

R A D I O A C T I V I T Y M A P
O F
V E R M O N T

1 9 8 0

(File no. 1980-1, rev. 3)

Compiled and edited
by
C. Ratte' and D. Vanecek

Drafted
by
D. Vanecek

I N D E X

	<u>Page</u>
Explanation of "Radioactivity Map of Vermont".	1-2
Appendix A--Generalized Uranium Occurrences by Town and County	3
Appendix B--Uranium Occurrence Localities and Analytical Data	4-8
Addendum to Appendix B	9
Literature Cited	10-11

****NOTE**** This text accompanies the "Radioactivity Map of Vermont" and
the "Overlay Addendum to Radioactivity Map of Vermont."

INTRODUCTION

The Radioactivity Map of Vermont is a compilation map that includes areas that display anomalously high radioactivity detected by aerial and ground surveys, and the locations of known uranium occurrences where analytical information is available. These sites are located on the Vermont Town-County map (Appendix A), and corresponding analytical data is presented in Appendix B.

RADIOACTIVITY

Anomalously high radioactivity is associated with all geologic terranes in Vermont, for example, igneous granitics at Ascutney, Precambrian crystallines at Jamaica and Okemo Mt., Paleozoic crystallines at the Udall mine in Wolcott, Paleozoic carbonates at Milton and Highgate, and Pleistocene to Recent gravels reported at Cuttingsville and occurrences in the Glens Falls, Albany and Lewiston NTMS $1^0 \times 2^0$ hydrogeochemical and stream sediment reports by NURE.

URANIUM OCCURRENCES

Uranium occurs in a variety of minerals and geologic settings in each of the terranes where samples have been collected and analyzed.

In the Precambrian crystalline terrane uranium mineralization is found in discontinuous veins in quartzites and gneissic quartzites, in tourmaline-bearing pegmatites, in coarse-textured migmatite (recrystallized pegmatite), and in biotite-rich zones in mica schist.

Uranium minerals occur largely as intergranular disseminations in "spotty" or "patchy" accumulations along shear and fracture surfaces, along foliation surfaces, or filling intergranular space in coarse-textured occurrences.

Pitchblende is the main uranium-bearing substance. Secondary uranium minerals and allanite and zircon are also reported. Associate minerals are graphite, pyrite, garnet and blue quartz. Iron oxide staining is commonly associated with uranium occurrences.

At the Udall mine in Wolcott (Paleozoic crystalline terrane) uraninite is associated with pyrite and chalcopyrite in a small strata-bound sulfide deposit.

Uranium replaces calcium in fluorapatite (hydroxylapatite) in the intraformational breccias of the Clarendon Springs dolomite in the Highgate-Milton area.

Uranium in stream sediments of Pleistocene and recent origin apparently is associated with resistate minerals such as zircon and monazite. No attempt has been made to locate stream sediment sites showing anomalously high uranium content. The uranium content in stream sediments is seldom greater than 75 ppm and most commonly is less than 10 ppm. Detailed maps are available in the NURE hydrogeochemical-stream sediment reports (see reference list).

The apparent proliferation of uranium occurrences and anomalous radioactivity in southern Vermont is due only to the fact that the greatest efforts to locate uranium occurrences have concentrated on this area. Also perhaps the most promising uranium occurrences have been located in Vermont's Precambrian terrane, exposures of which are restricted to the southern and central part of the state.

