A Safer Pipeline Design

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The idea for this experiment came from my dad and brother, they have worked in the oil field for quite a long time. I came up with this idea by talking about the issue of oil spills. The crisis of pipelines breaking and releasing mass amounts of oil into water is relevant these days, because it has happened in North Dakota. I decided to create our own specially designed pipe in order to protect water from these spills. I collected the materials and built a functioning model. The model consists of an interior pipeline carrying the oil surrounded by an exterior pipeline to direct fluid leaks to either ends of the containment's. It was a success showing that the model pipe would safely protect waterways during pipeline leakage, the model accomplished this by distributing the oil into containment vessels. Variables in this experiment were the exterior pipeline as independent and presence of the fluid diverted into the containment as the dependent. My hypothesis was proven correct in showing that this is a more successful style of pipeline crossing thanks to the fluids entering the catch containment's without leakage. Thus, in conclusion, this pipeline will be more successful in protecting waterways from spills and should be implemented into oil field projects.

Awards Won: