

**IN THE CIRCUIT COURT OF STONE COUNTY, MISSOURI
DIVISION ONE**

STATE OF MISSOURI)	Case No. CR695-1441FX
Plaintiff,)	
)	
vs.)	
)	
TIMOTHY CHANEY)	
Defendant.)	

MOTION FOR POST-CONVICTION DNA TESTING

COMES NOW Movant Timothy Chaney, by and through his undersigned attorneys, pursuant to Section 547.035, Mo. Rev. Stat., respectfully requests that this Court order post-conviction DNA testing of physical evidence secured in relation to the murder of Michelle Winter. Mr. Chaney asserts that DNA analysis on previously untested evidence would provide exculpatory evidence substantiating his innocence and identify the actual perpetrator of the crime.

The evidence presented against Mr. Chaney at trial was insufficient, such that three justices of the Missouri Supreme Court would have reversed his conviction. *State v. Chaney*, 967 S.W.2d 47, 62 (Mo. 1998) (White, J. dissenting). As Judge White stated, convicting Mr. Chaney of Michelle Winter’s murder requires “conjecture, stacking overlapping probabilities until [the State] can link Timothy Chaney with the hand that inflicted the fatal stab wounds.” *Id.* at 61. The dissent concluded, “the State’s case against Chaney is missing an essential element” and there is “no evidence [that] ties [Chaney] to the crime either directly or by first generation inference.” *Id.* at 62.

Given the weakness of the State's evidence against Mr. Chaney, there is a reasonable probability that a jury would not have convicted him if exculpatory DNA evidence was offered. Additionally, if DNA from the physical evidence secured in relation to the crime were to match a profile in the Combined DNA Index System (CODIS) national database or the state database, DNA testing could prove Mr. Chaney's innocence and identify the actual perpetrator.

Specifically, Chaney requests that the following items be tested for DNA:

- (1) Two hairs that were found on the victim's sweater determined to be foreign to the victim;
- (2) Fingernail scrapings from the victim;
- (3) A pair of blue jeans the victim was wearing;
- (4) A black short-sleeved sweater the victim was wearing;
- (5) A black plastic belt from the victim's blue jeans
- (6) A pair of white socks the victim was wearing
- (7) One black canvas tennis shoe from the victim's right foot
- (8) Sexual assault kit of Michelle Winter
- (9) A bed sheet with apparent blood stains recovered from the residence of suspect Wing Cheong Leong;
- (10) A pair of women's panties recovered from the residence of suspect Wing Cheong Leong; and
- (11) A meat thermometer with apparent blood stains recovered from the residence of suspect Wing Cheong Leong
- (12) Various items recovered near the victim's body including:
 - (a) Cigarette butts

- (b) Beer cans
- (c) Chewing gum
- (d) Library card from the victim's pants pocket
- (e) Coins/change from the victim's pants pocket
- (f) Shell casings
- (g) Notebook paper with apparent blood stain

In support of his motion, Chaney pleads the following:

Sentence

A jury convicted Chaney of first degree murder on November 22, 1996. (T. 1804.¹) He was initially sentenced to death. (T. 1927.) He is currently serving a life sentence and is in the custody of the Missouri Department of Corrections at the Southeast Correctional Center in Charleston, Missouri.

Factual Background

The Crime

On Saturday, April 8, 1995, Michelle Winter and Stephanie Steel made plans to go to the library and stop at Burger King before heading to Stephanie's house. (T. 493-94, 529, 572-73.) Michelle and Stephanie were seventh grade friends and had known each other since elementary school (T. 521-522, 582); they lived only a few blocks from each other. (T. 472, 530.) Stephanie was the thirteen-year old step-daughter of Tim Chaney, and she worked after school at Chaney's business, C&H Optical. (T. 471, 587, 1507-1508.)

At 3:30 p.m. on April 8, Michelle called her mother and told her that she was at Stephanie's house. (T. 533.) She left Stephanie's at 4:50 p.m. Stephanie left the house at the same time, walking in the opposite direction of Michelle to return a movie. (T. 577-78, 586.)

¹ Cites to the Trial Transcript are cited as "T." followed by the transcript page number.

Witness Richard McEvoy was outside at about 5:00 p.m., when he saw a young girl matching Michelle's description heading east on Cherokee Street, toward Michelle's home. (T. 592-595.) McEvoy did not see any vehicles or notice anything unusual. (T. 598-99). He later identified the girl he saw as Michelle. (T. 599-600.) Between 5:00 and 6:00 p.m., Courtney Vaughn, a neighbor and fellow schoolmate of Michelle, was in her backyard when she noticed Michelle walking by on Cherokee Street. (T. 601-04; Ex. 6, 4-11-1995 Incidental Report re Courtney & Sally Vaughn at 1.²) Neither Courtney nor her mother Sally, who was outside cooking, saw or heard anything out of the ordinary. (T. 604, 607, 609-611.) Frank Thompson noticed a tall adolescent girl in a dark shirt, jeans, and tennis shoes around 5:50 p.m that evening as he was on Cherokee Street heading east. (T. 1300-02.)

At 6:00 p.m., Michelle's mother called Stephanie's house to tell Michelle to come home for dinner, but Stephanie told her that Michelle had already left forty-five minutes earlier, around 5:00 p.m. (T. 533-534, 578-79.) Michelle's mother then called the police, who began investigating Michelle's disappearance. (T. 538.) Later that night, Mr. Chaney and his wife, Wendy, began driving around their neighborhood to look for Michelle. (T. 539; Ex. 4, 4-14-1995, Interview with Tim Chaney at 5-6; Ex. 3, Selected Police Reports at 11-12.) They also drove to the local mall and to a few parks in the surrounding area. (*Id.*)

Michelle Winter's body was found nearly a week later on April 14, 1995 at the end of a cul-de-sac in an undeveloped area in the Cape Fair region of Stone County. (T. 657-58, 665, 800-04, 831-32.) Her body was partially covered with leaves and her sweater had been pulled up, exposing her breasts; her jeans were unzipped and pulled down around her thighs, and she was not wearing underwear. (T. 699, 813, 815-16, 852, 893; Ex. 10, Autopsy Report at 2.)

² The page numbers in Exhibit citations refer to the PDF file page numbers.

An autopsy performed by Dr. James Spindler revealed bruises on Michelle's neck and a scrape injury consistent with a "fingernail type injury." (T. 680-81.) Michelle also had bruises on her arms, buttocks and shins. (T. 688-90.) Her scalp had several areas of bruising that might have been caused by a blow (or blows) from a round object (T. 683), along with four 1/8 inch puncture wounds to the right and middle portions of the chest had caused her death. (T. 684.)³ At trial, Dr. Spindler testified that these injuries were caused by an "ice pick type" object. (T. 684.) Lastly, the victim had mud and sand on her hands and on the seat of her jeans.⁴ (T. 713.)

