**Student Handout 1**

Natural Gas and the Fayetteville Shale

Introduction

***Geo gal:*** *"When I was a the fitness center the other day I overheard someone say that a friend of theirs had been offered $2,000 an acre by a natural gas company"*

***Geo guy (while examining a hand sample of shale):*** *"Wow, last I heard top dollar was around $1700 an acre. Can you imagine if you owned a couple hundred-acre farm in rural northeast Arkansas and you were offered this kind of money? And this is just to lease your land. You’d also get a percentage of the value of any gas that was produced.”*

***Geo gal (noting the parting in the shale specimen****): "Considering many farmers are just barely making it, I can see that a gas lease offer would be highly attractive. It might be the only way that farmers can survive and keep them from selling their land. After all, family farms are an essential part of our rural landscape."*

***Geo guy (using a grain-size comparator):*** *"But how will gas wells and the production and transmission of gas impact the land? Will a farm still look like a farm?"*

***Geo gal:*** *"I’ve heard that advances in technology have reduced the environmental impact of fossil fuel drilling. Still, given the vast area of land that lies above the Fayetteville Shale, the landscape would surely be changed.*

***Geo guy (puzzled look on his face):*** *So, how do they get the gas out of fine-grained impermeable shale anyway??*