

APPENDIX A. URANIUM OCCURRENCES IN THE PORTLAND QUADRANGLE

no.	Name	Location	Host Rock Formation/Member	Deposit Class	Production ¹	Reference
1	Ruggles Mine	43 ⁰ 35'24"N, 071 ⁰ 59'40"W	NH Plutonic Seri 3/2-mica pegmatite	Pegmatitic		This report
2	Orange	43 ⁰ 37'28"N, 071 ⁰ 58'14"W	NH Plutonic Series/ Pegmatite	Pegmatitic	a	This report
3	Grafton	43 ⁰ 33'37"N, 071 ⁰ 57'08"W	Concord Granite/Garnet pegmatite	Pegmatitic	a	This report
4	Fogg Hill	43 ⁰ 31'00"N, 071 ⁰ 57'20"W	NH Plutonic Series/2-mica granite	Orthomagmatic	c a	This report
5	Horseshoe Pond	43 ⁰ 26'11"N, 071 ⁰ 48'21"W	Warner Fm.	Vein-type in meta.rock	a	This report
6	Gunstock Hill Rd.	43 ⁰ 32'35"N, 071 ⁰ 25'10"W	Littleton Fm.	Vein-type in meta.rock	a	This report
7	Walnut Hill	43 ⁰ 04'45"N, 071 ⁰ 19'00"W	Concord Granite/2-mica granite	Orthomagmatic	c a	This report
8	Ayers Pond	43 ⁰ 15'17"N, 071 ⁰ 00'47"W	Quartz diorite/Pegmatite	Pegmatitic	a	This report
9	New Durham Ridge	43 ⁰ 24'22"N, 071 ⁰ 07'30"W	NH series pegmatite/ Grantoid-pegmatoid facies	Pegmatitic	a	This renort
10	Alton	43 ⁰ 28'25"N, 071 ⁰ 13'35"W	NH series pegmatite/ Grantoid-pegmatoid facies	Pegmatitic	a	This report
11	North Wakefield	43 ⁰ 37'40"N, 071 ⁰ 03'44"W	Winnipesaukee Pluton/ 2-mica granite	Orthomagmatic	a a	This report
12	Province Lake	43°40'09"N, 071°00'34"W	Winnipesaukee Pluton/ 2-mica granite	Orthomagmatic	a a	This report
13	Hatch Molybdenum Prospect	43 ⁰ 39'93"N, 070 ⁰ 52'13"W	Biotite granodiorite	Magmatic- hydrothermal	a	This report



occurrence no.	Name	Location	Host Rock Formation/Member	Denosit Class	Production ¹	Reference
14	Newfield	43°33'55"N, 070°50'46"H	Granitoid rocks	Magmatic- hydrotherm31		This report
15	Symmes Pond	43 ⁰ 38'46"N, 070 ⁰ 52'29"W	Conway granite/ aplitic dike	Pegmatitic	a	This report
16	North Shapleigh	43 ⁰ 36'23"N, 070 ⁰ 53'37"W	Undifferentiated alkalic rock/trachyte dikes	Magmatic- hydrothermal	a	This report
17	Emery's Corner	43 ⁰ 43'04"N, 070 ⁰ 45'38"W	Biotite granite	Orthomagmati	c a	This report
18	East Freedom	47°30'07"N, 070°59'45"W	Winnipesaukee Pluton/ 2-mica granite	Orthomagmati		This report
19	Ossipee Valley	43 ⁰ 47'56"N, 071 ⁰ 11'10"W	Winnipesaukee Pluton/ 2-mica granite	Orthomagmati	c a	This report
20	Drake's Brook	43 ⁰ 56'10"N, 071 ⁰ 31'00"W	White Mountain Magma Series (WMMS)/Conway Granite	Orthomagmati	c a	This report
21	Acteon Ridge	43°55'12"N, 071°32'22"W	WMMS/Conway granite	Orthomagmati	c a	This report
22	Welch Mountain	43 ⁰ 54'50"N, 071 ⁰ 34'35"W	WMMS/Conway granite toplite	Orthomagmatic		This report
23	Dickey Notch	43 ⁰ 54'50"N, 071 ⁰ 35'42"W	WMMS/Conway granite	Orthomagmatic		This report
24	Woodstock	43 ⁰ 59'54"N, 071 ⁰ 40'71"W	Littleton Fm./Pegmatite	Pegmatitic		Moke, 1946
25	Hancock Hairpin	44 ⁰ 02'42"N, 071 ⁰ 31'12"W	WMMS/Conway granite	Magmatic- hydrothermal		This report
26	Graham Wangan	44 ⁰ 02'42"N, 071 ⁰ 31'12"W	WMMS/Conway granite	Manmatic- hydrothermal	a	This report
27 '	Mad River	43 ⁰ 59'09"N, 071 ⁰ 29'52"W	WMMS/Conway granite	Orthomagmatic	c a	This report

occurrence no.	Name	Location	Host Rock Formation/Member	Deposit Class	roduction 1	Reference
23	Flume Trail	43 ⁰ 59'03"N, 071 ⁰ 29'52"W	WMMS/Conway Granite	Orthomagmatic		This report
29	Rob Brook	44 ⁰ 00'55"N, 071 ⁰ 21'20"W	WMMS/Conway Granite	Orthomagmatic		This report
30	Potash Mountain	43 ⁰ 59'00"N, 071 ⁰ 23'19"W	WMMS/Conway Granite	Orthomagmatic		This report
31	Passaconaway	43 ⁰ 59'26"N, 071 ⁰ 20'10"W	WMMS/Conway Granite	Orthomagmatic		This report
32	Champney Falls Trail	43 ^o 59'08"N, 071 ^o 17'33"W	WMMS/Conway Granite	Orthomagmatic		This report
33	Oliverian Brook Trail	43 ⁰ 57'15"N, 071 ⁰ 21'03"W	WMMS/Conway Granite	Orthomagmatic	a	This report
34	Mt. Osceola No.2	43 ⁰ 57'11"N, 071 ⁰ 18'28"W	WMMS/Conway Granite	Orthomagmatic	a	This report
35	Wonalancet Stock	43 ⁰ 55'25"N, 071 ⁰ 22'00"W	WMMS/Conway Granite	Orthomagmatic	a	Smith and others, 1939
36	Mt. Osceola No.1	43 ⁰ 55'57"N, 071 ⁰ 18'30"W	WMMS/Mt. Osceola Granite	Orthomanmatic		This report
37	Wonalancet	43 ⁰ 54'35"N, 071 ⁰ 19'51"W	WMMS/Conway Granite	Orthomagmatic	a	Smith and others, 1939
38	Lower Falls	44 ⁰ 00'55"N, 071 ⁰ 14'49"W	WMMS/Albany Syenite	Authigenic		This report
39	Nickerson Ledge	43 ⁰ 56'00"N, 071 ⁰ 14'35"W	HMMS/Conway Granite	Orthomagmatic		This report
40	Band M Ledge	43 ⁰ 57'13"N, 071 ⁰ 09'45"W	WMMS/Conway Granite	Orthomagmatic		This report
41	Chase Hill	43 ⁰ 58'24"N, 071 ⁰ 09'08"W	WMMS/2-mica Granite	Orthomagmatic		This report
42	Conway	44 ⁰ 00'09"N, 071 ⁰ 06'38"H	WMMS/Conway Granite	Magmatic- hydrothermal		Wilson, 1969

See footnote at end of table, p. A-6.

no.	Name	Location	Host Rock Formation/Member	Deposit Class	Production ¹	Reference
43	Redstone Quarry Core	44°01'10"N, 071°05'51"N	WMMS/Conway Granite	Orthomagmati		This report
44	Starks Mountain	44 ⁰ 00'28"N, 070 ⁰ 59'15"W	Sebago Lake Pluton/ 2-mica granite	Pegmatitic	a	This report
45	Haley Pond	43 ⁰ 59'14"N, 070 ⁰ 59'10"W	WMMS/Conway Granite	Pegmatitic	a	This report
46	Burnt Meadow Mountain No. 1	43 ⁰ 54'31"N, 070 ⁰ 53'08"W	Meta. rock /Pegmatite	Pegmatitic	a	This report
47	Great Falls	43 ⁰ 51'09"N, 070 ⁰ 47'50"W	Rindgemere Fm./Pegmatite	Pegmatitic	a	This report
48	Pleasant Mountain Creek	44 ^o 02'06"N, 070 ^o 50'46"W	Sebago Lake Pluton/ 2-mica granite	Pegmatitic		This report
49	Pleasant Mountain East No. 1	44°02'48"N, 070°48'48"W	Sebago Lake Fluton/ 2-mica granite	Pegmatitic	a	This report
50	Pleasant Mountain East No. 2	44 ⁰ 02'20"N, 070 ⁰ 48'12"W	Sebago Lake Pluton/ 2-mica granite	Pegmatitic	a	This report
51	East Denmark	43 ⁰ 59'16"N, 070 ⁰ 46'40"W	Sebago Lake Pluton/ 2-mica granite	Pegmatitic	a	This report
52	Perley Pond	43 ⁰ 57'44"N, 070 ⁰ 44'17"W	Sebago Lake Pluton/ 2-mica granite	Pegmatitic	a	This report
53	Peabody Pond	43 ⁰ 55'42"N, 070 ⁰ 41'38"N	Sebago Lake Pluton/ 2-mica granite	Pegmatitic	a	This report
54	Sebago	43 ⁰ 54'08"N, 0/0 ⁰ 42'23"W	Sebago Lake Pluton/Aplite in 2-mica granite	Pegmatitic	a	This report
55	Ward's Cove	43 ⁰ 49'47"N, 070 ⁰ 36'18"W	Sebago Lake Pluton/2-mica granite and pegmatite	Pegmatitic	a	This report

ccurrence no.	Name	Location	Host Rock Formation/Member	Deposit Class	Production ¹	Reference
56	Rich Mill Pond	43 ⁰ 48'18"N, 07C ⁰ 34'05"W	Sebago Lake Pluton/ 2-mica granite	Pegmatitic		This report
57	Mast Cove	43 ⁰ 59'14"N, 070 ⁰ 38'46"W	Sebago Lake Pluton/ 2-mica granite	Pegmatitic	a	This report
58	Randall Hill	44 ⁰ 01'20"N, 070 ⁰ 37'03"W	Sebago Lake Pluton/ Biotite granite	Pegmatitic	a	This report
59	Parker Pund	43 ⁰ 59'56"N, 070 ⁰ 31'10"W	Sebago Lake Pluton/ 2-mica granite	Pegmatitic	a	This report
60	Thompson Lake	44 ⁰ 01'10"N, 070 ⁰ 29'13"W	Sebago Lake Pluton/ 2-mica granite	Pegmatitic	a	This report
61	Black Cat Mountain	44 ⁰ 00'28"N, 070 ⁰ 25'13"W	Sebago Lake Pluton/ 2-mica granite	Pegmatitic	a	This report
62	East Raymond	43 ⁰ 55'53"N, 070 ⁰ 26'31"W	Sebago Lake Pluton/ 2-mica granite	Pegmatitic	a	This report
63	Suckerville	43 ⁰ 55'17"N, 070 ⁰ 23'30"W	Sebago Lake Pluton/ Pegmatoid facie of 2-mica granite	Pegmatitic	a	This report
64	Pownal	43 ⁰ 54'15"N, 070 ⁶ 12'20"W	Berwick Fm./Pegmatite	Pegmatitic	a	This report
65	Tryon Mountain	43 ⁰ 54'34"N, 070 ⁰ 11'42"W	2-mica granite/granitoid- pegmatoid facies	Pagmatitic		This report
66	Pownal Center	43 ⁰ 53'54"N, 070 ⁰ 09'36"W	Berwick Fm./Pegmatite	Pegmatitic	a	This report
67	1-95	43°53'53"N, 070°04'43"M	Berwick Fm./Pegmatite	Pegmatitic		This report

See footnote at end of table, p. A-6.

Occurrence no.	Name	Location	Host Rock Formation/Member	Deposit Class	Production ¹	Reference
63	Route 1	43 ^o 53'49"N, 070 ^o 04'03"W	Berwick Fm./Pegmatite	Pegmatitic	a	This report
69	Growstown	43 ⁰ 53'51"N, 070 ⁰ 00'00"W	Cushing/Pegmatite	Pegmatitic	a	This report
70	Flying Point Rd.	43 ⁰ 51'01"N, 070 ⁰ 02'12"W	Cushing Fm./Pegmatite	Pogmatitic	a	This report
71	Hunter Road	43 ⁰ 51'51"N, 070 ⁰ 09'51"W	Berwick Fm./Pegmatite	Pegmatitic	a	This report
72	Hodson Road	43 ⁰ 52'29"N, 070 ⁰ 11'55"W	Berwick Fm./Pegmatite	Pegmatitic	a	This report
73	The Ledges	43 ⁰ 50'37"N, 070 ⁰ 10'35"W	Berwick Fm./Pegmatite	Pegmatitic	a	This report
74	Hadlock Road	43 ⁰ 45'55"N, 070 ⁰ 18'00"W	2-mica granite	Pegmatitic	a	This report
75	Pleasant Hill	43 ⁰ 42'19"N, 070 ⁰ 15'23"W	Berwick Fm./Pegmatite	Pegmatitic	a	This report

¹ Production cotegories: a. 0-20,000 lb. U₃0₈

APPENDIX B. TABLE OF CHEMICAL ANALYSES, MHM ROCK SAMPLES (IN PPM1)

Sample Number								
(MHM)	001	002	003	004	005	006	007	008
U308 (F1 ²)	5	150	103	31	6	28	110	11
AG	< 10	< 10	< 10	< 10	< 10	10	< 10	< 10
AL	70,000	60,000	70,000	70,000	70,000	70,000	70,000	70,000
AS	< 200	< 200	< 200	< 200	< 200	200	< 200	< 200
В	< 10	< 10	< 10	<10	10	10	< 10	< 10
ВА	500	< 20	150	150	700	150	100	1,000
BE	30	150	20	30	15	30	20	7
CA	7,000	3,000	15,000	5,000	7,000	5,000	15,000	10,000
СО	< 10	< 10	< 10	< 10	< 10	< 10	< 10	10
CR	20	10	20	10	20	10	10	30
CU	7	< 10	5	< 10	10	< 10	< 10	5
FE.	10,000	7,000	30,000	15,000	10,000	15,000	30,000	20,000
LA	50	< 20	150	200	100	300	500	300
LI	< 10	< 10	200	100	100	< 10	. 100	< 10
MN	300	3,000	500	150	300	500	700	700
MO	< 10	< 10	50	5	< 10	5	< 10	<10
NA	30,000	20,000	30,000	40,000	30,000	30,000	30,000	30,000
NB	< 20	< 20	150	150	< 20	70	300	< 20
NI	7	10	15	7	10	10	7	15
PB	100	50	70	100	70	70	100	150
SB	< 100	< 100	< 100	< 100	< 100	< 100	< 100	< 100
SC	< 10	< 10	< 10	< 10	5	< 10	<10	5
SN	15	10	300	15	10	30	70	10

APPENDIX B. (CONTINUED)

Sample Numb (MHM)	oer 001	002	003	004	005	006	007	008
SR	300	<100	<100	<100	300	< 100	< 100	700
TI	1,000	100	2,000	1,000	2,000	1,000	1,500	3,000
٧	10	<10	<10	< 10	30	<10	<10	70
W	<100	<100	< 100	<100	≺100	<100	<100	< 100
Y	10	20	300	200	10	- 70	700	30
ZN	300	∠ 200	300	< 200	< 200	< 200	300	< 200
ZR	50	70	70	1,000	200	200	700	700

PORTLAND

APPENDIX B. TABLE OF CHEMICAL ANALYSES, MHM ROCK SAMPLES (IN PPM1)

Sample Number (MHM)	009	010	011	012	013	014	015	016
U308 (F1 ²)	6	13	17	12	1	20	23	15
AG	< 10	< 10	< 10	<10	< 10	< 10	<10	< 10
AL	70,000	60,000	70,000	60,000	70,000	70,000	70,000	70,000
AS	< 200	< 200	< 200	< 200	< 200	< 200	< 200	< 200
В	< 10	<10	< 10	< 10	< 10	< 10	< 10	< 10
ВА	700	150	70	150	200	20	50	50
BE	7	30	20	7	3	15	20	10
CA	10,000	3,000	2,000	1,500	30,000	1,500	3,000	3,000
СО	< 10	< 10	< 10	< 10	5	< 10	< 10	< 10
CR	10	10	10	10	30	10	< 10	< 10
CU	< 10	< 10	< 10	<10	5	< 10	< 10	< 10
FE	20,000	15,000	15,000	7,000	15,000	15,000	7,000	10,000
LA	200	200	300	150	150	300	70	70
LI	< 10	< 10	< 10	< 10	200	< 10	100	< 10
MN	1,000	300	300	300	700	700	150	70
MO	< 10	< 10	< 10	< 10	<10	< 10	< 10	< 10
NA	30,000	30,000	40,000	30,000	40,000	30,000	30,000	40,000
NB	50	30	70	10	< 20	30	< 20	10
NI	7	10	7	7	7	10	5	5
РВ	70	70	70	70	30	70	50	30
SB	< 100	< 100	< 100	< 100	< 100	< 100	< 100	< 100
SC .	< 10	< 10	< 10	< 10	15	< 10	< 10	< 10
SN	10	10	10	10	- 10	15	20	< 10

APPENDIX B. (CONTINUED)

Sample Number (MHM)	009	010	011	012	013	014	015	016
SR	300	< 100	< 100	< 100	500	< 100	< 100	< 100
TI	3,000	1,000	1,500	500	5,000	1,500	700	700
٧	15	<10	< 10	<10	50	< 10	< 10	< 10
W	< 100	< 100	< 100	< 100	< 100	< 100	< 100	< 100
Υ	70	30	70	10	70	70	70	50
ZN	< 200	< 200	< 200	< 200	< 200	< 200	< 200	< 200
ZR	150	300	700	100	300	300	500	200

APPENDIX B. (CONTINUED)

ample Number (MHM)	017	018	019	020	021	022	023	024
U308 (F1 ²)	14	30	25	18	16	14	13	7
AG	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
AL	70,000	70,000	70,000	70,000	70,000	70,000	70,000	70,000
AS	< 200	< 200	< 200	< 200	< 200	< 200	< 200	< 200
В	< 10	< 10	< 10	< 10	<10	< 10	<10	< 10
ВА	20	70	20	20	70	< 20	300	70
BE	20	7	7	10	. 15	7	5	5
CA	3,000	2,000	1,500	3,000	5,000	2,000	5,000	2,000
СО	<10	< 10	< 10	< 10	< 10	<10	< 10	< 10
CR	<10	< 10	< 10	< 10	< 10	<10	< 10	< 10
CU	< 10	< 10	< 10	< 10	< 10	< 10	5	< 10
FE	10,000	15,000	15,000	15,000	15,000	15,000	20,000	15,000
LA	100	70	70	100	200	100	300	70
LI	100	200	100	< 10	< 10	100	< 10	<10
MN	200	200	300	300	500	300	300	200
MO	< 10	< 10	< 10	< 10	70	< 10	<10	< 10
NA	30,000	30,000	30,000	30,000	40,000	30,000	30,000	30,000
NB	30	30	70	30	50	30	20	10
NI	7	5	5	7	7	7	7	
РВ	70	70	70	70	70	70	70	70
SB	< 100	<100	< 100				< 100	< 100
SC	<10	<10	< 10	<10	< 10	< 10	< 10	< 10
SN	< 10	10	< 10	10	10	< 10	20	< 10

APPENDIX B. (CONTINUED)

Sample Number (MHM)	017	018	019	020	021	022	023	024
SR	< 100	< 100	< 100	< 100	< 100	< 100	< 100	< 100
TI	700	500	700	500	1,000	700	1,500	1,000
٧	< 10	<10	< 10	< 10	< 10	< 10	< 10	< 10
W	< 100	<100	< 100	< 100	< 100	< 100	< 100	< 100
Y	100	70	70	70	150	70	70	30
ZN	< 200	< 200	< 200	< 200	< 200	< 200	< 200	< 200
ZR	500	70	150	150	300	100	200	300

APPENDIX B. (CONTINUED)

Sample Number (MHM)	025	026	027	028	029	030	031	032
U308 (F1 ²)	13	27	3	130	4.7	3	50	50
AG	< 10	N	N	L	N	N	L	1
AL	70,000	70,000		60,000				
AS	< 200	N	N	N	N	N	N	, oo
В	< 10	N	N	N	10	N	200	۸
ВА	200	1,000	700	20	20	100	50	700
BE	5	20	30	30	30	50	50	70
CA	5,000	7,000	7,000	2,000		3,000		10,000
СО	< 10	N	N	N	N	N	N	N
CR	< 10	10	10	10	10	10	10	10
CU	< 10	N	N	30	N	N	N	10
FE	20,000	10,000	10,000	70,000	2,000			
LA	100	150	100	N	100	50	N	100
LI	100	100	100	N	100	100	500	100
MN	200	200	200	500	300	500	500	200
MO	<10	N	N	N	N	N	N	N
NA	40,000	30,000	30,000	20,000	20,000	30,000	20,000	
NB	10	10		10	50	20	20	10
NI	7	N	N	N	N	N	N	N
РВ	70	70	70	70	50	50	50	100
SB	< 100	N	N	N	N	N	N	N
sc	< 10	5	5	N	15	N	15	N
SN	10	10	10	10	20	10	100	10
				B-7				

APPENDIX B. (CONTINUED)

Sample Number (MHM)	025	026	027	028	029	030	031	032
SR	< 100	200	100	100	100	100	100	300
TI	1,500	2,000	2,000	50	2,000	1,500	1,000	1,500
٧	< 10	10	10	N	15	10	N	10
W	< 100	N	N	N	N	N	N	N
Y	30	10	10	N	70	10	10	10
ZN	< 200	N	N	N	N	N	N	N
ZR	200	100	200	N	50	50	N	70

APPENDIX B. (CONTINUED)

Sample Number (MHM)	033	034	035	036	038	039	040	041
U308 (F1 ²)	10	850	125	9	6	41	26	65
AG	N	N	N	N	N	N	N	N
AL	70,000	70,000	70,000	70,000	70,000	70,000	70,000	70,000
AS	N	N	N	N	N	N	N	N
В	N	N	N	N	N	10	N	10
ВА	500	20	700	700	150	300	300	500
BE	50	150	20	30	70	150	150	150
CA	10,000	70,000	7,000	10,000	3,000	20,000	10,000	10,000
CO	N	5	5	N	N	5	5	10
CR	10	10	10	10	10	50	10	20
CU	L	15	N	N	N	15	50	10
FE	10,000	7,000	10,000	10,000	15,000	20,000	10,000	20,000
LA	100	150	100	100	100	50	150	300
LI	100	100	100	100	N	N	N	
MN	300	1,000	200	200	300	3,000	300	300
MO	N	N	5	N	N	И	5	1
NA	40,000	20,000	30,000	40,000	30,000	50,000	40,000	40,000
NB	10	20	20	10	70	20	50	2,000
NI	N	N	N	N	N	5	N	,
РВ	70	100	100	100	50	1,000	50	200
SB	N	N	N	N	N	N	N	
SC	N	5	10	5	N	15	N	15
SN	20	30	10	15	20	150	10	100

APPENDIX B. (CONTINUED)

Sample Number (MHM)	033	034	035	036	038	039	040	041
SR	200	100	100	200	100	200	300	300
TI	1,000	500	2,000	1,500	1,000	3,000	1,000	3,000
٧	10	L	10	10	N	30	L	20
W	N	N	N	N	N	N	N	N
Y	10	200G	50	10	20	G	150	G
ZN	N	N	N	N	11	1,000	N	300
ZR	70	300	300	200	200	200	300	G

APPENDIX B. (CONTINUED)

ample Number (MHM)	042	043	044	045	046	048	049	050
U308 (F1 ²)	17	8	16	4	4	3	3	16
AG	N	N	N	N	N	N	< 1	N
AL	70,000	70,000	70,000	70,000	70,000	70,000	50,000	75,000
AS	N	N	N	N	N	N	N	N
В	10	20	10	10	10	20	10	10
ВА	100	700	50	700	700	700	50	700
BE	150	30	150	150	50	15	700	100
CA	1,000	1,000	3,000	3,000	2,000	20,000	15,000	20,000
СО	N	15	N	10	10	20	N	15
CR	10	150	10	100	100	150	10	20
CU	L	70	5	70	50	100	15	70
FE	20,000	20,000	20,000	30,000	20,300	20,000	10,000	20,000
1.A	500	150	500	100	100	100	100	700
LI	N	N	100	N	N	100	N	N
MN	500	300	500	300	300	500	5,000	1,000
MO	10	10	10	5	N	N	L	500
NA	50,000	30,000	50,000	40,000	20,000	40,000	40,000	50,000
NB	500	10	300	70	20	10	100	100
NI	N	30	N	20	15	30	N	N
PB	500	50	100	100	70	70	150	70
SB	N	N	N	N	N	N	N	N
SC	N	30	N	50	30	20	10	10
SN	70	15	70	10	L	N	15	30

APPENDIX B. (CONTINUED)

Sample Number (MHM)	042	043	044	045	046	048	049	050
SR	100	100	100	200	100	300	700	500
TI	1,000	3,000	1,500	5,000	5,000	2,000	3,000	3,000
٧	10	50	N	100	30	50	15	20
W	N	N	N	N	N	N	N	N
Y	150	10	200	150	50	70	G	G
ZN .	300	200	300	N	N	N	700	N
ZR	G	200	G	500	500	300	100	300

