New Jersey Geological Survey
Open File Report No. 83-5

Radioactive Mineral Occurrences in New Jersey

New Jersey Department of Environmental Protection • Division of Water Resources

Thomas H. Kean, *Governor*
Robert E. Hughey, *Commissioner*

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CN 029
Trenton 08625

1983

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Plate 1. Map of Radioactive Mineral Occurrences in New Jersey.

ABSTRACT

This report is a radioactive mineral inventory prepared in partial response to Chapter 130 of the Laws of 1981 (N.J.S.A. 13: 1J-1 through 1J-6) which require the DEP to study the potential hazards of a fissionable source materials industry in New Jersey. Locations and descriptions of occurrences were obtained from the files of the New Jersey Geological Survey and published reports. The occurrences are placed into four categories according to the radioactive elements present: 1) uranium; 2) uranium, thorium and rare earth elements; 3) thorium and rare earth elements; 4) elements unknown. Accompanying the inventory is a map of northern New Jersey showing the locations.

DISCUSSION

In May, 1981 a bill was signed into law placing a seven year moratorium on exploration, mining and milling of fissionable source material in New Jersey. During the first six years of the moratorium, the Department of Environmental Protection is mandated to study the environmental and health effects of a fissionable source material industry in New Jersey. A report will be submitted to the Governor and the Legislature during the six year period discussing the potential problems and making recommendations to regulate or ban the industry.

To address the possible hazards of a fissionable source material industry in the State, the Department must know the location, geology and mineralogy of the radioactive mineral occurrences. This report is a compilation of the natural occurrences in northern New Jersey and gives a brief description for each reported site. Stream sediment occurrences associated with known areas of rock mineralization are not listed. Because some of the bedrock occurrences may be potentially economic, much additional work needs to be done to better define the locations, determine all mineral species present, and the geologic characteristics of the occurrences. This information will help the Department assess problems that could affect a mining operation or could be created by mining.

Published reports and studies done at the New Jersey Geological Survey (Markewicz, unpub.) were utilized in a compilation of radioactive mineral locations completed several years ago (Jogan and Konopko, unpub.). Sites have been added to the list from recent field work of the New Jersey Geological Survey and published reports of the National Uranium Resource Evaluation of the United States Department of Energy. Most of the sites have not been field checked by the author.

The size and existing knowledge of each site varies greatly. Occurrence size ranges from single outcrops where radioactive minerals were reported to a belt several miles long. For the sites listed as "mineralization unknown", no information exists about the mineralogy or radioactive elements present.

The list of occurrences is divided into four groups based on the radioactive elements present in the minerals: 1) uranium; 2) uranium, thorium and/or rare earth elements (REE); 3) thorium and/or rare earth elements (REE); 4) elements unknown, For many of the occurrences the elements present had not been determined, but the radioactive mineral suite was known. In these cases the probable radioactive elements were determined from the chemistry of the radioactive minerals present. For example, if the mineral monazite ((Ce, La, Nd) PO_4) is the only mineral mentioned in an occurrence description, the elements present are assumed to be thorium and rare earth elements. Cerium (Ce), lanthanum (La), and neodymium (Nd) are rare earth elements and it is known that monazite can have up to 26.4% thorium substituting in the mineral structure (Hounslow, 1976).

Each occurrence in the list has a number which corresponds to the occurrence numbers on Plate 1. The site descriptions give the county and township in which the occurrence is located, a brief discussion of the geology and a list of references in which the site is mentioned.

LIST OF OCCURRENCES

URANIUM

9 ANDOVER MINE
SUSSEX CO , ANDOVER TWP
GEOLOGY- URANINITE AND SECONDARY MINERALS IN METASEDIMENTS AND QUARTZITE
REFERENCES-GRAUCH & ZARINSKI(1976), NJ GEOLOGICAL SURVEY

13 GROSS PROPERTY
SUSSEX CO , BYRAM TWP
GEOLOGY- URANINITE IN HORNBLENDE GNEISS AND PEGMATITE
REFERENCES-GRAUCH & ZARINSKI(1976), POPPER & BLAUVELT(1980)

22 HIBERNIA MINE
MORRIS CO , ROCKAWAY TWP
GEOLOGY- URANINITE IN GNEISS WITH MAGNETITE
REFERENCES-GRAUCH & ZARINSKI(1976), POPPER & BLAUVELT(1980), NJ GEOLOGICAL SURVEY

26 HEWITT-SE
PASSAIC CO , RINGWOOD BORO
GEOLOGY- URANINITE AND SOME SECONDARIES IN PEGMATITIC GRANITE
REFERENCES-NJ GEOLOGICAL SURVEY

