

FILED
United States Court of Appeals
Tenth Circuit

PUBLISH

UNITED STATES COURT OF APPEALS
TENTH CIRCUIT

August 29, 2012

Elisabeth A. Shumaker
Clerk of Court

UNITED STATES OF AMERICA,

Plaintiff - Appellee,

v.

WILLIAM C. ORR,

Defendant - Appellant.

No. 09-1351

Appeal from the United States District Court
for the District of Colorado
(D.C. No. 1:06-CR-00192-LTB-1)

Paul K. Grant, Parker, Colorado, for Defendant – Appellant.

James C. Murphy, Assistant United States Attorney (John F. Walsh, United States Attorney, Patricia Davies, Assistant United States Attorney, and Thomas O’Rourke, Assistant United States Attorney, with him on the brief), Office of United States Attorney, Denver, Colorado, for Plaintiff – Appellee.

Before **HARTZ**, Circuit Judge, **HOLLOWAY**, Senior Circuit Judge and **O'BRIEN**, Circuit Judge.

O'BRIEN, Circuit Judge.

For over twenty years, William Orr was a self-taught inventor and entrepreneur in the fuel additives industry. In 1991, he incorporated Octane International (Octane) to

further develop his alternative fuel combination, to provide capital for the costs of prosecuting and maintaining his various foreign alternative fuel patents, and to obtain approval of his United States patent application.¹ From 1991 through 2002, Orr and his business associates raised over 1.3 million dollars from Octane's investors. In October 2000, Orr's promotion of his fuel technology in Washington D.C. resulted in a congressional earmark of over 3.6 million dollars to test his ideas. In order to receive the grant, Orr created a non-profit corporation called the National Alternative Fuels Foundation (NAFF) and submitted to the Environmental Protection Agency (EPA), the entity charged with overseeing the grant, information necessary to begin the distribution of funds.

In 2004, the EPA began an investigation into the NAFF grant's expenditures and bookkeeping. In January 2005, the EPA suspended payment from the grant while the investigation continued. Eventually, the matter was referred to the United States Attorney's office to further investigate whether Orr had misled his investors or the EPA. Orr was indicted on May 18, 2006, and charged with numerous counts of wire fraud, mail fraud, making false statements to both Octane's shareholders and the government, as well as several counts of tax evasion. Following an eight-week trial, the jury found him guilty on all counts except three counts of tax evasion. His convictions were based, in large part, on various misrepresentations he made to his investors and the EPA regarding the

¹ Orr had patented a fuel formula in other countries such as Canada.

results of tests performed on his fuel and his progress in bringing the fuel to market.

On appeal from his convictions, Orr claims: (1) the district court erred when it allowed the scientists who tested his fuels to testify without qualifying them as experts; (2) the exclusion of certain defense witnesses deprived him of fair trial; and (3) the court erred in failing to grant a new trial in light of newly discovered evidence. We AFFIRM.

I. FACTUAL BACKGROUND

Orr's fascination with alternative fuels found its genesis in the wake of the oil crisis in the late 1970's. He saw the development of an alternative fuel company as an opportunity to be one of the first in an embryonic yet potentially lucrative international market. Orr's proposed alternative fuel was eventually composed of a formula which used certain proportions of an oxygenate, such as methanol or ethanol, in combination with a manganese compound containing sulfur (MMT) and unleaded gasoline. Over the years, he created several companies to pursue his interests.

A. Orr's Companies

In 1980, Orr enlisted several experienced petroleum scientists and businessmen and formed his first alternative fuels corporation, Ennergos, which operated until its collapse in 1984.² Sometime in the late 1980's, Orr became actively involved in opposing the EPA's proposed regulations under the Clean Air Act regarding the ingredients of a marketable fuel. Around the same time, Orr founded a non-profit

² Ennergos investors lost their investments.

organization called the American Constitutional Law Foundation (ACLF).³ In 1990, Orr met Scott Shires, an attorney and businessman, through Shires' involvement in the ACLKF. Eventually, ACLKF employed both men on a part-time basis.

In the early 1990's, Orr formed another non-profit organization called the National Alternative Fuels Association (NAFA).⁴ NAFA's purpose was to oppose EPA's proposed rules to remove sulfur content from fuels (sulfur was a component of Orr's alternative fuel). Orr believed the significant costs of implementing the proposed rules were unnecessary and based on inaccurate science.⁵ He maintained his fuel would achieve better economic and environmental results without the cost of removing sulfur.⁶

In 1991, Orr and Shires incorporated Octane International (Octane), a for-profit company. Orr was the president and Shires was secretary/treasurer. The board of

³ The ACLKF was financed through contributions. Orr was the executive director. The purpose of the organization was to lobby Congress for causes not revealed in the record. Orr's compensation took the form of "loans" which are generally not considered income for tax purposes. The loans were not repaid.

⁴ NAFA's formal membership was limited to Orr's company, Octane International, and one individual, Doug Chiappetta.

⁵ The Clean Air regulations did not allow MMT as a fuel component. In 1994, Ethyl Corporation received a waiver from the EPA approving fuel containing a small amount of MMT combined with unleaded gasoline. The waiver issued only after significant testing and a federal court order requiring EPA to grant the waiver.

⁶ After the regulations were adopted, NAFA filed a lawsuit against EPA in April 2000. The lawsuit eventually was dismissed without reaching the merits. Orr, through NAFA, continued to be involved in lobbying efforts through 2004.

directors consisted of Orr, Shires and Alden Kautz, an old friend and colleague of Orr's, and occasionally, Joe Belton, another friend of Orr's. The leaders at Octane recruited investors to fund the company.⁷ The money received was deposited into Octane's bank account and then immediately distributed to Orr's personal bank account, purportedly as a loan.

In October 2000, Orr learned he had successfully lobbied for and received a congressional earmark for over 3.6 million dollars to research his alternative fuels. The earmarked funds were to be distributed by the EPA to an as-yet unregistered non-profit corporation called National Alternative Fuels Foundation (NAFF). Shires, at Orr's request, completed the paperwork to register NAFF as a Colorado non-profit organization and NAFF engaged scientists to continue testing Orr's fuel.

B. Tests on Orr's Fuels

In late 1984, Orr applied for a United States patent on his alternative MMT fuel formula. Orr believed his fuel blend would be cheaper, cleaner and more efficient than the current fuels on the market.⁸ In late 1991, after the formation of Octane, Orr hired

⁷ Shires had a falling-out with Orr in 1992 over the repayment of a personal loan to Orr. Orr later contacted Shires to rekindle their relationship after the EPA had allowed MMT to be placed in certain fuels. From 1996 through 2004, Shires was active in procuring money from investors for Octane, keeping Octane's books and generally being Orr's right-hand man. In total, Shires personally invested \$105,000 in Octane.

⁸ Orr's fuel combination was originally referred to as "component Z, or C-Z" and later, "vapor phase combustion," or "VPC" fuel. (Vol. 7, Part 2 at 227; Vol. 7, Part 3 at 560.) We will simply refer to it as Orr's fuel.

William Marshall at the National Institute for Petroleum and Energy Research (NIPER), to conduct two series of tests.⁹ The first series tested Orr's fuel against two patented fuels and a "base fuel" or "reference fuel."¹⁰ (Vol. 7, Part 3 at 401) This stage of testing did not measure fuel efficiency or emissions other than hydrocarbons. The results showed less hydrocarbon emission from Orr's fuel than the other fuels. The second series of tests simulated road conditions. It measured fuel economy, mass emission rates, and grams per mile of hydrocarbons, carbon monoxide and nitrogen oxide. The data from the tests was transferred to "preliminary computer outputs" and sent to Orr in 1992.¹¹

In the fall of 1997, Orr showed up unexpectedly at Marshall's office. Orr appeared excited about some of the 1992 data and showed Marshall a graph based on that preliminary data set. Marshall replied, "[this] can't be right." (R. Vol. 7, Part 3 at 416.)

⁹ The only tests conducted on Orr's fuel prior to the NIPER tests occurred in 1985 (the Farmland tests). These tests were designed to distinguish Orr's formula in his 1984 patent application from another patent which also used MMT but in greater amounts. The tests indicated Orr's fuel had less hydrocarbon emissions than the other fuel. Testing, however, was constricted in scope due to Orr's limited resources. Therefore, no test was run comparing the Orr fuel to any fuel already used in the market. The Farmland tests did not address fuel efficiency, engine performance or the emission of hazardous materials such as nitrous oxide or carbon dioxide.