APPENDIX B. (CONTINUED)

ample Numbe (MHM)	051	052	053	054	055	057	058	059
308 (F1 ²)	45	24	2	7	36	144	13	68
AG	. 11	L	N	N	N	< 10	< 10	< 10
AL	70,000	70,000	70,000	70,000	20,000	70,000	70,000	70,000
AS	N	N	N	N	N	< 200	< 200	< 200
В	2,000	N	N	N	N	<10	10	< 10
ВА	150	700	700	700	300	500	70	500
BE	15	15	20	15	3	10	20	15
CA	7,000	7,000	7,000	70,000	500	7,000	10,000	7,000
СО	10	N	N	N	14	5	15	5
CR	30	20	10	10	10	10	150	10
CU	L	N	N	N	N	15	20	15
FE	15,000	7,000	10,000	15,000	3,000	10,000	50,000	10,000
LA	100	N	100	150	N	20	700	100
LI	N	N	100	100	N	100	<10	< 10
MN	200	200	300	200	70	500	700	70
MO	N	N	N	N	N	< 10	< 10	< 10
NA	20,000	30,000	30,000	40,000	30,000	30,000	30,000	30,000
NB	10	L	10	10	N	10	50	20
NI	10	N	N	N	N	< 10	20	< 10
PB	50	150	100	70	300	70	50	70
SB	N	N	N	N	N	< 100	< 100	< 100
SC	10	N	N	5	N	5	20	10
SN	N	10	10	10	N	10	10	10

APPENDIX B. (CONTINUED)

Sample Number (MHM)	051	052	053	054	055	057	058	059
SR	100	100	200	100	200	100	100	100
TI	3,000	1,000	2,000	2,000	20	< 1	< 1	<1
٧	15	10	10	10	N	10	20	< 10
W	N	N	N	N	N	< 100	< 100	< 100
Υ	50	200	10	10	N	20	150	70
ZN	N	N	N	N	N	< 200	< 200	< 200
ZR	300	300	100	300	N	20	200	100

APPENDIX B. (CONTINUED)

ample Numbe (MHM)	060	061	062	063	064	065	066	067
308 (F1 ²)	2	54	7	201	394	137	38	59
AG	< 10	< 10	< 10	< 10	< 10	< 10	< 1	< 10
AL	70,000	70,000	60,000	70,000	70,000	70,000	70,000	70,000
AS	< 200	< 200	< 200	< 200	< 200	< 200	< 200	< 200
В	10	10	< 10	70	70	15	< 10	< 10
ВА	700	500	300	200	50	300	150	100
BE	70	70	10	15	15	7	15	
CA	20,000	3,000	7,000	10,000	30,000	20,000	5,000	3,000
СО	15	5	< 10	< 10	5	< 10	< 10	< 10
CR	30	20	20	20	30	10	20	10
CU	50	15	< 10	5	7	7	7	< 1
FE	30,000	20,000	15,000	7,000	15,000	5,000	7,000	10,000
LA	300	300	50	50	50	100	20	< 2
LI	< 10	< 10	100	< 10	< 10	100	100	< 10
MN	700	100	700	700	700	300	500	5,000
140	200	< 10	< 10	< 10	< 10	< 10	< 10	< 1
NA	40,000	40,000	30,000	30,000	40,000	30,000	30,000	30,00
NB	70	2,000G	10	10	10	< 20	20	< 2
NI	5	< 10	7	7	15	10	7	
PB	70	70	100	150	150	150	100	10
SB	< 100	<100	< 100	< 100	< 100	< 100	< 100	< 10
SC	10	10	5	5	20	< 10	5	< 1
SN	30	100	15	20	20	10	20	1

Sample Number (MHM)	060	061	062	063	064	065	066	067
SR	700	100	100	200	200	200	100	100
TI	<1	< 1	< 1	< 1	<1	< 1	< 1	<1
٧	15	15	20	15	50	< 10	< 10	10
W	< 100	150	< 100	<100	< 100	< 100	< 100	< 100
Y	100	200G	10	50	70	200	30	20
ZN	< 200	< 200	< 200	< 200	< 200	< 200	< 200	< 200
ZR	300	1,0006	70	70	200	70	100	100

APPENDIX B. (CONTINUED)

ample Number (MHM)	068	069	070	071	072	073	074	075
U308 (F1 ²)	19	150	282	8	100	7	54	29
AG	< 10	< 10	< 10	<10	< 10	< 10	< 10	< 10
AL	70,000	60,000	70,000	50,000	70,000	70,000	70,000	70,000
AS	< 200	< 200	< 200	< 200	< 200	< 200	< 200	< 200
В	<10	< 10	< 10	100	15	<10	< 10	< 10
ВА	500	200	300	500	300	200	150	20
BE	7	2	7	2	7	5	5	20
CA	7,000	5,000	7,000	500	7,000	3,000	5,000	3,000
CO	5	5	<10	5	<10	<10	<10	< 10
CR	20	10	10	70	10	20	10	10
CU	5	< 10	7	30	<10	<10	< 10	< 10
FE	10,000	10,000	7,000	15,000	7,000	15,000	15,000	5,000
LA	70	50	50	70	< 20	150	70	< 20
LI	< 10	< 10	< 10	< 10	< 10	< 10	< 10	100
MN	300	200	200	500	150	100	1,000	200
MO	< 10	15	< 10	20	< 10	5	< 10	< 10
NA.	40,000	30,000	30,000	10,000	20,000	30,000	30,000	40,000
NB	10	10	< 20	20	10	70	20	10
NI	7	7	7	20	7	5	7	15
РВ	100	• 100	70	30	70	30	70	50
SB	< 100	< 100	< 100	< 100	< 100	< 100	< 100	< 100
SC	15	< 10	< 10	10	20	< 10	< 10	< 10
SN	20	10	<10	< 10	10	15	20	10

Sample Number (MHM)	068	069	070	071	072	073	074	075
SR	200	200	200	< 100	200	100	100	< 100
TI	< 1	< 1	< 1	2,000	1,500	1,500	1,000	500
٧	15	10	10	100	< 10	10	< 10	<10
M	< 100	< 100	< 100	< 100	< 100	< 100	< 100	< 100
Y	20	10	70	30	70	70	50	10
ZN	< 200	< 200	< 200	< 200	< 200	< 200	< 200	< 200
ZR	200	50	100	300	100	500	70	20

APPENDIX B. (CONTINUED)

Sample Number (MHM)	076	077	078	079	080	081	082	083	
U308 (F1 ²)	93	4	74	27	15	7	3	12	
AG	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	
AL	40,000	70,000	70,000	70,000	70,000	30,000			
AS	< 200	< 200	< 200	< 200	< 200		< 200	< 200	
В	< 10	< 10	< 10	< 10	< 10	< 10		< 10	
ВА	70	50	100	200	200	150	300	300	
BE	1	7	2	7	2	1	3	7	
CA	1,000	3,000	5,000	3,000	2,000	1,500	3,000	5,000	
СО	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	
CR	10	10	10	10	10	10	10	< 10	
CU	< 10	<10	10	5	< 10	< 10	< 10	<10	
FE	7,000	3,000	1,000	7,000	1,000	15,000	5,000	15,000	
LA	< 20	< 20	< 20	< 20	50	20	< 20	100	
LI	< 10	<10	< 10	< 10	< 10	<10	< 10	< 10	
MN	500	1,000	300	100	150	300	100	300	
MO	< 10	< 10	< 10	< 10	< 10	< 10	< 10	<10	
NA	20,000	20,000	20,000	40,000	30,000	30,000	40,000	30,000	
NB	< 20	< 20	< 20	< 20	< 20	< 20	< 20	< 20	
NI	15	15	15	10	7	7	10	5	
PB	70	30	30	100	70	70	50	30	
SB	< 100	< 100	< 100	< 100	<100	<100	<100	< 100	
SC	< 10	5	< 10	< 10	< 10	< 10	< 10	10	
SN	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	

APPENDIX B. (CONTINUED)

Sample Number (MHM)	076	077	078	079	080	081	082	083
SR	< 100	< 100	100	100	< 100	< 100	< 100	100
TI	500	500	700	1,000	700	700	700	3,000
٧	15	10	30	< 10	< 10	20	<10	< 10
W	<100	< 100	< 100	< 100	< 100	< 100	< 100	< 100
Υ	< 10	< 10	< 10	10	50	< 10	10	70
ZN	< 200	< 200	< 200	< 200	< 200	< 200	< 200	< 200
ZR	20	20	20	20	70	70	50	300

APPENDIX B. (CONTINUED)

ample Number (MHM)	084	085	086	087	088	089	090	091
U308 (F1 ²)	19	9	19	23	22	8	123	54
AG	<10	<10	< 10	< 10	< 10	< 10	<10	< 10
AL	70,000	70,000	70,000	70,000	70,000	70,000	70,000	70,000
AS	< 200	<200	< 200	< 200	< 200	< 200	< 200	< 200
В	< 10	<10	< 10	<10	< 10	< 10	< 10	< 10
ВА	20	150	20	20	150	100	500	300
BE	7	5	7	7	. 3	3	2	2
CA	2,000	2,000	3,000	3,000	3,000	3,000	3,000	5,000
CO	< 10	<10	< 10	< 10	< 10	< 10	<10	< 10
CR	< 10	<10	< 10	< 10	<10	< 10	< 10	< 10
CU	< 10	<10	< 10	< 10	< 10	< 10	< 10	< 10
FE	10,000	20,000	15,000	20,000	15,000	15,000	15,000	20,000
LA	150	100	100	200	100	150	20	50
LI	100	100	< 10	< 10	< 10	100	<10	< 10
MN .	200	200	500	500	300	200	200	300
MO	< 10	<10	< 10	< 10	< 10	< 10	10	< 10
NA	30,000	40,000	40,000	40,000	30,000	50,000	20,000	30,000
NB	10	20	20	30	10	20	< 20	< 20
NI	< 10	5	7	7	5	7	7	10
PB	50	70	50	2.0	30	50	70	70
SB	< 100	< 100	< 100	< 100	< 100	<100	<100	< 100
SC	< 10	< 10	< 10	< 10	< 10	< 10	5	15
SN	< 10	10	10	10	10	<10	20	15

APPENDIX B. (CONTINUED)

Sample Number (MHM)	084	085	086	087	088	089	090	091
SR	< 100	<100	< 100	< 100	< 100	< 100	< 100	< 100
TI	700	1,000	700	1,000	700	1,000	700	1,500
٧	< 10	< 10	< 10	< 10	< 10	< 10	10	15
W	< 100	< 100	< 100	< 100	< 100	< 100	< 100	<100
Y	30	20	70	70	30	50	20	10
ZN	< 200	< 200	< 200	< 200	< 200	< 200	< 200	< 200
ZR	500	150	100	700	70	200	50	50

APPENDIX B. (CONTINUED)

imple Number (MHM)	092	101	102	103	104	105	106	107
U308 (F1 ²)	5	17	57	83	30	23	180	17
AG	< 10	<10	< 10	< 10	< 10	< 10	< 10	< 10
AL	60,000	70,000	70,000	70,000	70,000	70,000	70,000	70,000
AS	< 200	< 200	< 200	< 200	< 200	< 200	< 200	< 200
В	10	< 10	<10	< 10	< 10	10	10	< 10
ВА	300	300	70	500	100	500	20	50
BE	2	15	15	10	15	10	30	71
CA	1,000	7,000	7,000	5,000	10,000	10,000	3,000	5,000
СО	15	< 10	< 10	< 10	< 10	10	<10	< 1
CR	70	10	10	10	10	70	20	1
cu	50	15	15	5	7	20	20	21
FE	30,000	7,000	7,000	7,000	15,000	30,000	30,000	7,00
LA	50	< 20	100	300	500	300	100	5
LI	< 10	<10	< 10	< 10	< 10	< 10	100	10
MN	500	500	70	100	100	300	5,000G	20
MO	< 10	< 10	< 10	< 10	< 10	<10	< 10	< 1
NA	10,000	20,000	40,000	20,000	30,000	30,000	30,000	30,00
NB	< 20	10	10	10	10	30	100	3
NI	30	< 10	< 10	< 10	< 10	15	< 10	< 1
РВ	30	150	100	70	100	150	70	7
SB	< 100	<100	< 100	< 100	< 100	< 100	<100	< 10
SC	15	5	5	5	5	20	30	
SN	< 10	10	<10	< 10	10	10	100	1

APPENDIX B. (CONTINUED)

Sample Number (MHM)	092	101	102	103	104	105	106	107
SR	< 100	< 100	< 100	100	< 100	< 100	< 100	< 100
TI	2,000	< 1	< 1	<1	< 1	< 1	< 1	< 1
٧	100	< 10	< 10	10	<10	15	< 10	< 10
W	< 100	< 100	< 100	< 100	< 100	<100	< 100	< 100
Y	20	10	200	10	200	200G	150	20
ZN	< 200	< 200	< 200	< 200	< 200	< 200	< 200	< 200
ZR	70	70	200	50	50	100	50	100

APPENDIX B. (CONTINUED)

Sample Number (MHM)	110	111	301	302	303	304	305	306
U308 (F1 ²)	46	114	50	64	25	7	6	23
AG	< 10	< 10	< 10	< 10	< 10	< 10	<10	< 10
AL	70,000	60,000	70,000	70,000	70,000	70,000	70,000	60,000
AS	< 200	₹ 200	< 200	< 200	< 200	< 200	< 200	< 200
В	< 10	< 10	< 10	< 10	< 10	<10	< 10	< 10
ВА	50	< 20	20	500	500	1,500	1,000	150
BE	15	3	20	15	5	5	3	15
CA	5,000	1,000	7,000	7,000	7,000	7,000	10,000	7,000
СО	< 10	10	< 10	< 10	5	5	5	< 10
CR	20	150	10	10	20	30	10	10
CU	< 10	30	10	7	15	10	<10	<10
FE	15,000	30,000	7,000	7,000	15,000	15,000	10,000	5,000
LA	150	20	< 20	150	100	150	200	20
LI	< 10	< 10	< 10	< 10	< 10	< 10	<10	100
MN	1,500	3,000	100	100	G	300	200	700
MO	< 10	< 10	< 10	< 10	5	<10	<10	< 10
NA	40,000	10,000	40,000	30,000	30,000	40,000	30,000	30,000
NB	20	70	10	10	10	10	< 20	10
NI	7	30	< 10	< 10	5	7	7	5
РВ	50	50	70	70	70	100	150	70
SB	<100	<100	< 100	< 100	<100	< 100	< 100	< 100
SC	10	10	< 10	< 10	20	10	5	5
SN	20	20	10	< 10	< 10	10	30	10

APPENDIX B. (CONTINUED)

Sample Number (MHM)	110	111	301	302	303	304	305	306
SR	100	< 100	< 100	< 100	200	300	300	100
TI	2,000	3,000	<1	<1	< 1	< 1	< 1	< 1
٧	20	70	< 10	< 10	15	50	20	<10
W	< 700	< 100	< 100	< 100	< 100	< 100	< 100	<100
Y	150	50	10	200G	300	20	30	30
ZN	< 200	300	< 200	< 200	< 200	< 200	< 200	< 200
ZR	500	200	< 10	300	200	300	200	150

APPENDIX B. (CONTINUED)

Sample Number (MHM)	307	308	309	310	311	312	313	301
U308 (F1 ²)	17	11	67	11	17	187	32	4
AG	< 1	<1	< 10	< 10	<10	< 10	< 10	< 10
AL	70,000	70,000	70,000	70,000	70,000	60,000	70,000	70,000
AS	< 200	< 200	< 200	< 200	< 200	< 200	< 200	< 200
В	< 10	< 10	< 10	10	<10	15	<10	<10
ВА	150	300	300	300	500	70	500	1,000
BE	3	5	3	7	5	7	3	5
CA	3,000	5,000	5,000	7,000	3,000	500	2,000	5,000
СО	5	5	< 10	<10	< 10	< 10	< 10	< 10
CR	10	10	10	10	20	50	20	20
CU	10	7	< 10	5	10	15	20	< 10
FE	3,000	3,000	7,000	30,000	15,000	7,000	10,000	10,000
LA	< 20	< 20	< 20	300	200	< 20	< 20	200
LI	< 10	<10	< 10	< 10	< 10	< 10	<10	< 10
MN	1,000	700	150	1,500	300	100	150	200
MO	< 10	<10	< 10	< 10	50	< 10	<10	< 10
NA	30,000	30,000	30,000	15,000	30,000	20,000	30,000	40,000
NB	< 20	< 20	< 20	200	70	< 20	< 20	10
NI	7	5	10	7	7	10	15	7
РВ	100	100	150	30	50	100	50	100
SB	< 100	< 100	< 100	< 100	< 100	< 100	< 100	< 100
SC	< 10	< 10	5	< 10	< 10	< 10	<10	<10
SN	10	10	< 10	30	10	< 10	20	10

APPENDIX B. (CONTINUED)

Sample Number								3,000 30 <100 20
(MHM)	307	308	309	310	311	312	313	108
SR	< 100	100	200	200	200	<100	100	200
TI	<1	<1	700	1,000	1,000	200	1,000	3,000
٧	< 10	< 10	< 10	<10	<10	70	30	30
W	< 100	< 100	< 100	< 100	< 100	< 100	< 100	< 100
Υ	< 10	10	20	100	50	<10	30	20
ZN	< 200	< 200	< 200	< 200	< 200	< 200	< 200	< 200
ZR	50	200	20	> 1,000	200	200	70	700

APPENDIX B. (CONTINUED)

mple Number (MHM)	802	803	804	805	806	807	808	809
U308 (F1 ²)	8	10	2	10	19	28	32	22
AG	< 10	< 10	<10	<1		1	<1	<10
AL	70,000	70,000	70,000	70,000		70,000	70,000	70,000
AS	< 200	< 200	< 200	< 200	< 200	< 200	< 200	< 200
В	< 10	< 10	< 10	<10	< 10	<10	< 10	< 10
ВА	200	700	200	200	200	100	70	100
BE	3	10	2	2	3	15	7	15
CA	3,000	7,000	3,000	2,000	5,000	3,000	3,000	3,000
CO	< 10	< 10	< 10	< 10	< 10	<10	< 10	< 10
CR	20	20	< 10	10	< 10	<10	<10	< 10
CU	<10	< 10	< 10	15	< 10	5	< 10	7
FE	5,000	10,000	3,000	10,000	15,000	15,000	15,000	15,000
LA	70	300	20	50	50	20	20	100
LI	< 10	< 10	<10	<10	< 10	< 10	< 10	< 10
MN	150	300	100	200	300	300	300	500
MO	<10	< 10	< 10	<10	< 10	<10	< 10	< 10
NA .	30,000	30,000	30,000	30,000	30,000	30,000	30,000	40,000
NB	< 20	< 20	< 20	< 20	< 20	20	30	20
NI	7	10	7	7	7	10	15	15
PB	100	100	50	100	50	50	30	70
SB	< 100	<100	< 100	< 100	< 100	< 100	< 100	< 100
SC	<10	5	< 10	< 10	< 10	< 10	< 10	<10
SN	10	10	<10	<10	<10	10	10	15

APPENDIX B. (CONTINUED)

Sample Number (MHM)	802	803	804	805	806	807	808	809
SR	100	200	< 100	< 100	< 100	< 100	< 100	< 100
TI	700	3,000	700	700	1,500	1,000	700	700
٧	<10	15	< 10	< 10	10	<10	< 10	< 10
W	<100	<100	< 100	< 100	<100	<100	< 100	< 100
Υ	30	70	< 10	10	< 10	10	10	10
ZN	< 200	< 200	< 200	< 200	< 200	< 200	< 200	< 200
ZR	100	500	50	50	50	50	50	50

APPENDIX B. (CONTINUED)

Sample Number (MHM)	810	811	812	813	814	815	816	817
U308 (F1 ²)	22	24	30	23	37	22	24	4
AG	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
AL	70,000	60,000	70,000	70,000	70,000	70,000	70,000	60,000
AS.	< 200	< 200	< 200	< 200	< 200	< 200	< 200	< 200
В	<10	<10	<10	< 10	< 10	< 10	< 10	<10
ВА	100	70	150	< 20	< 20	100	70	200
BE	15	10	10	20	2	15	10	7
CA	3,000	2,000	3,000	700	70,000	5,000	2,000	7,000
СО	< 10	<10	< 10	<10	< 10	< 10	< 10	< 10
CR	<10	< 10	< 10	< 10	< 10	< 10	< 10	<10
CU	< 10	<10	< 10	<10	< 10	< 10	< 10	<10
FE	10,000	10,000	10,000	15,000	7,000	15,000	7,000	20,000
LA	150	70	100	150	50	70	50	70
LI	< 10	<10	<10	<10	< 10	< 10	< 10	<10
MN	200	300	150	70	1,500	300	100	500
140	< 10	<10	< 10	< 10	< 10	< 10	< 10	
NA	40,000	30,000	40,000	40,000	40,000	40,000	40,000	40,000
NB	10	20	30	30	<20	20	< 20	30
NI	7	7	7	7	7	10	7	
PB	30	30	50	10	<10	20	20	30
SB	< 100	<100	< 100	< 100	< 100	< 100	< 100	< 100
SC	< 10	<10	< 10	< 10	<10	< 10	< 10	10
SN	< 10	<10	< 10	< 10	<10	< 10	< 10	< 10

APPENDIX B. (CONTINUED)

Sample Number (MHM)	810	811	812	813	814	815	816	817
SR	< 100	< 100	< 100	<100	300	< 100	< 100	100
TI	1,000	700	1,000	1,500	200	1,000	300	2,000
٧	< 10	< 10	< 10	< 10	< 10	< 10	< 10	10
W	< 100	< 100	< 100	< 100	< 100	<100	< 100	<100
Y	30	20	50	30	< 10	20	10	30
ZN	< 200	< 200	< 200	< 200	< 200	< 200	< 200	< 200
ZR	150	100	150	200	20	100	70	300

Sample Number (MHM)	818	819	820	821	822	823	824	825
U308 (F1 ²)	18	6	11	<1	5	26	1	11
AG	< 10	<10	< 10	<10	< 10	< 10	< 10	< 10
AL	70,000	60,000	70,000	70,000	70,000	70,000	70,000	70,000
AS	< 200	< 200	< 200	< 200	< 200	< 200	<200	< 200
В	< 10	<10	<10	< 10	150	< 10	<10	< 10
ВА	150	70	500	200	< 20	< 20	200	300
BE	1	3	5	1	15	5	1	1
CA	3,000	1,000	3,000	3,000	2,000	3,000	3,000	2,000
СО	< 10	< 10	< 10	< 10	< 10	<10	<10	< 10
CR	10	10	10	10	10	10	10	10
CU	< 10	<10	< 10	<10	< 10	< 10	<10	< 10
FE	10,000	3,000	20,000	20,000	3,000	2,000	15,000	10,000
LA	20	20	50	300	< 20	< 20	< 20	20
LI	< 10	< 10	100	< 10	<10	100	< 10	< 10
MN	200	150	300	300	700	100	300	150
MO	< 10	< 10	< 10	<10	<10	< 10	<10	< 10
NA	40,000	30,000	30,000	40,000	40,000	40,000	40,000	40,000
NB	< 20	< 20	< 20	< 20	< 20	< 20	< 20	< 20
NI	10	7	7	7	10	7	15	7
PB	50	30	70	30	70	50	50	70
SB	<100	<100	< 100	< 100	< 100	<100	< 100	< 100
SC	15	10	< 10	< 10	< 10	< 10	< 10	< 10
SN	< 10	< 10	< 10	< 10	15	< 10	30	10

APPENDIX B. (CONTINUED)

Sample Numb (MHM)	er 818	819	820	821	822	823	824	825	
SR	100	<100	100	< 100	<100	< 100	100	100	
TI	1,500	700	1,500	1,000	50	200	1,000	700	
٧	10	< 10	10	30	< 10	< 10	15	10	
W	< 100	< 100	< 100	< 100	< 100	< 100	<100	< 100	
Y	< 10	< 10	10	10	< 10	20	20	10	
ZN	< 200	< 200	< 200	< 200	< 200	< 200	< 200	< 200	
ZR	20	< 10	50	50	< 10	< 10	20	20	

APPENDIX B. (CONTINUED)

mple M (MHM)	Number 826	827	828	829	830	831	832	833
U308	(F1 ²) 4	4	8	2	3	4	6	5
AG	< 10	< 10	< 10	<10	<10	<10	<10	< 10
AL	70,000	60,000	60,000	70,000	70,000	70,000	70,000	70,000
AS	< 200	< 200	< 200	< 200	< 200	< 200	<200	< 200
В	<10	< 10	<10	<10	< 10	<10	<10	<10
ВА	500	150	150	200	300	500	200	300
BE	4	5	5	7	10	7	3	3
CA	5,000	7,000	3,000	5,000	7,000	3,000	5,000	5,000
CO	< 10	< 10	< 10	<10	< 10	<10	< 10	< 10
CR	30	10	10	10	10	10	. 10	10
CU	<10	5	< 10	<10	<10	<10	< 10	< 10
FE	15,000	5,000	20,000	10,000	10,000	15,000	10,000	7,000
· LA	300	20	70	70	150	200	150	70
LI	<10	< 10	< 10	100	100	< 10	<10	<10
MN	500	300	300	300	300	300	300	200
MO	<10	< 10	<10	<10	< 10	<10	<10	< 10
NA	40,000	40,000	30,000	40,000	40,000	40,000	30,000	30,000
NB	10	< 20	20	10	< 20	< 20	< 20	< 20
NI	20	10	10	15	10	15	10	10
PB	70	70	100	100	70	70	70	100
SB	< 100	< 100	< 100	<100	< 100	< 100	< 100	< 100
SC	10	<10	<10	< 10	< 10	<10	<10	< 10
SN	10	< 10	< 10	15	10	15	< 10	< 10

