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Nebraska Supreme Court
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Roskop Dairy, L.L.C., appellant, v. GEA Farm Technologies, Inc., and Midwest Livestock Systems, Inc., appellees.

871 N.W.2d 776

Filed December 4, 2015. No. S-14-115.

1. **Trial: Expert Witnesses: Appeal and Error.** An appellate court reviews de novo whether the trial court applied the correct legal standards for admitting an expert's testimony.
2. ____: ____: ____. An appellate court reviews for abuse of discretion how the trial court applied the appropriate standards in deciding whether to admit or exclude an expert's testimony.
3. **Summary Judgment: Appeal and Error.** In reviewing a summary judgment, an appellate court views the evidence in the light most favorable to the party against whom the judgment was granted and gives that party the benefit of all reasonable inferences deducible from the evidence.
4. **Evidence: Appeal and Error.** Generally, the control of discovery is a matter for judicial discretion, and decisions regarding discovery will be upheld on appeal in the absence of an abuse of discretion.
5. **Prejudgment Interest: Appeal and Error.** Prejudgment interest may be awarded only as provided in Neb. Rev. Stat. § 45-103.02 (Reissue 2010), and whether prejudgment interest should be awarded is reviewed de novo on appeal.
6. **Summary Judgment.** A motion for summary judgment shall be granted where there is no genuine issue as to any material fact and the moving party is entitled to judgment as a matter of law.
7. **Evidence: Proof.** Failure of proof concerning an essential element of the nonmoving party's case necessarily renders all other facts immaterial.
8. **Summary Judgment: Proof.** A party moving for summary judgment makes a prima facie case for summary judgment by producing enough evidence to demonstrate that the movant is entitled to judgment if the evidence were uncontroverted at trial.

9. ____: ____. Once the moving party makes a prima facie case, the burden shifts to the party opposing the motion to produce admissible contradictory evidence showing the existence of a material issue of fact that prevents judgment as a matter of law.
10. **Summary Judgment: Evidence.** Conclusions based on guess, speculation, conjecture, or a choice of possibilities do not create material issues of fact for the purposes of summary judgment; the evidence must be sufficient to support an inference in the nonmovant's favor without the fact finder engaging in guesswork.
11. **Products Liability: Warranty.** All implied warranty theories of recovery and strict liability claims for manufacturing defect, design defect, or failure to warn seek to recover for a "defect."
12. **Actions: Negligence: Warranty: Proximate Cause.** Whether a plaintiff is proceeding under negligence, defect theories, or breach of express warranty, proximate cause is a necessary element of the plaintiff's case.
13. **Negligence: Proximate Cause: Words and Phrases.** Proximate cause is the cause that in a natural and continuous sequence unbroken by an efficient intervening cause, produces the injury, and without which the injury would not have occurred.
14. **Negligence: Proximate Cause: Proof.** To establish proximate cause, the plaintiff must meet three basic requirements: (1) Without the negligent action, the injury would not have occurred, commonly known as the "but for" rule or "cause in fact"; (2) the injury was a natural and probable result of the negligence; and (3) there was no efficient intervening cause.
15. **Expert Witnesses: Testimony.** Findings of fact as to technical matters beyond the scope of ordinary experience are usually not warranted in the absence of expert testimony supporting such findings.
16. **Testimony.** It is well settled that a causation opinion based solely on a temporal relationship is not derived from the scientific method and is therefore unreliable.
17. **Products Liability: Proof.** Under the malfunction theory, also sometimes called the indeterminate defect theory or general defect theory, a plaintiff may prove a product defect circumstantially, without proof of a specific defect, when (1) the incident causing the harm was of a kind that would ordinarily occur only as a result of a product defect and (2) the incident was not, in the particular case, solely the result of causes other than a product defect existing at the time of sale or distribution.
18. **Circumstantial Evidence: Verdicts.** Circumstantial evidence is not sufficient to sustain a verdict that depends solely thereon unless the circumstances proved by the evidence are of such a nature and so related to each other that the conclusion reached by the jury is the only one that can fairly and reasonably be drawn therefrom.

19. **Juries: Evidence.** Where, under the facts viewed in a light most favorable to the nonmoving party, the nonexistence of the fact to be inferred is just as probable as its existence, the conclusion that it exists is a matter of speculation, surmise, and conjecture, and a jury will not be permitted to draw it.
20. **Evidence.** The line between impermissible speculation and reasonable inferences is drawn by the laws of logic.
21. ____. Reasoning causation from temporal correlation represents a logical fallacy. A conclusion based upon such reasoning is not a reasonable inference but is mere speculation and conjecture.
22. **Rules of the Supreme Court: Appeal and Error.** It is incumbent upon the party appealing to present a record which supports the errors assigned. Neb. Rev. Stat. § 25-1140 (Reissue 2008) and Neb. Ct. R. App. P. § 2-105(B)(1)(b) (rev. 2010) place the burden on the appellant to file a praecipe identifying the matter to be contained in the bill of exceptions.
23. **Prejudgment Interest: Claims.** A claim is liquidated for purposes of prejudgment interest when there is no reasonable controversy as to both the amount due and the plaintiff's right to recover.

Appeal from the District Court for Gage County: Paul W. Korslund, Judge. Affirmed in part, and in part reversed.

Kristopher J. Covi, of McGrath, North, Mullin & Kratz, P.C., L.L.O., for appellant.

Stephen L. Ahl and Nathan D. Anderson, of Wolfe, Snowden, Hurd, Luers & Ahl, L.L.P., for appellee Midwest Livestock Systems, Inc.

William M. Bremer and Ann M. Byrne, of Bremer & Nelson, L.L.P., and Catherine L. Stegman and Joseph S. Daly, of Sorodo, Daly, Shomaker & Selde, P.C., L.L.O., for appellee GEA Farm Technologies, Inc.

Connolly, Stephan, McCormack, Miller-Lerman, and Cassel, JJ.

McCormack, J.

NATURE OF CASE

A dairy appeals from the district court's order of summary judgment in favor of a manufacturer of a microprocessor-based

milking control unit and the dealer of that unit (collectively the defendants). The principal issue is whether the dairy rebutted the defendants' prima facie case that mechanical components of the milking system maintained by the dairy and not a part of the microprocessor-based control unit were the proximate cause of the alleged damages.

BACKGROUND

Roskop Dairy, L.L.C. (Roskop Dairy), owned by Michael Roskop (Roskop), is a commercial dairy operation. GEA Farm Technologies, Inc. (GEA), manufactures automated dairy equipment used in dairy systems. Midwest Livestock Systems, Inc. (Midwest), was an authorized dealer of GEA products.

Roskop Dairy sued the defendants for damages allegedly stemming from the "Dematron 60 Air Detacher Package" (Dematron) manufactured by GEA and purchased by Roskop Dairy from Midwest. The total purchase price was $153,027.88. Roskop Dairy paid Midwest a downpayment of $33,600 and made a second payment of $70,000. Roskop Dairy never paid the remainder.

The installation of the Dematron at Roskop Dairy occurred in June 2008. There was no evidence of a service agreement by which Midwest was to regularly inspect or maintain other component parts of Roskop Dairy's milking system that were not provided by Midwest.

Roskop Dairy sued the defendants for breach of express and implied warranties and negligence. Roskop Dairy theorized that Midwest negligently and defectively installed and programmed the Dematron. Specifically, Roskop Dairy asserted that improper parameter settings caused the milking units to detach while still under significant vacuum and thereby harmed the teats of the dairy cows, resulting in mastitis and lowered milk production. Roskop Dairy did not allege liability based on negligent maintenance of the physical component parts of the milking system that are not part of the Dematron.

The defendants generally denied liability and asserted that Roskop Dairy's contributory negligence barred any claim

against them. Midwest counterclaimed for the principal amount still due under the sales contract agreement, as well as for 8 percent interest per annum from the payment due date. After discovery, the defendants moved for summary judgment.

Milking System, Dematron, and Somatic Cell Counts

Roskop Dairy has 50 milking "parlors" used to milk approximately 700 cows. When a cow enters a parlor, an employee of Roskop Dairy manually prepares the cow's teats by cleaning them and stimulating let down. The employee then presses a button to apply vacuum to the milking "claw." The employee applies the claw to the teats, and milking begins. Milk flows through tubes into holding tanks. The claw, vacuum, tubes, and tanks are not part of the Dematron.

