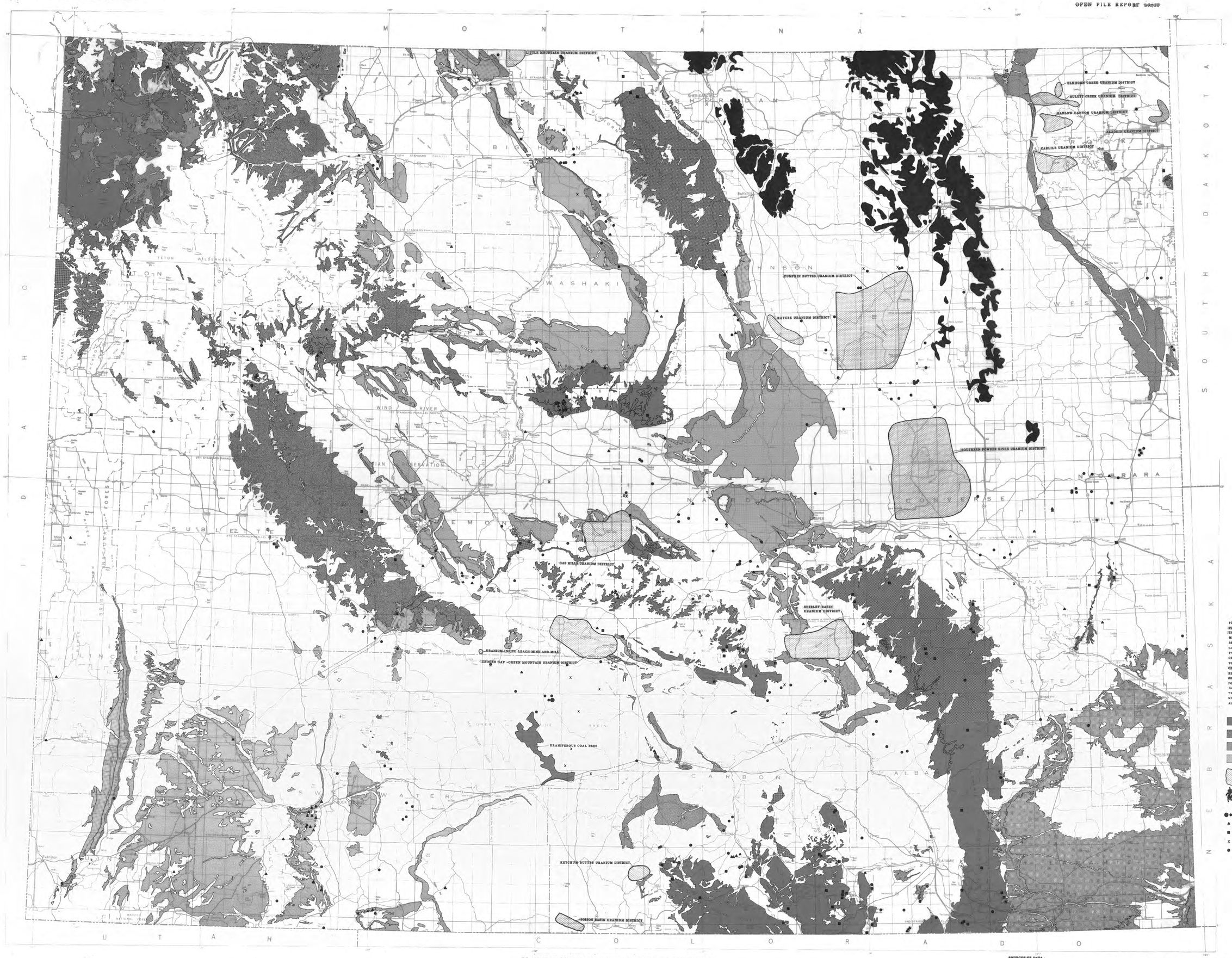

PURPOSE OF MAP

THIS MAP IS TO BE USED AS A PLANNING GUIDE IN SELECTING SITES FOR ANALYSIS. AREAS DELINEATED REPRESENT GENERALIZED POTENTIAL FOR OCCURRENCE OF RADON.