*The Alternative Suspect*⁵

Wing Cheong Leong, a known pedophile who harbored and had sex with runaway juveniles, lived only one and a half blocks from Michelle Winter.⁶ (T. 78-82; Ex. 3 at 23.) The Winter case generated much publicity, as television stations were provided pictures of Michelle, missing posters were made, and an extensive 6-day search was conducted, yet when Leong was first questioned by police on April 16, 1995, he claimed that he had not heard about the murder. (T. 546-47, 1635.) Leong told investigators that he had been at work on Saturday, April 8, 1995, at Accurate Plastics in Nixa, Missouri. (T. 1635; Ex. 3 at 23.) After he left work, Leong claimed that he had gone to the Elks Lodge. (T. 1635-36.) However, Leong's boss, Tammy Brown, and the company president, Don Ladd, conveyed to police that Leong was not at work at all on April 8, the day the victim disappeared. (*Id.*) His work records further verified that he had not worked

³ In the autopsy report, blunt force trauma to the head and "bruise to right side of neck suggesting possible strangulation attempt" were listed as "contributing factors." (Ex. 10 at 1.)

⁴ At the autopsy, Sergeant Ron Replogle (Missouri State Highway Patrol) took the victim's clothing. (T. 920-21.) Among the items seized were jeans and a sweater (T. 921-22.) The sweater had no damage correlating to the stab wounds. (T. 1286.)

⁵ The jury did not hear any of this evidence regarding Mr. Leong as an alternative suspect. It was presented as an offer of proof by the defense. (T. 1633.) The State objected to the offer of proof and told the judge that "there is a good bit of additional evidence that the investigators cleared Mr. Leong after several of the stories by, I guess you would say *electronic means*..." (T. 1639-40 (emphasis added).)

⁶ Leong was eventually charged with forcible rape of a minor in Green County. (T. 111, 112; Ex. 11, Criminal History of Wing Cheong Leong.)

on that date. (*Id.*; *See* Ex. 3 at 23.) When confronted by investigators with this information, Leong responded by saying that he did not remember being off work. (T. 1636.) He then stated that he had been at the Elks Lodge all day playing poker and gin until he left at 9:30 p.m and went straight home.⁷ (Ex. 3 at 23-24.) In contrast, Peggy Orr, the bartender on duty at the Elks Lodge that day, recalled that the gin game Leong was playing had ended around 5:00 or 5:30 p.m. and that she had turned out all the lights in the card room and locked the doors at that time. (T. 1637-38; Ex. 3 at 27.) Orr told police that only three customers were in the business at that time, and Orr was positive that Leong was not one of them. (*Id.*)

When confronted again by Sergeant Replogle with conflicting information indicating that Leong left the Elk's Lodge around 5:00 p.m., Leong finally admitted that he had left the Lodge at that time. (T. 1638; Ex. 3 at 24.) He now said that he left the Lodge when it was still daylight and went to a strip bar called Foxy's Lounge in Springfield, Missouri. (*Id.*) Leong allegedly stayed at the strip bar until after dark, left for home, and went to bed. (*Id.*) At this point, Leong confessed that he had not told the truth in his earlier interactions with the police. (*Id.*) When asked by Replogle why he had lied, Leong acknowledged that he was scared and "needed an alibi." (*Id.*)

Leong then gave the officer yet another version of his alibi: He left the Elks Lodge at about 5:30 PM, drove to a Dillons Store on East Sunshine Street, and then drove home and went to sleep for two or three hours. (T. 1638-39; Ex. 3 at 24.) However, Leong's next door neighbors would have refuted this testimony. Shawn Newland, a security guard who lived next door, kept track of Leong's comings and goings because Leong was a known pedophile. (T. 1639.)

⁷ Sergeant Replogle reported, "[Mr. Leong] was recontacted, and he then told [investigators] that he had been at the Elk's Lodge in Springfield until 2130 hours. This could not be verified, and it was felt he again was not truthful concerning his whereabouts." (Ex. 3 at 23.)

Newland and his wife knew that Leong had not come home on the evening of April 8, 1995. (*Id.*) In fact, they stated that he did not return home until late the following Monday evening, April 10, 1995. (*Id.*) Both Mr. and Mrs. Newland told police that Leong had a large dog that always barked and disturbed Mrs. Newland when Leong came home. (Ex. 3 at 55-56.)

In addition to Leong's ever-changing story regarding his whereabouts on the day of the crime, Leong was familiar with Cape Fair, the area where the victim's body was found. (T. 80.) He admitted having fished near Cape Fair and he owned a hotel in nearby Branson. (*Id.*; Ex. 3 at 24-25.) Importantly, a search of Leong's residence led to the confiscation of several possibly incriminating items, including a bed sheet with apparent blood stains and a pair of women's panties.⁸ (Ex. 3 at 21-22, 28-29.)

Mr. Chaney's Alibi

Mr. Chaney has consistently denied any involvement in the murder of Michelle Winter. (T. 788, 1592, 1597.) During the course of the police investigation, Chaney voluntarily gave hair samples and blood (T. 798-99, 1036), and he was cooperative and polite to officers (T. 1036.)

Police first spoke with Mr. Chaney on April 12, 1995 (T. 759.) Mr. Chaney said that on April 8, he entered his daughter Stephanie's room between 4:30 and 4:45 and told her that he was leaving for the carwash. After discovering that the carwash was full, Mr. Chaney decided to go fishing at Springfield Lake. (T. 760, 1547, 1555; Ex. 4 at 1-2; Ex. 5, 4-11-1995 Incidental Report re Cheri Nelson, Tim Chaney, & Wendy Chaney at 5.) Chaney lost two lures that day. (T. 766, 1557-59; Ex. 4 at 2; Ex. 5 at 5.) Chaney then left the Lake, and began looking for an access to the James River to find future fishing sites. (T. 766, 1560-61; Ex. 4 at 2; Ex. 5 at 5.) As he was

⁸ Mr. Leong was given a polygraph examination by Sergeant Ron Replogle on April 16, 1995. (Ex. 3 at 23, 26.) He was asked whether he murdered Michelle Winter, whether he dragged her body into the woods, and whether he could take Sergeant Replogle to the weapon used in the murder. (*Id.*) It was Sergeant Replogle's opinion that "Mr. Leong was deceptive concerning the issues addressed." (*Id.*)

driving, he saw a sign for Linden, which reminded him of Linden Lure; Chaney had heard this might be a good fishing spot, so he headed in its direction. (T. 1561-62; Ex. 4 at 2; Ex. 5 at 5.) He then noticed he was almost out of gas and saw a cemetery where he could turn around. (T. 766, 1562, Ex. 4 at 2.) The cemetery ended up taking up a few minutes of Mr. Chaney's time as he began to look around because he noticed that a few the headstones said "Holland", which was his business partner's name. (*Id.*) Chaney then went to a convenience store and bought twenty dollars worth of gas (T. 766-67, 1565-66; Ex. 4 at 2, 4.), which was confirmed by register receipts from Cody's Convenience Store at Highway 60 and 125. The receipts verified that a \$20.00 gas purchase was made at 6:09 PM, the approximate time when Chaney had stated he stopped for gas. (T. 1374-79.) When he left the gas station, Chaney went south on Highway 125 to Linden Lure (T. 1567), where he fell asleep in his vehicle (T. 1491-92, 1572; Ex. 4 at 2-3; Ex. 5 at 5.) Upon waking up, Chaney left and decided to head home, but he was disoriented and got turned around. (T. 1575; Ex. 4 at 3; Ex. 5 at 5.) Eventually, he turned towards Ozark because he knew he could find his way home from there. (T. 1576; Ex. 4 at 3-4; Ex. 5 at 5.)