0 <100 100
0 700 700
5 <10 <10
0 <100 <100
0 10 10
0 < 200 < 200
0 100 70
(

APPENDIX B. (CONTINUED)

ple No (MHM)	834	835	836	837	838	839	840	841
U308 ((F1 ²) 10	2	2	6	11	4	7	2
AG	<10	<10	< 10	< 10	< 10	<10	<10	< 10
AL	70,000	70,000	70,000	70,000	60,000	70,000	70,000	60,000
AS	< 200	< 200	< 200	< 200	< 200	< 200	< 200	< 200
В	< 10	< 10	<10	< 10	<10	<10	<10	< 10
ВА	500	300	700	150	70	200	150	50
BE	2	10	7	3	7	5	5	10
CA	1,500	3,000	7,000	3,000			3,000	2,000
СО	< 10	< 10	<10	< 10	<10	<10	< 10	< 10
CR	10	10	10	<10	< 10	<10	< 10	<10
CU	< 10	< 10	<10	< 10	<10	<10	< 10	< 10
FE	15,000	10,000	15,000	15 000	10,000	7,000	1,000	1,500
LA	300	100	150	50	20	70	50	< 20
LI	< 10	100	< 10	100	100	100	100	100
MN	150	300	300	300	300	300	300	150
MO	< 10	<10	< 10	<10	< 10	<10	< 10	< 10
NA	30,000	30,000	30,000	30,000	30,000	3,000	3,000	3,000
NB	< 20	< 20	< 20	< 20	< 20	< 20	< 20	< 20
NI	7	7	10	10	7	5	7	
PB	50	70	70	30	30	30	30	10
SB	< 100	<100	< 100	< 100	< 100	<100	< 100	< 100
SC	10	< 10	< 10	< 10	<10	<10	< 10	< 10
SN	20	10	15	10	< 10	< 10	< 10	< 10

Sample Numl (MHM)	ber 834	835	836	837	838	839	840	841
SR	100	< 100	200	100	< 100	< 100	< 100	< 100
TI	5,000	1,000	1,500	1,500	700	700	700	150
٧	50	15	30	20	< 10	10	10	< 10
W	<100	< 100	< 100	<100	< 100	< 100	< 100	<100
Υ	30	20	20	10	< 10	<10	<10	<10
ZN	< 200	< 200	< 200	< 200	< 200	<200	< 200	< 200
ZR	200	70	70	100	50	70	70	< 10

APPENDIX B. (CONTINUED)

ample Nun (MHM)	nber 842	843	844	845	846	847	848	849
U308 (F	12) 13	4	3	13	8	4	25	6
AG	<10	<10	< 10	< 10	< 10	< 10	< 10	< 10
AL	70,000	70,000	70,000	70,000	70,000	70,000	40,000	60,000
AS	< 200	< 200	< 200	< 200	< 200	< 200	< 200	< 200
В	<10	< 10	<10	< 10	< 10	< 10	< 10	<10
ВА	200	150	300	200	150	150	100	100
BE	7	5	3	5	3	3	1	
CA	3,000	3,000	3,000	3,000	3,000	3,000	700	3,000
CO	< 10	<10	<10	< 10	< 10	< 10	< 10	< 10
CR	< 10	<10	< 10	< 10	10	< 10	10	10
CU	< 10	<10	<10	<10	< 10	< 10	<10	< 1
FE	7,000	7,000	10,000	10,000	10,000	7,000	3,000	7,00
LA	70	50	50	70	70	50	20	2
LI	100	100	<10	< 10	< 10	< 10	<10	10
MN	500	300	300	300	150	300	100	30
MO	<10	<10	<10	<10	< 10	< 10	< 10	<1
NA	30,000	3,000	30,000	30,000	30,000	3,000	30,000	30,00
NB	< 20	< 20	< 20	< 20	< 20	< 20	< 20	< 2
NI	7	7	7	7	7	7	5	
PB	30	30	30	50	50	30	70	3
SB	< 100	< 100	< 100	< 100	< 100	< 100	< 100	<10
sc	<10	< 10	< 10	< 10	< 10	< 10	< 10	<1
SN	< 10	<10	< 10	<10	< 10	< 10	< 10	< 1

Sample Num (MHM)	ber 842	843	844	845	846	847	848	849
SR	100	<100	100	100	< 100	100	< 100	< 100
TI	1,000	700	1,000	700	700	700	300	300
٧	10	<10	15	10	10	< 10	< 10	< 10
W	<100	< 100	< 100	<100	< 100	< 100	< 100	< 100
Y	20	<10	< 10	10	10	10	10	10
ZN	< 200	< 200	< 200	< 200	< 200	< 200	< 200	< 200
ZR	100	50	100	20	50	50	20	20

APPENDIX B. (CONTINUED)

(MHM)	umber 850	851	852	853	854	855	856	857
U308	(F1 ²) 11	5	4	6	7	7	11	5
AG	< 10	<10	< 10	<10	<10	< 10	<10	< 10
AL	70,000	70,000	70,000	60,000	70,000	70,000	70,000	70,000
AS	< 200	<200	< 200	< 200	< 200	< 200	< 200	< 200
В	< 10	<10	<10	<10	< 10	< 10	< 10	< 10
ВА	300	70	300	100	20	150	100	50
BE	7	20	2	10	3	3	15	15
CA	5,000	3,000	3,000	3,000	7,000	3,000	3,000	3,000
CO	< 10	< 10	< 10	<10	< 10	< 10	< 10	< 10
CR	< 10	< 10	<10	10	< 10	< 10	10	< 10
CU	< 10	< 10	<10	< 10	< 10	<10	15	< 10
FE	15,000	5,000	15,000	5,000	7,000	5,000	5,000	2,000
LA	50	20	< 20	50	20	< 20	< 20	20
LI	<10	100	< 10	100	< 10	< 10	100	100
MN	300	300	300	100	300	70	100	150
MO	<10	< 10	< 10	<10	< 10	<10	< 10	< 10
NA	30,000	30,000	30,000	30,000	3,000	30,000	30,000	3,000
NB	< 20	< 20	< 20	< 20	< 20	< 20	< 20	< 20
NI	7	5	7	5	7	7	7	7
PB	50	30	30	30	10	30	70	10
SB	< 100	< 100	<100	< 100	< 100	< 100	< 100	< 100
SC	<10	< 10	<10	< 10	< 10	< 10	< 10	< 10
SN	< 10	10	< 10	< 10	< 10	< 10	10	19

APPENDIX B. (CONTINUED)

Sample Numb (MHM)	er 850	851	852	853	854	855	856	857
SR	200	< 100	200	<100	100	100	< 100	< 100
TI	1,500	700	1,000	500	1,000	700	500	500
٧	20	<10	30	< 10	< 10	< 10	<10	< 10
W	<100	<100	< 100	< 100	<100	<100	< 100	< 100
Υ	10 -	10	< 10	10	10	10	< 10	10
ZN	< 200	< 200	< 200	< 200	< 200	< 200	< 200	< 200
ZR	70	50	50	70	20	20	20	20

APPENDIX B. (CONTINUED)

Sample Number (MHM)	er 858	859	860	861	862	863	864	865
U308 (F1	2) 12	4	6	3	2	3	4	12
AG	< 10	< 10	< 10	< 10	< 10	< 10	7	<10
AL	70,000	60,000	70,000	60,000	70,000	70,000	70,000	70,000
AS	< 200	< 200	< 200	< 200	< 200	< 200	< 200	< 200
В	10	< 10	<10	< 10	< 10	< 10	< 10	< 10
ВА	20	150	300	100	200	150	500	100
BE	7	3	3	5	3	10	10	3
S4	3,000	3,000	3,000	2,000	7,000	5,000	5,000	3,000
co	< 10	< 10	< 10	< 10	5	< 10	< 10	< 10
CR	< 10	< 10	10	< 10	10	10	10	10
CU	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
FE	3,000	5,000	7,000	2,000	15,000	5,000	15,000	10,000
LA	20	20	20	20	20	20	100	20
LI	100	< 10	< 10	<10	100	< 10	100	100
MN	200	200	500	50	300	300	300	300
МО	<10	<10	< 10	< 10	< 10	< 10	< 10	10
NA	30,000	30,000	30,000	3,000	30,000	30,000	30,000	30,000
NB	< 20	< 20	< 20	< 20	< 20	< 20	< 20	< 20
NI	7	7	7	<10	15	,0	10	7
PB	20	30	70	20	20	50	20	20
SB	< 100	< 100	< 100	< 100	< 100	< 100	< 100	< 100
SC	< 10	< 10	< 10	< 10	5	< 10	< 10	< 10
SN	10	< 10	10	< 10	< 10	< 10	10	< 1(

APPENDIX B. (CONTINUED)

SR <100 <100 <100 300 100 100 TI 300 700 1,500 300 1,500 700 1,500 V <10 <10 10 <10 70 <10 20 W <100 <100 <100 <100 <100 <100 <100 Y <10 <10 <10 <10 <10 30 10 ZN <200 <200 <200 <200 <200 <200 <200	Sample Number (MHM)	858	859	860	861	862	863	864	865
V <10 <10 10 70 <10 20 W <100 <100 <100 <100 <100 <100 <100 <10	SR	< 100	< 100	< 100	< 100	300	100	100	< 100
W <100 <100 <100 <100 <100 <100 <100 <10	TI	300	700	1,500	300	1,500	700	1,500	1,000
Y <10 <10 <10 <10 <10 30 10 ZN <200 <200 <200 <200 <200 <200 <200	V	< 10	< 10	10	< 10	70	<10	20	< 10
ZN <200 <200 <200 <200 <200 <200 <200	W	< 100	< 100	< 100	< 100	< 100	< 100	< 100	< 100
	Υ	< 10	<10	< 10	<10	< 10	30	10	10
70 20 20 100 20 50 70 100	ZN	< 200	< 200	< 200	< 200	< 200	< 200	< 200	< 200
20 20 100 20 50 70 100	ZR	20	20	100	20	50	70	100	70

APPENDIX B. (CONTINUED)

nple Num (MHM)	866	867	868	869	870	871	872	873
U308 (F	12) 6	8	1	4	4	5	3	9
AG	<10	< 10	<10	< 10	<10	<10	<10	<10
AL	70,000	60,000	60,000	70,000	60,000	70,000	70,000	70,000
AS	< 200	< 200	< 200	< 200	< 200	< 200	< 200	< 200
В	<10	<10	< 10	<10	<10	< 10	< 10	< 10
ВА	200	300	300	300	300	300	500	300
BE	7	3	1	7	5	15	7	7
CA	3,000	2,000	7,000	7,000	1,500	7,000	7,000	3,000
CO	<10	<10	< 10	< 10	<10	< 10	< 10	< 10
CR	10	10	20	10	10	10	20	10
CU	<10	<10	30	< 10	< 10	<10	7	< 10
FE	10,000	7,000	15,000	10,000	1,500	20,000	20,000	15,000
LA	50	50	20	70	< 20	150	< 20	50
LI	100	<10	< 10	100	< 10	200	100	100
MN	300	150	300	300	100	700	300	300
MO	< 10	<10	< 10	< 10	<10	<10	< 10	< 10
NA	30,000	30,000	20,000	30,000	30,000	40,000	40,000	40,000
NB	< 20	< 20	< 20	< 20	< 20	< 20	< 20	< 20
NI	7	5	15	7	7	7	10	10
PB	30	20	10	50	50	50	30	30
SB	< 100	< 100	< 100	< 100	< 100	< 100	< 100	< 100
SC	< 10	<10	5	5	< 10	5	< 10	< 10
SN	<10	<10	< 10	< 10	<10	10	< 10	< 10

Sample Numb (MHM)	866	867	868	869	870	871	872	873
SR	100	100	300	200	< 100	100	200	200
TI	1,500	700	1,500	2,000	150	2,000	1,000	1,000
٧	< 10	10	50	15	<10	20	30	15
W	< 100	< 100	< 100	< 100	< 100	< 100	< 100	< 100
Y	10	< 10	< 10	10	<10	20	< 10	10
ZN	< 200	< 200	< 200	< 200	< 200	< 200	< 200	< 200
ZR	70	50	70	100	20	200	20	20

APPENDIX B. (CONTINUED)

mple Nu (MHM)	874	875	876	877	878	879	880	881
U308 (F	1 ²) 3	6	2	7	15	7	2	19
AG	<10	< 10	<10	<10	<10	< 10	<10	< 10
AL	60,000	70,000	70,000	70,000	70,000	70,000	70,000	70,000
AS	<200	< 200	< 200	< 200	< 200	< 200	< 200	< 200
В	<10	<10	< 10	<10	< 10	< 10	< 10	<10
ВА	300	100	300	500	200	300	300	20
BE	5	15	7	5	7	7	7	5
CA	3,000	3,000	3,000	3,000	3,000	5,000	5,000	3,000
co	< 10	< 10	<10	< 10	< 10	<10	< 10	< 10
CR	10	10	10	10	10	10	10	< 10
CU	<10	10	30	5	< 10	30	< 10	< 10
FE	10,000	15,000	10,000	10,000	10,000	10,000	7,000	15,000
LA	100	100	20	< 20	< 20	100	20	200
LI	100	100	100	100	100	100	100	< 10
MN	200	500	200	150	300	200	300	300
MO	< 10	<10	< 10	< 10	< 10	< 10	< 10	<10
NA	40,000	40,000	30,000	30,000	30,000	30,000	30,000	20,000
NB	< 20	< 20	< 20	< 20	< 20	< 20	< 20	30
NI	7	10	10	10	7	7	7	5
PB	30	50	70	70	30	50	30	30
SB	< 100	< 100	< 100	< 100	< 100	< 100	< 100	< 100
SC	< 10	<10	< 10	< 10	< 10	< 10	< 10	< 10
SN	<10	10	<10	< 10	15	< 10	< 10	< 10

Sample Number (MHM)	874	875	876	877	878	879	880	881
SR	100	<100	100	200	100	100	100	< 100
TI	700	1,000	700	700	500	700	1,500	700
٧	10	10	10	15	10	15	15	<10
W	< 100	< 100	< 100	< 100	< 100	<100	<100	< 100
Y	10	30	< 10	20	< 10	10	<10	30
ZN	< 200	< 200	< 200	< 200	< 200	< 200	< 200	< 200
ZR	100	70	100	50	50	150	70	300

(MHM)	lumber 882	883	884	885	886	887	888	889
U308	(F1 ²) 18	16	5	9	4	4	27	19
AG	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
AL	70,000	70,000	70,000	70,000	70,000	70,000	70,000	70,000
AS	< 200	< 200	< 200	< 200	< 200	< 200	< 200	< 200
В	< 10	<10	<10	< 10	<10	<10	<10	< 10
BA	200	300	300	100	300	300	30	150
BE	7	7	2	7	3	3	15	3
CA	5,000	5,000	5,000	2,000	5,000	5,000	3,000	5,000
CO	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
CR	< 10	<10	< 10	<10	< 10	10	10	10
CU	. < 10	< 10	< 10	< 10	< 10	< 10	<10	< 10
FE	30,000	15,000	10,000	15,000	15,000	15,000	10,000	20,000
LA	300	100	20	150	100	150	70	150
LI	< 100	100	< 10	< 10	100	< 10	100	< 10
MN	300	300	300	300	300	300	200	300
MO	< 10	<10	< 10	<10	< 10	< 10	<10	< 10
NA	40,000	30,000	30,000	40,000	30,000	40,000	40,000	40,000
NB	70	< 20	< 20	20	10	10	50	.10
NI	7	7	10	5	5	5	7	7
PB	70	70	150	70	30	30	70	70
SB	< 100	<100	< 100	< 100	< 100	< 100	<100	< 100
SC	< 10	< 10	5	<10	< 10	10	< 10	.< 10
SN	< 10	10	< 10	10	< 10	< 10	15	< 10

Sample Number	882	883	884	885	886	887	888	889
SR	< 100	<100	< 100	< 100	< 100	< 100	< 100	< 100
TI	2,000	2,000	1,000	1,500	700	2,000	700	1,000
٧	< 10	20	10	< 10	10	< 10	< 10	< 10
W	< 100	<100	< 100	< 100	< 100	<100	< 100	< 100
Y	100	10	20	30	10	70	70	50
ZN	< 200	< 200	< 200	< 200	< 200	< 200	< 200	< 200
ZR	200	150	70	70	50	300	100	100

APPENDIX B. (CONTINUED)

nple M (MHM)	lumber 890	891	892	893	901	902	951	952
U308	(F1 ²) 9	12	32	9	104	9	3	2
AG	< 10	<10	<10	< 10	< 10	<10	< 10	<10
AL.	70,000	70,000	70,000	70,000	70,000	70,000	70,000	70,000
AS	< 200	< 200	< 200	< 200	< 200	< 200	< 200	< 200
В	<10	<10	<10	< 10	1,500	15	< 10	< 1
ВА	50	300	50	200	150	100	500	700
BE	5	10	7	3	1	7	1	
CA	5,000	5,000	3,000	2,000	2,000	3,000	5,000	5,00
CO	<10	< 10	< 10	< 10	30	< 10	<10	<1
CR	10	10	10	10	150	10	< 10	<1
CU	<10	<10	< 10	< 10	70	10	<10	<1
FE	15,000	20,000	10,000	10,000	30,000	10,000	10,000	5,00
LA	70	150	100	70	50	20	20	< 2
LI	<10	100	100	100	< 10	100	<10	10
MN	500	500	200	300	500	150	150	10
MO	<10	<10	< 10	< 10	< 10	<10	<10	< 1
NA	30,000	50,000	30,000	30,000	10,000	30,000	30,000	30,00
NB	10	50	20	10	<20	< 20	< 20	< 2
NI	7	7	7	5	50	10	5	
PB	20	70	50	30	< 10	70	30	
SB	< 100	< 100	< 100	< 100	<100	< 100	< 100	<10
SC	< 10	10	< 10	< 10	15	<10	5	<1
SN	<10	15	10	< 10	15	< 10	15	< 1

APPENDIX B. (CONTINUED)

Sample Num	ber							
(MHM)	890	891	892	893	901	902	951	952
SR	< 100	100	< 100	< 100	< 100	< 100	< 100	200
TI	700	1,500	700	700	3,000	700	700	700
٧	< 10	< 10	< 10	<10	200	<10	15	15
W	< 100	< 100	<100	< 100	<100	< 100	<100	< 100
Y	20	70	70	30	10	< 10	10	50
ZN	< 200	< 200	< 200	< 200	200	< 200	< 200	< 200
ZR	50	300	150	70	100	20	70	50

APPENDIX B. (CONTINUED)

(MHM)	lumber 953	954	955	956	957	
U308	(F1 ²) 3	37	4	10	17	
AG	< 10	< 10	< 10	<10	<10	
AL	70,000	70,000	70,000	70,000	60,000	
AS	< 200	< 200	< 200	< 200	< 200	
В	< 10	<10	<10	< 10	<10	
ВА	500	300	300	300	300	
BE	1	7	7	7	3	
CA	3,000	5,000	7,000	3,000	2,000	
CO	<10	< 10	< 10	< 10	< 10	
CR	< 10	10	10	10	10	
CU	< 10	< 10	<10	<10	<10	
FE	15,000	15,000	15,000	7,000	15,000	
LA	50	70	50	100	20	
LI	100	100	< 10	100	100	
MN	200	300	300	200	300	
MO	< 10	< 10	< 10	< 10	< 10	
NA	30,000	30,000	30,000	40,000	30,000	
NB	< 20	< 20	< 20	< 20	< 20	
NI	7	7	10	7	7	
PB	70	70	70	50	50	
SB	<100	< 100	< 100	<100	< 100	
SC	< 10	5	5	5	< 10	
SN	10	10	< 10	< 10	< 10	

APPENDIX B. (CONTINUED)

Sample Number (MHM)	953	954	955	956	957	
SR	< 100	<100	< 100	< 100	< 100	
TI	1,000	1,000	1,500	1,500	700	
٧	<10	20	20	10	20	
W	< 100	< 100	< 100	< 100	< 100	
Y	< 10	30	10	20	< 10	
ZN	< 200	< 200	< 200	< 200	< 200	
ZR	50	50	100	100	50	

APPENDIX B. TABLE OF CHEMICAL ANALYSES, MHL ROCK SAMPLES (IN PPM1)

ample Number (MHL)	208	214	215
U308 (F1 ²)	16	703	205
AG	< 10	3	<10
AL	70,000	20,000	40,000
AS	< 200	< 200	< 200
В	< 10	< 10	10
BA	50	20	20
BE	7	1	3
CA	10,000	< 500	< 500
СО	5	< 10	< 10
CR	10	10	10
CU	5	< 10	15
FE	15,000	700	7,000
LA	20	< 20	< 20
LI	100	< 10	< 10
MN	300	300	150
MO	<10	< 10	< 10
NA	30,000	30,000	40,000
NB	10	< 20	10
NI	7	10	7
PB	50	300	100
SB	< 100	< 100	< 100
SC	15	< 10	< 10
SN	30	10	70

Sample Number (MHL)	208	214	215
SR	< 100	< 100	< 100
TI	< 1	< 20	70
٧	< 10	< 10	< 10
W	< 100	< 100	< 100
Y	100	<10	< 10
ZN	< 200	< 200	< 200
ZR	< 10	< 10	< 10

APPENDIX B. TABLE OF CHEMICAL ANALYSES, MHM SOIL SAMPLES (IN PPM1)

Sample Number (MHM)	037	047
U308 (F1 ²)	15	75
AG	N	N
AL	70,000	70,000
AS	N	500
В	10	20
BA	100	1,000
BE	70	700
CA	3,000	15,000
СО	N	30
CR	10	100
cu	15	150
FE	20,000	30,000
LA	200	200
LI	N	N
MN	500	5,000
МО	N	L
NA ·	40,000	20,000
NB	700	50
NI	N	30
PB	70	150
SB	N	N
sc	5	20
SN	30	20

APPENDIX B. (CONTINUED)

Sample Number (MHM)	037	047
SR	100	500
TI	2,000	2,000
٧	10	30
W	N	N
Y	G	G
ZN	N	200
ZR	1,000G	300

PORTLAND

APPENDIX B. TABLE OF CHEMICAL ANALYSES, MHM WATER SAMPLES (IN PPB)

Sample Number (MHM)	501	502	503	504	505	506	507	508
U308 (F1 ²)	<1	< 1	<1	< 1	< 1	<1	4<1	< 1

Sample Number (MHM)	509	510	511	512	513	514	515	516
U308 (F1 ²)	<1	2	<1	2	<1	<1	41	41

Sample Number (MHM)	517	518	519	520	521	522	523	524	525
U308 (F1 ²)	1	<1	4	-41	41	41	41	41	41

N, not detectable; L, less than the detection limit; G, greater than the detection limit

² Fluorometric

URANIUM-OCCURRENCE	Quad Name A90< Portland
REPORT	Quad Scale A1004 , 2, 5, 0, 0, 0, 0
	Deposit No. B40< 1
Deposit Name AlO < Ruggles Mine	
Synonym Name(s) All	
District or Area A30 < Grafton pegmatit	e district
Country A40 <u s=""> U S</u>	State New Hampshire
State Code A50 <3,3 > [3,3] (Enter code twice from List D)	County A60 < Grafton
Position from Prominent Locality A82 <	16 km WSW of Newfound Lake, NH
Field Checked G1 <7,9 1,0 By G2<	McHone , J. Gregory Last name First Initial
Yr Mo	Last name First Initial
Latitude A70 44, 3-3, 5-2, 4, ND Lor Deg Min Sec	Deg Min Sec
Township A77 <	E/W Section A79 Q P
Meridian A81 <	> Altitude Al07 <463 m
Quad Scale A91 4 6, 2, 5, 0, 0p (7½' or 15' quad)	Quad Name A92 < Cardinan
Physiographic Province A63 < 0, 1 Ne (List K)	w England
Location Comments A83 < From Rt. 4 (G	Grafton Center) west on road 2 km, right
at gate up mine road 1 km (open for tour	rists)
Location Sketch Map:	1 70 Canaen
In Ruggles Mine	
M 8 mHC 214, 215	
Gote	R+4
1	GrastonCenter
	1

2+4

Grafton

BFE 1236 4/19/78 0.5 1.0

km

2.0

URANIUM-OCCURRENCE	Quad Name Portland
REPORT	Deposit No. 1
Commodities Present:	٠
Commodities Produced: MAJOR MIC, FLD, BE, C	OPROD 4
MINOR QU B	YPROD 4
Potential Commodities:	L
Commodity Comments C50 < Still actively quar	ried for feldspar
Status of Exploration and Development A20 < (1 = occurrence, 2 = raw prospect, 3 = deve	
Comments on Exploration and Development Lll	.0 <sampling 1978<="" and="" drilling="" during="" td=""></sampling>
by U.S.G.S.?) reported by mine owner	,
Property is (A21) (Active) A22 (Inacti	(Circle appropriate labels)
Workings are M120 (Surface) M130 (Underg	ground) M140 (Both)
Description of Workings M220< large open pi	it with some tunnels
	>
Cumulative Uranium Production PROD DH2 accuracy thousands of 1b. G7 Q U [E, S, Tp G7A]	YES NO SML MED LGE (circle) years grade > G7C<1944-45 > G7D< % U308>
Source of Information D9 < hearsay (owner) >
Production Comments D10 < minor amou	unts of U were handsorted out during
WII	,
Reserves and Potential Resources EH accuracy thousands of 1b. ELQUI P ELBQ	year of est. grade LB> E1C<
Source of Information E7 <	>
Comments E8 < probably only in the tens	of tons U30g