The Dematron is a microprocessor-based milking control unit that monitors signals from milking sensors in the milking system and sends signals to that system to control when various processes take place after manual application of the claw. There are multiple parameter settings involved in the functioning of the Dematron. These settings are preset at the factory, but are regularly adjusted to accommodate dairy owners' preferences.

The "milk flow threshold" level is an adjustable Dematron parameter that indicates when the system should finish milking. Another Dematron parameter, "blink time," is the length of time a cow must be below the milk flow threshold before detachment of the claw will start. A component in the system actually blinks during the blink time, and milk flow can also be observed through clear lenses attached to the top of the claw. After the cow is below the milk flow threshold for the desired blink time, the Dematron shuts off the vacuum by sending a signal to a "shifting valve" that is also part of the Dematron.

After the vacuum is shut off, it should quickly dissipate. Depending on the model of claw, vacuum dissipates either through vents in the metal claw itself or in clear plastic

replaceable lenses that attach to the top of the claws. In the model of claw used at Roskop Dairy, the vents were located in the lenses and not in the claw itself.

The "detach delay" is a setting of the Dematron that controls the time between when the vacuum is shut off and the claw is retracted by the automated system. Retraction ideally occurs when most, but not completely all, of the residual vacuum has dissipated through the vents. If no residual vacuum is left when the claw retracts, the claw will fall, rather than be retracted, and will land on the parlor deck.

The "milk sweep delay" is a Dematron setting controlling the time between when the claw is retracted and when the "milk sweep begins." The "milk sweep" is an optional setting and consists of a short burst of vacuum to pull any residual milk into the tubes of the milking system.

After detachment, the cows' udders are manually dried with a cloth by Roskop Dairy employees.

The somatic cell count of the milk at a dairy is an indicator of the number of mastitis organisms in the herd. Increased somatic cell count can mean either many cows with a lesser degree of infection or fewer cows with a worse infection. Somatic cell counts above 400,000 are "concerning." Below 200,000 represents a well-managed herd.

While the somatic cell count in Roskop Dairy's herd had previously been in the 200,000 range, in January 2008, before the installation of the Dematron, it significantly increased to 409,000, from 285,000 the previous month. The somatic cell count continued in the 409,000 to 476,000 range until June 2008, when it reached 510,000.

In July 2008, after installation of the Dematron, the somatic cell count rose to 627,000. It went back down to 493,000 in August, after Dematron employees visited Roskop Dairy. It is undisputed that during that visit, Dematron employees adjusted some parameter settings of the Dematron.

Roskop Dairy claims that the rise in somatic cell counts in the herd after installation of the Dematron corresponded to a reduction in milk production that had not occurred during

the pre-Dematron rise in somatic cell counts. Roskop did not address the extent to which any changes in milking practices entered into this conclusion. Roskop had milked his cows three times a day until July 2, 2008. Since July 2, however, he has milked his cows twice a day. Milking three times a day versus twice a day would increase milk yield by 12 to 15 percent.

Deposition of Michael Roskop and Karen Cass' Mastitis Reports

Roskop's deposition was entered into evidence at the summary judgment hearing. Roskop testified that due to the timing of events, he believed the July 2008 increase in the somatic cell count was caused by the parameters of the Dematron's being set incorrectly the previous month. Roskop admitted that he was not an expert on milking machines. He admittedly did not fully understand the Dematron settings. But he stated that approximately 20 days after the system was installed, his herd experienced an increase in mastitis.

Roskop suspected, first, that from the time the system was installed until July 31, 2008, when Midwest employees made further adjustments to the Dematron's parameter settings, the blink time was set too short, such that the machines were detaching before the cows were fully milked. He believed this based on the appearance of the cow udders and the fact that the cows were not producing as much milk as he expected.

Roskop admitted the blink time setting did not lead to mastitis, however. Roskop testified that his employees manually reattached the system when the cows' udders appeared to not be completely milked out. Roskop did not specifically recall which of the original blink time settings and adjustments may have been made at his request.

Roskop suspected that incorrect parameters for the sweep time led to the increase in mastitis. Roskop believed that from the time of installation until adjustments were made on July 31, 2008, incorrect sweep time settings resulted in the machine's detaching while still under a vacuum. This, in

turn, tugged on the cows' teats, causing physical injury that made them more susceptible to mastitis. Since discovery, Roskop Dairy no longer asserts that the sweep time settings led to mastitis.

Roskop testified that from late June 2008 when the system was installed until Midwest employees made adjustments to the parameter settings in late July, he witnessed the claw units being "jerked off" the cows with a lot of "tugging." He testified that the units were coming off under vacuum and that vacuum lasted for approximately 3 seconds before it dissipated. Roskop did not clearly explain whether he could determine that this vacuum was active vacuum versus residual vacuum. At one point, he affirmed that he could hear the hissing of air being sucked into the machine for about 3 seconds, but that at another point, he affirmed this was the failure of the vacuum to dissipate for approximately 3 seconds.

During the time period that the units were detaching under vacuum, Roskop observed approximately one-third of his dairy cows with "everted" teat ends. Roskop explained that normally only about 2 percent of his cows demonstrated everted teat ends. Roskop further observed bruised teats during that time.

Roskop testified that he had concluded the Dematron was in some manner the cause of the detachment under vacuum because "when they made the change off of the sweep time, that's when we had the instant change of no more damage to the teat end on the cows." Roskop explained that although the cows with damaged teat ends took some time to heal, new cases of teat-end damage significantly decreased after Midwest employees changed the parameter settings of the Dematron in late July.

Roskop confirmed that Roskop Dairy employees were supposed to check the lenses of the claws constantly to make sure the vents, through which the residual vacuum escapes, were not clogged. The most common cause of vent clogging was manure. His employees were supposed to unclog the vents if they observed them clogged. Roskop did not specify to what

extent his employees were successfully carrying out these duties in the summer of 2008. Roskop indicated that sometime in June 2008, four Roskop Dairy employees quit, because cows were kicking them. Roskop testified that it took approximately 2 months to replace those employees.

Roskop testified that he hired Karen Cass, a mastitis consultant, to "come in and give me an outside look and test the herd." She observed the dairy and tested the cows on July 19, 2008. Roskop admitted that Cass observed several behaviors of Roskop Dairy's employees that were concerning from the standpoint of mastitis prevention. Roskop acknowledged that Cass' report found various deficiencies in his employees' care of the cows during the milking process. Roskop did not deny the veracity of Cass' observations, but hoped those deficiencies were isolated instances.

Cass found there were too many cows with clinical mastitis in line being milked with nonclinical cows. Cass found that the milk and air tubes were falling off the equipment. Cass also saw employees "flipping towels," meaning that they were using the same towel to wipe off the teats of more than one cow, and were using towels that were still damp. Cass observed that employees were not wearing gloves during manual cleaning and stimulation before attaching the claw. Cass wrote that the herd's teat-end condition "look[ed] good."

Roskop blamed the incidents of cows in the line showing clinical mastitis on the fact that the number of sick cows exceeded the capacity of his hospital pen. Roskop believed that the backflush system between each cow, in any case, prevented cross-contamination.

Depositions of Dennis Nissen, Gerald Farrier, and Jeff Hunt Concerning Installation and Adjustments to Dematron

Dennis Nissen and Gerald Farrier are Midwest employees who install and maintain equipment sold by Midwest, including the Dematron. Nissen was the employee who primarily installed the Dematron at Roskop Dairy, and Farrier

occasionally assisted. Their depositions were entered into evidence at the summary judgment hearing. Jeff Hunt, a GEA technical specialist who the parties do not dispute qualifies as an expert, was also deposed on two occasions, and his depositions were entered into evidence at the summary judgment hearing.

Nissen explained that it is normal to adjust the parameter settings for the blink time and low milk threshold according to the dairy owner's preferences as to how thoroughly the cows are milked. Although Nissen believed that the factory settings were correct given his observation of the milk flow when he installed the Dematron at Roskop Dairy, he testified that he acceded to Roskop's request to have the cows milked more thoroughly by adjusting the parameters of the blink time and low milk threshold accordingly. Nissen testified that before doing so, he told Roskop that these were not well-advised changes and that the cows just needed to get used to the new detacher.

Nissen made followup visits on July 30 and 31, 2008, after Roskop had complained of an increase in mastitis. At those times, Nissen checked the vacuum settings and observed the detachers coming off the cows after milking. He testified that he found no problems with the Dematron. Nissen testified that he made some "minute" parameter changes.

