Table 3-6
Locatable Minerals Deposits in the Rawlins RMPPA

Commodity	Location	Geologic Description	Deposit Type	Production History	Future Potential
Sedimentary Uranium					
Shirely Basin Deposits (USGS PP 745)	T27-28N, R 77-80W Shirley Basin 30 x 60	Sandstone uranium deposits hosted in the Tertiary Wind River Fm.	Epigenetic redox/roll front uranium deposits.	Major mines: Petrotomics, Pathfinder, Jenkins. Est. production about 10 to 20 million pounds of U3O8.	Major district with considerable future potential for uranium. Est. resource of 50 million pounds.
Red Desert Deposits (USGS Bull. 1030-I) (USGS Bull. 1099-B)	T18-21N, R99-101W Red Desert 30 x 60	Lignite coal uranium. Low grade uranium mineralization in lignite beds of the Wasatch and Green River formations.	Disseminated uranium in lignite beds. Grades range from 0.003 to 0.007 percent U3O8.	No production of uranium. Estimated resources are 24,000 tons of uranium in coal. Coal estimated at 20 percent stripable.	Grades too low for future production except as byproduct of lignite coal production.
Great Divide Basin (WGA Guidebook, 25th field conference)	T24-26N, R93096W Red Desert 30 x 60	Sandstone and evaporative uranium prospects hosted in Tertiary Battle Spring and Bridger Fms.	Epigenetic redox/roll front uranium deposits. Also evaporative uranium deposits near Lost Creek mine.	Lost Creek Schroeckinite Deposit(T26N: R94W). Grades are 0.013 to about 0.28 percent U3O8.	Limited future potential. No major deposits.
Poison Buttes (Baggs) (Ore Deposits Western US)	T12-13N, R92W Baggs area Saratoga 30 x 60	Sandstone uranium deposits hosted in Tertiary Browns Park Fm.	Disseminated and epigenetic redox/roll front uranium deposits.	Urangesellschaft proposed mine at2,000 tpd production.	Considerable future potential at higher uranium prices. Estimated resource of 8 to 15 million pounds.
Ketchum Buttes (USGS Bull. 1046-M) (USGS PP 538)	T15N, R89W Northeast of Encampment Saratoga 30 x 60	Sandstone uranium prospects hosted in Tertiary Browns Park Fm.	Disseminated and epigenetic redox/roll front uranium deposits.	Prospects only	
Desert Rose area (USGS PP 538) (USGS MR-21)	T13N, R76W Southwest of Laramie Laramie 30 x 60	Sandstone uraium prospects hosted in Cretaceous Clovery Fm.	Disseminated and epigenetic redox/roll front uranium deposits.	Prospects only	
Miller Hill area	T18N, R88W Rawlins 30 x 60	Sandstone uranium prospects hosted in Tertiary Browns Park Fm.	Disseminated and epigenetic redox/roll front uranium deposits.	Prospects only	
Encampment/Riverside	T15-16N, R84-85W Saratoga 30 x 60	Sandstone uranium prospects hosted in Tertiary Browns Park Fm.	Disseminated and epigenetic redox/roll front uranium deposits.	Prospects only	
Magmatic Uranium					
Pedro Hills	T26N, R81W West side of Shirley Basin Shirley Basin 30 x 60	Veins in Precambrian rocks	Magmatic-hydrothermal uranium veins along fissures	Little Man Mine - no production history	Limited future potential - this type of deposit is difficult to develop.
Titaniferous Magnetite					
Iron Mountain District (WGS Bull. 31) (Ore Deposits of US)	T18-19N, R71W Rock River 30 x 60	Lenses, masses, and beds of titaniferous magnetite and Ilmenite with spinel in Precambrian Laramie Anorthosite.	Magmatic segregations and/or possible replacments within layered mass of feldspar and olivine called Laramie Anorthosite. Deposits follow anticlinal axis of anorthosite.	Main mines are Shanton, Iron Mountain, and Sybille Pit. Past production about1.1 million tons to 1968. Past operators were Union Pacific Railroad and Anaconda.	Estimated 30 million tons of massive ore at 45% Fe and 20% TiO2. Disseminated ore estimated at148 million tons at 20% Fe and9.7% TiO2.
Sheep Mountain (WGS OFR 90-7)	T15N, R77W Medicine Bow 30 x 60	Titaniferous magnetite black sand deposit in the Mesaverde Formation.	Paleo-beach sand deposit 4,300 feet long and about 50 feet x 17 feet. Grades are 15.6 % TiO2. No identified resource.	No production.	Uncertain