URANIUM-OCCURRENCE	Quad Name Portland				
REPORT	Deposit No. 1				
Deposit Form/Shape M10 < dike or plug (intru	sive) >				
Length M40 < 180 > M41 < M >	Size M15 (circle letter):				
Width M50 < 120 > M51 < M >	1ь изов				
Thickness M60 < 30 > M61 < M >	A 0 - 20,000 B 20,000 - 200,000				
Strike M70 < Unknown >	C 200,000 - 2 million				
Dip M80 < Unknown >	D 2 million - 20 million E More than 20 million				
Tectonic Setting N15 < mobile belt	<u> </u>				
Major Regional Structures N5 < NE-trendin	g faults and folds (Merrimack				
Synclinorium).					
	,				
Local Structures N70 scattered NE-trending	fractures				
Host-FM. Name U1 < NH Plutonic Series	Member U2 < 2-mica pegmatite				
Host Rock K1 $ \triangleleft D_{1}E_{1}V_{1} $ (Age) (Rock	coarse biotite-muscovite-microcline-				
albite- quartz-(garnet-tourmaline-beryl) per alteration, attitude, geometry, structure,					
, , , , , , , , , , , , , , , , , , , ,					
	>				
Host-Rock Environment U3 < epizonal igner (Sed. dep. environments on Associated Rocks U4 < adjacent to Grafton p	n., metamorphic facies, ign. environ.)				
Intrudes Littleton Fm. schists.					
	-/-				
Ore Minerals C30 < uraninite, gummite, autum	nite, torbernite, uranophane - some				
museum quality specimens.					
Gangue Minerals K4 < quartz, feldspar, mic	as, beryl				

URANTUM-OCCURRENCE

ORANI ON-OCCURRENCE	Quad Name Torcrand
REPORT	Deposit No. 1
Alteration N75 < minor hematite stains	
	>
Reductants U5 < minor sulfides (pyrite)	
	,
Analytical Data (General) C43 <	MHL 214, 703 ppm U ₃ O ₉ :
MHL 215, 205 ppm H ₀ G ₀	
	>
Radiometric Data (General) U6 < Most of	
	No. times background and dimensions)
	5m zone (MHL 214) on east wall; 1200-3500 cp
in northern end of tunnel (MHL 215); Spec	ctrometer measurements: MHL 214-K = 11.0%> *
Ore Controls K5 < hydrothermal-magmatic	(?) movement of U-rich fluids into micaceous
zones and early fractures. Secondaries i	in east wall are concentrated along base of
	tunnel, radioactivity is associated with a
	muscovite-rich pegmatite, possibly a margina
facies	
	>
Deposit Class C40 < pegmatite	> Class No. U7 43 12 10 >
	ne pegmatite may contain larger uraniferous
zones at depth	re peginderee may contain larger manifering
	>

URANIUM-OCCURRENCE

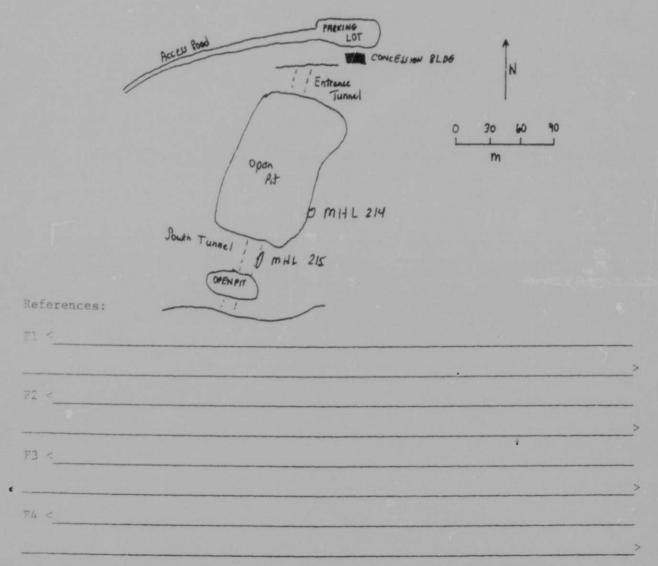
	T	R	0	P	E	R	
	T	K	O	r	Ł	ĸ	

Quad	Name	Portland		
D	- d to 37 -	1		
nebo:	sit No			

Uranium Analyses:

Sample No.	Sample Description	Uranium Analysis	
MHL 214	Chips along 5m long zone of U secondaries exposed	704 ppm U ₃ 0 ₉	
	along east wall, 50 m from south tunnel- mostly fe	aldspar	
MHL 215	6m channel in tunnel at south end of quarry, about	205 ppm U ₂ O ₂	
	24m from north entrance, east side- micaceous pegma	atite	

Geologic Sketch Map and/or Section, with Sample Locations:

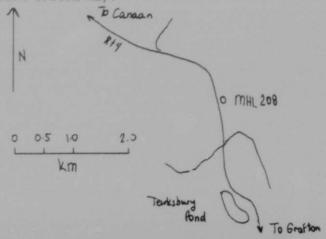


URANIUM-OCCURRENCE	Quad Name Portland
REPORT	Deposit No. 1
Continuation from p. 1-5:	
Label	
	Th = 7.3; MHL 215-7.3%K, 309 ppm U, 26.3 ppm
Th. U/Th = 11.8	
· · · · · · · · · · · · · · · · · · ·	

RA	N	Ι	U	ų.	-(00	C	U	R	R	E	N	C	E
			-	21	77			m						

Quad	Name A90<	Portland	
Quad	Scale Aloo	1 , 2, 5, 0, 0, 0, 0	
Depoi	sit No. B40	< 2	

Deposit Name AlO < Orange anomaly >
Synonym Name(s) All <>
District or Area A30 < Grafton Pegmatite District >
Country A40 (U, S) U, S State New Hampshire
State Code A50 <3,3 [3,3] County A60 < Grafton > (Enter code twice from List D)
Position from Prominent Locality A82 < 16 km west of Newfound Lake
>
Field Checked G1 $<$ $\frac{7}{8}$ $\frac{1}{1}$ By G2< McHone , J. Gregory > Try Mo Last name First Initial
Latitude A70 4 3 13 7 12 3 ND Longitude A80 0,7,115,311,4, WD Deg Min Sec
Township A77 <
Meridian A81 < > Altitude A107 < 320 m >
Quad Scale A91 4 6,2,5,0,0 Quad Name A92 < Cardigan > (7½' or 15' quad)
Physiographic Province A63 < 0 1 New England >
Location Comments A83 < New roadcuts 4.1 km east of intersection of Rts. 4 and
113, east side of Rt. 4, N-end of southern roadcut
Location Sketch Map:



BFE 1236 4/19/78

URANIUM-OCCURRENCE	Quad Name Portland
REPORT	Deposit No. 2
Commodities Present:	
Commodities Produced:	P COPROD 4
MINOR 4	P BYPROD 4 1 1 1 1 1 1 1 P
POTEN 4 OCC	CUR <u< td=""></u<>
Commodity Comments C50 <	
Status of Exploration and Development A (1 = occurrence, 2 = raw prospect, 3 = Comments on Exploration and Development	<pre>developed prospect, 4 = producer)</pre>
Property is A21 (Active) (A22) (In Workings are M120 (Surface) M130 (Un Description of Workings M220<	nactive) (Circle appropriate labels) nderground) M140 (Both)
	YES NO SML MED LGE (circle) years grade B <lb> G7C< > G7D< % U308></lb>
Reserves and Potential Resources EH accuracy thousands of 1b. ElqU , P ElAq , P ElAq P ElAq	year of est. grade ElB< <u>LB</u> > ElC< <u>, , ,)</u> ElD< <u>% U308</u> >
Comments E8 <	

URANIUM-OCCURRENCE	Quad Name Portland
REPORT	Deposit No. 2
Deposit Form/Shape M10 < dike	>
Length M40 < 1.5 > M41 < M >	Size M15 (circle letter):
Width M50 < 1.5 > M51 < M >	1b U308
Thickness M60 < 2.5 > M61< 11 >	A 0 - 20,000
Strike M70 < N30E >	B 20,000 - 200,000 C 200,000 - 2 million
Dip M80 < 90 >	D 2 million - 20 million E More than 20 million
Tectonic Setting N15 < mobile belt	· · · · · · · · · · · · · · · · · · ·
Major Regional Structures N5 < NNE-tre	nding folds and faults
Local Structures N70 < NE-trending fractu	ires
Host-FM. Name U1 < NH Plutonic Series	
Host Rock Kl QDEV New York Ne	(Rock type, texture, composition, color,
alteration, attitude, geometry, structure	e, etc.)
	,
Host-Rock Environment U3 < igneous (Sed. dep. env. Comments on Associated Rocks U4 < Intrudes Littleton gneiss body is within 0.4 km to the west	
Ore Minerals C30 < none observed	
Gangue Minerals K4 < <u>muscovite</u> , quartz,	feldspar

Quad Name Portland

REPORT Deposit No. 2
Alteration N75 < minor iron oxide stains
Reductants U5 < none observed
Analytical Data (General) C43 < 16 ppm U ₃ O ₈ ; 7 ppm Be; 50 ppm Ba; 50 ppm Pb;
10 ppm B; 20 ppm La; 100 ppm Y; 10 ppm Zr; eU/eTh = 7.4 (spectrometer);
eU = 52 ppm, eTh = 7.1 ppm, eK = 6.0%
Radiometric Data (General) U6 < 400-720 cps in 0.3 x 1m zone (BG = 60 cps) (No. times background and dimensions)
along N side of pegmatite dike; adjacent pegmatites and schist are 60-120 cps
Ore Controls K5 < Primary magmatic U minerals (?) - probably U-Th bearing silicate
such as zircon and monazite. Possibly pitchblende or uraninite are present below
the sampled surface, since the spectrometer indicates higher U and U/Th than the
chemical analysis.
Deposit Class C40 < pegmatite • Class No. U7 <3,2,0
Comments on Geology N85 < 5 km NE of Ruggles Mine; the association with a
2-mica granite pluton to the east (Grafton pluton) may indicate a genetic source,
since such granites are known to be high in Uranium (see Sunapee, Ruggles Mine
U.O.R.'s)

www.		16 c ~	-	-		
111111111111111111111111111111111111111	270	M-0		ספו	2230	•
0.152	212 11	12-11-11		n n		

Ouad	Name	Portland	
Deno	git No.	2	

Uranium Analyses:

Sample No.	Sample Description	Uranium Analysis
MHL 208	Chips in anomalous zone	16 ppm U ₃ 0 ₈

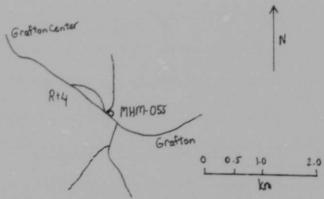
Geologic Sketch Map and/or Section, with Sample Locations:

References:	
r1 <	
	<u></u>
F2 <	
	>
F3 <	
	>
74 <	

REPORT

Quad	Name A90< Portland	
Quad	Scale A100 - 2, 5, 0, 0, 0, 0	
Depos	sit No. B40< 3	

Deposit Name AlO < Grafton Occurrence >
Synonym Name(s) All <
District or Area A30 < Ruggles Mine Area
Country A40 (U, S) U, S) State New Hampshire
State Code A50 < 3,3 County A60 < Grafton > (Enter code twice from List D)
Position from Prominent Locality A82 < From Grafton, NH travel west on Rte. 4,
outcrop (on North side) has vertical control mark D50X 1973, on topo map designated
as BM 337 outcrop opposite Sousa's BP station & 23m east of dirt road branching N >*
Field Checked G1 $<17.811.1p$ By G2< Bruton and Poer , > Last name First Initial
Latitude A70 < 4,3 + 3,3 + 3,7 ND Longitude A80 < 0,7,1 + 5,7 + 0,8 WD Deg Min Sec
Township A77 <
Meridian A81 < > Altitude A107 < 255 m >
Quad Scale A91 4 62500 Quad Name A92 < Cardigan, NH > (7½' or 15' quad)
Physiographic Province A63 < 0 1 New England >
Location Comments A83 < Hottest spot is 4.5 m from east end of outcrop in permatite
2 m above ditch level, sample from 2 areas several meters to lower left of >*
Location Sketch Map:



URANIUM-OCCURRENCE	Quad Name Portland
REPORT	Deposit No. 3
Commodities Present:	
Commodities Produced:	COPROD 4
MINOR 4	BYPROD 4
Potential Commodities:	AU I IPIBI I I I I P
Commodity Comments C50 <	
	>
Status of Exploration and Development A20 (1 = occurrence, 2 = raw prospect, 3 = development)	
Comments on Exploration and Development L1	10 <
Property is A21 (Active) (A22) (Inact	ive) (Circle appropriate labels)
Workings are M120 (Surface) M130 (Under	ground) M140 (Both)
Description of Workings M220<	>
Cumulative Uranium Production PROD	YES NO SML MED LGE (circle)
DH2 accuracy thousands of 1b. G7 Q U	years grade > G7C<
Source of Information D9 <	· · · · · · · · · · · · · · · · · · ·
Production Comments D10 <	>
Reserves and Potential Resources	
EH accuracy thousands of 1b.	year of est. grade
Source of Information E7 <	
Comments E8 <	

****			200	A 200			
URAN	988	IIM.	(3)		888	2 F/ N	
OU THE SE	1 40	MARK.				100000	

. UKANIUM-OCCURRENCE	Quad Name Fortland
REPORT	Deposit No. 3
Deposit Form/Shape M10 < Spot anomaly in pe	egmatite
Length M40 < 1 > M41 < M >	
Width M50 < > M51< >	1b U308
Thickness M60 < 2.5 > M61 < M > Strike M70 <	A 0 - 20,000 B 20,000 - 200,000 C 200,000 - 2 million D 2 million - 20 million E More than 20 million
Tectonic Setting N15 < mobile be	elt , >
Major Regional Structures N5 <	
Local Structures N70 <	
	,
Host-FM. Name U1 < Concord granite Host Rock K1 < D E V	
plutonic series, discordant in Concord-ty alteration, attitude, geometry, structure,	pe two-mica granite. , etc.)
	>
Host-Rock Environment U3 < plutonic	ron., metamorphic facies, ign. environ.)
Comments on Associated Rocks U4 < This is a significa	
We are at a contact between a good two-mi	
Kinsman Quartz Monzonite. The two-mica g	ranite contains several large inclusions
Ore Minerals C30 <	
Gangue Minerals K4 < quartz, feldspar, ga	rnet

UNANIUM-OCCURRENCE	Quad Name Fortiand
REPORT	Deposit No. 3
Alteration N75 < Feldspars are stained rec	i near points of maximum radioactivity.
Reductants U5 <	>
neductants 05	
Analytical Data (General) C43 < 36 ppm U ₃ 0 ₂	> 300 ppm PB
	<u> </u>
Radiometric Data (General) U6 < BG 55, pegma (No.	atite 300-1700 cps; granite 100-200 cps.
standard situation: spot anomalies in pegma	atite. There are two maxima - one
1700 and one 1200. Overall, the pegmatite	has surface radioactivity (SR)300-500
Ore Controls K5 < Differentiation in silice	eous water-rich magma.
Deposit Class C40 < pegmatitic	> Class No. U7 43,2,0 >
Comments on Geology N85 <	
	,

Ouad	Name	Portland	
-	4 44	2	

REPORT

Uranium Analyses:

Sample Description	Uranium Analysis
rab sample at pegmatite	36 ppm U ₃ O ₉
	Sample Description rab sample at pegmatite

Geologic Sketch Map and/or Section, with Sample Locations:

. 1		E
	Two mice granite chilled adjacent to in chasions of kgm	1700 cps
11/2/100	Vertical Control Marker DSDX, 1978 2m 20m	MHM OSS Kam
References:		
F1 <		
72 <		
F3 <		
F3 <		

Quad	Nar	ne _	Portland	
Depo	sit	No.	3	

REPORT Continuation from p. 1-5: Label A82 < off Rte. 4 > A83 (anomaly> U4 < of KQM. The two-mica granite has been chilled around the inclusions to form the fine-grained gray two-mica granite that is common to the Sebago Lake pluton. The exposure is spectacular in petrologic scope, despite its relatively small size.> U6 < including sampling points, which is considerably higher than normal. Size of 1700 spot, 0.6 m long, 0.4 m wide, in area of pink feldspar, sampled area 400-500 cps, 0.6 m long, 0.3 m wide. SR of two-mica granite 100-200.>

THE A 161	1 4 4 44 6			
	IUM	- 6 36	7323-1	
	12021			N Service

Quad	Name A90< F	ortland	
Quad	Scale Al004	2, 5, 0, 0, 0, 0	
Denos	sit No. B40<	4	

Fara 11622
Deposit Name AlO < Fogg Hill >
Synonym Name(s) All <
District or Area A30 <>
Country A40 QU SP U S State New Hampshire
State Code A50 43,3 County A60 < Sullivan >
Position from Prominent Locality A82 < Outcrop on SW flank Fogg Hill
Field Checked G1 < 7.9110 60 Rv C2< Bruton/DePietro
Field Checked G1 < 7,9 0,6 By G2 Bruton/DePietro , > Yr Mo Last name First Initial
Latitude A70 4,3 14,1 10,0, ND Longitude A80 40,7,1 15,7 12,0, WD Deg Min Sec
Township A77 <
Meridian A81 < > Altitude A107 < 463 m >
Quad Scale A91 4 , 6,2,5,0,0 Quad Name A92 < Cardigan > (7½' or 15' quad)
Physiographic Province A63 <0,1 New England >
Location Comments A83 < on dirt road trending N-S along W flank of hill, it is the
first visible outcrop on east side 35 m into woods - approximately 160 m past the > *
Location Sketch Map: Robinson Center Robinson Center Robinson Center M FOGGHILL M M M M M M M M M M M M

URANIUM-OCCURRENCE	Quad Name Portland
REPORT	Deposit No. 4
Commodities Present:	
Commodities Produced:	COPROD 4
MINOR 4	BYPROD 4
Potential Commodities:	44
Commodity Comments C50 <	/>
Status of Exploration and Development A20 (1 = occurrence, 2 = raw prospect, 3 = dev	
Comments on Exploration and Development Ll	10 <
Property is A21 (Active) A22 (Inact Workings are M120 (Surface) M130 (Under Description of Workings M220<	
Cumulative Uranium Production PROD DH2 accuracy thousands of 1b. G74 U G7A4 G7A4 G7B4LI Source of Information D9 4	years grade
Production Comments D10 <	>
Reserves and Potential Resources EH accuracy thousands of 1b. E1 E1 E1A E1A E1B	year of est. grade < <u>LB</u> > E1C< <u>,,,</u> > E1D< <u>% U308</u> >
Source of Information E7 <	<u> </u>
Comments E8 <	

	URANIUM-OCCURRE	NCE		Quad Name Portland Deposit No. 4					
	REPORT								
Deposit Fo	rm/Shape M10 <	Area of a	nomalous	rad	dioactivity >				
Length	M40 <			Si	ize M15 (circle letter):				
Width	M50 <	> M51<	>		1b U308				
Thickness	M60 <	> M61<	>		0 - 20,000				
Strike	M70 <		3	C	20,000 - 200,000 200,000 - 2 million				
Dip	M80 <		>	D E	2 millior - 20 million More than 20 million				
Tectonic S	etting N15 <	110	bile bel	t					
Major Regi	onal Structures	N5 < Ca	rdigan P	luto	on of Merrimack Synclinorium				
Local Stru	ctures N70 <								
Host Rock		r-garnet.	(Roc	Gra k ty	Member U2 < Two-Mica Granite > anite, medium grained, with quartz-type, texture, composition, color,				
Comments o		(Sed. dep.	. environ		metamorphic facies, ign. environ.) act of granite and biotite schist at				
Ore Minera	ls C30 < none of	oserved							
Gangue Min	erals K4 < quar	tz, biotit	e, muscov	ite	e, feldspar, garnet				

URANIUM-OCCURRENCE	Quad Name Portland
REPORT	Deposit No. 4
Alteration N75 < none observed	
Reductants U5 <	
Analytical Data (General) C43 < 23 pp	m U ₃ O ₃
Radiometric Data (General) U6 < BG 60	
	(No. times background and dimensions)
	,
Ore Controls K5 <	
Deposit Class C40 < orthomagmatic	> Class No. U7 <3,1,0;
Comments on Geology N85 <	

were a				
111111111111111111111111111111111111111	10.7.11	M (V	RRI	

Quad	Name	Portland

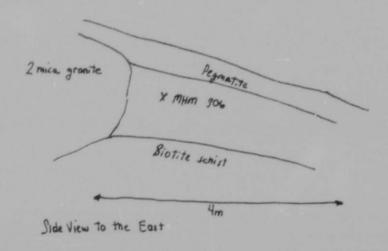
Deposit No.

Uranium Analyses:

Sample No.	Sample Description	Uranium Analysis
MHM 306	Chip sample from most radioactive area	23 ppm U ₃ 0
		3 3

Geologic Sketch Map and/or Section, with Sample Locations:

← N



References:					
r1 <					
72 <					
F3 <					
74 -					

URA			

Quad Name	Portland	
Deposit No.	4	*

Cantinua	43 44	Burney.		N. W.
Continua	Lion	Trom	D :	- 15 C
		V 50 -0 TH	20.00	the set to

Labe	1
	<pre></pre>
-	
_	
-	
-	
-	
-	
-	

ij	R/	AN	Ι	UM	-	0	C	CI	Ű	R	R	E)	g	C	

URANIUM-OCCURRENCE	Quad Name A90< Portland	>
REPORT	Quad Scale A100 (, 2, 5, 0, 0, 0, 0)	
	Deposit No. B40<5	>
Deposit Name AlO < Horseshoe Pond	Occurrence	
Synonym Name(s) All <		
District or Area .30 < Ragge	ed Mountain	>
Country A40 4U, SP U, S	State New Hampshire	
State Code A50 < 3,3 > [3,3] (Enter code twice from List	County A60 < Merrimack D)	>
Position from Prominent Locality A	82 < At intersection of Highways 4 and 11.	east

Field Checked G1 < 7,9 0,6 By G2< Wagener , H. D. Yr Mo Last name First Initial Latitude A70 44,3H2,6H1,1,NP Longitude A80 40,7,1H4,8H2,1,WP Deg Min Sec Deg Min Sec

Meridian A81 <____ > Altitude AlO7 < 220 m > Quad Scale A91 (6,2,5,0,0) Quad Name A92 (Mt. Kearsarge (7½' or 15' quad)

Physiographic Province A63 q0,1 New England
(List K)

Location Comments A83 <

Location Sketch Map:

Andover.

km

		120 E) E7	

URAN LUM-OCCURRENCE	Quad Name Portiand
REPORT	Deposit No. 5
Commodities Present:	
Commodities Produced:	COPROD 4
MINOR 4	BYPROD 4
Potential Commodities:	R <u< td=""></u<>
Commodity Comments C50 <	
	>
Status of Exploration and Development A2 (1 = occurrence, 2 = raw prospect, 3 = d	0 < 1 > eveloped prospect, 4 = producer)
Comments on Exploration and Development	L110 <
Property is A21 (Active) A22 (Ina Workings are M120 (Surface) M130 (Und	(Circle appropriate labels)
	erground) M140 (BOCH)
Description of Workings M220<	
	YES NO SML MED LGE (circle) years grade (LB> G7C< > G7D< % U308>
Source (i Information D9 <	· · · · · · · · · · · · · · · · · · ·
Production Comments D10 <	
Reserves and Potential Resources	
EH accuracy thousands of 1b.	year of est. grade 1B< <u>LB</u> > E1C< <u>1 1 1 1 1 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2</u>
Source of Information E7 <	>
Comments E8 <	

REPORT	
MAL VILL	Deposit No. 5
Deposit Form/Shape M10 <	*
FT/M Length M40 <> M41<>	Size M15 (circle letter):
Width M50 <> M51<>	1b U308
Thickness M60 <> M61<>	A 0 - 20,000 B 20,000 - 200,000
Strike M70 <>	C 200,000 - 2 million D 2 million - 20 million
Dip M80 <>	E More than 20 million
Tectonic Setting N15 < Mobile Belt	>
Major Regional Structures N5 <	
Local Structures N70 <	
	>
Host-FM. Name U1 < Warner	> Member II2 /
Host Rock Kl (Age) (R	lock type, texture, composition, color,
quartzite, or from adjacent quartz-pebble	
alteration, attitude, geometry, structure,	
Host-Rock Environment U3 < (Sed. dep. envir	on., metamorphic facies, ign. environ.)
Comments on	
Associated Rocks U4 < A careful search v	was made of all road cuts in this region
in an attempt to locate similar mylonite	zones - the search was totally without suc
	>
Ore Minerale C20 - None observed	
Ore Minerals C30 < None observed	
	
Gangue Minerals K4 <	

	M - 0		

URANIUM-OCCURRENCE	Quad Name	Portland
REPORT	Deposit No.	5
Alteration N75 < None observed		
Reductants U5 <		
		>
Analytical Data (General) C43 < 59 ppm	U ₂ O ₂	
	3 3	
Radiometric Data (General) U6 < Micaceous	quartz pebble o	conglomerate surface
radioactivity (SR) 125 cps	o, times backgro	Juliu and dimensions)
radioactivity (SR) 125 Cps		
		>
Ore Controls K5 <		
•		
Deposit Class C40 < Vein type in metan	norphic rock	> Class No. U7 < 7, 2, 0
Commences on Geology NOS		

 H A	NO TO SE	M	α	-	D D 1	in Bala	- 14

Quad Name	Portland	
Deposit No.	5	

Uranium Analyses:

Sample No.	Sample Description	Uranium Analysis
MHM 067	Grab sample of mylonite, 300-400 cps	59 ppm U ₃ 0 ₈
МНМ 092	Grab sample of micaceous quartz-pebble conglom- erate	5 ppm U ₃ O ₈

Geologic Sketch Map and/or Section, with Sample Locations:

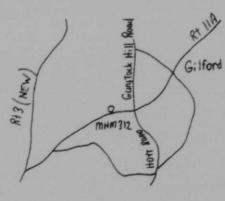
References:	
F1 <	
F2 <	
F3 <	
F4 <	

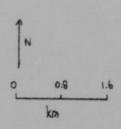
REPORT

Quad	Name A90< P	ortland
Quad	Scale Aloo<	1 , 2, 5, 0, 0, 0, 0
Depos	sit No. B40<	6

Deposit Name AlO < Gunstock Hill Road >
Synonym Name(s) All <
District or Area A30 < Laconia >
Country A40 (U,S) [U,S] State New Hampshire
State Code A50 43,3p 3,3 County A60 < Belknap >
Position from Prominent Locality A82 < On north side of Rte. 11A, .32 km west of
Oct. of Rte. 11A and Gunstock Hill Road.
<u> </u>
Field Checked G1 < 7,9 0,7 By G2 < Bruton , Keith A. > Yr Mo Last name First Initial
Latitude A70 4 3 3 2 3 5 ND Longitude A80 4 0 7 1 4 2 5 4 1 0 WP Deg Min Sec Deg Min Sec
Township A77 <
Meridian A81 < > Altitude A107 < 262 m >
Quad Scale A91 4 6,2,5,0,0 Quad Name A92 < Winnipesaukee > (7½' or 15' quad)
Physiographic Province A63 < 0,1 New England >
Location Comments A83 First outcrop west of Gunstock Hill Road on north side
Rte. 11A. Anomaly is at ground level.