¹⁰ A base fuel is a fuel with no additives. According to Marshall's testimony, the base fuel was unleaded reference fuel used by EPA and manufactured by Amoco.

¹¹ In 1992, Marshall filed affidavits with the European Patent Office in which he averred the dynamometer test showed a superior hydrocarbon emission rate for Orr's fuel as compared to the others tested.

Marshall went to his computer and discovered he had given Orr incorrect data. Had the correct data point been given, the load test (road simulation) would have shown Orr's fuel had no significant fuel economy as compared to the base fuel. Orr did not ask Marshall to redo the test. Because Marshall believed Orr then understood the ramifications of the five-year-old incorrect data, Marshall did not issue a written correction.

In 1998, Orr arranged to have his fuel tested at Auto Research Laboratories. He told the company president, Gerald Keller, the tests were to determine whether his additive improved fuel economy and had a positive effect on emissions. The test engine stopped running during the first test. The researchers dismantled the engine and found deposits in the fuel delivery system. Keller told Orr about the problem and, in the end, Auto Research Laboratories ran only one of five planned tests.¹² The results demonstrated no increased fuel efficiency or performance.

Orr's United States patent finally issued on March 21, 2000. Following the congressional earmark and the creation of NAFF, Orr hired Dr. Thomas Reed, a professor at the Colorado School of Mines specializing in alternate fuels, to oversee the testing under the grant. The initial testing, begun in the spring of 2003, was conducted in a laboratory constructed in Reed's garage. By October or November of 2003, the tests had shown no significant differences between the Orr fuel and other fuels. Around December

¹² According to Orr, the problems with the fuel were caused by the laboratory's mishandling of his samples.

2003, the research group moved to a new facility where measurements could be made with greater precision. By mid-to-late summer 2004, Reed, as well as some of the other scientists under his direction, told Orr the tests were not producing the results they had hoped for. There were no substantial increases in engine efficiency or reduction in emissions.

Orr was determined to continue the testing on a larger scale. He put together planned protocols and scheduled a comprehensive testing project with Southwestern Alternative Fuels Research estimated to cost over one million dollars. These tests were to begin in early 2005. On January 13, 2005, just prior to the tests' scheduled start, the EPA suspended disbursements under the grant.

C. Orr's Efforts to Develop and Market His Fuel

From 1996 through 2004, Orr actively lobbied and promoted his technology to Congressional staff members, investors and potential partners. He met with representatives from Enron, Exxon, foreign corporations and Prudential Securities,¹³ among others, to discuss his technology and attempt to negotiate some sort of business relationship or financial backing. None of these meetings resulted in a final business deal.

During the same time, Orr periodically drafted (and Shires mailed or faxed)

¹³ Prudential Securities was also referred to as Prudential Bache in Orr's updates to investors but apparently the reference was incorrect.

“confidential updates” to Octane’s shareholders and potential shareholders about Octane’s progress.¹⁴ Orr’s representations in these updates included statements such as: (1) Octane owned the United States patent;¹⁵ (2) Orr’s fuel was ready to be produced and marketed; (3) Exxon wanted to purchase his fuel and its patent for \$30 million or more; and (4) an initial public offering was imminent.¹⁶ And despite Marshall’s 1997 statement to Orr that the data Orr relied upon was incorrect, Orr continued to represent to all interested parties that the NIPER data had shown his fuel offered significant benefits in reduced emissions, fuel economy, reduced combustion temperatures, and “astounding” positive environmental implications. (Vol. 7, Part 3 at 425.)

D. The Congressional Grant

In the spring of 2001, Orr and Robin Hult, another Orr associate, met in Washington D.C. with Katherine Moore and Jennifer Dolin, both employed by the EPA to oversee grant management. Dolin and Moore explained the grant process and the importance of the grant narrative in accomplishing the release of funds. Moore also told

¹⁴ The updates to Octane shareholders were drafted under letterheads from corporations called Advanced Fuels International (AFI) and Advanced Energy Partners (AEP). According to Orr, he planned to create AFI to market international sales of Orr’s fuel as opposed to national sales overseen by Octane. AEP was to be a joint venture entity. The two companies were never actually incorporated and the record does not reflect what relationship, if any, they would have to Octane.

¹⁵ In January 2005, Orr learned he was the subject of a criminal investigation. He did not transfer his United States patent from himself to Octane until July 2005.

¹⁶ All of these representations were refuted by various witnesses at trial.

Orr that he needed to submit written proof that NAFF was authorized to use Octane's patented fuel. In the grant narrative, Orr represented that, based on the NIPER data, the fuel to be tested had already demonstrated great strides in positive environmental implications, including reduced emissions and better gas mileage. Orr did not disclose that the patent was in his name; nor did he tell the EPA staff of his personal connection with Octane or that the formula was his creation. The grant was approved and the disbursements began.

In April 2004, the Office of the Inspector General (OIG) notified NAFF it intended to audit NAFF's grant money. The audit began with an off-site review followed by two one-week on-site reviews at NAFF's offices. The first on-site review was conducted in May 2004. The auditor, Jan Lister, met with Shires (Orr was out of the country). While some of the requested documentation was ready at the time of Lister's first visit and more documents were provided during the second on-site visit in June 2004, some were never produced. At the end of the June review, Lister told Shires the investigators had some concerns about expenditures, including whether the costs of Orr's continued lobbying efforts were being paid with grant money. Other concerns related to documentation of personnel time and NAFF's non-bid contracts with a business owned by Orr's son and several of Shires' companies. The auditors reported these concerns to the OIG which began an investigation.¹⁷ Based on the audit information and the ongoing

¹⁷ The record does not state when or why the audit became a criminal

investigation, Richard Kuhlman, from the Grants Administration Office and the decision-maker regarding the release of the NAFF grant funds, decided to suspend the release of the grant money in January 2005. Later discussions allayed most of the auditor's concerns but extended negotiations between NAFF and the EPA did not resolve some conflict-of-interest and procurement issues. Ultimately, the EPA cancelled future disbursements to NAFF.¹⁸

II. PROCEDURAL BACKGROUND

Orr was indicted in May 2006 for solicitation of money from investors and the United States government by false representations. Counts one through eight charged mail fraud based on individual misrepresentations from Orr to investors claiming:

(i) Octane owned the patents for [Orr's fuels];¹⁹ (ii) [Orr's fuel] was ready to be produced and marketed; (iii) scientific testing demonstrated that [Orr's fuel] had substantial benefits over conventional gasoline regarding both decreased nitrogen oxide ("NOx") emissions and increased fuel efficiency; (iv) Exxon wanted to purchase [Orr's fuel] and its patent for \$30 million or above; (v) Prudential was interested in furnishing substantial funds for Octane; (vi) investor monies would be used to finish developing and marketing [Orr's fuel]; and (vii) investors would receive Octane shares and would reap substantial profits due to an imminent initial public offering ("IPO") and/or other substantial increase in Octane's share price. Orr also caused others to solicit monies for Octane using similar representations to potential investors.

(Vol. 1, Part 1 at 14.) Counts nine and ten charged mail fraud based on Orr's

investigation.

¹⁸ The audit was never finalized.

¹⁹ This allegation, as it pertained to investors, was withdrawn at a pre-trial conference.

misrepresentations or misleading omissions to United States congressmen and their employees and to the EPA - statements regarding Octane's ownership of Orr's patent and the allegedly positive NIPER test data. Counts eleven through fourteen charged wire fraud based on wire transmissions to the government containing the same misrepresentations. Counts fifteen through seventeen charged Orr with false statements based on individual communications to the EPA. Counts eighteen through twenty-eight charged tax evasion for the years Orr did not file tax statements.²⁰

After several continuances, on September 13, 2007, Orr requested another continuance. The request was granted but the court warned defense counsel that it would be the last continuance because "we can't keep pushing this case off." (Vol. 6, Part 1 at 59.) Defense counsel said he understood. Trial was set for March 31, 2008.

