

# USGS National Assessment of Oil and Gas Online (NOGA Online)

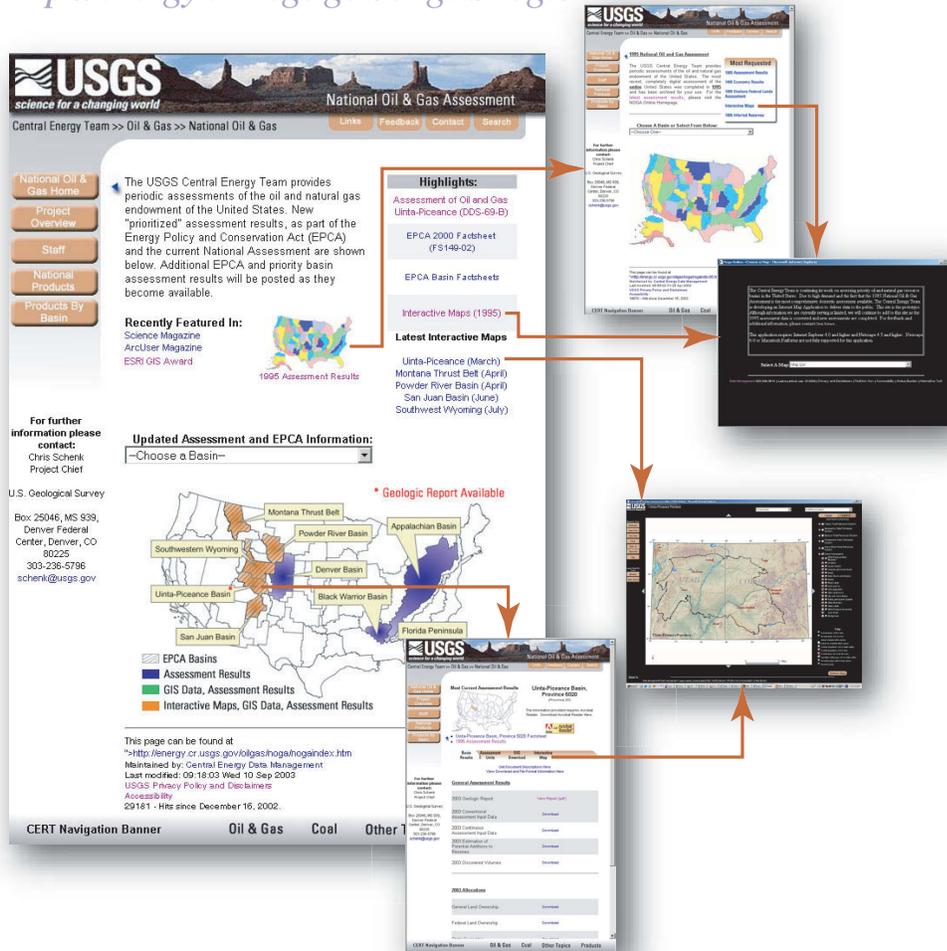
The Central Energy Resources Team (CERT) of the U.S. Geological Survey is providing results of the USGS National Assessment of Oil and Gas online (NOGA Online). In addition to providing resource estimates and geologic reports, NOGA Online includes an internet map application that allows interactive viewing and analysis of assessment data and results. CERT is in the process of reassessing domestic oil and natural gas resources in a series of priority basins in the United States using a Total Petroleum System (TPS) approach where the assessment unit is the basic appraisal unit (rather than the oil and gas play used in the 1995 study). Assessments of undiscovered oil and gas resources in five such priority provinces were recently completed to meet the requirements of the Energy Policy and Conservation Act of 2000 (EPCA 2000). New assessment results are made available at this site on an ongoing basis.

To access NOGA Online visit <http://energy.cr.usgs.gov/oilgas/noga/>. The assessment results are provided by province from either a map interface or a pull-down menu. For each completed province, Total Petroleum Systems and their assessment units (AU's) are defined and results reported. NOGA Online currently provides nearly 6,000 datasets for viewing, download, and interactive analysis directly from the website.

Users have an option of exploring the assessment data via an interactive map application using ArcIMS (ESRI, 2003). The NOGA Online map application is a single interface that provides interactive mapping, HTML Viewer, limited GIS functionality, GIS data/metadata download, tools to view assessment results, and tools to access all the data provided at the NOGA province pages.

