

SUPREME COURT OF THE STATE OF NEW MEXICO

State of New Mexico v. Carlos Carrillo

State v. Carrillo, 2017-NMSC-023 · No. S-1-SC-34662 · Decided June 30, 2017

SUMMARY

The New Mexico Supreme Court reviewed Carlos Carrillo’s convictions for murders, tampering with evidence, breaking and entering, and related offenses. The court held that testimony describing cell phone business records was admissible without expert qualification, but testimony concerning how cell towers operate required expert testimony; any error was harmless, and the convictions were affirmed.

CASE DETAILS

COURT	Supreme Court of the State of New Mexico
WRITING FOR THE COURT	Barbara J. Vigil; Judith K. Nakamura; Petra Jimenez Maes; Edward L. Chávez; Charles W. Daniels
JURISDICTION	New Mexico
DECIDED	June 30, 2017
DOCKET	S-1-SC-34662
DISPOSITION	affirmed
PROCEDURAL POSTURE	Capital criminal appeal from convictions for first-degree murder, second-degree murder, felony murder, tampering with evidence, breaking and entering, possession of heroin, and related offenses.
STANDARD OF REVIEW	The court reviewed the legal question whether the correct evidentiary rule or standard was applied de novo; admission of expert or scientific evidence for abuse of discretion; unpreserved evidentiary error for plain error affecting a substantial right; evidentiary error under the nonconstitutional harmless-error standard; sufficiency of the evidence by viewing the evidence in the light most favorable to the verdict and asking whether any rational trier of fact could find the essential elements beyond a reasonable doubt; preserved prosecutorial-misconduct rulings for abuse of discretion and unpreserved claims for fundamental error; and cumulative error under the cumulative-error doctrine.
PRECEDENTIAL VALUE	published precedential opinion

TOPICS

expert testimony

evidence

preservation of error

harmless error

appellate procedure

PRACTICE AREAS

criminal law

criminal procedure

evidence

appellate law

QUESTIONS PRESENTED

1. Whether the district court erred by allowing a lay witness to testify about how cell towers operate and interact with cell-phone signals without qualifying the witness as an expert.
2. Whether Carrillo preserved his objection to the cell-phone testimony of the second witness by relying only on an unresolved motion in limine.
3. Whether the erroneous admission of the cell-tower-operation testimony required reversal under the nonconstitutional harmless-error standard.
4. Whether sufficient evidence supported Carrillo's murder convictions.
5. Whether sufficient evidence supported the convictions for tampering with evidence and breaking and entering.
6. Whether the State committed prosecutorial misconduct by attempting to introduce statements allegedly excluded before trial.
7. Whether cumulative error deprived Carrillo of a fair trial.

HOLDINGS

1. Testimony by a qualified records custodian concerning the contents and meaning of a call-detail report and a cell-tower report is admissible as business-record testimony and need not satisfy the requirements for lay or expert opinion testimony.
2. A witness must be qualified as an expert before testifying about the technical operation of cell towers and the interaction of cell signals in a manner used to identify the general location of a cell-phone call.
3. The challenge to the second witness's testimony was not preserved because Carrillo did not object at trial and the district court had not ruled on the motion in limine; the testimony did not constitute plain error.
4. The admission of the unqualified cell-tower-operation testimony was harmless nonconstitutional error and did not require reversal.
5. The evidence was sufficient for a rational jury to find beyond a reasonable doubt that Carrillo committed the murders, tampered with evidence, and broke and entered the vehicle.
6. No prosecutorial misconduct or fundamental error occurred because the record did not show that the State attempted to introduce evidence previously excluded by court order, and the limiting instruction requested by the defense was given.

7. Cumulative error did not warrant relief because the only trial error was harmless and the record demonstrated that Carrillo received a fair trial.

KEY QUOTATIONS

“In our view, understanding how cell towers operate requires a duly qualified expert to explain the technical nature of the many variables that influence how cell tower signals connect with cell phones.” (¶ 35)

“We therefore conclude that Cabrera should have been identified and properly qualified as an expert before testifying about how cell towers interact with cell signals to identify the location of a cell phone call because this information required specialized knowledge.” (¶ 38)

“New Mexico’s breaking and entering statute . . . requires no intent to commit a crime upon entering, only the breaking and entering need be shown.” (¶ 48)

FACTUAL BACKGROUND

Police discovered Christopher Kinney and Lyndsey Frost fatally shot in a pickup truck at Tigues Park. Evidence connected Carrillo to Kinney through numerous calls and text messages during the early morning hours, and cell-phone records placed Carrillo's phone near the area around the approximate time of the murders. Later that morning, a witness saw Carrillo using what appeared to be a firearm to break into a car; he fled and was arrested without the firearm, and he gave police changing accounts about his whereabouts. The trial court admitted testimony and exhibits concerning cell-phone records and cell-tower operation, and the jury convicted Carrillo of multiple offenses.

PROCEDURAL HISTORY

Carrillo was indicted by a grand jury and tried in the Second Judicial District Court of Bernalillo County. The jury returned multiple guilty verdicts. The district court merged certain convictions and vacated one shooting conviction on double-jeopardy grounds, then imposed two life sentences plus additional prison time and habitual-offender enhancements. Carrillo appealed directly to the New Mexico Supreme Court, challenging the admission of cell-phone evidence, sufficiency of the evidence, alleged prosecutorial misconduct, and cumulative error.