In late February 2008, Orr filed a motion for an ends-of-justice continuance for at least six weeks. After a hearing on February 27, 2008, the court denied the continuance but granted Orr's motions to extend the date for filing tax expert reports and to respond to the government's objections to Orr's proposed expert testimony.

The night before trial was to begin, Orr filed another motion to continue based on the illness of his forensic accountant. Counsel again argued the time he expended in responding to the government's motions opposing his expert witnesses had taken substantial time away from his trial preparation. The court denied the motion, noting the

²⁰ Counts sixteen and eighteen were dismissed prior to trial.

case was virtually two years old and it had granted continuances on several prior occasions, its schedule was full, and some of the government's witnesses were experiencing health problems due to their age. The court explained its experience in the case left it with "no confidence that a continuance of two, three, six months [would] make any difference." (Vol. 7, Part 1 at 145.)

The jury began hearing the evidence on April 1, 2008, and reached its verdict on May 28, 2008. Orr was found guilty on all counts but three counts of tax evasion for which a verdict could not be reached.

Sentencing began on May 18, 2009. The day before the sentencing hearing, Orr moved for a new trial based on newly discovered evidence. He claimed he had just discovered that Tony O'Riordan, who Orr mentioned at trial and had joined Orr at several meetings with potential high-profile investors, would have testified that Orr's representations to Octane's investors were "reasonable and accurate and consistent with [O'Riordan's] recollections" regarding those meetings. (Vol. 4, Part 1 at 56.)

Orr filed a second motion for a new trial based on newly discovered evidence during the six-day sentencing hearing. In this motion, he argued Reed's testimony and Marshall's private statements to Frank Cox during a break, materially contradicted their trial testimony. The court denied the motions for a new trial. Orr was sentenced to 36 months imprisonment followed by 3 years of supervised release.²¹

²¹ The court determined Orr's total offense level under the guidelines was 27 and

III. DISCUSSION

Orr raises five issues on appeal. He claims the court erred by: (1) allowing the government to present “implied” expert testimony from its non-expert witnesses; (2) excluding the testimony of several of Orr’s witnesses; (3) failing to reign in the government’s misconduct in the use of its non-expert testimony, thus denying him a fair trial; (4) denying his motions for a new trial, and (5) denying his pre-trial request for a continuance.

A. Lay and Expert Witnesses

The government did not attempt to qualify the witnesses who had conducted tests on Orr’s fuel as experts.²² Orr maintains the government’s tactic precluded their testimony regarding what they told Orr about the results of those tests. He contends the admission of this testimony improperly allowed the government to offer “implied” expert opinions. (Appellant’s Br. at 24.) Orr also claims the district court erred in excluding some of his proffered expert testimony. “We review a district court’s evidentiary rulings for an abuse of discretion.” *Davoll v. Webb*, 194 F.3d 1116, 1136 (10th Cir. 1999). “We review de novo a district court’s interpretation of the Federal Rules of Evidence.” *Id.*

During trial, Orr made a Rule 403 relevance objection to Marshall and Reed’s

his criminal history was Level I, resulting in an imprisonment range of 70 to 87 months. It concluded a variance from that range was required to provide just punishment under 3553(a).

²² The record does not explain why the government chose not to qualify these witnesses as experts.

(among others) “non-expert” testimony. In his motion for a new trial, Orr upped the ante, claiming the admission of the testimony violated his right to confront these witnesses. Because this claim was not raised at trial, we review his second argument for plain error. *United States v. Kaufman*, 546 F.3d 1242, 1252 (10th Cir. 2008). Plain error exists when there is an error that is “clear or obvious at the time of the appeal”; the error affected the defendant’s substantial rights and there is “a reasonable probability that, but for the error claimed, the result of the proceeding would have been different.” *Id.* (citations and quotation marks omitted). In addition, “the error must seriously affect the fairness, integrity, or public reputation of judicial proceedings” such that “the failure to remand for correction would produce a miscarriage of justice.” *Id.* (quotation marks omitted).

1. Government’s Fact Witnesses

Although Orr asserts the admission of all the witnesses who had first-hand knowledge of the tests made on Orr’s fuel was error, his argument on appeal deals almost exclusively with the testimony of Bill Marshall.²³ We, therefore, explore Marshall’s testimony in some detail.

The government did not seek to qualify Marshall as an expert. Orr objected to Marshall’s “opinion” testimony that the data Orr received from the NIPER tests was incorrect and the corrected data did not show Orr’s fuel was an improvement over others. Rule 701 provides:

²³ Orr also objected to Reed’s testimony and the testimony of Reed’s assistants, Shivayam Ellis and Justin Buckmaster.

If a witness is not testifying as an expert, testimony in the form of an opinion is limited to one that is: (a) rationally based on the perception of the witness, (b) helpful to clearly understanding the witness's testimony or to determining a fact in issue; and (c) not based on scientific, technical, or other specialized knowledge within the scope of Rule 702.²⁴

Here, the district court determined the scientists who participated in testing Orr's fuel were limited to testifying to what Orr asked them to do, what they did and what they told Orr. They were not to opine on the effectiveness of Orr's fuel. Even with this limitation, Orr objected on the basis that anything these witnesses told Orr was irrelevant or inadmissible unless they were qualified as experts because their statements were based on specialized knowledge within the scope of Rule 702.

At trial, Marshall testified to the following: He was a research engineer at NIPER between 1992 and 1998, and Orr had telephoned him on the recommendation of Frank Cox. Orr hired Marshall to run tests related to Orr's patents and patent applications. Marshall described the tests he ran in February 1992 and explained the emissions

²⁴ Generally, opinion testimony is reserved for experts and is admissible if it meets the requirements of Federal Rules of Evidence Rule 702:

. . . [A] witness qualified as an expert by knowledge, skill, experience, training, or education, may testify thereto in the form of an opinion or otherwise, if (1) the testimony is based upon sufficient facts or data, (2) the testimony is the product of reliable principles and methods, and (3) the witness has applied the principles and methods reliably to the facts of the case.

measured.²⁵ Marshall then identified an affidavit, which was submitted in Orr's patent application in April 1993, relating to the February tests. The affidavit was admitted over Orr's objection but the following limiting instruction was given:

You recall, ladies and gentlemen of the jury, that early on in this case I told that at times certain witnesses who are adequately qualified may state opinions. Mr. Marshall is not here for that purpose. The purpose for this exhibit is limited to show that it was provided by Mr. Marshall to Mr. Orr, and you may not consider any opinions as opinions in that exhibit . . . any opinions that might be referenced in [the exhibit] are not to be considered as opinions of an expert. The exhibit is being proffered and received only for the purpose of showing that it was provided by the witness to Mr. Orr.

(Vol. 7, Part 3 at 625-26.)

Marshall then described the testing he conducted for Orr in June or July 1992. He stated he conducted a first-phase test and discussed the purpose of that test, the protocol, and identified the fuels tested. He testified the second-phase test differed in that it was run on a vehicle placed on a dynamometer which is "a device that enables operating the vehicle on rolls, to which a power absorber is attached." (*Id.* at 631.) A fax from Marshall to Orr was admitted under the same limitations as the previous exhibit. The fax contained the preliminary computer outputs from the testing and graphs generated by placing that data in a statistical program.

As to Orr's visit to NIPER in 1997, Marshall testified:

The only thing I recall that came up right away was he had – he was excited

²⁵ When Marshall was asked to define what he meant by a "base" fuel, Orr objected on the basis it called for a technical explanation. The court overruled the objection.

about some results that I had given him, and he showed me the plot, one of the plots that's in this exhibit I said it can't be right. So I went to my computer and looked at it, and sure enough it was data that I had given him, yes. But it was incorrect I said it had to be a typographical error. And his response was: It's a typo? Or something to that effect [Orr looked] I'm not sure if the correct term is "despondent," but close to that.

(*Id.* at 636-37.) Marshall said Orr did not ask him to redo the test or ask for something in writing. Government counsel asked "Did you have a concern at the conclusion of your meeting in 1997 that Mr. Orr hadn't understood you, so that you felt like you needed to do a written correction?" (*Id.* at 638.) Marshall answered: "No." (*Id.*) Marshall said he told Orr the tests showed no fuel economy advantage for Orr's fuel. Orr objected several times during this testimony on the basis that the question asked for an implied expert opinion.

