

**BOLD MOVES
BIG FUTURE**





Chesapeake ENERGY

Brownfields for Alternative Energy
Oklahoma Brownfields Conference – May 23, 2012

1

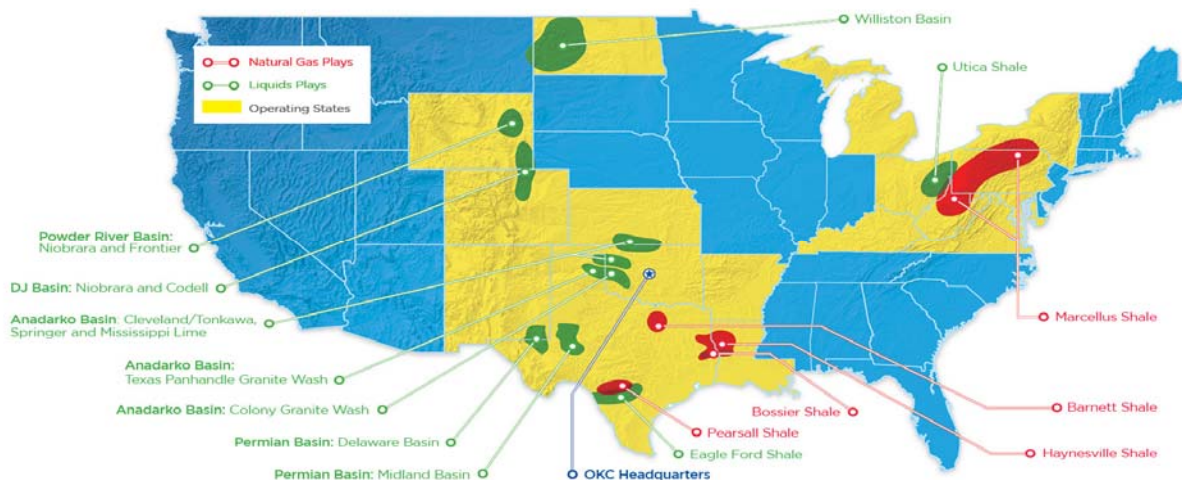
Chesapeake Energy Overview

- Second-largest producer of U.S. natural gas and a Top 15 producer of U.S. liquids
- Most active explorer for natural gas and liquids with 161 active U.S. drilling rigs as of February 2012
- Employ over 13,200 people in 17 states
- Applying unconventional thinking and state-of-the art technologies, Chesapeake has grown from a \$50,000 startup in 1989 to a \$30 billion enterprise
- Chesapeake is leading the industry effort to reduce American dependence on high-cost foreign oil and on higher emitting fuels through the greater use of natural gas in transportation and electric generation

2

CHK's Operating Areas



Low-risk, U.S. onshore asset base; not exposed to economic, geopolitical or technological risks internationally or in the Gulf of Mexico

3

Brownfield at Chesapeake



- **How is Chesapeake involved in Brownfields?**
- **Chesapeake purchases real estate for:**
 - › Regional corporate offices and field offices
 - › Compressor stations
 - › Drilling sites
 - › Disposal wells
 - › Commercial development
- **Property acquisitions provide opportunities for traditional and alternative energy brownfield projects**
- **Brownfields are well suited for energy development projects**

Food for Thought



- **Goals of EPA's Brownfields program**
 - › Clean up and reinvest in blighted properties
 - › Encourage / leverage private investment
 - › Put Brownfields into productive use
 - › Create jobs and improve local economy
- **In North Texas, Chesapeake has**
 - › Invested more than \$219MM through acquisition and cleanup at 47 Brownfields
 - › Turned 24 Brownfields into sites that produce a clean burning energy source, generate millions of dollars in local revenue, and create local jobs

Traditional Brownfield Projects



- **Bunge Edible Oils (TX)**
 - › Original home of Armour & Co meatpacking plant
 - › Converted to cooking oil plant in 1960s
 - › Chesapeake acquired in 2007 for possible regional office
 - › Buildings on the property were deemed uninhabitable and structurally unsound
 - › Chesapeake abated all asbestos in 2010
 - › Remaining buildings are currently undergoing "de-construction" so as to preserve the historic brick used to construct building
 - › The site is in a prime development area in the Fort Worth Stockyards



Traditional Brownfield Projects



■ Former E&P yard (OK)

