IN THE STATE COURT OF GWINNETT COUNTY
STATE OF GEORGIA

GREGORY CHARLES UNDERWOOD, Individually, and as Administrator of the Estate of his deceased wife, ROBERTA ARLENE UNDERWOOD,	:	
Plaintiff,	:	CIVIL ACTION FILE NO. 05C-00951-1
v.	:	
BRIDGESTONE FIRESTONE NORTH AMERICAN TIRE, LLC; BYERS WELL DRILLING, INC.; FLOYD TRENNIS ELLIOT; PRO-FORMANCE CARRIERS, INC.; and SELECT TIRE, INC.,	:	
Defendants.	:	

MEMORANDUM OF LAW IN SUPPORT OF DEFENDANT BRIDGESTONE FIRESTONE NORTH AMERICAN TIRE, LLC'S MOTION TO EXCLUDE TESTIMONY OF JON M. CRATE

Bridgestone Firestone North American Tire, LLC respectfully submits this memorandum of law in support of its motion to preclude plaintiff's liability expert, Jon Crate, from offering at trial certain opinions that are neither reliable nor based on sound scientific methodology.

I. INTRODUCTION

In this case, plaintiff has identified Jon Crate as an expert who will testify as to causation regarding the failure of a Bridgestone truck tire. Crate is prepared to testify, generally, that the subject tire failed due to adhesion defects or lack of consolidation that occurred during the manufacturing process. Crate's testimony should be excluded as he

is not qualified to opine regarding tire failure and his testimony is not the product of reliable principles and methods.

II. BACKGROUND

On July 22, 2004, Floyd Elliot ("Elliot"), an employee of Byers Well Drilling, Inc. ("Byers"), was operating a 1994 Kenworth Truck eastbound on Georgia Highway No. 2 in Fannin County, Georgia, approaching its intersection with Forge Mill Road. As the Byers' truck approached the intersection, it veered to the right, left Georgia Highway No. 2 and struck a minivan operated by Roberta Underwood, which was stopped at the stop sign in the northbound lane of Forge Mill Road. The collision resulted in the death of Mrs. Underwood. Gregory Underwood, individually and as Administrator of the Estate of Mrs. Underwood, filed suit against Bridgestone Firestone North American Tire, LLC, Byers, Elliot, Pro-Formance Carriers, Inc. ("Pro-Formance") and Select Tire, Inc. ("Select Tire") to recover for damages resulting from Mrs. Underwood's death.

Plaintiff contends Elliot was negligent in operating the Kenworth truck too fast for conditions existing at the time. Amd. Cmplt., ¶ 14. However, defendants Byers and Elliot contend the right front tire (the "subject tire") of the Kenworth truck failed immediately before Defendant Elliot lost control of the truck. Amd. Cmplt., ¶ 16. The subject tire, a 385/65R22.5 Bridgestone M844 steel belted radial tire, was manufactured at Firestone's facility in Warren County, Tennessee during the 39th week of 1998. Little is known about the history of the subject tire during its first five and one-half years of existence. Deposition of Lon Dillard (hereinafter "Dillard dep."), taken June 14, 2005, pp. 26-27. On or about March 2004, Lon Dillard, president and co-owner of Byers, saw

the subject tire and a companion tire of the same type leaning up against the outside wall of defendant Select Tire. Dillard dep., pp. 9, 25. Although stored at Select Tire, the tires were owned by defendant Pro-Formance[1] (Johnny Thomas, president of Pro-Formance is also president of Select Tire). Deposition of Johnny Thomas (hereinafter "Thomas dep."), taken May 12, 2005, pp. 6-7. Mr. Thomas could not recall the exact origin of the tires, though believes they likely came off a truck he traded for. Thomas dep., p. 24-25. However, he didn't think the tires were worth anything because "[t]hey [were] just two big ol' rough tires." Thomas dep., p. 28. In fact, he recalled that Pro-Formance eventually took the tires to Select Tire "probably to get rid of them, scrap them or something." Thomas dep., p. 27. On April 1, 2004, Byers purchased the subject tire and its companion from defendant Pro-Formance and the tires were ultimately installed by defendant Select Tire. Defendant Byers Well Drilling Inc.'s Response to Plaintiff's Second Interrogatories and Request for Production of Documents, No. 3.; Dillard dep., p. 35.

