OIL AND GAS MAP OF WYOMING

MGTC 10" Natural gas

Carbon dioxide

Anadarko

BF -- Belle Fourche Pipeline

вне -- Big Horn Gas Gathering

внр -- Black Hills Power Inc.

сөт -- Colorado Gas Transmission

cig -- Colorado Interstate Gas

cmsgg -- CMS Gas Gathering

EWW -- Energy West Wyoming

FUGG -- Fort Union Gas Gathering

KMEP -- Kinder Morgan energy Partners

нsc -- House Creek System

JGG -- Jonah Gas Gathering

кмі -- Kinder Morgan Interstate

IR -- Interline Resources

conph -- ConocoPhillips

ES -- Express Sponsors

FMC -- FMC Wyoming

ғв -- Fourbear

MAR -- Marathon

PERM -- Permian

wp -- Wyoming Pipeline

99. (51, 70) MARNIE SOUTH (W)

110. (52, 67) MOORCROFT EAST

113. (53, 68) MOREL

116. (52, 69) O'CONNOR

118. (49, 71) OLSEN (D)

123. (48, 69) PICKREL RANCH (D) (A)

136. (58, 70) ROCKY BUTTE (W)

139. (47, 71) ROYAL DRAW (W)

143. (52, 68) SEMLEK SOUTHWEST (SI) 144. (52, 68) SEMLEK WEST (W) (D)

Kmd Kla PIPml

SOUTHEASTERN

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140. (52, 69) RULE (T) (W)

142. (52, 68) SEMLEK

MAPS OF WYOMING

wrg -- Wind River Gathering

156. (53, 68) TEXAS TRAIL (D)

158. (49, 67) THORSON (D)

163. (52, 70) TWIN CREEK (SI)

165 . (50, 69) UNNAMED

167. (51, 69) UNNAMED

128. (53, 68) PRAIRIE CREEK SOUTH (W) 176 . (51, 70) WALLACE SOUTH (W)

131. (49, 71) RAINBOW RANCH NORTH (W) (T) 179 . (50, 69) WELL CREEK (SI)

cgrc -- Columbia Gulf Transmission

clfp -- Cheyenne Light, Fuel & Power

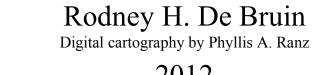
EPO -- Enterprise Products Operating LI

вс -- Bitter Creek

BG -- BOC Gases

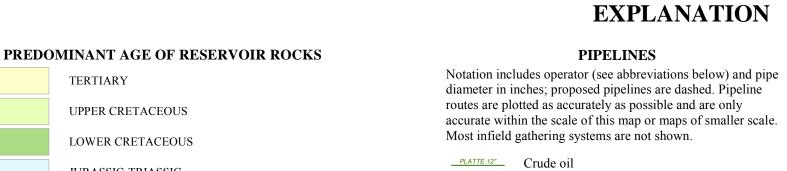
BPAW -- Bear Paw

Proterozoic rocks



LIST OF ABBREVIATIONS FOR

PIPELINE OPERATORS



Refinery or natural gas processing plant products MISSISSIPPIAN-DEVONIAN-ORDOVICIAN-CAMBRIAN-PRECAMBRIAN New fields are spotted through March 30, 2012. 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 88 -- Eighty Eight

the primary reservoir or nonassociated natural gas from secondary FRENCHIE DRAW Names in red denote fields that primarily produce natural gas. These fields may produce significant condensate along with the natural gas

FIELD DESIGNATIONS (D) Produced water disposal project

(H) Hydrothermal (steam) injection proje (HO) Heavy oil—less than 20°API gravity

SYMBOLOGY AND GEOLOGY Oil refinery. Notation includes operator and capacity in barrels of oil per day (B/D). Locations are approximate DEVON ENERGY 50 MMCF 1 Natural gas processing plant. Notation includes operator and capacity in millions of cubic feet (MMCF) per day. Locations are

> Thrust fault(s) defining the eastern boundary of the Overthrust Belt and major thrust faults on northeastern edge of Green River Basin. Dashed where approximately located. Quaternary volcanic rocks in the Yellowstone National Park area. Includes Pleistocene-age basalt flows and basaltic intrusive igneous rocks; rhyolite flows, tuffs, and rhyolitic intrusive igneous rocks; and alkalic extrusive and intrusive igneous rocks. Modified and adapted from Love and Christiansen (1985). Tertiary volcanic rocks of the Absaroka Range. Includes Eocene-age rocks of the Absaroka Volcanic Supergroup and related intrusive

Oil shale-bearing strata. Shaded area depicts the oil shale occurrence. Oil shale occurs in the Luman Tongue, Fontenelle Tongue, Tipton Shale Member, and Laney Shale Member of the Green River Formation (Eocene) (Bradley, 1964; Love and Christiansen, 1985); in the Eocene Tatman Formation along the southwestern margin of the Bighorn Basin (J.D. Love, personal communication, 1984); and in the Eocene Wagon Bed Formation in the Lysite Mountain area, Tps. 41-42 N., Rs. 89-92 W. (Bay, 1969).

Major Wyoming sedimentary basins. Map shows approximate extent of Undifferentiated Precambrian rocks exposed at the surface. Modified 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., (Kf); formations from which significant hydrogen sulfide is produced are enclosed in brackets, e.g., [Mm].