Three out of the 50 milking units had plungers that were not seating properly, and they were fixed promptly. Hunt testified that plungers do not create enough vacuum to cause the kind of problems reported by Roskop.

Nissen and Farrier testified that during their visits in late July 2008, they found numerous claws that either did not have vented lenses in them or were placed with the vent upside down. Of the 50 claws at Roskop Dairy, Nissen found that half had to have the lenses replaced. Farrier assumed that Roskop or his employees had improperly replaced the lenses. Nissen explained that the dairy must be aware of what kind of claws it has when ordering replacement lenses, because other models of claws do not require vented lenses. Apparently,

the vented lenses and unvented lenses are indistinguishable besides the presence or absence of a vent.

Nissen explained that lenses were not part of the detacher system sold by Midwest, but were preexisting components that mount to the claws. Hunt likewise testified that there is no part of the claw system that is part of the Dematron package. According to Nissen, Midwest was not charged with maintaining the claws or the lenses. Most dairy owners, according to Nissen, handle their own maintenance of the lenses. Farrier similarly explained that it was not "cost conducive" for dairy owners to have Midwest maintain their lenses. Although they did not consider it to be part of a maintenance obligation, Nissen and Farrier used the vented lenses that Roskop had on hand and replaced the lenses during their visits in late July 2008.

Hunt visited Roskop Dairy in September 2008. He made some "routine adjustments" to a portion of the database kept for the parlors, but he did not make any changes affecting the detachers. He did not observe anything out of the ordinary in the operation of the detacher system.

Hunt testified that the factory setting for detach delay is 0 seconds. He explained that the reason for that setting is that vacuum detachment cylinders typically do not operate instantaneously. And if the detach delay is set for longer than 0 seconds, the claw will usually drop before the rope is taut and allow the claw to fall to the deck. But detach delay, like other settings, may be adjusted by dairy personnel and the installer at the time of installation or first use.

Hunt testified that based on computer records of the Dematron settings at the time of installation, the detach delay was originally set for 3 seconds around the time of installation. When Nissen and Farrier visited Roskop Dairy in late July 2008, they changed the detach delay setting from 3 seconds to 10 seconds. By February 2013, however, the detach delay setting had been reduced from 10 seconds to 1 second.

Hunt explained that, generally, "[l]enses without vent holes or claws with no venting is a cause of poor residual vacuum

decay." Likewise, Nissen and Farrier testified that improper venting will cause the claws to detach while still under vacuum. Without proper venting, these witnesses explained, there is no way to quickly release the residual vacuum when the vacuum is signaled by the Dematron to be turned off.

Hunt testified that "one of the most prominent and most probable" reasons for residual vacuum during retraction of the claw is vents not functioning properly. Other physical components of the milking system, however, can also cause residual vacuum not to dissipate, such as short air tubes or vacuum pulsation. Those other physical components are likewise not matters controlled by the Dematron settings or maintained by the defendants.

Having reviewed the records, reports, and Nissen's deposition, and taking into account other possible causes, Hunt opined that the most likely cause for the claws to retract under vacuum in the summer of 2008 was the condition described by Nissen of the vents in the lenses of the claws.

Limited Exclusion of William Wailes' Testimony

Roskop Dairy had designated William Wailes as an expert witness. Wailes has a bachelor's degree in animal science and is a member of the National Mastitis Council. He considers himself an expert in management systems, including treatment protocols, in the overall operation of a dairy farm. Wailes testified that he was not an expert in milking machine equipment and that he is not a veterinarian.

Wailes explained that there are two forms of mastitis. Environmental mastitis comes from organisms that are in the cow's environment and typically involve issues of cleanliness, keeping the manure under control, changing the bedding, and other sanitary conditions. Contagious mastitis does not grow in the environment but is passed from cow to cow depending on a number of factors. Usually, contagious mastitis is passed from infected cows to uninfected cows during milking time. Wailes confirmed that according to Cass' report,

both environmental and contagious mastitis was present in Roskop's herd in the summer of 2008. Most of the cases were contagious mastitis.

Wailes testified generally that there are many reasons why a dairy herd might have an outbreak of mastitis, which have nothing to do with the milking machine. For instance, using bare hands rather than gloves when preparing cows for the milking machine can increase the spread of mastitis. Using damp cloths in the milking parlor is also not advisable, because there are opportunities for more colonies of bacteria within the damp cloth. Using the same towel for two different cows by flipping it over was "unacceptable," "[b]ecause you can cross-contaminate two cows if you use a single towel on two different cows."

Further, Wailes testified that milking clinical cows in the same line as nonclinical cows can lead to the spread of mastitis. Wailes testified that a backflush system will help prevent certain types of contagious mastitis from spreading when clinical cows are in the line with nonclinical cows, but not all. Buying infected cows from other herds could also cause an outbreak.

Wailes had reviewed Cass' reports in which Cass stated that in July 2008, she had observed Roskop's employees failing to use gloves and using damp towels, which they flipped for use on multiple cows. Wailes was also aware of Cass' observation that cows with clinical mastitis were being milked with cows who did not have mastitis and that other cows with mastitis were being kept in sick pens with other cows that did not have mastitis. Wailes acknowledged these were "unacceptable" practices that could cause the spread of contagious mastitis. Wailes did not specifically address the causal role of these practices in the rise of mastitis in the Roskop Dairy herd.

Wailes explained that, physically, the "first and second lines of defense" against mastitis are a healthy teat end, "from a sphincter muscle skin condition," and the keratin that is in the teat canal. But Wailes did not otherwise elaborate on how much more susceptible to contagious mastitis a cow with

damaged teat ends might be. Wailes did not testify that teat-end damage alone can cause mastitis.

Wailes further explained that teat-end lesions are "pretty rare" and, in normal circumstances, would only result from teats being stepped on or similar injuries. Wailes testified that vacuum not properly shutting off before retraction of the claw could lead to teat-end damage. In addition, certain practices leading to overmilking, such as prepping the cow too long before milking or a low flow rate setting, could "possibly" lead to teat-end damage.

Although Cass purportedly checked teat health and found little evidence of teat-end damage in the herd in July 2008, Wailes relied on Roskop's statement that 30 percent of the cows had visible teat-end damage, which would be approximately 200 cows. Wailes considered Cass to be qualified to evaluate teat-end health—more so than Roskop—and she was "[v]ery diligent" in her work. But Wailes questioned the logistics of Cass' making such observations while carrying out her primary duty of obtaining clean samples from the cows to test for mastitis.

Wailes testified that he did not have the factual information he needed to make a report or a "differential diagnosis as to the causes of the cows having mastitis at the Roskop Dairy farm in 2008." Wailes had not reviewed Nissen's deposition and had no knowledge of the allegedly clogged vents. Neither did Wailes consider, in reaching his opinion, the rise in somatic cell count from January to June 2008, before installation of the Dematron. Wailes specifically stated that he had not ruled out the various other possible causes of a mastitis outbreak at Roskop Dairy that would be unrelated to the Dematron, because he did not have the necessary records to do so.

Wailes did not know how long the milking system was coming off under vacuum. Wailes did not know how many units in the system were coming off under vacuum. Wailes had no specific information about the hygienic practices at the

dairy in the summer of 2008 other than Cass' report and his longtime relationship with Roskop Dairy.

Wailes stated that he had generally found throughout the years that Roskop Dairy was well maintained. When asked whether through his discussions with Roskop he had learned of any changes in the sanitation practices at Roskop Dairy from May to June 2008, Wailes responded, "I think he had protocols in place for his milking facility, his people, and so that's, that's my answer, he had protocols in place." Wailes testified that he did not specifically review what the protocols were. Wailes further testified that he was not specifically aware of what steps were taken at Roskop Dairy to enforce its protocols.

Wailes summarized, "[M]y analysis is that there had to be some event to trigger somatic cell counts to take that much of a spike." Citing as the factual foundation for his opinion the documentation of a spike in the somatic cell count and his conversation with Roskop in which Roskop related observing the units coming off under vacuum and the teat-end damage during the time of that spike, Wailes concluded that the alleged damage to Roskop's herd was "consistent with" the units detaching under vacuum.