DISPOSITION

affirmed

CASES CITED

- State v. Walters, 2007-NMSC-050, ¶ 18, 142 N.M. 644, 168 P.3d 1068
- State v. Lucero, 1993-NMSC-064, ¶ 11, 116 N.M. 450, 863 P.2d 1071
- State v. Leyva, 2011-NMSC-009, ¶ 36, 149 N.M. 435, 250 P.3d 861
- Kysar v. BP American Production Co., 2012-NMCA-036, ¶ 23, 273 P.3d 867
- State v. Begay, 1998-NMSC-029, ¶ 21, 125 N.M. 541, 964 P.2d 102
- State v. Torres, 1999-NMSC-010, ¶¶ 23, 28, 42, 127 N.M. 20, 976 P.2d 20

- State v. Alberico, 1993-NMSC-047, ¶ 58, 116 N.M. 156, 861 P.2d 192
- Collins v. State, 172 So. 3d 724, 743 (Miss. 2015) (en banc)
- State v. Blurton, 484 S.W.3d 758, 771-72 (Mo. 2016) (en banc)
- Burnside v. State, 352 P.3d 627, 636-37 (Nev. 2015) (en banc)
- State v. Vargas, 2008-NMSC-019, ¶ 8, 143 N.M. 692, 181 P.3d 684
- Trujillo v. Dimas, 1956-NMSC-043, ¶ 42, 61 N.M. 235, 297 P.2d 1060
- Carlsbad Broad. Corp. v. Bureau of Revenue, 1947-NMSC-047, ¶ 8, 51 N.M. 360, 184 P.2d 434
- United States v. Piggie, 622 F.2d 486, 488 (10th Cir. 1980)
- Rozelle v. Barnard, 1963-NMSC-101, ¶ 2, 72 N.M. 182, 382 P.2d 180
- United States v. Yeley-Davis, 632 F.3d 673, 684 (10th Cir. 2011)
- State v. Patton, 419 S.W.3d 125, 132 (Mo. Ct. App. 2013)
- State v. Tollardo, 2012-NMSC-008, ¶¶ 25, 31, 36, 275 P.3d 110
- State v. Leyba, 2012-NMSC-037, ¶¶ 23-24, 289 P.3d 1215
- State v. Cunningham, 2000-NMSC-009, ¶ 26, 128 N.M. 711, 998 P.2d 176
- State v. Garcia, 1992-NMSC-048, ¶ 26, 114 N.M. 269, 837 P.2d 862
- State v. Flores, 2010-NMSC-002, ¶ 23, 147 N.M. 542, 226 P.3d 641
- State v. Franklin, 1967-NMSC-151, 78 N.M. 127, 428 P.2d 982
- State v. Boyer, 1985-NMCA-029, 103 N.M. 655, 712 P.2d 1
- State v. Silva, 2008-NMSC-051, ¶¶ 17-19, 144 N.M. 815, 192 P.3d 1192
- State v. Guerra, 2012-NMSC-027, ¶¶ 12-16, 284 P.3d 1076
- State v. Paiz, 2006-NMCA-144, ¶ 53, 140 N.M. 815, 149 P.3d 579
- State v. Allen, 2000-NMSC-002, ¶ 95, 128 N.M. 482, 994 P.2d 728
- State v. Trevino, 1991-NMCA-085, ¶ 20, 113 N.M. 804, 833 P.2d 1170
- State v. Ortega, 2014-NMSC-017, ¶ 53, 327 P.3d 1076
- State v. Samora, 2013-NMSC-038, ¶ 28, 307 P.3d 328

OPINION

PER CURIAM.

I attest to the accuracy and integrity of this document New Mexico Compilation Commission, Santa Fe, NM '00'04- 13:55:39 2017.08.09 IN THE SUPREME COURT OF THE STATE OF NEW MEXICO Opinion Number: 2017-NMSC-023 Filing Date: June 30, 2017 Docket No. S-1-SC-34662 STATE OF NEW MEXICO, Plaintiff-Appellee, v. CARLOS CARRILLO, Defendant-Appellant. APPEAL FROM THE DISTRICT COURT OF BERNALILLO COUNTY Brett R. Loveless, District Judge Robert E. Tangora, L.L.C.

Robert E. Tangora Santa Fe, NM for Appellant Hector H. Balderas, Attorney General Sri Mullis, Assistant Attorney General Santa Fe, NM for Appellee OPINION VIGIL, Justice. {1} This is a

capital appeal from the Second Judicial District Court following Defendant Carlos Carrillo's convictions of the murders of Christopher Kinney (Kinney) and Lyndsey Frost (Frost), tampering with evidence, and breaking and entering.

Defendant appeals his convictions, arguing that: (1) the district court erred in allowing lay witnesses to testify to cell phone-related evidence with respect to the murder convictions, which, in Defendant's view, required a qualified expert; (2) there was insufficient evidence to support Defendant's convictions of murder, tampering with evidence, and breaking and entering; (3) the State committed prosecutorial misconduct when it repeatedly attempted to admit statements that the district court had ruled inadmissible prior to trial; and (4) cumulative error renders the guilty verdict unreliable.

While we agree with Defendant with respect to the first issue, in part, we find that it was harmless error. We affirm Defendant's convictions. I. BACKGROUND {2} At around 8:00 a.m. on December 4, 2011, Albuquerque Police Department (APD) officers were dispatched to Tiguex Park in the Old Town area of Albuquerque. There, an APD officer spoke with a witness who had called 911 after noticing a blue Chevy Silverado pickup truck parked on the street with a man slumped over the driver's seat. {3} After consulting with the witness, an APD officer approached the truck, which had the driver's side window rolled down, and saw a man, later identified as Kinney, in the driver's seat with what appeared to be a gunshot wound behind his left ear.

The APD officer also noticed a woman in the passenger seat who was later identified as Kinney's girlfriend, Frost. Both were unconscious and unresponsive. {4} As part of their investigation, the APD officers canvassed the neighborhood and asked nearby residents whether they had heard or seen anything. Some neighbors reported hearing cars driving down the street and a loud noise sometime between midnight and 4:00 a.m.

Physical evidence collected from the crime scene included a red cell phone belonging to Kinney, seven shell casings, and two projectiles. Four additional projectiles were recovered during the autopsy of Frost. {5} Based on the injuries to the victims and the trajectory of the bullets, the APD officers concluded that the shooter was standing at the driver's side of the truck and shot through the open window or possibly with the gun held inside the truck, since some of the ejected shell casings were found inside the vehicle.

The APD officers also concluded that the victims did not have an opportunity to defend themselves as there was no evidence of a struggle, and Kinney's injury was from a shot fired at very close range. Frost had injuries that went through her hands and the top of her head, indicating that she was trying to protect herself by covering her head with her hands, and likely had her head down during the shooting.

