30]

Prior to trial, the defendant moved to suppress the results of the breathalyzer test on the ground that the destruction of the test ampoule and its contents deprived him of due process of law. After a hearing, the court granted defendant's motion to suppress and dismissed the action. The state appealed the dismissal; it was eventually reversed and remanded to the municipal court for trial. The California

28. Published and republished in JOURNAL OF FORENSIC SCIENCE, July 7, 1978, at page 432. A telephone call to the Committee on Sept. 20, 1979 confirmed that the resolution is still current.
29. *See e.g.* State v. Canaday, *supra* note 23, State v. Teare, 135 N.J. Super, 19, 342 A.2d 556 (1975).
30. People v. Hitch, *supra* note 4, at 363.

Land & Water Law Review, Vol. 15 [1980], Iss. 1, Art. 10

Supreme Court then granted a hearing.[31] That court subsequently held that where

> such evidence cannot be disclosed because of its intentional but nonmalicious destruction by the investigative officials, sanctions shall in the future be imposed for such nonpreservation and nondisclosure unless the prosecution can show that the governmental agencies involved have established, enforced and attempted in good faith to adhere to rigorous and systematic procedures designed to preserve the test ampoule and its contents and the reference ampoule used in such chemical test. The prosecution shall bear the burden of demonstrating that such duty to preserve the ampoules and their contents has been fulfilled. If the prosecution meets its burden and makes the required showing, then the *results* of the breathalyzer test shall be admissible in evidence, even though the ampoules and their contents have been lost.[32]

Ironically, Mr. Hitch was denied relief because the court made the holding prospective only.[33]

As the first major case to hold that the state is required to save the ampoules, *Hitch* became the cornerstone of motions to suppress based on the destruction of the ampoules. The case, however, is analytically defective.

The California Supreme Court blithely assumed that retesting was possible, based on the findings of the court below. There was no consideration as to the admissibility of any evidence gained from retesting.[34] As pointed out above, retesting procedures do not meet the *Frye* standard, and should therefore be inadmissible as evidence. This flaw renders the entire decision questionable.

The *Hitch* court also assumed that the ampoules were material because of the statutory presumption which arose when a person had a blood alcohol content of .10% or greater. The court itself pointed out that the defendant could have had an independent test, but failed to consider

31. *Id.* at 364 n. 2.
32. *Id.* at 369.
33. *Id.* at 370.
34. *Id.* at 364 n. 1.

Johnson and Edwards: Breathalizers: Should the State Be Required to Preserve the Ampou

what effect that might have on any due process problems.[35] Since the purpose of maintaining the ampoules and retesting them is to impeach the results of the breathalyzer, an independent examination could provide the same opportunity for impeachment. In fact, that opportunity would be greater, in light of the failure of retests to be admissible in court. Therefore, as discussed above, due process is satisfied by the opportunity to have an independent test.

Perhaps the most persuasive argument against *Hitch* is that it misapplies the *Brady* rule.

> The Hitch court found that it sufficed that there was a "reasonable possibility" that they [the ampoules] might constitute favorable evidence. This extension of the Brady Doctrine is not justified as a matter of constitutional law. Brady focused upon the harm to the defendant resulting from nondisclosure. Hitch diverts this concern from the reality of prejudice to speculation about contingent benefits to the defendant. Without regard to the culpability of the prosecution or the specific prejudice to the accused the rule would render constitutionally infirm every conviction in which there are missing items of evidence or evidence which may have been destroyed or damaged by careless or inept investigators. Historically, these have been matters to be argued to the jury as perhaps raising a reasonable doubt as to the strength of the prosecution's case.[36]

Interestingly enough, the predictions about every conviction where there is missing evidence becoming constitutionally infirm have not come to pass. This is largely because the California courts have been retreating from the literal language of *Hitch.*

In a 1976 case, *People v. Vera,*[37] the court rejected defendant's claim that the police should have preserved or photographed his latent fingerprints in place as a prerequisite to admission of fingerprint testimony. The defendant argued that this evidence could possibly have helped

