



DIRECTORY

OF URANIUM

ACTIVITY

IN

WESTERN

SOUTH DAKOTA

DIRECTORY OF URANIUM ACTIVITY

IN

WESTERN SOUTH DAKOTA

AUGUST, 1980

This report was prepared through a joint effort between the Sixth District Council of Local Governments and the Black Hills Group of the Sierra Club and financed through a grant from the Old West Regional Commission.

T A B L E O F C O N T E N T S

	<u>PAGE</u>
INTRODUCTION	1
RESEARCH METHODOLOGY	1
ORGANIZATION AND DETAIL OF MAPS.	2
SUMMARY-COMPARISON OF ACTIVITY BETWEEN 1979-1980	4
<u>Butte County.</u>	4
<u>Custer County</u>	4
<u>Fall River County</u>	4
<u>Harding County.</u>	4
<u>Lawrence County</u>	5
<u>Meade County.</u>	5
<u>Pennington County</u>	5
APPENDIX I	6
GUIDE TO APPENDIX II	7
ABBREVIATIONS.	8
REFERENCES	8
GOVERNMENT LOTS.	9
PAGE ARRANGEMENT	11
MISCELLANEOUS.	11
ACCURACY	12
ACTIVE COMPANIES & INDIVIDUALS, AND THEIR HOLDINGS	13
HARDING COUNTY	13
BUTTE COUNTY	13
LAWRENCE COUNTY.	13
MEADE COUNTY	13
CUSTER COUNTY.	14
FALL RIVER COUNTY.	15
ACTIVE COMPANIES & INDIVIDUALS, NAMES & ADDRESSES.	17
SCOPE AND NATURE OF URANIUM ACTIVITY IN RESPECTIVE COUNTIES.	18
APPENDIX II.	19
BUTTE COUNTY EXPLORATION PERMITS	20
CUSTER COUNTY EXPLORATION PERMITS.	21
FALL RIVER COUNTY EXPLORATION PERMITS.	40
HARDING COUNTY EXPLORATION PERMITS	63
LAWRENCE COUNTY EXPLORATION PERMITS.	66
MEADE COUNTY EXPLORATION PERMITS	68
PENNINGTON COUNTY EXPLORATION PERMITS.	72
MAPS	75

INTRODUCTION

The issue of energy development, particularly the prospect of uranium mining and milling, has drawn a great deal of attention in western South Dakota over the past few years and specifically, as of late.

As a result of the concern, the Sixth District Council of Local Governments, in a joint effort with the Black Hills Group of the Sierra Club, has developed a report entitled "The Directory of Uranium Activity in Western South Dakota". This directory, which was funded through a grant from the Old West Regional Commission, identifies both in map and narrative form, the location of uranium activity in affected western South Dakota counties. The research for this report was compiled during May, 1980, and updates a similar project conducted in 1979 by the Black Hills Group of the Sierra Club.

RESEARCH METHODOLOGY

This report identifies uranium activity in seven western South Dakota Counties: Harding, Butte, Lawrence, Meade, Pennington, Custer and Fall River. Each of these counties was researched in the 1979 report, with the exception of Harding County and northern Butte County.

Using the 1979 research as baseline data, each respective County Register of Deeds office was visited to ascertain the level of uranium activity in each county since 1979. Uranium activity was identified using the following methods:

1. examination of Exploration Permits which specify the mineral sought;
2. examination of leases which specify type of lease by title or content;
3. examination of Claim Location Notices or Affidavits of Labor which specify type of activity;
4. review of "the Engineering and Mining Journal", November, 1978 issue, which listed companies currently active in uranium mining in South Dakota;
5. through contact with companies who publicly acknowledge the nature of their activities; and

6. through direct contact with companies who had other mineral interests in South Dakota; this contact took place when activities could not be clearly identified.

It should be noted that little useful information was derived using the sixth method. This point is supported by the following statements: two companies said that although their primary search was for other minerals, they would not ignore potentially profitable recoverable uranium; another company refused all comment; still another official from a large company said that the information sought was "proprietary".

The policy in conducting this research was to be as accurate as possible in identifying uranium activity; therefore, the activities of such companies were not identified on the maps unless each company could be positively identified with uranium activities in 1979. This was the case with a portion of the large company's activities. The company that refused comment was not mapped; it had abandoned obvious uranium claims and its other holdings were not in areas associated with uranium mining.

ORGANIZATION AND DETAIL OF MAPS

As stated in the introduction of the directory, information is conveyed using both a narrative and map format, which allows two methods for examining the data.

There are three maps for each county, one for Exploration Permits, one for Claims, and one for Leases, with the exception of Butte County, where no claims exist.