These conclusions regarding the victims' injuries were supported by the information provided by Dr. Ross Zumwalt from the Office of the Medical Investigator after the autopsies of the victims. {6} Later that morning, the APD officers responded to a call that a male suspect was attempting to break into a car parked at the Golden Pride Restaurant on Old Coors and Central.

The witness who called 911 reported that it looked like the suspect was using the butt of a gun to break the window of the car. The suspect then fled on foot. {7} While en route to the restaurant, an APD officer made contact with a person who fit the description of the suspect. Shortly after, another APD officer arrived and assisted in 2 arresting the suspect, who identified himself as Carlos Carrillo.

Defendant told the APD officers that the car belonged to his girlfriend, Shantell Montoya (Montoya), who was at work at the restaurant, and that he broke the car window with his hands to retrieve his cell phone from inside the vehicle.

The APD officers did not notice any injuries on Defendant's hands, and did not find a firearm on Defendant or along his possible routes from the restaurant parking lot to the intersection where he was arrested. Defendant did have \$413 in cash, a cell phone, a bottle of cologne, and a plastic bag containing a brown substance, which Defendant admitted was heroin but which he claimed did not belong to him. {8} The APD officers discovered that Defendant's cell phone number was saved in Kinney's cell phone under the name "Los" (presumably short for "Carlos").

There were multiple text messages on Kinney's cell phone that were sent to "Los" in the early morning hours of December 4, 2011. These text messages included: 2:28 a.m. - "This is f[***]ed up, bro[.] no joke[. W]hy you doing me like this?" 3:31 a.m. - "Dude[,] are you [f***]ing kidding me[? I] trusted you[. I] waited forever[. L]et me know what the [f***]ing deal is[.

I] can[']t believe you[. You're] just as bad as [JJ,] but at least we got some [s****] from him[. T]his is [f***]ing bull[s****. I] seriously can[']t believe you[.]” After retrieving Defendant's cell phone number from Kinney's cell phone, the APD officers obtained Defendant's cell phone records.

The cell phone records showed that between 11:34 p.m. on December 3, 2011 and 4:03 a.m. on December 4, 2011, there were seventy-five cell phone calls from Kinney to Defendant and eight from Defendant to Kinney. Based on the text messages and calls, Detective Hollie Anderson believed that there was a disagreement and a possible confrontation between Kinney and Defendant. {9} Detective Anderson interviewed Defendant in the early morning hours of December 5, 2011.

Defendant initially told Detective Anderson that he went to bed around 1:00 a.m. or 2:00 a.m. on the night of December 3 into December 4, and stayed home the entire day of December 4. When Detective Anderson asked how he could have been arrested if he stayed home all day, Defendant explained that Montoya picked him up and took him to the restaurant where she worked.

Initially, Defendant said that he and his girlfriend were pulled over and that the APD officers found drugs on his side of the car, so he was arrested. In response to further questioning, however, Defendant changed his story and explained that he was walking away from the restaurant when an APD officer stopped him in response to a 911 caller reporting that he had tried to break into Montoya's car.

He said that the APD officers found the heroin at that time, but he was not sure where they found it. {10} Detective Anderson asked Defendant whether he knew either Kinney or Frost. Defendant claimed that he did not know anyone by those names.

However, when Detective Anderson showed him a picture of Kinney, he responded that he and Kinney had gotten high 3 together and that he sometimes helped Kinney "score" drugs. Defendant alleged that Kinney had tried to call him to get drugs the night before he was arrested. Defendant said that he was not able to find drugs for Kinney that night, and that since Kinney eventually stopped calling, he assumed that Kinney had found some drugs on his own.

Detective Anderson told Defendant that Kinney and Frost had been found murdered that morning. Defendant denied knowing about the murders. {11} On December 20, 2011, Defendant was charged by grand jury indictment with two counts of first-degree murder (willful and deliberate), two counts of first-degree felony murder, two counts of shooting at or from a motor vehicle causing great bodily harm, tampering with evidence, possession of a firearm by a felon, auto burglary, and possession of a controlled substance (heroin).

During November 2013, Defendant was tried on all charges except the felon in possession of a firearm charge, which was severed. {12} The pretrial scheduling order mandated that the parties produce and exchange final witness lists no later than ten days prior to the first day of trial.

The State provided a final witness list in accordance with the pretrial scheduling order, but it did not identify any expert witnesses. Defendant filed a motion in limine to restrict Abraham Cabrera (Cabrera) and Amy Tan (Tan) from testifying because they lacked personal knowledge, their testimony was irrelevant, and neither one was disclosed as an expert witness.

See Rule 11-602 NMRA (A lay witness "may testify to a matter only if evidence is introduced sufficient to support a finding that the witness has personal knowledge of the matter."); Rule 11-401 NMRA (Evidence is relevant if it tends to make a fact in issue "more or less probable" and "the fact is of consequence in determining the action."); and Rule 11-702 NMRA ("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 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."). {13} At the hearing on the motion in limine, Defendant argued that he anticipated Cabrera and Tan's testimony would interpret cell phone-related records, which he believed required a qualified expert.

The district court did not rule on the motion in limine, but instead took it under advisement and told the parties it would decide the motion during trial based on the foundation laid and the exhibits offered. {14} Both Cabrera and Tan testified at trial. Cabrera explained that as an employee in Cricket's legal compliance division, his job was to "pull the raw data for telephone calls for Cricket [C]ommunications and format it so law enforcement can read the records." The State introduced two exhibits through Cabrera: a call detail report record for Defendant's cell phone number listing all incoming and outgoing calls made between November 18, 2011 and December 5, 2011 (call detail report record), and a cell tower report listing all Albuquerque cell towers and the longitude and latitude coordinates for each cell tower (cell tower report).

