

# 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/>

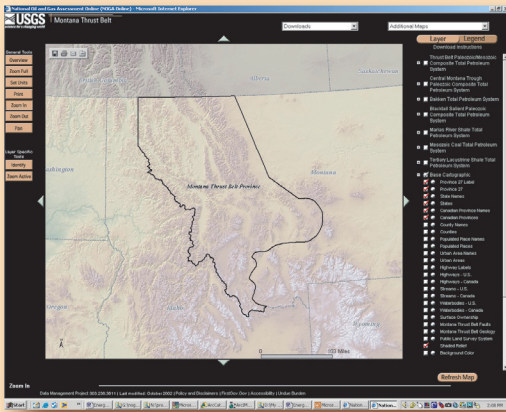
The screenshot shows the USGS National Oil & Gas Assessment website. Callout 1 points to the 'Updated Assessment and EPCA Information' dropdown menu. Callout 2 points to the 'Choose a Basin' dropdown menu. Callout 3 points to the 'Interactive Maps (1995)' link. Callout 4 points to the 'Geologic Report Available' link for the Uralta-Piceance Basin. The website also features a 'Highlights' section, 'Recently Featured In' section, and a 'Map' section with a legend for EPCA Basins, Assessment Results, GIS Data, and Interactive Maps.

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

Downloads

- Downloads
- GIS Data Download
- Results By Province
- Results By Assessment Unit

Additional Maps

Layer Legend

- Download Instructions
- Ferron Total Petroleum System
  - 50200201 Label
  - 50200201 Cells
  - 50200201
  - 50200261 Label
  - 50200261 Cells
  - 50200261
  - 50200262 Label
  - 50200262 Cells
  - 50200262
  - 50200263 Label
  - 50200263 Cells
  - 50200263
  - 50200264 Label
  - 50200264 Cells
  - 50200264
  - 50200281 Label
  - 50200281 Cells
  - 50200281
  - 50200282 Label
  - 50200282 Cells
  - 50200282
  - Mesaverde Pod of Mature Source Rock
  - Mesaverde Maturation Contours Labels
  - Mesaverde Maturation Contours
  - Mesaverde Depth Labels
  - Mesaverde Depth
  - Mesaverde TPS Label
  - Mesaverde Total Petroleum System
- Mancos Total Petroleum System
- Phosphoria Total Petroleum System

Refresh Map

Mesaverde

0 71 Miles

Zoom In

Zoom Out

Zoom Full

Set Units

Make Map

Zoom In

Zoom Out

Pan

Layer Specific Tools

Identify

Zoom Active

Overview

General Tools

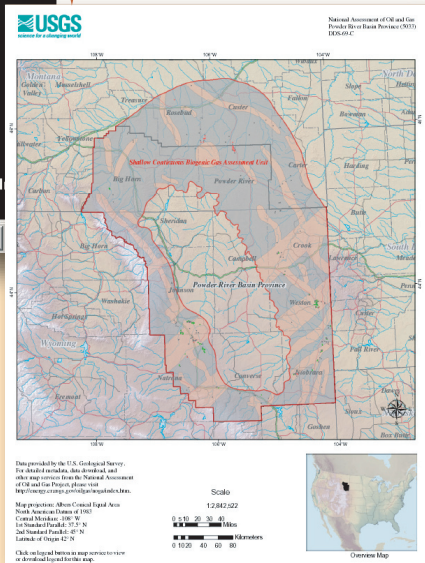
1

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U.S. Department of the Interior  
U.S. Geological Survey  
This page is maintained by the National Oil & Gas Assessment Program  
Last modified: 12/15/2006



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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:**  
[Download GIS Here](#)

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

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

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

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

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

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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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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

Get Document Descriptions Here  
View Download and File Format Information Here

**General Assessment Results**

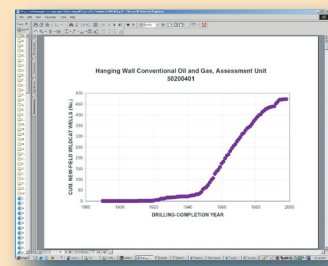
2003 Geologic Report	<a href="#">View Report (pdf)</a>
2003 Conventional Assessment Input Data	<a href="#">Download</a>
2003 Continuous Assessment Input Data	<a href="#">Download</a>
2003 Estimation of Potential Additions to Reserves	<a href="#">Download</a>
2003 Discovered Volumes	<a href="#">Download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

**2003 Allocations**

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

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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**  
[View PDF file \(108KB\)](#)

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

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

**GIS Data/Metadata**  
[Click Here to Download GIS Data and Metadata](#)

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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)

**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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CERT Navigation Banner Oil & Gas Coal Other Topics Products

Layer Info Dialogue For Mesaverde Tot...

Download Spatial Data  
Shape Export File Metadata

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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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- ESRI (Environmental Systems Research Institute, Inc.), 2003, ArcIMS, v. 4.01.
- Federal Geographic Data Committee, 2000, Content Standard for Digital Geospatial Metadata Workbook (For use with FGDC-STD-001-1998), Version 2.0. URL: [http://www.fgdc.gov/publications/documents/metadata/workbook\\_0501\\_bmk.pdf](http://www.fgdc.gov/publications/documents/metadata/workbook_0501_bmk.pdf).
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*NOGA Online*  
<http://energy.cr.usgs.gov/oilgas/noga/>

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

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

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