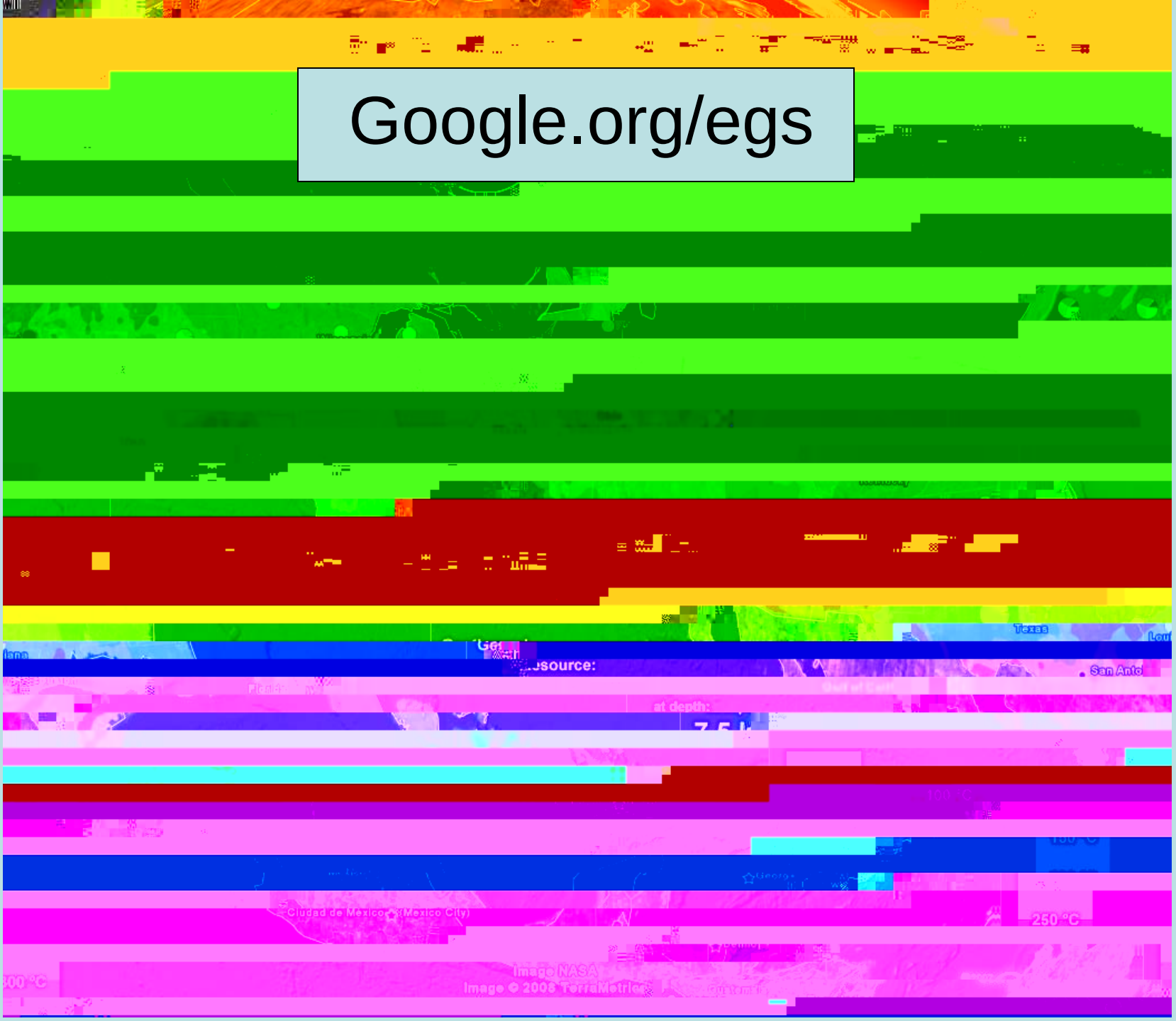
INTRODUCTION TO GEOTHERMAL CONFERENCE

David D. Blackwell

BRONZE

2006

THE EGS SYSTEM
Introduction of water into rock of limited permeability (either tight sediment or basement) in a controlled fracture setting so that this water can be withdrawn in other wells for heat extraction,
i.e. heat mining