Migration to the internet map application is provided from the NOGA home page and from the province pages. Links to the 1995

<http://energy.cr.usgs.gov/oilgas/noga/>

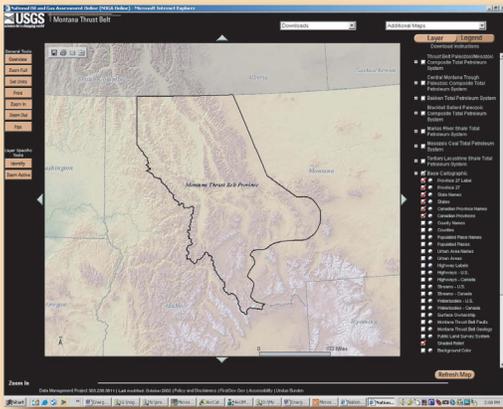


internet map application open a page where the user can choose a province map from a pull-down menu.

The interactive map application utilizes ArcIMS (ESRI, 2003) tools that allow the user to choose which layers are visible and (or) active, zoom in or out or to the extent of the active layer and identify its geographic features, and view a map explanation. Within the map application users can access related information from drop-down menus or open another map. By clicking on the "Downloads" drop-down menu (1), the user can link to the geologic report and assessment results

tables. The "Additional Maps" drop-down menu (2) accesses all provinces currently available. The user can select and link to another province, link to the 1995 map service for this province, or link to the NOGA Online "choose a map" window where all 1995 map services may be opened from the map list (3).

The Basin Results page (4) presents the province geologic reports and assessment results data in tab-delimited files. Available for download are input data, estimates of potential additions to reserves, discovered volumes, and allocations according to land ownership and ecosystems.



- Additional Maps**
- 2003 Uinta-Piceance (Province 20)
  - 2003 San Juan Basin (Province 22)
  - 2003 Montana Thrust Belt (Province 27)
  - 2003 Powder River Basin (Province 33)
  - 2003 Southwestern Wyoming (Province 37)
  - 2001 South Florida Basin (Province 50)
- 
- 1995 Uinta-Piceance (Province 20)
  - 1995 Interactive Maps (Entire List)

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NOGA Online - Microsoft Internet Explorer

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Uinta-Piceance Province

General Tools: Overview, Zoom Full, Set Units, Make Map, Zoom In, Zoom Out, Pan

Layer Specific Tools: Identify, Zoom Active

Downloads: Downloads, GIS Data Download, Results By Province, Results By Assessment Unit

Additional Maps: Layer Legend, Download Instructions, Ferron Total Petroleum System, Mesaverde Total Petroleum System

Map Content: Mesaverde TPS, >15000, 10000 - 15000, 6000 - 10000, <6000, 6000, 10000, 50000, 10000

Scale: 71 Miles

Zoom In

Refresh Map

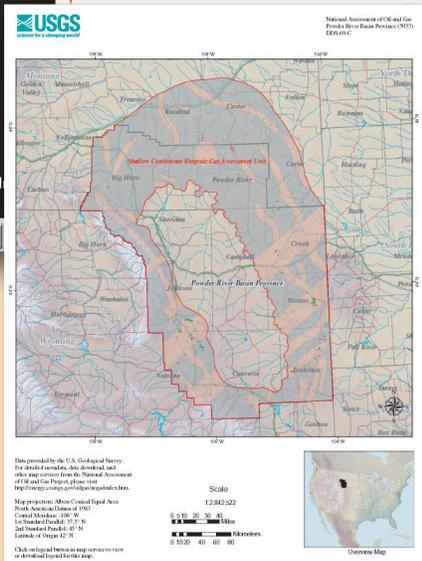
Mesaverde

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National Oil & Gas Assessment

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**Most Current Assessment Results**  
**Uinta-Piceance Basin, Province 5020**  
(Province 20)

The information provided requires Acrobat Reader. Download Acrobat Reader Here.