27 PETERS MINE
PASSAIC CO , RINGWOOD BORO
GEOLOGY- PITCHBLENDE, URANINITE IN SHOOTS OFF MAIN MAGNETITE SEAMS IN GNEISS
REFERENCES-GRAUCH & ZARINSKI(1976), NJ GEOLOGICAL SURVEY

29 RIVERDALE
PASSAIC CO , BLOOMINGDALE BORO
GEOLOGY- URANINITE IN LOSEE GNEISS WITH MAGNETITE
REFERENCES-GRAUCH & ZARINSKI(1976), NJ GEOLOGICAL SURVEY, POPPER & BLAUVELT(1980)

30 SPARTA
PASSAIC CO , BLOOMINGDALE BORO
GEOLOGY- URANINITE AND SOME SECONDARY MINERALS IN LOSEE GNEISS
REFERENCES-GRAUCH & ZARINSKI(1976), NJ GEOLOGICAL SURVEY, POPPER & BLAUVELT(1980)

32 HOPE
WARREN CO , HOPE TWP
GEOLOGY- URANINITE IN GRANITE PEGMATITE IN BYRAM GNEISS
REFERENCES-NJ GEOLOGICAL SURVEY, POPPER & BLAUVELT(1980)

37 KISHPAUGH MINE
WARREN CO , LIBERTY TWP
GEOLOGY- UNIDENTIFIED PRIMARY AND SOME SECONDARY MINERALS IN GNEISS
REFERENCES-NJ GEOLOGICAL SURVEY, POPPER & BLAUVELT(1980)

42 EDISON QUARRY
WARREN CO , OXFORD TWP
GEOLOGY- URANINITE, MAGNETITE AND SULPHIDES IN FRANKLIN FM.
REFERENCES-NJ GEOLOGICAL SURVEY, GRAUCH & ZARINSKI(1976), POPPER & BLAUVELT(1980)

43 POHATCONG MOUNTAIN
WARREN CO , MANSFIELD TWP
GEOLOGY- SOIL ON A HORNBLENDE GRANITE(BYRAM)
REFERENCES-POPPER & MARTIN(1982)

45 JENNY JUMP MOUNTAIN-3
WARREN CO , INDEPENDENCE TWP
GEOLOGY- PLAGIOCLASE-QUARTZ GRANITE(LOSEE)
REFERENCES-POPPER & MARTIN(1982)

49 GAME CLUB PROPERTY
HUNTERDON CO , LEBANON TWP
GEOLOGY- URANINITE, SECONDARY MINERALS & SULPHIDES IN COARSE GRAINED GRANITE
REFERENCES-NJ GEOLOGICAL SURVEY

54 JENNY JUMP MOUNTAIN-4
WARREN CO , ALLAMUCHY TWP
GEOLOGY- FRANKLIN MARBLE
REFERENCES-POPPER & MARTIN(1982)

55 LONGWOOD LAKE POWERLINE
MORRIS CO , JEFFERSON TWP
GEOLOGY- ALASKITE IN HORNBLENDE GRANITE AND GNEISS
REFERENCES-POPPER & MARTIN(1982)

66 LEDGEWOOD
MORRIS CO , ROXBURY TWP
GEOLOGY- SECONDARY URANIUM MINERALIZATION IN BYRAM GNEISS
REFERENCES-NJ GEOLOGICAL SURVEY

72 DOVER
MORRIS CO , RANDOLPH TWP
GEOLOGY- URANINITE AND SECONDARY MINERALS IN TALUS
REFERENCES-NJ GEOLOGICAL SURVEY

74 BARTLEY
MORRIS CO , MOUNT OLIVE TWP
GEOLOGY- URANOTHORITE(?) AND SECONDARY MINERALS
REFERENCES-NJ GEOLOGICAL SURVEY, POPPER & BLAUVELT(1980)

79 HACKLEBARNEY-1
MORRIS CO , CHESTER TWP
GEOLOGY- URANINITE AND SOME SECONDARY MINERALS IN AN IRON-BIOTITE-SULPHIDE RICH POCHUCK GNEISS
REFERENCES-NJ GEOLOGICAL SURVEY, POPPER & BLAUVELT(1980)

80 HACKLEBARNEY-2
MORRIS CO , CHESTER TWP
GEOLOGY- URANINITE IN MAGNETITE-RICH POCHUCK GNEISS, SOME SULPHIDES
REFERENCES-GRAUCH & ZARINSKI(1976), NJ GEOLOGICAL SURVEY