After Cabrera briefly explained what each exhibit was, Defendant objected, explaining that the State had not "established that... Cabrera [was] anything other than the custodian of 4 records" and that it appeared that the State was beginning to ask Cabrera "to interpret the meaning of the records." Defendant contended that such testimony was "technical" and had to be introduced "through an expert witness and not through a lay witness." The State responded that Cabrera was only going to testify that the cell tower report "shows the locations of the cell towers around town," about which Cabrera had personal knowledge "[f]rom the records." The district court sustained the objection, instructing the State to lay a foundation, and explained that if Cabrera could testify about the contents of the records "based on his experience," the testimony would be allowed. {15} The State then elicited testimony from Cabrera establishing that he had seen the cell tower reports before and knew how to read them.

He explained that the records give the latitude and longitude for each cell tower, and that it did not take any scientific expertise to map the location of the cell tower from those coordinates because a simple Google search "will map it for you." Cabrera then described how a cell phone connects with a cell tower when a wireless customer places a cell phone call.

Cabrera explained that each cell tower provides a signal to three separate sectors, each covering 120 degrees of the area around the cell tower, which might provide a general indication of where a cell phone is located when it connects to the cell tower. Cabrera testified that a cell phone will connect to the cell tower with the strongest signal and that the radius of a cell tower's range depends on the terrain and other factors, but the range is generally about one mile in an urban area like Albuquerque.

Defense counsel did not object again during Cabrera's testimony, and only asked two questions on cross examination: whether Cabrera knew about the accuracy of the longitude and latitude data provided for the cell towers, and whether there was any way to determine the distance between a cell phone and the cell tower to which it connects. Cabrera explained that the cell tower coordinates were pulled from engineer reports, which he did not produce himself.

He also testified that there is no way to determine how far a cell phone is from a cell tower when it connects to place a call. {16} The State's second witness, Tan, was an employee of Rocky Mountain Information Network. Tan's job was to create visual depictions of information provided by law enforcement agencies. Tan compiled information from Defendant's cell phone records onto a map that showed the location of the cell towers used for each call using software called "Tracing Trips." Tan created a second map that showed the cell tower and the sector to which each call connected.

Tan also created a timeline of incoming and outgoing calls between Defendant's and Kinney's cell phones. Tan did not testify about Defendant's location based on the maps she created. However, the maps showed that the cell signal from Defendant's cell phone was received and recorded by cell towers near the Downtown and Old Town areas of Albuquerque around the time that the APD officers believed Kinney and Frost were killed.

Defense counsel did not object at any point during Tan's testimony. {17} The jury found Defendant guilty of: one count of first-degree murder (willful and deliberate) for the death of Kinney; one count of second-degree murder for the death of Frost; two counts of first-degree felony murder; two counts of shooting at or from a motor vehicle causing great bodily harm; one count of tampering with evidence; one count of 5 breaking and entering; and one count of possession of heroin.

After sentencing, the district court entered its judgment, sentence, and commitment. With respect to Kinney's murder, the district court merged the convictions for first-degree murder and felony murder and vacated the conviction for shooting at a motor vehicle on double jeopardy grounds. With respect to the killing of Frost, the district court merged the convictions for second-degree murder and shooting at a motor vehicle with the felony murder conviction.

Accordingly, the district court sentenced Defendant to two life sentences, one for each first-degree murder conviction, plus an additional twelve and a half years, including two habitual offender enhancements on the remaining convictions for tampering with evidence, breaking and entering, and possession of heroin. {18} We address each of Defendant's challenges to his convictions below.

II. DISCUSSION A. Admission of Cell Phone-Related Testimony {19} Defendant argues that the district court should not have permitted the State to admit cell phone-related testimony because the State did not qualify Cabrera and Tan as experts. Defendant argues further that the district court erred by admitting the testimony because it entailed specialized knowledge and, thus, a qualified expert witness was necessary.

The State responds that the district court did not abuse its discretion in admitting lay testimony by Cabrera and Tan because their cell phone-related testimony did not involve any scientific,

technical, or otherwise specialized knowledge. 1. Preservation {20} As a preliminary matter, we must determine whether the issue was preserved when Defendant filed a motion in limine and objected to Cabrera’s testimony at trial. “In order to preserve an issue for appeal, a defendant must make a timely objection that specifically apprises the trial court of the nature of the claimed error and invokes an intelligent ruling thereon.” State v. Walters, 2007-NMSC-050, ¶ 18, 142 N.M.

644, 168 P.3d 1068 (internal quotation marks and citations omitted); see Rule 11-103(A)(1)(a)-(b) NMRA (“A party may claim error in a ruling to admit or exclude evidence only if the error affects a substantial right of the party and... if the ruling admits evidence, the party, on the record... timely objects or moves to strike, and... states the specific ground, unless it was apparent from the context[.]”). “[I]t is the responsibility of counsel at trial to elicit a definitive ruling on an objection from the court.” State v. Lucero, 1993-NMSC-064, ¶ 11, 116 N.M.

450, 863 P.2d 1071. {21} Defendant initially objected to the admission of Cabrera and Tan’s testimony by filing a motion in limine. The district court did not rule on the motion in limine, but took it under advisement. Then, at trial, Defendant objected to Cabrera’s testimony on the basis that it required a qualified expert.

The district court sustained Defendant’s objection and ordered 6 the State to lay a foundation for Cabrera’s “personal knowledge or his experience.” Defendant properly preserved the issue with respect to Cabrera’s testimony because the objection was made in a timely fashion, the nature of the objection was clear, and the district court issued a ruling upon the objection. {22} The challenge to Tan’s testimony, however, was not preserved.

While Defendant asserted a specific objection to Cabrera’s trial testimony, and thus preserved the issue, Defendant failed to object to Tan’s testimony at trial. As a result, Defendant’s objection to Tan’s testimony rested solely on the motion in limine, a general objection, on which the district court judge did not rule. {23} The motion in limine did not apprise either the opposing party or the district court to any specific alleged error in Tan’s actual trial testimony.

