



Coalbed Natural Gas Activity in the eastern Powder River Basin, Campbell and Converse counties, Wyoming

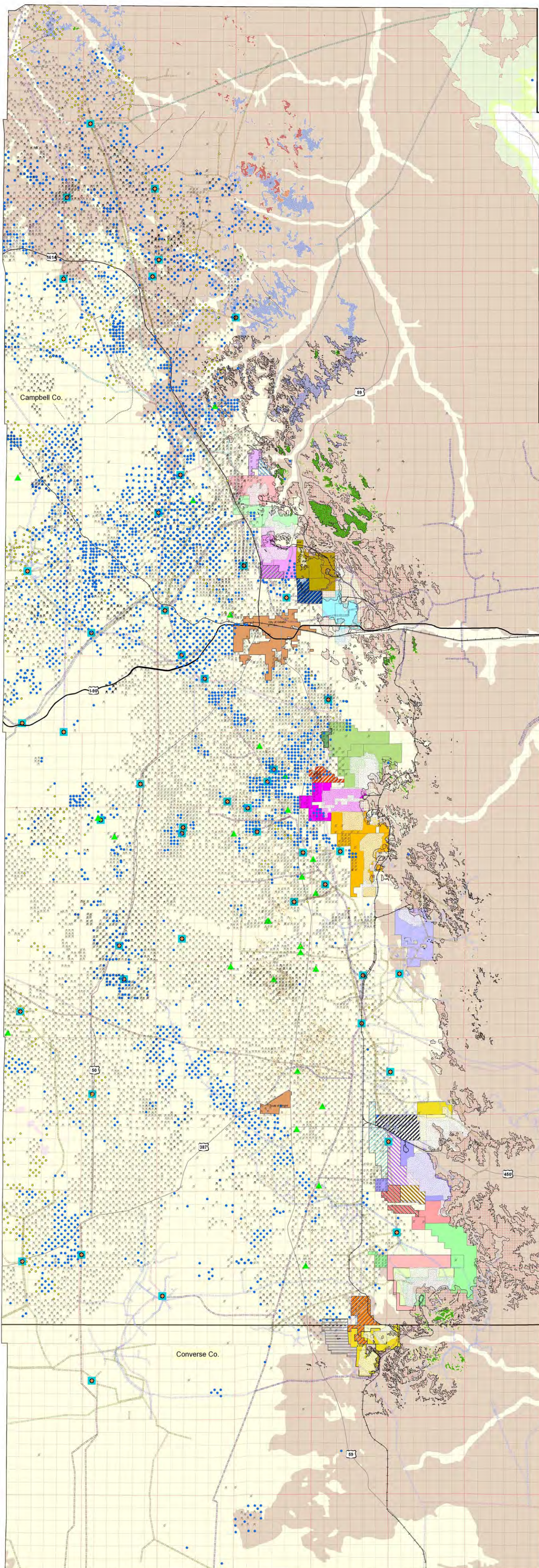
by
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Map Series 56
Eastern Powder River Basin
Coalbed Natural Gas Map
(Updated as of (11/1/2009))

Wyoming State Geological Survey

Ronald C. Sudam, State Geologist
Laramie, Wyoming



Explanation

- Monitoring well
 - Producing Coal Bed Methane well
 - Permitted Coal Bed Methane Well
 - Shut In Coal Bed Methane Well
 - Injection well
 - Abandoned Coal Bed Methane Well
 - Dry hole
 - Waiting for permit
 - Compressor
 - Pumpstation
- ### Natural Gas Pipelines
- Bear Paw
 - Bighorn Gas Gathering
 - Bitter Creek Pipeline, LLC
 - CMS Pipeline Co.
 - Caballo System
 - Fort Union Gas Gathering
 - Hoe Creek System
 - House Creek System
 - KN Gas Gathering
 - KinderMorgan
 - KinderMorgan LP A
 - KinderMorgan Retail
 - M G T C INC
 - MIGC INC
 - Maverick
 - Northern Gas Company
 - Northern Gas of Wyoming
 - Rawhide
 - South Kitty System
 - Thunder Creek Gas Services, LLC
 - Western Gas Resources or Subsidiary
 - Williston Basin Interstate Pipeline Co.
 - gathering
- ### Roads
- Interstate
 - U.S. Highway
 - State Highway
 - RailLines