97 RAVEN ROCK
HUNTERDON CO , DELAWARE TWP
GEOLOGY- DISSEMINATED SECONDARY MINERALS IN STOCKTON FM.
REFERENCES-POPPER & BLAUVELT(1980), NJ GEOLOGICAL SURVEY

100 STOCKTON
HUNTERDON CO , DELAWARE TWP
GEOLOGY- TORBERNITE IN LIMONITE/MANGANESE ZONE IN STOCKTON FM.
REFERENCES-NJ GEOLOGICAL SURVEY

102 WESTONS MILLS
MIDDLESEX CO , NEW BRUNSWICK CITY
GEOLOGY- CARBONACEOUS SHALE IN THE LOCKATONG FM.
REFERENCES-POPPER & MARTIN(1982)

105 HUDSON RIVER DRIVE
BERGEN CO , FORT LEE BORO
GEOLOGY- CARBONACEOUS SHALE IN THE LOCKATONG FORMATION.
REFERENCES-POPPER & MARTIN(1982)

URANIUM, THORIUM AND/OR REE

4 PARKER MINE
SUSSEX CO , VERNON TWP
GEOLOGY- MONAZITE AND ZIRCON
REFERENCES-NJ GEOLOGICAL SURVEY

5 UPPER GREENWOOD LAKE-1
PASSAIC CO , WEST MILFORD TWP
GEOLOGY- ZONE IN BYRAM GNEISS CONTAINING MONAZITE, URANINITE AND SECONDARY MINERALS
REFERENCES-NJ GEOLOGICAL SURVEY

6 UPPER GREENWOOD LAKE-2
PASSAIC CO , WEST MILFORD TWP
GEOLOGY- URANINITE AND SPHENE IN EPIDOTIZED BYRAM GNEISS. SECONDARY MINERALS IN MAGNETITE.
REFERENCES-NJ GEOLOGICAL SURVEY

7 CENTENNIAL MINE
PASSAIC CO , WEST MILFORD TWP
GEOLOGY- URANINITE AND SPHENE IN GNEISS. SECONDARY MINERALS PRESENT.
REFERENCES-GRAUCH & ZARINSKI(1976), NJ GEOLOGICAL SURVEY

8 LIMECREST
SUSSEX CO , SPARTA TWP
GEOLOGY- PEGMATITE CONTAINING ALLANITE AND PURPLE ZIRCONS, IN MARBLE
REFERENCES-NJ GEOLOGICAL SURVEY

11 CRANBERRY LAKE-1
SUSSEX CO , BYRAM TWP
GEOLOGY- URANINITE AND THORITE IN GNEISS, PYROXENITE AND PEGMATITE
REFERENCES-NJ GEOLOGICAL SURVEY, VAN DE KAMP(1963)

12 CHARLOTTE MINE
SUSSEX CO , BYRAM TWP
GEOLOGY- ZIRCON(VAR. CYRTOLITE), FERGUSONITE, AND URANOTHORITE IN PEGMATITE
REFERENCES-HAJI-VASSILOU ET AL(1974), WOOD(1967), WILLIAMS(1967), VAN DE KAMP(1963), GRAUCH & ZARINSKI(1976)

15 LAKE LACKAWANNA
SUSSEX CO , BYRAM TWP
GEOLOGY- THORIANITE, URANOTHORITE, AND THOROGUMMITE AT CONTACT OF PEGMATITE AND PYROXENITE. SULPHIDES PRESENT.
REFERENCES-NJ GEOLOGICAL SURVEY

19 HURDTOWN MINE
MORRIS CO , JEFFERSON TWP
GEOLOGY- URANOTHORITE IN MAGNETITE-RICH PYROXENITE
REFERENCES-POPPER & BLAUVELT(1980), NJ GEOLOGICAL SURVEY

20 BOWLING GREEN MOUNTAIN
MORRIS CO , JEFFERSON TWP
GEOLOGY- URANINITE & ZIRCON IN A NORTHEASTERLY TRENDING ZONE IN A PEGMATITIC GRANITE
REFERENCES-GRAUCH & ZARINSKI(1976)

21 OAK RIDGE
MORRIS CO , JEFFERSON TWP
GEOLOGY- URANOTHORITE AND SECONDARY MINERALS IN DISCONTINUOUS PEGMATITIC GRANITE
REFERENCES-NJ GEOLOGICAL SURVEY