• Uinta-Piceance Basin, Province 5020 Factsheet  
• 1995 Assessment Results

Basin Results Assessment Units GIS Download Interactive Map

**Basinwide Data:**  
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**Green River Total Petroleum System:**  
[Download GIS Here](#)

**Phosphoria Total Petroleum System:**  
[Download GIS Here](#)

**Mancos/Mowry Total Petroleum System:**  
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**Mesaverde Total Petroleum System:**  
[Download GIS Here](#)

**Ferron Coal/Wasatch Plateau:**  
[Download GIS Here](#)

For further information please contact:  
Chris Schenk  
Project Chief

U.S. Geological Survey  
Box 25046, MS 939,  
Denver Federal  
Center, Denver, CO  
80225  
303-236-5796  
schenk@usgs.gov

Updated Assessment Data Download - Microsoft Internet Explorer

Green River Total Petroleum System	Shape File	Export File	Metadata
Green River Total Petroleum System Maturation Contours	Shape File	Export File	Metadata
Green River Total Petroleum System Pod(s) of Mature Source Rock	Shape File	Export File	Metadata
Green River Total Petroleum System Tar Sands	Shape File	Export File	Metadata
Green River Total Petroleum System Tar Deposits	Shape File	Export File	Metadata
Deep Uinta Overpressured Continuous Oil Assessment Unit	Shape File	Export File	Metadata
Piceance Green River Conventional Oil Assessment Unit	Shape File	Export File	Metadata
Uinta Green River Conventional Oil and Gas Assessment Unit	Shape File	Export File	Metadata
Deep Uinta Overpressured Continuous Oil Assessment Unit 1/4-Mile Cells	Shape File	Export File	Metadata
Uinta Green River Conventional Oil and Gas Assessment Unit 1/4-Mile Cells	Shape File	Export File	Metadata
Piceance Green River Conventional Oil Assessment Unit 1/4-Mile Cells	Shape File	Export File	Metadata

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National Assessment of Oil and Gas Project - Uinta-Piceance Province (020) Maturation Contours

Metadata also available as

**Metadata:**

- Identification Information
- Data Quality Information
- Spatial Data Organization Information
- Spatial Reference Information
- Temporal and Application Information
- Distribution Information
- Lineage Information
- Metadata Reference Information

Identification Information:  
Title: Maturation Contours

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**Uinta-Piceance Basin, Province 5020**  
(Province 20)

The information provided requires Acrobat Reader. Download Acrobat Reader Here.

• Uinta-Piceance Basin, Province 5020 Factsheet  
• 1995 Assessment Results

Basin Results Assessment Units GIS Download Interactive Map

Get Document Descriptions Here  
View Download and File Format Information Here

**General Assessment Results**

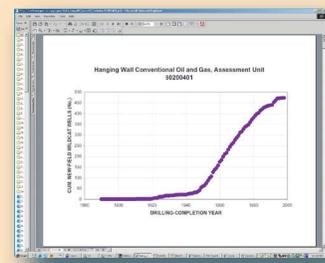
2003 Geologic Report	<a href="#">View Report (pdf)</a>
2003 Conventional Assessment Input Data	<a href="#">Download</a>
2003 Continuous Assessment Input Data	<a href="#">Download</a>
2003 Estimation of Potential Additions to Reserves	<a href="#">Download</a>
2003 Discovered Volumes	<a href="#">Download</a>

**2003 Allocations**

General Land Ownership	<a href="#">Download</a>
Federal Land Ownership	<a href="#">Download</a>

For further information please contact:  
Chris Schenk  
Project Chief

U.S. Geological Survey  
Box 25046, MS 939,  
Denver Federal  
Center, Denver, CO  
80225  
303-236-5796  
schenk@usgs.gov



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National Assessment of Oil and Gas Project:  
Petroleum Systems and Geologic Assessment of Oil and Gas in the Uinta-Piceance Province, Utah and Colorado

**Main Contents**

Viewing PDF files require Adobe Acrobat or similar software, that can be downloaded [here](#) if needed.