At the time of purchase and installation, the five and one-half year old subject tire had been regrooved and had a load carrying capacity of 9,370 pounds at 120 p.s.i. of air pressure. Defendant Byers Well Drilling, Inc.'s Response to Defendant Bridgestone/Firestone North American Tire, LLC's First Request for Admissions, Nos. 3, 13 and 14. Regrooving is the process by which the existing tread grooves, on a tire marked "regroovable" on the sidewall, are deliberately deepened by cutting or burning to

[1] Defendant Pro-Formance is a truck bed manufacturer. Thomas dep., p. 5.

provide extended use.[2] A specific Federal motor carrier safety regulation provides that "[a] regrooved tire . . . shall not be used on the front wheels of any truck or truck tractor." 49 C.F.R. § 393.75(e). In direct violation of that regulation, the subject tire was installed on the right front of the Byers' Kenworth truck. Defendant Byers Well Drilling, Inc.'s Response to Defendant Bridgestone/Firestone North American Tire, LLC's First Request for Admissions, No. 1.

Plaintiff claims Defendant Pro-Formance was negligent in selling the subject tire to Defendant Byers and that Defendant Select Tire was negligent in installing the tire as they should have known that the tire was defective or otherwise unsafe for the intended use. Am. Cmplt., ¶¶ 29-31. Plaintiff further alleges Defendant Bridgestone Firestone designed, engineered, tested and manufactured the subject tire in a defective manner and brings claims for negligence, strict liability, failure to warn and implied warranty. Am. Cmplt., ¶¶ 21-27.

A. John Crate – Plaintiff's "Tire Failure Expert"

Plaintiff has identified Jon M. Crate to be called at trial as an expert witness for the purpose of offering his opinion that the subject tire failed as the result of a manufacturing defect. Crate, however, has repeatedly testified that he is not a tire expert. Deposition of Jon M. Crate, (hereinafter "Crate dep.") taken March 8, 2006, pp. 100-01. Indeed, he has no academic, industry or non-litigation experience with tires. Nor is he even an engineer. Crate received a degree in chemistry from the University of Central

[2] A Bridgestone diagram demonstrating the regrooving process is attached hereto as Exhibit "A" for illustrative purposes only.

Florida in 1980. Crate dep., p. 177. After college he worked a series of non-technical jobs, including managing fast food restaurants such as Wendy's, Arby's, Sadie's Buffet and Domino's Pizza; operating a pet shop for three years, and selling storm windows for Sears for three years. Id., pp. 113, 178.

In 1991, eleven years after obtaining his bachelor's degree, Crate took a job with Applied Technical Services ("ATS") in Marietta "doing . . . polymer science."[3] Id., p. 178. While at ATS he was involved in some litigation, but had no involvement with tires. Id., pp. 112-113. Instead, during his seven years at ATS, Crate worked with a variety of products unrelated to tires, including seat belts, heat dissipation vests, shopping cart wheels, brake fluid, golf balls and bee traps. *See* Deposition of Jon Crate, in Coleman Williams v. Daihatsu America, Inc., *et al.*, taken September 24, 2002 and October 2, 2002, relevant portions of which are attached as Exhibit "C", pp. 9-12.

From January of 1999 to July of 2002 Crate worked for the Georgia Tech Research Institute ("GTRI") as a research scientist. Crate dep., p. 123. In this position, Crate was required to find sponsors for live research projects. Crate dep., p. 124. In that capacity, he performed research projects for various industries, including glove and carpet manufacturers. In 2000, while working at GTRI, Crate obtained a Master of Science in Polymers from Georgia Tech.[4] In 1999, while working at GTRI, Crate formed

[3] In prior testimony Crate described polymers as including "all plastics, rubbers, coatings, paints, and composites made [of] different materials." Cooper Tire v. Mendez, 2006 WL 1652234, *7 (Tx S.C. 2006), attached hereto as Exhibit "B".

[4] Crate's Master's Thesis, entitled "Development of a Test System to Assess the Effectiveness of Adhesion Promoters in Glass and Thermoplastic Composites" did not involve tires.

a litigation consulting company named Failure Analysts, Inc. (now known as FAI Materials Testing Laboratory)("FAI"). Crate dep. 7, 180-81.

Crate abruptly resigned from GTRI on July 19, 2002. Id., p. 137. On that date, Crate was called to a meeting with his superiors and was confronted with the results of an investigation conducted by Robert Lang, GTRI's director of research security and compliance assurance. Id., pp. 128-29; 143-44. The results of Mr. Lang's investigation were presented in a thirty-one (31) page report. Id., p. 137. The investigation concerned such questions as Crate's use and conversion of equipment donated by the Centers for Disease Control and Crate's use of GTRI funds to purchase software for equipment owned by his personal company. Id., pp. 130-31; 134-35. In deposition, Crate portrayed his resignation as voluntary – the result of his unwillingness to put up with further investigation and his uncomfortable work environment. Id., pp. 140-145. However, Crate has previously testified in court that he resigned from GTRI under pressure. [5] *See* Trial Transcript, John Crate, Coleman Williams v. Continental General Tire, Inc., Civil Action No. 3:01-cv-184-N, N.D. TX, ("Williams, Crate Testimony"), November 20, 2002, p. 77, relevant portions of which are attached hereto as Exhibit "D".