Location Sketch Map:





TITL AN	STIME	no	CHARLE	DWILL
UKAI	NLUM	-00	BUR	RENCE

ORGANIZATI OCCURRENCE	Quad Name Portland
REPORT	Deposit No. 6
Commodities Present:	
Commodities Produced:	P COPROD 4
MINOR 4	P BYPROD 4
POTEN 4 00	CUR QU, , L , L , L , L
Commodity Comments C50 <	
Status of Exploration and Development (1 = occurrence, 2 = raw prospect, 3 =	developed prospect, 4 = producer)
Comments on Exploration and Developmen	t L110 <
Workings are M120 (Surface) M130 (U	(Circle appropriate labels) Inderground) M140 (Both)
Description of Workings M220<	
Cumulative Uranium Production PROD DH2 accuracy thousands of lb. G7 Q U	
Source of Information D9 <	
Production Comments D10 <	
Reserves and Potential Resources	
EL U P ELA	year of est. E1B <lb> E1C<</lb>
Source of Information E7 <	
Comments E8 <	

URANIUM-OCCURREN	CE	Quad Name Portland		
REPORT		Deposit No. 6		
Deposit Form/Shape M10 <				
Length M40 <	FT/M > M41<>	Size Ml5 (circle letter):		
Width M50 <	> M51<>	<u>1b U308</u>		
Thickness M60 <	> M61<>	A 0 - 20,000		
Strike M70 <	>	B 20,000 - 200,000 C 200,000 - 2 million		
Dip M80 <	>	D 2 million - 20 million E More than 20 million		
Tectonic Setting N15 <	Mobile be	1t >		
Major Regional Structures	N5 <			
		>		
Local Structures N70 < Ope	en fold, plunging	S 55-60, 175 SE		
		, , , , , , , , , , , , , , , , , , , ,		
		>		
		> Member U2 <>		
Host Rock K1 < E, D, E, V, , (Age)	/ / / / / Ki cream	grey mylonite with small kinks ock type, texture, composition, color,		
		, , , , , , , , , , , , , , , , , , ,		
alteration, attitude, geom	etry, structure,	etc.)		
		>		
Host-Rock Environment U3 <				
Comments on	(Sed. dep. envir	on., metamorphic facies, ign. environ.)		
	lying mica schis	t (N80M, 45SW) has surface radioactivity		
of 150-450 cps probably d	ue to underlying	mylonite. Binary quanite at west end of		
outcrop SR 80-150 cps. G	arnet biotite qu	artzite SR 80-130 cps.		
Ore Minerals C30 < none ob	served			
		>		
Gangue Minerals K4 < none	observed			
odubac minerars K4 / Hone	observed.			

URANIUM-OCCURRENCE	Quad Name For Cland
REPORT	Deposit No. 6
Alteration N75 < None observed	
	,
Reductants U5 < None Observed	
	,
Analytical Data (General) C43 < 187	ppm U ₃ O _o
	,
Radiometric Data (General) U6 < BG-65	11 to 26 times BG (70 x 80 cm)
	No. times background and dimensions)
6.2% eK, 176 ppm eU, 13 ppm eTh	
	>
Ore Controls K5 < Structural control	in nose of open fold plunging 55-60S.
Fold Axis 175 SE . Shearing is ind	icated. Mylonite is above and below garnet
muscovite schist.	
Deposit Class C40 < Vein type deposit i	n metamorphic rocks > Class No. U7 47,2,0
Comments on Geology N85 < Muscovite sch	ist has a higher count than the biotite
schist on the eastern portion of the	
	The second secon

K D N		192 90 70 1	

Quad Name Portland

REPORT

Deposit No. 6

Uranium Analyses:

Sample No.	Sample Description	Uranium Analysis
MHM 312	Chip sample from 700-1000 cps area	137 ppm U ₃ O ₃

Geologic Sketch Map and/or Section, with Sample Locations:

Stray Stray &	garnet by the south of the sout	siotite schust
W	I view North	Sunny Slope Poultry Form
	References:	
	F1 <	<u> </u>
	F2 <	>
	F3 <	
•	74 <	>
		>

ITR:AN			

Quad	Name A	190< Po	rtland			
Quad	Scale	A1004_	, 2, 5, 0	0, 0,	00	
Depos	sit No.	B40<	7			

Deposit Name AlO < Walnut Hill	
Synonym Name(s) All <	>
District or Area A30 < Candia	>
Country A40 (U,S) U,S State New Hampshire	
Enter code twice from List D) County A60 < Rockingham (Enter code twice from List D)	>
Position from Prominent Locality A82 < At Candia Hill School, take Healy	Road
orth 1 km, take left on dirt road, go west 1.2 km, outcrop 30 m on roa	ad west
f driveway of house on north side of road.	>
Stald Charled Cl. a7 Qu Q Sp. Dayton Voith	Δ
Field Checked G1 <7,910,60 By G2< Bruton Yr Mo Last name ,Keith First	Initial
Yr Mo Last name First Latitude A70 44 34 0 44 4 5 ND Longitude A80 40,7,141,940,0, WD Deg Min Sec Deg Min Sec	Initial
	Initial FT/M
Deg Min Sec Longitude A80 4 0, 7, 1 1, 9 1, 0, w Deg Min Sec	FT/M
Latitude A70 4 3 1 0 4 4 5 N Longitude A80 0 7 1 1 9 0 0 W Deg Min Sec Township A77 1 P Range A78 1 P Section A79 1 P	FT/M
Latitude A70 < 4,3+0,4+4,5,N Longitude A80 < 0,7,1+1,9+0,0,W Deg Min Sec Township A77 < 1	FT/M
Latitude A70 4,3+0,4+4,5, N Longitude A80 0,7,1+1,9+0,0, W Deg Min Sec Deg	FT/M >>

Rt 1018

Candia Four Corners

o 0.5 1.0 2.0

km

BFE 1236 4/19/78

URANIUM-OCCURRENCE	Quad Name Portland
REPORT	Deposit No. 7
Commodities Present:	
Commodities Produced:	COPROD 4
MINOR 4	
Potential Commodities:	< <u>u</u> , <u>M</u> , <u>N</u> , , <u>I</u> , , <u>P</u>
Commodity Comments C50 <	
	>
Status of Exploration and Development A20 $(1 = \text{occurrence}, 2 = \text{raw prospect}, 3 = \text{det})$	<pre> < 1 > veloped prospect, 4 = producer)</pre>
Comments on Exploration and Development L	.110 <
Property is A21 (Active) (A22) (Inactive) Workings are M120 (Surface) M130 (Under Description of Workings M220<	ctive) (Circle appropriate labels) erground) M140 (Both)
Cumulative Uranium Production PROD DH2 accuracy thousands of 1b. G74 U G7A4 G7A4 G7B41	YES NO SML MED LGE (circle) years grade B> G7C<
Source of Information D9 <	
Production Comments D10 <	
Reserves and Potential Resources EH accuracy thousands of 1b. E1	year of est. grade % U308>
Comments E8 <	

	Quad Name Portland
	Deposit No. 7
Deposit Form/Shape M10 < circular area of	f anomalous radioactivity
Length M40 < > M41 < >	Size M15 (circle letter):
Width M50 <> M51<>	15 U308
Thickness M60 <> M61<>	(a) 0 - 20,000
Strike M70 <	B 20,000 - 200,000 C 200,000 - 2 million
Dip M80 <	D 2 million - 20 million E More than 20 million
Tectonic Setting N15 < mobile be	elt
Major Regional Structures N5 < Fitchburg	Pluton
Local Structures N70 <	
Host-FM Name III < Concord Granito	Nambau III constitution and the
Host-FM. Name U1 < Concord Granite	
HOST ROCK KI QUEV 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	303 concordant_pegmatite with smokey
(Age) (R	WER LYDE, LEXILIE, COMBOSITION COLOR
(Age) (R	
(Age) (R quartz, muscovite, biotite and feldspar. Mh	HM 304 is the pegmatoid-granitoid facies
(Age) (R quartz, muscovite, biotite and feldspar. Mh alteration, attitude, geometry, structure,	HM 304 is the pegmatoid-granitoid facies
(Age) (R quartz, muscovite, biotite and feldspar. Mh	HM 304 is the pegmatoid-granitoid facies
(Age) (R quartz, muscovite, biotite and feldspar. Mh alteration, attitude, geometry, structure, the Concord 2-mica granite.	HM 304 is the pegmatoid-granitoid facies
quartz, muscovite, biotite and feldspar. Mhalteration, attitude, geometry, structure, the Concord 2-mica granite. Host-Rock Environment U3 < plutonic	HM 304 is the pegmatoid-granitoid facies etc.)
quartz, muscovite, biotite and feldspar. Mhalteration, attitude, geometry, structure, the Concord 2-mica granite. Host-Rock Environment U3 < plutonic (Sed. dep. envir Comments on	dM 304 is the pegmatoid-granitoid facies etc.) on., metamorphic facies, ign. environ.)
quartz, muscovite, biotite and feldspar. Mhalteration, attitude, geometry, structure, the Concord 2-mica granite. Host-Rock Environment U3 < plutonic (Sed. dep. envir Comments on	dM 304 is the pegmatoid-granitoid facies etc.) on., metamorphic facies, ign. environ.)
quartz, muscovite, biotite and feldspar. Mhalteration, attitude, geometry, structure, the Concord 2-mica granite. Host-Rock Environment U3 < plutonic (Sed. dep. envir Comments on Associated Rocks U4 < Concordant pegmatite	dM 304 is the pegmatoid-granitoid facies etc.) on., metamorphic facies, ign. environ.)
quartz, muscovite, biotite and feldspar. Mhalteration, attitude, geometry, structure, the Concord 2-mica granite. Host-Rock Environment U3 < plutonic (Sed. dep. envir Comments on Associated Rocks U4 < Concordant pegmatite	dM 304 is the pegmatoid-granitoid facies etc.) on., metamorphic facies, ign. environ.)
quartz, muscovite, biotite and feldspar. Mhalteration, attitude, geometry, structure, the Concord 2-mica granite. Host-Rock Environment U3 < plutonic (Sed. dep. envir Comments on Associated Rocks U4 < Concordant pegmatite quartz augen.	dM 304 is the pegmatoid-granitoid facies etc.) on., metamorphic facies, ign. environ.)
quartz, muscovite, biotite and feldspar. Mhalteration, attitude, geometry, structure, the Concord 2-mica granite. Host-Rock Environment U3 < plutonic (Sed. dep. envir Comments on Associated Rocks U4 < Concordant pegmatite quartz augen.	dM 304 is the pegmatoid-granitoid facies etc.) on., metamorphic facies, ign. environ.)
quartz, muscovite, biotite and feldspar. Mhalteration, attitude, geometry, structure, the Concord 2-mica granite. Host-Rock Environment U3 < plutonic (Sed. dep. envir Comments on Associated Rocks U4 < Concordant pegmatite	dM 304 is the pegmatoid-granitoid facies etc.) con., metamorphic facies, ign. environ.) e is in biotite schist with feldspar and

URANIUM-OCCURRENCE	Quad Name Fortiand
REPORT	Deposit No. 7
Alteration N75 < None observed	
	,
Reductants U5 <	
	<u> </u>
Analytical Data (General) C43 < Sample Sample MHM 304-7 ppm U ₃ O ₈	MHM 303-25 ppm $\rm U_3O_8$, very high MN values;
	>
	cps, MHM 303 45 times BG (13 x 13 cm), No. times background and dimensions) s BG (50 x 50 cm); MHM 304 BG 60,6 to 14
times BG.	
Ore Controls K5 <	
Deposit Class C40 < Orthomagmatic	> Class No. U7 43,1,0
Comments on Geology N85 < The anomalous	s areas are pods of pegmatoid material
enriched in biotite and muscovite. The	ere are four anomalous areas (500-800 cps)
surrounding MHM 304.	

NIUN		

Quad Name Portland

Deposit No. 7

REPORT

Uranium Analyses:

Sample No.	Sample Description	Uranium Analysis
MHM 303	Chip sample at anomalous area	25 ppm
MHM 304	Chip sample off of fracture surface	7 ppm

References:	
r1 <	
¥2 <	
	>
F3 <	
	·
74 <	

	NIU			

Quad Name Portland

Deposit No. 7

Continuation from p. 1-5:

Label

A83 < and approximately 45 m into the woods on the south side of the road. >

U2 < facies of the two-mica granite.>

Tot	K	U	Th	eK	eUppm	eThppm			
157470	8667	9451	811	4.42	217.3	45.2	MHM303	01	
157300	8943	9186	819	5.27	211.1	45.7	MHM303	02	
25330	2476	846	371	3.90	14.0	15.9	MHM304		>

TTTS A ST	T. T. T. T. S. C. J.		RENCE
111 86 73 76		14 (17)	

To Northwood

BFE (236 4/19/78

Quad	Name A90<	Portland	
Quad	Scale Al00<	1, 2, 5, 0, 0, 0, 0	
Depos	sit No. B40<	8	

Deposit Name AlO < Ayers Pond	>
Synonym Name(s) All <	3
District or Area A30 Barrington Township	>
Country A40 (U, S) (U, S) State New Hampshire	
State Code A50 93,3p 3,3j County A60 < Strafford (Enter code twice from List D)	>
Position from Prominent Locality A82 <turn 202="" off="" onto="" pond<="" rt.="" td="" west=""><td>Hill Rd., go</td></turn>	Hill Rd., go
1.6 km and turn NE onto dirt rd., first sample location is 160 m up rd.	on west side
and in woods, second sample location is in third exposure 160 m up fro	m first one > *
Field Checked G1 47,9,0,9p By G2< Poer , Anne Yr Mo Last name First	T. >
Latitude A70 4 3 1 5 1 7 ND Longitude A80 4 0 7 1 1 0 0 4 7 WD Deg Min Sec	
Township A77 <	FT/M
Meridian A81 < > Altitude A107 < 65	
Quad Scale A91 (7½' or 15' quad) Quad Name A92 < Alton	>
Physiographic Province A63 < 0, 1 New England (List K)	>
Location Comments A83 < for first sample location 160 m north of inte	rsection, at
utility pole 46S, walk back from it \bot to rd. \emptyset m, turn south at right	t angle and >
Location Sketch Map: 1 To Roberter	

URANIUM-OCCURRENCE	Quad Name For Grand
REPORT	Deposit No. 2
Commodities Present:	
Commodities Produced:	COPROD 4
MINOR 4	P BYPROD 4 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
Potential Commodities:	DER & Y
Commodity Comments C50 <	<u> </u>
Status of Exploration and Development A (1 = occurrence, 2 = raw prospect, 3 = Comments on Exploration and Development	developed prospect, 4 = producer)
Property is A21 (Active) (A22) (In Workings are M120 (Surface) M130 (Un Description of Workings M220<	nactive) (Circle appropriate labels) nderground) M140 (Both)
Cumulative Uranium Production PROD DH2 accuracy thousands of 1b. G7 4 4 5 67A 6 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7	years grade B <lb> G7C< > G7D< <u>% U308</u>></lb>
Reserves and Potential Resources EH accuracy thousands of 1b. Elqu P ElAq P P Source of Information E7 <	year of est. grade E1B <lb> E1C<</lb>
Comments E8 <	

			Page 3
	URANIUM-OCCURRENCE		Quad Name Portland
	REPORT		Deposit No. 3
Deposit F	orm/Shape M10 < chip samp	les across	zone of anomalous radioactivity
Length	M40 < see N85 > M41<	/M _>	Size M15 (circle letter):
Width	M50 < see N85 > M51<	_>	15 U308
Thickness	M60 < > M61<	_>	A 0 - 20,000
Strike	M70 <	>	B 20,000 - 200,000 C 200,000 - 2 million
Dip	M80 <	>	D 2 million - 20 million E More than 20 million
Tectonic	Setting N15 < m	obile belt	
		3,37,37	of Fitchburg Pluton
Local Str	uctures N70 <		
Local Str	uctures N70 <		
	uctures N70 <		
Host-FM.	Name Ul <quartz diorite<="" td=""><td>> 16 medium-</td><td></td></quartz>	> 16 medium-	

Host-Rock Environment U3 < (Sed. dep. environ., metamorphic faci s, ign. environ.)

Associated Rocks U4 <

Ore Minerals C30 < none observed

Gangue Minerals K4 < quartz, feldspar, muscovite, garnet

URANIUM-OCCURRENCE	Quad Name	Portland	
REPORT	Deposit No.	3	
Alteration N75 < surface feldspar weathered			t,
hematite-staining in muscovite			
			>
Reductants U5 <			
			>
Analytical Data (General) C43 < 46 ppm U ₃ 0	3 in sample	1; 114 ppm U ₃ 0 ₈ in sa	imple 2
			>
Radiometric Data (General) U6 &BG 30, Chips (No. t		to 30 x BG (see N35)	
for sample 1; sample 2 BG 70, chips 5 to 17			
			>
Ore Controls K5 <			
			>
Deposit Class C40 < Pegmatitic		> Class No. U7 <_3	12,00
Comments on Geology N85 Sample 1 - chip x	is rectangu	lar area 2 m long, 1	m high.
and 1 m wide, counts 300-850 cps and chips			
massive; chip x^2 is irregularly shaped, 3 m	long, 2 m w	ride, 1 m high, counts	300-
2500 cps, chips from 2500 cps spot, highest	readings at	north end of zone, 2	2000 cps
zone .3 m square; sample 2- chip x^3 is on s	ide of expos	ure along driveway,	> 1

Quad	Name	Portland Portland	
Depos	sit No	. 3	

REPORT

Uranium Analyses:

Sample No.	Sample Description	Uranium Analysis
סדר אווא	chips across 2 zones of anomalous radioactivity	46 ppm U ₃ O ₃
мнм 111	chips across 2 zones of anomalous radioactivity	114 ppm U ₃ O ₃

Anomalous zone X' Anomalous zone 12 mto X' 13 mto X' 14 mto X' 15 mto X' 16 mto X' 17 mto X' 18 mto X			
X14 X2= MHM-110 OTHITY POLE HES	+ Read 160 in -	Anemaleus 3m x2	T4.6m
References:			
F2 <			
F3 <			
Th <			

Quad Name Portland

REPORT

Continue	ion from p. 1-5:
Label	
A82 <	on same side >
A83 <	go 6 M, x^2 will be to west 4.6 m, go 6 m more along same path to x^1 ;
	for second sample location, 320 m north of intersection, southern end of
	exposure is 30 m from driveway, x^3 15 m south of driveway, and x^4 12 m
	farther south.)
N85 <	is 4.6 m above ground, hottest spot (1000-1500 cps) is 0.5 m big, zone
	of 300-1500 cps is 2 m long and 1.5 m high, chip from 1200 spot, very
-	weathered, less feldspar than other chips, chip x4 is on road side of
	outcrop 1.2 m offground, zone is 0.3 to 0.6 m wide, 1.5 m long, 300-300 cm
	chips from 400-700 cps, lot of muscovite.>

REPORT

Quad	Name /	ame A90-Portland			
Quad	Scale	A1004_	, 2, 5,	40	
Depos	sit No.	. B40<	9		

Deposit No. 540-
Deposit Name AlO < New Durham Ridge
Synonym Name(s) All <
District or Area A30 < Alton Pegmatite District
Country A40 QU, SP (U, S) State New Hampshire
State Code A50 <3.3 P 3.3 County A60 < Belknap County A60 Count
Position from Prominent Locality A82 < On new Highway 11 NW of Farmington, first
road cut in rock NW at road junction near BM 491.
Field Checked G1 < 7,9 0,7 By G2 Wagener , H. D. Yr Mo Last name First Initial
Latitude A70 43 H2,4 H2,2, ND Longitude A80 40,7,1 H0,7 H3,0, WP Deg Min Sec
Township A77 <
Meridian A81 < > Altitude A107 < 150 m
Quad Scale A91 4 62,5,0,0 Quad Name A92 < Alton (74' or 15' quad)
Physiographic Province A63 40,1 New England (List K)
Location Comments A83 < Anomalous zone in concordant pegmatice in middle to
upper part of central portion of cut.
Location Sketch Map: New DurhamCorpus New DurhamCorpus No. 8 1.6 km No. 8 1.6 km Farmington

****	NAME OF STREET		-	
URA	NIII	M = OC	CHRR	RENCE

UKANTUM-UCCURRENCE	Quad Name Portland
REPORT	Deposit No. 9
Commodities Present:	
Commodities Produced:	> COPROD 4
MINOR 4	> BYPROD 4
Potential Commodities:	UR QU, , , , , , , , , , , , , , , , , , ,
Commodity Comments C50 <	
Status of Exploration and Development A (1 = occurrence, 2 = raw prospect, 3 = o Comments on Exploration and Development	developed prospect, 4 = producer)
Property is A21 (Active) (A22) (In. Workings are M120 (Surface) M130 (Undescription of Workings M220<	derground) (Circle appropriate labels)
Cumulative Uranium Production PROD DH2 accuracy thousands of 1b. G74 U	
Production Comments D10 <	
Reserves and Potential Resources III accuracy thousands of 1b. E14 U P E1A4 E1A4	year of est. grade 1B <lb> E1C<</lb>
Comments E8 <	

URANIUM-OCCURRENCE	Quad Name Portland
PEPORT	Deposit No. 9
Deposit Form/Shape M10 <	
Length M40 < 8 > M41 < M >	Size M15 (circle letter):
Width M50 < > M51 < >	
Thickness M60 < 0.5 > M61 < M >	A 0 - 20,000
Strike M70 <>	B 20,000 - 200,000 C 200,000 - 2 million
Dip M80 < nearly horizontal >	D 2 million - 20 million E More than 20 million
Tectonic Setting N15 < Mobile t	pelt
Major Regional Structures N5 <	
Local Structures N70 <	
Host-FM. Name U1 < NH series pegmatite	> Member U2 granitoid-pegmatoid facies
Host Rock Kl 4 (Age) (Age)	cordant pegmatite of the NH series type Rock type, texture, composition, color.
contains zones of granitoid-pegmatoid roo	
alteration, attitude, geometry, structure	, etc.)
subordinate biotite. Discordant pegmatit	te is of the giant crystal type.
Host-Rock Environment U3 < Plutonic	
(Sed. dep. envi	ron., metamorphic facies, ign. environ.)
Comments on Associated Rocks U4 < Host rocks for the	pegmatite are schists and quartzites of
the Littleton formation.	
Ore Minerals C30 < none observed	
Canaua Minaral W Quarta California	
Gangue Minerals K4 < Quartz-feldspar-mus	Lovite-blotite-schori-garnet

URANIUM-OCCURRENCE	Quad Name Portland
REPORT	Deposit No. 9
Alteration N75 < None observed	
Reductants U5 <	
Analytical Data (General) C43 < MHM 072	100 ppm U ₃ O ₃ , MH1 309 67 ppm U ₃ O ₃
Radiometric Data (General) U6 < Surface r	radioactivity (SR) of schist around 120; of o. times background and dimensions)
two-mica granite, 150; of discordant peg	matite, around 150; of concordant pegmatite
	long a joint under an overhang (700 is >*
	nitic magma. It is becoming clear that in
	series, as certain portions of the melt
	concentrated in pockets of highly fluid
magma that crystallizes to form the pegm	
	jected outward with pegnatite forming fluid
	f concordant syntectonic pegmatites. This
process seems to be independent of the 1	
Deposit Class C40 < pegmatitic	> Class No. U7 4 3, 2, 0
Comments on Geology N85 <similar td="" the<="" to=""><td></td></similar>	
Sametre on Secretary and American and sine i	and the sentral and region.