See State v. Leyva, 2011-NMSC- 009, ¶ 36, 149 N.M. 435, 250 P.3d 861 (concluding that “[w]e require parties to assert the legal principle upon which their claims are based and to develop the facts in the trial court primarily for two reasons: (1) to alert the trial court to a claim of error so that it has an opportunity to correct any mistake, and (2) to give the opposing party a fair opportunity to respond and show why the court should rule against the objector.” (internal quotation marks and citation omitted)).

As the Court of Appeals stated in Kysar v. BP American Production Co., 2012-NMCA-036, ¶ 23, 273 P.3d 867, “[a] motion in limine is merely a preliminary determination by a district court regarding the admissibility of evidence.... [M]otions in limine are interlocutory orders which are subject to reconsideration by the district court during the trial.” (Citations omitted).

The Court of Appeals continued that “[i]t is often impossible to make definitive evidentiary rulings prior to trial because admissibility will depend on the state of the evidence at the time of the ruling. As the trial unfolds,... it [may be] proper for the district court to revisit, and modify or reverse its prior ruling.” *Id.* (internal quotation marks and citation omitted). “[M]otions in limine seeking advance rulings on the admissibility of evidence are fraught with problems because they are necessarily based upon an alleged set of facts rather than the actual testimony which the trial court would have before it at trial in order to make its ruling.” *Id.* (alteration in original) (citations omitted).

By their very nature, motions in limine do not sufficiently preserve an issue because the rulings on them are subject to change, depending on the nature of the relevant evidence at trial. Thus, Defendant failed to preserve his objection to Tan’s testimony. {24} We review the admission of an unpreserved claim only if the admission of the challenged evidence is plain error and it affects a substantial right.

Rule 11-103(E). To constitute plain error, it must give rise to “an injustice that creates grave doubts concerning the validity of the verdict.” *State v. Begay*, 1998-NMSC-029, ¶ 21, 125 N.M. 541, 964 P.2d 102 (internal quotation marks and citation omitted).

The admission of Tan’s testimony does not rise to a level that creates a grave doubt as to the validity of the verdict. For these reasons, we do not find plain error that would compel us to review the admissibility of Tan’s testimony. 2. Admissibility of Cabrera’s testimony 7 {25} The central issue before us is whether Cabrera should have been qualified as an expert to testify regarding cell phone-related evidence.

While cell phone-related testimony is increasingly common evidence in trials, see generally Aaron Blank, *The Limitations and Admissibility of Using Historical Cellular Site Data To Track the Location of a Cellular Phone*, 18 *Rich. J. L. & Tech.* 3 (2011); Alexandra Wells, *Ping!*

The Admissibility of Cellular Records To Track Criminal Defendants, 33 *St. Louis U. Pub. L. Rev.* 487 (2014), the parameters of its admission are a matter of first impression in New Mexico. {26} “[T]he threshold question of whether the trial court applied the correct evidentiary rule or standard is subject to de novo review on appeal.” *State v. Torres*, 1999-NMSC-010, ¶ 28, 127 N.M.

20, 976 P.2d 20. “[T]he admission of expert testimony or other scientific evidence is... within the sound discretion of the trial court and will not be reversed absent a showing of abuse of that discretion.” *State v. Alberico*, 1993-NMSC-047, ¶ 58, 116 N.M. 156, 861 P.2d 192. {27} We consider Cabrera’s trial testimony to fall within two distinct categories.

The first category of Cabrera’s testimony includes his testimony regarding the contents of two cell phone-related records, namely a call detail report record and a cell tower report listing the location of all cell towers in the city of Albuquerque.

The second category includes testimony pertaining to how cell towers operate. We address each in turn. {28} The State argues that the first category of cell phone-related testimony does not require a qualified expert. Many other jurisdictions have addressed this issue and concluded that information in a cell detail report or map showing the location of cell towers does not require a qualified expert.

See, e.g., *Collins v. State*, 172 So. 3d 724, 743 (Miss. 2015) (en banc) (The Mississippi Supreme Court held that testimony that simply describes the information in a call detail report record or “informs the jury as to the location of cell... towers” is properly lay testimony when it is based upon the personal observations of the witness.); *State v. Blurton*, 484 S.W.3d 758, 771-72 (Mo.

2016) (en banc) (The Missouri Supreme Court held that a lay witness may testify as to the location of different cell towers “pinged” by the defendant’s cell phone throughout the night so long as the State did not try to pinpoint the precise location of the defendant’s “cell phone in relation to the cell tower to which [the defendant’s] cell phone was connected at the time the calls were made[.]”); *Burnside v. State*, 352 P.3d 627, 636 (Nev.

2015) (en banc) (The Supreme Court of Nevada held that “a map showing the locations of the cell phone sites that handled calls from the cell phones registered to [the defendants] during the time period relevant to the murder,” which also included the time of each call and testimony which merely described the locations of cell towers, was not expert testimony.). {29} In the instant case, we take a different approach.

The first category of Cabrera’s testimony was not opinion testimony. Rather, Cabrera’s testimony regarding the call detail report record and the cell tower report was testimony about the contents and meaning of business records for which he was qualified as a custodian.

Under Rule 11-803(6) NMRA, a record of an act, event, condition, opinion, or diagnosis is not excluded by the hearsay rule 8 if: (a) the record was made at or near the time by—or from information transmitted by—someone with knowledge, (b) the record was kept in the course of a regularly conducted activity of a business, institution, organization, occupation, or calling, whether or not for profit, (c) making the record was a regular practice of that activity, and (d) all these conditions are shown by the testimony of the custodian or another qualified witness, or by a certification that complies with Rule 11-902(11) or (12) NMRA or with a statute permitting certification.

As a result, neither Rule 11-701 NMRA nor Rule 11-702 needed to be satisfied. {30} The State laid an adequate evidentiary foundation for Cabrera, the records custodian, to testify to the contents of the business records. Rule 11-803(6). Cabrera testified that the data in the call detail report record was captured by a computer at or near the time of occurrence of a matter set forth in the cell phone records.

He further testified that the raw data, documents, and records were created and kept in the usual course of regular business activity. The defense counsel declined to object. {31} With regard to the admissibility of the business records, under the right-for-any- reason doctrine, we uphold the district court's decision that the contents of the business records were properly admitted as business records.