**ReadMe File**  
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**Executive Summary**  
[View PDF file \(2.8MB\)](#)

**Assessment Reports**  
[View PDF file \(245 KB\)](#)

**GIS Data/Metadata**  
[Download Oil & Gas Assessment Data Web Site \(PDF\)](#)

U.S. Geological Survey  
Box 25046, MS 939,  
Denver Federal  
Center, Denver, CO  
80225  
303-236-5796  
schenk@usgs.gov

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**Most Current Assessment Results**  
**Phosphoria Total Petroleum System:**

Hanging Wall Assessment Unit  
Choose a Report  
Assessment Results  
Discovery Table  
Undiscovered Conventional Resources, Detailed Output  
Exploration/Discovery History Graphs, Known Volumes  
Exploration/Discovery History Graphs, Growth Volumes  
Data Input Forms for Conventional Accumulations (7th Approximation)

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For further information please contact:  
Chris Schenk  
Project Chief

U.S. Geological Survey  
Box 25046, MS 939,  
Denver Federal  
Center, Denver, CO  
80225  
303-236-5796  
schenk@usgs.gov

Layer Info Dialogue For Mesaverde Tot...

Download Spatial Data  
Shape Export File Metadata

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**Most Current Assessment Results**  
**Green River Total Petroleum System:**

Uinta Green River Conventional Oil and Gas Assessment Unit  
Choose a Report

Deep Uinta Overpressured Continuous Oil Assessment Unit  
Choose a Report

Piceance Green River Conventional Oil Assessment Unit  
Choose a Report

**Phosphoria Total Petroleum System:**

Paleozoic/Mesozoic Assessment Unit  
Choose a Report

Hanging Wall Assessment Unit  
Choose a Report

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80225  
303-236-5796  
schenk@usgs.gov

CERT Navigation Banner Oil & Gas Coal Other Topics Products

The Assessment Units (5) page provides assessment unit results by TPS, which can be viewed or downloaded in PDF tables, forms, or graphs. Some or all of the following files are available for each assessment unit: Assessment Results; Discovery Table; Undiscovered Conventional Resources, Detailed Output (Klett and others, 2000); Continuous Resources, Detailed Output (Klett and others, 2000); Exploration/Discovery History Graphs, Known Volumes (Klett and others, 1997); Exploration/Discovery History Graphs, Grown Volumes (Klett and others, 2000); Data Input Forms for Conventional Accumulations (Seventh Approximation Data, Schmoker and Klett, 1999); Data Input Forms for Continuous Accumulations (FORSPAN, Schmoker, 1999).

GIS download provides assessment results in shapefile (ESRI, 1998) and Arc/Info EXPORT format complete with FGDC-compliant metadata (Federal Geographic Data Committee, 2000) (6).

Also provided are links to information associated with the layers, such as GIS data, metadata, thumbnail views, and links to the sources of the base cartographic layers (7).

Interactive map applications separate GIS use from GIS management, thus simplifying the utilization of GIS technology. Internet map services cater to a wide range of user levels, from novice to expert. Using GIS technology to build a research tool leads to that tool becoming a published product.

Map service products developed by CERT can be integrated into a wide variety of external applications, for example, the availability of NOGA Online map services from (1) the Geography Network (<http://www.geographynetwork.com/aboutus/index.html>), a global network of geographic information users and providers maintained by ESRI, and (2) the Geospatial One-Stop (<http://www.geodata.gov/>), one of 24 OMB electronic-government initiatives to enhance government efficiency.

A major goal of CERT is inter-organizational sharing and coordination of spatial data. Map services provide the framework for such coordination and sharing: A wide variety of client applications can be used, including web browsers and desktop GIS software; map services can be integrated into a range of custom applications; GIS data management is transparent to the user; data providers can control presentation of their local data; data are accessed and utilized in a distributive fashion.

## References Cited

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*NOGA Online*  
<http://energy.cr.usgs.gov/oilgas/noga/>

### For further information:

NOGA Online is available at the USGS Central Energy Team website:

<http://energy.cr.usgs.gov/oilgas/noga/>

#### Energy Team GIS Coordinator

Laura R.H. Biewick                      lbiewick@usgs.gov                      (303) 236-7773

#### Spatial Data Management

Gregory L. Gunther                      ggunther@usgs.gov                      (303) 236-5884

Christopher C. Skinner                      cskinner@usgs.gov                      (303) 236-1651

#### National Assessment of Oil and Gas Project Chief

Christopher J. Schenk                      schenk@usgs.gov                      (303) 236-5796

#### Information Systems Group Leader

David A. Ferderer                      dferdere@usgs.gov                      (303) 236-3611

#### USGS NOGA Assessment Team

<http://energy.cr.usgs.gov/oilgas/noga/staff.htm>