23 SPLIT ROCK
MORRIS CO , ROCKAWAY TWP
GEOLOGY- URANOTHORITE AND MINOR SECONDARY MINERALS IN GRANITE
REFERENCES-NJ GEOLOGICAL SURVEY, POPPER & BLAUVELT(1980)

24 MERIDEN
MORRIS CO , ROCKAWAY TWP
GEOLOGY- ALLANITE, THORITE WITH THOROGUMMITE RIMS IN A PEGMATITE.
REFERENCES-NJ GEOLOGICAL SURVEY

33 JENNY JUMP MOUNTAIN-1
WARREN CO , FRELINGHUYSEN TWP
GEOLOGY- THOROGUMMITE AND SOME URANINITE IN PEGMATITE
REFERENCES-NJ GEOLOGICAL SURVEY

35 JENNY JUMP MOUNTAIN-2
WARREN CO , INDEPENDENCE TWP
GEOLOGY- SECONDARY URANIUM MINERALS WITH UNIDENTIFIED RED CRYSTALS IN PEGMATITE PODS
REFERENCES-VAN DE KAMP(1963), NJ GEOLOGICAL SURVEY

36 NEAR STINSON MINE
WARREN CO , INDEPENDENCE TWP
GEOLOGY- UNIDENTIFIED URANIUM-THORIUM MINERAL IN PEGMATITE PODS AND IN STREAM SEDIMENT
REFERENCES-NJ GEOLOGICAL SURVEY

38 CUMMINS ESTATE
WARREN CO , LIBERTY TWP
GEOLOGY- ALLANITE ALONG CONTACT OF BYRAM AND POCHUCK GNEISS
REFERENCES-NJ GEOLOGICAL SURVEY, POPPER & BLAUVELT(1980)

44 WASHINGTON MINE
WARREN CO , OXFORD TWP
GEOLOGY- POSSIBLE ALLANITE
REFERENCES-NJ GEOLOGICAL SURVEY, POPPER & BLAUVELT(1980)

50 SCHOOLEYS MOUNTAIN
MORRIS CO , WASHINGTON TWP
GEOLOGY- MONAZITE AND ZIRCON IN BYRAM AND LOSEE GNEISS
REFERENCES-NJ GEOLOGICAL SURVEY

51 MIDDLE VALLEY
MORRIS CO , WASHINGTON TWP
GEOLOGY- ZIRCON AND PROBABLE SECONDARY MINERALS IN HARDYSTON FM.
REFERENCES-NJ GEOLOGICAL SURVEY, POPPER & BLAUVELT(1980)

53 HARMONY
WARREN CO , LOPATCONG TWP
GEOLOGY- URANINITE, THORIANITE IN SERPENTINE
REFERENCES-NJ GEOLOGICAL SURVEY, POPPER & BLAUVELT(1980)

56 ROYAL GREEN MARBLE QUARRY
WARREN CO , LOPATCONG TWP
GEOLOGY- URANINITE AND SULPHIDES IN SERPENTINE
REFERENCES-VAN DE KAMP(1963),GRAUCH & ZARINSKI(1976)

57 MARBLE MOUNTAIN
WARREN CO , LOPATCONG TWP
GEOLOGY- URANIUM-THORIUM MINERALS IN METASEDIMENTS
REFERENCES-WILLIAMS(1967), GRAUCH & ZARINSKI(1976), MCKEOWN & KLEMIC(1953), POPPER & BLAUVELT(1980), NJ GEOLOGICAL SURVEY

58 PATTENBURG
HUNTERDON CO , UNION TWP
GEOLOGY- EUXENITE, FERGUSONITE, ALLANITE CRYSTALS IN PEGMATITE
REFERENCES-VAN DE KAMP(1963), NJ GEOLOGICAL SURVEY, POPPER & BLAUVELT(1980)

60 LOCKWOOD GORGE-1
HUNTERDON CO , LEBANON TWP
GEOLOGY- MONAZITE, URANINITE, ALLANITE, THORITE AND SOME SECONDARY MINERALS IN PEGMATITE
REFERENCES-NJ GEOLOGICAL SURVEY

61 COKESBURY
HUNTERDON CO , CLINTON TWP
GEOLOGY- URANIUM-THORIUM MINERALS IN GRANITE
REFERENCES-NJ GEOLOGICAL SURVEY, POPPER & BLAUVELT (1980)

69 DALRYMPLE MINE
MORRIS CO , RANDOLPH TWP
GEOLOGY- URANIUM-THORIUM MINERALS IN SHEAR ZONES IN PEGMATITE
REFERENCES-NJ GEOLOGICAL SURVEY, POPPER & BLAUVELT(1980)