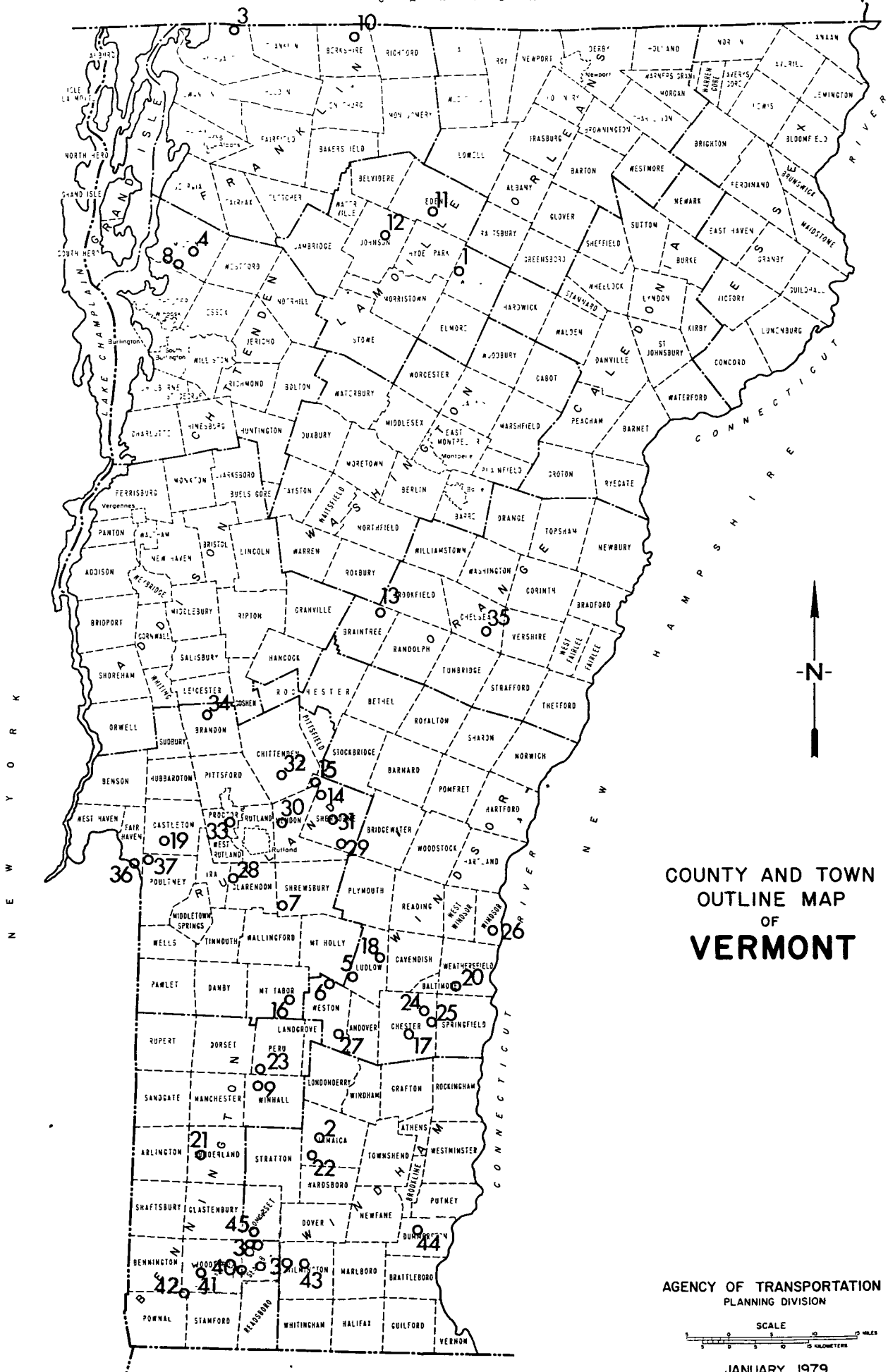
POTENTIAL FOR URANIUM ORE DEPOSITS

Whether or not a mineral occurrence becomes a mineable ore deposit depends on several factors. Among the most important factors are ore grade or the quality of mineralization, the proven tonnage or quantity of concentrated ore minerals, and the monetary value placed on each pound of ore. Other factors such as geographic accessibility, nearness to processing facilities and markets, and geologic occurrence of the ore mineral are strong determinants in making the decision to mine or not to mine.

The Schwartzwalder mine in Jefferson County, Colorado is a vein-type occurrence in a Precambrian crystalline terrane. On the surface, uranium mineralization is expressed by the occurrence of iron oxide staining and presence of secondary uranium minerals. Readings as high as 7000 cps (counts per second) were recorded on an exploration scintillometer at the surface. Pitchblende ores range from .17% to 58% U_3O_8 . For every foot of rock that has been core drilled, approximately 100 pounds of U_3O_8 has been discovered. The mine is currently 4430 feet deep, and several thousand feet of rock core has been drilled. In Vermont's Precambrian terrane, one sample collected at the surface (Okemo) shows a U_3O_8 analyses of 5300 ppm or approximately .5%. No core drilling has occurred which would test the quality and quantity of uranium mineralization at depth.

In Colorado, Utah and Wyoming much of the uranium mineralization occurs in relatively soft, sedimentary sandstones. The ease of accessibility, the massive open pit mining methods, and the large tonnages of mineralized rock make it possible to consider grades as low as .05%. No comparable geologic occurrence exists in Vermont. The closest similarity might be the uranium mineralization in the Clarendon Springs dolomite. There has been insufficient exploration core drilling to determine either the grade or extent of mineralization in this geologic setting.

