

The Closing Window for Plugging Ancient Oil Wells

Citizens Advisory Council
January 19, 2021



Arthur Stewart
507 Cherry Grove Road
Clarendon, PA 16313
(814)688-0219

Deteriorating Surface Conditions Nature at Work



Deteriorating Surface Conditions

Nature at Work



Deteriorating Surface Conditions

Nature at Work



Deteriorating Surface Conditions

Rust at Work



Deteriorating Surface Conditions

Rust at Work



Deteriorating Surface Conditions Human Activity (Destroys Well Evidence)



Deteriorating Surface Conditions

Human Activity



Deteriorating Surface Conditions

Human Activity



Deteriorating Downhole Conditions Casing Holes (Bridges)



Deteriorating Downhole Conditions

Casing Collapse



Deteriorating Downhole Conditions

Casing Holes Impede Circulation



<https://drive.google.com/file/d/1o1hdq87S3IA5vl8FqcA6nNktBiq7VMXG/view?usp=sharing>

Deteriorating Downhole Conditions Old Pipe Difficult to Unscrew



Deteriorating Downhole Conditions Old Pipe Difficult to Unscrew



<https://drive.google.com/file/d/1InPFJ2AIYqM1Wtobh-QZCupYfbeZMaSb/view?usp=sharing>

Deteriorating Downhole Conditions Old Timers Left Problems Behind



Deteriorating Downhole Conditions

Rotten Tubing



Deteriorating Downhole Conditions

Too Many Holes Makes Pipe Fragile



Deteriorating Downhole Conditions

Fishing for Rotten Tubing



Deteriorating Downhole Conditions

Rotten Rods Come Out in Pieces



Deteriorating Downhole Conditions Drilling Out to Achieve Attainable Bottom



Deteriorating Downhole Conditions Spudding Rig to Achieve Attainable Bottom



Environmental Impacts of Delayed Plugging: Oil on Ground or in Water



Environmental Impacts of Delayed Plugging: Comingling of Water Resources



<https://drive.google.com/open?id=1YpAYMEpGRKLNZ9CDomZ45VjiGbBHyd2k>

Environmental Impacts of Delayed Plugging: Comingling of Water Resources



Environmental Impacts of Delayed Plugging: Comingling of Water Resources



<https://drive.google.com/file/d/1-FbgGYByCpYNe43htmo1oXShlkp0xaYM/view?usp=sharing>

Environmental Impacts of Delayed Plugging: Methane Release



https://drive.google.com/file/d/1iV55Mr3hSozMotNHjOYY_VoXsS5cZIJU/view?usp=sharing

Scope of Problem

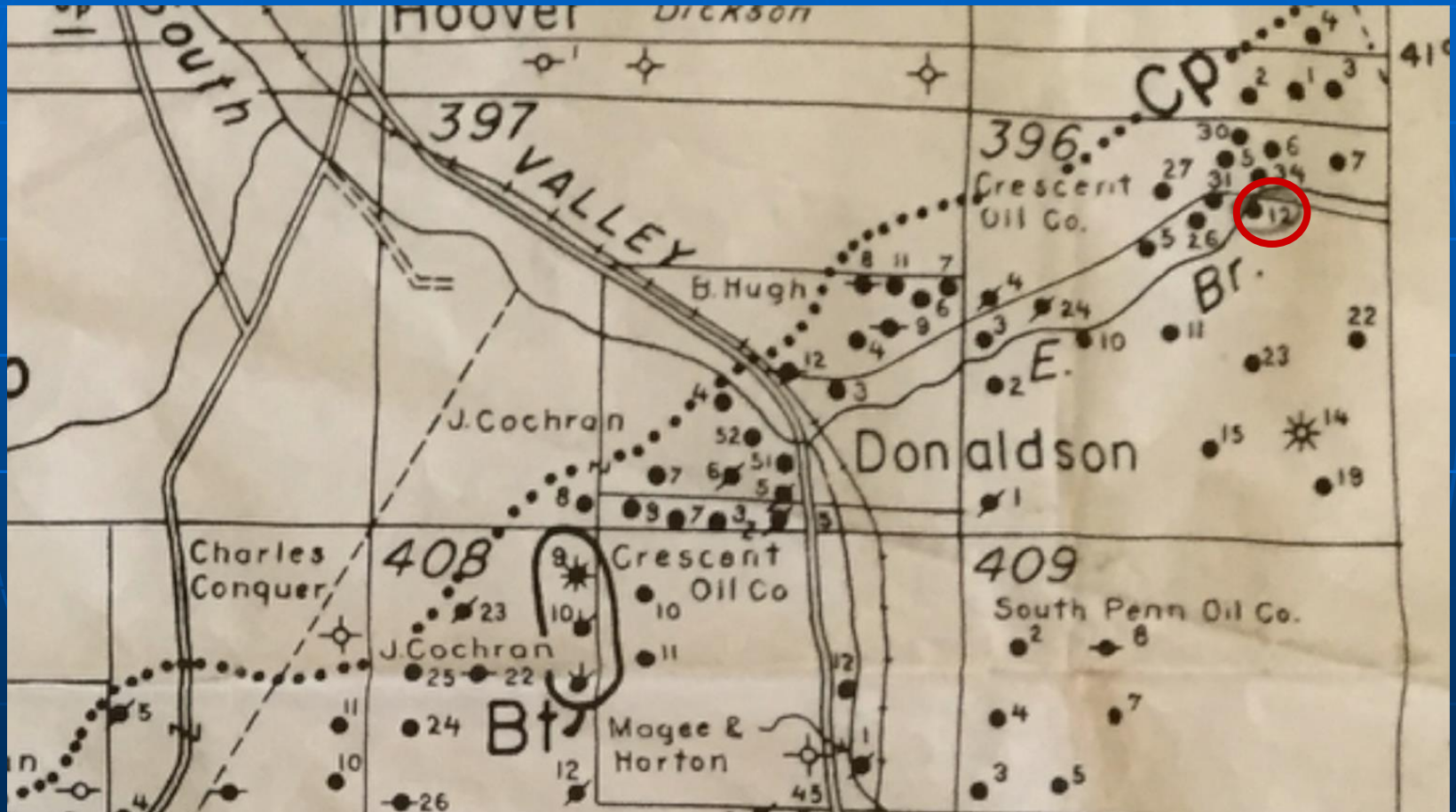


Scope of Problem



<https://drive.google.com/file/d/1wwslalsZ7FgdJSESGRhAVTbTgbuHUw1k/view?usp=sharing>

Scope of Problem



Cost of Delay