35. *Id.* at 370 n. 7.
36. Edwards v. Oklahoma, *supra* note 10, at 671.
37. People v. Vera, 62 Cal.3d 293, 132 Cal. Rptr. 817 (1976).

him to impeach the testimony of the police fingerprint expert.[38] The court found that: (1) there were ways to frame a defendant through the use of fingerprints,[39] but this defendant had not provided any evidence that it could be done.[40] Additionally, the court stated it was uncertain that authorities unanimously agreed that a defendant could be so framed.[41] This sounds suspiciously like an argument based on *Frye* and *Brady*. (2) There was no testimony as to the problems that would be faced by law enforcement agencies if latent prints had to be preserved in place.[42] The *Hitch* court was unconcerned about such problems. (3) There was no evidence to support a charge of fabrication and the testimony was corroborated by other evidence.[43]

In another 1976 case, *People v. James*,[44] the court found that receipts destroyed by the prosecution would have seriously damaged the trial testimony of a co-defendant, but would have functioned primarily as impeachment. Since impeaching evidence would not have exculpated the defendant, he was not deprived of a fair trial by the destruction of the receipts. The court thus defined "exculpated" as establishing the innocence of the defendant,[45] and in doing so distinguished *Hitch*.

These cases illustrate that the California courts are reluctant to apply *Hitch* in many contexts and actually are retreating to a standard that more closely approximates the *Brady* Doctrine. In *Vera*, the defendant failed to demonstrate that the evidence was either favorable or material; in *James*, the defendant failed to demonstrate that the evidence was favorable (exculpatory).[46] Thus, the *Hitch* formulation ("reasonable possibility" that the evidence would be favorable) seems to be losing vitality.

38. *Id.* at 820.
39. *Id.* at 821.
40. *Id.* at 823.
41. *Id.*
42. *Id.*
43. *Id.*
44. People v. James, 56 Cal.3d 876, 128 Cal. Rptr. 733, 743 (1976).
45. *Id.*
46. *See e.g.* State v. Helmer, *supra* note 15.

Another interesting aspect of *Hitch* is that it has had little effect upon drunk driving prosecutions in California.[47] In *People v. Miller*,[48] the defendant was convicted of driving under the influence of intoxicating liquor. On appeal, the court was called on to decide whether *Hitch* should be extended to the results of all chemical tests of breath conducted by use of the "Omicron Intoxilyzer."[49] The court described the working of the Intoxilyzer this way:

> The subject's breath is captured in a metal chamber, infra-red energy of fixed intensity and wave length is passed through the chamber from one side to a photo-electric cell on the other side. Alcohol absorbs light of the fixed wave length. The device computes the loss of energy, translates the result in terms of the grams of alcohol per 100 milliliters of blood, and prints the result upon a card. In the prescribed operation of the device, clear air is first tested, then the breath of the subject. The chamber is then purged by blowing clear air through it, the clear air is tested, and all three results appear upon the printout card. The two tests of clear air constitute a test of the machine, and should show zero alcohol content. It is apparent that no test result, save the printout card, was available for preservation.[50]

The defendant claimed that had a breathalyzer been used, he could have had a sample for retesting; by using the Intoxilyzer, he was deprived of any possibility of retesting. The court rejected the argument that all evidence which can be reduced to preservable form by any means must be so transformed and then retained.[51] The court then placed its imprimatur on the Intoxilyzer.[52]

The effect of *Hitch* in California is as ironic as was the denial of the benefit of the decision to its namesake. In 1974, California was in the process of replacing the

47. Johnson, *The Supreme Court of California 1975-1976 Forward: The Accidental Decision and How It Happens*, 65 CAL. L. REV. 231-254 (March 1977).
48. People v. Miller, 52 Cal.3d 666, 125 Cal. Rptr. 341 (1975).
49. *Id.* at 342.
50. *Id.*
51. *Id.*
52. *Id.* at 343.

breathalyzer with the supposedly superior "Omicron Intoxilyzer."[53] Therefore, defendants are still being tested by a machine, the statutory presumption regarding intoxication still applies, but there is no sample for retesting.