While driving through Ozark on his way home, Chaney remembered seeing a few guys being arrested at a gas station. (T. 782, 1577-78; Ex. 4 at 5.) This fact was confirmed by two arresting officers, Jeff Patrick and Danny Cline. (T. 1360-62, 1367-69.) These officers arrested high school students Zachary Cave and Shannon O'Toole at the Total Gas Station at 900 West Jackson (the main street through Ozark) on April 8, 1995 at 8:15 p.m.; they were at the station until 8:45 p.m. (T. 1312-13, 1348-50, 1355-57, 1360-62, 1367-69.) Neither Cave nor O'Toole knew Mr. Chaney and they had not told him about the arrest. (T. 1314-15, 1352-53, 1358.)

When he got home that night between 8:30 and 9:00 p.m., Chaney provided this same information to his wife, Wendy Chaney. (T. 1491-92, 1580-82; Ex. 5 at 5.) In an April 15, 1995

interview, Mrs. Chaney told police that Mr. Chaney indicated he had gone to the car wash, but it was crowded. (Ex. 3 at 1-2.) He then relayed to Mrs. Chaney that he went to look for a fishing spot at Lake Springfield and he made a wrong turn on the way home. (*Id.*) She knew Chaney loved to fish, and they went fishing often (T. 637, 1512-13, 1543, 1557); Lake Springfield was one of their usual spots. (T. 636.)

The Physical Evidence

a. Hair analysis

On April 14, 1995, officers searched Chaney's house and van with his consent. (T. 796, 798, 952, 1511, 1598.) The van was towed to the Springfield Police Department so that it could be vacuumed. (T. 951-52, 955; Ex. 3 at 47.) The next day, during a search of the van, five prints were lifted, none matching the victim. (T. 973, 1339-40.) Luminol testing was performed and did not reveal the presence of any blood in the van.⁹ (T. 990-91, 994.) Hairs were found on the front passenger side floor and on the driver's side rear seat area. (T. 984.) On August 22, 1995, Sergeant Rogers (Missouri State Highway Patrol) and Laboratory Technician Jenny Smith searched the van a second time. (T. 836, 842, 907, 952-53, 1009-11; Ex. 3 at 47-48.) They seized a tool box with a tire repair kit, paint chips, and a third hair. (T. 1012, 1016.)

Jenny Smith performed a trace evidence examination of the particles that had been collected through vacuuming the van, including the hairs. One hair was found to be similar to Michelle's hair.¹⁰ (Ex. 8, Lab Reports at 26.) Smith noted that the hair, "could have come from [Michelle] or *any other person* with the same microscopic hair characteristics." (*Id.*) This third hair had a root tag, meaning that it could be subjected to DNA testing. Smith sent the hair to Meghan Clemmons of Laboratory Corporation for PCR DNA testing. (T.1079-80, 1094) The lab

⁹ Luminol will detect blood even when someone has attempted to wash the surface. (T. 991.)

¹⁰ The other two hairs found in the van were not similar to either Chaney or the victim. (Ex. 8 at 26.)

determined that the hair found in Chaney's van *could have* come from the victim (T. 1067; Ex. 9, 11-17-1995 LabCorp Certificate of Analysis at 2), but Clemmons opined that the odds that the hair came from another Caucasian were as many as 1 in 264. (T. 1069.)

b. Particle analysis

In further investigating the available physical evidence, Smith shook the victim's clothing over butcher block paper, and then collected and examined several trace samples from the clothing. (T. 1082-84.) Notably, this clothing had been collected by Sergeant Replogle during the autopsy on April 14, 1995. (T. 924; Ex. 10 at 1.) Afterwards, Sergeant Replogle brought the clothes home with him and laid them in his garage on top of paper evidence bags he had spread out on the floor. (T. 924.) At this point, the clothes were saturated with moisture. (T. 930.) Replogle let the clothes dry for a few hours and then dumped them inside another evidence bag before he went to bed. (T. 924, 926-27.) There were normally two cars inside Replogle's garage, used by all members of his family.¹¹ (T. 930-32.) Additionally, the garage housed a rusty lawn mower with an old white motor and red body, along with a small red metal tool box. (T. 931-932.) Replogle described the garage floor as "typical", with dirt and debris from the lawn mower and other items. (T. 933.)

Using a stereoscope to examine Michelle's clothing, Smith first identified items that were foreign to the victim's clothing and the environment in which she was found. (T. 1083-84.) Next, she conducted a microscopic analysis of those items, testing for color and elemental components of the particles. (T. 1084-87.) She compared the particles from the victim's clothes to particles collected from the vacuuming of Chaney's van. (T. 1087-88.) Smith found eleven items on the victim's clothing that she considered "consistent" with items from the rear of the van: (1) head

¹¹ Replogle owned a 1988 Chrysler Lebaron and a 1993 Ford Aerostar Minivan, which was "reddish maroon" in color. (T. 931.)

hair consistent with Chaney and foreign to victim (T. 1104-05, 1142-43); (2) head hair consistent with victim (T. 1102-03, 1144); (3) floor mat pieces (T. 1096, 1099, 1100, 1116-18, 1144); (4) red paint chips with rust (T.1091, 1130-32, 1145); (5) turquoise paint chips with white primer (T.1093, 1118-20, 1127-30, 1145); (6) paper with dark blue paint (T. 1092, 1136-37, 1145); (7) metallic spheres not visible to the naked eye (T. 1091-92, 1121-22, 1132-34, 1145-46); (8) metal shavings (T. 1146, 1154); (9) dark blue metallic paint (T. 1091, 1096, 1100-01, 1122-23, 1134-36, 1146); (10) aluminum foil pieces (T. 1092-93, 1146-47); and (11) reddish orange paint chips (T. 1101, 1124, 1138-39, 1147, 1154).

On cross-examination, Smith testified that Chaney's home might have been the source for some of the fibers found on the victim's clothing, as opposed to the van, and that these fibers could have been carried back and forth from the house to the van and vice versa. (T. 1222, 1224-25, 1227, 1229, 1232.) For example, with regard to the floor mat, Smith admitted that this rubber mat inside the van was chipped and that the particles were "mobile" and spread all over the van (T. 1224); the particles could have been easily carried in and out of Chaney's home (T. 1224-25), where Michelle spent part of her day on April 8, 1995 (T. 533). Smith further confessed that she had not initially known that the victim had been inside Chaney's home that day. (T. 1178.) She testified during cross-examination that if the same pool of particles taken from the van were found inside the Chaney house, the transfer of those particles to Michelle's clothing could have occurred in the home.¹² (T. 1184-86, 1194, 1674.)