Government counsel then went through the exhibits containing Orr's updates to Octane's shareholders and asked whether the statements in the document "accurately reflect[ed]" what Marshall told Orr about the NIPER tests during the meeting in 1997. (*Id.* at 639.) Marshall consistently replied in the negative. However, when government counsel asked if the representations in Orr's updates were true, the court sustained Orr's objection to the question. The court also sustained all objections to questions regarding the accuracy of graph materials based on the data.

Marshall was extensively cross-examined about his affidavits in support of Orr's European patent and agreed that the data point he identified at the 1997 meeting was the only incorrect data point. On redirect, when government counsel asked, "[i]n the context

of the data generated in these tests, how important was that [incorrect] data point?” the court sustained Orr’s objection and did not allow Marshall to answer. (*Id.* at 690.)

On appeal, Orr argues “the trial judge’s rulings suggested to the jury that what the government *non-experts* told Orr was significant and, having read or heard those statements, Orr had some duty to respond to them.” (Appellant’s Br. at 24-25). Orr’s argument misconstrues the factual context of Marshall’s testimony, as well as that of the other testifying scientists hired by Orr to test his fuel.

It matters not whether Marshall or the others could have been designated as experts at trial. Their testimony was not admitted to refute Orr’s claims that his fuel combinations would be environmentally beneficial or his patent potentially valuable. At issue was whether Orr intentionally misrepresented *the results* from the NIPER testing and the NAFF tests *as conveyed to him by his employees or contractors*. In this context, what matters is that Orr chose Marshall and Reed (and approved of their assistants) to assist him in testing; this fact made what they said to Orr relevant. It makes no difference if the *court* qualified these witnesses as experts because *Orr* engaged them to perform the precise services and provide the information which was the subject of their testimony. The jury was permitted to infer that a reasonable investor would have wanted to know the results of this testing.

The trial court walked a careful line between allowing these witnesses to testify based on first-hand knowledge and disallowing opinions based on their expertise. It repeatedly instructed the jury on the purpose of the testimony and its limitations. It did

not abuse its discretion but, instead, carefully controlled the evidence brought before the jury in accord with the Federal Rules of Evidence.²⁶

Orr's argument that the admission of the non-expert testimony violated his Sixth Amendment right to confront the witnesses and his Fifth Amendment right to a fair trial is equally unavailing. In his post-trial brief, Orr provided several examples of questions his counsel was allegedly unable to ask Marshall because he had not been qualified as an expert.

The trial court rejected Orr's confrontation claim, stating:

The problem with this argument is that it is predicated on strategic decisions by defense counsel not to pursue certain lines of inquiry with these witnesses rather than any rulings by the Court precluding defense counsel from asking certain questions As such, any analysis of the impact that the Governments' failure to offer or qualify these witnesses as experts had on cross-examination by defense counsel is wholly speculative and cannot provide the basis for . . . a new trial.

(Vol. 3, Part 2 at 482.) We agree.

In *Luce v. United States*, a defendant chose not to testify after the district court ruled the government could cross-examine him about a prior conviction. 469 U.S. 38, 39 (1984). The Supreme Court granted certiorari to resolve whether the defendant, who did not testify at trial, was entitled to review of the district court's ruling denying his motion to preclude the use of a prior conviction for impeachment. *Id.* The Supreme Court

²⁶ Orr also argues the government failed to offer competent evidence showing Orr's representations to others were false or otherwise not justified by the NIPER data or with the known existing science. This argument does not go the admissibility of the evidence but rather to its sufficiency – an issue not raised on appeal.

determined the defendant's claim was not reviewable because "any possible harm flowing from a district court's *in limine* ruling permitting impeachment by a prior conviction is wholly speculative." *Id.* at 41. Without a "factual context" in which to make its ruling, a reviewing court has no ability to determine what might have happened. *Id.*

Similarly, here we have no way of knowing what questions Orr's counsel would have asked, whether there would have been an objection and, if so, how the court would have ruled. In such a factual vacuum, any harm to Orr is entirely speculative. As a result, there is no error, plain or otherwise.

2. Exclusion of Defense Witnesses

Orr contends the district court's refusal to admit the expert testimony of Richard Schlosberg, Bruce Leybourne and Melvin Ingalls, as well as its refusal to issue a subpoena for William G. Frick, former general counsel for the EPA, deprived him of his right to present his defense. Orr bears the burden of showing that his proffered experts' testimony is admissible. *United States v. Nacchio*, 555 F.3d 1234, 1241 (10th Cir. 2009). The standard used by the district court is reviewed *de novo* while its performance of its gatekeeping role is reviewed for an abuse of discretion. *Id.* "[W]e will not disturb the ruling unless it is arbitrary, capricious, whimsical or manifestly unreasonable, or we are convinced that the district court made a clear error of judgment or exceeded the bounds of permissible choice in the circumstances." *Id.* (quotation marks omitted).

Generally, the district court "must first determine whether the expert is qualified

by knowledge, skill, experience, training, or education to render an opinion.” *Id.* (quoting Fed. R. Evid. 702). “[I]f the expert is sufficiently qualified, the court must determine whether the expert’s opinion is reliable by assessing the underlying reasoning and methodology, as set forth in *Daubert*.” *Id.*²⁷ “[T]he expert’s data, method, or his application of the method to the data” may affect the reliability of the proposed testimony. *Id.* Orr must show his experts’ testimony was based on a methodology that was “scientifically sound and that the opinion is based on facts which satisfy Rule 702’s reliability requirements.” *Id.* (quotation marks omitted). If an expert’s analysis is unreliable, the testimony is inadmissible. *Id.*

Richard Schlosberg

Schlosberg would have testified that Orr’s technology was worth between \$37 million and \$272 million. Schlosberg’s expertise was based on his work for ExxonMobil evaluating technologies for the purpose of making research and development proposals to senior management. After a *Daubert* hearing, the district court concluded Schlosberg was qualified as an expert but his opinion regarding the value of Orr’s patent was unreliable. It said:

²⁷ “[W]e use *Daubert* as legal shorthand for the district court’s obligation to test a proposed expert’s methodology in advance of his or her testimony. *See Daubert v. Merrell Dow Pharmaceuticals, Inc.*, 509 U.S. 579, 592-93 (1993)] (charging trial courts with the responsibility of acting as gatekeepers to ensure that expert testimony is both reliable and relevant); *Kumho Tire Co. v. Carmichael*, 526 U.S. 137, 147-49, 119 S. Ct. 1167, 143 L.Ed.2d 238 (1999) (clarifying that the court’s gatekeeper function applies to all expert testimony, not just testimony based in science).” *United States v. Nacchio*, 555 F.3d 1234, 1238 n.3 (10th Cir. 2009)

So we have Dr. Schlosberg, who concededly applied his subjective standards and criteria to the construct of the business model reference in his report. It is a construct of a business model which he says he would present to management at Exxon but that he would have, if he were to present it, included other options to add octane to fuel, would have included a reference and a discussion to other intellectual property that should be considered.

He did not factor into the business model what appears to be a fact that there is zero MMT in commerce in the United States in gasoline. He did not factor in potential environmental concerns and the potential for health effects, and as a result risk considerations that it is reasonable to believe that Exxon management would factor into its decision to invest in this technology.

There are other risk issues that were not factored into the business model and the opinion as to value, not the least of which is that any patent is subject to challenge as being invalid.

It is reasonable to assume that any industry or a company such as Exxon would want to determine independently a sound judgment that the technology will withstand a challenge. That was not factored in.

The opinion as to value – and I understand that certain assumptions are appropriate when rendering expert opinions. The assumptions here are legion. It assumes, first, that the fuel is valuable because . . . the combination of MMT and ethanol will successfully achieve either a 211(f) waiver or a designation as a substantially similar fuel, and it assumes the willingness to invest the capital to place the product into commerce if the previous assumptions bear fruit.

It assumes that his presentation of this business model to Exxon management will convince Exxon management as to the reliability of the business model and the opinion of value that flows from it. And it assumes that the market will react as he estimates.

