1. INTRODUCTION

1.1 PURPOSE AND SCOPE

The purpose of this report is to assess the occurrence potential of minerals and the likelihood of development in the planning area of the Richfield Field Office, Bureau of Land Management (BLM). This assessment involved reviewing both published and unpublished data. Identified mineral resources are assigned an occurrence potential in accordance with the BLM Manuals 3031 and 3060 for mineral assessments and mineral reports, respectively.

This report provides the intermediate level of detail for mineral assessment as prescribed in BLM Manual 3031 and does not include field studies for data collection. This report is prepared as a mineral assessment for use in an Environmental Impact Statement (EIS) as required by the National Environmental Policy Act (NEPA) for amending existing or creating new management plans. This report is not a decision document and does not present specific recommendations on the management of mineral resources. The conclusions in this mineral report are limited to the action prompting this mineral report, which is land use planning, and the report should not be used for other purposes.

The Utah Geological Survey (UGS), the BLM, and the U.S. Geological Survey (USGS) are currently working on a National Coal Resource Assessment project to assess the coal resources in Utah, including the Richfield Field Office. Coal resources are addressed in two reports: One for the Wasatch and Emery coal fields (UGS, 2003) and one for the Henry Mountains coal field (Jackson, 2004).

1.2. LANDS INVOLVED AND RECORDS DATA

The BLM Richfield Field Office manages public land in central Utah that is included in Sanpete, Sevier, Piute, and Wayne Counties, and the eastern portion of Garfield County (Maps 1 and 2). The portion of Garfield County is generally east of Capitol Reef National Park and west of the Colorado River. Public land as defined by the Federal Land Policy and Management Act (Sec. 103) is any land or interest in owned by the U.S. and managed by the Secretary of the Interior through the BLM. Geologic formations, mineral deposits, and mineral exploration and development overlap lands of different ownership, including federal, state and private lands; thus, this report addresses all lands within the above-described counties. In this report, all land within the described counties, without consideration of ownership, is referred to as the planning area, and the BLM-managed public land within the described counties is referred to as the field office. The planning area consists of approximately 5.47 million acres, and the Richfield Field Office administers approximately 2.13 million acres of public land. Land status is summarized in Table 1.

Table 1. Land Management Status

Land Management Status	Inventory Acreage ¹			
Bureau of Land Management	2,128,253			
U.S. Forest Service	1,476,383			
State	385,261			
Native American Reservation	1,213			
Military	769			
National Park Service ²	606,482			
Outdoor Recreation Area ³	36,717			
Private	803,569			
Water	35,365			
Total	5,474,012			

Notes:

- 1. Acreage calculations are approximate
- 2 Includes Glen Canyon National Recreation Area
- 3 Includes state, county and city wildlife, park and recreation areas

Table 1 does not include acreage for split estate land. Split estate is where the surface and mineral estates are under separate ownership. As pertaining to BLM, in most cases for public land, split estate is non-federal surface estate and federal mineral estate. In that case, BLM administers the minerals rights, as "interest in" the land as defined under FLPMA. A less common scenario with split estate is federal surface estate and non-federal mineral estate. A total of split estate acreage is not available for this report.

Under federal laws, the federal mineral estate is managed as locatable, leasable, or salable minerals, which are respectively subject to the general mining laws, the Mineral Leasing Act of 1920, and the Materials Act of 1947. Each of these defining laws is subject to amendments which are not listed. BLM administers entry and recordation of unpatented mining claims on public land administered by the BLM, as well as federal lands that are administered by other federal agencies, such as National Forest Service or National Park Service. BLM also administers federal mineral leases (onshore) including federal lands administered by the BLM, National Forest and National Park Service.

The acreage held under authorized Federal leases for oil and gas and coal and current, maintained, unpatented mining claims on Federal land in the planning area, regardless of the surface management agency, is shown in Table 2. In addition, the acreage of authorized mineral material disposals on public land is included. The oil and gas leases are displayed on Map 10; the mining claims, on Map 16; and mineral material disposals, Map 17. Coal leases are not shown as coal is addressed in a separate report. Authorized, oil and gas leases include those pending a conversion to Combined Hydrocarbon Leases. Also, as a note, the acreage is the land held under mining claims, leases, or mineral disposals, and that acreage does not necessarily indicate the acreage disturbed by mineral operations — the acreage related to on-the-ground activity is considerably less.

Table 2. Acres of Federal Leases, Unpatented Mining Claims, and Mineral Material Disposals

Resource	Sanpete Co	Sevier Co	Piute Co	Wayne Co	Garfield Co	Total
Oil and Gas Leases	265,721	219,963	0	82,136	92,429	660,249
Coal Leases	0	23,937	0	0	0	23,937
Mining Claims	4,569	16,708	27,389	9,830	15,044	73,540
Mineral Materials	75	200	119	553	25	972

Notes:

Source: (BLM, 2003)

Acreage calculations are approximate.

Special Tar Sands Areas (STSA) are a land classification for bituminous hydrocarbon deposits, subject to the Combined Hydrocarbon Leasing Act of 1981. These STSAs were established by the federal government for the purposes of leasing all hydrocarbon resources within the STSA. Two STSAs—the Tar Sand Triangle and the Circle Cliffs—are within the planning area. The Tar Sands Triangle STSA covers about 230 square miles and overlaps the Wayne-Garfield county line. The Circle Cliffs STSA in Garfield County overlaps the Richfield Field Office, Capitol Reef National Park, and the Grand Staircase Escalante Canyons National Monument. Approximately 28 square miles of the Circle Cliffs STSA are in the planning area.

Land in the western part of the planning area in Sevier and Sanpete Counties is subject to a withdrawal for oil shale. This land is part of a regional withdrawal that was executed subject to Executive Order 5327. The subject lands were withdrawn from lease or other disposal and reserved for investigation, examination, and classification. Subsequent, executive orders and public land orders have modified the original withdrawal, for instance, the withdrawn lands are subject to leasing for oil and gas but are closed to entry under the general mining laws. Within the field office, the public land, which has been classified as prospectively valuable for oil shale, is shown on Map 11. The prospectively valuable classification coincides with the withdrawn lands.