Federal Coal Leases and LBA Tracts

- Black Thunder
- Coal Creek
- Little Thunder LBA
- North Rochelle
- North Rochelle LBA
- Thundercloud LBA
- West Black Thunder LBA
- Wyodak
- Belle Ayr
- Eagle Butte
- Eagle Butte LBA
- Antelope
- Antelope LBA
- Cordero Ropo Complex
- Cordero LBA
- Horse Creek LBA
- Jacobs Ranch
- Jacobs Ranch LBA
- West Antelope LBA
- Caballo
- NARO North LBA
- NARO South LBA
- North Antelope/Rochelle Complex
- North Antelope/Rochelle LBA
- Rawhide
- Powder River LBA
- West Rocky Butte LBA
- West Roundup LBA
- Belco Exchange
- Buckskin
- Hay Creek LBA
- Dry Fork
- Fort Union
- Mined Out Areas

Outcrop and Subcrop of Selected Coal Seams

- Upper Uim/Waters Coal Seam
- Lower Uim/Healy Coal Seam
- P K Coal Seam
- Wyarno Coal Seam
- Roland Coal Seam of Baker
- Roland Coal Seam of Taft
- Anderson Coal Seam
- Lower Anderson Coal Seam
- Dietz 1 Coal Seam
- Dietz 2 Coal Seam
- Dietz 3 Coal Seam
- Monarch Coal Seam
- Canyon Coal Seam
- Carney Coal Seam
- Miscellaneous Coal Seams
- Wyodak Coal Zone