PRESERVATION OF BREATH

A variation on the theme of preservation of the ampoules is preservation of the breath itself. As has been previously noted, in 1975 the California Supreme Court, in *People v. Miller*, found preservation of the breath outside the purview of the *Hitch* doctrine.[54] A year later the New Hampshire Supreme Court reached the same conclusion in *State v. Shutt.*[55] That court found that the New Hampshire implied consent statute made no provision for the preservation of breath because that bodily substance is not capable of being retained.[56] In formulating its decision, the court referred specifically to the statute, finding no express or implied mandate to preserve the ampoules.[57] It stated that preservation of the ampoules would be analogous to the preservation of chemicals used in testing blood or urine, and noted that the statute also did not require preservation of such chemicals.[58] The New Hampshire statute in question provided detailed and exact safeguards in the breathalyzer testing procedure. Additionally, it provided the "due process safeguard of permitting defendant an additional test of his own performed by a person of his own choosing."[59]

Two 1979 cases discussing discovery requirements reached opposite conclusions on the question of preservation of the breath; the Oregon Court of Appeals, in *State v. Simpson*,[60] held that breath is not discoverable, and the Colorado Supreme Court, in *Garcia v. Dist. Ct.*,[61] held that the state has a duty to preserve such samples.

53. Johnson, *supra* note 47.
54. People v. Miller, *supra* note 48.
55. State v. Shutt, 116 N.H. 495, 363 A.2d 406 (1976).
56. *Id.* at 407.
57. *Id.*
58. *Id.*
59. *Id.* at 407-408.
60. State v. Simpson, ___ Or. App. ___, 594 P.2d 425 (1979).
61. Garcia v. Dist. Ct. ___ Colo. ___, 589 P.2d 924 (1979).

The applicable section of Oregon's discovery statute,[62] speaks of the disclosure of reports, statements or results of examinations intended to be offered into evidence at trial. Subsection (4) of that statute specifically refers to books, papers and tangible objects.[63] Defendant argued that his breath was a tangible object "because it could be perceived by at least one of the senses and could chemically react."[64] He sought to obtain the sample for retesting. The court concluded that the legislature, in formulating the statute, had not intended the term "tangible objects," as used therein, to include a breath sample.[65]

Analyzing defendant's contentions in terms of the statute, the court found that the ampoule was not a "result," but was part of the test mechanism.[66] The "result" was the blood alcohol reading, which is commonly offered into evidence. Taking the sample further from the statute was the fact that the district attorney did not intend to offer the ampoule into evidence.

The Colorado Supreme Court, reaching the opposite conclusion, found a violation of due process in the denial of discovery. Its reasoning was based, not on an analysis of the discovery statute, as in *Simpson*, but on its view of fundamental fairness and materiality.

> The state, of course, has no obligation to give defendant any blood alcohol test. (citations omitted.) However, fundamental fairness requires that, when the state does offer such tests, its decision to preserve a separate sample of evidence for independent testing in one case, but not in another, must bear a rational relation to some legitimate state interest.[67] (citations omitted.)

62. OR. REV. STAT. § 135.815 is similar in terms to WYO. R. CRIM. P. 18.
63. State v. Simpson, *supra* note 60, at 425.
64. *Id.* at 428.
65. *Id.*
66. *Id.*
67. Garcia v. Dist. Ct., *supra* note 61, at 929 n. 3. A telephone call to the Denver District Attorney's Office, Sept. 28, 1979, elicited the assurance that Colorado is in compliance with the requirements of *Garcia* that a sample of the breath be preserved for the accused. Three districts, including Denver, have purchased new systems, Intoximeters, manufactured in Mintern, Colorado. These machines each cost $4,000.00, and the samples cost about $.60 apiece. Other districts have retained their Gas Chromatograph systems and are using the Mobat system to preserve a separate breath sample for the accused.

