



Locatable Mineral Reports for South Dakota and Colorado, provided to the U.S. Forest Service in Fiscal Years 2000 and 2001

by Anna B. Wilson¹

Open File Report 01-401

2001

This report is preliminary and has not been reviewed for conformity with U.S. Geological Survey (USGS) editorial standards or with the North American Stratigraphic Code. Any use of trade, product, or firm names is for descriptive purposes only and does not imply endorsement by the U.S. Government.

U.S. DEPARTMENT OF THE INTERIOR
U.S. GEOLOGICAL SURVEY

¹Denver, Colorado

CONTENTS

	page
INTRODUCTION	1
SOUTH DAKOTA	3
Black Hills National Forest	
Pacer Corporation Exchange (locmin48)	4
Black Hills Chairlift Company Offer (locmin55)	12
Joe Dollar (Johnson) Exchange (locmin59)	17
Nebraska National Forest	
Buffalo Gap National Grassland	
Pinnt Ranch Land Exchange (locmin50)	29
Donald Kelly Land Exchange (locmin51)	35
Donald Kelly Land Exchange Revision (locmin51_revision)	41
City of Wall Land Exchange (locmin52)	44
White Land Exchange (locmin53)	50
Crown Land Exchange (locmin58)	56
Spring Draw Land Exchange (locmin62)	62
COLORADO	71
Arapaho and Roosevelt National Forests	
Winter Park Exchange (locmin49)	72
Uncompahgre National Forest	
Elk Mountain Resort Exchange (locmin54)	79
Miller Exchange (locmin56)	84
Double RL Exchange (locmin60)	90
White River National Forest Forest	
Vassar Meadows Land Exchange (locmin57)	97
Rio Grande National Forest	
Rio Oxbow Exchange (locmin61)	115
Pike and San Isabel National Forests	
Land Uses Resource Center Land Exchange (locmin63)	127

FIGURES

SOUTH DAKOTA

Black Hills National Forest

Pacer Corporation (locmin48)

Fig. 1. Attachment A.	8
Fig. 2. Attachment B.	9
Fig. 3. Attachment C.	10
Fig. 4. Attachment D.	11

Black Hills Chairlift Company (locmin55)

Fig. 5. Attachment A.	16
----------------------------	----

Joe Dollar (Johnson) (locmin59)

Fig. 6. Attachment A.	23
Fig. 7. Attachment B.	24
Fig. 8. Attachment C.	25
Fig. 9. Attachment D.	26
Fig. 10. Attachment E.	27
Fig. 11. Attachment F.	28

Nebraska National Forest

Buffalo Gap National Grassland

Pinnt Ranch (locmin50)

Fig. 12. Attachment A.	33
Fig. 13. Attachment B.	34

Kelly (locmin51)

Fig. 14. Attachment A.	39
Fig. 15. Attachment B.	40

Kelly revision (locmin51_rev)

Fig. 16. Attachment C.	43
-----------------------------	----

City of Wall (locmin52)

Fig. 17. Attachment A.	48
Fig. 18. Attachment B.	49

White (locmin53)

Fig. 19. Attachment A.	54
Fig. 20. Attachment B.	55

Crown (locmin58)

Fig. 21. Attachment A.	60
Fig. 22. Attachment B.	61

Spring Draw (locmin62)

Fig. 23. Attachment A.	67
Fig. 24. Attachment B.	68
Fig. 25. Attachment C.	69
Fig. 26. Attachment D.	70

COLORADO

Arapaho and Roosevelt National Forests

Winter Park (locmin49)

Fig. 27a. Attachment A, p. 1. 77

Fig. 27b. Attachment A, p. 2. 78

Uncompahgre National Forest

Elk Mountain Resort (locmin54)

Fig. 28 Attachment A. 82

Fig. 29. Attachment B. 83

Miller (locmin56)

Fig. 30. Attachment A. 88

Fig. 31. Attachment B. 89

Double RL (locmin60)