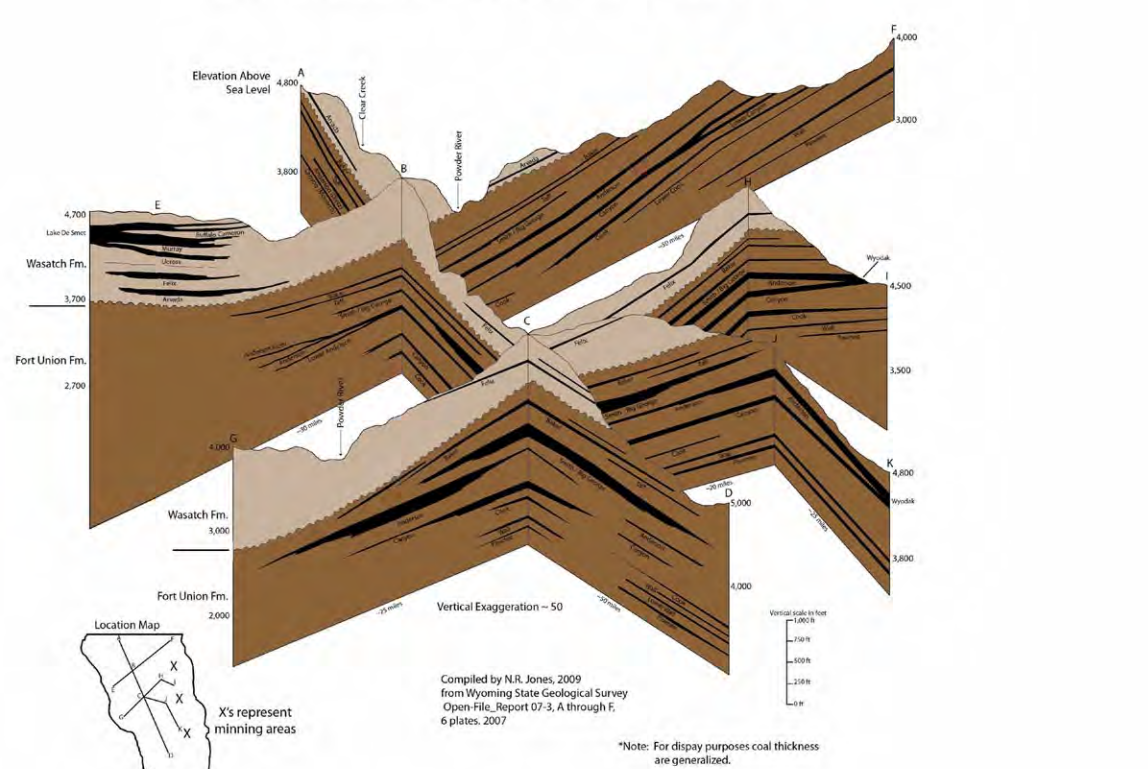
Bedrock Geology

- Alluvium and Colluvium
 - Gravel, Pediment, and Fan Deposits
 - Undivided Surficial Deposits
 - White River Formation
 - Wasatch Formation (main body)
 - Fort Union Formation (Undifferentiated)
 - Lance, Meeteetse Formation, Fox Hills Sandstone, and Bearpaw Shale / Lewis Shale
 - Fox Hills Sandstone and Bearpaw Shale / Lewis Shale
 - Older Rocks undivided
- ### Clinker
- Felix Coal Seam
 - Smith Coal Seam
 - Anderson Coal Seam
 - Lower Anderson Coal Seam
 - Buckskin
 - Canyon Coal Seam
 - Wyodak Coal Zone
- ### Geological Structure
- K-T boundary
 - Faults
 - Surface Contour
 - Syncline

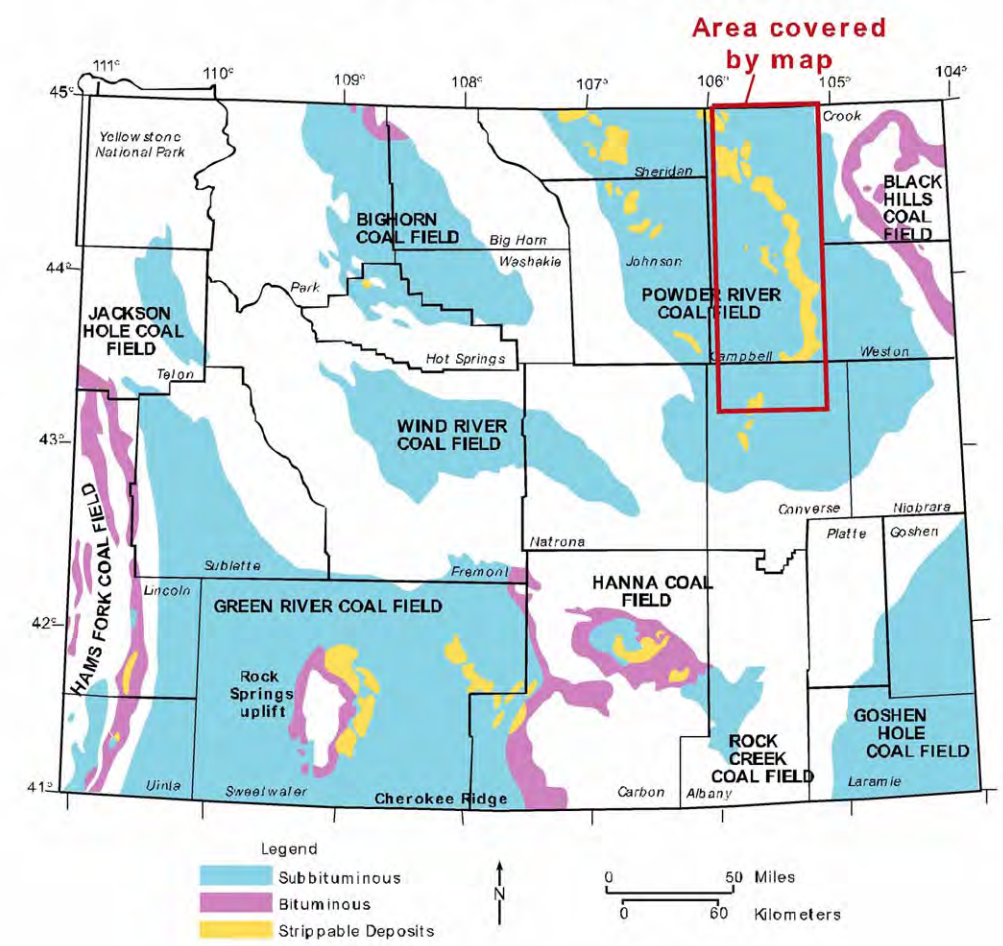


Scale 1:200,000

Generalized Fence Diagram



Location Map



Pipelines and compressor stations are located as accurately as possible using maps supplied by the pipeline companies. This map may not show all pipelines and compressor stations.

Data Sources:
Ed Harten, U.S. Bureau of Land Management State Office, Cheyenne, Wyoming.
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Western Gas Resources.
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Love, J.D., and Christiansen, A.C., 1985, Geologic Map of Wyoming, U.S. Geological Survey, scale 1:500,000, color, 3 sheets.

Additional copies of this map can be obtained from:
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