25/25/				

Quad Name	Portland	
Denneft No.	0	

REPORT

Uranium Analyses:

Sample Description	Uranium Analysis
Chip sample across anomalous zone of pegmatite	100 ppm U ₃ 0 ₉
Chip sample across anomalous zone of pegnatite	67 ppm U ₃ O ₉
	Chip sample across anomalous zone of pegmatite

	permotord grantford-facies	1	
arnet-hictitle schist and quar	Taite Schitt + quotaite	discordant Pegnodite	1
References:			
F1 <			
F2 <			
F3 <			

Quan Marie Portland

DEDOGE

Continuation from p. 1-5:
Libel
U6 about 10 x BG). Chip specimens were taken across a zone in which SR
ranged from 300-600. Highest SR occurs near schlieren, but zone is anomalous
in absence of schlieren. Where the concordant pegmatite is anomalous, the
anomalous zore is granitoid-pegmatoid rock:>
K5 < that causes hematization and U-Mo mineralization along internal fracture

REPORT

Quad Name A90< Portland

Quad Scale A100< 12, 5, 0, 0, 0, 0

Deposit No. B40< 10

Deposit Name AlO < Alton
Synonym Name(s) All <
District or Area A30 < Alton Pegmatite District >
Country A40 (U, S) U, S State New Hampshire
State Code A50 < 3,3 County A60 < Belknap County A60 County A60
Position from Prominent Locality A82
Rte. 23 and Bay Hill Road, approximately 2.7 km north of circle at Jct. of Rte. 23
and Rte. 11.
Field Checked G1 < 7,9 0,7 By G2 < Bruton , Keith A. > Yr Mo Last name First Initial
Latitude A70 4,3-2,3-2,5, ND Longitude A80 40,7,1-1,3-3,5, ND Deg Min Sec
Township A77 <
Meridian A81 < > Altitude A107 < 2/4 m >
Quad Scale A91 4 625000 Quad Name A92 < Alton >
Physiographic Province A63 < 0, 1 New England >
Location Comments A83 < sample 75 m from south end of exposure and 2 m up from
ditch level.
Location Sketch Map: Rt.28 N Roy Hill Root St. N Riton Km Km Rt.28 N Rt

UKAN1UM-OCCURRENCE	Quad Name Fortland
REPORT	Deposit No. 10
Commodities Present:	الساسا
Commodities Produced:	COPROD 4
MINOR 4 1 1 1 1 1 1 1 1 1 P	BYPROD 4
Potential Commodities:	R (U
Commodity Comments C50 <	
Status of Exploration and Development A2((1 = occurrence, 2 = raw prospect, 3 = de) Comments on Exploration and Development	eveloped prospect, 4 = producer)
comments on Exploration and Development	
Property is A21 (Active) (A22) (Inactive) Workings are M120 (Surface) M130 (Und Description of Workings M220<	ctive) (Circle appropriate labels) erground) M140 (Both)
DH2 accuracy thousands of 1b.	YES NO SML MED LGE (circle) years grade LB> G7C< > G7D< % U308
Source of Information D9 <	
Production Comments D10 <	
Reserves and Potential Resources	
EH accuracy thousands of lb.	year of est. grade B <lb> E1C<</lb>
Comments E8 <	

URANIUM-OCCURRENCE	Quad Name Portland		
REPORT	Deposit No. 10		
Deposit Form/Shape M10 < Spot anomaly			
Length M40 < > M41 < >	Size M15 (circle letter):		
Width M50 < > M51< >	1b U308		
Thickness M60 < > M61< >	A 0 - 20,000 B 20,000 - 200,000		
Strike M70 <>	C 200,000 - 2 million D 2 million - 20 million		
Dip M80 <>	E More than 20 million		
Tectonic Setting N15 < Mobile Be	lt ,		
Major Regional Structures N5 <			
Local Structures N70 <			
Host-FM. Name U1 < NH Series Pegmatite	> Member U2 < granitoid-pegmatoid facies >		
Host-FM. Name U1 < NH Series Pegmatite Host Rock Kl DiE V 1 1 1 1 1 1 1 1 1	> Member U2 < facies >		
Host-FM. Name U1 < NH Series Pegmatite Host Rock Kl ADIE V 1 1 1 1 1 1 1 1 1	> Member U2 < facies >		
Host Rock Kl ADIEN (Age) (Romaterial with biotite and muscovite	> Member U2 < facies > cordant, with zones of granitoid-pegmato ock type, texture, composition, color,		
Host Rock Kl Spre V (Age) (Re	> Member U2 < facies > cordant, with zones of granitoid-pegmato ock type, texture, composition, color,		
Host Rock Kl ADIEN (Age) (Romaterial with biotite and muscovite	> Member U2 < facies > cordant, with zones of granitoid-pegmato ock type, texture, composition, color,		
Host Rock Kl ADIEN (Age) (Romaterial with biotite and muscovite	> Member U2 < facies > cordant, with zones of granitoid-pegmato ock type, texture, composition, color,		
Host Rock Kl Spie V (Age) (Romaterial with biotite and muscovite alteration, attitude, geometry, structure,	> Member U2 < facies > cordant, with zones of granitoid-pegmato ock type, texture, composition, color, etc.)		
Host Rock Kl (D.E.V. (Age) (Romaterial with biotite and muscovite alteration, attitude, geometry, structure, Host-kock Environment U3 < Igneous (Sed. dep. environments on	> Member U2 < facies > cordant, with zones of granitoid-pegmato ock type, texture, composition, color, etc.) etc.)		
Host Rock Kl QD F V (Age) (Romaterial with biotite and muscovite alteration, attitude, geometry, structure, Host-Rock Environment U3 < Igneous (Sed. dep. environment Carterial Sed. dep. env	> Member U2 < facies > cordant, with zones of granitoid-pegmato ock type, texture, composition, color, etc.) etc.)		
Host Rock Kl (D.E.V. (Age) (Romaterial with biotite and muscovite alteration, attitude, geometry, structure, Host-kock Environment U3 < Igneous (Sed. dep. environments on	> Member U2 < facies > cordant, with zones of granitoid-pegmato ock type, texture, composition, color, etc.) etc.)		
Host Rock Kl (Age) (Real Material with biotite and muscovite alteration, attitude, geometry, structure, Host-kock Environment U3 < Igneous (Sed. dep. environments on Associated Rocks U4 < rusty, weathered bi is intruded by the pegmatite.	> Member U2 < facies > cordant, with zones of granitoid-pegmato ock type, texture, composition, color, etc.) etc.) on., metamorphic facies, ign. environ.) otite schist of the Littleton Formation		
Host Rock Kl (Age) (Rock Material with biotite and muscovite alteration, attitude, geometry, structure, Host-kock Environment U3 < Igneous (Sed. dep. environments on Associated Rocks U4 < rusty, weathered bi is intruded by the pegmatite.	> Member U2 < facies > cordant, with zones of granitoid-pegmato ock type, texture, composition, color, etc.) on., metamorphic facies, ign. environ.) otite schist of the Littleton Formation		
Host Rock Kl (Age) (Real Material with biotite and muscovite alteration, attitude, geometry, structure, Host-kock Environment U3 < Igneous (Sed. dep. environments on Associated Rocks U4 < rusty, weathered bi is intruded by the pegmatite.	> Member U2 < facies > cordant, with zones of granitoid-pegmato ock type, texture, composition, color, etc.) on., metamorphic facies, ign. environ.) otite schist of the Littleton Formation		
Host Rock Kl (Age) (Record Age)	> Member U2 < facies > cordant, with zones of granitoid-pegmato ock type, texture, composition, color, etc.) on., metamorphic facies, ign. environ.) otite schist of the Littleton Formation rved		
Host Rock Kl (Age) (Rock Material with biotite and muscovite alteration, attitude, geometry, structure, Host-kock Environment U3 < Igneous (Sed. dep. environments on Associated Rocks U4 < rusty, weathered bi is intruded by the pegmatite.	> Member U2 < facies > cordant, with zones of granitoid-pegmato ock type, texture, composition, color, etc.) on., metamorphic facies, ign. environ.) otite schist of the Littleton Formation rved		

UNANTUM-UCCURRENCE	Quad Name Totorano
REPORT	Deposit No. 10
Alteration N75 < none observed	
Reductants U5 <	
Analytical Data (General) C43 < 32 ppm U	1303
Radiometric Data (General) N6 < BG 70 (3	3 to 7 times BG) A spot anomaly of 700
(No	o. times background and dimensions)
cps along a fracture surface and two an	nomalies of 1000 cps along biotite
segregations were found but not sampled	
Ore Controls K5 <	
Deposit Class C40 < pegmatitic	> Class No. U7 <3,2,0)
Comments on Geology N85 <	

Quad Name Portland

Deposit No. __10

Uranium Analyses:

Sample No.	Sample Description	Uranium Analysis
MHM 313	Chip sample across anomalous area (400-500 cps)	32 ppm U ₃ O ₈

DETIT				
75/3/3/	otte		Biotite senist and psymattes	_
海雪	pegmatite pegmatite	2m 111Hm 313		
1-	Biothe senit			_
N		4	75 m to roadout end	S

References:			
F1 <			
	>		
F2 <			
	<i>*</i>		
F3 <			
	<u> </u>		
F4 <			

URANIUM-OCCURRENCE Qued Park Portland

orit No. 10

211/20	120		40	

-	Totct	Kct	Uct_	Thct	%eK	eUppm	eThppm
	124300	7479	7472	332	6.23	176.30	18.13
	99490	6425	5638	375	6.73	130.90	21.00
3	90250	5423	5449	233	8.93	256.10	34.4

0	A 162	14	179,	h			E	177
		120					SEL.	

km

Y To Wake field

Deposit No. B40< 11
Deposit Name AlO < North Wakefield
Synonym Name(s) All <
District or Area A30 < Wakefield
Country A40 qu, SP [U, S] State New Hampshire
State Code A50 <3,3 p
Position from Prominent Locality A82 < 1.1 km south on road through North
Makefield from intersection with Rt. 16
Field Checked G1 47,911,0p By G2< Poer , Anne T. Yr Mo Last name First Initial
Latitude A70 44,3 +3,7 +4,0, NP Longitude A80 40,7,1+0,3+4,4, NP Deg Min Sec
Township A77 <
Meridian A81 < > Altitude A107 < 210 m
Quad Scale A91 4 , 6,2,5,0,0 Quad Name A92 < <u>Wolfeboro</u> (7½' or 15' quad)
Physiographic Province A63 <0,1 New England (List K)
Location Comments A83 < sample in boulder in woods to west of intersection of two
unused dirt roads, southeast of road from North Wakefield
Location Sketch Map: North Wakefield North Wakefield

3FE 1236 4/19/78

URANIUM-OCCURRENCE Quad Name Portland
REPORT Deposit No. 11
Commodities Present:
Commodities Produced: MAJOR 4
MINOR 4
Potential Commodities: POTEN 4 OCCUR 4U, 1 1 1 1 1 1
Commodity Comments C50 <
Status of Exploration and Development A20 < 1 > (1 = occurrence, 2 = raw prospect, 3 = developed prospect, 4 = producer)
Comments on Exploration and Development L110 <
Property is A21 (Active) A22 (Inactive) (Circle appropriate labels) Workings are M120 (Surface) M130 (Underground) M140 (Both) Description of Workings M220<
Cumulative Uranium Production PROD YES NO SML MED LGE (circle) DH2 accuracy thousands of 1b. years grade G7 U
Production Comments D10 <
Reserves and Potential Resources accuracy thousands of 1b. year of est. grade E1-[U] P E1A- P E1A- E1B- E1C- P E1D- % U308: Source of Information E7 -

URANIUM-OCCURRENCE	Quad Name Portland'
	Deposit No. 11
Deposit Form/Shape M10 < plutonic	stock
Length M40 < > M41< >	Size M15 (circle letter):
Width M50 < > M51< >	
Thickness M60 < > M61< >	A 0 - 20,000
Strike M70 <>	B 20,000 - 200,000 C 200,000 - 2 million
Dip M80 <>	D 2 million - 20 million E More than 20 million
Tectonic Setting N15 < mobile belt	
Major Regional Structures N5 < western	section of Winnipesaukee Pluton in
New Hampshire Plutonic Series	
Local Structures N70 <	
Host-FM. Name U1 < Winnipesaukee Pluton	> Member U2 < two-mica granite
Host Rock K1 4 DEV	
(Age) (Re	ock type, texture, composition, color,
alteration, attitude, geometry, structure,	etc.)
Host-Rock Environment U3 < igneous	
(Sed. dep. envir	on., metamorphic fa ies, ign. environ.)
Associated Rocks U4 K	
Ore Minerals C30 < none observed	
Gangue Minerals K4 < quartz, feldspar, b	intite. muscovite

ONE BOOK OUT OF THE PARTY OF	Quad Name Tortrand
REPORT	Deposit No. 11
Alteration N75 < none observed	
Reductants U5 < none observed	
15	" "
Analytical Data (General) C43 < 15 ppm	0303
Radiometric Data (General) U6 < rock 2	times BG(50) , 100 cps
(N	o. times background and dimensions)
Ore Controls K5 <	
,	
Deposit Class C40 < Orthomagmatic	> Class No. U7 < 3, 1, 0
Comments on Ceclogy N85 < boulde	

	-OCC	

Quad	Name	Portland	
		11	

Uranium Analyses:

Sample No.	Sample Description	Uranium Analysis
MHM 378	granite grid sample from boulder	15 ppm U ₃ 0 ₃

deferences:			
EI <			
	·		
F2 <			
	<u> </u>		
F3 <			
	<u> </u>		
The e			

REPORT

	Name A90< Por	tland	
Quad	Scale Aloo		
	sit No. B40<	12	

Deposit Name AlO < Province Lake		>
Synonym Name(s) All <		
District or Area A30 < Wakefield		
Country A40 qu, Sp [U, S] State New Hampshir	e	
State Code A50 < 3,3 p [3,3] County A60 < Car (Enter code twice from List D)	roll	>
Position from Prominent Locality A82 < 1.4 km west of Rt.	153 on south	side of
Province Lake, near top of mountain south of road and west	of swamp	
		>
Field Checked G1 < 7 9 1 0 By G2 Cer Last name	Anne First	T. >
Latitude A70 44,3H4,0H0,9 ND Longitude A80 40,7,1H		
Township A77 <	79 4}	FT/M
Meridian A81 <> Altitude	A107 <	295 m >
Quad Scale A91 4 1 6, 2, 5, 0, 0 Quad Name A92 < (7½' or 15' quad)	Molfeboro	?
Physiographic Province A63 < 0, 1 New England (List K)		>
Location Comments A83 < went up mtn. from NE (from swamp)	to very ton	which was
being logged, sample to north of large outcrop of rock at e	extreme top	,
Location Sketch Map: Province Loke Province Loke MHM 957 Reed	N 0.8 1.6 km	

V To Rochester

BFE 1236 4/19/78

URANIUM-OCCURRENCE	Quad Name Portland
REPORT	Deposit No. 12
Commodities Present:	- Mariana
Commodities Produced:	> COPROD 4
TINOR 4	BYPROD 4
Potential Commodities:	UR <u,< td=""></u,<>
Commodity Comments C50 <	
Status of Exploration and Development A2 (1 = occurrence, 2 = raw prospect, 3 = o Comments on Exploration and Development	developed prospect, 4 = producer)
Property is A21 (Active) (Inc. Workings are M120 (Surface) M130 (Unc. Description of Workings M220<	derground) M140 (Both)
DH2	YES NO SML MED LGE (circle) years grade <lb> G7C<</lb>
Source of Information D9 <	· · · · · · · · · · · · · · · · · · ·
Production Comments D10 <	
Reserves and Potential Resources CH accuracy thousands of 1b. ELQUI, P ELAQ, P E. Source of Information E7 <	year of est. grade 1B< <u>LB</u> > E1C< <u> </u>
Comments E8 <	

URANIUM-OCCURRENCE	Quad Name Portland
REPORT	Deposit No. 12
Deposit Form/Shape M10 < plutonic stock	
Length M40 < > M41< >	Size M15 (circle letter):
Width M50 <> M51<>	1b U308
Thickness M60 <> M61<>	A 0 - 20,000
Strike M70 <>	B 20,000 - 200,000 C 200,000 - 2 million
Dip M80 <>	D 2 million - 20 million E More than 20 million
Tectonic Setting N15 < mobile b	pelt
Local Structures N70 <	
	otite-muscovite medium-grained granite Rock type, texture, composition, color,
alteration, attitude, geometry, structure	, etc.)
Host-Rock Environment U3 < igneous	
Comments on	ron., metamorphic facies, ign. environ.)
Ore Minerals C30 < none observed	
Gangue Minerals K4 < quartz, feldspar,	biotite, muscovite

Portland

	6 27	~	20.0		THE REL	MAKE	
		-					
	 20.7	-	JM-				

REPORT	Deposit No. 12
Alteration N75 < none observed	
none observed	
Reductants U5 < none observed	
Analytical Data (General) C43 < 17 ppm	U ₃ 0 ₈
Radiometric Data (General) U6 < BG 70	
	o. times background and dimensions)
granite ranged from 100 to 200 cps	
Ore Controls K5 <	
Deposit Class C40 < Orthomagmatic	> Class No. U7 < 3, 1, 0
Comments on Geology N85 < most of rock pr	esent a porphyritic quartz-syenite (?);
not much two-mica granite	

Quad Name	Portland	
Deposit No.	12	

REPORT

Uranium Analyses:

Sample No.	Sample Description	Uranium Analysis
MHM 957	grid sample	17 ppm U ₃ C ₃

References:		
F1 <		
¥2 <		
74 4		

REPORT

Symmes (

Name A90< Portland	
Scale A100 1 , 2, 5, 0, 0, 0, 0	
sit No. B40< 13	

Deposit Name AlO < Hatch Molybdenu	m Prospect
Synonym Name(s) All <	
District or Area A30 < Newfield	
Country A40 SU, SP U, S	State Maine
State Code ASO (2,3) (Enter code twice from List D)	County A60 < York >
Position from Prominent Locality A82	1.6 km ENE of Newfield
Field Checked Gl <7.8 1.1 P By G2<	Wagener , H. n. > Last name First Initial
Latitude A70 (4,3-13,9-10,3, N) I Deg Min Sec	Deg Min Sec
Township A77 <	QP Section A79 QP FT/M
Meridian A81 <	> * titude Al07 < 201 m >
Quad Scale A91 4 6,2,5,0,0 (7½' or 15' quad)	Quad Name A92 < Newfield >
Physiographic Province A63 <0,1 (List K)	New England >
Location Comments A83 < From Newf	ield, take Highway 11 west to old loop in
straightened highway. Take old loop	to Hall Road. 0.4 km west on Hall Road is a
Location Sketch Map:	
	↑N
11-11-0	
Hall Road MHMO	150

1.6 km

0

Newfield

0.8

km

1.6

UKAN LUM-OCCURRENCE	Quad Name Portland
REPORT .	Deposit No. 13
Commodities Present:	
Commodities Produced:	DPROD 4
MINOR 4	PROD 4
Potential Commodities:	
Commodity Comments C50 < Molybdenite deposit	from which uranium might be recovered
as a byproduct.	
Status of Exploration and Development A20 < (1 = occurrence, 2 = raw prospect, 3 = devel	1 > loped prospect, 4 = producer)
Comments on Exploration and Development L110	0 <
	,
Property is A21 (Active) (A22) (Inactive) Workings are M120 (Surface) M130 (Undergo	
Description of Workings M220<	
Cumulative Uranium Production PROD 19 DH2 accuracy thousands of 1b. G74 U	
Source of Information D9 <	>
Production Comments D10 <	
	,
Reserves and Potential Resources EH accuracy thousands of 1b. E1 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4	year of est. grade B> E1C< , , > E1D< % U308>
Source of Information E7 <	
Comments E8 <	

	Quad Name Portland
	Deposit No. 13
Deposit Form/Shape M10 < Planar vein depo	osit
Length M40 < 10+ > M41 < m >	Size MI5 (circle lecter):
Width M50 < 1.3+ > M51< m >	
Thickness M60 < 0.30 > M61< m >	○ 0 - 20,000
Strike M70 < 30	B 20,000 - 200,000 C 200,000 - 2 million
Dip M80 < 60 NW >	D 2 million - 20 million E More than 20 million
Tectonic Setting N15 < Mobile Bell	lt.
Major Regional Structures N5 < Merrimack	synclinorium
	syner mor rum
	>
Local Structures N70 < Complex, with su	perimposed 30 deg vein and fracture
system	ser-imposed 50 deg. Veril and Tracture
3,30011	
	>
Host-FM. Name U1 < Biotite granodiorite	> Member 112 <
Host Rock K1 (DEV) KBrecci	ated alkalic pegmatite, and biotite grano- ock type, texture, composition, color,
diorite that has a high color index. Poth alteration, attitude, geometry, structure,	rock types have been silicified. Fracture
and breccia interstices are filled with d	
principal radioactive vein in the exposure	is filled with a biotite-metallic > *
Host-Rock Environment U3 < Plutonic, synor	ogenic(?) stock
(Sed. dep. enviro	on., metamorphic facies, ign. environ.)
Comments on Associated Rocks U4 < Rocks in stone walls	along the road are principally carry
	arong the road are principally conway
Granite and alkalic pegmatite.	
Ore Minerals C30 < None observed	
While observed	
	>
Gangue Minerals K4 < Biotite, molybdenite	silica
and the state of t	3 311100

		rage 4	
URANIUM-OCCURRENCE	Quad Name _	Portland	
	Deposit No.	13	
Alteration N75 < Brecciation, silici	ification, probably	other effects visible	
in thin section.			
Reductants U5 <			
Analytical Data (General) C43 < 16 ppm	U308 & 500 ppm Mo	in vein; 700 ppm Ba;	
700 ppm La; 1000 ppm Mn; 500 ppm Sr; ve			
Radiometric Data (General) U6 < <u>8G 150</u> (1	cps along road, the No. times background	ne highest recorded outsi	de
the mineralized zones in the Sebago Lak	ke Pluton in the Le	ewiston Quadrangle. Alon	g
the principal sulfide-biotite vein, 3 a	anomalies of 1200-	1600 cps were located. >	*
Ore Controls K5 < Precipitation of sul	fides and radioact	ive minerals in fractures	
associated with intrusion of alkalic fe	elsic rocks. The	association of sulfides a	nd
radioactivity along the principal fract	ture seems direct.	but sulfides (MoS) have	tee
deposited in considerable quantity in b	oiotite-rich grano	diorite one or two meters	
away from the principal vein, and in su	uch rock the surface	ce radioactivity (SR) is	
relatively low.			
		>	
Deposit Class C40 < Magmatic-hydrotherma	21	> Class No. U7 43 3 0 >	
Comments on Geology N85 < Relations bety	ween the melanocra	tic granite, numerous	
dark inclusions in the granite aphani	tic and aplitic di	kes, pegmatite and leuco-	
cratic granitoid rock are quite complex	x. A zone of mult	iple injections is	

Quad Name Portland

REPORT

Deposit No. 13

Uranium Analyses:

Sample No.	Sample Description	Uranium Analysis
MHM 050	Two grab samples of brecciated and silicified wall	
	rock at points of maximum radioactivity make up	
	this specimen.	16 ppm U ₃ O ₂
MHM 060	Molybdenum-rich diorite, low radioactivity	2 ppm U ₃ O ₂

	,

Quad Name Portland

REPORT

Deposit No. 13

Continuation from p. 1-5:

Label

A83 < sharp little ridgecrest. About 60 m north of the road on the crest is a quarried bedrock exposure (visible from road in winter)

Radioactivity of 500-1000 cps occurs in the vein and in a zone about 0.3 m thick sporadically along its flanks. Brecciated areas (about fist-size) in the wall rock are highly radioactive. Biotite in the vein is not anomalous. A bag full of it collected on a return visit registers nothing above background.

A broad zone in fractured pegmatite near the base of the exposure (the quarried portion), and blocks in the small block pile have a surface radioactivity of 300-500 cps.

K1 < sulfide mixture, and is about 2 cm wide. >

U6 < Hatch Molybdenite Prospect

Station	Totot	Kct	Uct	Thct	%eK	eUppm	eThppm
	45710	2423	2060	1518	-2.20	53.63	198.40
02	41160	2137	1384	2013	3.42	5.68	264.40
03	60890	2485	2169	3300	-11.89	5.05	436.00
04	69420	2577	2583	3920	-16.46	6.49	518.66
05	30500	1908	1098	1232	0.237	15.35	160.27
06	97190	3577	3307	5251	-20.34	1.56	696.13
07	(1)41460*	5336	5407	8076	-33.416	18.56	1072.8
	36020	3377	3098	5036	-19.56	-2.13	667.47
09	(1)20340*	4316	4455	7095	-30.59	1.79	942.0
10	45910	1763	1968	2715	-12.54	12.94	358.0
11	(1) 5227*	5483	5615	8925	-37.96	3.03	1136.0

* The (1) indicates an overload in the channel. This does not affect the results of the count taken.

Station O1 is in diorite at the lower workings.

Station 02 is in the upper eastern workings.

Station 03 is on a pegmatite on the NE slope.

