

Kohlleppel for stealing water. Kohlleppel operates a farming business with his son David Kohlleppel. The business is incorporated as T&D Kohlleppel Farms, Inc. The farming business is also a plaintiff in this case. This order refers to both plaintiffs as "Kohlleppel."

Kohlleppel purchases water to irrigate his farms from defendant Bexar, Medina, Atascosa Counties Water Control and Improvement District Number 1 (the Water District). In 2008, a dispute arose between the Water District and Kohlleppel about charges for water for a farm called the Fisher Farm. The Fisher Farm consists of 38 acres of land that falls within the Water District's span of control and 32 acres outside of the Water District.

The Water District sells water to farmers for two prices: one price for water to irrigate land within the district and a significantly higher price for water to irrigate land outside the district. The Water District accused Kohlleppel of purchasing water to irrigate that portion of the Fisher Farm that is within the district and then using the water to irrigate that portion of the farm that is outside the district. In 2009, the Water District presented Kohlleppel with a substantial bill for water for 2004, 2006, 2007, and 2008, asserting that Kohlleppel had used the water he had purchased in those years to irrigate out-of-district land.

Kohlleppel denied the accusation and refused to pay the bill. The Water District

refused to sell Kohlleppel water to irrigate his farms and asked the district attorney to prosecute Kohlleppel for stealing water from the Water District. The district attorney prosecuted Kohlleppel for stealing water in 2006, 2007, and 2008. After a jury acquitted Kohlleppel, the Water District still refused to deliver water to the Fisher Farm.

Kohlleppel then sued the Water District and Water District employees Will Carter, Ed Berger, Tommey Fey, Ralph Kohlleppel, and Brian Sullivan for malicious prosecution in state court. Kohlleppel offered to deposit the money for the disputed bill in the court registry and asked the state court to order the Water District to deliver water to the Fisher Farm. After Kohlleppel amended his complaint to add a civil rights claim, the defendants removed the case to federal court.

The Water District designated John Lawson Berry as an expert witness.² Kohlleppel deposed Berry and then moved to exclude Berry's expert testimony.³

Whether Berry should be able to testify. Berry is a "Senior Earth Scientist with Remote Sensing focus and global experience in hydrocarbon exploration, environmental geology and mineral exploration."⁴ The defendants did not identify the purpose of

²Docket entry # 23.

³Docket entry # 35.

⁴Docket entry # 23, p. 1.

Berry's testimony in the designation,⁵ but the defendants' response to Kohlleppe's motion indicates they designated Berry to disprove Kohlleppe's deposition testimony "that not a bucket of water went into the dry land."⁶ Berry plans to use infrared photographs to prove Kohlleppe irrigated the out-of-district land.

Berry's opinion. In his expert report, Berry reported that the goal of his investigation "was to determine whether, and if possible when, irrigation water had been applied to the given area, and to measure the acreage to which irrigation had been applied."⁷ Berry concluded the following:

1. Attempts have been made to water the northern part of the field [the out-of-district land] by using a large excess of water on the southern part [the in-district land]. This water has drained at least 1,000 feet into the northern [out-of-district] area.
2. In some years the crop can be seen to be better watered in the area of these rills [small brooks], but in other years the crop is completely uniform across the whole field, leading to *the supposition* that irrigation has been more systematic in those years.
3. So much water has flowed down the straight S-N ditch that it has left the field in significant quantities. Other evidence *suggests* that it has formed a significant fraction of the water in the creek.⁸

⁵Docket entry # 23 (summarizing Berry's qualifications and opinions).

⁶Docket entry # 51, p. 7.

⁷Docket entry # 35, ex. 7, p. 003234.

⁸Docket entry # 35, ex. 7, p. 003238 (italics added).