The court held that where the defendant submits to a breath test to determine his blood alcohol content, and the state intends to use that test as evidence, the state must furnish defendant with a separate sample of his breath "in a manner which will permit scientifically reliable independent testing."[68]

Note that Colorado, unlike New Hampshire or Wyoming, does not provide the accused with the opportunity to obtain an independent test of intoxication. It does, however, provide that separate samples of an accused's blood or urine, taken for the intoxication test, be preserved in order that the defendant may test them for impeachment purposes. The holding of *Garcia* is a logical extension of the statute to samples of breath. The limitation of the statute makes more obvious the court's opinion that failure to collect and preserve potentially exculpatory evidence, when such could be done as a "mere incident to a procedure routinely performed" is "tantamount to suppression of that evidence."[69] Colorado's statute, when supplemented by Justice Erickson's due process analysis, becomes more closely aligned with implied consent statutes offering an independent test to an accused.

LAUDERDALE V. STATE

In 1976, an Alaska resident sought review of the denial of the opportunity to test the reliability or credibility of the results of a breathalyzer test. He appealed from the Superior Court's reversal of the trial court's order to suppress results of a breathalyzer test. The Superior Court found that "the expert testimony did not meet the test of establishing that preservation and subsequent analysis of the ampoules would provide scientifically reliable data that would materially assist the petitioner's case."[70]

The Alaska Supreme Court held "that there was plausible evidence that could be derived from later testing of the test ampoule which could bear upon the propriety of the

68. Garcia v. Dist. Ct., *supra* note 61, at 930.
69. *Id.* at 929-930.
70. Lauderdale v. State, 548 P.2d 376, 379 (Alaska 1976).

Johnson and Edwards: Breathalizers: Should the State Be Required to Preserve the Ampou

examination of the ampoule in the breathalyzer machine. . . ."[71] In so holding, that court sought to get around the "favorable evidence" requirement of *Brady* by analogizing the denial of an opportunity to retest the ampoule with the denial of cross-examination, thus making the former a denial of due process, an error of constitutional dimensions.

> A denial of the right to make such analysis, that is to say, to "cross-examine" the results of the test, would be reversible error without any need for a showing of prejudice. It would be a denial of a right to a fair trial, and a fair trial is essential to affording an accused due process of law.[72]

While *Brady*, and Alaska Criminal Rule 16(b)(7), require that the evidence sought to be discovered by the defendant be shown to be material, the *Lauderdale* court found, under its cross-examination analogy, that reasonable latitude should be afforded the petitioner. Just as a cross-examiner could not know in advance what pertinent facts might be brought out by his cross-examination, so the petitioner need not state to the court what facts his analysis might develop. "Cross-examination . . . is a matter of right, and the purpose of that right is to attempt to bring out facts which will tend to discredit the witness by showing that his testimony was untrue."[73]

The court reasoned that the materiality requirement as to the ampoule was satisfied by the fact that a rebuttable presumption of intoxication was raised by the statute.[74] It stated that the favorableness of the evidence obtained from the ampoule would not be known until after the ampoule had been subjected to a "cross-examination" of study and analysis.[75] It further found that no accurate means of re-running the test existed, but that a test on the used ampoule could be made, and if different results were obtained, "the original results would be suspect. The reason for this is that

71. *Id.* at 379.
72. *Id.* at 381.
73. *Id.* at 381.
74. *Id.* at 380; *Accord*, Scales v. City Ct. of City of Mesa, ____ Ariz. ____, 594 P.2d 97 (1979); People v. Johnson, 74 Cal.2d 205, 141 Cal. Rptr. 418, 422 (1977).
75. Lauderdale v. State, *supra* note 70, at 381.

the passage of time, with the chemical changes in the solution in the ampoule, would normally cause the test results to show an increase in blood alcohol."[76] The finding that it is not possible to "rerun a test and obtain accurate results" is inconsistent with the impeachment value the court placed on the "test of a used ampoule." One is as much a retest of the ampoule as the other.