¹² Stephanie Smith, an independent trace examiner who testified for the defense, explained further how the transfer of particles can occur. (T.1393-97.) She clarified that since the victim spent time in the Chaney residence, the items found on Michelle's clothing may not have come from the van, but from the home instead. (T. 1412, 1415, 1444-45, 1450.) Stephanie Smith was interested in looking at exclusionary standards to determine whether there were legitimate explanations for the consistencies found by Jenny Smith and requested that Jenny Smith send her vacuumings from Chaney's home, the victim's home, and Sergeant Replogle's garage, along with the head hair of Chaney's wife, stepdaughter, family members of the victim, and Replogle. (T.1398-99.) Stephanie Smith was told that none of these materials had been obtained by the State. (T.1399.) Therefore, because there was no way to know

Further, Smith also found many items in the van that she could not examine or characterize, and vice versa; there were items on the victim's clothing that she could not match to the van and items in the van that she could not match to the victim's clothing. (T. 1200-1202, 1212; *see* T. 1209-1220.) For example, although numerous black cotton fibers consistent with the victim's sweater readily came off when Smith shook Winter's clothing over the butcher paper, (T. 1205-07, 1423-26), no such fibers were found in the van. (T.1207.) Additionally, no fibers from the van's beige carpet were found on the victim's clothing, even though the carpeting appeared to easily shed. (T.1258-59.) Smith admitted that she would have expected to find fibers on the victim had she been lying on that carpet. (T. 1259.) Additionally, a turquoise paint chip and flat magnetic pieces with oxidated colors were found on the victim, but not in the van. (T. 1275-76.) Smith acknowledged that she did not attempt to collect all debris from the victim's clothing, just "surface debris." (T.1670.) She stopped shaking the clothing when she felt she had a "sufficient quantity" of material to analyze. (*Id.*)

Argument

Mo. Rev. Stat. §547.035 provides, in pertinent part, that any person in the custody of the department of corrections claiming that forensic DNA testing will demonstrate the person's innocence of the crime for which the person is in custody may file a postconviction motion in the sentencing court seeking such testing. Mo. Rev. Stat. §547.035.1. Such a motion must allege facts under oath demonstrating that:

- (1) there is evidence upon which DNA testing can be conducted; and
- (2) the evidence was secured in relation to the crime; and

what materials from the van were also present in Chaney's home, Stephanie Smith concluded that the value of the particle analysis done by Jenny Smith was "extremely limited." (T. 1411-12.)

- (3) the evidence was not previously tested because the technology for testing was not reasonably available to the movant at the time of trial; and
- (4) identity was an issue in the trial; and
- (5) a reasonable probability exists that the movant would not have been convicted if exculpatory results had been obtained through the requested DNA testing.

Mo. Stat. § 547.035(2).

The evidence submitted for testing in this case meets all of these requirements. Therefore, Chaney is entitled to DNA testing.

1. There is evidence upon which DNA testing can be conducted.

All physical evidence mentioned above and referenced herein is believed to be available for testing. On April 14, 1995, the fingernail scrapings from the victim, the pair of blue jeans the victim was wearing, black short-sleeved sweater the victim was wearing, black plastic belt from the victim's blue jeans, pair of white socks the victim was wearing, black canvas tennis shoe from the victim's right foot, and sexual assault kit from the victim were recovered during the autopsy by Sergeant Replogle. (Ex. 3 at 57-58, 62.) These items were released to Stone County Deputy Tom Martin, Evidence Officer for the South Central Major Case Squad on April 15, 1995. (*Id.*) The bed sheet with apparent blood stains, the pair of women's panties, and a meat thermometer with apparent blood stains were recovered from a search of Leong's residence on April 16, 1995 and released to Stone County Deputy Richard Hill for submission to the Missouri State Highway Patrol (MSHP) Laboratory. (Ex. 3 at 21-22, 28-29.) The various items recovered near the body of the victim were taken into evidence by Stone County Investigator Thomas Martin and Missouri State Highway Patrol Officers Sergeant Rogers, and Corporal Dwayne Isringhausen. (Ex. 7, Investigation of Crime Scene Report at 3.) They collected six cigarette

butts, twelve beer cans, two pieces of chewing gum, a library card from the victim's pants pocket, coin change from the victim's pants pocket, three shell casings, and one piece of paper. (Ex. 7 at 3-4, 6-8.)

The fingernail scrapings, blue jeans, sweater, belt, socks, shoe, sexual assault kit, bed sheet, panties, meat thermometer, were in possession of the MSHP on April 19, 1995, according to their lab report. (Ex. 3 at 31-33.) Additionally, their report lists several of the beer cans, both pieces of chewing gum, the library card, shell casings, and one sheet of notebook paper. (Ex. 3 at 32-33.) The two foreign hairs found on the victim's sweater were discovered by Jenny Smith during her trace particle analysis in August of 1995. (Ex. 8 at 24.) The record suggests that the fingernail scrapings, sexual assault kit, bed sheet, panties, meat thermometer, beer cans, library card, and piece of paper were released back to the Stone County Sheriff's Department in September of 1995. (Ex. 3 at 50-54.)

Undersigned counsel has made repeated attempts to the Stone County Prosecutor and the State Attorney General's office inquiring as to the location of the evidence.¹³ (Ex. 1, Affidavit of Chris Brown; Ex. 2, Affidavit of Megan Alfano.) Although both offices allege that the other office is in possession, neither office has produced any evidence of destruction or a destruction order. (Ex. 1 at 1.) Thus, the evidence is still in possession of the State.

2. The evidence was secured in relation to the crime.

As mentioned, the two hairs found on the victim's sweater determined to be foreign to the victim were discovered by Jenny Smith during her trace examination. (Ex. 8 at 24.) The fingernail scrapings from the victim, the pair of blue jeans worn by the victim, the black short sleeved sweater the victim was wearing, the black plastic belt from the victim's blue jeans, a pair

¹³ Counsel has also contacted the Missouri State Highway Patrol Lab in Jefferson City, Missouri, who indicated that once they perform testing for a case, the physical evidence at issue is sent back to the county agency who submitted it. (Ex. 2 at 1.)

of white socks the victim was wearing, one black canvas tennis shoe from the victim's right foot, the sexual assault kit of Michelle Winter, and the blood and hair samples taken from the victim were collected by Dr. Spindler and Sergeant Replogle during the autopsy. (T. 697-699, 701-02, 919-24; Ex. 10 at 1-2; Ex. 3 at 57-58, 62.) The bed sheet with apparent blood stains, pair of women's panties, and meat thermometer were secured by Sergeant Rogers on April 16, 1995 in a search of Leong's residence in connection with Michelle Winter's death. (Ex. 3 at 21-22, 28-29.) The various items recovered from the area surrounding Winter's body were collected as part of the Major Case Squad investigation into her disappearance and homicide. (*See* Ex. 7.)

