

UNITED STATES DISTRICT COURT
EASTERN DISTRICT OF LOUISIANA

UNITED STATES

CRIMINAL ACTION

VERSUS

NO: 13-66

WALTER PORTER

SECTION: R

ORDER AND REASONS

Before the Court is defendant's motion in limine¹ seeking to exclude expert testimony on historical cell site analysis under Federal Rules of Evidence 702 and 403. Defendant also requests an evidentiary hearing on his motion. For reasons that follow, the motion is denied.

I. BACKGROUND

Defendants Walter Porter, Nemesis Bates, and Aaron Smith were indicted for charges relating to the alleged November 21, 2010 murder-for-hire of Christopher Smith. Bates was tried by jury before this Court in June 2015. During trial, the Government introduced expert testimony from Federal Bureau of Investigations Special Agent W. Charles Williams, who the Court

¹ R. Doc. 309-1.

accepted as an expert in the field of historical cell site analysis.² Special Agent Williams testified that call detail records for phones allegedly associated with Bates and Porter reveal, in general terms, the area in which those phones must have been when making or receiving calls at relevant times.³ The Government intends to call Special Agent Williams to present the same analysis at Porter's trial. Transcripts of the Bates trial, which outline Special Agent Williams's conclusions and methodology in detail, are available to Porter.

Porter now moves to preclude the Government from offering Special Agent Williams's expert testimony in his upcoming trial.⁴ Porter argues that Special Agent Williams's historical cell site analysis is scientifically unsound and does not meet the standards for admissibility as expert testimony under Federal Rule of Evidence 702 and *Daubert v. Merrell Dow Pharmaceuticals, Inc.*, 509 U.S. 579 (1993). Porter also contends that Special Agent Williams's testimony should be excluded under Federal Rule of Evidence 403 because its probative value is substantially outweighed by the danger of unfair prejudice. Porter seeks an evidentiary hearing on his motion.

² *United States v. Nemesis Bates*, 13-cr-66, Trial Transcript at 77-80 ("Bates Trial Transcript") at 80.

³ *Id.* at 80-144.

⁴ R. Doc. 309-1.

II. DISCUSSION

A. Rule 702

Porter argues that Special Agent Williams's expert testimony concerning cell site analysis is inadmissible because it is based on methods and principles that are both unreliable and irrelevant to matters at issue in this case. The test for the admissibility of expert testimony is set forth in Rule 702 of the Federal Rules of Evidence. *See Daubert*, 509 U.S. at 587. Rule 702 provides:

A witness who is qualified as an expert by knowledge, skill, experience, training, or education may testify in the form of an opinion or otherwise if: (a) the expert's scientific, technical, or other specialized knowledge will help the trier of fact to understand the evidence or to determine a fact in issue; (b) the testimony is based on sufficient facts or data; (c) the testimony is the product of reliable principles and methods; and (d) the expert has reliably applied the principles and methods to the facts of the case.

Fed. R. Evid. 702.

In *Daubert v. Merrell Dow Pharmaceuticals., Inc.*, the Supreme Court held that Rule 702 requires the district court to act as a gatekeeper to ensure that "any and all scientific testimony or evidence admitted is not only relevant, but reliable." 509 U.S. at 589; *see also Kumho Tire Co., Ltd. v. Carmichael*, 526 U.S. 137, 147 (1999) (clarifying that the *Daubert* gatekeeping function applies to all forms of expert testimony).