Part of the rationale I think assumes that only Exxon will acquire the rights to the patent. When he discussed the process of negotiating royalties, he said that it is an arm's length negotiation between the holder of the patent as licensor and the licensee. He did not factor in that these negotiations for a license may include more than one licensee or how that would affect the royalty value of the patent.

The opinion assumes too much, and in my conclusion it is not reliable
(Vol. 8, Part 8 at 2995-96.)

Orr moved the court to reconsider its exclusion of Schlosberg's testimony. He argued it had misunderstood the purpose of the testimony - to show the value of the patent to the *owner*, not the value to Exxon. He also claimed Schlosberg's assumptions of regulatory approval and investment backing would be required of any expert. This is because his expert testimony was offered to show "the net income possible from deploying the technology." (Vol. 3, Part 1 at 14) The district court denied the motion, stating:

[T]he problem is that [Schlosberg's opinion] was subjective, and concededly subjective. So his methodology is not only untested, but it is untestable. And when in my ruling I opined that he assumes too much, what that says is that his opinions are speculative, at best. If speculative, they are unreliable; and if, as I conclude, they are unreliable, they cannot be helpful to this jury.

(Vol. 9, Part 3 at 3746.)

Orr later claimed this was an error requiring a new trial. On appeal, he asserts the district court's *Daubert* analysis of Schlosberg's testimony was "totally flawed." (Appellant's Br. at 54.) We disagree.

The district court fulfilled its duty as gatekeeper by first looking at Schlosberg's qualifications and then considering his methodology. It was the methodology the court found lacking, concluding it was "not only untested, but . . . untestable." Orr does not address the subjective nature of Schlosberg's opinion nor does he explain why a

“possible” value of the patent is a reliable figure to present to the jury. (Vol. 3, Part 1 at 14.) Schlosberg’s own testimony illuminates the unreliability of his opinion as to any value Orr’s patent may have had in the marketplace.

According to Schlosberg’s testimony, a proper evaluation of value to a buyer involves an investigation into “the best available technology,” “the competition,” “market [growth]”, and “potential sustainable advantage [to the buyer].” (Vol. 8, Part 8 at 2948-49.) However, when asked whether he had checked the competition, he said he did “some looking” but did not do an exhaustive study. He merely assumed “the fact that this patent exists indicates that there is no other patent that exists that talks about this group of compositions.” (*Id.* at 2952-53.) In response to another question, he said his opinion was the type of presentation he would have made to Exxon but he “would have spent additional time gathering more data. [He] didn’t have enough time to do that.” (*Id.* at 2968.) Ultimately, Schlosberg conceded he was not saying the patent could be sold for the amounts in his report.

The court did not abuse its discretion in excluding Schlosberg’s expert testimony. The value of the patent to Orr (and his investors) is what a willing buyer would pay a willing seller. Schlosberg’s estimate of the patent’s potential value based on unquestioned assumptions was, admittedly, not the same methodology he used for his work at ExxonMobil. The court, recognizing these flaws, sufficiently developed the record and made a concrete reliability determination based on specific findings and discussion. The decision was sound.

Melvin Ingalls and Bruce Leybourne

We need not spend much time on experts Ingalls or Leybourne because Orr failed to present an adequate argument on appeal. These experts would have opined that the EPA's regulations were unnecessary and the agency trumped up charges against Orr because his research would have shown the costly national fuel regulations were unnecessary, causing embarrassment to the agency. Rather than address the reason the court excluded this testimony – the potential for confusing the jury - Orr argues “[t]he trial court’s exclusion of Ingalls prevented Orr from explaining to the jury the EPA’s motive [behind its investigation]. . .[and] Leybourne would have shown the huge environmental benefits. . .[from] from Orr’s fuel formulations,” thus rendering any alleged misrepresentations immaterial. (Appellant’s Br. at 55-56.)

But Orr again confuses the issues. The validity of Orr’s fuel formulations was not the question at trial. The issue was whether he knowingly made material misrepresentations to his investors and the EPA regarding the results of specific tests, the ownership of the patents, the interest shown by Enron, Exxon and other potential business partners and the imminence of business opportunities. However, it appears Orr’s theory of the case was that, if in fact his product would eventually be successful, any misstatements as to the test results or the imminence of a public offering would be immaterial. But whether Orr’s technology would successfully refute the EPA’s regulations and be profitable in the future does not render immaterial his past misrepresentations. Orr’s beliefs, right or wrong, do not justify his intentional

misrepresentations of specific facts for the purpose of acquiring funding for his project.

In addition, Orr's right to present a complete defense must "bow to accommodate other legitimate interests in the criminal trial process." *Young v. Workman*, 383 F.3d 1233, 1237 (10th Cir. 2004) (quotation marks omitted). The court did not abuse its discretion in determining that expert testimony on environmental impacts of fuel and opposition to EPA regulations would unnecessarily confuse the issues. Because there was no abuse of discretion in excluding this evidence, there was no impingement upon Orr's right to present his defense. *See Chambers v. Mississippi*, 410 U.S. 284, 302 (1973) (noting that the accused must comply with rules of procedure and evidence in exercising the right to present a defense).

William Frick

Orr argues the district court erroneously refused to issue a subpoena for the testimony of William J. Frick, former general counsel of the EPA. *See Fed. R. Crim. P. 17(b)*. On April 30, 2008, just under one month into the trial, Orr submitted a 70-person witness list. Frick was the last listed. The subpoena request states Frick's testimony was necessary to "testify to EPA rules regarding the blending of [fuel additives], which will clarify the process for the jury." (Supp. Vol. 1 at 237.) At the hearing the court stated it was inclined to deny the request because there had already been "testimony . . . by the defense along these general lines. The subject matter has been known to the defense for a long period of time . . . [and] while there may be some marginal probative value, it is not material and it is not useful." (Vol. 13 at 4048.) Orr responded that he expected Frick to

testify that, while he was EPA's general counsel, he told Orr his fuel could be used under the "current regulations." (*Id.* at 4051.) The court denied the subpoena request.

"Rule 17(b) requires a court to issue a subpoena when an indigent defendant: (1) files an ex parte application with the court; (2) shows an inability to pay the witness's fees; and (3) demonstrates the necessity for the witness's presence for an adequate defense." *United States v. Pursley*, 577 F.3d 1204, 1230 (10th Cir. 2009) (emphasis added). The indictment charged Orr with misrepresenting to Octane investors that his fuel "was ready to be produced and marketed." (Vol. 1, Part 1 at 14.) Orr claims Frick's testimony would have rebutted this charge but the court denied the subpoena "on a whim" and determined Orr's request was "too late" "without regard to the importance of the witness." (Appellant's Br. at 57.)

"By virtue of the 'necessity' requirement, a defendant's burden under Rule 17(b) is not light." *Pursley*, 577 F.3d at 1230. The defendant must establish the "witness's testimony is relevant, material, and useful" and "must demonstrate particularized need." *Id.* (quotation marks omitted). Adequate grounds for the denial of a request for a subpoena include the defendant's failure to "set forth the expected testimony of a witness, or when the testimony of the subpoenaed witness would be cumulative of the testimony of other witnesses." *Id.* "Practical factors also bear on this analysis, such as the timeliness of the subpoena request and the possible delay of trial." *Id.*

The district court's denial of Orr's request for a subpoena was reasonable. It was considering Orr's request for 70 subpoenas submitted after the defense had already begun

its case. The motion itself contained no explanation of the particularized need for Frick's testimony. Orr had previously called another EPA employee, Caldwell, who testified at length about the history of fuel additive waivers granted by the EPA and, in particular, a waiver for gasoline using the same additives (in different proportions) as Orr's.

In any event, even if the denial of Frick's subpoena was an abuse of discretion, the error was harmless. Frisk's testimony that Orr's fuel was legal under current regulations does not bear on whether the fuel was ready to be produced and marketed. Orr admitted Octane never produced "a finished product." (Vol. 10, Part 2 at 5334.) He also admitted he knew he would need a waiver to market his "premier" formula. (*Id.* at 5340-41.) Thus, even if Frick had testified as counsel represents,²⁸ it would not have changed the result of Orr's trial.