Blood and hair samples of Leong were secured on April 17, 1995 at the Springfield Community Hospital in Springfield, MO, under the supervision of Sergeant Rogers and Deputy Mark Hoskins. (Ex. 3 at 30.) Hair, saliva, and blood samples of Chaney were secured during the investigation of Winter's murder. The hair and saliva samples were collected at the Springfield Police Department in the presence of Officer Tom Savard. (T. 1032-36.) The blood samples were collected at Cox North Emergency Room in the presence of officers of the Springfield Police Department. (T. 1031, 1035-36; Ex. 3 at 59-61.)

3. The evidence was not previously tested because the technology for testing was not reasonably available to the movant at the time of trial.

The only DNA testing that was completed before trial was performed on a single hair that was found in Chaney's van, which was found to be microscopically consistent with the victim's hair. (T. 1079-80, 1094-95; Ex. 3 at 36.)¹⁴ This, however, does not preclude relief under § 547.035. DNA testing was not reasonably available to the defendant to test any of the requested items. In evaluating the availability of DNA testing technology at the time of a defendant's trial,

¹⁴ This DNA testing was done in North Carolina at Laboratory Corporation of America Holdings Incorporated—a private laboratory. (T. 1051; Ex. 9 at 1.)

a court must take into account the specific conditions of the case. *Fields v. State*, 425 S.W.3d 215, 218 (Mo. Ct. App. 2014). The statute does not require the movant to prove that “DNA testing was not technologically possible or was unavailable anywhere at the time of trial.” *Weeks v. State*, 140 S.W.3d 39, 48 (Mo. 2004). Rather, the test is “subjective . . . and not a question of objective scientific feasibility.” *Id.* It requires only that the movant must show that “the technology for the testing was not reasonably available to the movant” under the circumstances he faced at the time of trial. *Id.* Therefore, this court can consider the defendant’s education, financial ability, trial court counsel’s DNA testing experience, and the availability of DNA testing at local crime laboratories in reaching the determination of whether the DNA testing was “reasonably available.” The fact that *rudimentary* Polymerase Chain Reaction (PCR) DNA testing in an out-of-state private laboratory was available to the State at the time of Chaney’s trial does not mean that the technology was reasonably available to Chaney.

Further, as the Missouri Supreme Court noted, in contrast to other post-conviction relief rules¹⁵, which “have unyielding time restrictions and prohibit successive motions,” the DNA statute at issue here “focuses on the ‘real concern that DNA technology could produce exonerating results.’” *Belcher v. State*, 299 S.W.3d 294, 297 (Mo. 2009) (quoting *Hudson v. State*, 190 S.3.3d 434, 440 (Mo. Ct. App. 2006). Section 547.035 “specifically contemplates technological developments that will permit later testing; where new testing techniques become available that shed doubt on previous findings, subsequent motions are permitted.” *Id.* The evidence gathered in the present case could not feasibly have been tested by Chaney at the time of trial with then-existing techniques. However, this court can now make use of advanced DNA techniques and order testing of evidence that contains minute amounts of DNA, as Section 547.035 was intended to operate broadly in order to exonerate the wrongfully convicted.

¹⁵ See MO. REV. STAT. §29.15, MO. REV. STAT. §24.035.

i. DNA technology was not reasonably available to Mr. Chaney because the dominant method of DNA testing in existence at the time of his trial (RFLP) would not have provided probative results.

At the time of Chaney's trial, there were two methods of DNA testing in existence. The dominant method was Restriction Fragment Length Polymorphism (RFLP), which continued to be the prevailing method through the early 2000s; in 1995, PCR STR (Short Tandem Repeat) testing was a novel method of testing that was not in routine use. *See e.g.*, John M. Butler, *Fundamentals of Forensic DNA Typing* 70 (Academic Press ed., 2009) ("As in the O.J. Simpson case [], conventional RFLP markers were used to match the sample of President Clinton's blood to the semen stain on Monica Lewinsky's dress. At the time these samples were analyzed in the FBI Laboratory (early August 1998), STR typing methods were being validated *but were not yet in routine use* within the FBI's DNA Analysis Unit.") (emphasis added) (internal citations omitted). In 1998, United States Attorney General Janet Reno requested that the National Institute of Justice establish a National Commission on the Future of DNA Evidence to recommend ways that DNA technology could be used to enhance justice in the post conviction appeals process. U.S. DEP'T OF JUSTICE, NAT'L COMM'N ON THE FUTURE OF DNA EVIDENCE, *Postconviction DNA Testing: Recommendations for Handling Requests*, iii, v (1999), available at <https://www.ncjrs.gov/pdffiles1/nij/177626.pdf>. The study reported in 1999: "*In the near future*, DNA testing at a number of STR locations will likely replace RFLP and earlier PCR-based tests in most laboratories through the United States and the world." *Id.* at 28 (emphasis added). This illustrates the dominance of RFLP testing even in 1998 and it highlights the general unavailability of even rudimentary PCR STR testing methods.

The fingernail scrapings, clothing of the victim, and foreign hairs found on the victim would likely only contain very small amounts of degraded DNA. Thus, RFLP testing would not have been useful to Chaney's defense since it generally requires large amounts of intact DNA. *See, e.g., Butler, supra* at 53-54 ("Because it required lots of DNA . . . as well as intact DNA molecules, RFLP was quickly discovered to have severe limitations with many forensic cases. Degraded DNA samples of limited amounts that are often present with forensic cases did not work well with RFLP methods."). Since the dominant RFLP method of DNA testing in 1995-1996 would not have been able to produce probative results it is clear that DNA technology was not reasonably available to Chaney at the time of time. It would be paradoxical to hold that Chaney should be precluded from taking advantage of more accurate, modern DNA testing because he did not utilize the more widely available RFLP testing which would have likely provided no information whatsoever. *See generally, Belcher, 299 S.W.3d at 297 (Mo. 2009)* ("[§ 547.035] specifically contemplates technological developments that will permit later testing; where new testing techniques become available that shed doubt on previous findings, subsequent motions are permitted.").

ii. Even the newly developed PCR STR methods in existence at the time of Mr. Chaney's trial would not have provided probative results.