71 MOUNT HOPE-2
MORRIS CO , DENVILLE TWP
GEOLOGY- URANINITE, AND ALLANITE IN PEGMATITE
REFERENCES-NJ GEOLOGICAL SURVEY

75 PLEASANT HILL
MORRIS CO , CHESTER TWP
GEOLOGY- MONAZITE AND ZIRCON
REFERENCES-NJ GEOLOGICAL SURVEY

76 CHESTER
MORRIS CO , WASHINGTON TWP
GEOLOGY- THORITE(?) AND SECONDARY MINERALS IN COARSE GRAINED GRANITE
REFERENCES-NJ GEOLOGICAL SURVEY

81 GLADSTONE-NORTHWEST
MORRIS CO , CHESTER TWP
GEOLOGY- FEW MONAZITE AND ZIRCON CRYSTALS
REFERENCES-NJ GEOLOGICAL SURVEY

83 RALSTON-WEST
MORRIS CO , CHESTER TWP
GEOLOGY- MONAZITE AND ZIRCON
REFERENCES-NJ GEOLOGICAL SURVEY

84 MENDHAM MOUNTAIN
MORRIS CO , MENDHAM TWP
GEOLOGY- ZONE CONTAINING MONAZITE & ZIRCON
REFERENCES-NJ GEOLOGICAL SURVEY

108 GLEN GARDNER
HUNTERDON CO , GLEN GARDNER BORO
GEOLOGY- URANOTHORITE IN HORNBLENDE GRANITE. RADIOACTIVE BAND IS 40-50 FEET WIDE AND EXTENDS TO THE SOUTH.
REFERENCES-N.J. GEOLOGICAL SURVEY

THORIUM AND/OR REE

16 HURD MINE
MORRIS CO , JEFFERSON TWP
GEOLOGY- THORITE, THOROGUMMITE IN PYROXENITE INCLUSIONS IN ALASKITE.
REFERENCES-VAN DE CAMP(1963), NJ GEOLOGICAL SURVEY

17 ALLEN QUARRY
SUSSEX CO , BYRAM TWP
GEOLOGY- THORITE WITH THOROGUMMITE RIMS IN STRINGER-LIKE CONCENTRATIONS IN ALASKITE
REFERENCES-VAN DE KAMP(1963)

18 WELDON MINE
MORRIS CO , JEFFERSON TWP
GEOLOGY- THORITE AND PERKIERITE FOUND IN AN ALASKITE IN A MIGMATITIC ZONE
REFERENCES-VAN DE CAMP(1963), POPPER & BLAUVELT (1980), NJ GEOLOGICAL SURVEY

28 POMPTON JUNCTION
PASSAIC CO , BLOOMINGDALE BORO
GEOLOGY- POSSIBLE MONAZITE IN GRANITE PEGMATITE
REFERENCES-NJ GEOLOGICAL SURVEY

31 DEBOW MINE
PASSAIC CO , BLOOMINGDALE BORO
GEOLOGY- MONAZITE IN A PEGMATITE
REFERENCES-NJ GEOLOGICAL SURVEY

34 ROBINSON PROSPECT
WARREN CO , FRELINGHUYSEN TWP
GEOLOGY- THORITE AND THOROGUMMITE IN ALASKITE NEAR INCLUSIONS OF METASEDIMENTS
REFERENCES-VAN DE KAMP(1963), NJ GEOLOGICAL SURVEY

39 MOUNTAIN LAKE
WARREN CO , LIBERTY TWP
GEOLOGY- ALLANITE AND ZIRCONS(?) IN FAULT ZONE IN COARSE GRANITE. THORIUM IS THE MAJOR RADIOACTIVE ELEMENT PRESENT. SOME URANIUM DETECTED
REFERENCES-NJ GEOLOGICAL SURVEY

48 PLEASANT GROVE
MORRIS CO , WASHINGTON TWP
GEOLOGY- PROBABLE MONAZITE IN LOSEE GNEISS
REFERENCES-NJ GEOLOGICAL SURVEY

52 MONAZITE BELT
MORRIS CO , WASHINGTON TWP
GEOLOGY- NORTHEAST-SOUTHWEST TRENDING ZONE, APPROXIMATELY 7 MILES LONG, OF ROCK CONTAINING SMALL QUANTITIES OF MONAZITE.
REFERENCES-NJ GEOLOGICAL SURVEY

64 WATERLOO
SUSSEX CO , BYRAM TWP
GEOLOGY- THORITE AND THOROGUMMITE IN PEGMATITE
REFERENCES-VAN DE KAMP(1963), NJ GEOLOGICAL SURVEY