Crate began working full time at FAI after his abrupt resignation from GTRI. Shortly after forming FAI, Crate was retained by a Plaintiff's attorney to serve as an "expert" witness in his first tire case on narrow chemical issues.[6] Crate dep., p. 109.

---

[5] Crate learned that General George Harrison, Director of GTRI, had issued instructions to fire him on July 19, 2002 if he did not resign. Crate dep., p. 137.

[6] One hundred percent of Crate's testimony in tire cases has been against tire manufacturers. Crate dep., p. 109.

However, prior to this retention, Crate had no experience with tire design, manufacture, or failure analysis. Id., p. 110. He has never taken a course in tire failure analysis or even developed a mentoring relationship with someone experienced in the field. Id., pp. 110, 112. In fact, aside from reading on his own and looking at failed tires Crate has had no training in tire failure analysis. Id., pp. 110-12.

Crate freely admits he has not sought or obtained any experience with tires outside of the litigation context. Id., p. 27. He has never attempted any scientific writing regarding tire failure or attended a scientific meeting where tire failure was discussed. Id., p. 98. He has also never designed a tire or tire component, participated in or seen the tire manufacturing process in person, or even been to a tire manufacturing plant for the purpose for understanding the manufacturing process. Crate dep., pp. 101-105. Most important, he has never performed tire testing independent of paid efforts in litigation. It is, therefore, not surprising that Crate does not consider himself an expert in tire design, tire performance or tire manufacture. Id., pp. 100-101. Crate has also testified that he does not consider himself an expert in the field of forensic tire examination. Id., p. 106.

Crate was first hired as an expert on narrow chemical issues. In his early testimony, Crate conceded that he is not an expert in tire design or manufacture, but then claim that he is a "materials scientist"[7] or otherwise scientifically qualified to testify about "the appropriateness of materials in certain places." *See* Williams, Crate Testimony, p. 13; William Aldrich v. General Motors Corporation, *et al*, Case No. 02-

[7] Crate describes materials science as "the science and study of – of the things around us. You can't point to something around us that's not a material, and how it functions and its strength is important to be able to predict and to use those parameters in – in manufacturing things around us."

416-NP, Circuit Court for the County of Ingham, State of Michigan, Deposition Testimony of Jon Crate, ("Aldrich, Crate dep."), September 4, 2003, pp. 39-40, relevant portions of which are attached hereto as Exhibit "E." In Aldrich, Crate admitted he was not an expert in tire manufacture or design, then explained his general materials theory:

> That's correct [that I am not an expert in the manufacture or design of tires], but you really need the caveat that as a polymer scientist and chemist, I do have opinions about materials and – and the appropriateness of certain materials in certain places. I feel like it's pretty clear, from an engineering standpoint, that it's not appropriate to use wax on the internal components of the tire."

Aldrich, Crate dep., p. 39. However, Crate is now claiming, apparently for the first time in this case, that he has a broader and more generalized tire failure analysis expertise.

B. Crate's Opinions and Lack of Methodology.

Crate's primary opinion is that the subject tire failed due to inadequate consolidation and adhesion of the rubber and steel components in the tire.[8] Crate dep., p. 151. He developed this opinion despite this being only his second time to examine a truck tire and first time to examine a tire that had been regrooved. Id., pp.. 14, 27.

Crate did not perform any scientific testing on the subject tire, confining his inspection to visual and tactile observations. He inspected the tire visually through

[8] Crate also expresses other opinions, however, none are central to his overall opinion that an adhesion defect, present at the time of manufacture, caused the subject tire to fail. For example, Crate is of the opinion that the regrooving was done according to regulations, yet he has no way to quantify how that process weakened the structure of the tire. Additionally, Crate had shearography testing on the companion tire performed by an outside company. Crate dep., pp. 35-39. This companion tire testing allegedly revealed belt edge separation Crate believes would have eventually led to failure. Id., pp. 35-37. Crate opined that this "may be" indicative of the same mechanism that caused the companion tire to fail, however, he would need to perform additional testing to verify his theory. Id., p. 41. He has not requested plaintiff's counsel allow him to perform this additional testing. Id.