Generalized Uranium Occurrences by Town and County



A P P E N D I X B

Uranium Occurrence Localities

and

Analytical Data

BENNINGTON COUNTY (see page 9)

9. Snow Mountain, Winhall, VT (Grauch and Zarinski, 1976, Location Nos. 1a and 1b in their report):

$$U_3O_8 = 0.1\%$$

also Deposit No. 29 in Appendix C of McHone and Wagener, 1980:

$$U_3O_8 = 60 \text{ ppm}$$

also Deposit No. 30 in Appendix C of McHone and Wagener, 1980:

$$U_3O_8 = 72.5 \text{ ppm}$$

21. East Kansas occurrence, Sunderland, VT (McHone and Wagener, 1980, Deposit No. 31 in their Appendix C):

$$U_3O_8 = 158 \text{ ppm}$$

$$U_3O_8 = 1350 \text{ ppm}$$

23. Peru, VT (McHone and Wagener, 1980, Sample No. MHL 009 in their Appendix B):

$$U_3O_8 = 18 \text{ ppm}$$

CHITTENDEN COUNTY

4. Turgeon Farm (Dunham Dolomite, Clarendon Springs Formation (?)), Milton VT (Grauch and Zarinski, 1976, Location No. 2 in their report):

$$U_3O_8 = 0.018\%$$

also Lucius Pitkin, Inc., 1975, lab no. RD-43:

$$U_3O_8 = 0.04\%, eU_3O_8 = 0.07\%, ThO_2 = 9 \text{ ppm}$$

8. Near Milton, VT (McKeown, 1951, table 3):

$$eU(\%) = .022, \text{ Uranium } (\%) = .019 \text{ (highest \% of samples taken)}$$

FRANKLIN COUNTY

3. Roland Fortin Farm (Clarendon Springs Formation), Highgate Springs, VT (Lucius Pitkin, Inc., 1975, lab no. RD-41):

$$U_3O_8 = 317 \text{ ppm}, ThO_2 = 34 \text{ ppm}$$

also Rio Tinto Canadian Exploration, Ltd., 1972:

$$U_3O_8 = .46 \text{ lbs/ton (highest amount of samples taken)}$$

also Grauch and Zarinski, 1976, Location No. 4 in their report:

$$U = 0.032\%$$

10. Berkshire Copper Mine, Berkshire, VT (Grauch and Zarinski, 1976, Location No. 3 in their report): No analytical data available.

LAMOILLE COUNTY

1. Udall Mine, Wolcott, VT (U. S. Atomic Energy Commission, 1969, p. 113):

$$\%U_3O_8e = 0.06, \%U_3O_8c = 0.06$$

11. Eden, VT (Grauch and Zarinski, 1976, Location No. 5 in their report): No analytical data available.

con't

con't LAMOILLE COUNTY

12. Johnson Talc Mine, Johnson, VT (Grauch and Zarinski, 1976, Location No. 6 in their report): No analytical data available.

ORANGE COUNTY

13. East Braintree Arsenic Mine, East Braintree, VT (Grauch and Zarinski, 1976, Location No. 8 in their report): No analytical data available.
35. Chelsea, VT (McHone and Wagener, 1980, Sample No. MHL 029 in their Appendix B):
 $U_3O_8 = 3 \text{ ppm}$

RUTLAND COUNTY

7. Cuttingsville, VT, quartz-pyrite fracture filling associated with the syenite stock at or near Granite Hill (Anaconda Copper Co., 1978):
 $U_3O_8 = 25 \text{ ppm}, 27 \text{ ppm}, 53 \text{ ppm}, 45 \text{ ppm}$
 also McHone and Wagener, 1980, Sample Nos. MHL 021, 051, and 401 in their Appendix B:
 $U_3O_8 = 9 \text{ ppm}$, Sample No. MHL 201
 $U_3O_8 = 16 \text{ ppm}$, Sample No. MHL 051
 $U_3O_8 = 2 \text{ ppm}$, Sample No. MHL 401
14. Tweed River Mine, Sherburne Center, VT (Grauch and Zarinski, 1976, Location No. 10 in their report): No analytical data available.
15. Allen Mica Mine, Sherburne, VT (McHone and Wagener, 1980, Deposit No. 16 in their Appendix C):
 $U_3O_8 = 390 \text{ ppm}$
16. Uranium Prospect, Mt. Tabor, VT (near Devil's Den) (Grauch and Zarinski, 1976, Location No. 11 in their report): No analytical data available.
19. Castleton anomaly, Castleton, VT (McHone and Wagener, 1980, Deposit No. 15 in their Appendix C):
 $U_3O_8 = 150 \text{ ppm}$
 $U_3O_8 = 65 \text{ ppm}$
28. Clarendon, VT (McHone and Wagener, 1980, Sample No. MHL 022 in their Appendix B):
 $U_3O_8 = 3 \text{ ppm}$
29. Sherburne, VT (McHone and Wagener, 1980, Sample No. MHL 023 in their Appendix B):
 $U_3O_8 = 12 \text{ ppm}$
30. Mendon, VT (McHone and Wagener, 1980, Sample No. MHL 001 in their Appendix B):
 $Y_3O_8 = 14 \text{ ppm}$
31. Sherburne, VT (McHone and Wagener, 1980, Sample No. MHL 002 in their Appendix B):
 $U_3O_8 = 11 \text{ ppm}$

