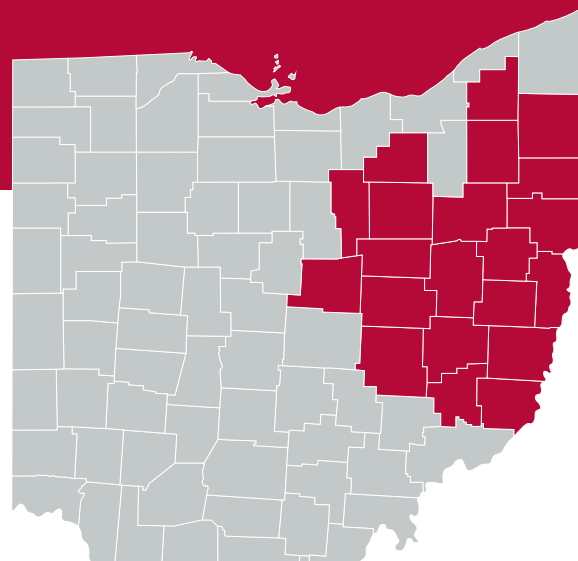


Regional Marketing Alliance of Northeast Ohio Tapping the Utica Shale

Development of the Utica Shale began in 2010 with a crush of permitting activity that outstripped the capacity of pipelines and processing plants necessary to commercialize the natural gas, valuable distillates and oil emerging from the ground. In 2012, billions of dollars in infrastructure or “midstream” investment began to pour into Eastern Ohio. The Utica Shale now is poised to become one of the most prolific shale formations in the U.S.



MIDSTREAM INVESTMENTS:

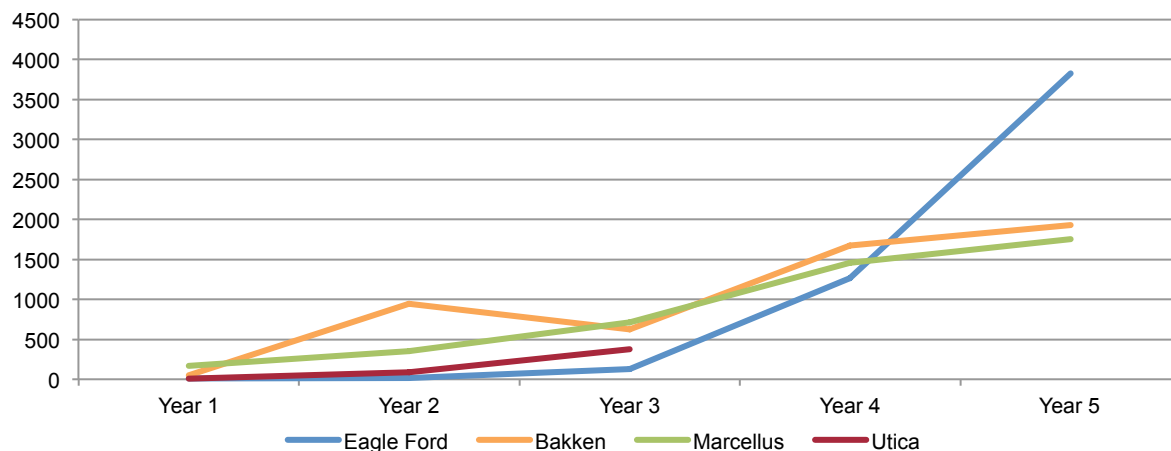
Company	Location	Operations	Estimated Investment
Markwest	Harrison, Noble counties	Gathering, processing and fractionalization	\$1.5 billion
Access Midstream/ EV Energy Partners/ M3 Midstream Partnership	Columbiana, Harrison counties	Gathering, processing and fractionalization	\$1.2 billion
Enterprise	Eastern, Central, & Southwestern Ohio	Ethane pipeline	\$1 billion plus
Dominion/Caiman	Eastern Ohio	Gathering, processing	\$800 million
Antero	Southern and Eastern Ohio	Water transport to fracking sites	\$500 million
Spectra	Northern & Eastern Ohio	NG pipeline	\$430 million plus
NiSource	Eastern Ohio	Gathering, processing	\$390 million
Hess Corp./ PVR Partners LP	Eastern Ohio	NG pipeline	\$125 million
Bluegrass Pipeline	Eastern, Central & Southwestern Ohio	NGL pipeline	TBD

