



EXPLANATION

**PREDOMINANT AGE OF RESERVOIR ROCKS**

- TERTIARY
- UPPER CRETACEOUS
- LOWER CRETACEOUS
- JURASSIC-TRIASSIC
- PERMIAN-PENNSYLVANIAN

**LIST OF OIL AND GAS PRODUCING GROUPS, FORMATIONS, AND MEMBERS**

Both abandoned and currently producing formations are shown for each field. On the map, formations from which heavy oil is produced are enclosed in parentheses, e.g., (PPC). Formations from which significant hydrogen sulfide is produced are enclosed in brackets, e.g., [Jm].

<b>TERTIARY</b>	<b>JURASSIC</b>
Th Hanna Formation	Jm Madison Formation
	Js Sandstone Formation
<b>UPPER CRETACEOUS</b>	<b>JURASSIC-TRIASSIC</b>
Kw Manvelo Group	J7m Nappet Sandstone
Ksh Shawnee Sandstone	
Ks Niobrara Formation	
Krd Cretaceous Sandstone	
Kf Frontier Formation	
Km Mowry Shale	
<b>LOWER CRETACEOUS</b>	<b>PERMIAN-PENNSYLVANIAN</b>
Knd Muddy Sandstone	PPC Cooper Formation
Kd Dakota Sandstone 1	
Kla Lakota Formation	

**FIELDS**

New fields are spotted through December, 2005. Field boundaries are approximate. Names in green denote fields that primarily produce oil. These fields may produce significant associated natural gas along with the oil in the primary reservoir or nonassociated natural gas from secondary reservoirs. Names in red denote fields that primarily produce natural gas. These fields may produce significant condensate along with the natural gas in the primary reservoir or oil from secondary reservoirs.

**FIELD DESIGNATIONS**

(A) Abandoned field	(H) Hydrogen sulfide
(CM) Coalbed methane	(S) Gas or LPG storage
(D) Produced water disposal project	(SS) Shut-in field
(HC) Horizontal drilling project	(W) Waterflood project
(HG) Heavy oil less than 20°API gravity	

Note: These designations appear after the oil or gas field name.

**PIPELINES**

Notation includes operator (see abbreviations below) and pipe diameter in inches; proposed pipelines are dashed. Pipeline routes are plotted as accurately as possible and are only accurate within the scale of this map or maps of smaller scale. Most infield gathering systems are not shown.

- 16" Crude oil
- 18" Natural gas
- 12" Refinery or natural gas processing plant products

**LIST OF ABBREVIATIONS FOR PIPELINE OPERATORS**

BHP	Black Hills Power Inc.
CIG	Colorado Interstate Gas
CLFP	Cheyenne Lignite Fuel & Power
KNE	Kansas-Nebraska Interstate
KNEP	Kinder Morgan Energy Partners
NGC	Northern Gas Company
RMP	Rocky Mountain Pipeline System, LLC
WIC	Wyoming Interstate Company
WG	West Gas

**OTHER SYMBOLS AND DESIGNATIONS**

- Approximate location of major basin axis.
- Major Wyoming sedimentary basins. Map shows approximate extent of latest Cretaceous and early Tertiary rocks.
- Undifferentiated Precambrian rocks exposed at the surface. Modified and adapted from Love and Christensen (1985).
- Oil refinery. Notation includes operator and capacity in barrels of oil per day (B/D). Location is approximate.
- Natural gas processing plant. Notation includes operator and capacity in millions of cubic feet (MMCF) per day. Locations are approximate.

**REFERENCES**

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**Oil and gas coverages**

Field locations and boundaries: De Bruin (2005). Wyoming State Geological Survey (2002) (unpublished), using production data from the Wyoming Oil and Gas Conservation Commission (2001).

Oil, natural gas, and product pipelines; natural gas processing plants; refineries: Wyoming State Geological Survey (2005) (unpublished).

**Geology coverages**

Basin boundaries and Precambrian rocks: modified and adapted from Love and Christensen (1985). Basin axes: De Bruin (1996).

**Base map coverages**

County boundaries: Spatial Data Visualization Center, University of Wyoming (1997).

City locations: Wyoming Water Resources Center GIS Lab, University of Wyoming (1994).

Federal boundaries: Spatial Data Visualization Center, University of Wyoming (1996).

Latitude, Longitude: Wyoming State Geological Survey (2002).

Public Land Survey System (PLSS): Wyoming Water Resources Center GIS Lab, University of Wyoming (1994).