Wailes stated that he did not have the facts to say that units coming off under vacuum was the "probable" cause of the spike in mastitis. He elaborated that, based on the facts he had, he could only say it was "possible" that detachment under vacuum caused the spike in mastitis:

> A. It's very possible, but my, my only backup to that would be that when we see a spike in somatic cell counts something is causing the mastitis.
>
> Q. And we've agreed it could be many things?
>
> A. Yes.
>
> Q. One of which could be something wrong with the detacher if indeed there was?
>
> A. Yes.
>
> Q. But a lot of other things that have nothing to do with the detacher?

A. Yes.

Q. And we can't rule anyone in or rule anyone out based on the facts we have right now?

A. It's a dynamic issue.

But later, Wailes mentioned that "when you try to eliminate events that could occur during that period of time, the one that you can't eliminate is the installation of new equipment that was not working properly at the time." Wailes further stated at counsel's prompting that he did not find any other cause for the spike in mastitis and loss of production in the summer of 2008.

On this point, Wailes elaborated only that there was no change in feed, that Roskop had "protocols in place," that Cass' report did not necessarily mean that none of the dairy workers were exercising good hygiene practices, and that he had no reason to believe new cows had been introduced into the herd. Wailes then answered affirmatively to Roskop Dairy's counsel's question as to whether his "analysis that the detacher system caused the damage [was] based in part on the fact that [Wailes had] either eliminated or not been provided with any evidence of any other causes during that time frame."

But when Midwest's counsel asked, "You said you didn't find any other cause other than the installation, but fair to say you didn't really look for any other cause other than the installation; is that correct?" Wailes answered, "My main concern at the time was the timing of the events, and the timing of the events match up to the installation." Midwest's counsel then pressed, "But, sir, the question I asked you was did you look for any other causes?" Wailes answered, "No."

Wailes again clarified that he did not know what, if anything, was wrong with the Dematron and had no opinion about the parameter settings. Wailes stated that he was not an expert in the design, installation, diagnosis, settings, or repair of milking machine equipment.

Wailes confirmed generally that "a properly operating detacher system" does not "come off under pressure as

described by . . . Roskop." But Wailes also acknowledged that there were many reasons other than the Dematron why units could come off under vacuum. Wailes described these as including improper venting of the claws, misapplication of the unit to the udders, kinks in the hoses, and cow movement. Wailes further conceded there were other parts of the milking system that, if not properly maintained by the dairy farmer, could cause conditions conducive to cows' getting contagious forms of mastitis. Thus, Wailes agreed that it would not be "scientific reasoning" to conclude that the Dematron was responsible for the claws' detaching under vacuum.

The defendants moved to strike Wailes' testimony on the issue of causation, asserting that his testimony represented mere speculation and conjecture and was based on unscientific methodology and insufficient facts to meet the requirements of *Schafersman v. Agland Coop*.[1] The district court granted the motion and excluded Wailes' testimony insofar as Wailes sought to opine that the units were coming off under vacuum because of something wrong with the Dematron or that the increase in mastitis was caused by the units detaching under vacuum. Wailes' deposition was not offered at the summary judgment hearing.

Limited Exclusion of Michael Slattery's Testimony

Michael Slattery is Roskop Dairy's veterinarian. In his deposition, Slattery discussed in the abstract several possible causes of an increased somatic cell count in a dairy herd. In addition to the factors discussed by Wailes and acknowledged by Roskop in his discussion of Cass' report, Slattery testified that the "inflations" components of the milking machine could be worn out and porous, therefore harboring bacteria and leading to an increase in mastitis. He also added that high temperatures and humidity can lead to an increase in

[1] *Schafersman v. Agland Coop*, 268 Neb. 138, 681 N.W.2d 47 (2004).

the spread of mastitis. Finally, milking cows on manual for too long could lead to overmilking and increased incidents of mastitis.

Slattery stated he believed that the increase in mastitis at Roskop Dairy was due to the Dematron, although he did not observe anything wrong with the Dematron and explained that he was not an expert on milking machines. Rather, he testified that he based his conclusion solely on Roskop's statement that the somatic cell count of the herd increased after the Dematron was installed. Slattery conceded he did not look at any data and did not eliminate the other possible causes of increased somatic cell count that had been discussed.

Upon the defendants' motion in limine, the court excluded Slattery's testimony to the extent that it concerned the proximate causation of the increased somatic cell count at Roskop Dairy in the summer of 2008. Slattery's deposition was offered by Roskop at the summary judgment hearing. It was allowed into evidence only to the extent that it contained "factual observations."

Order Granting Summary Judgment

The court granted the defendants' motions for summary judgment. In its order, the court noted that it had stricken the causation testimony of both Slattery and Wailes as unreliable. But it also noted in its order that "[b]oth Slattery and Wailes admitted there are numerous possible causes for spikes in a dairy herd's mastitis rate that could not be ruled out in this case." The court noted that there was evidence that Roskop Dairy was not following proper hygiene procedures to prevent the spread of mastitis. Indeed, the court noted, the somatic cell counts indicated a mastitis problem before the Dematron was installed.

The court further noted that Midwest's expert, Patrick Gorden, testified that there was no scientific basis to conclude that the detacher system caused mastitis or decreased milk production. Rather, Gorden testified that the mastitis was preexisting and likely exacerbated by hot weather and Roskop

Dairy's failure to implement a milk quality program and to properly maintain the milking system. Gorden's affidavit is not in the record and apparently was not entered into evidence at the summary judgment hearing.

Finally, the court noted that Hunt opined that Roskop Dairy's failure to properly maintain the vents caused the mastitis. The court noted that Roskop had failed to present any expert to contradict Hunt's expert opinion.

The court reasoned that the fact the detacher units came off under vacuum did not in itself demonstrate a product defect. Although parameter settings were changed throughout the installation process, there was no evidence that any settings were incorrect or defective. While, under *Genetti v. Caterpillar, Inc.*,[2] proof that a warranted product is defective may be circumstantial and inferred from the evidence, the court concluded that *Genetti* was inapplicable. There were various possible causes of the increase in the somatic cell count or for the units detaching under vacuum, which were beyond the normal experience and understanding of the jury.

The court concluded that expert testimony was required for a jury to determine which component parts or settings of the milking system caused it to come off under vacuum. Expert testimony was also required for the jury to determine which, among a number of possible causes of the spike in mastitis in the herd, was more probable. Roskop Dairy had no such expert testimony.

Prejudgment Interest

The court subsequently granted summary judgment in favor of Midwest on its counterclaim for the remaining principal due of $78,026.56 plus prejudgment interest. Because the contract did not provide for interest, the court applied Neb. Rev. Stat. § 45-104 (Reissue 2010):

> Unless otherwise agreed, interest shall be allowed at the rate of twelve percent per annum on money due

[2] *Genetti v. Caterpillar, Inc.*, 261 Neb. 98, 621 N.W.2d 529 (2001).

> on any instrument in writing, or on settlement of the account from the day the balance shall be agreed upon, on money received to the use of another and retained without the owner's consent, express or implied, from the receipt thereof, and on money loaned or due and withheld by unreasonable delay of payment. Unless otherwise agreed or provided by law, each charge with respect to unsettled accounts between parties shall bear interest from the date of billing unless paid within thirty days from the date of billing.

The court observed that Midwest sent a payment request to Roskop Dairy which bore a date of October 14, 2008, but there was no evidence of when it was actually sent. Therefore, the court utilized the date of November 1, because Roskop Dairy admitted that the outstanding principal was owed to Midwest as of November 1. The court utilized the rate of 8 percent per annum rather than the statutory 12 percent, because 8 percent was what Midwest had requested. The court did not expressly discuss whether there had been a "reasonable controversy" over the amount due to Midwest.[3]

ASSIGNMENTS OF ERROR

Roskop Dairy asserts that the district court erred by (1) excluding the testimony of Wailes, (2) denying Roskop Dairy's motion to compel, (3) granting the defendants' motions for summary judgment, and (4) awarding prejudgment interest to Midwest.

STANDARD OF REVIEW

[1,2] We review de novo whether the trial court applied the correct legal standards for admitting an expert's testimony.[4] We review for abuse of discretion how the trial court applied

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[3] See, e.g., *Wilson Concrete Co. v. A. S. Battiato Constr. Co.*, 196 Neb. 185, 188, 241 N.W.2d 819, 821 (1976).