B. Government Misconduct

Orr claims he was denied a fair trial because the government engaged in misconduct during the trial and closing argument. The government contends Orr did not specifically raise a misconduct objection at trial and, therefore, our review is for plain error. Orr argues his objections did not have to be "labeled as misconduct" to avoid plain error review. Not so. "A defendant must notify the court that its ruling on an objection was insufficient to cure prejudice and that the prosecutor's questions rose to the level of misconduct." *United States v. Baldrige*, 559 F.3d 1126, 1134-35 (10th Cir. 2009). Orr

²⁸ Orr did not submit an affidavit from Frick with his motion for a new trial.

did not do so. Therefore, we review for plain error. *Id.* at 1135.

1. Questions at Trial

Orr contends the prosecutors asked the Octane investors “innumerable hypothetical questions, questions loaded with implied and suggested facts which had not been proven.” (Appellant’s Br. at 43.) He supports this claim with one citation to the record. During the redirect examination of an Octane investor, Roger Wing, the prosecutor asked:

Q. Sir, you were . . . asked a whole series of questions about refiner advantages and consumer advantages . . . [from Orr’s fuel]. Do you remember those questions, sir?

A. Yes

Q. What affect, [sic] if any, would it have had upon you if you had been told that all tests done on Mr. Orr’s own fuel did not show the advantages disclosed in those documents?

Defense Counsel: Objection. Assumes facts not in evidence. All tests – and it doesn’t say told by whom. It’s just an open-ended speculative question designed to prejudice the jury.

The Court: I am going to overrule the objection, with the same caution to the jury that you must take and apply your own individual recollections of testimony presented here during the trial and judge it as to credibility as you think it may deserve.

(Vol. 8, Part 2 at 1833.) The prosecutor rephrased the question: “In reference to . . . questions about the supposed refiner advantages, consumer advantages to [Orr’s fuel], what affect [sic] would it have on you as an Octane investor if you had learned that all tests Mr. Orr caused on his own fuel showed no advantages?” (*Id.* at 1833-34.) Defense counsel lodged another objection, which was overruled. Wing answered: “Had I known

that the test results were negative I would have changed my entire thought about investment” (*Id.* at 1834.) Orr claims hypothetical questions such as these were “improper suggestion and insinuation and an expression of the prosecutor’s opinion of guilt.” (Appellant’s Br. at 44.)

In a remarkably similar case, the Fourth Circuit rejected the defendant’s claim that the court erred in allowing questions regarding the effect of misrepresentations on an investor’s decision to invest in a company. *See United States v. Dukes*, 242 Fed. App’x. 37 (4th Cir. 2007) (unpublished).²⁹ In *Dukes*, the defendant was charged with fraud after seeking funding for several of his companies with the promise the stock would soon be part of an IPO. Upon questioning an investor, the government “asked the witness whether his investment choice would have been different if Dukes had altogether discounted the infrastructure companies’ IPO chances.” *Id.* at 45. The court determined the question was hypothetical, but it “did not assume Dukes’s guilt of the charged crimes.” *Id.*

Instead, it focused on the materiality of Dukes’s representations about the infrastructure companies’ financial prospects. In this regard, the question was qualitatively different than the guilt-assuming hypothetical questions proscribed by courts, which assume the defendant’s guilt of *the very crime(s)* with which he is charged and most often are asked during cross-examination on the heels of testimony about the defendant’s good character or reputation. Here, the Government did not ask the fact witness to assume that Dukes committed “fraud.” Dukes’s argument is therefore unavailing.

²⁹ Unpublished opinions are not binding precedent. 10th Cir. R. App. P. 32.1(A). We mention *Dukes* because of its persuasive and reasoned analysis.

Id. at 45-46.

We agree with the Fourth Circuit's approach. Here, the prosecutor's "hypothetical" questions to Wing and other investors were not improper. Although a prosecutor may not vouch for the credibility of the state's witnesses, *United States v. Bowie*, 892 F.2d 1494, 1498 (10th Cir. 1990), such impermissible vouching occurs only when "the jury could reasonably believe that the prosecutor is indicating a personal belief in the witness's credibility, either through explicit personal assurances of the witness's veracity or by implicitly indicating that information not presented to the jury supports the witness's testimony." *Id.* Absent such personal vouching, a prosecutor may fairly comment on the evidence. *United States v. Hartsfield*, 976 F.2d 1349, 1354-55 (10th Cir. 1992). This is not a case where the prosecution was seeking to discredit a character witness or seek an opinion on the ultimate issue of the case from an expert. *See United States v. Parker*, 553 F.3d 1309, 1320 (10th Cir. 2009) ("Our cases allow the prosecution in a criminal case to ask questions of the 'have you heard' variety when a character witness testifies about personal opinion of the defendant's character."); *United States v. Goodman*, 633 F.3d 963, 970 (10th Cir. 2011) ("[T]he prosecution posed hypothetical facts that mirrored the charged robberies and asked the experts whether the hypothetical robber's actions were consistent with the behavior of someone with PTSD. The jury still needed to make an additional inferential step to determine whether or not Goodman was legally insane.").

As in *Dukes*, the prosecutor here was required to show that Orr deliberately

misrepresented material facts to his investors. The prosecutor's question went to the material nature of Orr's statements. The question focused on the investor's willingness to supply money if he discovered the tests did not show the promised advantages over other fuels. The prosecutor did not express her personal beliefs about these matters and the question was based on testimony presented to the jury. The district court did not err in allowing the prosecutor's questions.

Orr also claims the prosecutor deliberately misled the jury while cross-examining Orr. Marshall testified he had never given Orr the correct data point; he merely told Orr the data point was wrong. Several weeks after this testimony, during Orr's cross-examination, the prosecutor asked, "In fact he told you that the indicated horsepower at 20 . . . should have been 28, didn't he sir?" (Vol. 10, Part 2 at 5367.) Defense counsel objected because the question assumed facts not in evidence. The court overruled the objection and Orr responded to the prosecutor's question: "I don't think that's what he testified to and he certainly didn't say that in this meeting he described." *Id.*

The prosecutor did misstate the evidence, but as the Supreme Court reminds us:

[G]iven the myriad safeguards provided to assure a fair trial, and taking into account the reality of the human fallibility of the participants, there can be no such thing as an error-free, perfect trial, and that the Constitution does not guarantee such a trial

[We have] consistently made clear that it is the duty of a reviewing court to consider the trial record as a whole and to ignore errors that are harmless, including most constitutional violations

United States v. Hasting, 461 U.S. 499, 508-09 (1983).

Thus, we do not “review this comment in a vacuum.” *United States v. Manriquez Arbizo*, 833 F.2d 244, 248 (10th Cir. 1987). We look to the trial as a whole and “will not overturn the verdict on this basis unless the misconduct was enough to influence the jury to render a conviction on grounds beyond the admissible evidence presented.” *Id.* There is no evidence the jury did so here. The record contains no indication that the prosecutor deliberately tried to mislead the jury when cross-examining Orr. Even though the prosecutor misspoke, the jury heard Marshall’s testimony; Orr had a chance to respond and correct the prosecutor’s misstatement and the court instructed the jury that counsel’s statements were not evidence. The prosecutor’s misstatement was not so prejudicial as to deprive Orr of a fair trial.

2. Closing Argument

Orr claims the prosecutor deliberately misstated the evidence and implicitly called Orr and his counsel liars. During Orr’s closing argument, counsel reminded the jury Shires testified he had seen a missing letter from the IRS stating Orr was not required to file personal income taxes during the time he experienced a net operating loss.

In the rebuttal argument, the prosecutor stated:

[L]et me make a couple of points about this letter, the missing letter. The letter that Mr. Orr says existed, but – the free pass, if you will. He claims he has a letter from the IRS that said to him: As long as you’ve got a net operating loss, you don’t have to file taxes.

This is a man who used to be a CPA. This is a man who used to be a tax preparer. This is a man who studied business at the University of Colorado. And he wants you to believe that the IRS would write him a letter and say: Don’t worry about it, Bill, as long as you think you’ve got an NOL, that’s

all we need to know, and you don't have to file.

That's simply not credible. But there's an effort here to support that testimony by saying that Shires said that he saw the letter. That is not true. Shires said he was told by Bill Orr that he had the letter.

And like I said before, you've got to believe Bill Orr. Because when Shires gets up on the stand and talks about a letter, what he's saying is what Bill Orr told him. Shires never testified he saw the letter. Nobody saw the letter. The letter didn't exist. The letter does not exist.