Google.org/egs

Types of Unconventional Geothermal Resources

- Basement EGS
- Hydrothermal Margin EGS
- Sedimentary EGS-Tight gas sands-gas shales
- Geopressure-Gulf Coast/East Texas
- Coproduced-Low Temperature

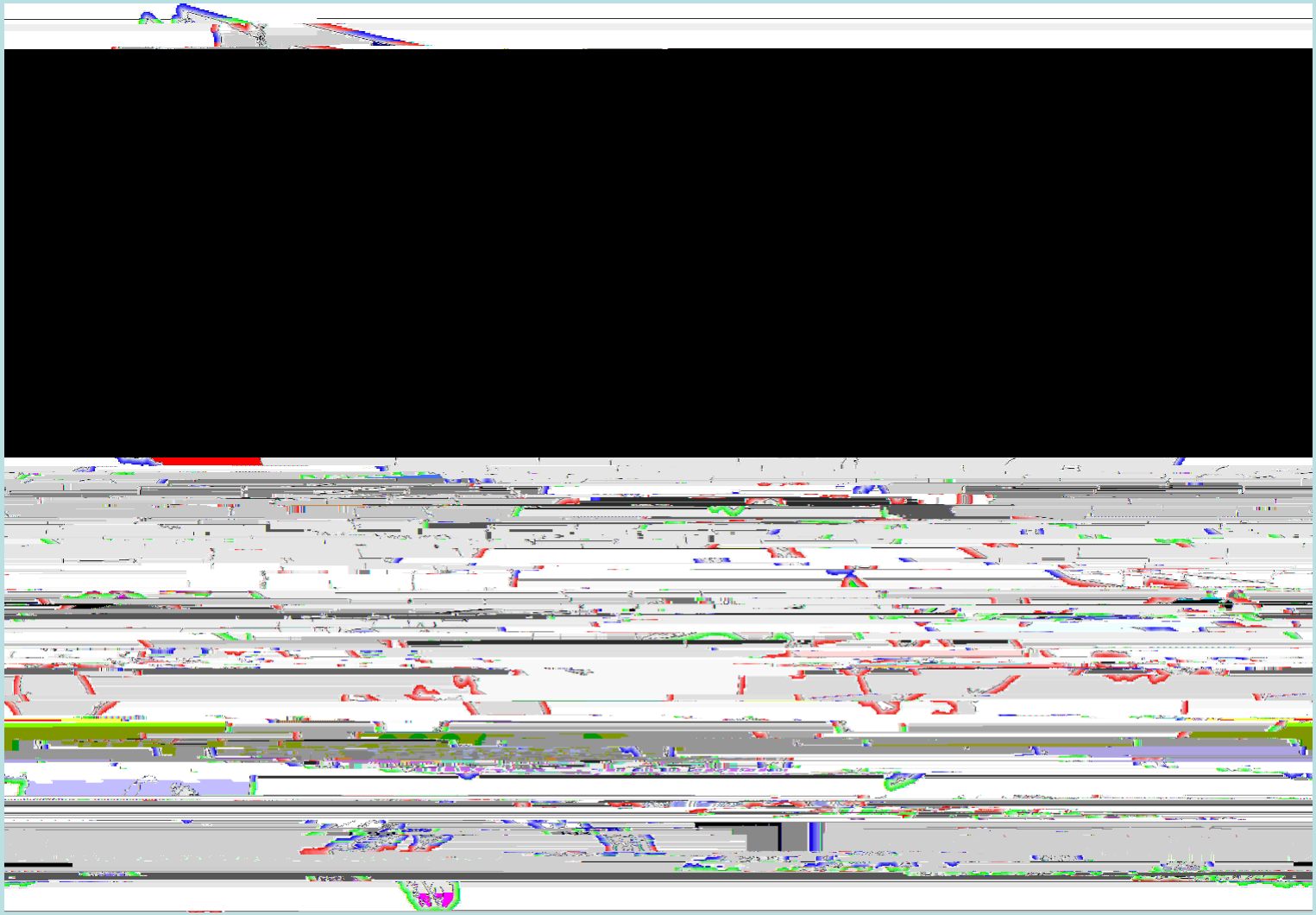
AAPG 1972 Oil/Gas Well Database

Interpolated Depth to 250°F

9000 ft
11000 ft
13000 ft
15000 ft
17000 ft
19000 ft
21000 ft
23000 ft