The court's analysis is circular and somewhat difficult to reconcile. It would seem to follow from its finding that no reliable method of rerunning the test exists, that evidence obtained from *any* retest would be unreliable. Unreliable evidence is inadmissible because of its unreliability, irrelevancy and immateriality.

Admittedly, on cross-examination, counsel is allowed wide lattitude in his "questioning." The evidence he seeks to have admitted in that cross-examination is, however, limited by the same rule of relevancy as is the evidence sought to be admitted on direct examination.[77] Unreliable evidence would not be relevant in that it would not *logically* tend to influence the issue, that being the guilt or innocence of the accused.[78] If the presumption raised by the statute is in controversy, unreliable evidence would not rationally rebut that presumption. Unreliable evidence would not meet the *Agurs'* standard of materiality, as it would not have a legitimate bearing on the case. "It necessarily follows that if the omitted evidence creates a reasonable doubt that did not otherwise exist, constitutional error has been committed."[79] While results of a retest, admittedly inaccurate, might create a doubt in the mind of the trier of fact which did not otherwise exist, that doubt could not be reasonable in view of the unreliability of those results.

The analogy of retest to cross-examination is unwieldy. The rules of evidence speak in terms of cross-examination of a person, not an inanimate object. The *Lauderdale* court further muddies the water by distinguishing this situation

76. *Id.* at 379-380.
77. McCORMICK, EVIDENCE §§ 184-185 (2d. ed. 1977).
78. *Id.*
79. United States v. Agurs, *supra* note 8, at 112.

from an earlier one in which the evidence in question, a quantity of what appeared to be a narcotic drug, was used up by the prosecution in its analysis.[80] It would seem, from the court's discussion, that if the breath were sampled in such a manner that it was entirely consumed in the analysis, the defendant would have no right to suppress the results because there would be nothing left for him to "retest." This is confusing because it seems to be a more direct example of a denial of cross-examination. Logically, the *Lauderdale* court should have reasoned that when a sample is entirely destroyed by the testing procedures, it is analogous to bad faith refusal by the prosecution to produce a witness, while at the same time seeking to use that witness' statement against the defendant.

It would seem that the course is clear in Alaska, as it was in California: a switch to the use of Intoxilyzers. Such a change, however, involves some expense. Alaska law enforcement agencies have instead chosen to keep their Breathalyzers, and comply with the *Lauderdale* holding by keeping the ampoules in any makeshift manner they can devise.[81] In one and one-half years, Deputy District Attorney Edward F. Peterson of Anchorage, Alaska, has yet to see an ampoule retested.[82]

EVIDENCE TO BE GAINED FROM RETESTING THE AMPOULES

While courts generally recognize that there is currently no acceptable method of retesting the ampoule, they sometimes require its preservation for physical examination.[83] Perhaps the most comprehensive laundry list of items determinable from such a physical examination is found in *Scales v. City Court of City of Mesa.*[84] That court found

80. Lauderdale v. State, *supra* note 70, at 382.
81. A telephone call to the Anchorage office of the Alaska State Troopers, Sept. 25, 1979, found that office preserving the ampoules by taping the test ampoule to the reference ampoule, marking it for reference, and placing it in a board with holes drilled in it. The boards are then placed in a locked cabinet, but are not treated as evidence. The ampoules are periodically purged, after the date of appeal has passed.
82. Telephone conversation, Sept. 25, 1979, with Sgt. Hedle of the Alaska State Troopers, Anchorage, Alaska.
83. *See e.g.*, Lauderdale v. State, *supra* note 70.
84. Scales v. City Court of City of Mesa, ___ Ariz. ___, 594 P.2d 97 (1979).

measurements could be made of the volume of solution, the sulphuric acid and nitric acid content, and the thickness of the glass wall of the ampoule. Additionally, any imperfections in the glass and the existence of any foreign substance either inside or outside the ampoule could be detected.[85]

Many of these items in the *Scales* list are either superfluous or non-prejudicial to the defendant. The only feature critical to the Breathalyzer is the volume of solution in the ampoule,[86] which must be 3 ml. with a tolerance of plus or minus 0.1 mil. given by the manufacturer. A special gauge for measuring this volume accompanies the breathalyzer. One of the first steps on the checklist of the breathalyzer operator is to insert the ampoules into this gauge to measure the height, and thereby the volume, of the solution.[87] If the solution passes the gauge test, the ampoule is satisfactory. The breathalyzer result is inversely proportional to the amount of the solution; too little solution results in overestimation of the exact blood alcohol content, and vice versa.

