



The Water Trough is Missing Water



Morning sunshine stretched across the Lazy K Ranch as Cowboy Kade stepped off the porch and headed toward the barn. Rusty stopped every few feet to investigate something that apparently required immediate attention.

Mom Nina and Grampa were sitting in their rocking chairs having their morning coffee.



Kade had almost reached the barn when he noticed that the large water trough beside the pasture fence was nearly empty. "That's funny," Kade said. "Troy filled that yesterday."

Rusty put his front paws on the side of the trough and looked inside. "Woof!"

Kade hurried back toward the house.



Kade yelled, "Grampa! We have a problem!" "What kind of problem?" Grampa asked. Kade answered, "The water trough is empty, we better call Troy and Kenzie,"

It wasn't long before Troy walked up to the water trough carrying his toolbox. Kenzie stood next to him with her notebook ready to write in it.

Kade, Grampa, Mom Nina, Troy and Kenzie all looked in the water trough.



Troy crouched beside the pipe leading into it. "First thing we do is check the plumbing and tighten it."

Kenzie said, "And I'll keep track of what we know." Rusty sniffed at the ground.

Rusty," Kade said, "we're investigating the water." Rusty ignored him and kept to his job of sniffing.

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Troy filled the water trough up to the top. They walked away for an hour and when they returned the water had dropped almost five inches.

Troy checked everything again. "No leak." Kenzie made another water mark showing the new water level. Another hour passed. The water level had dropped again. "This doesn't make sense," Kade said.



Everyone gathered on the porch to report. Troy reported, "The trough is solid. The valve works. The pipe isn't leaking." Kade looked at Grampa. "Grampa, where's the leak?"

Grampa pointed toward the pasture. "Maybe you're looking in the wrong place."



They decided to have lunch by the water trough so they could watch how fast the water level went down.

Rusty, meanwhile, seemed completely uninterested in the lunch. He wandered along the fence with his nose to the ground. He stopped near a clump of grass. Sniff. Sniff.



Rusty!" Kade called. "You're supposed to be helping!" Rusty ran past him and disappeared behind the barn. Kade shook his head. "Some detective." Grampa said, "Sometimes you find a leak by looking where the water went, not where it started." Kade thought about that.



Suddenly as they were walking back to the house Rusty took off running. Troy followed Rusty.

Rusty led them to a leaking pipe by following a water trail along a different fence in the pasture.



"A pipe!" Troy knelt beside it. The pipe ran underground from the main water line toward the trough. Kade grinned. "That's why there wasn't any water around the trough." Troy added, "And why I couldn't find the leak when I checked and tightened the valve." Troy then took out the wrench from his back pocket and tightened the loose pipe.

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When the repair to the pipe in the pasture was finished, they went to the shed and turned the water back on.

The trough slowly filled. Kenzie marked the new water level. They waited – it was still full. Kade looked at Kenzie and asked, “it is the same level, right?” Kenzie said yes, it is not going down.

“Mystery solved,” Kade announced.



That evening, everyone gathered on the porch.

“So, you found your leak,” Grampa said. Grampa and Kade high-fived.

They all agreed that Rusty found where the water went.

Grampa smiled, “That's usually how solving a problem works. If looking in one place doesn't give you the answer, change what you're looking for.”

Rusty woofed in agreement.

Kenzie closed her notebook. Troy reached for another cookie. Then when no one was looking took another one.

Kade looked across the pasture toward the water trough. It was still full.

Rusty raised his head and stared toward the barn. His ears stood straight up. WOOF!

Kade watched him suspiciously. “Rusty, don't even think about starting another mystery tonight.”

Rusty lowered his head back onto his paws. “Woof.”

And as the sun dropped behind the Lazy K Ranch, the water stayed exactly where it belonged.