URANIUM-OCCULTENCE

REPORT

	Quad	Name	Portland	
Denneit No. 12				

Continuation from p. 1-5:
Label
U6 < Stations 04,05,and06 are along the anomalous pegmatite on the NE slope.
Station 07 is on the hilltop along a N45E fracture.
Stations 08 through 011 are on the hilltop along the NW slope in diorite
and pegmatite. >

REPORT

		ne A90< Portland	
Quad	Scale		
	sit No.		14

Deposit Name AlO < Newfield >
Synonym Name(s) All <
District or Area A30 < Newfield >
Country A40 qu, SP [U, S] State Maine
State Code A50 (2,3) County A60 (York (Enter code twice from List D)
Position from Prominent Locality A82 < In Newfield Village, 160 m E of junction
of Highway 11 and road to Ross Corner
Field Checked G1 < 7,8 1 1 p By G2 < Wagener , H. D. > Yr Mo Last name First Initial
Latitude A70 4 3 3 5 5 N Longitude A80 0 7 0 5 0 4 6 W Deg Min Sec
Township A77 <
Meridian A81 < > Altitude A107 < 120 m >
Quad Scale A91 4 , 6, 2, 5, 0, 0> Quad Name A92 < Newfield > (7½' or 15' quad)
Physiographic Province A63 < 0, 1 New England (List K)
Location Comments A83 < Anomalies are in blasted portions of ledge on N
side of Highway 11, directly in sharp curve.
Location Sketch Map:

Rt 11

Newfield

THE PERSON NAMED IN THE PE	yuau wane rurtiaju
REPORT	Deposit No. 14
Commodities Present:	IB,A, , , , , , , , , , , , , , , , , , ,
Commodities Produced:	COPROD 4
MINOR 4	P BYPROD 4
Potential Commodities:	OCCUR QU, INB, IB,A, > *
Commodity Comments C50 <	
Status of Exploration and Development (1 = occurrence, 2 = raw prospect, 3 Comments on Exploration and Development	= developed prospect, 4 = producer)
Property is A21 (Active) (A22) Workings are M120 (Surface) M130 Description of Workings M220<	(Inactive) (Circle appropriate labels) (Underground) M140 (Both)
Cumulative Uranium Production PRODH2 accuracy thousands of 1b.	OD YES NO SML MED LGE (circle) years grade G7B <lb> G7C< > G7D< % U308></lb>
Source of Information D9 <	
Production Comments D10 <	
Reserves and Potential Resources EH accuracy thousands of 1b. ELQUI P ELAQ	year of est. grade E1B< <u>LB</u> > E1C< <u>,,,</u> > E1D< <u>% U308</u> >
Source of Information E7 <	
Comments E8 <	

URANIUM-OCCURRENCE	Quad Name Portland
REPORT	Deposit No. 14
Deposit Form/Shape M10 < Zone containing	parallel planar veinlets
Length M40 < 60 > M41 < m >	Size M15 (circle letter):
Width M50 < > M51< >	
Thickness M60 < 34 > M61 < m >	A 0 - 20,000
Strike M70 < N32E >	3 20,000 - 200,000 C 200,000 - 2 million
Dip M80 < 90 >	D 2 million - 20 million E More than 20 million
Tectonic Setting N15 < mobile belt	
Major Regional Structures N5 < Merrimack	synclinorium
Local Structures N70 < Dikes and fractures	have a strongly dominant trend of
about 30 (N30E)	
Host-FM. Name U1 < Granitoid Rocks	Northern 112
Host Rock K1 (Age) (Ro	ock for veinlets is biotite pegmatite th
appears to be alkalic, and granitoid rock	of the Kinsman type. Veinlets are up to
alteration, attitude, geometry, structure,	
about 2 cm thick, and appear to be crushed	
contain tiny globular black opaque grains	having conchoidal fracture. Veinlets >
Host-Rock Environment U3 < Plutonic (Sed. dep. enviro	n., metamorphic facies, ign. environ.)
Associated Rocks U4 < Coarse-grained gneiss of 100-150.	old rocks have surface radiation (SR)
01 100-130.	
	>
Ore Minerals C30 < Uraninite? See K1. Probab	ly thorite.
Contract Con	
Gangue Minerals K' < quartz, feldspar, biot	ite

REPORT Deposit No. 14 Alteration N75 < No significant wall-rock alteration is apparent in hand specimen
Alteration N75 < No significant wall-rock alteration is apparent in hand specimen
Reductants U5 <
Analytical Data (General) C43 < 65 ppm U ₃ 0 ₈ ; 500 ppm Ba; 2000 ppm Nb; Y very hi Zr very high.
Radiometric Data (General) U6 < Anomalous radioactivity is traceable precisely al (No. times background and dimensions) veinlets, and is fairly consistent. Along the bedrock surface, counts of 500-10
were found; larger anomalies (up to 1600 cps) occur along ledge faces split
Ore Controls K5 < Fracture system trending 30 (N30E).
Deposit Class C40 < Magmatic-hydrothermal > Class No. U7 < 3, 3, 0
Comments on Geology N85 < Alkalic pegmatite and granite of the Kinsman Quartz
Monzonite type have intruded gneissoid rocks discordantly and concordantly, as
observed in boulders in river bed.

MARKET AND				
URAN		10		THE YEAR
UPASI	NILUI			BUCKET OF

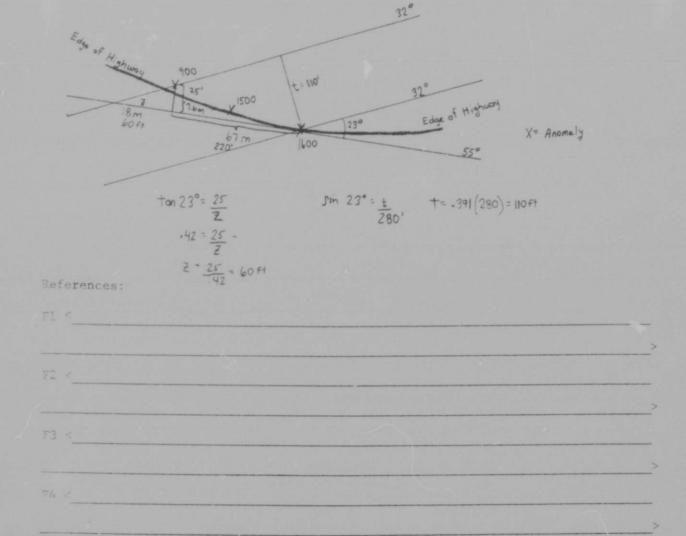
Quad Name Portland

REPORT

Uranium Analyses:

Sample No.	Sample Description	Uranium Analysis
MHM 041	Grab sample of pegmatite about 5 cm thick between	2
	two veinlets, so that a veinlet occurs along	
	either side of a tabular specimen . The veinlets	
	are 2 to 3 mm thick.	65 ppm U ₃ O ₈
MHM 061	Sample of coarsely porphyritic adamellite of Kinsm	nan
	type with 1.5 cm pink silicified vein.	54 ppm U ₂ O ₂

Geologic Sketch Map and/or Section, with Sample Locations:



	URANIUM-OCCURRENCE	Quad Name Portland	
	REPORT	Deposit No. 14	
Continua	tion from p. 1-5:		
Label			
K1 <	are vertical, parallel to anast	mosing, and strike N32E.	The veinlets
	are commonly paralleled by mult	ple fractures, and incip	oient bracciatio
C10 <	OCCUR < Y ZR > >		
U6 <	parallel to veinlets. >		
			7
-			

REPOR'

Quad Name A90< Portland

Quad Scale A100< , 2, 5, 0, 0, 0, 0

Deposit No. B40< 15

Deposit Name AlO < Symmes Pond Occurrence
Synonym Name(s) All <
District or Area A30 < Newfield
Country A40 (U, S) U, S) State Maine
State Code A50 q3,3p [3,3] County A60 < York
Position from Prominent Locality A82 < At Symmes Pond on Highway 11 west of
Newfield.
Field Checked G1 7 3 1 1 P By G2 Wagener , H. p. Yr Mo Last name First Initial
Latitude A70 4 4 3 4 6 ND Longitude A80 4 0 7 0 5 2 4 2 9 WD Deg Min Sec
Township A77 <
Meridian A81 < > Altitude A107 < 150 m
Quad Scale A91 4 62500 Quad Name A92 < Newfield (7½' or 15' quad)
Physiographic Province A63 <0 1 New England (List K)
Location Comments A83 < Boulders lie north of the highway between lake and
highway not far from dam, and on hillside southeast of highway.

Symmes Pond

R+11

Newfield

Newfield

R+11

R+11

	Quad Name Portland
	Deposit No. 15
Commodities Present:	
Commodities Produced:	P COPROD 4
MINOR 4	BYPROD 4
Potential Commodities: POTEN 4 OCC	UR (U, , , B, E, , , , , ,)
Commodity Comments C50 <	
Status of Exploration and Development A (1 = occurrence, 2 = raw prospect, 3 =	20 < 1 > developed prospect, 4 = producer)
Comments on Exploration and Development	L110 <
	*
Property is A21 (Active) (A22) (In	active) (Circle appropriate labels)
Workings are M120 (Surface) M130 (Un	derground) M140 (Both)
Description of Workings M220<	
Cumulative Uranium Production PROD	YES NO SML MED LGE (circle)
DH2 accuracy thousands of 1b. G74 U G7A4 G7A	years grade
Source of Information D9 <	*
Production Comments D10 <	
Reserves and Potential Resources	
	year of est. grade
ElqU P ElAq P E	EIB <lb> E1C<</lb>

	Quad Name Portland
	Deposit No. 15
Deposit Form/Shape M10 < Tabular (dike)	
Length M40 < > M41 < >	Size M15 (circle letter):
	○ 0 - 20,000
Strike M70 <	B.20,000 - 200,000 C 200,000 - 2 million
	D 2 million - 20 million E More than 20 million
Tectonic Setting N15 < mobile bel	
Major Regional Structures N5 < Merrimack	
	27107111071311
Local Structures N70 < Dikes of fine-grain	ined granite in a small stock (?)
of Conway Granite	
Host-FM. Name U1 < Conway Granite	> Member U2 < aplitic dike >
Host Rock Kl q	dike in biotite granite (Conway)
(Age) (Ro	ck type, texture, composition, color,
alteration attitude	
alteration, attitude, geometry, structure,	etc.)
	**
Host-Rock Environment U3 < Hypabyssal, post	
(Sed. dep. environ	n., metamorphic facies, ign. environ.)
Associated Rocks U4 < Large boulders of	coarse-grained Conway Granite and a fine-
grained facies of the granite have a su	rface radiation (SR) of 200 - 350 cps.
Ore Minerals C30 < none observed	
Conque Minarala W	**************************************
Gangue Minerals K4 < quartz and feldspar	

URANIUM-OCCURRENCE	Quad Name Portland
PEPORT	Deposit No. 15
Alteration N75 < None observed	
Reductants U5 <	
Analytical Data (General) C43 < 26 ppm	U ₃ O ₃ (see radiometric data, below), 150 pr
Radiometric Data (General) U6 < One lar	ge boulder near the lake has a 20 cm o. times background and dimensions)
	R) up to 700 cps. For this dike, spectro-
	:Th. A boulder of aplite in a rock wall >
Ore Controls K5 < Igneous differentia	
Deposit Class C40 < Pegmatitic	> Class No. U7 43,2,0>
Comments on Geology N85 < West of the s	pecimen locality, backgrounds are low and
	. At the locality, BG is 100 and Conway
	Some Conway bedrock is exposed on the new
ighway 11, on the first hill east of Symm	

Quad Name	Portland
Deposit No.	15

Uranium Analyses:

Sample No.	Sample Description	Uranium Analysis
MHM 040	Sample Description Grab sample of aplite (leached)	26 ppm U ₃ O ₃
	1-	

Geologic Sketch Map and/or Section, with Sample Locations:

References:

of Maine: U.S. Geol. Survey TEI-68, 44 p., issued by U.S. Atomic Energy Comm.	>*
F2 <	
	>
F3 <	
	>
F4 <	

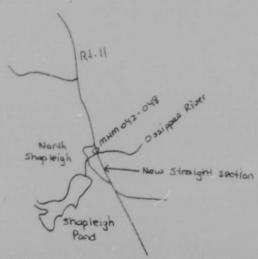
Quad Name	Portland
Deposit No.	15

REPORT	Denosit No.	16
	Deposit No.	15
Continuation from p. 1-5:		
Label		
J6 < (sampled) had SR up to 900 cp	os . The sampled boulde	r was weathered -
leaching of U possibly a large factor.		
Fl < Tech. Inf. Service Ext., Oak	Didan Tonn >	
	k kidge, Tenn.	
Topical and the second		THE PERSON
		Account to the second

** *		* **	160					
	W							ж
200	mm/fill	A 19	10.00					189

Quad	Name A90 Por	tland	
Quad	Scale Al00	2, 5, 0, 0, 0, 0	
Depo	sit No. B40< 1	6	

Deposit Name AlO < North Shapleigh Occurrence
Synonym Name(s) All <
District or Area A30 < Newfield
Country A40 QU, SP [U, S] State Maine
State Code A50 2.30 [2.3] County A60 < York (Enter code twice from List D)
Position from Prominent Locality A82 < At North Shapleigh, in deep roadcut in
rock on new straight portion of Highway 11 on north side of Ossipee River.
Field Checked G1 < 7.8 1.10 By G2 Wagener , H. D. Yr Mo Last name First Initial
Latitude A70 44,3 H 3,6 H 2,3, NP Longitude A80 40,7,0 H 5,3 H 3,7, WP Deg Min Sec
Township A77 <
Meridian A81 < > Altitude A107 < 165 m :
Quad Scale A91 4 625000 Quad Name A92 Newfield (7½' or 15' quad)
Physiographic Province A63 <0,1 New England (List K)
Location Comments A83 < See A82 and below
Location Sketch Map:



2 2 2 2 4 4	5 m 1 m 1		425 × 10 ×
	1111195	11000	
URAN	4 77 77 77 7		ELIZABELLE EL

URANIUM-OCCURRENCE	Quad Name Portland		
REPORT	Deposit No16		
Commodities Present:	الماليديانية الماليديانية الماليديانية الماليديانية الماليديانية الماليديانية الماليديانية الماليديانية المالي		
Commodities Produced:	COPROD 4		
MINOR 4	BYPROD 4		
Potential Commodities:	المساليسية		
Commodity Comments C50 <			
Status of Exploration and Development A20 (1 = occurrence, 2 = raw prospect, 3 = de Comments on Exploration and Development I	eveloped prospect, 4 = producer)		
Property is A21 (Active) (A22) (Inactive) Workings are M120 (Surface) M130 (Under Description of Workings M220<	erground) (Circle appropriate labels) erground) M140 (Both)		
	YES NO SML MED LGE (circle) years grade > G7D<		
Production Comments D10 <			
Reserves and Potential Resources EH accuracy thousands of lb. EI U EIA			
*			

URANI UM-OCCURRENCE	Quad Name Portland
REPORT	Deposit No16
Deposit Form/Shape M10 < Anomalous zones p	parallel to contacts in dikes.
FT/M Length M40 < > M41 < >	Size M15 (circle letter):
Width M50 <> M51<>	<u>15 U308</u>
	A 0 - 20,000 B 20,000 - 200,000 C 200,000 - 2 million D 2 million - 20 million E More than 20 million

Major Regional Structures N5 < Merrimack syr	ici inori un
Host-FM. Name U1 < Undifferentiated alkalic Host Rock K1 < M.E.S. (Age) (Ro	
have zones parallel to the contacts that alteration, attitude, geometry, structure,	
those dikes throughout this part of New	England that are correlated with the
Mesozoic alkalic plutonic series. The on	iy other type of anomaly in this road >
Host-Rock Environment U3 < Hypabyssal, pos (Sed. dep. environments on Associated Rocks U4 < Schistose gneisses	
175 cps	
	>
Ore Minerals C30 < None observed. •	
Canaua Minawala Wi	

Quad Name Portland

REPORT Deposit No. 16
Alteration N75 < Wallrock alteration not observed. Anomalous silicified seam in
pegmatite is highly sulfidic
Reductants U5 <
Analysis 1 Par (G. 12 and 12 a
Analytical Data (General) C43 < 16 and 17 ppm U ₃ O ₈ in two dikes sampled. Wall
rocks and contact zones outside the dikes contain little U303. Soil weathered out
of silicified seam has 75 ppm U, but was rich in Th (several thousand cps).
Padiometric Data (General) U6 < Nonanomalous dikes have surface radioactivities (No. times background and dimensions)
around 200 cps (twice the unusually high BG in this roadcut). Radioactivities
of anomalous dikes are commonly 300-500 cps and up to 800 cps. One joint >
Ore Controls K5 < Differentiation in trachytic magma and magmatic-hydrothermal
segregation along fractures.
Deposit Class C40 < Magmatic-hydrothermal > Class No. U7 < 3, 3, 0
Comments on Geology N85 <

Quad Name Portland
Deposit No. 16

REPORT

Uranium Analyses:

Sample No.	Sample Description	Uranium Analysis
MHM 042	Chip sample across anomalous zone in dike	17 ppm U ₃ 0 ₈
MHM 043	Schist adjacent to contact of 042 zone	8 ppm U ₃ O ₈
MHM 044	Chip sample across thin dike	16 ppm U ₂ O ₂
MHM 045	Pegmatoid gneiss (600 cps) adjacent to dike	4 ppm U ₂ O ₈
11HM 046	Chip sample across 2 m contact zone in mica	4 ppm U ₃ O ₂
MHM 047 MHM 048	Soil & rock fragments from weathered seam Background sample of schistose gneiss, 175 cps	75 ppm U ₃ 08 3 ppm U ₃ 08

Geologic Sketch Map and/or Section, with Sample Locations:

End of yundrail and bagining of roaded x mun oy 3	S And South of State	2
7m 30		Highway
	mum ory dike ore ore ore	
	References: PLAN IEW OF ROAD CUT	
	F2 <	
	F3 <	>
		>
•	F4 <	

Quad Name	Portland	
Denneit No	16	

REPORT

Continuation from p. 1-5:

a		

K1 < cut is an anomalous, crushed, silicified, sulfidic seam about 2 cm thick in pegmatite. For attitudes of dikes and seam, see N 70, p. 3.

The anomalous and nonanomalous zones in the dikes have both sharp and gradational boundaries. There are subtle differences in the lithologies of the anomalous and nonanomalous zones. Anomalous zones are pink or purplish; nonanomalous zones are gray to light gray or nearly white, and are more sulfidic. Dikes in schist are more anomalous than dikes in pegmatite. Along the contact of one of the larger dikes, where schist is adjacent to the dike, an anomalous zone adjoins the contact. Where the same contact is adjacent to pegmatite, the anomalous zone is abruptly displaced toward the center of the dike. Some of the smaller dark gray dikes are anomalous from one side to the other.

is anomalous in relation to height above the base of the cut. The seam has been largely weathered out, and the residue collects toward the base of the cut. By digging away radioactive, black, clay-rich soil from the base of the cut directly adjacent to the soil-filled seam, a maximum radioactivity of 8500 cps was obtained. A bag of this soil (mixed with nonanomalous rock chips) had a surface radioactivity of 1500 cps (specimen MHM 048). >

C43 < The dikes contain 500 ppm La; 10 ppm Mo; 500 and 300 ppm Nb; 500 and 100 ppm Pb; 150 and 200 ppm Y; 300 ppm Zn; and very high Zr. Soil from the silicified seam contained 500 ppm As; 1000 ppm Ba; 700 ppm Be; 150 ppm Cu; 5000 ppm Mn; and very high Y. >

U1 < rocks. >

km

URAN IUM-OCCURRENCE

pepapa

Name .	Portland
sit No	17

Deposit Name AlO < Emerys Corner Occu	irrence		
Synonym Name(s) All <			
District or Area A30 <			
Country A40 4U, SP U, SI	State Maine		
State Code A50 q2.35 [2.3] (Enter code twice from List D)	County A60 < York		>
Position from Prominent Locality A82 <	0.37 km south of Eme	rys Corner a	t inter-
section of Emerys Corner Road and Coffin	Hill Road, east of in	tersection	65 m
along stone wall to old granite quarry as	nd sample.		
Field Checked G1 < 7,9 0,5 By G2<	Poer Last name	, Anne First	T. >
Latitude A70 443443404 NP Lon			
Township A77 <	E/W Section A79	411	FT/M
Meridian A81 <	> Altitude A	107 < 160 m	>
Quad Scale A91 (75' or 15' quad)	Quad Name A92 < New	field	>
Physiographic Province A63 <0_1 New (List K)	England		
Location Comments A83 < at intersection	n of Emerys Corner Roa	ad and Coffin	Hill Road
go east 65 m along stone wall, sample i	n ledge trending N 22	W 4.5 m N c	f wall >
Location Sketch Map: Smith Row			
		1	
E	mery's Corner	N	
	MHM-IOT	0	00 16

rock well

Coffin Hill Road

Rt 11

To Limerick

To Limingtone

BFE |236 4/19/78

UMM LUIT VOCURRENCE	Quad Maile FULLIAND
REPORT	Deposit No17
Commodities Present:	
Commodities Produced:	COPROD 4
MINOR 4	BYPROD 4
Potential Commodities:	< <u>U</u>
Commodity Comments C50 <	
Status of Exploration and Development A20 (1 = occurrence, 2 = raw prospect, 3 = dev	veloped prospect, 4 = producer)
Property is A21 (Active) (A22) (Inact Workings are M120 (Surface) M130 (Under	
Description of Workings M220<	ground, market (actual)
Cumulative Uranium Production PROD DH2 accuracy thousands of 1b. G7 Q U	
Source of Information D9 <	
Production Comments D10 <	
Reserves and Potential Resources	
Elquip ElAq	year of est. grade <u>KLB</u> > E1C<
Source of Information E7 <	
Comments E8 <	

	Quad Name Portland
Deposit Form/Shape MIO < irregular area of	f anomalous radioactivity >
Length M40 < * > M41 < >	
Width M50 <> M51<>	
Thickness M60 < > M61< > Strike M70 < (ledge)N22 W >	A 0 - 20,000 B 20,000 - 200,000 C 200,000 - 2 million
Dip M80 <>	D 2 million - 20 million E More than 20 million
Tectonic Setting N15 < mobile belt	
Major Regional Structures N5 < <u>southwest</u>	of Sebago Lake Pluton
Local Structures N70 <	
Host-FM. Name U1 < Host Rock K1 q D, E, V, (Age) (Rock K1 q D, E, V) (Rock K1 q D, E,	
(Age) (Ro	ock type, texture, composition, color,
alteration, attitude, geometry, structure,	etc.)
Host-Rock Environment U3 < plutonic synorog (Sed. dep. environments on Associated Rocks U4 <	on., metamorphic facies, ign. environ.)
Ore Minerals C30 <none observed<="" td=""><td>></td></none>	>
Gangue Minerals K4 < quartz, feldspar, bi	otite

Portland

Quad Name

REPORT	Deposit No. 17
Alteration N75 < none observed	
	·
Reductants U5 <	
	,
Analytical Data (General) C43 <	17 ppm U ₃ O ₃
	>
Radiometric Data (General) 116 <	2-2.3 x BG(90) over all 3 chip areas
	(No. times background and dime sions)
Ore Controls K5 <	
Deposit Class C40 < orthomagmati	C > Class No. U7 <3 1 0 >
Comments on Geology N85 < bridg	e at mill in Limerick Mills made of granite from
old quarry at this site	

		RENCE

Quad	Name	Portland	
	du Na	17	

Uranium Analyses:

Sample No.	Sample Description	Uranium Analysis
MHM 107	chips of area of anomalous radioactivity	17 ppm U ₃ 0 ₃

MHM-107 chipartes

References:

F1 <_____

F3 <____

F4 <

22	m .	4.85	7.1	JM-	-0	01	CI	TO I	0.17	120	æ
	100	SUN.		UP31		ALC:	w U	uro	rs co	OH.	æ

Quad	Name	Portland Portland	
	-4- 31-	17	

Continuation from p. 1-5:

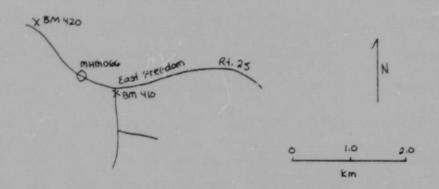
<u>Label</u>
M40 < Sample taken from 3 spots, each very small: No. 1/length 10 cm,
width 12 cm, depth 5 cm; No. 2/length 10 cm, width 7½ cm, depth 5 cm; No. 3/length
$7\frac{1}{2}$ cm, width $7\frac{1}{2}$ cm, depth 5 cm, with readings of 200-210 cps, nonanomalous granite
averaged 150 cps.

REPORT

Ouad	Name A90< Portland	
Quad	Scale A100 , 2, 5, 0, 0, 0, 0	
Depo	sit No. B40<18	-

Deposit Name AlO < East Freedom Occurrence >
Synonym Name(s) All <>
District or Area A30 <>
Country A40 4U, SP U, SJ State New Hampshire
State Code A50 < 3.3 County A60 < Carroll > (Enter code twice from List D)
Position from Prominent Locality A82 < First road cut in rock on Highway 25 west
of road intersection at BM 410, near western edge of map.
Field Checked G1 < 7,9 0,6 By G2 Wagener, H. D.
Latitude A70 44,7 + 3,0 + 0,7, ND Longitude A80 40,7,0 + 5,9 + 4,5, WP Deg Min Sec Deg Min Sec
Township A77 <
Meridian A81 < > Altitude A107 < <u>122 m</u>
Quad Scale A91 4 12.4.0.0.0 Quad Name A92 < Kezar Falls (7½' or 15' quad)
Physiographic Province A63 Q0,1 New England (List K)
Location Comments A83 < Specimen taken from mid-portion of cut, N side of
highway

Location Sketch Map:



RANII			

URANIUM-OCCURRENCE	Quad Name	Portland
REPORT	Deposit No	18
Commodities Present:		>
Commodities Produced:	COPROD 4	
MINOR 4	BYPROD 4	
Potential Commodities:	44	
Commodity Comments C50 <		
Status of Exploration and Development A20 (1 = occurrence, 2 = raw prospect, 3 = de Comments on Exploration and Development I	eveloped prospect,	4 = producer)
Property is A21 (Active) (A22) (Inactive) (Workings are M120 (Surface) M130 (Under Description of Workings M220<		
Cumulative Uranium Production PROD DH2 accuracy thousands of 1b. G7 Q U		
Source of Information D9 <		>
Production Comments D10 <		
Reserves and Potential Resources EH accuracy thousands of 1b. E1 4 4 5 E1 4 5 E1	year of es B< <u>LB</u> > E1C<	st. grade > E1D<
Source of Information E7 <		
Comments E8 <		

URANIUM-OCCURRENCE					Quad Name Portland		
	REI	ORT			Deposit No. 18		
eposit P	Form/Shape	M10 <_			inable		
ength	M40 <		> M41<	T/M >	Size M15 (circle letter):		
	M50 <				1b U308		
	M60 <				A 0 - 20,000		
	M70 <				B 20,000 - 200,000 C 200,000 - 2 million		
)ip	M80 <			_>	D 2 million - 20 million E More than 20 million		
Cectonic	Setting NI	.5 <	Mobile	e Belt			
ocal Str			N5 <				
	ructures N	10 <					
Host-FM. Host Rock two-mic	Name U1 < K1 < L_D a granite, on, attitude	Winnip E_V(Age simila le, geo	pesaukee) ar to leametry, s	pluton % Media (ucocration tructure	> Mcmber U2 < Two-mica granite um-grained, porphyritic, leucocratic Rock type, texture, composition, color c facies of Sebago Lake granite.		
Host-FM. Host Rock two-mic alteratio	Name U1 < K1 < L_D a granite, on, attitude	Winnip E_V(Age simila de, geo iotite	pesaukee ir to leimetry, s pegmatif	pluton % Media (ucocration tructure	> Mcmber U2 < Two-mica granite um-grained, porphyritic, leucocratic Rock type, texture, composition, color c facies of Sebago Lake granite.		