Fig. 32a. Attachment A, p. 1. 93

Fig. 32b. Attachment A, p. 2. 94

Fig. 33. Attachment B. 95

Fig. 34. Attachment C. 96

White River National Forest

Vassar Meadows (locmin57)

Fig. 35. Attachment A. 105

Fig. 36. Attachment B. 106

Fig. 37. Attachment C. 107

Fig. 38. Attachment D. 108

Fig. 39. Attachment E. 109

Fig. 40. Attachment F. 110

Fig. 41. Attachment G. 111

Fig. 42. Attachment H. 112

Fig. 43. Attachment I. 113

Fig. 44. Attachment J. 114

Rio Grande National Forest

Rio Oxbow (locmin61)

Fig. 45a. Attachment A, p. 1. 122

Fig. 45b. Attachment A, p. 2. 123

Fig. 45c. Attachment A, p. 3. 124

Fig. 46. Attachment B. 125

Fig. 47. Attachment C. 126

Pike and San Isabel National Forests

Land Uses Resource Center (locmin63)

Fig. 48. Attachment A. 135

Fig. 49. Attachment B. 136

Fig. 50. Attachment C. 137

Fig. 51. Attachment D. 138

Fig. 52. Attachment E. 139

Fig. 53. Attachment F. 140

Fig. 54. Attachment G. 141

INTRODUCTION

The U. S. Geological Survey is required by Congress (under Public Law 86-509) to provide Locatable Mineral Reports to the U. S. Forest Service whenever National Forest System lands are sold or exchanged. This volume is a compilation of the reports already provided to the Forest Service by the author in fiscal years 2000 and 2001. Altogether, the reports describe the geology and resource potential of 74 properties covering considerably more than 14,267.6 acres in nine National Forests and one National Grassland.

Locatable Mineral Reports provide a summary of geology and mineral resource information and a subjective appraisal of the mineral resource potential for land parcels considered for exchange. Information in each report is based on a review of library and file resources, the professional expertise of the writer, and interviews with other knowledgeable geoscientists. Site visits are conducted only where it is deemed necessary--only two days of field investigations support the reports included in this volume. The mineral resource information provided is used in making relative comparisons of the potential future mineral value of lands being offered in an exchange and in appraising the value of the land. Future mineral value is subjectively expressed in three-tier nomenclature of "high," "moderate," and "low." In general, "high" indicates that a proven mineral deposit is present on the property or adjacent to it, or it is strongly suspected that the area has been mineralized. "Moderate" is applied to lands where mineralization is only suspected or where the area shares some of the same geologic characteristics common to areas around proven deposits. "Low" applies to all remaining areas, with the understanding that the information necessary to confirm that there is no future mineral potential is rarely available. The reports contained in this volume have not been formally reviewed, but appropriate scientists informally review them before submission to the Forest Service. Copies of the reports reside in U.S. Geological Survey Mineral Resource Program and U.S. Forest Service files.

Most recent land exchanges are proposed for mutual convenience to gather both Federal and private lands into manageable blocks. Some are proposals by Towns, Counties, and States to enhance the "common good". Others are motivated by ranchers to improve their grazing lands and efficiency of their operations. Many recent land exchange offers are directed toward acquisition of public lands in high-value recreation areas (such as ski areas). The potential for litigation, controversy, and politics is much higher when land exchanges involve "high-value real estate" than when exchanges involve common grazing lands. Hence, locatable mineral reports must be reliable enough to withstand scrutiny of litigants vying for "high-stakes" real estate.

Sixteen reports are included in this volume. They are grouped by State, then chronologically by report date by Forest. Each starts with a cover letter and title page. Geologic descriptions of properties, their mineral potential, and references comprise the main body of each report. Legal descriptions (either verbatim or paraphrased from descriptions supplied by the Forest Service) of the property locations are given either before the main body of the report or as attachments designated Exhibits A and B; figures follow. Figures, normally photocopies of cited references, are provided only for the convenience of the Forest Service minerals examiner--they have not been redrafted.