Another function of the gauge is to test the diameter of the ampoules, which is controlled by the manufacturer to a tolerance of between 0.625 and 0.650 inch.[88] If there is too much play between the ampoule and the gauge, it is readily apparent, and, because of the bore of the gauge, it is impossible to fit an ampoule that is too large into the gauge.[89]

The strength of the solution is unimportant.[90] A stronger solution of potassium dichromate might reduce the sensitivity of the instrument, while a weaker than normal solution will give accurate answers unless it is too weak to utilize all the alcohol in the breath sample.[91] This weak

85. *Id.* at 99-100.
86. SMITH & WESSON, BREATHALYZER MAINTENANCE COURSE 2 (1975).
87. *Id.*
88. *Id.* at 3.
89. *Id.*
90. STATE OF WYOMING DEPARTMENT OF HEALTH AND SOCIAL SERVICES, APPROVED PROCEDURE FOR DIRECT BREATH TESTING ON THE BREATHALYZER 24, Retroactive and effective July 1, 1971 (Oct. 22, 1973).
91. SMITH & WESSON, *supra* note 86, at 2.

Johnson and Edwards: Breathalizers: Should the State Be Required to Preserve the Ampou

condition can be detected by a total lack of yellow color in the solution following the test.[92] Varying the sulphuric acid content beyond the stated limits only interferes with alcohol collection. Reduction in the sensitivity of the breathalyzer or failure to utilize all of the alcohol in the breath would cause an underestimation of the blood alcohol content, hardly a prejudicial result.[93]

Prior to beginning the test, two ampoules are placed in the breathalyzer and balanced photometrically. When this balance is achieved, each of the two photocells is receiving the same amount of light through the ampoules, and variations in line voltage affect each ampoule and photocell equally. The effect of any imperfections in the glass of the ampoules is negated by the balance. After accused's breath has been introduced into the test ampoule, the breathalyzer then measures any difference in light transmittal between the test ampoule and the reference ampoule.[94] A problem arises if either ampoule is then removed and reinserted. There is no known way of reinserting the ampoules in the same positions they were in prior to commencing the test. Removal and reinsertion would affect subsequent readings because of variation in refraction.[95] Therefore, the ampoule cannot be retested in the machine once it has been removed. The Alaska Supreme Court in *Lauderdale* asserted that a retest could be made, and if the readings were lower the results would be suspect; this is because the reaction of the alcohol with the chemicals would continue and over a period of time the expected result would be a higher reading.[96] In view of the concepts of photometric balance and refraction this assertion is obviously invalid.

The breathalyzer is not a specific test for alcohol. Other substances may react or interfere with the chemical reaction in the ampoule to give a false positive reading. As a practical matter, however, several factors combine to minimize or eliminate from consideration nearly every case of a false

92. *Id.*
93. *Id.*
94. STATE OF WYOMING DEPARTMENT OF HEALTH AND SOCIAL SERVICES, *supra* note 90, at 24.
95. State v. Bryan, 133 N.J. Super. 369, 336 A.2d 511 (1974).
96. Lauderdale v. State, *supra* note 70, at 379-380.