photographic documentation and microscopic review. He also took rubber hardness measurements and x-rays of the tire.[9] Crate also measured the regrooving and found that the work was consistent with the federal regulations. Id., p. 19. He believes that regrooving, by its very nature weakens the structure of the tire, however, he does not have the ability to quantify or measure what effect the regrooving has on his analysis. Id., p. 20. During his inspection Crate found what he referred to as areas of accelerated tread wear, underneath which he allegedly found "signs of fatigue polishing consistent with an ongoing expanding separation." Id., p. 58. Crate also noted some belts have areas where it "looked like" they never had any rubber at all. Id., p. 64. Crate also noted certain fatigue bench marks and, in a picture taken with the assistance of a microscope, Crate claims to see a gloved hand print, which he alleges evidences incomplete consolidation. Id., pp. 72-73. Other than checking the DOT number imprinted on the tire Crate was unable to tell how long the tire had been in service. Id., p. 13. Although, he did note that the tread showed "considerable damage from off road use." Id., p. 57.

Crate did not employ a scientifically accepted methodology to arrive at his ultimate conclusion that the tire failure was caused by a manufacturing defect. In fact, Crate had great difficulty explaining how he reached his opinions. He noted that a "big part of the story" in determining whether a manufacturing defect caused a failure is to eliminate service related problems like overdeflection, underinflation, impact damage and punctures. Id., pp. 147-148. Once the service related causes were eliminated Crate then

[9] The rubber hardness test and the x-rays did not reveal any defects or otherwise support his opinions. Dep. 45.

relied solely on his visual inspection. Id., pp. 147-148. However, he could not describe and demonstrate use of an accepted methodology for converting observations into reliable conclusions. In fact, he only identified one such method photographic comparison, but could not demonstrate a single use of that method:

> Q - Are there some accepted methods of examining tires that you're pointing to in the engineering or scientific community that you followed to reach your conclusion that there was an adhesion or other defect in the properties of this tire, published materials?
>
> A - One is to compare microscope pictures that you have in your situation to other published microscope images.

Crate dep., pp. 89-90. However, Crate could not show a single photograph of a comparable tire in published literature that demonstrated what he claimed is an adhesion defect in the subject tire. Crate dep., pp. 91-98. When pressed on this point, Crate finally offered an article by C.C.J. de Jong:

> Q - What I am getting at is, is there a figure in this article that you're pointing to and say this shows the kind of lack of adhesion that I saw was present in this tire, is there one of those figures that does that? If there is, just tell me which one it is.
>
> A – Yes, to some degree these are – [figures] 22 and 23 are cords that show wear and they're bare.

Id., p. 97; C.C.J. de Jong, Steel Cord: Analysis of Used Truck Tires and Simulation of the Found Phenomena in Laboratory Experiments, Tire Reinforcement and Tire Performance, 1979, Crate dep., Exhibit "31," attached hereto as Exhibit "F." However, Crate did not employ his own photographic comparison "methodology" with the figures in the de Jong article. If he did, the results would have proven figures 22 and 23 irrelevant as they are related to a discussion by de Jong about cord fretting in worn tires

that has nothing to do with adhesion.[10] Figures 22 and 23 are used in conjunction with a discussion regarding carcass cord constructions (not belt cords at issue here) and whether certain types of cord constructions with a steel cord wrapped around the steel bundle could account for some of the cord fretting that they observed when they were evaluating the residual tensile strength of carcass cords in worn tires. Crate dep., Ex. 31. These figures and the analysis involved have nothing to do with adhesion. Id. Clearly, Crate did not employ his own "methodology."

C. Other courts have found Crate unqualified to opine regarding alleged manufacturing adhesion defects in tires.

Other courts have refused to allow Crate to testify regarding tire failure given his lack of objective experience. In a June 16, 2006 opinion, the Texas Supreme Court found that Crate was not qualified to testify regarding alleged adhesion defects in tires. Cooper Tire & Rubber Company v. Mendez, 2006 WL 1652234 (TX S.C. June 16, 2006) *See* Exhibit "B." In Cooper, Plaintiff called on Crate to testify regarding the affect of wax on tire adhesion. He "opined that . . . wax would adversely affect adhesion, though he could not identify 'any testing that has been performed by anyone that addresses the effects that wax has on the bonding between the tread and the belt of a tire.'" Cooper Tire, 2006 WL 1652234, at *7. Once again, in the Cooper Tire trial, Crate "conceded . . . that he does not consider himself an expert in tire design, does not consider himself a forensic tire examiner, and does not hold himself out 'as having any expertise in the field of tire

[10] In fact, de Jong discusses "adhesion" in the article, but in a different section from figures 22 and 23. *See* Crate dep., Ex. "31," p. 75.

manufacturing.'" Id. The Court noted that '[t]ire chemistry and design and the adhesion properties of tire components is a highly specialized field" . . . . and further noted that Crate "has no specialized expertise in tire chemistry." Id. The Texas Supreme Court ultimately held that the trial court should have excluded Crate's testimony, concluding that "without more specialized education, training, or experience in tire chemistry, Crate was not qualified to testify [in the case]." Id., at *8.