SIGNIFICANT GENERAL INVESTMENTS:

Company	Location	Investment
Vallourec	Youngstown	\$1.05 billion
Carroll County Energy	Carroll County	\$800 million
Marathon Petroleum	Stark County	\$300 million
Schlumberger	Tuscarawas County	\$150 million
Halliburton	Muskingum County	\$150 million
US Steel	Lorain	\$100 million
Baker Hughes	Stark County	\$64 million
Exterran	Mahoning County	\$13 million
Industrial Piping Specialists Inc.	Youngstown	\$10 million

Regional Marketing Alliance of Northeast Ohio Tapping the Utica Shale

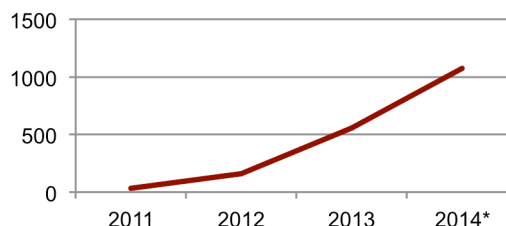
COMPARISON OF PERMIT ACTIVITY IN SHALE PLAYS IN THE U.S.



COMPANIES WITH WELL PERMITS:

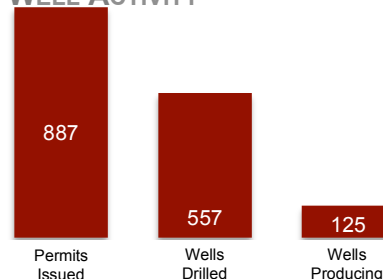
Anadarko E&P Onshore LLC (Woodland, TX)
 Antero Res Appalachian Corp - (Mount Clare, West Virginia)
 Atlas Noble LLC (Philadelphia, PA)
 BP – (London, United Kingdom)**
 Carrizo LLC – (Cambridge, OH)
 Chevron Appalachia LLC – (San Ramon, CA)
 Chesapeake Exploration LLC - (Oklahoma City, OK)
 CNX Gas Company LLC – (Canonsburg, PA)
 Devon Energy Production – (Oklahoma City, OK)
 Eclipse Resources – (State College, PA)
 Enervest Operating (Houston, TX)
 EQT Production Company INC – (Pittsburgh, PA)
 Gulfport Energy Corporation – (Oklahoma City, OK)
 Halcon Operating Company INC – (Houston, TX)
 Hall Drilling LLC – (Ellenboro, WV)
 Hess Ohio Developments LLC - (Woodbridge, NJ)
 HG Energy LLC – (Parkersburg, WV)
 Hilcorp Energy Company – (Houston, TX)
 Mountaineer Keystone LLC - Pittsburgh, PA
 PDC Energy INC – (Denver, CO)
 R E Gas Development LLC – (Evans City, PA)
 Sierra Resources LLC – (Houston, TX)
 Swepi LP – (Houston, TX)
 XTO Energy INC – (Fort Worth, Texas)

WELLS DRILLED OVER TIME



As of September 2013
 *Estimate

WELL ACTIVITY



As of September 2013, ODNR

SOURCES:

Ohio Division of Natural Resources – www.oilandgas.ohiodnr.gov
 Ohio Energy Resource Alliance - www.ohioenergyresource.org
 Institute for 21st Century Energy (Affiliate of U.S. Chamber of Commerce) - www.energyxxi.org
 U.S. Chamber of Commerce - www.uschamber.com/
 Ohio Oil and Gas Energy Education Program (OOGEEP) – www.oogEEP.org
 Nemaolin Energy Institute - www.neienergy.org
<http://www.ohio.com/blogs/drilling/ohio-utica-shale-1.291290/processing-plants-pipelines-worth-7-billion-coming-to-ohio-1.356200>