(Vol. 10, Part 6 at 6217.) Orr did not object so we review for plain error.³⁰

The government concedes the prosecutor's argument misstated the evidence. Nonetheless, it contends the prosecutor merely made a mistake; the government's theme, after all, was that the letter did not exist. In any event, the government argues this is not plain error because this evidence went solely to the tax evasion charges and was of slight consequence in the context of the trial as a whole. We agree. As discussed above, we review the error in the context of the entire trial. The comment did not lead the jury to convict Orr of tax evasion on grounds not in evidence since it was unable to reach agreement on three of the tax charges. In addition, the trial court repeatedly instructed the jury that counsel's argument was not evidence. *See Darden v. Wainwright*, 477 U.S. 168, 182 (1986) (jury instruction helped remedy improper closing argument). The prosecutor's mistake did not taint the fairness of the trial.

Finally, Orr maintains the prosecutor's references to Orr's lack of credibility improperly insinuated both Orr and his counsel were liars. The prosecutor said, "if you

³⁰ While Orr argues the trial court's prior response to his objections at closing prevented him from objecting further, we find no support for this argument in the record.

think about what you've heard here over the last several weeks, you've got to come to one conclusion, that you have to believe Bill Orr. You have to believe what Bill Orr says if you are going to acquit Bill Orr." (Vol. 10, Part 6 at 6197-98.) Orr objected; the court overruled the objection. The prosecutor also told the jury some of Orr's investors "relied on his false statements and his lies to invest a second time." (*Id.* at 6199.) Orr objected to the term "lies" and the court again overruled the objection. The court did not err in overruling these objections.

In the proper context, such as where the testimony conflicts on key aspects of a case and the jury must determine credibility, it is not misconduct to refer to the defendant's statements as lies. *United States v. Hernandez-Muniz*, 170 F.3d 1007, 1012 (10th Cir. 1999). The charges against Orr required the prosecution to prove Orr deliberately misrepresented material facts. In other words, Orr lied to his investors and EPA's representatives. The prosecutor's reference to those misrepresentations as lies is not prosecutorial misconduct.

C. Denial of Orr's Request for a New Trial Based on Newly Discovered Evidence

Orr claims the district court erred in denying his motions for a new trial based on newly discovered evidence. *See* Fed. R. Crim. P. 33. We review the court's denial of this motion for an abuse of discretion. *United States v. Combs*, 267 F.3d 1167, 1176 (10th Cir. 2001). To show an abuse of discretion, Orr must establish: (1) the evidence was discovered after trial; (2) the failure to learn of the evidence was not caused by lack

of diligence; (3) the new evidence is not merely impeaching or cumulative; (4) the new evidence is material to the principal issues involved; and (5) the new evidence would probably produce an acquittal if a new trial were granted. *United States v. La Vallee*, 439 F.3d 670, 700 (10th Cir. 2006). “A motion for a new trial based on newly discovered evidence is not favorably regarded and should be granted only with great caution.” *United States v. McCullough*, 457 F.3d 1150, 1167 (10th Cir. 2006).

1. Tony O’Riordan

Orr’s first motion claimed newly discovered evidence in the testimony of Tony O’Riordan. It stated “[he] and his counsel were aware of Mr. O’Riordan’s existence at the time of trial and that he might have important testimony. Orr and his counsel had difficulty locating him until near the time of trial, when it was learned he was in Zimbabwe Counsel’s efforts to get Mr. O’Riordan to come to trial proved to be unsuccessful.” (Vol. 4, Part 1 at 57.) According to Orr, defense counsel did not learn until April 6, 2009, that O’Riordan was back from Zimbabwe. O’Riordan, a respected professional investment advisor, would have credibly supported Orr’s recollections of his meetings and, in turn, “this would likely have led the jury to believe Orr’s recollections and representations about other events were also accurate and honest.” (*Id.* at 60.) The district court concluded O’Riordan’s testimony was not newly discovered and, even if it were, it would have been cumulative and of limited scope. Therefore, it would be unlikely to result in an acquittal.

Orr argues he could not have known what O’Riordan would recollect about

meetings that took place ten years earlier until after O’Riordan was interviewed. Thus, the evidence was newly discovered. We are not persuaded. While O’Riordan’s testimony may have been newly available, it was not newly discovered. *See United States v. Muldrow*, 19 F.3d 1332, 1339 (10th Cir. 1994) (“the evidence is not newly discovered if the defendant was aware of the proposed testimony prior to trial”); *United States v. Maestas*, 523 F.2d 316, 320 (10th Cir. 1975) (defendant’s prior relationship with witness was clearly within defendant’s knowledge). Orr knew before trial that O’Riordan had accompanied him to meetings where Orr attempted to get financial backing and potential business relationships. Orr did not inform the district court what steps he took to investigate O’Riordan’s testimony nor did he describe any attempt to preserve the testimony for trial. Moreover, Orr did not ask the court for a continuance on this basis. Because Orr later learned O’Riordan’s testimony may have been more favorable than Orr anticipated does not make it newly discovered. The district court did not err in denying this motion.

2. Reed and Marshall

Orr filed a second motion based on newly discovered evidence after Reed and Marshall testified during the sentencing hearing. Orr alleged Reed admitted “the engine he had for use in Golden was . . . not well-suited for drawing conclusions regarding fuel use in automobile engines.” (Appellant’s Br. at 38.) Orr also complained that Marshall and Reed admitted MMT is a known octane booster in gasoline (contradicting their testimony that Orr’s technology had no value) and Marshall admitted in a private

conversation with Frank Cox that “one bad data point does not invalidate a data set” (contradicting his testimony regarding the results of the NIPER data). (Id. at 39.) Orr argues a new trial would have resulted in acquittal because this testimony would have shown that Reed and Marshall had no reliable basis for the negative information they allegedly gave Orr.

The district court concluded Reed’s testimony was not new evidence because Orr undoubtedly knew what test equipment was being used for the NAFF tests. Orr maintains he could not question Reed or Marshall on these points because they were not qualified as experts at trial. But as stated above, what questions could or could not be asked of Reed was based on Orr’s trial strategy, not on the court’s rulings. In any event, a careful reading of the transcript reveals the statements on which Orr based his motion were not contrary to these witnesses’ trial testimony nor would a new trial admitting this evidence likely result in an acquittal. The district court did not abuse its discretion in denying Orr’s motions for a new trial.

D. Denial of Orr’s Request for a Continuance

Orr contends the district court abused its discretion by refusing to grant his pretrial motions for a continuance. He maintains a continuance should have been granted because “the trial case had just become much more complex” as a result of the disputes over expert testimony and the illness of Orr’s accounting expert. (Appellant’s Br. at 58-59.)

“We review the denial of a continuance motion for an abuse of discretion.”

Pursley, 577 F.3d at 1227-28. “Error only exists if the district court’s decision was arbitrary or unreasonable *and* materially prejudiced the defendant.” *Id.* (quotation marks omitted). In making this determination, we evaluate the following factors (the “*Rivera* factors”):

[1] the diligence of the party requesting the continuance; [2] the likelihood that the continuance, if granted, would accomplish the purpose underlying the party’s expressed need for the continuance; [3] the inconvenience to the opposing party, its witnesses, and the court resulting from the continuance; [4] the need asserted for the continuance and the harm that appellant might suffer as a result of the district court’s denial of the continuance.

Id. (quoting *United States v. Rivera*, 900 F.2d 1462, 1475 (10th Cir. 1990) (en banc)).

The final factor is the most important. *Id.*

The trial court did not abuse its discretion in denying Orr’s motion for a continuance. It carefully addressed and properly applied each of the *Rivera* factors. On appeal, Orr quotes the *Rivera* factors but makes no effort to apply them. Neither does he cite a single case to support his position. As a result, we could end our inquiry by applying the principle that “[a]rguments inadequately briefed in the opening brief are waived.” *Adler v. Wal-Mart Stores, Inc.*, 144 F.3d 664, 679 (10th Cir.1998). But Orr’s contentions fail on the merits as well.