Similarly, in a separate 2004 opinion, the Texas Court of Appeals held that Crate was not qualified to offer an expert opinion regarding "whether the [subject] tire failed because of an adhesion defect present at the time of manufacture." Goodyear Tire & Rubber Company v. Rios, 143 S.W.3d 107,116 (Tx. App.) (cert. denied) (a copy of which is attached hereto as Exhibit "G."). The Goodyear case involved a tire separation on a nine year-old used tire. Goodyear Tire, 143 S.W.3d 107,110. In overturning a plaintiff's verdict, the Court of Appeals held that the trial court abused its discretion in admitted Crate's testimony. Id. at 115-116 (noting that "[t]he determination of whether an expert witness is qualified to testify is left largely to the trial court's discretion, and we will not disturb it on appeal absent a showing that the court abused that discretion."). The Court specifically found that

> [a]lthough Crate's background includes research generally into the adhesion properties of various metals, none of his experience is specific to tires. He has no background in tires, and does not consider himself and expert on them. He admitted the vast amount of his experience in failure analysis has been related to products other than tires.

Id. at 116. In addition, the Court noted that "[n]one of the texts upon which he relied to give his opinion in this case are specific to tires. Instead, the focus of the texts is

adhesion, failure, and fracture surfaces generated on various surfaces." Id. The Texas Court of Appeals ultimately held that "[a]lthough [Crate's] background may have enabled [him] to discuss adhesion failures generally, he was not qualified to opine on whether the [subject] tire failed because of an adhesion defect present at the time of manufacture." Id.

Similarly, other courts and plaintiffs' attorneys have recognized Crate's limitations. In Coleman Williams v. Continental General Tire, Inc., the district judge ordered that while Crate could testify generally regarding chemistry, polymers and fractography, he could not testify regarding tire design or manufacturing. *See* Judge David Godbey's November 14, 2002 Order attached hereto as Exhibit "H." Additionally, in Jose E. Hernandez, *et al.* v. Continential Tire North America, Inc., Cause No. 6746, Presidio County, Texas, Plaintiffs' counsel agreed to not offer Crate as a causation witness. The specific agreement filed with the Court noted that

> Plaintiffs have agreed to limit the testimony of Jon Crate to his factual observations from his physical examination of the subject tire. Crate will not offer any causation testimony/opinions related to how or why the subject tire failed. Crate will not be permitted to identify any condition in the tire evidence as a defect.

Hernandez v. Continential, Agreement of Counsel, filed October 5, 2005, attached hereto as Exhibit "I."

III. ARGUMENT AND CITATION OF AUTHORITY

Crate's proposed expert testimony should be excluded for two reasons: 1) as two appellate courts have found, Crate is not qualified to opine as to purported adhesion related manufacturing defects; and 2) even if Crate is qualified, his testimony should be excluded because it is not the product of reliable principles and methods.

A. Crate is not qualified to testify in this case.

The Court should exclude Crate's testimony as he is not qualified to render an opinion regarding tire failure analysis and alleged tire manufacturing defects. An expert's qualifications must be capable of objective proof. A witness's mere assertion that he knows an area or is an expert is not good enough. Goodman v. Lipman, 197 Ga. App. 631, 399 S.E.2d 255 (1990). Indeed, "[c]onclusory statements as to a witness' 'knowledge' or 'familiarity', in a particular art, skill or science are not probative in determining the witness' qualifications as an expert witness. Such determination must be based on evidence of the witness' education, training or experience in the pertinent field of study." Goodman, 197 Ga. App. 631, 633. Crate's qualifications are not capable of such proof.

As described in detail in Section II. A. *supra*, and as recently held by the Texas Supreme Court and Court of Appeals, Crate is not qualified to testify as a tire failure expert. Crate has no academic, industry or non-litigation experience with tires. *See* Taylor v. State, 261 Ga. 287, 404 S.E.2d 255 (1991)(noting that "[t]he expert witness's background must show some experience or training in the matters for which he claims expertise." Paul S. Milich, *Courtroom Handbook on Georgia Evidence*, p. 157 (2004 ed.)). He has not offered any of his theories to the crucible of peer review. Crate dep., p. 98. He has never even attended a study course or a meeting where tire failure analysis was discussed. Id., p. 98, 110. Crate has even shunned the possibility of working with a mentor in the field. Id., p. 112. By turning his back on tried methods of training and learning, it is impossible for Crate to reliably evaluate his opinions:

Q - Is there a known rate of error in any of the observations you did or made?