Location of Texas Geothermal Resources

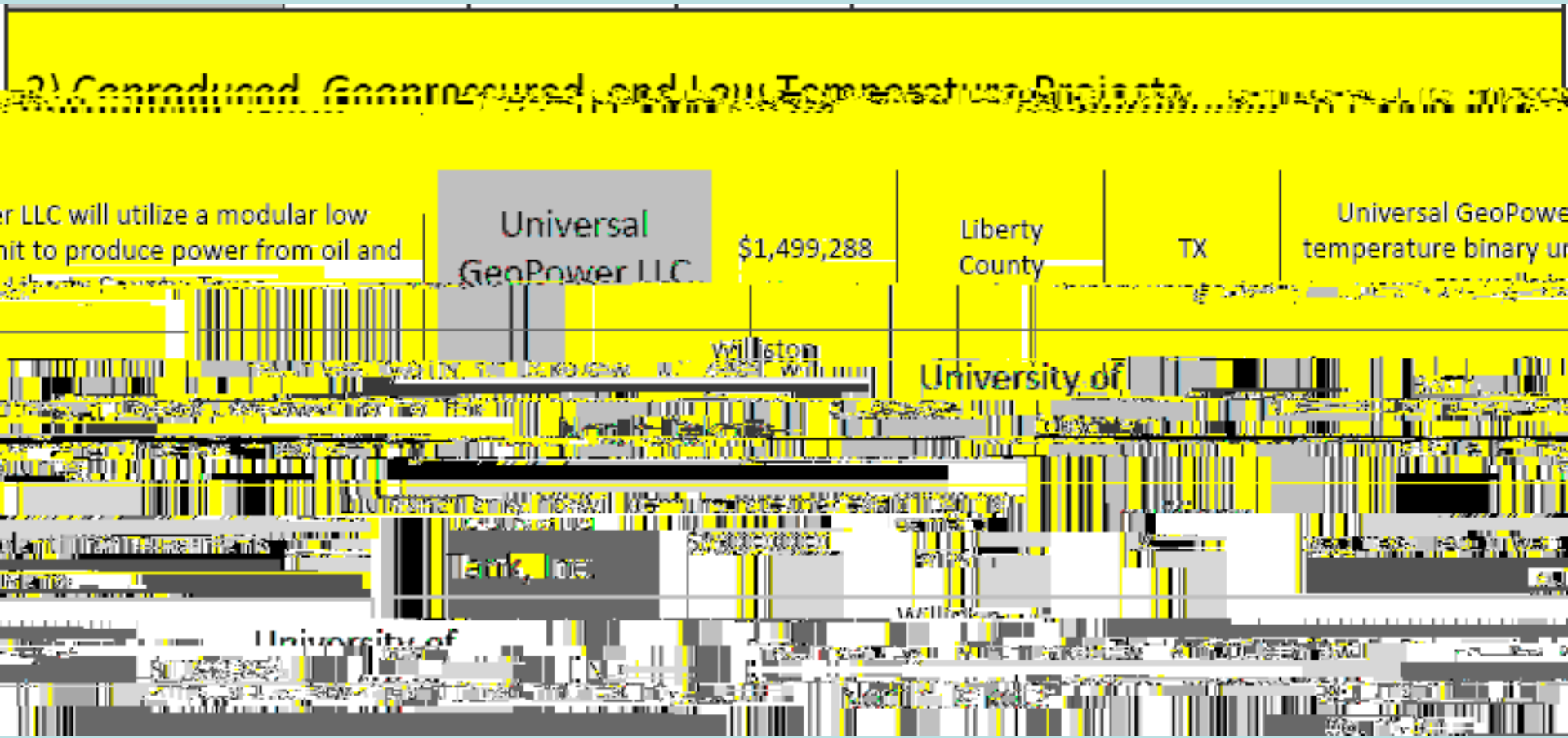
Geopressure Fairways

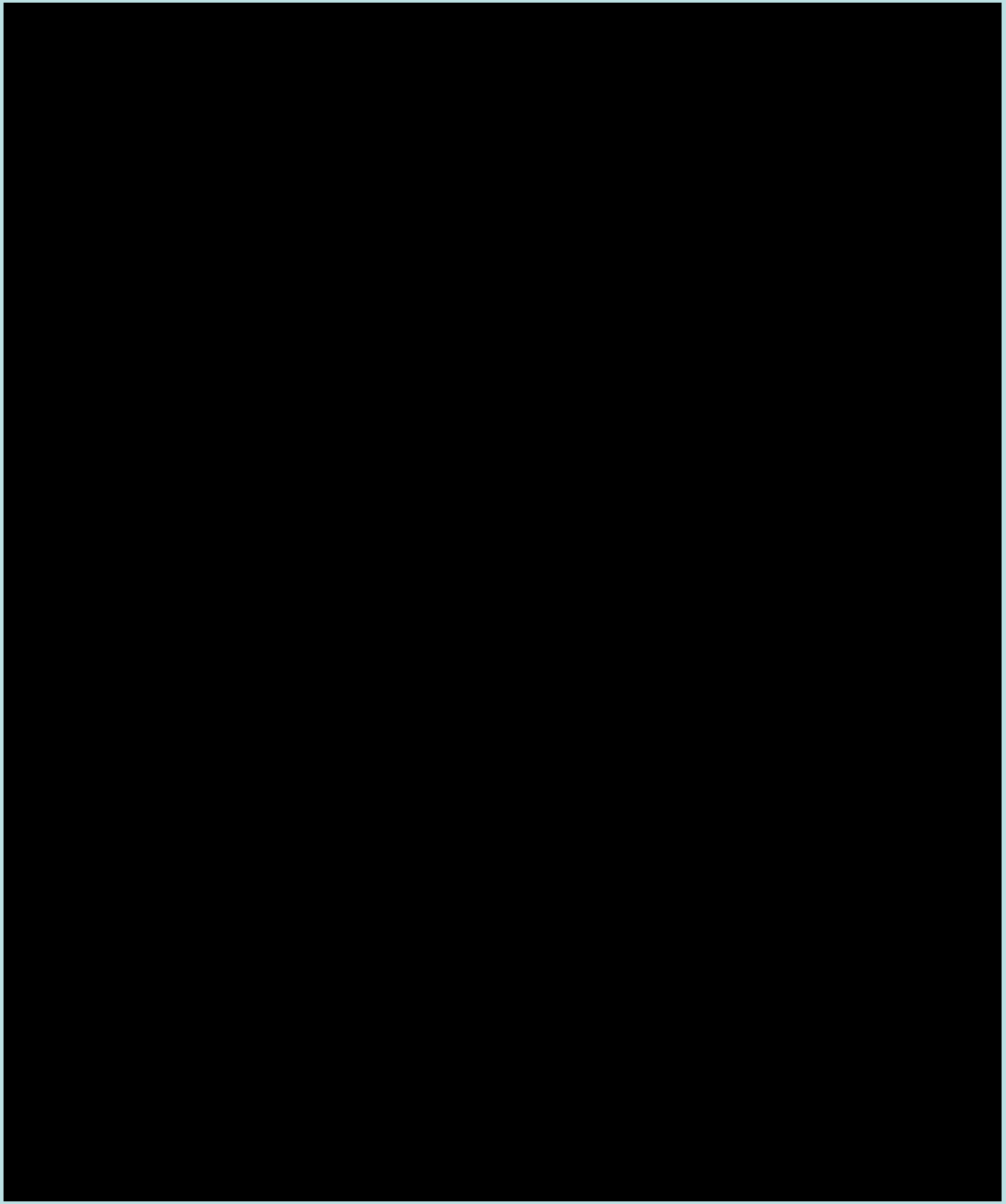


RPSEA

Research Partnership to Secure Energy for America

