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SLIDES: What Went Wrong at Divide Creek?

Matthew Sura

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Attorney Matthew Sura

- Introduction...
  - Former Director of Western Colorado Congress
  - Graduate of University of Colorado Law School
  - Attorney specializing in representation of landowners and mineral owners in oil and gas transactions and disputes
IMPACTS TO WATER QUALITY
Hydraulic Fracturing
Example Horizontal Well

- Treatable Groundwater Aquifers
- Private Well
- Municipal Water Well: < 1,000 ft.
- Additional steel casing and cement to protect groundwater
- Protective Steel Casing
- Shale Fractures
Denver Post study: From 2008–2010, average of more than a spill per day, average size of 5,300 gallons
Leaking Waste Pits

Hydraulic fracturing pit.
Divide Creek in Silt Colorado, April 2004, contaminated with methane and ignitable. The accident also affected water wells in three homes.
WELL CONSTRUCTION STANDARDS

CONDUCTOR PIPE

SURFACE CASING

PRODUCTION CASING

CEMENT

FRESH WATER AQUIFER ZONE

SHALLOW PRODUCING ZONE

TARGET PRODUCING ZONE

Southwestern Energy®
GOOD MECHANICAL INTEGRITY
CEMENT CHANNELING

PRESSURE BUILDS UP

CONDUCTOR PIPE

FRESH WATER AQUIFER ZONE

SURFACE CASING

SHALLOW PRODUCING ZONE

PRODUCTION CASING

TARGET PRODUCING ZONE

CASING

CEMENT

FORMATION
FRESH WATER AQUIFER ZONE

SHALLOW PRODUCING ZONE

TARGET PRODUCING ZONE

INSUFFICIENT CEMENT COVERAGE

CONDUCTOR PIPE

PRESSURE BUILDS UP

SURFACE CASING

PRODUCTION CASING

FRESH WATER AQUIFER ZONE

SHALLOW PRODUCING ZONE

TARGET PRODUCING ZONE
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