A district court has considerable discretion to admit expert testimony under Federal Rule of Evidence 702. *See Snap–Drape, Inc. v. Commiss'r of Internal Revenue*, 98 F.3d 194, 197 (5th Cir. 1997), *cert. denied*, 522 U.S. 821 (1998); *United States v. Garcia*, 86 F.3d 394, 400 (5th Cir. 1996), *cert. denied*, 519 U.S. 1083 (1997) (quoting *United States v. Townsend*, 3 F.3d 262, 270 (5th Cir. 1994)). This discretion extends not only to the decision whether particular expert testimony is reliable, but also to how to test an expert's reliability, including whether to hold evidentiary hearings. *See Kumho Tire*, 526 U.S. at 152 ("The trial court must have the same kind of latitude in deciding how to test an expert's reliability . . . as it enjoys when it decides whether or not that expert's relevant testimony is reliable."); *United States v. Wen Chyu Liu*, 716 F.3d 159, 168 n.19 (5th Cir. 2013), *cert. denied*, 134 S. Ct. 1011 (2014) ("[A] trial court has broad discretion in determining how to perform its gatekeeper function. . . ."); *United States v. Nichols*, 169 F.3d 1255, 1262 (10th Cir. 1999) (finding that *Daubert* does not mandate an evidentiary hearing); *Kirstein v. Parks Corp.*, 159 F.3d 1065, 1067 (7th Cir. 1998), *cert. denied*, 119 S.Ct. 1456 (1999) ("We have not required that the *Daubert* inquiry take any specific form."). Regardless of the procedures chosen, the *Daubert* gatekeeping function requires this Court to undertake a two-part analysis to determine whether the proffered testimony is reliable and whether it is relevant.

1. *Reliability*

The first prong of the *Daubert* inquiry concerns reliability. In determining whether the testimony of a proffered expert is reliable, the Court must assess whether the reasoning or methodology underlying the testimony is valid. *See Smith v. Borden, Inc.*, 188 F.R.D. 257, 259 (M.D. La. 1999) (citing *Curtis v. M & S Petroleum, Inc.*, 174 F.3d 661, 668 (5th Cir. 1999)). *Daubert* identified a number of factors to analyze the reliability of an expert's testimony, including whether his theory or technique has been tested, whether it has been subjected to peer review and publication, the existence of high known rates of error, and whether the theory or technique used to develop the theory is generally accepted within the relevant community. 509 U.S. at 592–94. In *Kumho Tire*, the Supreme Court emphasized that the test of reliability is "flexible," and that *Daubert's* list of specific factors does not necessarily, nor exclusively, apply to all experts in every case. 526 U.S. at 149–50. The Court further stressed that the *Daubert* factors may be relevant to the reliability of experience-based testimony, and not just scientifically based testimony. *Id.* at 151.

The Court is familiar with the cell site analysis of the Government's proffered expert witness, Special Agent Williams. During the trial of Porter's co-defendant, Bates, the Court heard extensive testimony on Special Agent

Williams's qualifications and methodology. Special Agent Williams testified that he has worked for the FBI's Cellular Analysis Survey Team ("CAST") since 2006 and that he was formally accepted into the program in 2009.⁵ He explained that the CAST unit's function is to assist criminal investigations by using call detail records to determine the general location of cellular phones at relevant times.⁶ In connection with this work, Special Agent Williams has received over 400 hours of formal training in cellular network theory, radio frequency theory, and analyzation of historical records.⁷ He has also received extensive "on-the-job training" and has analyzed "thousands of pages of historical call detail records."⁸ Special Agent Williams testified that he analyzes telephone records "daily" and that he has performed "hundreds and hundreds" of historical cell site analyses.⁹ Based on this experience, Special Agent Williams has been qualified as an expert in cell site analysis numerous times, in both federal and state court, including once before in this very case.¹⁰

⁵ Bates Trial Transcript at 78.

⁶ *Id.*

⁷ *Id.* at 79.

⁸ *Id.*

⁹ *Id.* at 80.

¹⁰ *Id.* During the trial of Porter' co-defendant, Bates, Special Agent Williams provided substantially the same testimony that Porter now seeks to exclude--his conclusions concerning the general location of cellular phones associated with Porter

During the Bates trial, Special Agent Williams explained that a cellular network contains numerous cellular towers with overlapping coverage areas.¹¹ Each tower has multiple antennas, and each antenna emits a radio frequency in a different direction.¹² Every time a cell phone makes or receives a phone call, the phone scans the network and connects to whichever tower provides the best signal.¹³ According to Special Agent Williams, the "best signal" will generally, but not always, come from whichever cell site is closest when the call occurs.¹⁴ Special Agent Williams applied these insights to call detail records for cell phone numbers allegedly associated with both Porter and Bates. Call detail records are essentially "enhanced billing records," which identify the date and time of each call, as well as the cellular tower and antenna to which the cell phone connected.¹⁵ Special Agent Williams testified that by using such information, he was able to determine the general location of where each cell phone must have been in order to use a particular tower and

and Bates.