[4] *King v. Burlington Northern Santa Fe Ry. Co.*, 277 Neb. 203, 762 N.W.2d 24 (2009).

the appropriate standards in deciding whether to admit or exclude an expert's testimony.[5]

[3] In reviewing a summary judgment, an appellate court views the evidence in the light most favorable to the party against whom the judgment was granted and gives that party the benefit of all reasonable inferences deducible from the evidence.[6]

[4] Generally, the control of discovery is a matter for judicial discretion, and decisions regarding discovery will be upheld on appeal in the absence of an abuse of discretion.[7]

[5] Prejudgment interest may be awarded only as provided in Neb. Rev. Stat. § 45-103.02 (Reissue 2010), and whether prejudgment interest should be awarded is reviewed de novo on appeal.[8]

ANALYSIS

Exclusion of Wailes' Testimony and Whether There Was Material Issue of Fact

[6,7] The central question in this case is whether we should affirm the district court's order of summary judgment for the defendants. A motion for summary judgment shall be granted where there is no genuine issue as to any material fact and the moving party is entitled to judgment as a matter of law.[9] Failure of proof concerning an essential element of the nonmoving party's case necessarily renders all other facts immaterial.[10]

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[5] *Id.*

[6] *Rent-A-Roofer v. Farm Bureau Prop. & Cas. Ins. Co.*, 291 Neb. 786, 869 N.W.2d 99 (2015).

[7] *Farmington Woods Homeowners Assn. v. Wolf*, 284 Neb. 280, 817 N.W.2d 758 (2012).

[8] *Countryside Co-op v. Harry A. Koch Co.*, 280 Neb. 795, 790 N.W.2d 873 (2010).

[9] See *Rent-A-Roofer v. Farm Bureau Prop. & Cas. Ins. Co., supra* note 6.

[10] See *Celotex Corp. v. Catrett*, 477 U.S. 317, 106 S. Ct. 2548, 91 L. Ed. 2d 265 (1986).

[8-10] A party moving for summary judgment makes a prima facie case for summary judgment by producing enough evidence to demonstrate that the movant is entitled to judgment if the evidence were uncontroverted at trial.[11] Once the moving party makes a prima facie case, the burden shifts to the party opposing the motion to produce admissible contradictory evidence showing the existence of a material issue of fact that prevents judgment as a matter of law.[12] Conclusions based on guess, speculation, conjecture, or a choice of possibilities do not create material issues of fact for the purposes of summary judgment[13]; the evidence must be sufficient to support an inference in the nonmovant's favor without the fact finder engaging in guesswork.[14]

The defendants made a prima facie case for summary judgment through expert testimony that poor maintenance of the vents in the claws was the proximate cause of the units detaching under vacuum and, thus, of any mastitis resulting therefrom. Without endorsing the sufficiency of the evidence on any other aspect of Roskop Dairy's case, we focus our analysis on this element of mechanical causation. Doing so, we conclude that Roskop Dairy failed to produce admissible contradictory evidence creating a material issue of fact to rebut the defendants' prima facie case.

Wailes neither purported to opine on the mechanical cause of the units detaching under vacuum, nor was he qualified to do so. And Roskop Dairy did not present other sufficient circumstantial evidence that could lead a reasonable person to accept its theory that the Dematron was the proximate cause

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[11] *Chicago Lumber Co. of Omaha v. Selvera*, 282 Neb. 12, 809 N.W.2d 469 (2011).

[12] See, *Borrenpohl v. DaBeers Properties*, 276 Neb. 426, 755 N.W.2d 39 (2008); *New Tek Mfg. v. Beehner*, 270 Neb. 264, 702 N.W.2d 336 (2005).

[13] *Marksmeier v. McGregor Corp.*, 272 Neb. 401, 722 N.W.2d 65 (2006); *Richards v. Meeske*, 268 Neb. 901, 689 N.W.2d 337 (2004).

[14] *C.E. v. Prairie Fields Family Medicine*, 287 Neb. 667, 844 N.W.2d 56 (2014).

of the purported injury. As will be explained in more detail below, we agree with the district court that Roskop Dairy's reliance on the malfunction theory is misplaced, because it is limited to proving a specific defect through circumstantial evidence and because Roskop Dairy failed to present evidence that could establish the elements of the malfunction theory. Any other circumstantial evidence that Roskop Dairy relies on to rebut the defendants' prima facie case for summary judgment amounts to speculative reasoning based on observations of a temporal correlation.

[11] All implied warranty theories of recovery and strict liability claims for manufacturing defect, design defect, or failure to warn seek to recover for a "defect."[15] Express warranty claims are not merged with implied warranty claims or strict liability claims due to the "'dickered'" aspects of the individual bargain,[16] but express warranty claims, like implied warranty theories and strict liability claims, require a showing that the goods were defective.[17] While a "defect" traditionally falls under the category of either a design, manufacturing, or warning defect, "defective" installation is also cognizable under the Uniform Commercial Code's breach of warranty theories when the installation is incident to the sale; in other words, when the purchase is for a system that is dependent upon proper installation.[18] And the user of a product may also assert a cause of action for negligent installation concurrently with actions under express and implied warranty theories.[19]

[12-14] Whether a plaintiff is proceeding under negligence, defect theories, or breach of express warranty, proximate cause

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[15] See *Freeman v. Hoffman-La Roche, Inc.*, 260 Neb. 552, 618 N.W.2d 827 (2000).

[16] *Id*. at 574, 618 N.W.2d at 844.

[17] *Genetti v. Caterpillar, Inc., supra* note 2.

[18] See, *Mennonite Deaconess Home & Hosp. v. Gates Eng'g Co.*, 219 Neb. 303, 363 N.W.2d 155 (1985); 3 American Law of Products Liability 3d § 37:12 (2015).

[19] 3 American Law of Products Liability 3d, *supra* note 18.

is a necessary element of the plaintiff's case.[20] Proximate cause is the cause that in a natural and continuous sequence unbroken by an efficient intervening cause, produces the injury, and without which the injury would not have occurred.[21] To establish proximate cause, the plaintiff must meet three basic requirements: (1) Without the negligent action, the injury would not have occurred, commonly known as the "but for" rule or "cause in fact"; (2) the injury was a natural and probable result of the negligence; and (3) there was no efficient intervening cause.[22]

[15] In this case, proving the elements of defect/negligence and proximate cause involves the mechanical functioning of a dairy farm milking system and its various component parts. Such technical matters are outside the scope of ordinary experience. Findings of fact as to technical matters beyond the scope of ordinary experience are usually not warranted in the absence of expert testimony supporting such findings.[23]

Hunt testified that the clogged and upside-down vents reported by Nissen and Farrier were the cause of the milking units detaching under vacuum. Roskop presented no reliable expert opinion to the contrary. Roskop admitted that he was not an expert on milking machines. Wailes likewise stated

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[20] See, *Powell v. Harsco Corp.*, 209 Ga. App. 348, 433 S.E.2d 608 (1993); 1 American Law of Products Liability 3d § 4:1 (2007).

[21] See, *Stahlecker v. Ford Motor Co.*, 266 Neb. 601, 667 N.W.2d 244 (2003); *Pendleton Woolen Mills v. Vending Associates, Inc.*, 195 Neb. 46, 237 N.W.2d 99 (1975).

[22] See, *Hughes v. School Dist. of Aurora*, 290 Neb. 47, 858 N.W.2d 590 (2015); *Belgum v. Mitsuo Kawamoto & Assoc.*, 236 Neb. 127, 459 N.W.2d 226 (1990); *Daniels v. Andersen*, 195 Neb. 95, 237 N.W.2d 397 (1975).

[23] See, *McVaney v. Baird, Holm, McEachen*, 237 Neb. 451, 466 N.W.2d 499 (1991); *Overland Constructors v. Millard School Dist.*, 220 Neb. 220, 369 N.W.2d 69 (1985). See, also, *Green v. Box Butte General Hosp.*, 284 Neb. 243, 818 N.W.2d 589 (2012); *State v. Aguilar*, 268 Neb. 411, 683 N.W.2d 349 (2004); *Eiting v. Godding*, 191 Neb. 88, 214 N.W.2d 241 (1974); *Clark v. Village of Hemingford*, 147 Neb. 1044, 26 N.W.2d 15 (1947).

clearly that he was not an expert in the design, installation, diagnosis, settings, or repair of milking machine equipment. Wailes stated that he did not know what, if anything, was wrong with the Dematron and had no opinion about the parameter settings.