THE SUSPECTED PRESENCE OF RADON IS BASED ON GAMMA RADIATION MEASUREMENTS ABOVE BACKGROUND LEVEL ONLY AND RADON HAS NOT BEEN MEASURED DIRECTLY.

GAMMA RADIATION USED FOR FIELD MEASUREMENTS CAN RESULT FROM THE DECAY OF URANIUM, THORIUM AND POTASSIUM 40. RADON IS GENERATED BY THE DECAY OF URANIUM AND THORIUM NOT POTASSIUM 40. THE DECAY PRODUCTS OF RADON ALSO GENERATE GAMMA RADIATION. CERTAIN GAMMA RADIATION AREAS SHOWN ON THE MAP MAY IN REPRESENT THE DECAY OF ELEMENTS THAT DO NOT GENERATE RADON. BECAUSE THERE ARE FEW BACKGROUND GAMMA RADIATION ANALYSES FOR MANY FORMATIONS, PORTIONS OF THE DEPICTED AREAS MAY NOT HAVE RADON. ALSO AREAS NOT DEPICTED MAY HAVE POTENTIAL FOR RADON. THE AREAS REPRESENT EITHER GEOLOGIC FORMATIONS URANIUM MINING DISTRICTS AND CLINKER/SCORIA. UNTIL CHECKED, NOT FORMING ARE ALSO LIKELY SOURCES OF NATURALLY -OCCURRING RADON.

EXPLANATION

- HIGH BACKGROUND GAMMA RADIATION (HIGHEST POTENTIAL FOR OCCURRENCE OF RADON)
- PROBABLE HIGH BACKGROUND GAMMA RADIATION (SUSPECTED HIGH POTENTIAL FOR OCCURRENCE OF RADON)
- MEDIUM BACKGROUND OR LOCAL HIGH BACKGROUND GAMMA RADIATION (MODERATE POTENTIAL FOR OCCURRENCE OF RADON)
- PROBABLE MEDIUM BACKGROUND GAMMA RADIATION (SUSPECTED MODERATE POTENTIAL FOR OCCURRENCE OF RADON)
- URANIUM MINING AREAS (BOUNDARIES APPROXIMATED), HIGH BACKGROUND GAMMA RADIATION (HIGHEST POTENTIAL FOR OCCURRENCE OF RADON)
- CLINKER/SCORIA DEPOSITS-MEDIUM BACKGROUND GAMMA RADIATION. UNTIL THESE DEPOSITS ARE ACTUALLY CHECKED FOR RADON , THEY HAVE BEEN RATED AS HAVING A MODERATE POTENTIAL FOR OCCURRENCE OF RADON.
- REDOX SEDIMENTARY URANIUM DEPOSITS AND OCCURRENCES
- NON-REDOX SEDIMENTARY URANIUM DEPOSITS AND OCCURRENCES
- IGNEOUS-METAMORPHIC URANIUM DEPOSITS AND OCCURRENCES
- X RADIOACTIVE MINERAL OCCURRENCE OF UNKNOWN ORIGIN
- GEOCHEMICAL URANIUM ANOMALIES

PLANNING-GUIDE MAP FOR RADON STUDIES IN WYOMING

MAP COMPILED BY JAMES C. CANNIA AND JAMES C. CASE

1986

SOURCES OF DATA:

HARRIS, R. E., BACKGROUND GAMMA RADIATION OF THE TORRINGTON 1 x 2 QUADRANGLE, WYOMING AND NEBRASKA GEOLOGICAL SURVEY OF WYOMING OPEN FILE REPORT 86-9, 20p., 2 SHEETS, SCALE 1:250,000.

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HARRIS, R. E., HARSEL, W. D., MEYER, J. E., METALLIC AND INDUSTRIAL MINERALS MAP OF WYOMING, WYOMING

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