Berry explained that he “identified several areas on the scene that had not been cropped or watered during the year, and compared the greenness of the vegetation on these with the greenness of the vegetation of the land in question, using the rainfall records made available to [him] as a control.”⁹ Berry analyzed the following years: 1985, 1990, 1995, 2000-2010. Later, during his deposition, Berry testified that the only year he was sure about was 2006.¹⁰

Kohlleppel’s challenge. Kohlleppel argued that Berry’s opinions are based on insufficient facts and data. Kohlleppel complained that Berry’s analysis is based rainfall data for locations other than the location of the Fisher Farm. Berry based his analysis using rainfall averages from Lytle, Texas, and from the Sea World area of San Antonio, rather than La Coste where the Fisher Farm is located. As to the one year Berry is sure about—2006—Kohlleppel argued that Berry’s opinion should be excluded because that opinion is based on the same methodology as his opinions for the years for which Berry is uncertain.¹¹

The defendants’ response. The defendants responded by first stipulating to narrowing Berry’s testimony to the following issues:

⁹Docket entry # 35, ex. 7, p. 003235.

¹⁰Docket entry # 35, p. 16 & ex. 4, pp. 212-14 (marked as pp. 003097-98).

¹¹Docket entry # 35, pp. 4-5.

1. Authentication of the 2006 images of the Fisher Farm.
2. The 2006 images of the Fisher Farm are consistent with the presence of a uniform and healthy crop in the entire 70 acres; and
3. The 2006 images are consistent with a field that was irrigated.¹²

Considering these stipulations, the question before the court is whether Berry may testify about whether the Fisher Farm was irrigated in 2006; that is, whether Berry's opinion for 2006 is based on sufficient facts or data.

Rule 702. Rule 702 applies to the testimony of an expert witness. The rule provides the following:

If scientific, technical, or other specialized knowledge will assist the trier of fact to understand the evidence or to determine a fact in issue, a witness qualified as an expert by knowledge, skill, experience, training, or education, may testify thereto in the form of an opinion or otherwise, if (1) *the testimony is based upon sufficient facts or data*, (2) the testimony is the product of reliable principles and methods, and (3) the witness has applied the principles and methods reliably to the facts of the case.¹³

Kohlleppel's motion directly challenged Rule 702's first numbered factor—whether Berry's testimony is based on sufficient facts or data. Kohlleppel maintained Berry's opinions are not based on sufficient facts or data because Berry's analysis is not based on rainfall data for the location of the Fisher Farm. Even though Kohlleppel did not directly challenge the second and third listed factors, "...an opinion based on an

¹²Docket entry # 51, p. 7.

¹³Fed. R. Evid. 702 (italics added).

inadequate or inaccurate factual foundation cannot be a reliable opinion, no matter how valid the principles and methods applied or how well-qualified the expert.”¹⁴

Analysis. In this case, the pleadings indicate that Berry’s conclusions about the 2006 infrared photographs are not supported by a sufficient factual basis. When questioned about the importance of rainfall data to his analysis, Berry characterized the data as “pretty important.”¹⁵ When asked specifically about his opinions for 2006, Berry testified that crops planted on the Fisher Farm in 2006 were healthy due to irrigation “because there was insufficient rain to do the job.”¹⁶ This explanation demonstrates the importance of rainfall data to Berry’s conclusions about 2006.

Berry’s opinion about 2006 is unreliable because it is not based on rainfall data for the location of the Fisher Farm. Rainfall averages for Lytle and the Sea World area may be the best or only data available, but those averages are not data for the relevant area. The Fisher Farm is La Coste, about 15 miles south of Sea World and 7 miles north of Lytle. Thus, the rainfall data Berry relied upon covers approximately 24 linear miles. Anyone living in the San Antonio area knows that it often rains in one part of the city

¹⁴*Fernandez v. Spar Tek Indus.*, No. 0:06-3253-CMC, 2008 U.S. Dist. LEXIS 41520, at * 21 (D.S.C. May 23, 2008).

¹⁵Docket entry # 35, ex. 4, p. 73.

¹⁶Docket entry # 35, ex. 4, p. 252 (marked as 003107).

and not in another part,¹⁷ such that rainfall data for one part of the city does not necessarily correlate to rainfall data in a different part of the city. No doubt the same absence of correlation exists in the 24 miles between Lytle and Sea World. Even Berry acknowledged that the actual rainfall in La Coste could be different than the data he used.¹⁸ The potential for discrepancies in rainfall data for areas other than La Coste renders Berry's rainfall data and the resultant conclusions unreliable for the purpose of expert testimony.

Whether potential discrepancies can be explored by cross-examination.