Roskop points out that Wailes confirmed that "a properly operating detacher system" does not "come off under pressure as described by . . . Roskop." This statement, in combination with Roskop's testimony, may support the occurrence of some kind of malfunction of the milking system. But this was not an opinion as to whether the Dematron was the cause of that malfunction. To the contrary, Wailes acknowledged that there were many possible mechanical causes of the units coming off under vacuum, which have nothing to do with the Dematron. Wailes agreed that it would not be "scientific reasoning" to conclude that the Dematron was responsible for the claws' detaching under vacuum.

Even if Wailes had been qualified to opine on which component part of the milking system caused the units to detach under vacuum, and had actually attempted to do so, such opinion would be unreliable under *Schafersman v. Agland Coop.*[24] The expert must have "good grounds" for his or her belief "in every step of the analysis."[25] The term "good grounds" means an inference or assertion derived by scientific method and supported by appropriate validation.[26]

[16] Wailes testified, "[M]y analysis is that there had to be some event to trigger somatic cell counts to take that much of a spike" and "[m]y main concern at the time was the timing of the events, and the timing of the events match up to the installation." It is well settled that a causation opinion based solely on a temporal relationship is not derived from the

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[24] *Schafersman v. Agland Coop, supra* note 1.

[25] *King v. Burlington Northern Santa Fe Ry. Co., supra* note 4, 277 Neb. at 227, 762 N.W.2d at 43.

[26] *Id.*

scientific method and is therefore unreliable.[27] Such an opinion is also unreliable because it is not based upon sufficient facts or data.[28]

An expert can challenge hypotheses formulated through the observation of association[29] or utilize a challenge/dechallenge/rechallenge methodology, or the expert can systematically eliminate other reasonably probable causes in conjunction with observation of temporal correlation.[30] But the reliability of such methodologies to support a causation opinion is directly related to the degree of scientific rigor.[31] Wailes' assertion that "when you try to eliminate events that could occur during that period of time, the one that you can't eliminate is the installation of new equipment that was not working properly at the time," and his further assertions that the feed had not changed, that Roskop had a good reputation, and that Roskop had unspecified protocols in place, demonstrate little scientific rigor. Furthermore, this testimony concerns, at most, alternate etiologies of mastitis and not the alternate mechanical causes of the malfunction. Thus, to the extent that Roskop makes an argument that the court should have admitted Wailes' testimony for purposes of mechanical causation, we find that the district court did not err.

Roskop alternatively argues that expert testimony is not required to create a material issue of fact rebutting the

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[27] See, *Porter v. Whitehall Laboratories, Inc.*, 9 F.3d 607 (7th Cir. 1993); *Derzavis v. Bepko*, 766 A.2d 514 (D.C. 2000); *Terry v. Bd. of Mental Retardation*, 165 Ohio App. 3d 638, 847 N.E.2d 1246 (2006), *reversed in part on other grounds sub nom. Terry v. Caputo*, 115 Ohio St. 3d 351, 875 N.E.2d 72 (2007). See, also, e.g., *Schafersman v. Agland Coop, supra* note 1; *Carlson v. Okerstrom*, 267 Neb. 397, 675 N.W.2d 89 (2004).

[28] *King v. Burlington Northern Santa Fe Ry. Co., supra* note 4.

[29] See *id.*

[30] See *Heller v. Shaw Industries, Inc.*, 167 F.3d 146 (3d Cir. 1999). See, also, *Carlson v. Okerstrom, supra* note 27.

[31] See *McClain v. Metabolife Intern., Inc.*, 401 F.3d 1233 (11th Cir. 2005). See, also, *Glastetter v. Novartis Pharmaceuticals Corp.*, 252 F.3d 986 (8th Cir. 2001).

defendants' prima facie case for summary judgment. In making this argument, Roskop apparently relies on the "malfunction theory." The malfunction theory is based on the same principle underlying res ipsa loquitur, which permits a fact finder to infer negligence from the circumstances of the incident, without resort to direct evidence of the wrongful act.[32]

[17] Under the malfunction theory, also sometimes called the indeterminate defect theory or general defect theory,[33] a plaintiff may prove a product defect circumstantially, without proof of a specific defect, when (1) the incident causing the harm was of a kind that would ordinarily occur only as a result of a product defect and (2) the incident was not, in the particular case, solely the result of causes other than a product defect existing at the time of sale or distribution.[34]

The malfunction theory should be utilized with the utmost of caution. Although some circumstances may justify the use of the malfunction theory to bridge the gap caused by missing evidence, the absence of evidence does not make a fact more probable but merely lightens the plaintiff's evidentiary burden despite the fact that the missing evidence might well have gone either way, and this rationale is too often subject to misapplication by courts in situations in which evidence is actually available.[35]

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[32] Restatement (Third) of Torts: Products Liability § 3, comment *a*. (1998).

[33] See, *id*., § 3; David G. Owen, *Manufacturing Defects*, 53 S.C. L. Rev. 851 (2002). See, also, e.g., *Sochanski v. Sears, Roebuck and Co.*, 621 F.2d 67 (3d Cir. 1980); *Stewart v. Ford Motor Co.*, 553 F.2d 130 (D.C. Cir. 1977); *Higgins v. General Motors Corp.*, 287 Ark. 390, 699 S.W.2d 741 (1985); *Wakabayashi v. Hertz*, 66 Haw. 265, 660 P.2d 1309 (1983); *Gillespie v. R. D. Werner Co.*, 71 Ill. 2d 318, 375 N.E.2d 1294, 17 Ill Dec. 10 (1978); *Stackiewicz v. Nissan Motor Corp.*, 100 Nev. 443, 686 P.2d 925 (1984); *Moraca v. Ford Motor Co.*, 66 N.J. 454, 332 A.2d 599 (1975); *Brownell v. White Motor Corp.*, 260 Or. 251, 490 P.2d 184 (1971).

[34] *Genetti v. Caterpillar, Inc., supra* note 2; Restatement, *supra* note 32, § 3.

[35] See *Metro. Property & Cas. Ins. Co. v. Deere & Co.*, 302 Conn. 123, 25 A.3d 571 (2011).

We have explained that as a matter of policy we allow circumstantial proof of a product defect without evidence of the specific defect because in many instances the dealer or manufacturer has either purposefully or inadvertently tampered with the evidence. Further, in light of the technological complexity in proving a specific defect, "forcing consumers to identify the cause, rather than the effect, of a defect would be unrealistically burdensome."[36]

The malfunction theory is narrow in scope. The malfunction theory simply provides that it is not necessary for the plaintiff to establish a specific defect so long as there is evidence of some unspecified dangerous condition or malfunction from which a defect can be inferred[37]—the malfunction itself is circumstantial evidence of a defective condition.[38] The malfunction theory does not alter the basic elements of the plaintiff's burden of proof and is not a means to prove proximate cause or damages.[39]

Other courts have set forth a nonexhaustive list of the kind of circumstantial evidence that may be used to support a reasonable inference of a specific defect. In *DeWitt v. Eveready Battery Co., Inc.*,[40] for example, the court illustrated six evidentiary factors that a plaintiff may present to create a genuine issue of fact on the element of defect through circumstantial evidence: (1) the malfunction of the product; (2) expert testimony as to a possible cause or causes; (3) the timeframe of the malfunction's occurrence after the plaintiff first obtained the product and other relevant history of the product, such as its age and prior usage by the plaintiff and others, including evidence of misuse, abuse, or similar relevant treatment

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[36] *Genetti v. Caterpillar, Inc., supra* note 2, 261 Neb. at 114, 621 N.W.2d. at 542.

[37] 1 American Law of Products Liability 3d, *supra* note 20, § 1:15 (2013).

[38] *Ducko v. Chrysler Motors Corp.*, 433 Pa. Super. 47, 639 A.2d 1204 (1994).

[39] See *Sochanski v. Sears, Roebuck and Co., supra* note 33.

[40] *DeWitt v. Eveready Battery Co., Inc.*, 355 N.C. 672, 565 S.E.2d 140 (2002).

before it reached the defendant; (4) similar incidents, when accompanied by proof of substantially similar circumstances and reasonable proximity in time; (5) elimination of other possible causes of the accident; and (6) proof tending to establish that such an accident would not occur absent a manufacturing defect.