con't

con't RUTLAND COUNTY

32. Chittenden, VT (McHone and Wagener, 1980, Sample No. MHL 033 in their Appendix B):
 $U_3O_8 = 18 \text{ ppm}$
33. Proctor, VT (McHone and Wagener, 1980, Sample No. MHL 066 in their Appendix B):
 $U_3O_8 = 6 \text{ ppm}$
34. Brandon, VT (McHone and Wagener, 1980, Sample No. MHL 034 in their Appendix B):
 $U_3O_8 = 16 \text{ ppm}$
36. Fair Haven, VT (McHone and Wagener, 1980, Sample No. MHL 058 in their Appendix B):
 $U_3O_8 = 3 \text{ ppm}$
37. Poultney, VT (McHone and Wagener, 1980, Sample No. MHL 075 in their Appendix B):
 $U_3O_8 = 1 \text{ ppm}$

WINDHAM COUNTY (see page 9)

2. College Hill, Jamaica, VT (Mariano, 1978, p. 14):
 $Th \text{ ppma} = \angle 0.02$, $Th \text{ ppmw} = \angle 0.2$, $U \text{ ppma} = \angle 0.02$, $U \text{ ppmw} = \angle 0$.

also Appendix C of McHone and Wagener, 1980 (includes two red cross-hatched areas just east and west of Jamaica), their Deposit Nos. 32-36:

$U_3O_8 = 578 \text{ ppm}$, Deposit No. 32	} The Pinnacle
$U_3O_8 = 325 \text{ ppm}$, Deposit No. 32	
$U_3O_8 = 710 \text{ ppm}$, Deposit No. 32	
$U_3O_8 = 403 \text{ ppm}$, Deposit No. 33	
$U_3O_8 = 42 \text{ ppm}$, Deposit No. 34	} Little Turkey Mtn.
$U_3O_8 = 41 \text{ ppm}$, Deposit No. 34	
$U_3O_8 = 5 \text{ ppm}$, Deposit No. 34	
$U_3O_8 = 19 \text{ ppm}$, Deposit No. 34	
$U_3O_8 = 255 \text{ ppm}$, Deposit No. 35	} East Jamaica
$U_3O_8 = 295 \text{ ppm}$, Deposit No. 35	
$U_3O_8 = 36 \text{ ppm}$, Deposit No. 36	} Wardsboro Brook

22. West Jamaica occurrence, Jamaica, VT (McHone and Wagener, 1980, Deposit No. 37 in their Appendix C):
 $U_3O_8 = 21 \text{ ppm}$

WINDSOR COUNTY

5. Okemo Mountain area, Ludlow, VT (Skyline Lab report, 1980):
 U-assay (%): Grant Brook, elev. 2040' = .075 and .06,
 top of Okemo Mtn. east of fire tower = .397

also Appendix C of McHone and Wagener, 1980 (includes all points in red cross-hatched area just west of Ludlow), their Deposit Nos. 17-27:

U_3O_8 = 210 ppm, Deposit No. 17

U_3O_8 = 300 ppm, Deposit No. 18

U_3O_8 = 124 ppm, Deposit No. 19

U_3O_8 = 325 ppm, Deposit No. 20

U_3O_8 = 1540 ppm, Deposit No. 21

U_3O_8 = 805 ppm, Deposit No. 21

U_3O_8 = 137 ppm, Deposit No. 22

U_3O_8 = 5300 ppm, Deposit No. 23

U_3O_8 = 47 ppm, Deposit No. 23

U_3O_8 = 230 ppm, Deposit No. 24

U_3O_8 = 188 ppm, Deposit No. 25

U_3O_8 = 342 ppm, Deposit No. 25

U_3O_8 = 214 ppm, Deposit No. 25

U_3O_8 = 318 ppm, Deposit No. 25

U_3O_8 = 525 ppm, Deposit No. 26

U_3O_8 = 313 ppm, Deposit No. 26

U_3O_8 = 10 ppm, Deposit No. 26

U_3O_8 = 360 ppm, Deposit No. 26

U_3O_8 = 93 ppm, Deposit No. 26

U_3O_8 = 460 ppm, Deposit No. 27

6. Weston, VT (Mt. Holly Complex) (Canadian Dept. of Mines, 1969):

U_3O_8 = 0.53%, ThO_2 = 13.8%

17. Chester Mica Prospect, Chester, VT (Grauch and Zarinski, 1976, Location No. 12 in their report): No analytical data available.

18. Soapstone Quarry, Ludlow, VT (Grauch and Zarinski, 1976, Location No. 13 in their report): No analytical data available.