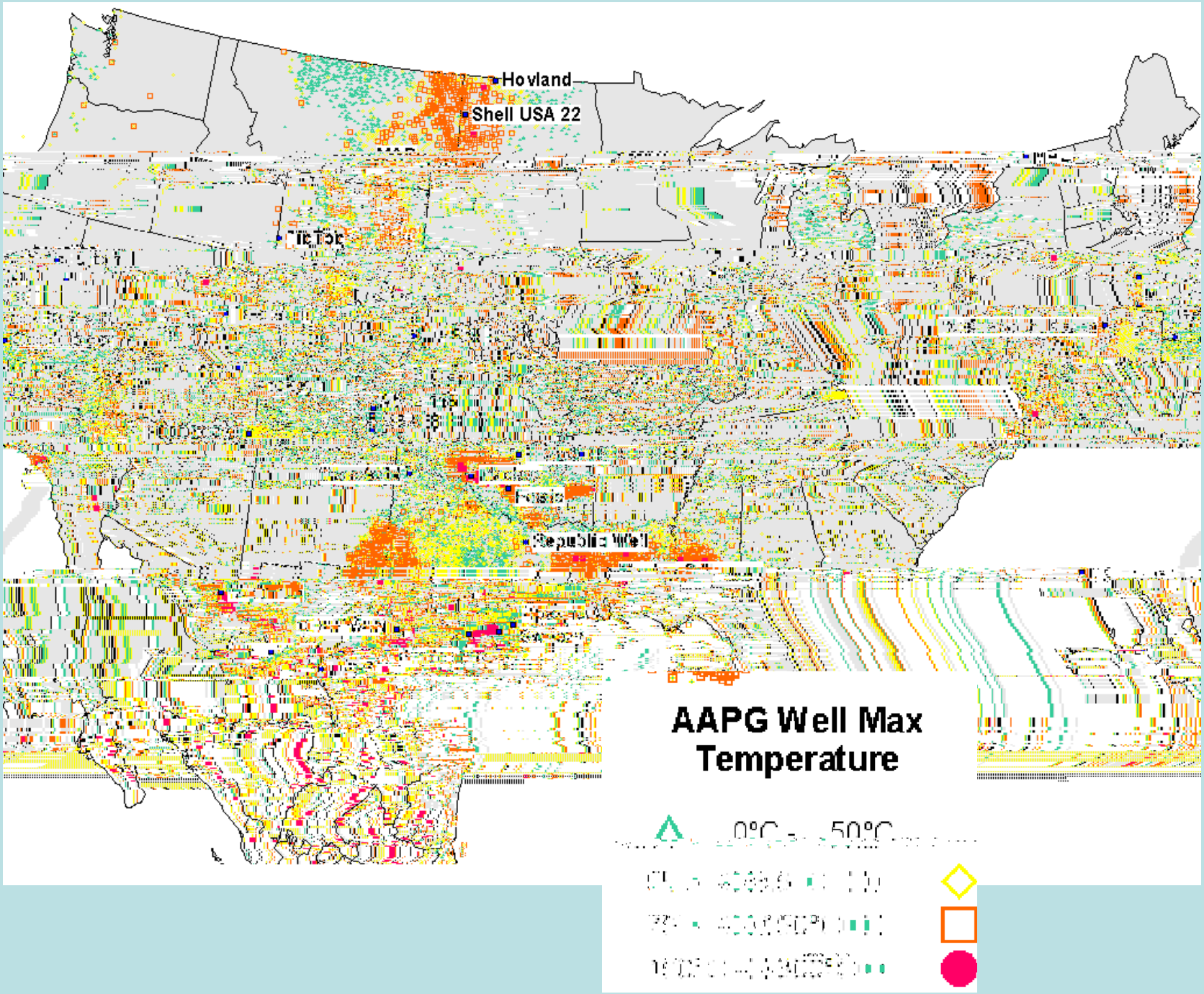
DOE Funding Announced October 28, 2009





- Barton Chapel:
  - $72,573,627
- Bull Creek:
  - $91,390,497
- Pyron Farm:
  - $121,903,906
- Penascal:
  - $114,071,646

