
EXECUTIVE SUMMARY AND CONCLUSIONS

This report assesses the mineral resource occurrence and development potential for all of the publicly owned land and federal mineral estate managed by the Price Field Office in Carbon and Emery Counties, Utah. Identified mineral resources are classified according to the U.S. Bureau of Land Management's (BLM's) system as described in Manual 3031, and Manual 3060. In terms of future development potential, the most important mineral resources in the planning area are coal, coal bed methane, and oil and gas (leasable minerals), gypsum (locatable mineral), clay, sand and gravel, and humate (salable minerals). Overall, coal and coal bed methane resources have the highest potential for future development. The specific conclusions regarding the mineral resources identified within the planning area are summarized as follows:

Coal

The Utah Geological Survey, the BLM, and the U.S. Geological Survey are currently working on a National Coal Resource Assessment project to determine the amount of coal remaining for future development in Carbon and Emery Counties. The BLM has determined that the results of this project will become incorporated into this Mineral Potential Report as soon as they are available. Attachment 4 of this document has been reserved for the inclusion of coal occurrence and development potential information. Nevertheless, Carbon and Emery Counties contain significant coal deposits that together account for about one-third of Utah's coal resources and 90 percent of its current production.

Coal Bed Methane

Areas of high, moderate, low, and no coal bed methane (CBM) occurrence potential were identified in the planning area. Areas of high occurrence potential were associated with a high degree of certainty, while areas of moderate and low occurrence potential had a medium or low degree of certainty (Mineral Potentials H/D, M/B, L/B, L/C and O/D). In areas with Mineral Potentials H/D and M/B, it is considered likely that CBM development will occur in the next 15 years. In all remaining portions of the planning area, CBM development in the next 15 is unlikely.

Oil and Gas

Areas of high and low conventional oil and gas occurrence potential were identified, each associated with a moderate level of certainty (Mineral Potentials H/C and L/C). In areas of high potential, it is considered likely that oil and gas resources will be developed over the next 15 years. It is unlikely that any areas with low oil and gas occurrence potential will be developed in the next 15 years.

Solid Hydrocarbons

Rocks containing solid hydrocarbons were assessed separately for tar sands and oil shales. For tar sands, areas of high, moderate and low occurrence potential were each identified associated with either a high or moderate level of certainty (Mineral Potentials H/D, H/C, M/C, and L/C). Oil shales were divided into areas of both moderate and low occurrence potential with a low degree of certainty (Mineral Potentials M/B and L/B). Remaining regions within the planning area that were not assigned one of the above mineral potentials were designated Mineral Potential ND (not determined) due to the lack of useful geologic data available. It is considered unlikely that any of the solid hydrocarbon resources in the planning area will be developed in the next 15 years.

Uranium and Vanadium

Areas of high, medium, and low occurrence potential for radioactive ores were identified in the planning area, each associated with either a high, moderate or low degree of certainty (Mineral Potentials H/D, H/C, M/D, M/B and L/B). It is considered unlikely that any of these radioactive mineral deposits will be developed in the next 15 years.

Precious and Base Metals

Areas of both medium and low occurrence potential for precious and base metals were identified in the planning area associated with either a moderate or low degree of certainty (Mineral Potentials M/C and L/B) and an unlikely possibility that these deposits will be developed in the next 15 years. The mineral potential for precious and base metals was not determined for all remaining lands in the planning area not designated by one of the above potentials due to a lack of useful data (Mineral Potential ND).

Gypsum

Areas of both high and moderate gypsum occurrence potential were identified in the planning area, each associated with a high degree of certainty (Mineral Potentials H/D and M/D). It is considered likely that the areas with high occurrence potential will be developed in the next 15 years, while it is unlikely that areas of moderate potential will be developed. Remaining lands within the planning area not designated by one of the above mineral potentials were considered to have no gypsum occurrence potential with a moderate degree of certainty (Mineral Potential O/C).

Potash and Salt

Two separate areas of high potash/salt occurrence potential were identified in the planning area, one associated with a high degree of certainty and the other associated with a moderate degree of certainty (Mineral Potentials H/D and H/C). It is unlikely that these deposits will be developed in the next 15 years. Remaining lands within the planning area not designated by one of the above mineral potentials were considered to have no potash and salt occurrence potential with a moderate degree of certainty (Mineral Potential O/C).

Clay

Areas of high, moderate and low clay occurrence potential were identified in the planning area, each associated with either a high or low level of certainty (Mineral Potentials H/D, H/B, M/B and L/B). With the exception of areas that are currently being mined, it is considered unlikely that clay deposits will be developed in the next 15 years. It is anticipated that areas undergoing active clay mining will continue to be developed over the next 15 years.

Sand and Gravel

Areas of both high and low sand and gravel occurrence potential were identified in the planning area associated with a moderate or low level of certainty, respectively (Mineral Potential H/C and L/B). In high potential areas that are located near major paved roadways, it is considered likely that sand and gravel deposits will be developed over the next 15 years. Elsewhere, it is unlikely that these resources will be developed in the next 15 years.

Stone

Areas of high, moderate and low stone occurrence potential were identified in the planning area, each associated with a high, moderate, and low degree of certainty, respectively (Mineral Potentials H/D, M/C, and L/B). In areas where stone is currently being quarried, it is anticipated that development will continue over the next 15 years. For all remaining lands within the planning area, it is unlikely that stone development will occur in the next 15 years.

Humate

Areas of high, moderate and no humate occurrence potential were identified in the planning area associated with either a high, moderate or low degree of certainty (Mineral Potentials H/D, M/C, M/B, O/C). A relatively small area of Mineral Potential H/D located near Interstate 70 has active humate mines, and it is considered likely that development in this area will continue over the next 15 years. For all

remaining lands within the planning area, it is unlikely that humate development will occur in the next 15 years.

Miscellaneous Minerals

Miscellaneous mineral materials considered in this assessment included sulfur, barite, semiprecious gemstones, and silica. With the exception of silica, the mineral potential for these other geologic commodities was not determined (Mineral Potential ND) due to a lack of available information. Areas of high, medium and no silica occurrence potential were identified in the planning area associated with either a moderate or low degree of certainty (Mineral Potentials H/C, M/B and O/C). For each of these areas, it is considered unlikely that silica resources will be developed in the next 15 years.