20. Perkinsville anomaly, Weathersfield, VT (McHone and Wagener, 1980, Deposit No. 28 in their Appendix C):

U_3O_8 = 27.5 ppm

con't WINDSOR COUNTY

24. Chester, VT (McHone and Wagener, 1980, Sample No. MHL 012 in their Appendix B):
 $U_3O_8 = 9$ ppm
25. Chester, VT (McHone and Wagener, 1980, Sample No. MHL 013 in their Appendix B):
 $U_3O_8 = 4$ ppm
26. Windsor, VT (McHone and Wagener, 1980, Sample Nos. MHL 068-071 in their Appendix B):
 $U_3O_8 = 3$ ppm, Sample No. MHL 068
 $U_3O_8 = 4$ ppm, Sample No. MHL 069
 $U_3O_8 = 7$ ppm, Sample No. MHL 070
 $U_3O_8 = 1$ ppm, Sample No. MHL 071
27. Weston, VT (McHone and Wagener, 1980, Sample No. MHL 406 in their Appendix B):
 $U_3O_8 = 19$ ppm

BENNINGTON COUNTY

38. Searsburg, VT (Field and Truesdell, 1980, this figure is the highest of 7 in the immediate area of point 28; information from their Appendix B and Plate 9):
 $U_3O_8 = 128 \text{ ppm}$
39. Searsburg, VT (Field and Truesdell, 1980, this figure is the highest of 14 in the immediate area of point 29; information from their Appendix B and Plate 9):
 $U_3O_8 = 96 \text{ ppm}$
40. Woodford, VT (Field and Truesdell, 1980, this figure is the highest of 4 in the immediate area of point 30; information from their Appendix B and Plate 9):
 $U_3O_8 = 39 \text{ ppm}$
41. Woodford, VT (Field and Truesdell, 1980, this figure is the highest of 15 in the immediate area of point 31; information from their Appendix B and Plate 9):
 $U_3O_8 = 3,217 \text{ ppm}$
42. Pownal, VT (Field and Truesdell, 1980, this figure is the highest of 2 in the immediate area of point 32; information from their Appendix B and Plate 9):
 $U_3O_8 = 5.5 \text{ ppm}$

WINDHAM COUNTY

43. Wilmington, VT (Field & Truesdell, 1980, Sample No. MHG 092, from Appendix B and Plate 5 in their report):
 $U_3O_8 = \angle 1 \text{ ppm}$
44. Dummerston, VT (Field and Truesdell, 1980, Sample No. MHG 250, from Appendix B and Plate 5 in their report):
 $U_3O_8 = 3.1 \text{ ppm}$
45. Somerset, VT (Field and Truesdell, 1980, this figure is the highest of 2 in the immediate area of point 35; information from their Appendix B and Plate 9):
 $U_3O_8 = 17 \text{ ppm}$

- Anaconda Copper Co., 1978, report made available to the State Geologist from Anaconda Copper Co., report available at the State Geologist's Office, Montpelier, VT.
- Canadian Dept. of Mines (analyzed by), 1969, Laboratory and Research Branch, Ontario, Canada, report available at the State Geologist's Office, Montpelier, VT.
- Cook, J. R., 1981, "Albany 1°x2° NTMS area, Connecticut, New Hampshire, Massachusetts, New York, and Vermont--Supplemental Data Report--National Uranium Resource Evaluation Program, Hydrogeochemical and Stream Sediment Reconnaissance (DPST-79-146-10S)(GJBX-107-81)": E. I. DuPont de Nemours, Savannah River Laboratory, Aiken, SC, for U.S.D.O.E. contract DE-AC09-76SR00001, 17 p.
- Cook, J. R., 1981, "Glens Falls 1°x2° NTMS area, New Hampshire, New York, and Vermont--Supplemental Data Report--National Uranium Resource Evaluation Program, Hydrogeochemical and Stream Sediment Reconnaissance (DPST-79-146-3S)(GJBX-70-81)": E. I. DuPont de Nemours, Savannah River Laboratory, Aiken, SC, for U.S.D.O.E. contract DE-AC09-76SR00001, 17 p.
- Cook, J. R., 1981, "Lake Champlain 1°x2° NTMS area, New York, Vermont and New Hampshire--Data Report (Abbreviated)--National Uranium Resource Evaluation Program, Hydrogeochemical and Stream Sediment Reconnaissance (DPST-81-146-2)(GJBX-108-81)": E. I. DuPont de Nemours, Savannah River Laboratory, Aiken, SC, for U.S.D.O.E. contract DE-AC09-76SR00001, 17 p.
- Cook, J. R. and Koller, G. R., 1980, "Lewiston 1°x2° NTMS area, Maine, New Hampshire, and Vermont--Data Report (abbreviated)--National Uranium Resource Evaluation Program, Hydrogeochemical and Stream Sediment Reconnaissance (DPST-80-146-18)(GJBX-14-81)": E. I. DuPont de Nemours, Savannah River Laboratory, Aiken, SC, for U.S.D.O.E. contract DE-AC09-76SR00001, 17 p.
- Field, M. T. and Truesdell, D. B., 1980, "Uranium resource evaluation, Albany quadrangle, Massachusetts, New York, Connecticut, Vermont and New Hampshire (preliminary report)": Work performed under Bendix Field Engineering Corp., Grand Junction Operations, Contract no. DE-AC13-76GJ01664, prepared for the U. S. Department of Energy, Grand Junction, CO.
- Grauch, R. I. and Zarinski, Katrin, 1976, "Generalized descriptions of uranium-bearing veins, pegmatites, and disseminations in non-sedimentary rocks, eastern United States": U. S. Geological Survey, open-file report no. 76-582.
- Jones, P. L. and Price, Van, 1979, "Orientation study data release VII, Wolcott, Vermont area--National Resource Evaluation Program, Hydrogeochemical and Stream Sediment Reconnaissance (DPST-78-141-2)(GJBX-43-79)": E. I. DuPont de Nemours, Savannah River Laboratory, Aiken, SC, for U.S.D.O.E. contract AT(07-2)-1, 28 p.
- Koller, G. R., 1979, "Albany 1°x2° NTMS area, Connecticut, Massachusetts, New Hampshire, New York, and Vermont--Data Report--National Uranium Resource Evaluation Program, Hydrogeochemical and Stream Sediment Reconnaissance (DPST-79-146-10)(GJBX-140-79)": E. I. DuPont de Nemours, Savannah River Laboratory, Aiken, SC, for U.S.D.O.E. contract AT(07-2)-1, 143 p.