State v. Vargas, 2008-NMSC-019, ¶ 8, 143 N.M. 692, 181 P.3d 684 (“Under the right for any reason doctrine, we may affirm the district court's order on grounds not relied upon by the district court if those grounds do not require us to look beyond the factual allegations that were raised and considered below.” (internal quotation marks and citation omitted)).

Because Cabrera testified to the contents and meaning of business records for which he was a custodian under Rule 11-803(6), the testimony was admissible. {32} In addition, the district court could have taken judicial notice of the cell tower report because it included the latitude and longitude of all cell towers in the city of Albuquerque.

The latitude and longitude points on a globe or valid map are a proper subject of judicial notice. Rule 11-201(B)(2) NMRA (“The court may judicially notice a fact that is not subject to reasonable dispute because it... can be accurately and readily determined from sources whose accuracy cannot reasonably be questioned....”); see also Trujillo v. Dimas, 1956- NMSC-043, ¶ 42, 61 N.M.

235, 297 P.2d 1060 (holding that the district court could take judicial notice of the location of a county and the location of the New Mexico Principal Meridian in an action involving the validity of tax sales); Carlsbad Broad. Corp. v. Bureau 9 of Revenue, 1947-NMSC-047, ¶ 8, 51 N.M. 360, 184 P.2d 434 (taking notice that “Texas state lines are about 70 miles east and 30 miles south of Carlsbad,” New Mexico); United States v. Piggie, 622 F.2d 486, 488 (10th Cir.

1980) (“Geography has long been peculiarly susceptible to judicial notice for the obvious reason that geographic locations are facts which are not generally controversial....”); Rozelle v. Barnard, 1963-NMSC-101, ¶ 2, 72 N.M. 182, 382 P.2d 180 (“This court, since early territorial days, has expressed the view that courts will take judicial notice of matters of common and general knowledge.”). {33} Had the State limited Cabrera's testimony to just the call detail report record and the cell tower report, we would find no error.

However, Cabrera proceeded to testify about how cell towers operate and interact with cell signals to locate the general origin of a cell phone call. This second category of testimony requires the “scientific, technical, or other specialized knowledge” to assist “the trier of fact to understand the evidence or determine a fact in issue.” Rule 11-702. “This Court has discerned three prerequisites in Rule 11-702 for the admission of expert testimony: (1) experts must be qualified; (2) their testimony must assist the trier of fact; and (3) their testimony must be limited to the area of scientific, technical, or other specialized knowledge in which they are qualified.” See Torres,

1999- NMSC-010, ¶ 23. {34} In essence, a cell phone functions as a two-way radio that continually transmits and collects signals from cell towers throughout a cell network.

United States v. Hill, 818 F.3d 289, 295 (7th Cir. 2016); see Blank, *supra*, at **5-6. Each cell tower covers a geographic area, and the connection between the cell phone and the cell tower can be influenced by a number of factors, including “[t]he number of antennas operating on the cell [tower], the height of the antennas, topography of the surrounding land, and obstructions (both natural and man-made).” Blank, *supra*, at *5.

When a call is made, the cell phone typically connects to the cell tower with the strongest signal. *Id.* at *6. However, cell towers often overlap in coverage so that a single cell phone call might simultaneously connect to more than one tower. *Id.* Although the vicinity of the cell phone user is a substantial factor in determining the cell tower with which the cell phone connects, the geography, topography, angle and number of antennas on the cell tower sites, and characteristics of the specific phone impact the analysis.

Id. at *7. {35} In our view, understanding how cell towers operate requires a duly qualified expert to explain the technical nature of the many variables that influence how cell tower signals connect with cell phones. Rule 11-702.

To conclude otherwise would subvert the reliability requirements of our rules of evidence. See Torres, 1999-NMSC-010, ¶ 42 (noting that without the proper foundation establishing the knowledge, skill, experience, training, or education of the witness, the reliability of this type of testimony is undermined). Qualifying an expert ensures that the testimony “will help the trier of fact to understand the evidence or to determine a fact in issue,” Rule 11-702, rather than “confus[e] the issues [or] mislead[] the jury.” Rule 11-403 NMRA. {36} Cabrera’s testimony regarding how cell towers operate required a technical analysis 10 of the many factors that influence the strength of cell signals and the towers’ connection with cell phones in order to ascertain the general location of Defendant’s phone at a particular point in time.

The State failed to establish that Cabrera had the specialized knowledge and experience to reliably explain how the cell tower operated in determining the general location of Defendant’s cell phone. This type of cell phone-related information is highly technical and requires specialized knowledge of a qualified expert under Rule 11-702. {37} Other jurisdictions have also determined that explaining how cell towers record and receive signals is clearly within the realm of expert testimony.

United States v. Yeley-Davis, 632 F.3d 673, 684 (10th Cir. 2011); see also Hill, 818 F.3d at 296 (concluding that “statements about how cell... towers operate... fit[] easily into the category of expert testimony”). Courts have explicitly held that pinpointing a cell phone in relation to a cell

tower involves “specialized knowledge not readily accessible to any ordinary person.” Yeley-Davis, 632 F.3d at 684.

The Nevada Supreme Court determined that testimony explaining that cell signals usually transmit from the nearest cell tower, except when the site is too busy or there is an obstruction, was expert testimony. Burnside, 352 P.3d at 636-37. Similarly, the Missouri Court of Appeals concluded that expert testimony is required to locate “the area in which [the defendant’s cell] phone must have been to have connected to a particular cell site—i.e., to proffer testimony actually probative of whether [the defendant] was in one area rather than the other—required analysis of many variables that influence cell site signal strength.” State v. Patton, 419 S.W.3d 125, 132 (Mo.

Ct. App. 2013). {38} It is incumbent upon the district court, as gatekeeper, to ensure the reliability of the testimony presented to the jury. We therefore conclude that Cabrera should have been identified and properly qualified as an expert before testifying about how cell towers interact with cell signals to identify the location of a cell phone call because this information required specialized knowledge.