reading: (1) breathalyzers are designed solely for analysis of breath samples, therefore, other substances which could give a false reading must appear in the breath of living and conscious persons; (2) the reactions, conditions of time, temperature, sample volumes, and concentrations further sharply reduce the number of each volatile substance which can react with the breathalyzer reagents. For example, the reaction time of the solution with ethanol is 90 seconds.[97] Within this time, substances such as methyl alcohol, acetone, etc. will not react; extending the reaction time allows a variety of such substances to react;[98] (3) most of the potential interfering substances have highly characteristic and readily recognizable odors; (4) in traffic law enforcement it is unusual to find potential interferents in sufficient concentrations to significantly affect the breathalyzer reading. Thus, given the conditions under which most tests are run, the interference problem is of little importance.[99]

Many states run spot checks on a certain number of ampoules from every lot purchased to assure the quality of the ampoules. As long as the breathalyzer has been properly maintained and the operator followed the checklist, some courts have held that spot checks are sufficient prima facie proof that the chemicals in any one ampoule are of the proper kind and mixed in the proper proportions.[100] This is due primarily to the fact that the ampoule is a sealed container and must be broken to allow access to the solution. Once opened, an ampoule cannot be resealed.

As discussed above, the only critical factor regarding the breathalyzer is the volume of the solution. This can be discovered by cross-examination of the operator. Thus, physical examination of the ampoules would not yield any material information that could not be gained through cross-examination.

---

97. SMITH & WESSON, *supra* note 86, at 1.

98. *Id.*

99. COMMITTEE ON MEDICOLEGAL PROBLEMS, AMERICAN MEDICAL ASSOCIATION, ALCOHOL AND THE IMPAIRED DRIVER, A MANUAL ON THE MEDICOLEGAL ASPECTS OF CHEMICAL TESTS FOR INTOXICATION 103-104 (1973).

100. *See e.g.* State v. Baker, *supra* note 5; State v. De Vito, 125 N.J. Super, 478, 311 A.2d 753 (1973).

CONCLUSION

The driver who drinks is on notice that, when arrested for driving under the influence, he impliedly consents to a chemical test of his blood alcohol content, the results of which can be used against him. Wyoming's implied consent statutes provide that the accused be offered the opportunity to have that test conducted by a person or entity of his own choosing.[101] Another section in that chapter provides that the Department of Health and Social Services shall set forth the procedure for testing breath for intoxicattion.[102] That department has approved the use of a detailed checklist which is intended to insure that the certified operator tests the ampoule and conducts the breathalyzer test in an accepted manner.

The certified operator may be cross-examined as to his qualifications, the procedures he used, and the operation of the machine, including the balancing of the photometric cells, measuring of the ampoule size and volume, and the color of the solution. Though a rebuttable presumption of intoxication may arise, the breathalyzer result is not the only evidence supporting the charge. The arresting officer may be questioned regarding his belief that he had probable cause to arrest, as well as the experience upon which he based that belief.

The law in Wyoming contains no direction, express or implied, that the ampoules should be preserved.[103] As chemical testing units, the ampoules are more analogous to the chemicals used in the analysis of blood and urine than to physical evidence. Additionally, it is clear that preservation

101. WYO. STAT. §§ 31-6-102(a), 31-6-105(d) (1977).
102. WYO. STAT. § 31-6-105(a) (1977).
103. A recent opinion of the First Judicial District Court of Wyoming affirmed appellant's conviction for driving under the influence. One of the issues on appeal was the admission in evidence of the breathalyzer test, which appellant argued should have been suppressed because of the state's failure to produce the ampoule used in the test. The district court held that (1) appellant had failed to demonstrate that the ampoule was either favorable or material under *Brady*; (2) appellant had failed to produce any scientific evidence at trial that retesting of the ampoule was scientifically possible; and (3) appellant was afforded due process safeguards under Wyoming Implied Consent Law which allowed an independent test to impeach the breathalyzer. A copy of this opinion is on file with the LAND AND WATER LAW REVIEW and may be obtained by requesting *State v. McHenry*, Docket 15, No. 90, October 1, 1979.

of the breathalyzer ampoules is limited by some practical considerations. The ampoule contains sulphuric acid, which is extremely hazardous. Once the ampoule has been opened, it cannot be resealed, and preserving an open container of sulphuric acid can be dangerous. Even assuming that one would wish to take the risks inherent in preserving open vials of acid, there is no reliable, accurate means of retesting the ampoules. Viewed in this light, preservation of the ampoules becomes a hazardous exercise in futility.