A - Not that I know of.

Crate dep., p. 88.

Furthermore, Crate has admitted his lack of qualifications to opine regarding an alleged adhesion defect in the subject tire's manufacture by testifying that he does not consider himself an expert in tire manufacture or forensic tire examination. Id., pp. 100-106. Accordingly, the Court should exercise its discretion and exclude Crate's testimony from this case. *See* Young v. State, 249 Ga. App. 563, 564-65, 548 S.E.2d 674 (2001) (internal citations omitted) ("It is a matter within the sound discretion of the trial judge as to whether a witness has such learning and experience in a particular art, science or profession as to entitle him to be deemed prima facie an expert.").

B. Crate's Opinion Should Be Excluded Under Daubert.

An amendment to the Georgia rules of evidence effective in February 2005 changed the standard for admissibility of expert opinion testimony. The amended statute provides that an expert may testify as to an opinion based on specialized or technical knowledge if it will assist the trier of fact, if the testimony is based on facts that will be admitted in evidence, and if the testimony is reliable:

> If scientific, technical or other specialized knowledge will assist the trier of fact in any cause of action to understand the evidence or to determine a fact in issue, a witness qualified as an expert by knowledge, skill, experience, training, or education, may testify thereto in the form of an opinion or otherwise, if: (1) the testimony is based upon sufficient facts or data which are or will be admitted into evidence at the hearing or trial; (2) the testimony is the product of reliable principles and methods; and (3) the

> witness has applied the principles and methods reliably to the facts of the case.

O.C.G.A. § 24-9-67.1(b). This statute is now virtually identical to Federal Rule of Evidence 702, and provides that opinions from federal courts, decided under Rules 702 and 703, apply to state court challenges to expert testimony:

> In interpreting and applying this Code Section, the courts of this state may draw from the opinions of the United States Supreme Court in Daubert v. Merrill Dow Pharmaceuticals, Inc., 509 U.S. 979 (1993); General Electric Co. v. Joiner, 522 U.S. 136 (1997); Kumho Tire Co. Ltd. v. Carmichael, 526 U.S. 137 (1999); and other federal courts applying the standards announced by the United States Supreme Court in these cases.

O.C.G.A. § 24-9-67.1(f).

In a word, to be admissible an expert opinion must be reliable. Opinions, like Crate's, purporting to contain technical or specialized knowledge, at their core must be based on facts, and on reliable principles and methodology reliably applied to the facts of the case. Because Crate is not qualified to render an opinion regarding an alleged manufacturing defect in the subject tire and because his opinion is not based on accepted principles and methodology applied reliably to the facts in this case, his testimony should be excluded.

1. The Daubert Standard

The Supreme Court's decision in Daubert v. Merrell Dow Pharmaceuticals, Inc., 509 U.S. 579, 113 S. Ct. 2786 (1993), emphasized that trial courts are required to serve as evidentiary "gatekeepers" who must conscientiously screen expert testimony for relevance and reliability. This requires that the court ensure that such testimony

constitutes "good science" (509 U.S. at 593) and that findings are sufficiently "derived by the scientific method" or otherwise "supported by appropriate validation." Id., p. 509.

There is no question that the dictates of Daubert apply strongly and directly to the opinions at issue in the case *sub judice*. In the subsequent decision of Kumho Tire Co. v. Carmichael, 526 U.S. 137, 119 S. Ct. 1167 (1999), the Supreme Court abolished the distinction between scientific and technical evidence previously recognized by some courts and held that the opinions of an expert in a tire failure case merited Daubert scrutiny.

The opinions addressed in this motion plainly must pass Daubert's reliability and validity tests. Regardless of Kumho Tire, Crates opinion is obviously about science and invokes scientific principles. Crate's opinion purports to address a cause and effect relationship between certain physical, chemical, or mechanical conditions and the ultimate bonding or adhesion failure of the tire. Such relationships must depend upon scientific principles that can be tested and which, if true, can be peer reviewed and gain acceptance in a relevant scientific community. Absent such testing and acceptance, the opinion must be viewed as scientifically unsound and unreliable. Such is the case here.