Table 3-6 (Continued)

Commodity	Location	Geologic Description	Deposit Type	Production History	Future Potential
Rare Earths And Yttrium, Including Columbite And Tantalite					
Big Creek District (USGS Bull. 1046-M)	T13N, R81-82W Saratoga 30 x 60	Veins and pegmatites in Precambrian granite intrusives.	Hydrothermal veins and pegmatites in granites	Prospects only.	
Tie Siding Area (WGA Guidebook 42)	T12N, R71-72W Laramie 30x60	Pegmatites in Sherman Granite	Radioactive pegmatites	Prospects only.	
Red Mountain Syenite (WGA Guidebook 42)	T22N, R71W Laramie 30 x 60	Disseminated allanite in Precambrian syenite intrusive mass.	Disseminated REE deposit	No Production.	
Fox Creek Pegmatites (WGA Guidebook 42)	T13N, R78W Laramie 30 x 60	Pegmatites with columbite and tantalite	High-grade pegmatites	Past production of 85 pounds of columbite and tantalite	
Stratabound Gold					
Ferris Mountains (USGS Bull. 811)	T27N, R87-88W Bairoil 30 x 60	Vein-like deposits and beds in Precambrian metasediments and granites	Exhalative iron-formation gold and copper deposits and associated intrusives with veins. Gold and copper associated with jasperoid beds.	Spanish Trail Mine. No recorded past production.	Deposit type known to host major gold deposits worldwide.
Seminoe Mountains (WGS OFR 82-2) (Klein, 1981: CSM Thesis) (WGS Prelim Rpt 6)	T25-26N, R84-86W Bairoil 30 x 60	Vein-like deposits and beds in Precambrian metasediments and granites	Exhalative iron-formation gold and copper deposits and associated intrusives with veins. Gold and copper associated with jasperoid beds in hornblende schist.	Penn Mine at Bradley Peak. Three adits with limited production. Estimated past production of about 530 oz Au.	Estimated 100 million tons of Fe ore at 28 to 68% Fe. Gold values to 2.7 opt Au. Nephrite jade present in Seminoe area.
Copper-Gold Deposits					
Jelm Mountain District (WGS RI-23) (WGS Bull. 50)	T12-13N, R76-77W Laramie 30 x 60 Saratoga 30 x 60	Copper-gold-silver-arsenic-bismuth "veins" in Precambrian amphibolite schist.	Oxidized quartz veins and mineralized shears in Precambrian metasediments and associated with mineralized pegmatites.	Annie Mine has 3-30% Cu and 0.1 opt Au. Wyoming Queen has 3 shafts to depths of 250 feet. No data on past production histories.	Deposits similar to major gold deposits of Canada. Veins may be folded beds, as they are in Canada.
Cooper Hill District (WGS RI-23)	T18N, R78W Medicine Bow 30 x 60	Copper and gold veins in Precambrian schist.	Vein and shear-zone sulfide mineralization in folded Precambrian schists.	Charlie, Emma G, and Albion mines. Grades to 0.7 opt Au and 12.2 opt Ag. No recorded production history.	Deposits similar to major gold deposits of Canada. Veins may be folded beds, as they are in Canada.
Silver Crown District (WGS OFR 82-4) (WGS Prelim. Rpt 14)	T13-14N, R69-70W Laramie 30 x 60	Precambrian quartz monzonite intrusive related to Nash Fork - Mullen Creek Shear Zone.	Disseminated copper and gold deposit related to Precambrian island-arc volcanism and intrusive igneous rocks.	Copper King Deposit: 35 million tons at 0.2% copper and 0.02 opt gold.	Copper King is only drilled reserve in area. May become economic at higher copper and gold prices.
Kimberlite/Diamonds					
Iron Mountain District (Smith, 1977: CSU Thesis) (Hausel and Roberts, 1984)	T19-20N, R70W Rock River 3 0x 60	Devonian kimberlite intrusives into Precambrian Laramie Anorthosite.	Kimberlite pipes with diamonds.	No production history.	Diamonds small and mainly of industrial quality.
Stateline District (WGS OFR82-1) (WGS Prelim Rpt 18)	T12N, R72W Laramie 30 x 60	Devonian kimberlite intrusives into Precambrian granites and metamorphics.	Kimberlite pipes with diamonds.	No past production. Diamond grades in range of 0.5 to 1.0 carat/100 tonnes. Industrial grade diamonds.	Diamonds small and mainly of industrial quality. Potential for more discoveries considered high.