Total: ~$400,000,000


Hovland
Shell USA 22
Republic Well
AAPG Well Max Temperature

For SMU and the Dallas Area

- Base-load clean energy
- Unique geologic information
- Potential research facility
- Commitment to sustainability
- Bragging rights

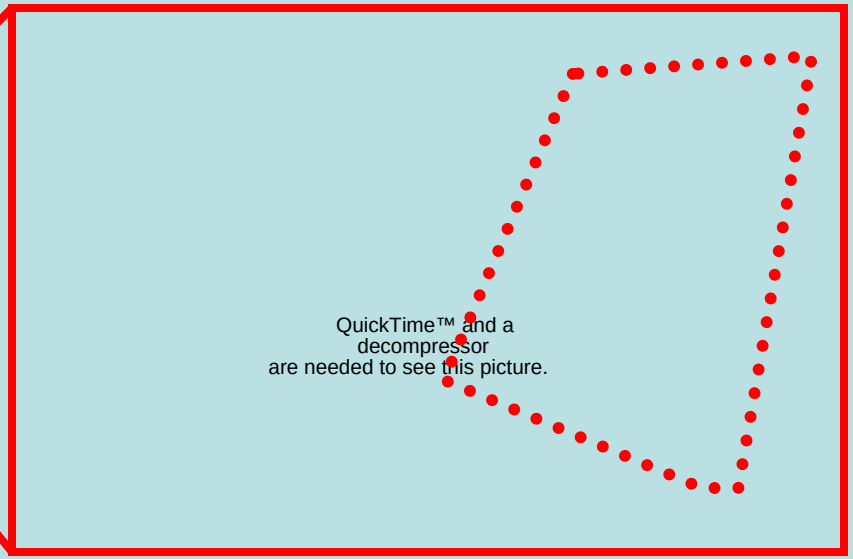
- North Texas skill set
- Turns liabilities into assets

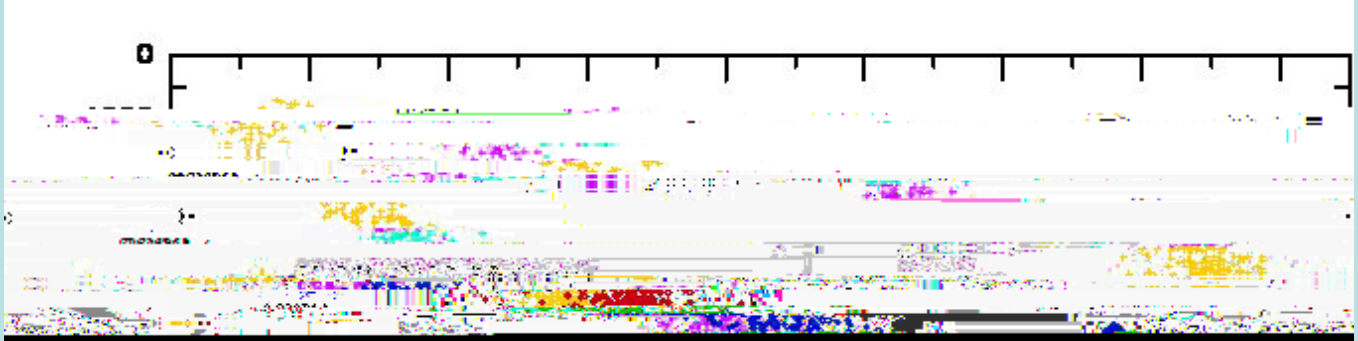
The next step...