All detail on the maps is drawn to the nearest occupied quarter-section (exception noted below). If there is any activity in a quarter-section, no matter how insignificant, the entire quarter-section is mapped. The exception is the mapping of certain Tennessee Valley Authority (TVA) claims in Fall River County. Time/budget limitations in 1979 and in 1980 prevented examining location certificates for each of TVA's hundreds of claims. Many of these locations were taken from TVA's affidavits of labor, which list claims by section, or groups of claims by groups of sections (Ball claims 1-108, for example, are listed as a

group in a group of contiguous sections). For mapping purposes in such cases, the researcher arbitrarily assigned an approximately equal number of claims to each section and so listed them in Appendix II. Sections with claims not located in a particular quarter section were mapped as whole sections unless the claims, as a group, obviously had to be in a particular half- or quarter-section. This will result in an insignificant increase in the visual appearance of claims mapped; most sections contain more than enough claims to affect each quarter section. Further research can refine this method. Any person interested in a particular small area can easily find out its status at the Register of Deeds Office. All other claims are mapped in their quarter-sections.

There was no distinction made, in maps or Appendix II, between leases for surface estate or mineral rights, or Surface Damage Agreements. These categories are frequently used in Fall River County, similar ones are used in Custer County; they are less common elsewhere. One can safely assume that the impacts are virtually identical: Surface Damage Agreements give rights to explore, bring in equipment, camps, etc., provide fees for test hole drilling and crop damage, damage from underground, strip, open pit, in-situ leaching and solution mining, and for damage to fences, buildings, livestock, and water supplies (references: Surface Damage Agreements filed in Fall River County Miscellaneous Record Book 79, pp. 515ff).

Note: Exploration Permits are granted by the South Dakota Conservation Commission for whole townships of 36 one-square-mile sections.

Leases are on private land; descriptions are made by township, range, and section or fraction of a section.

Claims are made on public land, and are precisely located and marked by survey. They are usually 600 by 1,500 feet - about 20 acres. (A number of older claims, and a few recent ones, are located only with reference to other claims or landmarks.)

Note: Fall River County millsites were mapped as claims; they are listed in Appendix II as millsites. There were no millsites in other counties.

SUMMARY-COMPARISON OF ACTIVITY BETWEEN 1979-1980

For the most part, changes between 1979 and 1980 were minor. The most obvious change took place in some 1979 holdings, which were presumably unpromising and therefore were released. Also, one may assume that a few marginal companies may have ceased operation.

The following provides a county-by-county description of changes between 1979 and 1980.

Butte County

Very little change occurred, except for a large new Rexcon lease. Also, there is the indication that a very large group of Gulf claims will be made in an area not previously associated with uranium.

Custer County

Very little change took place here, except for a large new Rexcon lease. As we go to press, we have word of a new and very large group of Gulf claims in an area not previously associated with uranium.

Fall River County

TVA has released a number of claims and some leases. Urangesellschaft USA is no longer involved, but their lessors, Howard Bailey and Eugene Nellis, remain very active, with new or relocated claims and leases. Minerals Exploration Company has released some of its leases to Nellis. Records also indicate that Gulf, which had interests in some Nellis holdings, has ceased operations in Fall River County.

Harding County

Harding County was not investigated in 1979. However, prior to 1978, Harding County was host to hundreds of claims and thousands of acres of leases held by Mobil Oil, Power Resources Energy Reserves Group, Union Carbide, Wyoming Minerals, and others. With the exception of a few leases still retained by Mobil, all other leases have been abandoned. Furthermore, only a few small operators are still retaining their claims.

Lawrence County

Some questionable companies were removed from the map in 1980. A few Nemo area claims have been abandoned. Otherwise, there has been little change.

Meade County

The greatest change has occurred in the Nemo area, where some companies, particularly American Copper and Nickel, have abandoned claims. Homestake and Johns-Manville remain quite active. Energy Reserves Group has released some of its leases.

Pennington County

Two questionable companies were removed from this year's map, and two small companies abandoned their eastern Pennington County claims. The only other change is a few new Rexcon claims.

A P P E N D I X I

APPENDIX I

GUIDE TO APPENDIX II:

Appendix II is the Directory of uranium activity from which the maps were prepared. Each township and range are addressed; however, only those sections of each township where uranium activity is occurring will be identified. Also, Exploration Permits are listed at the beginning of each township/range page.

ABBREVIATIONS:

The information regarding activity in each respective section is in abbreviated form. The abbreviations used in this directory are as follows:

N, S, E, W: The cardinal directions which are used to describe parts of 640-acre sections, e.g.,

N: the north half of each particular section (320 acres)

SW: the southwest corner of a particular section (160 acres)

WSE: the west half of the southeast quarter (80 acres)

WE: the west half of the east half of the section (160 acres)

SESW: the southeast quarter of the southwest quarter (40 acres)

NSWNW: the north half of the southwest quarter of the northwest quarter (20 acres)

(NOTE: some sections are slightly smaller due to compensation for curvature of the earth's surface; some sections are located in two counties and are listed as such.)

n, s, e, w: directions within a section

RR: railroad

ROW: right-of-way

Hwy: highway

EXAMPLE: e of RR = east of railroad

clm, clms: claim, claims

lse, lses: lease, leases

All: indicates activity in part, at least, of each quarter section

adj: adjoining: used for certain TVA claims in Fall River County to indicate that series of claims occupies the several adjacent sections listed. (See remarks about TVA claims under Organization and Detail of Maps.)