- › Former yard / compressor site
- › CHK acquired through donation, but never operated location
- › After acquisition, CHK cleaned up junk equipment and removed asbestos
- › Chesapeake entered the site into the OK Corporation Commission Brownfields program in early 2011
- › Final closure letter was obtained in December 2011 with no remediation required
- › Site currently being used by service companies owned by Chesapeake



Alternative Energy Brownfield Projects



■ Metromart (OK)

- › Former gas station located in NW OKC
- › Active LUST case
- › Working with OCC, tanks were removed and contaminated soil excavated
- › All surface structures were recently demolished
- › Plan to construct a large CNG station and convenience store



Alternative Energy Brownfield Projects



■ Barnett Shale (TX)

- › 47 brownfields purchased in the Fort Worth area totaling 754 acres
- › \$219MM spent on property acquisition, environmental studies, and cleanup
- › 31 sites are currently, or will eventually become, well sites
- › There are currently 86 producing wells / 135 proposed wells on these sites

■ Haynesville Shale (LA)

- › Three brownfields purchased in the Shreveport, LA area totaling approximately 21 acres
- › \$1.8MM spent on property acquisition and environmental studies
- › Sites are proposed drilling locations, but will be sold if not needed

Alternative Energy Brownfield Projects



■ Acquisitions have included:

- › Motels
- › Warehouses
- › Abandoned buildings and strip malls
- › Auto service/wrecking/sales
- › Salvage yard
- › Rail off loading site
- › Former airport
- › Multi-family housing
- › Vacant property



Mixed-use Brownfield projects



7th Street properties (TX)

- › 40-acre tract with industrial past
- › Approx 3-5 acres being used for gas production
 - 2 producing wells
 - 6 proposed wells
- › Remainder be used for commercial development
- › Demolished many blighted structures and removed trash/debris
- › Conducting a site assessment to determine need for further action



Mixed-use Brownfield projects



Arc Park field office (TX)

- › Blighted regional ballpark turned into Chesapeake field office
- › Asbestos abatement was only remediation required
- › Minor groundwater issues on adjacent site
- › Site includes 2 producing wells, 1 disposal well, and compression facility



Former Blue Swan Airport (PA)

- › 50 acre site to be used as new combined service Chesapeake field office
- › CHK identified groundwater issues from former AVGAS USTs, but below action levels
- › CHK closed abandoned monitoring wells
- › PADEP indicated no further action required



Mixed-use Brownfield projects



■ Mercado property (TX)

- › 10-acre former C&D landfill
- › Approx 3 acres used for production and compression
 - 9 producing wells
 - 1 proposed well
- › Approx 6-7 acres proposed for divesture
- › CHK had prior interest from developer as possible hotel site
- › CHK has entered site into the TCEQ Voluntary Cleanup Program
- › No remediation will likely be required



Future Brownfields



- **As we enter into new operating areas, new opportunities for Brownfield projects are evaluated**
- **Ohio (Utica Shale) currently has potential for additional Brownfields projects**
 - › State has a heavy industrial past
 - › CHK is working with the Ohio EPA in considering options for properties that are potential brownfields
 - › Examples of sites currently being evaluated include auto salvage yards, maintenance facilities, etc

Making a Positive Impact



- We have reversed the relationship between oil/gas industry and Brownfields
- Chesapeake is making a positive impact to Brownfields before drilling ever starts
 - › We have conducted a significant amount of demo and surface cleanup
 - › Some sites will be used for gas production
 - › Some will be returned to real estate market in a more desirable state
 - › Purchased two City of Fort Worth / Tarrant County brownfield assessment sites

Chesapeake has improved many Brownfields left behind by other non oil and gas uses

Putting Barnett Brownfields to Productive Use



- Chesapeake has purchased and cleaned up 47 blighted properties totaling 754 acres in North Texas
- Investment continues in other plays
- Most brownfield sites acquired will be used for natural gas wells
- One Texas site also serves as a Chesapeake regional office
- Properties that are no longer needed will be sold as clean sites
- 24 former Brownfields now have padsites with a combined 86 producing wells in the Barnett Shale
- With conservative estimates, one 12-well Barnett Shale padsite can produce
 - › \$20.3 million in royalties to residents
 - › \$9.3 million to state and local taxing jurisdictions
 - › \$23.5 million+ to local workforce and businesses

Brownfields for Alternative Energy

OKLAHOMA BROWNFIELDS CONFERENCE

MAY 23, 2012