67 SCRUB OAKS MINE
MORRIS CO , MINE HILL TWP
GEOLOGY- DOVERITE, BASTNAESITE, XENOTIME, CHEVKINITE AND MONAZITE IN IRON-RICH BYRAM GNEISS
REFERENCES-KLEMIC(1954), KLEMIC ET AL(1959), POPPER & BLAUVELT(1980), WILLIAMS(1967), GRAUCH & ZARINSKI(1976), NJ GEOLOGICAL SURVEY

68 CANFIELD MINE
MORRIS CO , MINE HILL TWP
GEOLOGY- RADIOACTIVE APATITE AND MONAZITE IN IRON-RICH GRANITE GNEISS
REFERENCES-WILLIAMS(1967), NJ GEOLOGICAL SURVEY

77 TANNERS BROOK
MORRIS CO , WASHINGTON TWP
GEOLOGY- MONAZITE IN FLOAT AND STREAM VALLEY SAMPLES
REFERENCES-WILLIAMS(1967), NJ GEOLOGICAL SURVEY

78 GERMAN VALLEY
MORRIS CO , WASHINGTON TWP
GEOLOGY- MONAZITE IN GNEISS
REFERENCES-NJ GEOLOGICAL SURVEY, POPPER & BLAUVELT(1980)

UNKNOWN

1 RUTAN HILL
SUSSEX CO , WANTAGE TWP
GEOLOGY- MINERALIZATION UNKNOWN
REFERENCES-NJ GEOLOGICAL SURVEY

2 BEEMERVILLE SYENITE
SUSSEX CO , WANTAGE TWP
GEOLOGY- MINERALIZATION UNKNOWN
REFERENCES-NJ GEOLOGICAL SURVEY

3 GREEN MINE
SUSSEX CO , VERNON TWP
GEOLOGY- SHOWS HIGH BACKGROUND RADIATION, HIGH URANIUM IN STREAM SEDIMENT, LOW TH/U RATIO AND HIGH URANIUM RESIDUAL FROM REGRESSION
REFERENCES-BAILLIEUL ET AL(1980)

10 UPPER MACOPIN
PASSAIC CO , WEST MILFORD TWP
GEOLOGY- MINERALIZATION UNKNOWN
REFERENCES-NJ GEOLOGICAL SURVEY

14 CRANBERRY LAKE-2
SUSSEX CO , BYRAM TWP
GEOLOGY- UNKNOWN MINERALIZATION IN POCHUCK GNEISS
REFERENCES-POPPER & BLAUVELT(1980)

25 COBB MINE
MORRIS CO , ROCKAWAY TWP
GEOLOGY- MINERALIZATION UNKNOWN
REFERENCES-NJ GEOLOGICAL SURVEY

40 ALLAMUCHY
MORRIS CO , ALLAMUCHY TWP
GEOLOGY- MINERALIZATION UNKNOWN
REFERENCES-NJ GEOLOGICAL SURVEY

41 FLEMINGTON MINE
HUNTERDON CO , FLEMINGTON BORO
GEOLOGY- MINERALIZATION UNKNOWN
REFERENCES-POPPER & BLAUVELT(1980), AEC-RME 4106

46 CASTNER FARM
HUNTERDON CO , LEBANON TWP
GEOLOGY- SLIGHTLY RADIOACTIVE ZONES IN GRANITE PEGMATITE
REFERENCES-NJ GEOLOGICAL SURVEY

47 PORT COLDEN
HUNTERDON CO , LEBANON TWP
GEOLOGY- PRIMARY MINERALS IN PEGMATITE ON NORTHWEST SIDE OF AN IRON-RICH ROCK BODY
REFERENCES-NJ GEOLOGICAL SURVEY, POPPER & BLAUVELT(1980)

59 MULLIGAN QUARRY
HUNTERDON CO , CLINTON TOWN
GEOLOGY- PROBABLY SECONDARY MINERALIZATION ALONG FRACTURES AND IN BLACK CHERTY SEAMS
REFERENCES-GRAUCH & ZARINSKI(1976), NJ GEOLOGICAL SURVEY, POPPER & BLAUVELT(1980)