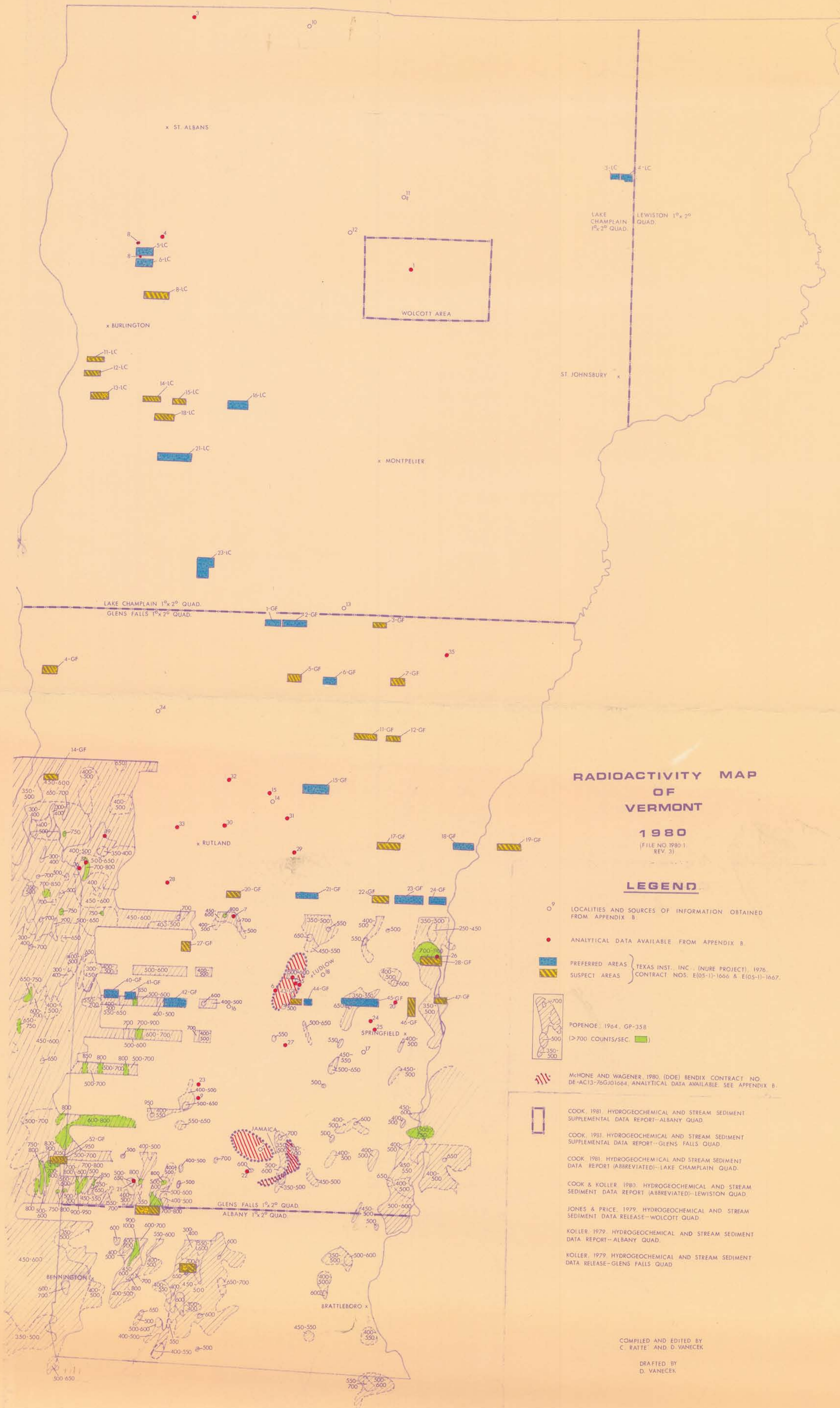
- Koller, G. R., 1979, "Glens Falls 1°x2° NTMS area, New Hampshire, New York, and Vermont--Data Release--National Uranium Resource Evaluation Program, Hydrogeochemical and Stream Sediment Reconnaissance (DPST-79-146-3)(GJBX-44-79)": E. I. DuPont de Nemours, Savannah River Laboratory, Aiken, SC, for U.S.D.O.E. contract AT(07-2)-1, 54 p.
- Lucius Pitkin, Inc., Petrographic-Mineralogical Laboratory (petrographic report for ERDA), 1975, lab no. RD-41, report available at the State Geologist's Office, Montpelier, VT.
- Lucius Pitkin, Inc., Petrographic-Mineralogical Laboratory (Petrographic report for ERDA), 1975, lab no. RD-43, report available at the State Geologist's Office, Montpelier, VT.
- Mariano, A. N., 1978, "Investigation of a radioactive anomaly in metamorphic rocks from College Hill near Jamaica, Vermont": The North American Coal Corp., Bismark, ND, 20 p., report available at the State Geologist's Office, Montpelier, VT.
- McHone, J. G. and Wagener, H. D., 1980, "Uranium resource evaluation, Glens Falls quadrangle, New York, Vermont and New Hampshire": Work performed under Bendix Field Engineering Corp., Grand Junction Operations, Subcontract No. 78-115-S, and Bendix Contract No. DE-AC13-76GJ01664, prepared for the U. S. Department of Energy, Grand Junction, CO.