Additionally, any argument by the State that Chaney should be precluded from utilizing modern PCR STR methods because elementary PCR STR methods were in premature existence at the time of trial fails for three reasons:

First, as argued above in Section 3, the standard that should be applied by the court is not whether the DNA technology *existed* at the time of trial, but whether it was reasonably available. Therefore, the mere existence of a method of DNA analysis does not preclude relief under the §

547.035. Second, the PCR STR methods in existence at the time of trial were novel and not widely available. Again, the dominant method of DNA analysis in 1995 was RFLP; PCR STR was still being validated for use in FBI laboratories and was not in general use. *See, e.g.,* Butler, *supra* at 70. Third, even if PCR STR methods were found to be reasonably available simply because they were in the early stages of existence at the time of Chaney's trial, the court should still consider that like RFLP, the rudimentary PCR STR methods at the time of trial would not have provided probative results. As discussed below, the small amounts of DNA at issue in this case could only be extracted, compared, and analyzed to provide confirmatory results using *modern* PCR STR testing methods.

a. Fingernail scrapings, blue jeans, sweater, belt, socks, tennis shoe, and women's panties

The type of sensitive DNA technology that would be required to obtain a probative DNA profile from extremely small amounts of DNA present in fingernail scrapings or the skin cells left behind from the perpetrator touching the victim's blue jeans, sweater, belt, socks, tennis shoe, or underwear did not exist at the time of Chaney's trial. The only way that such DNA samples can provide probative results is through an amplification procedure. By using PCR STR methods, laboratories can now copy small amounts of DNA and utilize amplification in order to provide meaningful information. *See* Butler, *supra* at 125.

As mentioned, PCR STR testing was a novel technology at the time of Chaney's trial and although this new type of testing was an improvement over RFLP, the early methods of PCR STR were still not sensitive enough to provide probative results from touch DNA or from fingernail scrapings: "*Modern-day* PCR methods, such as multiplex STR typing, are powerful because minuscule amounts of DNA can be measured by amplifying them to a level where they

may be detected. Less than 1 ng of DNA can now be analyzed with multiplex PCR amplification of STR alleles compared to 100 ng or more that might have been required with RFLP only a few years ago.” John M. Butler, *Advanced Topics in Forensic DNA Typing: Methodology* 293 (Academic Press ed., 2011) (emphasis added).

Two relevant methods of modern PCR testing techniques can now provide probative results for the miniscule and possibly degraded DNA samples that would be present in the fingernail scrapings and on the clothing worn by the victim. The first would be mini-STR kits, which allow for very low amounts of DNA to be more successfully amplified and analyzed. *Id.* at 295. Experiments that tested the effectiveness of mini-STR kits for degraded DNA samples did not begin until June of 1998 and protocols for trial use were not adopted until February of 2002. *Id.* at 297-99. The second is the use of touch DNA technology, which generally refers to DNA profiles that may be developed from fingerprint residue left on an object after being touched.¹⁶ *Id.* at 312. Low-level DNA testing was first experimentally applied to forensic DNA testing in 1999, but was not approved for general casework in the United States until 2006. *Id.* at 313.

b. Foreign hair found on the victim

The foreign hair from the victim’s sweater that was found to be microscopically consistent with Chaney could have been tested with PCR STR methods if it had a skin root tag. (T. 1105.) It is very probable that the reason these hairs were not tested by the State at the time of trial is because these hairs did not have such a root tag. If true, then only mitochondrial DNA testing can provide probative results.

¹⁶ Laboratories often refer to this methodology as low-copy, low-template, or low-level DNA testing. Butler, *Advanced Topics*, *supra* at 311.

The general availability of mitochondrial DNA testing came about in 2002, when the FBI released its mitochondrial database, CODIS. *See* Butler, *supra* at 384. The FBI did not start performing mitochondrial DNA testing until June of 1996, and results were first time allowed in a United States court in *State of Tennessee v. Paul Ware* in September of 1996. Alice R. Isenberg & Jodi M. Moore, *Mitochondrial DNA Analysis at the FBI Laboratory*, 1 FORENSIC SCIENCE COMMUNICATIONS (July 1999), available at <https://www.fbi.gov/about-us/lab/forensic-science-communications/fsc/july1999/dnalist.htm/dnatext.htm#Introduction>; C. Leland Davis, *ADA Mitochondrial DNA: State of Tennessee v. Paul Ware*, 1 PROFILES IN DNA (1998). Chaney's trial began only a few weeks later in November of 1996. (T. 3.) Given the absolute novelty of mitochondrial DNA for forensic purposes, and especially when also taking into account the question of admissibility, it is not reasonable to expect that Chaney would have requested such testing at the time of trial. Again, the court must look to the specific circumstances present at Chaney's trial to determine the reasonable availability of DNA technology, not simply when the technology first came into existence. *Weeks*, 140 S.W.3d at 48.

It is clear that the DNA technology necessary to produce exculpatory results was not reasonably available to Chaney at the time of trial because the methods in existence (RFLP and rudimentary PCR) would not have provided probative results. To hold otherwise would be to illogically conclude that Chaney should be precluded from using useful modern DNA technology which could now provide exculpating results because he did not use novel methods that would not have provided any constructive information at the time of his trial.

iii. DNA testing technology was not reasonably available to Mr. Chaney because PCR STR technology was not used in any Missouri laboratory at the time of his trial.

Even if the court determines that RFLP or rudimentary PCR STR methods could have provided probative results, DNA technology still was not reasonably available to Chaney at the time of trial because there were no laboratories in Missouri that provided testing using early PCR STR methods. The DNA testing ordered by the State was performed in an out-of-state, private laboratory. (Ex. 9 at 1.) This supports Chaney's claim that the technology was not reasonably available to him. In *Weeks*, the Missouri Supreme Court, in finding that the defendant had pled sufficient facts to show that DNA testing was not reasonably available at the time of trial, took into account in their analysis of availability that there were no "local laboratories that performed DNA testing". *Weeks*, 140 S.W.3d at 48. Furthermore, in *Fields*, the Missouri Appellate Court granted an evidentiary hearing to specifically determine the reasonable availability of DNA technology in 1996 in Missouri. *Fields*, 425 S.W.3d at 217. Therefore, the focus should not be on whether the DNA technology existed nationwide, but rather, whether such technology was available in Missouri at the time of trial.

iv. DNA databases did not exist at the time of Chaney's trial, and thus should be considered another form of new technology that could now provide exculpatory evidence.

The existence of modern DNA databases has become critical in maximizing the impact that DNA results can have at trial and post-conviction. "Of anything related to forensic DNA typing, DNA databases have arguably had the greatest impact on the criminal justice system in recent years. Serial crimes have been connected and solved. . . . The innocence of unjustly incarcerated individuals has been verified when postconviction evidence has matched another offender." Butler, *supra* at 260.

The FBI did not officially launch the National Data Index System (NDIS) database of the Combined DNA Index System (CODIS) until 1998. *Id.* at 259. The CODIS database contains the DNA profiles of criminals submitted by federal, state, and local agencies. *Frequently Asked Question (FAQs) on the CODIS Program and the National DNA Index System*, FED. BUREAU OF INVESTIGATION, available at <http://www.fbi.gov/about-us/lab/biometric-analysis/codis/codis-and-ndis-fact-sheet>. By taking DNA samples and uploading them into the CODIS database, law enforcement officers are now able to include *and* exclude suspects from a particular crime based on DNA results.