Although arguably the truth about the differences in rainfall averages and actual rainfall can be explored with vigorous cross-examination, "where technical information is involved, it is easier for the jury to get lost in the labyrinth of concepts."¹⁹ It is unlikely that cross-examination of Berry could capture the truth underlying his conclusions.²⁰ Concepts such as infrared imagery, electromagnetic wave length, reflectance of vegetation, the difference in spectra of different vegetation species, and rectangular color chips are foreign to the average juror. A jury, wrestling with these

¹⁷Fed. R. Evid. 201 (allowing the court to take judicial notice of facts not subject to reasonable dispute, whether requested or not).

¹⁸Docket entry # 35, ex. 4, p. 73 (marked as p. 003063).

¹⁹*Guillory v. Domtar Indus.*, 95 F.3d 1320, 1331 (5th Cir. 1996) .

²⁰*See Guillory*, 95 F.3d at 1331 (opining the same about expert testimony about equipment and procedures in a salt mine).

concepts “could easily miss subtle distinctions revealed on cross-examination and then drown in the untrue and the unproven,”²¹ without ever considering the underlying rainfall data. The risk of confusion is too high to be cured by vigorous cross-examination.

The importance of actual rainfall data. Despite the importance Berry placed on rainfall data, the Water District characterized rainfall data as having limited value because it intends “to narrow Berry’s testimony to the interpretation on infrared photographs taken during the times in 2006 when [Kohlleppel] purchased irrigation water to irrigate the Fisher Farm and *the evidence shows that the amount of rainfall in 2006 was insufficient to sustain a crop without irrigation.*”²² The latter reason, however, demonstrates the importance of rainfall data, not its limited value. It is illogical to characterize rainfall data as having limited value and then rely on that limited value to disprove Kohlleppel’s testimony that he did not irrigate out-of-district land. If an analysis using rainfall data has enough weight to disprove Kohlleppel’s testimony, then the data has probative value. It is likewise contradictory to characterize the value of rainfall data as limited after the proffered expert characterized the data as “pretty important.”

²¹*Guillory*, 95 F.3d at 1331.

²²Docket entry # 51, p. 8.

The Water District's other arguments. The Water District attempted to salvage the reliability of Berry's testimony by relying on Kohlleppel's farm records from the Department of Agriculture and his crop insurance records,²³ but that evidence does not overcome the absence of rainfall data for La Coste. The most the information can do is bolster Berry's opinions;²⁴ it cannot make the opinions reliable. Likewise, the Water District's reliance on the opinions of Kohlleppel's rebuttal expert witness²⁵ does not make Berry's opinion reliable. Like Berry, Kohlleppel's rebuttal expert witness recognized the importance of rainfall data in interpreting infrared photographs.²⁶ At most, the rebuttal expert's testimony can bolster Berry's opinion, but it cannot make the opinion reliable.

Conclusion. "Expert evidence based on a fictitious set of facts is just as unreliable as evidence based upon no research at all. Both analyses result in pure speculation."²⁷ Berry's opinion may be based on the available rainfall data, but it is not based on relevant rainfall data. Without relevant rainfall data, Berry's opinions are

²³Docket entry # 51, p. 9.

²⁴The Water District argued that the records show that the Fisher Farm experienced drought in 2006, but survived the drought because Kohlleppel irrigated the farm using water purchased from the Water District.

²⁵Docket entry # 51, pp. 14-15.

²⁶Docket entry # 51, ex. 8, pp. 29-30 & 61-62.

²⁷*Guillory*, 95 F.3d at 1331.

based on fiction. For this reason, Berry's opinions are not based upon sufficient facts or data under Rule 702.²⁸ I grant Kohleppel's motion to exclude Berry's testimony (docket entry # 35). Berry may not testify as an expert witness.

SIGNED on November 2, 2011.



NANCY STEIN NOWAK
UNITED STATES MAGISTRATE JUDGE

²⁸*Guillory*, 95 F.3d at 1331 (upholding the exclusion of expert testimony about a forklift where the expert's testimony was based on "a forklift model that was not sufficiently similar to the forklift which caused the accident," and explaining that the expert's testimony could have confused the jury because the expert's model involved highly technical information and differed in several respects from disputed forklift and the accident scene).