¹¹ *Id.* at 84-86.

¹² *Id.* at 84-85.

¹³ *Id.* at 88.

¹⁴ *Id.* at 88, 119-121.

¹⁵ *Id.* at 86-87.

antenna during a particular call.¹⁶ He cautioned, however, that his method can only "generally locate" cell phones; it cannot determine precisely where a caller was located at any particular time.¹⁷

The Fifth Circuit has upheld expert opinion evidence on historical cell site analysis against a *Daubert* challenge. *See United States v. Schaffer*, 439 F. App'x 344, 347 (5th Cir. 2011). In *Schaffer*, the defendant argued that cell site analysis testimony is inadmissible because the field lacks any "indicia of scientific reliability." *Id.* at 346. Applying *Daubert*, the court reasoned that "the field is neither untested nor unestablished," and that numerous federal courts have accepted cell site analysis as a reliable source of expert testimony. *Id.* at 347 (citing *United States v. Weathers*, 169 F.3d 336, 339 (6th Cir. 1999); *United States v. Sepulveda*, 115 F.3d 882, 891 (11th Cir. 1997)). It also noted that the Government's proffered expert had conducted numerous cell site analyses and had taught courses on the subject. *Id.* Thus, the court concluded that the district court did not abuse its discretion by permitting the expert to use his specialized knowledge to determine the past locations of defendant's cell phone based on data in the defendant's phone bill. *Id.* Numerous other courts have reached the same result. *See e.g., United States v. Jones*, 918 F.

¹⁶ *Id.* at 78, 82, 88-91.

¹⁷ *Id.* at 88-89.

Supp. 2d 1, 5 (D.D.C. 2013) (concluding that expert's testimony based on cell site data was based on a reliable methodology); *United States v. Dean*, 2012 WL 6568229, at *5 (N.D. Ill. Dec. 14, 2012) (same); *United States v. Fama*, No. 12-CR-186 WFK, 2012 WL 6102700, at *3 (E.D.N.Y. Dec. 10, 2012) (same); *United States v. Allums*, No. 2:08-CR-30 TS, 2009 WL 806748, at *2 (D. Utah Mar. 24, 2009) (same).

The reasoning in *Schaffer* applies here as well. Like the expert in that case, Special Agent Williams has undergone extensive training in cell site analysis. As a member of the FBI's CAST unit, he analyzes telephone records "daily" and has performed "hundreds and hundreds" of historical cell site analyses. Moreover, Special Agent Williams has thoroughly described the mechanics of cellular networks and explained how he used principles of cellular network technology to reach his conclusions in this case. The Court therefore finds that the historical cell site analysis at issue satisfies the *Daubert* reliability test. Furthermore, based on Special Agent Williams's training, experience, and the nature of his proffered testimony, the Court concludes that a pretrial evidentiary hearing is not necessary to determine the reliability of Special Agent Williams's testimony. *See United States v. Gatson*, No. 2:13-CR-705 (WJM), 2015 WL 5920931, at *3 (D.N.J. Oct. 9, 2015) (finding that *Daubert* hearing was unnecessary when defendant did not

present a novel challenge to cell site analysis); *United States v. Freeman*, No. 06-20185, 2015 WL 2062754, at *5 (E.D. Mich. May 4, 2015) (declining to hold *Daubert* hearing on challenge to cell site analysis testimony).

Porter argues that Special Agent Williams's proffered testimony relies on the "demonstrably false" premise that a cell phone always connects to the cell tower that is closest at the time of the call.¹⁸ Porter contends that the connection process is actually based on many factors that are not part of the call details records that Special Agent Williams used in his analysis. These factors include the number of calls being handled by towers in the area, the "health" of available towers, the line of sight to a particular tower from the phone, and the amount of interference in the area from weather conditions and/or other towers at the time the call is made or received.

Porter misrepresents the nature of Special Agent Williams's analysis. During the Bates trial, Special Agent Williams testified repeatedly that a cell phone does not necessarily connect to the closest tower; instead, the phone uses whichever tower produces the "best" or "strongest" or "clearest" signal at the time the call is made or received.¹⁹ Thus, Special Agent Williams acknowledges that although calls connect to the closest tower "the vast

¹⁸ R. Doc. 309-1 at 3.