In assessing the validity of a scientific theory or technique, the Supreme Court in Daubert and Kumho Tire enunciated a non-exclusive four factor test to be used in evaluating the admissibility of expert testimony: (1) Can the theory be tested? (2) Has the theory been subjected to peer review and publication? (3) What is the known or potential rate of error? and (4) Whether the theory is generally accepted? Daubert, 509 U.S. at 593-595, 113 S. Ct. at 2796-97; Kumho 119 S. Ct. at 1175. The application of

this test, and its essential purpose, is well defined by case law. Whether expert opinion testimony is supported by an adequate basis and is admissible is a matter of law to be determined by the trial judge. Boucher v. U.S. Suzuki Motor Corp., 73 F.3d 18, 21 (2d Cir. 1996); McCullock v. H.B. Fuller Co., 61 F.3d 1038, 1042 (2d Cir. 1995). When faced with a proffer of expert scientific testimony, the trial court must determine at the outset whether the reasoning or methodology underlying the testimony satisfies the Daubert test. Zuchowicz v. United States, 140 F.3d 381, 386 (2d Cir. 1998); McCullock, 61 F.3d at 1042; Arnold v. Dow Chemical Co., 32 F.Supp.2d 584, 586 (E.D.N.Y. 1999). The first issue to be resolved in determining the admissibility of expert testimony is whether the proffered testimony is "scientific knowledge." Daubert, 113 S. Ct. at 2796; O'Connor v. Commonwealth Edison Co., 13 F.3d 1090 (7th Cir. 1994), cert. denied, 512 U.S. 1222, 114 S. Ct. 2711 (1994). This task requires that the trial court consider whether the testimony has been subjected to the scientific method, as opposed to mere subjective belief or unsupported speculation. Porter v. Whitehall Laboratories, Inc., 9 F.3d 607, 614 (7th Cir. 1993). "The first and foremost significant Daubert factor is whether the scientific theory has been subjected to the scientific method." Bradley v. Brown, 42 F.3d 434, 438 (7th Cir. 1994). A theory has been subjected to the scientific method when it has "been adequately tested." Id.; see also United States v. Bynum, 3 F.3d 769, 773 (4th Cir. 1993)(scientific knowledge "is generated through the scientific method — subjecting testable hypotheses to the crucible of experiment in an effort to disprove them."), cert. denied, 510 U.S. 1132, 114 S. Ct. 1105 (1994); Stanczyk v. Black & Decker, Inc., 836 F. Supp. 565, 567 (N.D. Ill. 1993)("the most important factor is

whether the technique (or theory) being advanced by the expert can be or has been tested").

A leading decision of the Seventh Circuit construing Daubert notes that its basic object is "to make sure that when scientists testify in court they adhere to the same standards of intellectual rigor that are demanded in their professional work."[11] Rosen v. Ciba-Geigy Corp., 78 F.3d 316, 318 (7th Cir. 1996), cert. denied, 519 U.S. 819, 117 S. Ct. 73 (1996). As one District Court noted, "[e]xperts cannot float their conclusions on cushions of air; they must rest those conclusions upon foundations built from reliable scientific explanation." Navarro v. Fuji Heavy Industries, Ltd., 925 F. Supp. 1323, 1328 (N.D. Ill. 1996). The essential failing of Crate's opinions at issue here is that they show no adherence to such standards. They are based on no scientific analysis, no independent testing, and no independent body of accepted scientific information.

2. Application of Daubert to Crate.

Even if the Court finds Crate qualified to testify, his testimony should be excluded under Daubert because it is not the product of good science and not supported by appropriate validation. In fact, Crate's opinions fail under each of Daubert's four non-exclusive prongs as his theories can apparently not be tested, have not been subjected to peer review and publication, have no known potential rate of error and have not been generally accepted in the relevant scientific community. Additionally, like Kumho,

[11] Of course, this is impossible with a witness like Crate whose profession is providing testimony for plaintiffs in tire cases.

Crate's purported expert tire failure analysis should be excluded for its insufficient indications of reliability. Kumho Tire Co. Ltd., *et al.* v. Carmichael, *et al.*, 526 U.S. 137, 119 S. Ct. 1167, 143 L. Ed.2d. 238 (1999).

In Kumho, plaintiff's proffered expert, Dennis Carlson, like Crate, was prepared to testify that "[d]espite the tire's age and history . . . a defect in its manufacture or design caused [its failure]." Kumho, 526 U. S. 137, 143. Unlike Crate, however Carlson was apparently qualified to testify as a tire expert as he held a masters degree in mechanical engineering and worked ten years for a tire manufacturer. Id., p. 153. The trial judge expressed concern regarding "the methodology employed by [Carlson] in analyzing the data obtained in his visual inspection, and the scientific basis, if any, for such an analysis." Id., p. 143.