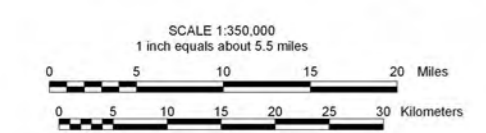
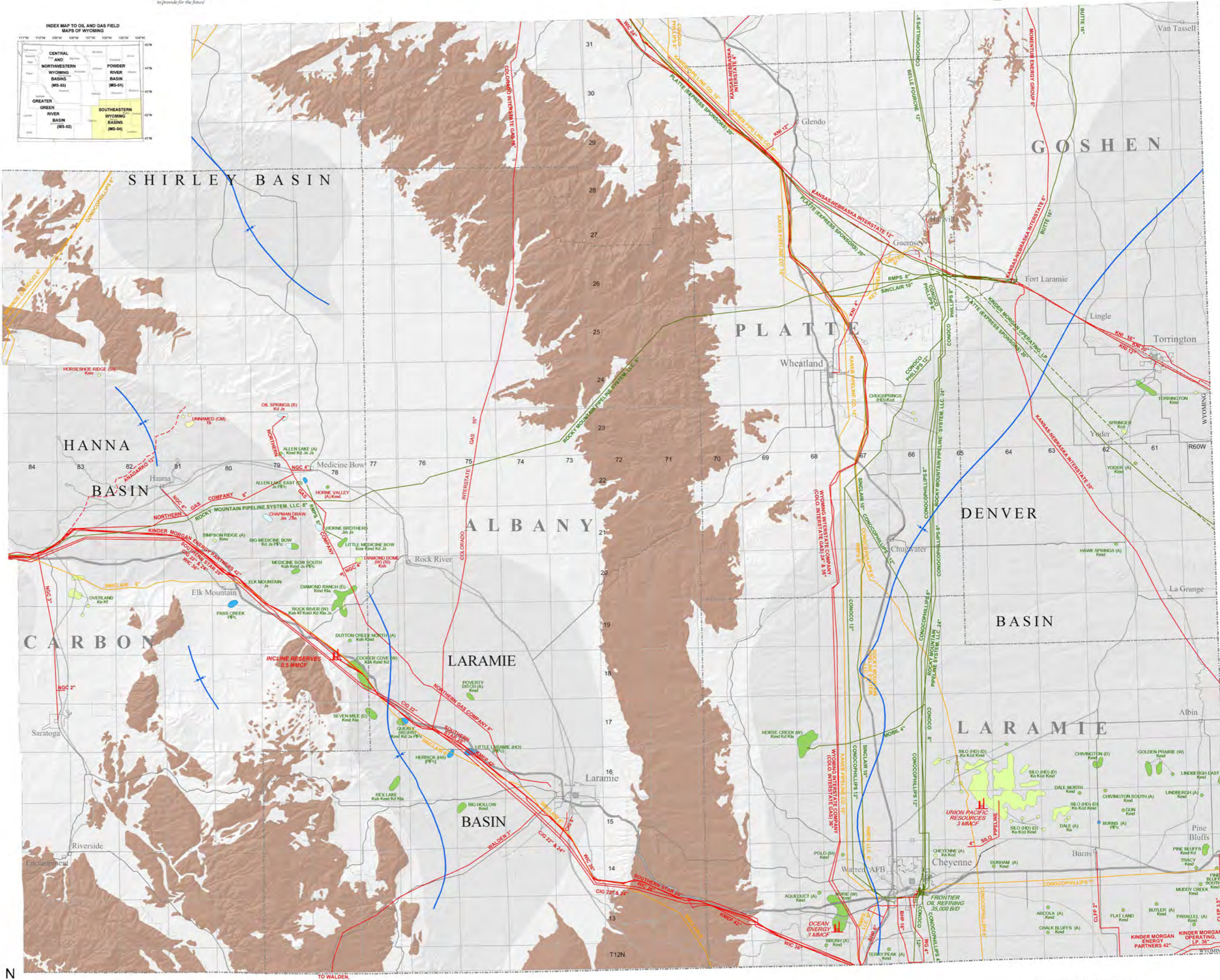
Railroads: U.S. Census TIGER files (1996).

Highways and roads: Wyoming State Geological Survey (2002); U.S. Census TIGER files (1997).

State boundaries: Wyoming State Geological Survey (2002); Spatial Data Visualization Center, University of Wyoming (1993).

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A digital version of this map is also available on CD-ROM.

**OIL AND GAS FIELDS MAP OF SOUTHEASTERN WYOMING BASINS**  
 by  
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 2007

Map projection: Lambert Conformal Conic.  
 Horizontal datum: North American Datum of 1983.  
 Ellipsoid: Geodetic Reference System 80.  
 Digital cartography by Fred H. Porter, Phyllis A. Ranz, and Joseph M. Huss.

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