¹⁹ Bates Trial Transcript at 88, 119-121.

majority of times," other factors are also relevant the selection process.²⁰ Porter neither addresses this testimony nor explains his charge that Special Agent Williams's analysis nonetheless relies upon a "demonstrably false" assumption. More importantly, to the extent that the proffered expert testimony relies on assumptions about the strength of the signal from a particular tower, Porter's challenges to those assumptions go to the testimony's weight, not its reliability. *See United States v. 14.38 Acres of Land, More or Less Situated in Leflore Cty., State of Miss.*, 80 F.3d 1074, 1077 (5th Cir. 1996) ("As a general rule, questions relating to the bases and sources of an expert's opinion affect the weight to be assigned that opinion rather than its admissibility. . . ."); *United States v. Rosario*, No. 09-CR-415-2 VEC, 2014 WL 6076364, at *2 (S.D.N.Y. Nov. 14, 2014) (finding that the "vagaries" of cellular technology "affect the persuasiveness of the circumstantial evidence, but they do not render [an expert's] testimony inadmissible"); *Jones*, 918 F. Supp. 2d at 5 (concluding that "the mere existence of factors affecting cell signal strength that the expert may not have taken into account goes to the weight of the expert's testimony . . . but does not render the fundamental methodology of cell site analysis unreliable"). Accordingly, the Court finds

²⁰ *Id.* at 88.

that Special Agent Williams's historical cell site analysis is based on a reliable methodology that has been reliably applied to the facts of this case

2. Relevance

The second prong of the *Daubert* inquiry requires the Court to determine whether the expert's reasoning or methodology can be properly applied to the facts in issue--in other words, whether it is relevant. *See Daubert*, 509 U.S. at 591. Porter contends that because Special Agent Williams's testimony is not based on reliable methods or principles, it cannot be relied upon to assist the jury to understand the evidence in this case. Because the Court has concluded that Special Agent Williams's testimony is reliable, this argument fails. Special Agent Williams's testimony would explain how cellular networks work and would identify the general locations of cell phones associated with Porter and Bates in relation to particular towers at particular times. This testimony would help the jury understand the Government's claims about Porter's whereabouts and his movements during times relevant to this case. *See United States v. Evans*, 892 F. Supp. 2d 949, 955 (N.D. Ill. 2012) (concluding that "testimony concerning how cellular networks operate would be helpful because it would allow the jury to narrow the possible locations of [defendant's] phone during the course of the

conspiracy"). The testimony is therefore relevant and admissible under Federal Rule of Evidence 702.

B. Rule 403

Porter also argues that Special Agent Williams's testimony should be excluded under Federal Rule of Evidence 403. Rule 403 permits the Court to exclude evidence "if its probative value is substantially outweighed by the danger of unfair prejudice, confusion of the issues, or misleading the jury, or by considerations of undue delay, waste of time, or needless presentation of cumulative evidence." Fed. R. Evid. 403. Porter argues that Special Agent Williams's testimony has little probative value because it is based on the false assumption that a cell phone always connects to the closest cell site. Porter also contends that Special Agent Williams's testimony will cause him undue prejudice because it will lead the jury to draw adverse inferences that are unsupported by scientific principles.

These arguments fail for reasons already discussed. Contrary to Porter's assertion, Special Agent Williams's testimony is based on reliable methods that have been reliably applied to the facts of this case. Special Agent Williams and other members of the FBI's CAST unit rely on the same methods in their daily work of investigating crimes, tracking fugitives, and locating missing

persons.²¹ The proffered expert testimony is therefore probative of the general location of cell phones allegedly associated with Porter and Bates at times relevant to this case. While Porter is, of course, free to introduce evidence or to cross examine to suggest the limitations of cell site analysis, the Court cannot conclude that the probative value of Special Agent Williams's testimony is substantially outweighed by the danger of unfair prejudice.

²¹ Bates Trial Transcript at 78.

III. CONCLUSION

For the foregoing reasons, the Court DENIES defendant's motion to exclude the testimony of the Government's historical cell site analysis expert and to hold a pretrial hearing on the admissibility of the expert's testimony.

New Orleans, Louisiana, this 10th day of February, 2016.



SARAH S. VANCE
UNITED STATES DISTRICT JUDGE