If the *Hitch* rationale of theoretical materiality is accepted without limitation, its logical extension eventually would be the requirement that anything and everything having to do with the test be preserved and disclosed to the defendant. Ultimately, this could mean that the entire machine would have to be preserved, intact, just as it was immediately after the test. The ramifications in terms of cost and clutter are obvious. There would be an effective negation of the very statutes created to protect the public from the person who chooses to drink and drive.

The line must be drawn somewhere. Due process requires only that the defendant be afforded a fair trial. It does not require that the state hurdle every obstacle to grant the defendant's wishes. The better rule of reason is to draw the line short of the requirement of preservation of the ampoules used in the breathalyzer test.

MARVIN JAMES JOHNSON

BILLIE RUTH EDWARDS

BIBLIOGRAPHY OF MAJOR BREATHALYZER CASES ARRANGED BY STATE

Alaska

LAUDERDALE V. STATE, 548 P.2d 376 (Alaska 1976).

Arizona

STATE V. SUPERIOR COURT IN AND FOR COUNTY OF MARICOPA, 107 Ariz. 332, 487 P.2d 399 (1971).

STATE V. CANTU, 116 Ariz. 356, 569 P.2d 298 (1977).

SCALES V. CITY COURT OF CITY OF MESA, ____ Ariz. ____, 594 P.2d 97 (1979).

Johnson and Edwards: Breathalizers: Should the State Be Required to Preserve the Ampou

California
PEOPLE V. HITCH, 12 Cal.3d 641, 527 P.2d 361 (1974).
PEOPLE V. MILLER, 52 Cal.3d 666, 125 Cal. Rptr. 341 (1975).

Colorado
PEOPLE V. HEDRICK, 192 Colo. 37, 557 P.2d 378 (1976).
GARCIA V. DISTRICT COURT, ____ Colo. ____, 589 P.2d 924 (1979).

Illinois
PEOPLE V. GODBOUT, 42 Ill. App.3d 1001, Ill. Dec. 583, 356 N.E.2d 865 (1976).

Michigan
PEOPLE V. STARK, 73 Mich. App. 332, 251 N.W.2d 574 (1977).

Missouri
STATE V. BARKER, 490 S.W.2d 263 (Mo. 1973).

New Hampshire
STATE V. SHUTT, 116 N.H. 495, 363 A.2d 406 (1976).

New Jersey
STATE V. BRYAN, 133 N.J. Super. 369, 336 A.2d 511 (1974).
STATE V. DEVITO, 125 N.J. Super. 478, 311 A.2d 753 (1973).
STATE V. TEARE, 135 N.J. Super. 19, 342 A.2d 556 (1975).

Ohio
STATE V. WATSON, 48 Ohio App.2d 110, 355 N.E.2d 883 (1975).

Oklahoma
EDWARDS V. STATE OF OKLAHOMA, 544 P.2d 60 (Okla. 1975), aff'd 429 F. Supp. 668 (W.D. Okla. 1976), *reversed,* 577 F.2d 1119 (10th Cir. 1978).

Oregon
STATE V. MICHENER, 25 Or. App. 523, 550 P.2d 449 (1976).
STATE V. REAVES, 25 Or. App. 745, 550 P.2d 1403 (1976).
STATE V. SIMPSON, ____ Or. App. ____, 594 P.2d 425 (1979).
STATE V. GIBFORD, 40 Or. App. 77, 594 P.2d 858 (1979).

South Dakota
STATE V. HELMER, ____ S.D. ____, 278 N.W.2d 808 (1979).

Washington
STATE V. BAKER, 56 Wash.2d 846, 355 P.2d 806 (1960).
STATE V. CANADAY, 90 Wash.2d 808, 585 P.2d 1185 (1978).

Published by Law Archive of Wyoming Scholarship, 1980