Therefore, because the State did not identify Cabrera as a qualified expert, the district court did not assess the evidentiary reliability of his testimony. As a result, the district court erred in admitting this testimony at trial. {39} “Improperly admitted evidence is not grounds for a new trial unless the error is determined to be harmful.” State v. Tollardo, 2012-NMSC-008, ¶ 25, 275 P.3d 110 (citations omitted). “We now analyze whether this evidentiary error was merely harmless, in which case we could overlook it, or prejudicial, requiring reversal.” State v. Leyba, 2012-NMSC-037, ¶ 23, 289 P.3d 1215. {40} “[W]e apply the non-constitutional error standard for harmless error” because admitting the cell tower evidence was an evidentiary error.

Id. ¶ 24; see also State v. Tollardo, 2012-NMSC-008, ¶ 36, 275 P.3d 110. While a constitutional error requires only a reasonable possibility of prejudice for reversal, “[a] non-constitutional error requires reversal when there is a ‘reasonable probability that misconduct contributed to the [defendant’s] conviction.’ ” Leyba, 2012-NMSC-037, ¶ 24 (second alteration in original) (emphasis added) (quoting Tollardo, 2012-NMSC-008, ¶ 31).

To determine “the probable effect of an evidentiary error,” we assess all of the circumstances surrounding the error. 11 Leyba, 2012-NMSC-037, ¶ 24 (internal quotation marks and citation omitted). In doing so, “[w]e examine the error itself, including the source of the error and the emphasis placed on the error at trial.” Id. “To put the error in context, we often look at the other, non- objectionable evidence of guilt... to evaluate what role the error played at trial.” Id. We conduct this analysis on a case-by-case basis.

Id. {41} Although the State used Cabrera’s testimony to discredit Defendant’s statements to the APD about his location on the night of the murders, Tan’s testimony, to which there was no

objection, summarized the information contained within the call detail report record and the cell tower report produced by Cabrera to show the longitude and latitude of cell phone towers on a map.

Under the non-constitutional standard for harmless error, we conclude that it was harmless error in admitting Cabrera's testimony regarding how cell towers operate because the call detail report record and the cell tower report which were used to create the maps were properly admitted. Additionally, the calls between Defendant and Kinney are inculpatory, as are the location of the towers when these calls were placed.

It is also harmless error with respect to Defendant's convictions for tampering with evidence and breaking and entering because Cabrera's testimony did not relate to Defendant's convictions for conduct occurring at a different time and location.

As a result, Defendant failed to establish that there is a reasonable probability that the jury would have had a reasonable doubt concerning his guilt as a result. B. Sufficiency of the Evidence {42} Defendant argues that there was insufficient evidence to support his convictions. "In reviewing the sufficiency of the evidence, we must view the evidence in the light most favorable to the guilty verdict, indulging all reasonable inferences and resolving all conflicts in the evidence in favor of the verdict." State v. Cunningham, 2000-NMSC-009, ¶ 26, 128 N.M.

711, 998 P.2d 176. "[T]he relevant question is whether, after viewing the evidence in the light most favorable to the prosecution, any rational trier of fact could have found the essential elements of the crime beyond a reasonable doubt." State v. Garcia, 1992-NMSC-048, ¶ 26, 114 N.M. 269, 837 P.2d 862 (alteration in original) (internal quotation marks and citation omitted).

1. Defendant's convictions for first-degree murder {43} Defendant's arguments concerning the sufficiency of the evidence to support his convictions for the crimes committed at Tiguex Park are based on what he views as the State's failure to prove identity; that is, that Defendant was the person who committed the murders. Defendant does not argue that there was insufficient evidence to prove the other elements of the crime. {44} Accordingly, we review the evidence to determine whether a rational jury could find that Defendant perpetrated the murders.

The cell phone records show that Defendant and Kinney were in contact on the night of the murders. As the State points out, the text 12 messages from Kinney to Defendant show that Kinney was upset with Defendant, which could support an inference of a conflict between the two.

The map prepared by Tan shows that Defendant's cell phone "pinged" a cell tower in the Old Town area around 4:00 a.m., the approximate time when the murders were believed to have occurred. Additionally, because we consider even erroneously admitted evidence, see Post, 1989-NMCA-090, ¶ 24, we note that the jury could have inferred that Defendant was in the area at that

time based on Cabrera's testimony about how a cell phone connects to the cell tower with the strongest signal.

Further, a witness reported seeing Defendant with a firearm only a few hours later in the parking lot of the restaurant where Montoya worked. And, although Defendant told Detective Anderson that he stayed home all night and fell asleep by 1:00 a.m. or 2:00 a.m., his phone records show that he made and answered cell phone calls to and from Kinney and others much later than 2:00 a.m.

See *State v. Flores*, 2010-NMSC-002, ¶ 23, 147 N.M. 542, 226 P.3d 641 (“[E]vidence of... an attempt to deceive the police may prove consciousness of guilt.” (internal quotation marks and citations omitted)). This evidence provides a sufficient basis upon which a jury could find that Defendant was the person who committed the murders. 2. Defendant's convictions for tampering with evidence and breaking and entering {45} Defendant argues under *State v. Franklin*, 1967-NMSC-151, 78 N.M.

127, 428 P.2d 982 and *State v. Boyer*, 1985-NMCA-029, 103 N.M. 655, 712 P.2d 1, that there was insufficient evidence to support his convictions for tampering with evidence and breaking and entering. {46} To find Defendant guilty of tampering with evidence, the jury must have found beyond a reasonable doubt that (1) “[t]he defendant hid a firearm,” and that (2) “[b]y doing so, the defendant intended to prevent the apprehension, prosecution or conviction of Carlos Carrillo.” See UJI 14-2241 NMRA.

At trial, a witness testified that she was “[a]bsolutely positive” she saw a gun in Defendant's hand when he broke into the car at Golden Pride. Defendant then fled on foot, and when police stopped him soon thereafter, he did not have a gun. Though Defendant told police that he used his hands to break the window, the jury could logically infer that he had a gun, which he disposed of on the way from Golden Pride, and then lied about it to the police.