As of December 2015, the FBI notes that CODIS has aided in 10,603 investigations in Missouri. (*CODIS-NDIS Statistics*, FED. BUREAU OF INVESTIGATION, available at <http://www.fbi.gov/about-us/lab/biometric-analysis/codis/ndis-statistics/#Missouri>). This is due, in part, to the growing number of profiles that exist in CODIS generally, and also to the growing number of Missouri offender profiles that have been obtained. In 2004, the number of DNA samples that were collected in Missouri was 27,000. *Missouri DNA Collection Laws Help Boost “Hits” in Database*, OZARKSFIRST.COM, available at <http://www.ozarksfirst.com/news/missouri-dna-collection-laws-help-boost-hits-in-database>. As of 2015, Missouri’s database alone contains 277,875 offender profiles. *CODIS-NDIS Statistics*, FED. BUREAU OF INVESTIGATION, available at <http://www.fbi.gov/about-us/lab/biometric-analysis/codis/ndis-statistics/#Missouri>.

Such a vast national database of DNA profiles was not available to Chaney at the time of his trial. This new technology means not only that there may be exculpatory evidence in this case, but it could further provide *exonerating* evidence as uploading a profile into CODIS could identify the actual perpetrator of this crime. To deny Chaney access to such a database is absolutely in contradiction with the Missouri Legislature’s stated purpose of § 547.035. *See*

Belcher, 299 S.W.3d at 297 (“[T]he DNA statute focuses on the ‘real concern that DNA technology could produce exonerating results.’”) (citing *Hudson v. State*, 190 S.W.3d 434, 440 (Mo. Ct. App. 2006)).

v. This Court should grant DNA testing despite its previous ruling since Mr. Chaney has now properly alleged facts under § 547.035.2(3)(a).

This court has previously denied relief to Mr. Chaney under § 547.035 in regard to the fingernail scrapings of Michelle Winter. (Ex. 12, 11-26-2002 Chaney v. State, Findings of Fact & Judgment at 4.) This court found that Chaney failed to properly allege that technology was not reasonably available to him at the time of his trial. Chaney has now pled such information. (*See infra*, Section 3i-iv) Further, there is nothing that prevents a defendant from making a renewed motion under § 547.035 that is properly pled. *Belcher*, 299 S.W.3d at 297 (explicitly recognizing that § 547.035 does not prohibit successive motions).¹⁷ Section § 547.035 also does not limit the number of times that a movant can ask the court to order the State to show cause as to why DNA testing should not occur.

Given that the arguments submitted in this brief directly relate to the requirements of § 547.035 and are independent of previous claims raised by movant, and given that the statute does not preclude Chaney from filing a successive motion for relief under the applicable statute, this court should evaluate the grounds for relief now submitted on their merits.

¹⁷ This court also previously rejected movant’s alternative argument that DNA testing was not available to him because trial counsel refused to request such DNA testing. (Ex. 12 at 3-4.) In its 2002 ruling, this court did not resolve the issue of availability of DNA testing of fingernail scrapings based on the arguments that are submitted in this brief, which directly relate to the requirements of § 547.035 and do not rest on the same premise of previous arguments raised by Chaney.

4. Identity was an issue at trial.

Chaney has always maintained that he is innocent and that an unknown perpetrator committed the crimes for which he has been convicted. (T. 788, 1592, 1597.) Therefore, identity was clearly an issue at trial, as required by § 547.035.2(4). *State v. Ruff*, 256 S.W.3d 55, 57 (Mo. 2008) (“The phrase ‘identity at issue’ encompasses “mistaken identity,” but it also includes all cases in which the defendant claims that he did not commit the acts alleged...”).

5. A reasonable probability exists that Mr. Chaney would not have been convicted if exculpatory results had been obtained through DNA testing.

Given the amount of available pertinent evidence to be tested and the various DNA testing methods that can be utilized to examine that evidence, it is likely that a third-party DNA profile would be developed. Because Chaney has consistently asserted that he did not have physical contact with the victim at any time, the presence of a foreign DNA profile on any of the items connected with the victim would exculpate Chaney. Additionally, the presence of the victim’s DNA profile on the items taken from Leong’s home would strongly point to an alternative perpetrator.

i. A DNA profile developed from the foreign hairs found on the victim could provide exculpatory evidence.

Jenny Smith, one of the State’s key witnesses, testified that the hairs found on the victim were microscopically similar to Chaney’s hair, which provided what sounded like reliable evidence to the jury suggesting that Chaney had physical contact with the victim. (T. 1105, 1444-1445; Ex. 8 at 25.) If DNA testing is performed on the hairs found on the victim’s sweater and a profile is developed that does not match Chaney, it would absolutely nullify a significant part of the State’s central evidence. Thus, a reasonable probability exists that the result of the trial would

have been different if the jury had heard evidence that the foreign hair did not actually belong to Mr. Chaney.

ii. A DNA profile developed from the fingernail scrapings of the victim could provide exculpatory evidence.

The victim's autopsy indicated that there had been several blows to the face and head of the victim, as well as a possible strangulation attempt. (T. 682-83; Ex. 10 at 1.) It is expected that the victim was fighting back against her assailant while she was being beaten and/or strangled. Therefore, there is a high likelihood that the skin cells of the perpetrator would be found under the fingernails of the victim. If a DNA profile can be developed from these skin cells that does not match the DNA profile of the victim or Chaney, it would strengthen further demonstrate that Chaney did not have physical contact with the victim and that he is innocent of this crime. Furthermore, if the profile can be matched to a profile in CODIS, this would not only provide evidence of Chaney's innocence, but also identify the true perpetrator.

iii. A DNA profile developed from the clothing of the victim or the sexual assault kit could provide exculpatory evidence.

Based on the position of the body and the victim's clothes at the crime scene, it can be assumed that it was the perpetrator who pulled down Winter's pants and pulled up her sweater. Further, Dr. Spindler theorized at trial that it is possible the victim was dragged into the woods by the perpetrator due to the presence of scrapes on the back of her right elbow (T. 688; Ex. 10 at 3.) Thus, since the perpetrator had significant physical contact with the victim, it is likely that the perpetrator's DNA was left behind on the victim's clothing. If a previously unknown DNA profile can be developed from the DNA left on the blue jeans, sweater, belt, socks, or shoe, it would powerfully support Chaney's alibi and his contention that he had no contact with the

victim whatsoever. It would also suggest that someone other than Chaney dragged the victim into to the woods, unbuckled her belt and pulled down her pants, and pulled up her sweater. Importantly, developing a DNA profile from the clothing of the victim could lead to a match in the CODIS database, which would not only exculpate Chaney, but also identify the person who actually committed this crime.