Roskop relies on *Genetti v. Caterpillar, Inc.*, in which we applied the principles of the malfunction theory and some of these factors to conclude that the circumstantial evidence of a defect was sufficient to support a verdict in the plaintiffs' favor.[41] The plaintiffs in *Genetti* sought recovery for the total failure of their truck's engine. Subsequent to purchasing the truck new, multiple engine failures had occurred. The defendant had first repaired the engine and, upon subsequent failures, replaced it. In replacing the engine, the defendant utilized some components from the old engine. The defendant did not keep records of which components of the engine were replaced and which were reused. Eventually, the truck was sold, and the defendant replaced the engine again after another engine failure subsequent to the purchase.

The plaintiffs' expert witness, a mechanic, admitted he was not an expert in engine design, but illustrated his expertise in repairing, rebuilding, and overhauling the kind of engine at issue. The mechanic reviewed documentation of the repairs, photographs, and interviews, and concluded that a coolant leak caused the engine failures. The mechanic negated alternate, reasonably possible causes of the engine failures. The mechanic was unsure whether the coolant leak was specifically due to a cracked head, cracked head gasket, or some other failure allowing the intrusion of coolant. He testified, however, that the uncontroverted testimony concerning the use of the truck was not a misuse that should have resulted in engine failure.

We held that because the plaintiffs presented evidence eliminating abuse or misuse as the alternate cause of the engine

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[41] *Genetti v. Caterpillar, Inc., supra* note 2.

failure, it was reasonable for a jury to conclude that if the failure was not due to improper use of the truck, then it was due to a defect, such as one of those suggested by the mechanic.[42] We held that the plaintiffs were not required to prove the specific defect that caused the failures in order to prove that the engine was defective.[43]

But more apposite to the facts of this case is *Wilgro, Inc. v. Vowers & Burback*.[44] In *Wilgro, Inc.*, although (unlike here) there was direct evidence of a specific defect, we held that the circumstantial evidence was insufficient to support a finding of proximate cause. The defendant in *Wilgro, Inc.* had provided the plaintiff with feed supplements for the plaintiff's cattle that contained slightly higher levels of nonprotein nitrogen, urea, than warrantied. Shortly after obtaining the feed, the cattle became sick. Some eventually died. Autopsies on some of the cattle were performed, and they were found to have died of urea poisoning.

Other causation theories unrelated to the defect and supported by the record could account for the poisoning. For instance, given the method of merely spreading the supplement on the bottom of a truck and pouring silage on top where the cattle "free fed," the feed could have been improperly mixed with the supplement. Or, some cows could have eaten more feed than they were allotted. Furthermore, the plaintiff's own immature silage could account for the symptoms observed in the majority of the animals that the plaintiff claimed had been injured.

[18,19] We explained that circumstantial evidence is not sufficient to sustain a verdict that depends solely thereon unless the circumstances proved by the evidence are of such a nature and so related to each other that the conclusion reached by the jury is the only one that can fairly and reasonably be

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[42] See *id.*

[43] *Id.*

[44] *Wilgro, Inc. v. Vowers & Burback*, 190 Neb. 369, 208 N.W.2d 698 (1973).

drawn therefrom.[45] Where, instead, under the facts viewed in a light most favorable to the nonmoving party, the nonexistence of the fact to be inferred is just as probable as its existence, the conclusion that it exists is a matter of speculation, surmise, and conjecture, and a jury will not be permitted to draw it.[46] We concluded in *Wilgro, Inc.* that the plaintiff had failed to adduce evidence that would lead the reasonable person to accept the plaintiff's theory of causation over those theories presented by the defendant.

In *Pendleton Woolen Mills v. Vending Associates, Inc.*,[47] a negligence case, we similarly found the circumstantial evidence to be insufficient for any determination of proximate cause in the plaintiff's favor to rise above speculation. The plaintiff's building had been damaged by the flooding of a sticky substance. A large amount of water and syrup was found on the floor in the vicinity of a soft drink machine, which was the apparent source of the flooding. The machine obtained its water supply from a water pipe in the building, to which it was connected by copper tubing. The defendant was allegedly responsible for the maintenance of the machine.

We found "a total lack of evidence establishing that any negligence . . . was the 'proximate cause' of either the leak or the damages; or to state it more accurately, that there was any 'causation in fact' between the alleged negligence, and the occurrence and the water damage."[48] Only one nonexpert witness reported a hearsay statement loosely attributing the leak to a malfunctioning shutoff valve. And there was no proof that the absence of regular inspection was a substantial factor in causing the valve to malfunction, if it indeed did. Nor was there evidence that but for the absence of such inspection, the leak would not have occurred. In particular,

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[45] *Id.*

[46] See *Ehler et ux v. Portland Gas & Coke Co.*, 223 Or. 28, 352 P.2d 1102 (1960).

[47] *Pendleton Woolen Mills v. Vending Associates, Inc., supra* note 21.

[48] *Id.* at 50, 237 N.W.2d at 102.

there was no evidence indicating the location of the shutoff valve in the machine and whether a leak could be detected. Again, we said that speculation and conjecture are not sufficient to establish causation; there must be something more that will lead a reasonable mind to one conclusion rather than another.[49]

In considering Roskop Dairy's argument that the malfunction theory applies, we first note that there is no apparent loss of the evidence of a specific defect, because there is a record of the parameter settings. Indeed, from these records, Roskop has suggested a very specific theory that the detach delay setting of 3 seconds was defective and negligent and that it should have been 10 seconds, the setting it was changed to in late July 2008. While we have found little case law specifically addressing whether the malfunction theory applies when there is no loss of evidence or when there is an allegation of a specific defect, we find no cases that have done so. And we observe that the related doctrine of res ipsa loquitur does not apply when specific acts of negligence are alleged or there is evidence of the precise cause of the accident.[50]

Assuming that the malfunction theory can be utilized when there has been no loss of evidence relating to the alleged specific defect, Roskop presented insufficient evidence to establish a material issue of fact supporting the malfunction theory. Roskop presented no reliable evidence that the incident causing the harm was of a kind that would ordinarily occur only as a result of a product defect, as he had no expert on milking systems. And he presented no reliable evidence negating causes other than the alleged product defect—despite undisputed evidence that detachment under vacuum could have multiple possible mechanical sources.[51] Roskop did not even present evidence negating Nissen's and Farrier's testimony that the vents

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[49] *Pendleton Woolen Mills v. Vending Associates, Inc., supra* note 21.

[50] See *Maly v. Arbor Manor, Inc.*, 225 Neb. 276, 404 N.W.2d 419 (1987).

[51] See, *Genetti v. Caterpillar, Inc., supra* note 2; Restatement, *supra* note 32, § 3.

of the lenses had been placed upside down and that nonvented lenses had been placed in the claws.

[20,21] In any event, the malfunction theory would not serve to create a material issue on the element of proximate cause, because it is a theory only utilized to prove the element of defect.[52] Roskop Dairy seeks more than just a bridge over the gap of difficult-to-obtain and highly technical evidence of a specific defect. Roskop attempts to create a material issue of fact on little more than his observation of a temporal correlation. But the line between impermissible speculation and reasonable inferences is drawn by the laws of logic.[53] And reasoning causation from temporal correlation represents a logical fallacy. A conclusion based upon such reasoning is not a reasonable inference but is mere speculation and conjecture.[54]

We find no merit to Roskop's argument that Hunt's testimony confirming that the settings for the detach delay were changed from 3 seconds to 10 seconds rebuts the defendants' prima facie case. It would be speculative to derive any conclusion as to either negligence/defect or proximate cause based on the record of the parameter settings without an expert opinion interpreting those settings in the larger context of the milking system. Roskop Dairy's conclusion based on the correlation of the 3-second setting to detachment under vacuum and of the 10-second setting to no detachment under vacuum remains at its core an application of the logical fallacy that correlation equals causation.

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[52] See, *White v. Mazda Motor of America, Inc.*, 313 Conn. 610, 99 A.3d 1079 (2014); *Barnish v. KWI Bldg. Co.*, 916 A.2d 642 (Pa. 2007).

[53] *Tose v. First Pennsylvania Bank, N.A.*, 648 F.2d 879 (3d Cir. 1981), *abrogated on other grounds, Griggs v. Provident Consumer Discount Co.*, 459 U.S. 56, 103 S. Ct. 400, 74 L. Ed. 2d 225 (1982).

