## **RENASCENT** Clean Geothermal Electricity from Dormant Shale Wells for Rural Communities

## Mission - Provide sustainable & renewable clean geothermal electricity for the rural community of Mansfield, LA, replicable to other rural areas in Louisiana and Texas

US Geothermal Potential Shut-in wells in DeSoto Parish, LA





- The disadvantaged community of 4,714 in Mansfield, Louisiana is 76.5% Black or African-American, with 40% of the population living below the national poverty level.
- It is located in the middle of hundreds of shut-in shale wells with abnormally high geothermal potential for clean geothermal electrical production to benefit local communities.



Lead Organization: <u>Renascent Energy Management LLC,</u> a minority-owned small business 4265 San Felipe, Suite 1100, Houston, TX 77027 Technical Director Dr. Kenneth R. Kibodeaux Project Manager - Dr. Ivan E. Terez



Technology Summary - Heat production cycle using existing depleted shale wells: cold water injection into existing fractures in the hot rock, followed by hot water or steam production to generate electricity

- •Geothermal electricity generation on the well pads as minelectical plants of 0.5-1 MWe
- Local communities to be involved

•Project to be replicated and scaled-up in similar rural areas in Louisiana and Texas in the vicinity of dormant Haynesville shale wells



Well pads are within 1500-2000 ft of schools and most residential and commercial buildings

## Project Impact:

•Assists citizens and businesses in underserved minority community

- •Replaces carbon-intensive power from the grid with energy that's both renewable <u>and</u> sustainable
- •Infuses capital and jobs into the local community
- Demonstrates technology that can be replicated in other similar communities
  No ESG-challenged activities - recycles already-existing wells