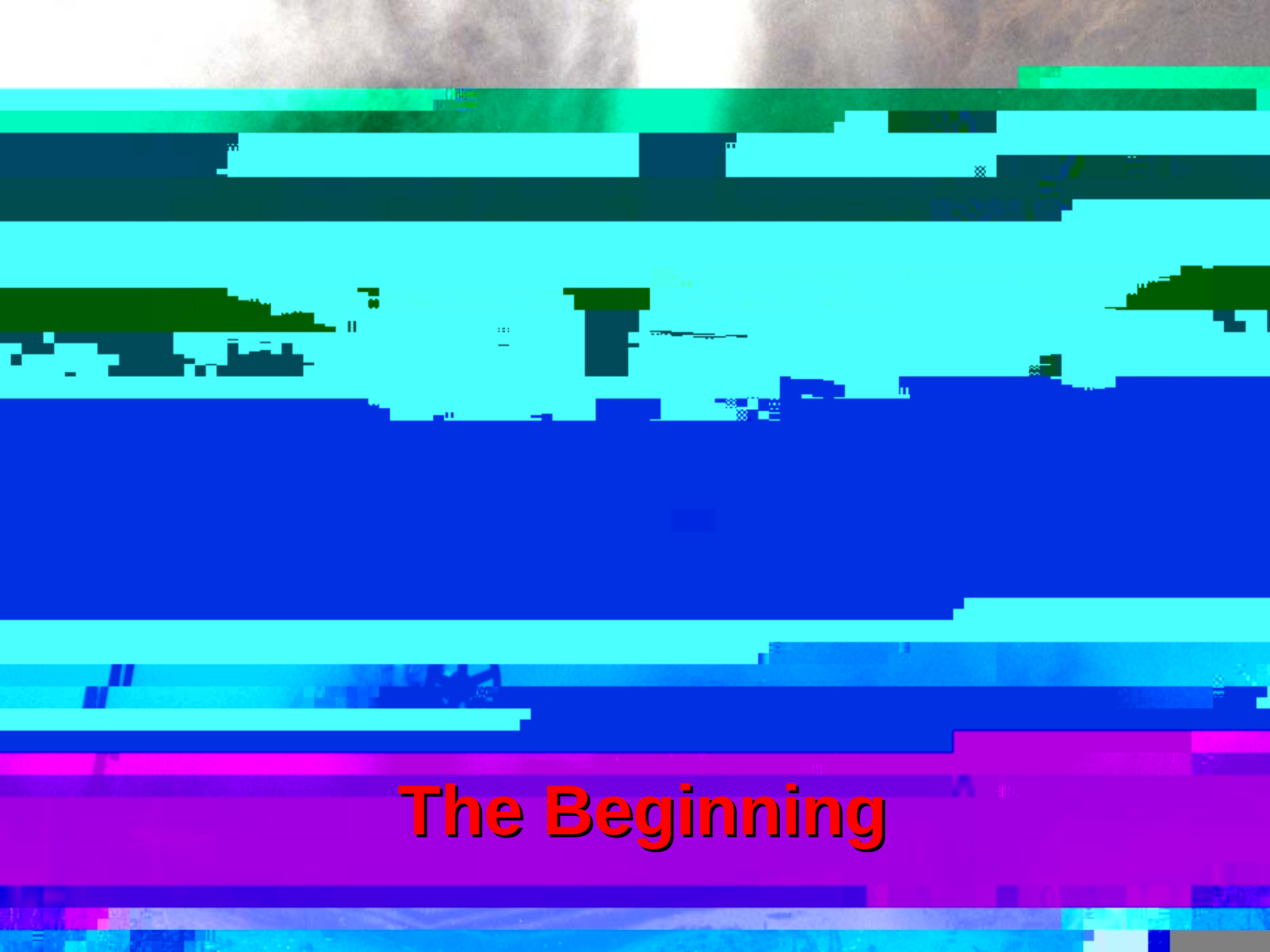
Permission of pursuit → US Department of Energy Development Grant

→ Test well → Plant Development →

SMU Geothermal Plant
&
Energy Research Center




0


The Beginning