

**North Carolina: Recent Natural Gas publications – Mesozoic basins**  
**Updated 7 March 2013**

For additional information contact: Dr. Jeffrey C. Reid, NC Geological Survey, 1612 Mail Service Center, Raleigh, NC 27699-1612; voice: 919.707.9205; email: [jeff.reid@ncdenr.gov](mailto:jeff.reid@ncdenr.gov)

**Publications:**

1. Olsen, Paul E., Reid, Jeffrey C., Kent, Dennis V., and Whiteside, Jessica H., 2012, Revised stratigraphy of Triassic age strata of the Danville and Dan River Basins (Virginia and North Carolina, USA) based on drill core and outcrop data: manuscript in preparation.
2. Reid, Jeffrey C. and Taylor, Kenneth B., with contributions by Olsen, Paul E., and Patterson, III, O.F., "Natural Gas Potential of the Sanford sub-basin, Deep River Basin, North Carolina," 57p., in Taylor, Kenneth B. and Jeffrey C. Reid, editors, "Field Trip Guidebook – 60<sup>th</sup> Annual Meeting," Southeastern Section, Geological Society of America, Wilmington, North Carolina, March 2011. Note: updated and revised version of this field trip guidebook was prepared for the 2011 annual meeting of the Eastern Section, AAPG and is available at URL [http://www.searchanddiscovery.com/documents/2011/10366reid/ndx\\_reid.pdf](http://www.searchanddiscovery.com/documents/2011/10366reid/ndx_reid.pdf) (AAPG Search and Discovery contribution).
3. Reid, Jeffrey C., Taylor, Kenneth B., and Cumberbatch, N.S., 2010, Digital compilation map Sanford sub-basin, Deep River Basin, parts of Lee, Chatham and Moore Counties, North Carolina [Seismic lines, drill hole locations, geologic units (from Reinemund, 1955), hydrocarbon shows (gas, oil asphaltic – or combination), and %Ro in wells – Area within dotted line inferred extent of %Ro  $\geq$  0.8]: North Carolina Geological Survey, Open-file report 2010-07.
4. Reid, Jeffrey C., 2009, "Natural gas and oil in North Carolina," North Carolina Geological Survey, Information Circular 36, 8p (see URL [http://www.geology.enr.state.nc.us/pubs/PDF/NCGS\\_IC\\_36\\_Oil\\_and\\_Gas.pdf](http://www.geology.enr.state.nc.us/pubs/PDF/NCGS_IC_36_Oil_and_Gas.pdf)) – includes drilling regulations and permitting details.
5. Reid, Jeffrey C., and Taylor, Kenneth B., 2009, "Shale gas potential in Triassic strata of the Deep River Basin, Lee and Chatham counties, North Carolina with pipeline and infrastructure data," North Carolina Geological Survey, Open-File Report 2009-01 (see URL <http://www.geology.enr.state.nc.us/news.htm> for PDF file).
6. Reid, Jeffrey C., and Milici, Robert C., 2008, "Hydrocarbon source rocks in the Deep River and Dan River Triassic Basins, North Carolina," U.S. Geological Survey, Open-File report 2008-1108, 35 pages plus tables (see URL <http://pubs.usgs.gov/of/2008/1108/>).

**Abstracts - AAPG abstracts are at AAPG Search and Discover at URL:**

1. Reid, Jeffrey C., and Taylor, Kenneth B., 2013, Mesozoic rift basins – Onshore North Carolina and south-central Virginia, U.S.A.: Deep River and Dan River - Danville total petroleum systems (TPS) and assessment units (AU) for continuous gas accumulation – extended abstract (8 p.) accepted for presentation, *GeoConvention 2013*, Calgary, Alberta, Canada (May 2013).