- McKeown, F. A., 1951, "Reconnaissance of radioactive rocks of Vermont, New Hampshire, Connecticut, Rhode Island, and southeastern New York": U. S. Atomic Energy Commission, TEI-67.
- Popenoe, Peter, 1964, "Aeroradioactivity of parts of east-central New York and west-central New England": U. S. Geological Survey, Geophysical Investigations Map, GP-358.
- Rio Tinto Canadian Exploration, Ltd., 1972, report available at the State Geologist's Office, Montpelier, VT.
- Skyline Labs, Wheat Ridge Co., 1980, analyzed by Sklyine Labs for Vermont State Geologist, Okemo Forest and Mineral Assessment Program, report available at the State Geologist's Office, Montpelier, VT.
- Texas Instruments, Inc., 1976, "Airborne geophysical survey of a portion of New England": Prepared for the U. S. Energy Research and Development Administration, Grand Junction Office, contract Numbers E(05-1)-1666 and E(05-1)-1667.
- U. S. Atomic Energy Commission, Division of Raw Materials and U. S. Geological Survey, 1969, "Preliminary reconnaissance for uranium in Connecticut, Maine, Massachusetts, New Jersey, New York, and Vermont, 1950-1959 (Udall Mine)": RME-4106, TIC UC-51, 129 p.
- White, W. S., Eric, J. H., and Amsden, T. W., 1946, "Preliminary geologic report on the Udall Mine, Wolcott, Lamoille County, Vermont": U. S. Geological Survey, REPORT NOT AVAILABLE--WITHDRAWN.