[T]he specific issue before the court was not the reasonableness in general of a tire expert's use of a visual and tactile inspection to determine whether overdeflection had caused the tire's tread to separate from its steel belted carcass. Rather, it was the reasonableness of using such an approach, along with Carlson's particular method of analyzing the data thereby obtained, to draw a conclusion regarding the particular matter to which the expert testimony was directly relevant.

Kumho, 526 U.S. 137, 153. The Court did not question that an expert "could draw a conclusion from a set of observations based on extensive and specialized experience." The question before the Court was whether "this particular expert had sufficient specialized knowledge to assist the jurors in deciding the particular issues of the case." Id., p.156. In preparing his opinion based on visual inspection, Carlson relied on a self-

made two-factor test. However, the Court found that "despite the prevalence of tire testing [plaintiff did not] refer to any articles or papers that validate Carlson's approach." Id., p. 157. In ultimately affirming the trial court's exclusion of Carlson's testimony, the Court noted that "[o]f course Carlson himself claimed that his method was accurate, but, as we pointed out in Joiner, 'nothing in either Daubert or the Federal Rules of Evidence requires a district court to admit opinion evidence that is connected to existing data only by the *ipse dixit* of the expert." Id.

Here, like in Kumho, Crate's testimony should be excluded. Like Kumho, Crate's opinion is formed solely on the basis of visual inspection without any scientific basis for analysis. However, unlike Carlson's analysis in Kumho, Crate's opinion was not even the product of a self-made methodology. The only methodology Crate could point to was photographic comparison – yet as shown in Section II. B. *supra,* it is highly questionable whether Crate even performed such a comparison. Essentially, Crate could not identify any accepted methods of examining and analyzing tires that he followed to reach his conclusion that there was an adhesion defect that caused the subject tire to fail. Moreover, Crate could not identify anything specific in a peer reviewed article that supported his opinion that a manufacturing defect led to the failure of the subject tire. He could only identify texts that were "[e]ssentially general reference materials . . . [having] to do with the building of tires [and] the failure of tires." Crate dep., pp. 48-49, 83-88. Therefore, this court should follow the lead of Kumho, and exclude Crate's opinion testimony in this case as it is not the produce of good science.

IV. CONCLUSION

Crate's opinions lack any foundation in scientific testing, and must be viewed as unreliable. As such, Crate's purported testimony will not assist the jurors in deciding the particular issues of the case. Accordingly, the Court should exercise its gatekeeper role and exclude the purported "expert" testimony of Jon Crate as he is not qualified to testify regarding alleged adhesion defects in tire manufacture and his opinions are not the product of objective science.

Respectfully submitted this 12th day of September, 2006.

HOLLAND & KNIGHT LLP

By: _____

Alfred B. Adams III
Georgia Bar No. 002300
Caroline Johnson Tanner
Georgia Bar No. 392580
John M. Hamrick
Georgia Bar No. 322079

Attorneys for Defendant Bridgestone Firestone North American Tire, LLC

Suite 2000, One Atlantic Center
1201 West Peachtree Street, N.E.
Atlanta, Georgia 30309-3453
(404) 817-8500
(404) 881-0470 (fax)

CERTIFICATE OF SERVICE

I hereby certify that I served a true and correct copy of **Defendant Bridgestone Firestone North American Tire, LLC's Memorandum of Law in Support of its Motion to Exclude Testimony of Jon M. Crate** on all parties to this action, or their attorney of record, by placing it in the United States Mail, first class postage prepaid, and properly addressed as follows:

Steven L. Beard, Esq.
Steven L. Beard, P.C.
324 Cherokee Street
Marietta, Georgia 30060

William D. Strickland, Esq.
Temple, Strickland, Dinges & Schwartz
3576 Covington Highway, Suite 100
Decatur, Georgia 30032

Warner S. Fox, Esq.
Shane Keith, Esq.
Hawkins & Parnell, LLP
4000 SunTrust Plaza
303 Peachtree Street, N.E.
Atlanta, Georgia 30308-3252

William T. Mitchell, Esq.
Cruser & Mitchell, LLP
Peachtree Ridge, Suite 750
3500 Parkway Lane
Norcross, GA 30092

This 12th day of September, 2006.

Attorneys for Defendant Bridgestone Firestone North American Tire, LLC

HOLLAND & KNIGHT LLP
Suite 2000, One Atlantic Center
1201 West Peachtree Street, N.E.
Atlanta, Georgia 30309-3453
(404) 817-8500
(404) 881-0470 (fax)