62 FAIRMONT
HUNTERDON CO , TEWKSBURY TWP
GEOLOGY- MINERALIZATION UNKNOWN
REFERENCES-NJ GEOLOGICAL SURVEY

63 BYRAM CASCADE MINE
MORRIS CO , BYRAM TWP
GEOLOGY- MINERALIZATION UNKNOWN
REFERENCES-NJ GEOLOGICAL SURVEY

65 GOLD MINE ROAD
MORRIS CO , MOUNT OLIVE TWP
GEOLOGY- MINERALIZATION UNKNOWN
REFERENCES-NJ GEOLOGICAL SURVEY

70 MOUNT HOPE-1
MORRIS CO , ROCKAWAY TWP
GEOLOGY- URANIUM MINERALS IN FOOTWALL OF MAGNETITE ORE BODY
REFERENCES-NJ GEOLOGICAL SURVEY

73 BOONTON
MORRIS CO , BOONTON TWP
GEOLOGY- PRIMARY MINERALS IN GNEISS
REFERENCES-NJ GEOLOGICAL SURVEY, POPPER & BLAUVELT(1980)

82 BURNETT BROOK
MORRIS CO , MENDHAM TWP
GEOLOGY- MINERALIZATION UNKNOWN
REFERENCES-NJ GEOLOGICAL SURVEY

85 POTTERSVILLE
SOMERSET CO , BEDMINSTER TWP
GEOLOGY- MINERALIZATION UNKNOWN
REFERENCES-POPPER & BLAUVELT(1980)

86 HOFFMAN MINE
SOMERSET CO , BRIDGEWATER TWP
GEOLOGY- MINERALIZATION UNKNOWN
REFERENCES-POPPER & BLAUVELT(1980)

87 PLAINFIELD MINE
SOMERSET CO , NORTH PLAINFIELD BORO
GEOLOGY- MINERALIZATION UNKNOWN
REFERENCES-POPPER & BLAUVELT(1980), AEC RME-1406

88 AMERICAN MINE
SOMERSET CO , BRIDGEWATER TWP
GEOLOGY- MINERALIZATION UNKNOWN
REFERENCES-POPPER & BLAUVELT(1980)

89 RARITAN MINE
SOMERSET CO , WARREN TWP
GEOLOGY- MINERALIZATION UNKNOWN
REFERENCES-POPPER & BLAUVELT(1980)

90 CHIMNEY ROCK MINE
SOMERSET CO , BRIDGEWATER TWP
GEOLOGY- MINERALIZATION UNKNOWN
REFERENCES-POPPER & BLAUVELT(1980), AEC RME-1406

91 MENLO PARK MINE
MIDDLESEX CO , EDISON TWP
GEOLOGY- MINERALIZATION UNKNOWN
REFERENCES-POPPER & BLAUVELT(1980)

92 LOCKWOOD GORGE-2
HUNTERDON CO , HILLSBOROUGH TWP
GEOLOGY- MINERALIZATON UNKNOWN
REFERENCES-POPPER & BLAUVELT(1980)

93 GLEN RIDGE MINE
ESSEX CO , BLOOMFIELD TOWN
GEOLOGY- MINERALIZATION UNKNOWN
REFERENCES-POPPER & BLAUVELT(1980), AEC RME-1406

94 ARLINGTON MINE
BERGEN CO , NORTH ARLINGTON BORO
GEOLOGY- MINERALIZATION UNKNOWN
REFERENCES-POPPER & BLAUVELT(1980), AEC RME-1406

95 BYRAM-EAST
HUNTERDON CO , KINGWOOD TWP
GEOLOGY- MINERALIZATION UNKNOWN
REFERENCES-POPPER & BLAUVELT(1980)

96 READING SCHOOL
HUNTERDON CO , DELAWARE TWP
GEOLOGY- MINERALIZATION UNKNOWN
REFERENCES-POPPER & BLAUVELT(1980)

98 RAVEN ROCK QUARRY
HUNTERDON CO , DELAWARE TWP
GEOLOGY- MINERALIZATION UNKNOWN
REFERENCES-POPPER & BLAUVELT(1980)

99 PRALLSVILLE
HUNTERDON CO , DELAWARE TWP
GEOLOGY- MINERALIZATION UNKNOWN
REFERENCES-POPPER & BLAUVELT(1980), JOHNSON(1950)

101 PENNINGTON MINE
MERCER CO , HOPEWELL TWP
GEOLOGY- MINERALIZATION UNKNOWN
REFERENCES-POPPER & BLAUVELT(1980), AEC RME-4106

103 WILBURTHA
MERCER CO , EWING TWP
GEOLOGY- MINERALIZATION UNKNOWN
REFERENCES-POPPER & BLAUVELT(1980), NJ GEOLOGICAL SURVEY

104 DEFELSCO QUARRY
MERCER CO , EWING TWP
GEOLOGY- PRIMARY AND SECONDARY MINERALS IN STOCKTON FM.
REFERENCES-NJ GEOLOGICAL SURVEY, POPPER & BLAUVELT(1980)