ALBANY 15-20 QUAD

OVERLAY - APPENDIX NO. 1
RADIOACTIVITY MAP OF
VERMONT

FIELD + TRUEDELL, 1980, URANIUM
RESOURCE EVALUATION - ALBANY QUAD





RADIOACTIVITY MAP OF VERMONT

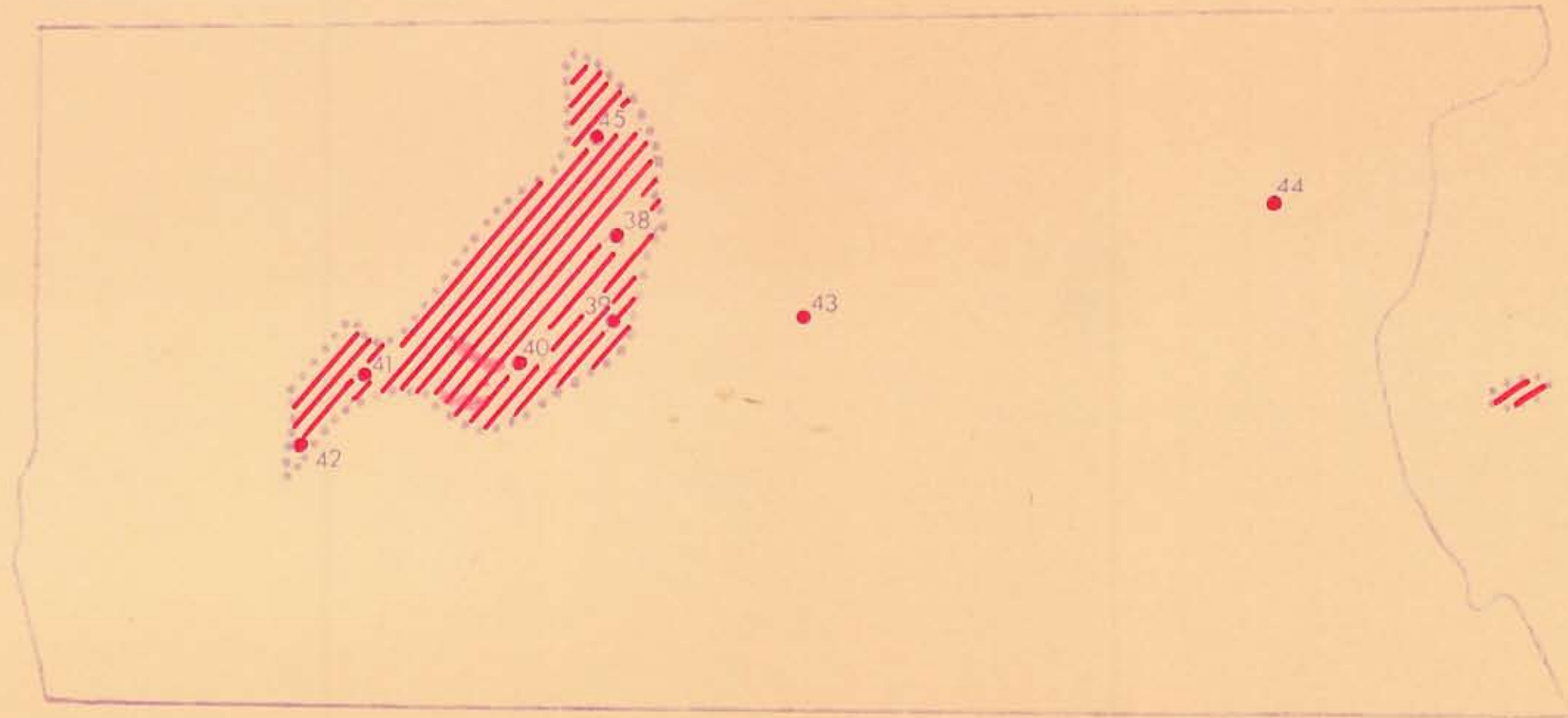
1980
(FILE NO. 1980-1)
REV. 3)

LEGEND

- LOCALITIES AND SOURCES OF INFORMATION OBTAINED FROM APPENDIX B.
- ANALYTICAL DATA AVAILABLE FROM APPENDIX B.
- PREFERRED AREAS
- SUSPECT AREAS
- POPOIE 1964, GP-358
- COOK, 1981, HYDROGEOCHEMICAL AND STREAM SEDIMENT SUPPLEMENTAL DATA REPORT-ALBANY QUAD.
- COOK, 1981, HYDROGEOCHEMICAL AND STREAM SEDIMENT SUPPLEMENTAL DATA REPORT-GLENS FALLS QUAD.
- COOK, 1981, HYDROGEOCHEMICAL AND STREAM SEDIMENT DATA REPORT (ABBREVIATED)-LAKE CHAMPLAIN QUAD.
- COOK & KOLLER, 1980, HYDROGEOCHEMICAL AND STREAM SEDIMENT DATA REPORT (ABBREVIATED)-LEWISTON QUAD.
- JONES & PRICE, 1979, HYDROGEOCHEMICAL AND STREAM SEDIMENT DATA RELEASE-WOLCOTT QUAD.
- KOLLER, 1979, HYDROGEOCHEMICAL AND STREAM SEDIMENT DATA REPORT-ALBANY QUAD.
- KOLLER, 1979, HYDROGEOCHEMICAL AND STREAM SEDIMENT DATA RELEASE-GLENS FALLS QUAD.

COMPILED AND EDITED BY
C. RATTE AND D. VANECEK

DRAFTED BY
D. VANECEK



OVERLAY ADDENDUM TO
RADIOACTIVITY MAP OF
VERMONT



FIELD + TRUESDELL, 1980, URANIUM
RESOURCE EVALUATION -- ALBANY QUAD