Further, because he had been seen committing a crime (breaking into the car), the jury could reasonably infer that Defendant hid the gun to prevent apprehension, prosecution, or conviction of that crime. {47} We note that *State v. Silva* requires that evidence showing that a defendant had a gun and used that gun to commit a crime, combined with a showing that the gun was then removed from the scene and never recovered, is insufficient to show that the defendant had the intent required by NMSA 1978, § 30-22-5(A) (2003).

2008-NMSC-051, ¶¶ 17-19, 144 N.M. 815, 192 P.3d 1192, holding modified by *State v. Guerra*, 2012-NMSC-027, ¶¶ 12-16, 284 P.3d 1076. The *Silva* Court held that the State must provide either direct evidence of a specific intent to tamper or evidence of an overt act from which the jury could infer that intent. 2008-NMSC-051, ¶ 18.

Here, the State's case is supported by a witness's testimony 13 that she saw Defendant with a gun after the murders were committed, that Defendant left the scene and was found shortly thereafter

with no gun, and that Defendant lied about using his hand to break the window. This evidence distinguishes this case from those in which the jury was “effectively asked... to speculate that an overt act of... hiding [the murder weapon] had taken place, based solely on the fact that such evidence was never found.” Id. ¶ 19 (alteration and second omission in original) (emphasis added) (internal quotation marks and citation omitted).

There was sufficient evidence to support Defendant’s conviction for tampering with evidence. {48} Defendant also contends that there was insufficient evidence to support his conviction for breaking and entering because he entered to retrieve his own property from the vehicle.

To find Defendant guilty of breaking and entering, the jury was required to find: (1) “[t]he defendant entered a 2006 Chevrolet 4-door belonging to Shantell Montoya without permission” and (2) “[t]he entry was obtained by the breaking of the vehicle window.” See UJI 14-1410 NMRA.

As the committee commentary to UJI 14-1410 explains, “New Mexico’s breaking and entering statute... requires no intent to commit a crime upon entering, only the breaking and entering need be shown.” Therefore, it is immaterial that Defendant was breaking in to retrieve his own property. A witness from Golden Pride testified that she saw him break the car window and rummage around inside the car.

Further, Montoya testified that she was mad at him for breaking into her car, supporting the inference that he did not have permission. Thus, there was sufficient evidence to support the conviction for breaking and entering. C. Alleged Prosecutorial Misconduct {49} Defendant argues under Franklin and Boyer that “the State’s repeated attempts to admit into evidence the statements by Mario Chavez and...

Montoya was prosecutorial misconduct.” The State responds that although defense counsel objected at various points to the testimony of witnesses Mario Chavez (Chavez) and Montoya, the relief requested at trial was a limiting instruction, which is granted.

Thus, the State argues, there was no basis for Defendant’s prosecutorial misconduct claim because the limiting instruction cured any potential prejudice resulting from the alleged misconduct. Further, the State argues, Defendant failed to preserve his claim of prosecutorial misconduct, and, thus, it is not properly before the Court.

We agree with the State. {50} “When an issue of prosecutorial misconduct is preserved by a timely objection at trial, we review the district court’s ruling for abuse of discretion.” State v. Paiz, 2006- NMCA-144, ¶ 53, 140 N.M. 815, 149 P.3d 579.

However, “[i]f no objection was raised, our review is limited to fundamental error.” Id. “Prosecutorial misconduct rises to the level of fundamental error when it is so egregious and had

such a persuasive and prejudicial effect on the jury’s verdict that the defendant was deprived of a fair trial.” State v. Allen, 2000- NMSC-002, ¶ 95, 128 N.M. 482, 994 P.2d 728 (internal quotation marks and citations omitted).

14 {51} Importantly, Defendant made no claim of prosecutorial misconduct at trial. As a result, the issue was not preserved. Therefore, our review is limited to fundamental error. {52} Defendant claims that the State introduced evidence in disregard of a district court order excluding the testimony of Chavez and Montoya.

However, the pages to which Defendant cites in referring to a motion in limine to exclude such evidence are actually a notice of a trial status conference and a pretrial scheduling order. In fact, there is no motion in limine to exclude the testimony of Chavez or Montoya anywhere in the record.

Thus, the State did not attempt to admit any evidence which had been previously excluded by the district court, and therefore, there was no prosecutorial misconduct. As the State points out, at the close of trial, defense counsel requested, and the jury received, a limiting instruction as to the scope of the evidence. See State v. Trevino, 1991-NMCA-085, ¶ 20, 113 N.M.

804, 833 P.2d 1170 (“Defendant may not complain on appeal when the specific relief requested was granted.”). We conclude that there was no prosecutorial misconduct and no error upon which to grant relief. D. Cumulative Error {53} Finally, Defendant argues that the cumulative errors alleged render the verdict inherently unreliable.“The doctrine of cumulative error applies when multiple errors, which by themselves do not constitute reversible error, are so serious in the aggregate that they cumulatively deprive the defendant of a fair trial.” State v. Ortega, 2014-NMSC-017, ¶ 53, 327 P.3d 1076 (internal quotation marks and citation omitted). “The doctrine of cumulative error is to be strictly applied, and... cannot [be] invoke[d] if the record as a whole demonstrates that [the defendant] received a fair trial.” State v. Samora, 2013-NMSC-038, ¶ 28, 307 P.3d 328 (alterations and omission in original) (internal quotation marks and citation omitted).

Because we find only one error at trial, an error which was harmless, we reject Defendant’s cumulative error claim, and thus, the doctrine of cumulative error does not entitle Defendant to further relief. We therefore affirm his convictions. III. CONCLUSION {54} For the foregoing reasons, we affirm Defendant’s convictions. {55} IT IS SO ORDERED.

_____	BARBARA J. VIGIL, Justice	WE CONCUR:
_____	JUDITH K. NAKAMURA, Chief Justice	15
_____	PETRA JIMENEZ MAES, Justice	
_____	EDWARD L. CHÁVEZ, Justice	
_____	CHARLES W. DANIELS, Justice	16