106 GRIGGSTOWN MINE
SOMERSET CO , FRANKLIN TWP
GEOLOGY- MINERALIZATION UNKNOWN
REFERENCES-POPPER & BLAUVELT(1980)

107 ALLAMUCHY
SUSSEX CO , GREEN TWP
GEOLOGY- MINERALIZATION UNKNOWN
REFERENCES-POPPER & BLAUVELT(1980)

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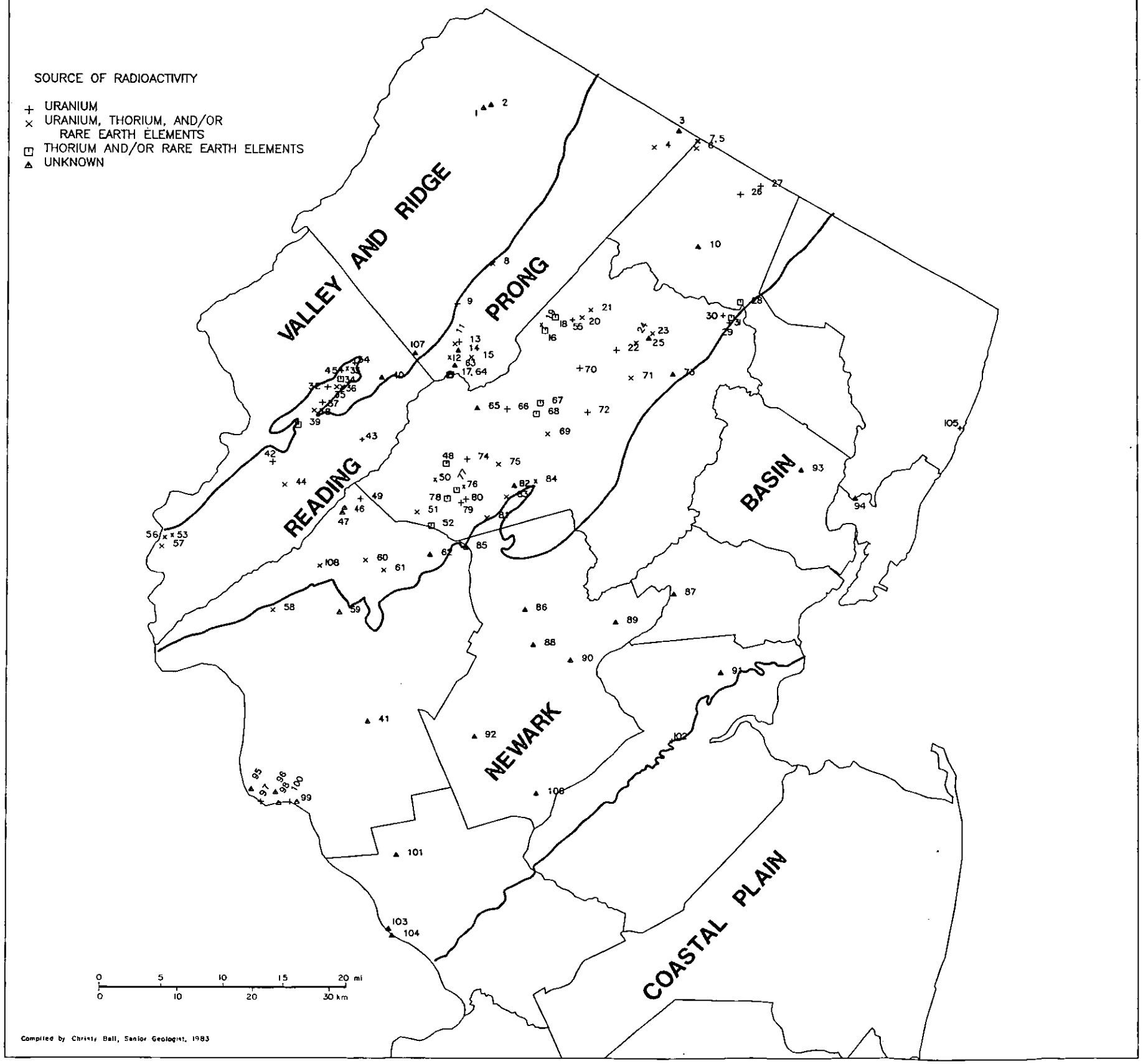
MAP OF RADIOACTIVE MINERAL OCCURRENCES IN NEW JERSEY