U.S. Department of the Interior
U.S. Geological Survey

Digital Data Series 69–HH
Plate 1

Map of Assessed Tight-Gas Resources in the United States, 2014

By
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Abstract

This report presents a digital map of tight-gas resource assessments in the United States as part of the U.S. Geological Survey's (USGS) National Assessment of Oil and Gas Project. Using a geology-based assessment methodology, the USGS quantitatively estimated potential volumes of undiscovered, technically recoverable natural gas resources within tight-gas assessment units (AUs). This is the second digital map product in a series of USGS unconventional oil and gas resource maps. The map can be printed in hardcopy form or downloaded in a Geographic Information System (GIS) data package, including an ArcGIS ArcMap document (.mxd), geodatabase (.gdb), and published map file (.pmf). In addition, the publication access table contains hyperlinks to current USGS tight-gas assessment publications and web pages.

Access to Report

This entire publication is available online at the USGS web site:
http://pubs.usgs.gov/dds/dds-069/dds-069-hh/ and on CD-ROM by contacting:
oteamdisks@usgs.gov.

Access to Assessment Results

Comprehensive geologic studies, supporting data, and reports on the methodology used in assessing undiscovered oil and gas resources in the United States are available at the USGS Central EnergyResources Science Center website:
http://energy.usgs.gov/OilGas/AssessmentsData/NationalOilGasAssessment.aspx

Project Chief: Christopher J. Schenk

Eastern Oregon and Washington Province
Columbia Basin Continuous-Gas AU

Bighorn Basin Province
Mesaverde Sandstone Continuous-Gas AU
Cody Sandstone Continuous-Gas AU
Muddy–Frontier Sandstone and Mowry Fractured Shale Continuous-Gas AU

North-Central Montana Province
Greenhorn–Upper Belle Fourche AU
Bowdoin Dome AU
Judith River Formation AU
Eagle Sandstone and Claggett Shale West AU
Greenhorn–Lower Belle Fourche AU
Niobrara-Carlile AU
Eagle Sandstone and Claggett Shale East AU
Eagle Sandstone and Claggett Shale West AU

Powder River Basin Province
Shallow Continuous Biogenic-Gas AU

Appalachian Basin Province
Clinton-Medina Transitional AU
Clinton-Medina Transitional Northeast AU
Berea Sandstone AU
Catskill Sandstones and Siltstone AU
Clinton-Medina Basin-Center AU
Tuscarora Basin-Center AU
Greater Big Sandy AU

Southwestern Wyoming Province
Mesaverde-Lance-Fort Union Continuous-Gas Au
Lance-Fort Union Continuous-Gas AU
Hilliard-Baxter-Mancos Continuous Gas AU
Lewis Continuous-Gas AU
Almond Continuous-Gas AU
Lance-Fort Union Continuous-Gas AU
Rock Springs-Ericson Continuous-Gas AU
Mowry Continuous-Gas AU

Uinta-Piceance Basin Province
Uinta Basin Continuous-Gas AU (Mesaverde TPS)
Uinta Basin Transitional-Gas AU (Mesaverde TPS)
Piceance Basin Continuous-Gas AU (Mesaverde TPS)
Uinta Basin Continuous-Gas AU (Mancos/Mowry TPS)
Deep (6,000 feet plus) Coal and Sandstone Gas AU (Ferron/Wasatch Plateau TPS)
Piceance Basin Continuous-Gas AU (Mancos/Mowry TPS)
Uinta-Piceance Transitional and Migrated Gas AU (Mancos/Mowry TPS)
Piceance Basin Transitional-Gas AU (Mesaverde TPS)

Wind River Basin Province
Lance-Fort Union Sandstone Gas AU
Mesaverde-Meeteetse Sandstone Gas AU
Cody Sandstone Continuous-Gas AU
Frontier-Muddy Continuous-Gas AU

Denver Basin Province
Dakota Group Basin-Center Gas AU

East Coast Mesozoic Basins
South Newark Basin Continuous-Gas AU
Richmond Basin Continuous-Gas AU
Taylorsville Basin Continuous-Gas AU
Dan River-Danville Basin Continuous-Gas AU
Deep River Basin Continuous-Gas AU

San Juan Basin Province
Dakota-Greenhorn Continuous-Gas AU
Mancos Sandstones Continuous-Gas AU
Pictured Cliffs Continuous-Gas AU
Mesaverde Central-Basin Continuous-Gas AU
Lewis Continuous-Gas AU

Arkoma Basin Province
Arkoma-Ouachita Foredeep Continuous AU

Southern Alaska Province
Tuxedni-Naknek Continuous-Gas AU

North-Central Montana Province 6.19 TCFG
Eastern Oregon and Washington Province 2.12 TCFG
Powder River Basin Province 0.79 TCFG
Bighorn Basin Province 0.42 TCFG
Wind River Basin Province 1.69 TCFG
Southwestern Wyoming Province—80.58 TCFG
Uinta-Piceance Basin Province 18.83 TCFG
Denver Basin Province 1.09 TCFG
San Juan Basin Province 26.18 TCFG
Arkoma Basin Province 6.79 TCFG
Appalachian Basin Province 51.71 TCFG
East Coast Mesozoic Basins 3.86 TCFG
Southern Alaska Province 0.64 TCFG

PACIFIC OCEAN
ATLANTIC OCEAN
Gulf of Mexico
CANADA
MEXICO
UNITED STATES
ALASKA

Explanation

Mean tight-gas resource estimates (TCFG)—Undiscovered, technically recoverable, TCFG, trillions of cubic feet of gas.

1
5
10
25
50
75
100

Tight-Gas Assessment Units—Merged on conterminous U.S. map. On inset maps, outlined and labeled with red text in a light red background.

Alaska Albers Equal Area Conic Projection
Central Meridian: -154.0
Standard Parallel 1: 55.0
Standard Parallel 2: 65.0
Latitude of origin: 50.0
Datum: North American Datum 1983

Shaded relief from U.S. Geological Survey, The National Map, published 2007 at http://nationalmap.gov/
Bathymetry from ETOPO1, NOAA Technical Memorandum
NESDIS NGDC-24 (Amante and Eakins, 2009)

Albers Equal Area Conic Projection, Central Meridian: -96.0
Standard Parallel 1: 29.5, Standard Parallel 2: 45.5
Latitude of origin: 23.0
Datum: North American Datum 1983

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