First, Orr complains about “late-developing changes,” but the only late-developing changes he mentions are the government’s well-founded and timely objections to his last-minute expert-witness disclosures. Second, Orr does not identify specifically how he would have benefited from a continuance other than to generally refer to the court’s

denial of some subpoenas requested during trial. He does not point to any specific evidence he was unable to present. Third, the district court carefully explained how the court, the government, and the scheduled witnesses would be prejudiced by the requested delay. *See Pursley*, 577 F.3d at 1228 (“The district court stressed the type of havoc such a continuance would wreak on its already congested docket.”). In sum, Orr cannot demonstrate the court’s refusal to continue the trial was prejudicial or erroneous.

Despite his numerous claims of error, the record demonstrates Orr was convicted by a jury after an eight-week trial conducted in a fair and thoughtful manner. He was given every benefit of our adversarial system. His conviction is **AFFIRMED**.

No. 09-1351, *United States v. Orr*

HOLLOWAY, Circuit Judge, concurring and dissenting:

I disagree with the majority's analysis and conclusion as to the first issue appealed: Whether Mr. Marshall and his colleagues were improperly allowed to testify as expert witnesses despite the government's failure to qualify them as such pursuant to Federal Rule of Evidence 702. Contrary to the majority, I would hold that the government was erroneously allowed to offer expert testimony from these witnesses in the absence of any Rule 702 findings. The trial judge's efforts to limit the testimony to proper purposes were unavailing because the remaining testimony was not relevant to any issues being tried.

Although I am in agreement with the majority's discussion of the other four issues appealed, I am convinced that the trial court's error on the first issue was not harmless as to some of the counts upon which Mr. Orr was convicted, and so would reverse the judgment entered against Mr. Orr and remand for a new trial on the affected counts.¹

Accordingly, I respectfully dissent.

* * *

I

The scope of Rule 702.

I begin by addressing a fundamental error by the trial court — allowing non-experts including Mr. Marshall and others to testify as to contested facts on the basis of the witnesses' specialized knowledge. This error is compounded by the majority, and is

¹ In light of the majority's disposition, which affirms the judgment entered against Mr. Orr in its entirety, I make no attempt to determine precisely which counts of conviction were affected by the error violating Rule 702.

exemplified by the trial judge’s statement that “[a] technical explanation is not an opinion, and technical explanations and information does [sic] not fall under the provisions of Rule 702” R., Vol. VII, at 400. This analysis is plainly belied by the text of Rule 702, which on its face covers “scientific, technical, or other specialized knowledge . . . in the form of an opinion *or otherwise*” Fed. R. Evid. 702 (emphasis added). The commentary to Rule 702 further enlightens us on this point: “Most of the literature assumes that experts testify only in the form of opinions. *The assumption is logically unfounded.*” Fed. R. Evid. 702, advisory committee’s note (emphasis added).² The district court’s interpretation of Rule 702 completely does away with the phrase “or otherwise.”

In relying on this erroneous distinction between expert *opinion* testimony and expert *fact* testimony, the trial judge allowed Mr. Marshall³ (whom the government made no effort to qualify as an expert under Rule 702) to describe in detail how he ran tests on Mr. Orr’s fuel. For example, Mr. Marshall defined the term “base fuel” as it is used in his

² Rule 702 was amended in 2000 to better conform to the standards imposed by Supreme Court’s rulings in *Daubert v. Merrell Dow Pharmaceuticals, Inc.*, 509 U.S. 579 (1993) and *Kumho Tire Co. v. Carmichael*, 526 U.S. 137 (1999), but since the Rule’s inception in 1975, it has *always* covered expert testimony that comes in the form of an opinion *or otherwise*.

³ I follow the majority’s convention of exclusively discussing the testimony of Mr. Marshall, even though Mr. Orr technically challenges the admission of testimony from a number of Mr. Marshall’s colleagues as well.

supposed field of expertise⁴, and went on to talk about how a “dynamometer” — a measuring apparatus used by experts who conduct tests like the one performed by Mr. Marshall — works. R., Vol. VII, at 401-02, 411.

The majority opinion asserts that the trial judge “walked a careful line between allowing [the non-expert] witnesses to testify based on first-hand knowledge and disallowing opinions based on their expertise.” Maj. op. at 20. I agree that this is an accurate description of what the trial judge tried to do. But it is *not* the line drawn by Rule 702. Instead, Rule 702 covers *all* testimony based on “scientific, technical, or other specialized knowledge.” The commentary to the rule makes this abundantly clear by noting that only *experts* “may give a dissertation or exposition of scientific or other principles relevant to the case, leaving the trier of fact to apply them to the facts.” Fed. R. Evid. 702, advisory committee’s note. Mr. Marshall was allowed to present a scientific discourse about fuel testing. This is *exactly* the kind of testimony that non-experts are forbidden from giving. In my view, allowing this testimony, which plainly implicated “scientific, technical, or other specialized knowledge,” ran afoul of Rule 702.

⁴ Of course, for purposes of this trial, Mr. Marshall had *no* field of expertise, because the government deliberately chose to refrain from making any effort to establish his expert qualifications.

II

The admission of embedded expert testimony.

I am also unable to agree with the trial court's conclusion — and the majority's acceptance thereof — that Rule 702 somehow does not apply when assertions of fact are made even though they depend upon expert knowledge. This crucial error resulted in the admission of expert testimony embedded within statements of fact by a non-expert. I focus particularly on the admission of Mr. Marshall's testimony that he told Mr. Orr in 1997 that the NIPER test results showed that Mr. Orr's fuel demonstrated no fuel economy advantages.

Setting aside Rule 702 for a moment, we must keep in mind that the rules defining hearsay dictate that Mr. Marshall's statement to Mr. Orr could *not* have been offered for the truth of the matter contained therein — *viz.* that NIPER actually concluded that Mr. Orr's fuel was ineffective. Mr. Marshall's testimony could *at most* have informed the trier of fact that Mr. Orr knew that Mr. Marshall supposedly represented that Mr. Orr's conclusions about his own fuel, which reflected fuel economy advantages, were inconsistent with the views of NIPER.

Turning back to Rule 702, the majority reasons that Marshall's testimony was “not admitted to refute Orr's claims that his fuel combination would be environmentally beneficial or his patent potentially valuable,” but instead was admitted to show “whether Orr intentionally misrepresented *the results* from the NIPER testing” Maj. op. at 20.

But without Mr. Marshall or anyone else having been qualified as an expert, the jury could not possibly know what the results of the NIPER testing were. Given Mr. Marshall's inability as a non-expert to espouse a conclusion about the tests, the evidence reflects that Mr. Orr's representations about his fuel's effectiveness were just as likely to have been true as false. Mr. Marshall's statement to Orr only shows that Orr knew that a non-expert, such as Marshall, thought Orr's interpretation of the circumstances was wrong. For purposes of this trial, Mr. Marshall was no better able to apprise Orr of conclusions about the testing data than any NIPER employee who happened to see the data, draw some conclusion about it, and pass that conclusion on to Mr. Orr. Thus, I disagree with the majority's statement that what Mr. Marshall told Mr. Orr was relevant solely because "Orr chose Marshall . . . to assist [Orr] in testing [Orr's fuel] . . ." Maj. op. at 20.

The majority concludes that the trial judge gave proper limiting instructions to the jury regarding Mr. Marshall's testimony. But the absence of *expert* conclusions about the actual results of NIPER's testing on Orr's fuel renders Marshall's testimony wholly irrelevant to the issues at trial. The majority dismisses this concern as going to the sufficiency of the evidence rather than its admissibility, and concludes that Mr. Orr has abandoned any sufficiency challenge. Maj. op. at 21 n.26. I respectfully disagree with this approach.

Mr. Marshall's testimony contained inadmissible expert conclusions, bearing no credentials of expertise and being therefore incapable of cure by limiting instructions. Moreover, the remaining testimony of Mr. Marshall was inadmissible because it was irrelevant. The irrelevance of Marshall's testimony when the expert conclusions are stripped away shows that the admission of Mr. Marshall's testimony, and that of others,⁵ was not harmless error.

* * *

For the foregoing reasons, I respectfully dissent from the majority's disposition of the expert testimony issue.

⁵ This error also makes the admission of testimony of Messrs. Reed, Ellis, and Buckmaster reversible error.