[54] See, *Sunward Corp. v. Dun & Bradstreet, Inc.*, 811 F.2d 511 (10th Cir. 1987); *Loesch v. United States*, 645 F.2d 905 (Ct. Cl. 1981); *Dodge Motor Trucks, Inc. v. First Nat. Bank of Omaha*, 519 F.2d 578 (8th Cir. 1975); *Genesee M. B. & T. Co. v. Payne*, 6 Mich. App. 204, 148 N.W.2d 503 (1967).

At oral arguments, Roskop Dairy also suggested that summary judgment was improper because cross-examination of Hunt at trial might lead to a more favorable and direct admission regarding the Dematron settings and their connection to the detachment under vacuum. In two depositions, Roskop Dairy has failed to obtain an opinion from Hunt that the Dematron settings during the relevant time period were in any way improper or a substantial factor in causing the units to detach under vacuum. Roskop's hope that this testimony might change at trial is insufficient to rebut the defendants' prima facie case for summary judgment.

Under the malfunction theory or otherwise, Roskop Dairy failed to present evidence from which a jury could determine, without resorting to speculation, that the Dematron was the proximate cause of the alleged injury to Roskop Dairy's cows. The district court accordingly did not err in granting the defendants summary judgment. Although we share the district court's concerns over the lack of evidence that the Dematron was defectively or negligently installed and the lack of reliable evidence causally linking the detachment under vacuum to the medical condition of mastitis, we need not examine those aspects of the district court's ruling in order to affirm its decision.

Considering Testimony Not in Evidence

We find no merit to Roskop Dairy's assertion that we should reverse the district court's order because it erroneously relied on facts not in evidence when it granted summary judgment. Roskop argues that in reasoning that there are several causes of mastitis, the district court erroneously relied on Gorden's affidavit, which was not entered into evidence. Roskop argues that, even "more egregiously," the district court relied on Wailes' excluded testimony and upon the deposition of Slattery, which was admitted for limited purposes only.[55]

[55] Brief for appellant at 28.

Roskop argues that the district court could not rely on any aspect of Wailes' testimony, because neither party reoffered it for summary judgment. Finally, Roskop characterizes the district court's order as expressing an improper factual finding that other factors could have contributed to or caused mastitis in the herd.

It is unclear how Roskop believes it helpful to argue that Wailes' deposition was not in evidence for purposes of summary judgment. The absence of Wailes' testimony in its entirety provides only less evidence from which we could conclude there was a material issue of fact. And such argument renders fruitless Roskop Dairy's argument that Wailes' testimony should not have been excluded.

Furthermore, the alternate causes of mastitis that Roskop believes the court erred in considering were generally listed in other admitted testimony, such as Roskop's deposition and the limited receipt of Slattery's deposition. A summary judgment hearing is similar to a bench trial of an action at law; thus, ordinarily, the erroneous admission of evidence in a summary judgment hearing is not reversible error if other relevant evidence, admitted without objection or properly admitted over objection, sustains the trial court's necessary factual findings.[56]

Regardless, none of Roskop Dairy's arguments on this assignment of error concern the absence of reliable evidence rebutting the defendants' prima facie case that improper maintenance by Roskop Dairy employees of the physical components of the milking system was the proximate cause of the malfunction. Therefore, these arguments are not grounds for reversal under our reasoning set forth above.

Denying Discovery

Roskop Dairy also argues that the district court erred in denying its motion to compel. Roskop Dairy argues vaguely

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[56] *John Markel Ford v. Auto-Owners Ins. Co.*, 249 Neb. 286, 543 N.W.2d 173 (1996).

that there is a series of correspondence listed on the privilege log between an employee of Midwest and its designated expert witness. Roskop Dairy further argues generally that it was entitled to discover underlying facts contained in privileged documents, such as parameter settings and changes, facts regarding the operation and maintenance of the system, and facts relating to the investigations of the malfunction of the system. Lastly, Roskop Dairy asserts broadly that information and parameter settings gathered by Hunt in the ordinary course of business were not privileged.

[22] The party asserting error in a discovery ruling bears the burden of showing that the ruling was an abuse of discretion.[57] For our review, Roskop Dairy requested only that sealed exhibit 9 be included in the bill of exceptions. It is incumbent upon the party appealing to present a record which supports the errors assigned. Neb. Rev. Stat. § 25-1140 (Reissue 2008) and Neb. Ct. R. App. P. § 2-105(B)(1)(b) (rev. 2010) place the burden on the appellant to file a praecipe identifying the matter to be contained in the bill of exceptions. Thus, we consider Roskop's assignment of error only as pertains to exhibit 9.

After an in camera review, the district court found that the documents contained in exhibit 9 were protected by attorney-client privilege and work-product privilege. The court also noted that GEA had produced for Roskop Dairy its most knowledgeable witness, Hunt, to be deposed on the topics contained in the deposition notice duces tecum attached to Roskop Dairy's motion to compel discovery. Further, the court found that GEA had produced the records required by Roskop Dairy's discovery request, except for those protected by privilege, but that Roskop Dairy had difficulty opening certain computer records and that Hunt did not have them all with him during his deposition. Because of this, the court allowed Roskop Dairy "latitude in discovery" and ordered that Roskop Dairy be able to reconvene the

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[57] *U.S. Bank Nat. Assn. v. Peterson*, 284 Neb. 820, 823 N.W.2d 460 (2012).

deposition of Hunt and that Hunt should have with him copies of any records he relied on for his testimony. That second deposition occurred, and Hunt brought with him records of the Dematron parameter settings.

We find no abuse of discretion in the district court's order partially denying Roskop Dairy's motion to compel. There is no evidence that Roskop Dairy was denied discovery of relevant underlying facts or business records pertaining to parameter settings or to any changes or facts regarding the operation and maintenance of the system. Furthermore, the court did not abuse its discretion in finding the documents contained in sealed exhibit 9 to be protected by the attorney-client privilege and the work-product privilege.

We have recognized that it is difficult to show that a party has been prejudiced by a discovery order, or that the question is not moot; and the harmless error doctrine, together with the broad discretion the discovery rules vest in the trial court, will bar reversal save under very unusual circumstances.[58] This case is no exception. We find no merit to Roskop Dairy's assignment of error concerning the motion to compel discovery.

Prejudgment Interest

Finally, we turn to Roskop Dairy's argument that the district court erred in granting Midwest prejudgment interest on its counterclaim for the unpaid amount of the purchase agreement. Prejudgment interest may be awarded only as provided in § 45-103.02, and whether prejudgment interest should be awarded is reviewed de novo on appeal.[59]

[23] A claim is liquidated for purposes of prejudgment interest when there is no reasonable controversy as to both the amount due and the plaintiff's right to recover.[60] The amount

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[58] *Brozovky v. Norquest*, 231 Neb. 731, 437 N.W.2d 798 (1989).

[59] *Countryside Co-op v. Harry A. Koch Co., supra* note 8.

[60] *Brook Valley Ltd. Part. v. Mutual of Omaha Bank*, 285 Neb. 157, 825 N.W.2d 779 (2013). See, also, § 45-103.02(2).

due was uncontroverted. But we conclude that, given the technical complexity of the matters at issue, until discovery was completed, there was a reasonable controversy over Roskop Dairy's right to recover. The fact that summary judgment was properly granted is not decisive of whether there was until that point a reasonable controversy over a plaintiff's right to recover.[61] We therefore reverse the district court's order granting prejudgment interest on Midwest's counterclaim.

CONCLUSION

The opponent of a motion for summary judgment must be given the benefit of every reasonable inference from the evidence, but not inferences based on guess or speculation.[62] The defendants made a prima facie case that there was no issue of fact that components other than the Dematron were the proximate cause of the detachment under vacuum. Roskop's eyewitness observation of a temporal correlation between installation of the Dematron and the units detaching under vacuum calls for speculation and is insufficient to create an issue of fact on the essential element of proximate cause. We therefore affirm the order of the district court granting summary judgment for the defendants in Roskop Dairy's action against them. But we reverse the district court's order granting prejudgment interest on Midwest's counterclaim.

Affirmed in part, and in part reversed.

Heavican, C.J., participating on briefs.
Stephan, J., not participating in the decision.
Wright, J., not participating.

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[61] See, *Countryside Co-op v. Harry A. Koch Co., supra* note 8; *Dutton-Lainson Co. v. Continental Ins. Co.*, 279 Neb. 365, 778 N.W.2d 433 (2010).

[62] See *Giordano v. Sherwood*, 968 A.2d 494 (D.C. 2009).