Further, DNA testing of Winter's sexual assault kit could provide powerful evidence of an alternative perpetrator. The State attempted to argue at trial that there was some sort of sexual molestation involved in this crime. Dr. Spindler testified,

Obviously from the clothing, appearance from it's—the way it was on the body or off of the body she had been sexually molested ... I don't have an definite evidence from that that she was—that penile penetration was performed. But, you know, it was obvious from the clothing. There was no underwear, the clothing was in disarray, it appeared as if the body was being clothed as if the jeans were pulled up, trying to be pulled up around the hips but could not be gotten up there. It was apparent that she had been molested but I could not determined [sic] she had been assaulted.

(T. 699.) In closing, the State claimed: “Whoever [killed Michelle Winter] knocked her unconscious first after overcoming her resistance, took her clothes off of her, you heard the doctors testimony, incompletely tried to get them back on. If that doesn't imply a sexual assault, I don't know what does.” (T. 1786-87.) If the positioning of Winter's body and clothing does, in fact, mean that she was sexually molested or assaulted in some manner, then a DNA profile developed from the sexual assault kit of the victim could prove Chaney's innocence and identify the person who murdered Michelle Winter.

iv. A DNA profile developed from the items taken from Wing Cheong Leong's house could provide exculpatory evidence.

If a DNA profile could be developed from the pair of women's panties found in the home of suspect Wing Cheong Leong, this would provide additional exculpatory evidence for Chaney. When the victim's body was found, she was not wearing any undergarments. If DNA from the panties in Leong's house matched the victim's profile, it would provide irrefutable evidence that Leong possessed underwear taken from the victim's body. This would directly place Leong at the scene of the crime and it would destroy his already weak and inconsistent alibi for the day Winter disappeared. If the jury had heard evidence of an alternate suspect who had possession of the victim's underwear, the result of Chaney's trial would have been different.

Likewise, if a DNA profile developed from the blood on the sheets recovered from Leong's residence matches the profile of the victim, it would present further evidence that Leong was involved in Winter's murder. Lastly, testing of the meat thermometer is crucial because Dr. Spindler testified that the puncture wounds to Winter's chest had been caused by an "ice pick type" object. (T. 684, 700-01.) Leong's meat thermometer may match this description. If a DNA profile were developed from the meat thermometer that matched the victim, this could show that Leong was the actual perpetrator of this crime.

v. A DNA profile developed from the items recovered near the victim's body could provide exculpatory evidence.

Winter's body was found in an uninhabited subdivision in a rural area of Stone County. (Ex. 7 at 1-2.) At the time Winter was discovered, there were "no homes either constructed or under construction along the roadway." (*Id.* at 2.) Corporal Isringhausen also noted that the distance between the roadway and the brush pile where Winter's body was lying was 128 feet.

(*Id.* at 4.) The items collected from the surrounding area, including cigarette butts, beer cans, chewing gum, and shell casings, could reveal important information about who else was present in the cul-de-sac near the time Winter disappeared. A DNA profile developed from the library card and coins from the victim's pants pocket that does not match the victim could further expose an alternative suspect; it is clear the victim's pants were pulled down (and possibly removed and then pulled back up), meaning her pockets may have been searched at some point. Lastly, serology testing by the Missouri State Highway Patrol Lab reported that human blood had been detected on the notebook paper, along with a latent fingerprint. (Ex. 3 at 35.) Again, DNA testing to determine whose blood and fingerprint is on that notebook paper could produce evidence that supports Chaney's claim of innocence and points to another suspect.

vi. Favorable DNA results would be sufficient to overcome the evidence presented by the State at trial.

Any exculpatory result from DNA testing would be sufficient to cast substantial doubt on the State's evidence at trial and would provide a reasonable probability that a jury would not have convicted Chaney if such favorable results were presented during trial. In addition to the State's possibly misleading testimony that the foreign hair found on the victim's body was indistinguishable from Chaney's hair, the only other physical evidence against Chaney came from the trace particle evidence testimony of Jenny Smith. As outlined above, Smith explained that her analysis entailed comparing particles found on the victim with particles found in Chaney's van. (T. 1083-88.) She determined that some of the particles on the victim matched those found in the van (and vice versa). However, there were also several particles found on the victim, but not in the van (and vice versa).

While this trace particle evidence may seem like strong evidence of guilt at first glance, the analysis performed by Smith does not qualify as a methodology subject to the rigors of the scientific method, and therefore, it cannot be said to be scientifically valid. A method should be able to be replicated by others and additional use of the method should lead to the same results within an acceptable margin of error. In a 2009 report published by the National Academy of Sciences, trace fiber analysis was specifically addressed. The report found that while there have been guidelines in the field, there are “no set standards, for the number and quality of the characteristics that must correspond in order to conclude that two fibers came from the same manufacturing batch.” NAT’L ACADEMY OF SCIENCES, *Strengthening Forensic Science in the United States: A Path Forward*, August 2009 at 162-63, <https://www.ncjrs.gov/pdffiles1/nij/grants/228091.pdf>. It went on to state: “There have been no studies of fibers (e.g., the variability of their characteristics during and after manufacturing) on which to base such a threshold. Similarly, there have been no studies to inform judgments about whether environmentally related change discerned in particular fibers are distinctive enough to reliably individualize their source, and there have been no studies that characterize either reliability or error rates in the procedures. Thus, a ‘match’ means only that fibers *could* have come from the same type of garment, carpet, or furniture....” *Id.* (emphasis added).

Taking into account this description of trace particle analysis, and the limitations of Jenny Smith’s testimony as relayed by defense witness Stephanie Smith (T. 1411-12.), there is no way in which to verify the reliability of Jenny Smith’s testimony regarding the matching particles found on the victim and inside Chaney’s van. Additionally, there is no way to determine the source of these particles, the probability that these particles would be found in or would match particles in another environment, or even if the particles came from the same manufacturer. In

light of this information, Smith's testimony that the probability that the number of particles found on the victim would match the particles found in Chaney's van was "astronomical", (T. 1198-99), was a complete mischaracterization of the evidence and misled the jury. Given the weakness of the State's trace particle evidence, any exculpatory evidence obtained through DNA analysis would bolster Chaney's claim of innocence and substantially diminish the State's evidence against Chaney, meaning that the jury would not have convicted Mr. Chaney at trial.

CONCLUSION

WHEREFORE, for the foregoing reasons, counsel for Mr. Chaney respectfully moves this Court to:

1. Compel the State to show cause as to why DNA testing should not occur pursuant to Mo. Stat. § 547.035;
2. Order the State to search for the requested evidence;
3. Order DNA testing of the items set forth above;
4. Order that DNA profiles obtained from the above listed items be uploaded into CODIS;
5. In the alternative, order a hearing regarding why DNA testing should occur pursuant to Mo. Stat. § 547.035.

Respectfully Submitted,

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CERTIFICATE REGARDING SERVICE

I hereby certify that it is my belief and understanding that counsel(s) for plaintiff in this matter are participants in the Court's e-filing program and that separate service of the foregoing document is not required beyond the Notification of Electronic Filing to be forwarded on January 11, 2016 upon the filing of the foregoing document.

/s/ Rachel K. Wester
RACHEL K. WESTER