Explo Permit: Exploration Permit

ABBREVIATIONS OF COMPANY NAMES:

ACN: American Copper and Nickel

ERG: Energy Reserves Group

H: Homestake Mining Corporation

JM: Johns Manville Sales Corporation

KM: Kerr-McGee Resources Corporation

Min Ex: Minerals Exploration Corporation

RX: Rexcon, Inc.

SK: Silver King Mines

TVA: Tennessee Valley Authority

UC: Union Carbide

Wyo: Wyoming Minerals

REFERENCES:

There are two types of reference notations in Appendix II: those to the researcher's notes and those to the courthouse records. There are relatively few of the latter, due to time/budget constraints. (Additional information regarding the researcher's notes may be obtained by contacting: Jim MacInnes, Black Hills Group of the Sierra Club.) However, the researcher's notes do contain those references.

The reference is after each entry, in parenthesis: e.g.: (F32). This means that entry is recorded on Fall River page 32 of the researcher's notes. Such references appear on pages copied directly from the 1979 notebook, for townships where no changes were needed in 1980. F32, then, refers to the researcher's 1979 notes.

In those townships where changes occurred between 1979 and 1980, the researcher's notes appear thus: F79/32 or F80/32, meaning respectively, that the first reference is found in the researcher's 1979 Fall River notes on page 32; the second on page 32 of the Fall River notes of 1980.

References to county courthouse records will be found on some of the pages revised in 1980. In such references, the first number refers to the book number of the miscellaneous record in the Register of Deeds Office for that county, the second to the page number. For example, 74/159 means Miscellaneous Record book no. 74, page 159. These references follow the researcher's references, separated by a semicolon. Records having many pages, or a similar series of records (e.g.: claims of the same name numbered in series) are referenced by the first page only. As another example, 74/159ff means the record continues on the following consecutive pages. In a few cases, information about one county was found in another county's records. This is noted in the reference.

EXAMPLE: Township 7 S, Range 6 E, Section 11: All, 14 Fall River claims, Wyo(F79/19a;F80/9;88/180). NE, NESE, S, 1ses Wyo(F79/21).

This means that Wyoming Minerals has 14 claims named Fall River occupying at least part of each quarter of section 11; the first two references are to the researcher's notes, the third is to Fall River County records. The next entry indicates that Wyoming Minerals has leases to the listed parts of section 11 (see abbreviations), and that they are recorded in the researcher's notes on the page given (those notes in turn have the courthouse references).

GOVERNMENT LOTS:

Certain lease descriptions refer to government lots. These are 40 acre parcels on the northern and western boundaries of the Township/Range. These parcels counted from east to west, turn the corner at section 6 (see chart on page 8b) and then are counted from north to south. Thus, sections 1-5 have four lots in this order: NENE, NWNE, NENW, NWNW. Section 6 has seven lots, the first four the same as those in sections 1-5; then SWNW, NWSW, and SWSW. Sections 7, 18, 19, 30, and 31 have four lots: NWNW, SWNW, NWSW, SWSW.

Arrangement of sections in a Township, with bordering sections of adjacent Townships, and typical disposition of government lots.

36		31	32	33	34	35	36	31
	4 3 2 1	4 3 2 1	4 3 2 1	4 3 2 1	4 3 2 1	4 3 2 1	4 3 2 1	
1	5 6 7	6	5	4	3	2	1	6
12	1 2 3 4	7	8	9	10	11	12	7
13	1 2 3 4	18	17	16	15	14	13	18
24	1 2 3 4	19	20	21	22	23	24	19
25	1 2 3 4	30	29	28	27	26	25	30
36	1 2 3 4	31	32	33	34	35	36	31
1		6	5	4	3	2	1	6

PAGE ARRANGEMENT:

Townships in the Black Hills Meridian are numbered to the north and to the south, beginning with number one, from an east-west line that bisects Pennington County, Ranges are numbered from west to east, beginning at the state border. Rapid City is in Townships 1 and 2 North, Ranges 7 and 8 East. Custer is in Township 3 South, Range 4 East. Deadwood is in Township 5 North, Range 5 East. The northernmost Township in Appendix II is 22N, in Harding County; the southernmost, 10S in Fall River County. Easternmost Range is 9 E, in Pennington and Custer Counties.

The pages in Appendix II are arranged starting with the northernmost and westernmost Township and Range in a particular county, then proceeding east, then starting with the next west-east line of Township/Ranges to the south. T 7 S, R 7 E precedes 8 S 1 E in Fall River County; but 2 N 5 E in Lawrence County precedes 7 N 5 E in Meade County, because all of Lawrence County comes before Meade County in the Appendix.

MISCELLANEOUS:

Total number of claims will be found in a later page of this Appendix. Claims should not be added up from the totals within each section because in some cases that will give an inflated result. Claims located across section lines are counted in both sections; claim totals within a section thus may include claims that are also counted in a neighboring section.

In T 6S R 1E of Custer County and in much of Fall River County, claims are too numerous to list by name under the regular section entry. There are separate pages naming these claims, locating them by Township/Range, but not by section. The claim names are necessary for comparison with future affidavits of labor.