Kn Niobrara Formation Rcr

Ktr Turner Sandstone¹

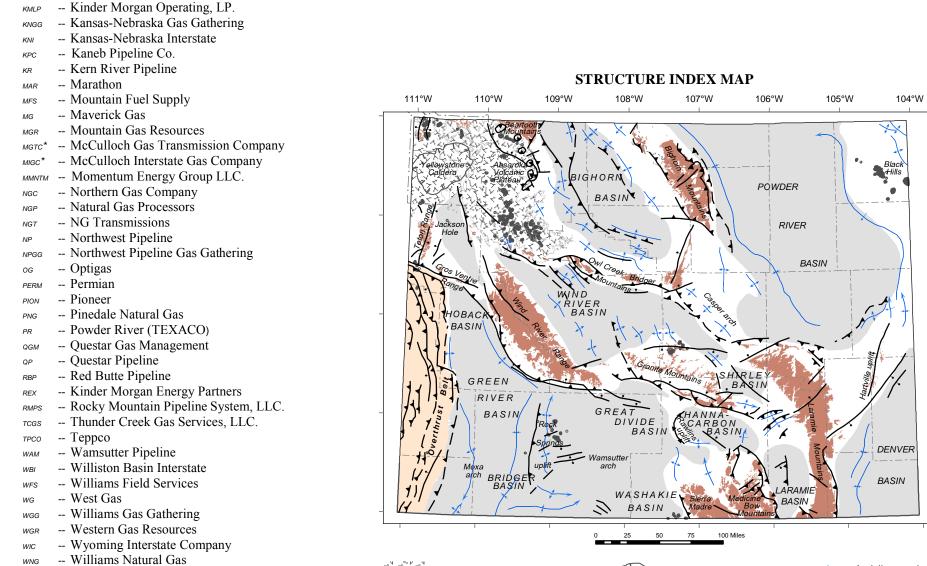
Knc Newcastle Sandstone **Pennsylvanian** Kmd Muddy Sandstone PPc Casper Formation Twr White River Formation Kbr Bear River Formation PPml Minnelusa Formation Tw Wasatch Formation Kcv Cloverly Formation Twdr Wind River Formation Ksc Skull Creek Shale **Pennsylvanian** Tgr Green River Formation Kd Dakota Sandstone Pm Morgan Formation Tfu Fort Union Formation Kfr Fall River Formation Pw Weber Sandstone Kla Lakota Formation Pt Tensleep Sandstone Th Hanna Formation KJg Gannett Group Mississippian Kfh Fox Hills Sandstone PMa Amsden Formation Kle Lewis Shale Kme Meeteetse Formation Jm Morrison Formation Mississippian Kmv Mesaverde Formation Jtc Twin Creek Limestone Md Darwin Sandstone Js Sundance Formation Mm Madison Limestone (or Group) Kad Adaville Formation Kmvt Teapot Sandstone Dj Jefferson Formation Jkn Nugget Sandstone Kmvp Parkman Sandstone Dd Darby Formation Kal Almond Formation Ke Ericson Sandstone Ra Ankareh Formation Ordovician Krs Rock Springs Formation Thaynes Limestone Obh Bighorn Dolomite кы Blair Formation Tecm Crow Mountain Kh Hilliard Shale Kba Baxter Shale Sandstone Member) €gv Gros Ventre Formation Ksx Sussex Sandstone Rc Chugwater Formation & Flathead Sandstone Ksh Shannon Sandstone Kc Cody Shale Rca Alcova Limestone Ks Steele Shale Red Peak Formation p€ Archean and

Lower Cretaceous

Kg Greenhorn Formation Rd Dinwoody Formation Kbf Belle Fourche Shale Kcd Codell Sandstone Kf Frontier Formation Pm Minnekahta Limestone Kmr Mowry Shale Pp Phosphoria Formation Ka Aspen Shale ¹ Formation name extended from neighboring states, not formally recognized in Wyoming, or not commonly used in Wyoming.

Tw Woodside Shale

(or Member)



Yellowstone caldera Tertiary and Quaternary igneous intrusive rocks *wtc* - Western Transmission Corporation Monocline, end arrow *These pipelines were purchased by Western Gas Resources but the abbreviations, MGTC and MIGC, are retained as the — Fault, displacement unspecified Precambrian rocks ▲ ▲ Thrust fault designations for these two subsidiaries of Western Gas

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GEOLOGY COVERAGES Basin boundaries, Tertiary and Quaternary volcanic rocks, and Precambrian rocks: modified and adapted from Love

Oil shale outcrops: Greater Green River Basin: Bradley (1964), and Love and Christiansen (1985); Tatman

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Map edited by Suzanne C. Luhr

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U.S. Geological Survey, 2002, The National Elevation Dataset: Photogrammetric

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> A digital version of this map is also available on CD-ROM. Pipeline, gas plants and refineries data provided by the Wyoming Pipeline Authority, http://www.wyopipeline.com/. The Wyoming State Geological Survey generalized this data for the purpose of display on the 1:500,000 scale Oil and Gas Map of Wyoming. Inquiries for the data should call the Wyoming Pipeline Authority (307) 237-5009.

Oil field data provided from the Wyoming Oil and Gas Conservation Commission, http://wogcc.state.wy.us.