2. Coleman, James L., Reid, Jeffrey C., and Hall, Donald L., accepted for presentation – May 2013, Confirmation of Hydrocarbon Shows in the Mobil #3 Offshore Hyde County Well, North Carolina: accepted for presentation at the May 2013 national meeting of the American Association of Petroleum Geologists, Annual Meeting, Pittsburgh, PA.
3. Olsen, Paul; Kent, Dennis V.; Reid, Jeffrey C.; Whiteside, Jessica H.; LeTourneau, Peter, and Et-Touhami, Mohammed, “Synchronized stasis and abrupt change in the accumulation rate history and facies between the Dan River-Danville (NC & VA) and other Eastern North American Triassic-Jurassic basins,” 2012 Geological Society of America annual meeting, Charlotte, NC, paper No. 203-6 (see url <https://gsa.confex.com/gsa/2012AM/webprogram/Paper212779.html>).
4. Reid, Jeffrey C., and Taylor, Kenneth B., 2012, “North Carolina (USA) Mesozoic rift basin shale gas: A fifth year perspective,” oral presentation at the 7<sup>th</sup> International Symposium on Oil & Gas Resources in Western Newfoundland, September 12-14, 2012, Corner Brook, Newfoundland-Labrador (see URL [http://www.wnloilandgas.com/media/uploads/Jeff\\_Reid.pdf](http://www.wnloilandgas.com/media/uploads/Jeff_Reid.pdf)).
5. Reid, Jeffrey C., DePoy, Elizabeth, and Taylor, Kenneth B., 2012, Preliminary carbon dioxide (CO<sub>2</sub>) sequestration, Dare, Tyrrell and Hyde counties, North Carolina, (poster) presented at the AAPG Eastern Section’s 41<sup>st</sup> annual meeting, Cleveland, OH, September 22-26. The abstract can be viewed at URL <http://www.searchanddiscovery.com/abstracts/html/2012/90154eastern/abstracts/reid.htm>. The abstract accompanied by the two-panel poster[PDF] can be viewed at URL [http://www.searchanddiscovery.com/documents/2012/80258reid/ndx\\_reid.pdf](http://www.searchanddiscovery.com/documents/2012/80258reid/ndx_reid.pdf)
6. Reid, Jeffrey C., Taylor, Kenneth B., and Simons, James D., 2011, “North Carolina Shale Gas: Dan River Basin – Stokes and Rockingham Counties,” Program with abstracts, 49<sup>th</sup> Eastern Section Meeting, September 24-29, 2011, Arlington, Virginia, p. 44. The PDF can be viewed as article #80188 at URL [http://www.searchanddiscovery.com/documents/2011/80199reid/ndx\\_reid.pdf](http://www.searchanddiscovery.com/documents/2011/80199reid/ndx_reid.pdf) (AAPG Search and Discovery contribution).
7. Reid, Jeffrey C., 2010 (March 31), North Carolina’s Shale Gas Potential – Who knew?, oral presentation with abstract, Developing Unconventional Gas (DUG), Hart Energy, Ft. Worth, Texas. No published proceedings (limited to subscription). Scope of presentation (PDF) available upon request.
8. Reid, Jeffrey C., and Taylor, Kenneth B., 2010, Shale Gas Potential in Triassic Strata of the Deep river Basin, Lee and Chatham counties, North Carolina: USA: Multidisciplinary Methods for Science Data Acquisition: 5<sup>th</sup> International Symposium on Oil and Gas Resources in Western Newfoundland, Canada (September 22-24, 2010). There are no printed proceedings. The presentation is in two parts (A and B). It is available in PDF format at URL: <http://www.wnloilandgas.com/international-symposium/archives/2010/presentations/>.
9. Reid, Jeffrey C., Taylor, Kenneth B., and Simons, James D., 2010, North Carolina Shale Gas – A Progress Report – Lee, Chatham and Moore Counties: American Association of Petroleum Geologists’ Eastern Section Meeting, Kalamazoo, Michigan, September 25-29, 2010, program with abstracts, p. 52. The PDF can be viewed as article #40704 at URL [http://www.searchanddiscovery.com/documents/2011/40704reid/ndx\\_reid.pdf](http://www.searchanddiscovery.com/documents/2011/40704reid/ndx_reid.pdf) (AAPG Search and Discovery contribution).

10. Reid, Jeffrey C. and Taylor, Kenneth B., 2009, Geology and Infrastructure Data for the Development of Shale Gas Wells in Triassic Strata of the Deep River Basin, Lee and Chatham Counties, North Carolina, USA. The PDF can be viewed as article #90095 at URL <http://www.searchanddiscovery.net/abstracts/html/2009/eastern/abstracts/reid.htm?q=%2Btext%3A Reid> (AAPG Search and Discovery contribution).
11. Reid, Jeffrey C., and Taylor, Kenneth B., 2009, Shale Gas Potential in Triassic Strata of the Deep River Basin, Lee and Chatham Counties, North Carolina, USA. The PDF can be viewed as article #90095 at URL <http://www.searchanddiscovery.net/abstracts/html/2009/eastern/abstracts/reid02.htm?q=%2Btext%3A Reid> – see also extended presentation (PDF) on AAPG’s Search and Discovery site at URL [http://www.searchanddiscovery.net/documents/2009/80072reid/ndx\\_reid.pdf](http://www.searchanddiscovery.net/documents/2009/80072reid/ndx_reid.pdf) (posted 11 December 2009 - (AAPG Search and Discovery contribution).
12. Reid, Jeffrey C., and Taylor, Kenneth B., 2008, Tools to Evaluate the Hydrocarbon Potential of the Mesozoic Basins, North Carolina, USA. This PDF can be viewed as article #90084 at URL <http://www.searchanddiscovery.net/abstracts/html/2008/eastern-pittsburgh/abstracts/reid.htm?q=%2Btext%3A Reid> (AAPG Search and Discovery contribution).

**Related publications and reports of interest**  
**Updated 4 September 2012**

**USGS Resource assessment (Fact Sheet), 2011:**

1. Milici, R.C., Coleman, J.L., Rowan, E.L., Cook, T.A., Charpentier, R.R., Kirschbaum, M.A., Klett, T.R., Pollastro, R.M., and Schenk, C.J., 2012, Assessment of undiscovered oil and gas resources of the East Coast Mesozoic basins of the Piedmont, Blue Ridge Thrust Belt, Atlantic Coastal Plain, and New England Provinces, 2011: U.S. Geological Survey Fact Sheet 2012–3075, 2 p. available at URL <http://pubs.usgs.gov/fs/2012/3075/>).

**NC Department of Natural Resources (DENR) – Shale gas study (2012):**

1. Links to various parts of this study can be accessed *via* URL <http://portal.ncdenr.org/web/guest/shale-gas>.