Ore Minerals C30 < No uranium minerals observed

Gangue Minerals K4 < Biotite, muscovite, quartz

URANIUM-OCCURRENCE	Quad Name _	Portland
REPORT	Deposit No.	18
Alteration N75 < None observed		
		>
Reductants U5 <		
		>
Analytical Data (General) C43 < 38 ppm	U ₃ 0 ₈	
		>
Radiometric Data (General) U6 < Surface	radioactivity (S	R) of granite at east end
		nd and dimensions)
of cut 150-200; increases to 200-400 in ce	entral part of cu	t;decreases to around 200
west end. Note: BG is high in this region	, due to till (e	astern fringe of White >
Ore Controls K5 < Differentiation in si	iliceous magma.	
		Of Allery III
		>
Deposit Class C40 < Orthomagmatic		> Class No. U7 43 1 9
Comments on Geology N85 <		
		>

	URANIUM-OCCURRENCE	Quad Name	Portland
	REPORT	Deposit No.	18
ranium An	alyses:		
Sample No.	Sample Desc	ription	Uranium Analys
MHM 066	Grab sample of granite n	ear point of maximum	radio- 38 ppm U ₃ O ₃
eclogic S	ketch Map and/or Section, w	with Sample Locations	:
seologic S	ketch Map and/or Section, w	with Sample Locations	
		with Sample Locations	
References		with Sample Locations	
References		with Sample Locations	
References		with Sample Locations	

BFE 1236 4/19/78 F3 <

F4 <

URANIUM-OCCURRENCE	Quad Name	Portland
REPORT	Deposit No.	18
Continuation from p. 1-5:		
Label		
U6 < Mountain effect?) >		
33 132113 111 911233.1		
		Falsale Till College
		^
	F	
A Section and Laboratory of the Contract of th		

Quad	Name A	190 Por	rtland		
Quad	Sc. le	A1004	, 2, 5, 0,	0,0,0	
Depos	sit No.	B40<	19		

To Center Ossipee

	Deposit No. B40<_19
Deposit Name AlO < Ossipee Valle	y
Synonym Name(s) All <	
District or Area A30 < Ossipee	
Country A40 4U, SP (U, S)	State New Hampshire
State Code A50 <3,3 \(\begin{array}{c}	County A60 < Carroll D)
Position from Prominent Locality	A82 < on Newman Drew Rd., 0.49 km NE of inter-
section with Rts. 16 and 25, 4.9 km	N of Center Ossipee and W of Ossipee Lake.
Field Checked Gl <7,9 1,0 By	G2< Poer , Anne T. Last name First Initial
Latitude A70 4,3 1,7 1,5,6, ND Deg Min Sec	Longitude A80 40.7.1H1.1H1.0.WP Deg Min Sec
Township A77 <	78 Q P Section A79 Q P FT/
Meridian A81 <	> Altitude Al07 < 138 m
Quad Scale A91 4 , 6,2,5,0,0 (7½' or 15' quad)	Quad Name A92 < Ossipee Lake
Physiographic Province A63 <0.1 (List K)	New England
Location Comments A83 < sample	from outcrop on SW side of Newman Drew Road,
across from house and road, in dit	
Location Sketch Map:	R116
	1
	Rts 16+25
N	Att 16+25
0 0.8 1.6 km	MHM 954 &
6	
	1 To Center Ossipee

URANIUM-OCCUPRENCE	Quad Name Portland
REPORT	Deposit No. 19
Commodities Present:	
Commodities Produced:	COPROD 4
MINOR 4	BYPROD 4
Potential Commodities: POTEN 4 OCCUR	< <u>U </u>
Commodity Comments C50 <	
Status of Exploration and Development A20 (1 = occurrence, 2 = raw prospect, 3 = dev Comments on Exploration and Development L1	veloped prospect, 4 = producer)
Property is A21 (Active) (A22) (Inactive) Workings are M120 (Surface) M130 (Under Description of Workings M220<	cive) (Circle appropriate labels) rground) M140 (Both)
Cumulative Uranium Production PROD DH2 accuracy thousands of 1b. G7 Q U	B> G7C< > G7D< % U308>
Reserves and Potential Resources EH accuracy thousands of 1b. EI U	year of est. grade <lb> E1C<</lb>

Source of Information E7 <

Comments E8 <___

URANIUM-OCCURRENCE	Quad Name Portland
REPORT	Deposit No. 19
Deposit Form/Shape M10 < plutonic stock	
Length M40 < > M41 < >	Size M15 (circle letter):
Width M50 <> M51<>	<u>1b U308</u>
Thickness M60 < > M61 < > Strike M70 < >	A 0 - 20,000 B 20,000 - 200,000 C 200,000 - 2 million
Dip M80 <>	D 2 million - 20 million E More than 20 million
Tectonic Setting N15 < mobile be	1t
Major Regional Structures N5 < Northern sec	tion of Winningsaukee Pluton in New
	Sign of within pesadakee Fracon in New
lampshire Plutonic Series	
Local Structures N70 <	
Local Scidciales N/O	
War TV W W Alianian who Divis	
Host-FM. Name U1 < Winnipesaukee Pluton	
Host Rock K1 4 L, D, E, V, 16 bioti	te-muscovite, medium-grained granite
(Age) (R	ock type, texture, composition, color,
alteration, attitude, geometry, structure,	etc.)
Host-Rock Environment U3 < igneous	
Comments on	on., metamorphic facies, ign. environ.)
Associated Rocks U4 <	
Ore Minerals C30 < none observed	
Gangue Minerals K4 < quartz, feldspar, b	iotite. muscovite

URANIUM-OCCURRENCE	Quad Name	4110
REPORT	Deposit No. 19	
Alteration N75 < none observed		
		>
Reductants U5 < none observed		
Analytical Data (General) C43 < 37 ppm	U ₃ O ₃	
		>
Padiometric Data (Coneval) U6 < RG 60	rock 3 times RC granit	200 cns
Radiometric Data (General) U6 < BG 60	No. times background and	dimensions)
Ore Controls K5 <		
		>
Deposit Class C40 orthomagmatic	> C1	ass No. 117 d3 .1 .0 b
Comments on Geology N85 <		

			ENCE

Quad	Name	Portland	
D	and a Min	10	

******	and the			
1197.5	200 7 1	um	Anal	yses:
200	***	Later 1	£21152 A.	1000

Sample No.	Sample Description		Uranium Analysis
MHM 954	granite grid sample		37 ppm U ₃ O ₃
		4	

Geologic Sketch Map and/or Section, with Sample Locations:

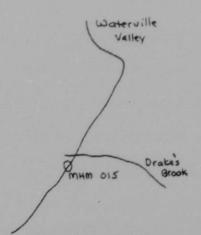
References:	
F1 <	
	· · · · · · · · · · · · · · · · · · ·
F2 <	
F3 <	
	· · · · · · · · · · · · · · · · · · ·
F4 <	

U	R	Al	N	I	U	М	-	0	C	C	U	R	R	E	N	C	Ī

Quad	Name /	A90<	Portland	3
Quad	Scale	A1004	, 2, 5, 0, 0, 0, 0	
Depos	sit No.	. B40<	20	3

Deposit No. 540- 20
Deposit Name AlO < Drake's Brook Occurrence >
Synonym Name(s) All <
District or Area A30 < White Mountains >
Country A(O QU, SP U, S) State New Hampshire
State Code A50 <3 3 P 3 3 County A60 < Grafton > (Enter code twice from List D)
Position from Prominent Locality A82 < From Waterville Valley proceed SW on road
towards Campton Upper Village for approximately 3 km. Road crosses Drake's Brook
before sample site
Field Checked G1 < 7,9 0,9 By G2 Wagener , H. D. > Yr Mo Last name First Initial
Latitude A70 4 3 5 6 1 1 0 NP Longitude A80 4 0 7 1 H 3 1 H 0 0 WP Deg Min Sec Deg Min Sec
Township A77 <
Meridian A81 < > Altitude A107 < 435 m
Quad Scale A91 4 6,2,5,0,0> Quad Name A92 < Plymouth (7½' or 15' quad)
Physiographic Province A63 <0 1 New England (List K)
Location Comments A83 <
Location Sketch Map:

0 1.0 2.0 km



3FE 1236 4/19/78

	M-OCCU	

URANIUM-OCCURRENCE	Quad Name For Cland
REPORT	Deposit No. 20
Commodities Present:	
Commodities Produced:	COPROD 4
INOR 4	BYPROD 4
Potential Commodities:	444444
Commodity Comments C50 <	
Status of Exploration and Development A20 (1 = occurrence, 2 = raw prospect, 3 = dev Comments on Exploration and Development L1	veloped prospect, 4 = producer)
Property is A21 (Active) (A22) (Inactive) Workings are M120 (Surface) M130 (Under Description of Workings M220<	rground) (Circle appropriate labels)
	YES NO SML MED LGE (circle) years grade B> G7C< > G7D< % U308
Source of Information E7 <	
Comments E8 <	

URANIUM-OCCURRENCE		Qua	Quad Name Portland	
	REPORT		Dep	osit No. 20
Deposit F	Form/Shape M10 <		k	
Length	M40 <	FT/M _> M41<>	Siz	e M15 (circle letter):
Width	M50 <	> M51<>		<u>15 U308</u>
Thickness	M60 <	> M61<>		0 - 20,000 20,000 - 200,000 200,000 - 2 million 2 million - 20 million
Strike	M70 <	>	C	
Dip	M80 <	>		More than 20 million
Tectonic	Setting N15 <	Mobile Belt		
Major Reg	gional Structure	s N5 < Conway	-Mt. Osceo	ola batholith
To the same				
Local St	ructures N70 <			
Host-FM.	Name U1 <white< td=""><td>Mountains Magn</td><td>ma Ser_{> Me}</td><td>ember U2 < Conway Granite</td></white<>	Mountains Magn	ma Ser _{> Me}	ember U2 < Conway Granite
Host Rock	k Kl 🔻	181	Biotite gra	anite
	k K1 4 (Ag	e)	(Rock ty	ype, texture, composition, color
-1				
alteration	on, attitude, ge	ometry, struct	ure, etc.)	
Host-Roc	k Environment U3	< Plutoni	C	metamorphic facies, ign. environ
Comments	on	(Sed. dep. e	environ., n	metamorphic facies, ign. environ
	ed Rocks U4 <			
Ore Mine	rals C30 < None	observed		•
Canque M	inerale V/ / D	intite quanta	foldens	
Jangue M	inerals K4 < B	Totile, quartz	, reruspar	

TENT A	****	31 A	non	FRES MICH.	***
UKA	AN LU		COL	RKI	ENCE

URANIUM-OCCURRENCE	Quad Name	Portland
REPORT	Deposit No.	20
Alteration N75 < None observed		
		>
Reductants U5 <		
		>
Analytical Data (General) C43' < 23 ppm	U ₂ O ₂	
	-3.0	
Radiometric Data (General) U6 < Surface	Radioactivity 400	cps
(N	o. times backgroun	nd and dimensions)
		>
Ore Controls K5 <		
		>
Deposit Class C40 < Orthomagmatic		> Class No. U7 < 3,1,0
C 1 VOS		
)
	/	

	NIII			

Quad Name	ortland
Deposit No.	20

Uranium Anal/ses:

Sample Description	Uranium Analysis
Granite Grid sample	23 ppm U ₃ 0 ₈

References:	
F1 <	
F2 <	
F3 <	
F4 <	

REPORT

Quad Name A90< Portland >
Quad Scale A100< , 2, 5, 0, 0, 0, 0

Deposit No. B40< 21 >

Deposit Name AlO < Acteon Ridge >
Synonym Name(s) All <>
District or Area A3C < White Mountains >
Country A40 4U, SP U, S State New Hampshire
State Code A50 43 3 P 13 3 County A60 < Grafton > (Enter code twice from List D)
Position from Prominent Locality A82 < From Campton Upper Village, proceed up
road that follows trend of Mad River and leads NE to Waterville Valley
,
Field Checked Gl <7,9 11,0 p By C2< Wagener , H. 0. > Yr Mo Last name First Initial
Latitude A70 4 4 3 5 5 1 2 NP Longitude A80 40 7 1 43 2 42 2 WP Deg Min Sec Deg Min Sec
Township A77 <
Meridian A81 < > Altitude A107 < 410 m >
Quad Scale A91 4 625000 Quad Name A92 < Plymouth > (7½' or 15' quad)
Physiographic Province A63 <0.1 New England > (List K)
Location Comments A83 < Continue past BM-1179 approximately .2 km when stream
will intersect road. Follow stream SE uphill approximately 0.3 km.
Location Sketch Map:
8MIT9 018 13°55' N
0 0.5 1.0 2.0

*To Campton Upper Village

BFE (236 4/19/78

URANIUM-OCCURRENCE	Quad Name Portland
REPORT	Deposit No. 21
Commodities Present:	
Commodities Produced:	COPROD 4
MINOR 4	BYPROD 4
Potential Commodities:	44
Commodity Comments C50 <	
Status of Exploration and Development A20 (1 = occurrence, 2 = raw prospect, 3 = de Comments on Exploration and Development L	veloped prospect, 4 = producer)
Property is A21 (Active) (A22) (Inac Workings are M120 (Surface) M130 (Unde Description of Workings M220<	tive) (Circle appropriate labels) rground) M140 (Both)
DH2	YES NO SML MED LGE (circle) years grade B> G7C<
Production Comments D10 <	
Reserves and Potential Resources EH accuracy thousands of 1b. EIQUI P EIAQ EIAQ EIAQ EIAQ	year of est. grade 3 <lb> ElC<</lb>
Source of Information E7 <	
Comments E8 <	

	URANIUM-OCCURR	ENCE		Quad Name Portland
	REPORT			Deposit No. 21
Deposit Fo	orm/Shape M10 <		Plutonic :	stock
		F"	T/M	Size M15 (circle letter):
Width	M50 <	_> M51<_	_>	1b U308
Thickness	M60 <	_> M61<_	>	
Strike	M70 <		_>	B 20,000 - 200,000 C 200,000 - 2 million
Dip	M80 <		>	D 2 million - 20 million E More than 20 million
	Setting N15 < ional Structure		Belt	
Major Regi	ional Structure	s N5 <		
Major Regi	ional Structure	s N5 <		f White Mountain Magma Series
Major Regi	ional Structure	s N5 <	r Stock of	
Major Regi	ional Structure	s N5 <	r Stock of	f White Mountain Magma Series > Member U2 < Conway Granite
Major Regi	ional Structure uctures N70 <	s N5 < Mad River	stock of	

(Sed. dep. environ., metamorphic facies, ign. environ.)

Host-Rock Environment U3 < igneous

Gangue Minerals K4 < none observed

Ore Minerals C30 < no Uranium minerals observed

Comments on

Associated Rocks U4 <

Portland.

Quad Name

	SPREE	

REPORT	Deposit No. 21
Alteration N75 < None observed	
Reductants U5 <	
Analytical Data (General) C43 < 30 p	ppm U ₃ O ₃
	>
Radiometric Data (General) U6 < BG va	(No. times background and dimensions)
surface radioactivity (SR) 300-400 cps	s, mass effects boosts SR to 600.
Ore Controls K5 <	
Deposit Class C40 < Orthomagmatic	> Class No. U7 <3 1 0 >
Comments on Geology N85 < This samp	le is part of a series of grid samples
taken in the White Mountain Magma Ser	ies.
	>

Quad Name	Portland
Deposit No.	21

Uranium Analyses:

Sample No.	Sample Description	Uranium Analysis
MHM 013	Granite Grid Sample	30 ppm U ₃ O ₉
	KIND OF THE REAL PROPERTY.	

References:		
F1 <		
F2 <		
F3 <	mente de la maria de la companya de	
F4 <		

to Cam

BFE 11

Quad Name A90<	Portland
Quad Scale A1004	, 2, 5, 0, 0, 0, 0
Deposit No. 840<	22

REPORT	Quad Scale A100 1 2 5 0 0 0 0
	Deposit No. B40< 22
eposit Name AlO < Welch Mountain Occurr	rence
ynonym Name(s) All <	
istrict or Area A30 < White Mounta	
ountry A40 <u,sp si<="" td="" u,si=""><td>tate New Hampshire</td></u,sp>	tate New Hampshire
tate Code A50 43,30 B 3 Co (Enter code twice from List D)	ounty A60 < Grafton
osition from Prominent Locality A82 <	From Campton Upper Village proceed NE on
Waterville Valley. Take turnoff to Six	Mile Bridge. Approximately 0.25 km pa
idge take trail leading to Welch Mountain	n Summit.
field Checked G1 < 7,9 0,9 By G2 L	Magener , H. D. ast name First Initial
Deg Min Sec Longi	tude A80 0 7 1 13 4 13 5 WP Deg Min Sec
ownship A77 < > Range A78 <	
deridian A81 <	> Altitude Al07 < 564 m
Quad Scale A91 4 6,2,5,0,0p (7½' or 15' quad)	Quad Name A92 < Plymouth
Physiographic Province A63 (0.1) New E	ngland
ocation Comments A83 <	
Location Sketch Map: /wat	crille
Mornton	N /
	7
- OMHM 016	0 0.5 1.0 2.0
Unner	The state of the s
llage /	km
llage /	km
llage	km

NTI		

URANIUM-OCCURRENCE	Quad Name Portland
REPORT	Deposit No. 22
Commodities Present:	
Commodities Produced:	COPROD 4
MINOR 4	BYPROD 4
Potential Commodities:	4 U,
Commodity Comments C50 <	
Status of Exploration and Development A20 (1 = occurrence, 2 = raw prospect, 3 = de Comments on Exploration and Development I	eveloped prospect, 4 = producer)
Property is A21 (Active) (A22) (Inac Workings are M120 (Surface) M130 (Under Description of Workings M220<	ctive) (Circle appropriate labels) erground) M140 (Both)
	YES NO SML MED LGE (circle) years grade LB> G7C< > G7D< % U308:
Source of Information D9 <	
Production Comments D10 <	
Reserves and Potential Resources	
EH accuracy thousands of 1b. E1 U E1A E1A E1	year of est. grade B< <u>LB</u> > E1C< <u>'</u> > E1D< <u>% U308</u>
Source of Information E7 <	
Comments E8 <	

URANIUM-OCCURRENCE	Quad Name Portland
REPORT	Deposit No. 22
Deposit Form/Shape M10 < Plutonic Stock	>
Length M40 <> M41<>	Size M15 (circle letter):
Width M50 <> M51<>	<u>1b U308</u>
Thickness M60 < 3 > M61< >	A 0 - 20,000
Strike M70 <>	B 20,000 - 200,000 C 200,000 - 2 million
Dip M80 <>	D 2 million - 20 million E More than 20 million
Tectonic Setting N15 < Mobile Belt	·
Major Regional Structures N5 < Conway-Mt.	Usceola batholith
Local Structures N70 <	
	>
Host-FM. Name U1 < White Mountain Magma Ser	.> Member U2 < Conway granite & aplite >
Host Rock Kl (Age) (Ro	ite granite and aplite ock type, texture, composition, color,
alteration, attitude, geometry, structure,	etc.)
Host-Rock Environment U3 < Plutonic	
(Sed. dep. environments on	on., metamorphic facies, ign. environ.)
Associated Rocks U4 <	
Ore Minerals C30 < None observed	
Gangue Minerals K4 < Biotite, quartz, fel	dspar

Quad Name Portland

URANIUM-OCCURRENCE

	REPORT		Deposit No	. 22	
Alteration	N75 <	None observ	ed		
					>
Reductants	U5 <				
Analytical	Data (General)	C43 < 15 ppm U	1308		
					-
Radiometri	c Data (General) U6 < Surface	radioactivity o. times backgr	(SR) of extensivound and dimension	e bedrock
75-200 cps.	. At some point	s of water seep	oage, SR goes u	to 400 cps. Sw	arms of apli
ikes (bioti	ite aplite or fi	ne-grained biot	tite granite) o	ccur at the highe	er > '
Ore Contro	ls K5 <				
THE STATE OF	The state of the state of				
	Onth	oma ama ti a			42101
	lass C40 < Orth			> Class No.	0/ 431105
Comments o	on Geology N85 <				
				0	
	Early The Land				>

TTTO A	ABTTT	TM-O	MARK	IDI	12783	000
1316.4	ADV 111	n-1			CHINI	u e

Quad Name	Portland	
Denneit No	22	

Uranium Analyses:

Sample No.	Sample Description	Uranium Analysis
MHM 016	Granite grid sample - sample was ½ granite and ½ aplite from a point having surface radioactivity	15 ppm U ₃ O ₈
	400-500 cps	

References:				
F1 <		_		
		>		
F2 <				
		>		
F3 <				
		>		
F4 <				

Quad Name Portland

REPORT

Deposit No. 22

Continuation from p. 1-5:
Label
U6 < elevations, and have SR 300 to 500 cps. Anomalies of 500-1000
cps occur sporadically along strike in the dikes.

RANTUM-OCCURRENCE	

Quad	Name A90 Po	rtland	
Quad	Scale Al00<_	, 2, 5, 0, 0, 0, 0	
Depo	sit No. B40<	23	

Deposit No. B40< 23 >
Dickov Notoh Ossumnan
Deposit Name AlO < Dickey Notch Occurrence >
Synonym Name(s) All <>
District or Area A30 <
Country A40 4U, SP U, S State New Hampshire
State Code A50 < 3 3 County A60 < Grafton > (Enter code twice from List D)
Position from Prominent Locality A82 < From Campton Upper Village proceed up road
that follows trend of Mad River and that leads to Materville Valley.
Field Checked G1 7 9 1 1 Op By G2
Latitude A70 4 4 3 1 5 4 5 0 NP Longitude A80 0 7 1 1 3 5 14 2 WP Deg Min Sec
Township A77 <
Meridian A81 < > Altitude A107 < 157 m
Quad Scale A91 4 6,2,5,0,0> Quad Name A92 < Plymouth (7½' or 15' quad)
Physiographic Province A63 < 0.1 New England (List K)
Location Comments A83 < Take turnoff to Six Mile Bridge, cross bridge, and go 1 kg
further. Take dirt road trending NW for 1 km, then take trail for .3 km and then
Location Sketch Map: MHM-019 To Waterille Valley H/Six Mile Bridge
To Campton Upper Village

BFE 1236 4/19/78

IRAN	IUM-	occi	IR P	EN	CI
O YOUTH	TOTAL		12020	HE ST	

URANIUM-OCCURRENCE	Quad Name Portland
REPORT	Deposit No. 23
Commodities Present:	
Commodities Produced:	P COPROD 4
MINOR 4	P BYPROD 4
Potential Commodities:	CUR < U
Commodity Comments C50 <	
Status of Exploration and Development (1 = occurrence, 2 = raw prospect, 3 = Comments on Exploration and Development	developed prospect, 4 = producer)
Commence on Exploracion and Developmen	>
Property is A21 (Active) (A22) (I) Workings are M120 (Surface) M130 (U)	nactive) (Circle appropriate labels) nderground) M140 (Both)
Description of Workings M220<	
DH2	YES NO SML MED LGE (circle) years grade B <lb> G7C< > G7D< % U308></lb>
Source of Information D9 <	
Reserves and Potential Resources	year of est. grade E1B< <u>LB</u> > E1C< <u>1 1 1 P</u> E1D<
Source of Information E7 <	
Comments E8 <	

URANIUM-OCCURRENCE	Quad Name Portland
REPORT	Deposit No. 23
Deposit Form/Shape M10 < plutonic stock	
Length M40 < > M41< >	Size M15 (circle letter):
Width M50 < > M51< >	1b U308
Thickness M60 < > M61< >	A 0 - 20,000
Strike M70 <>	B 20,000 - 200,000 C 200,000 - 2 million
Dip M80 <>	D 2 million - 20 million E More than 20 million
Tectonic Setting N15 <mob< td=""><td>oile beit</td></mob<>	oile beit
Major Regional Structures N5 < White Mo	puntains
Local Structures N70 <	
Host-FM. Name U1 < White Mountain Magma Se	er> Member U2 < Conway granite
Host Rock K1 (E,J,U,R, , , , , ,) MCoars	Rock type, texture, composition, color,
granite .	
alteration, attitude, geometry, structure	, etc.)
Host-Rock Environment U3 < igneous	
(Sed. dep. envi	ron., metamorphic facies, ign. environ.)
Comments on Associated Rocks U4 <	
Ore Minerals C30 < no Uranium minerals ob	served
Gangue Minerals K4 <none observed<="" td=""><td></td></none>	

URANIUM-OCCURRENCE	Quad Name Portland
REPORT	Deposit No. 23
Alteration N75 < None observed	
Reductants U5 <	
Analytical Data (General) C43 < 26 pp	om U308
	00.150
Radiometric Data (General) U6 <bg (n<="" td="" varies=""><td>No. times background and dimensions)</td></bg>	No. times background and dimensions)
300 to 375 cps	
Ore Controls K5 <	
Deposit Class C40 < Orthomagmatic	> Class No. U7 < 3 1 0
Comments on Geology N85 < This sample is	part of a sampling grid

	NT			37777	

Quad Name	Portland
	22

Uranium Analyses:

Sample No.	Sample Description	Uranium Analysis
MHM 019	Grab sample from granite grid	26 ppm U ₃ O ₉

References:	
F1 <	
	,
F2 <	
F3 <	
F. <	

URANIUM-OCCURRENCE	Quad Name Portland
REPORT	Deposit No. 23
Continuation from p. 1-5:	
Label	
A83 < head N to 457 m >	
77	

Quad Name A90 Por	tland
Quad Scale A1004	, 2, 5, 0, 0, 0, 0p
Deposit No. B40<	24

Deposit No. 840< 24 >
Deposit Name AlO < Hoodstock occurrence
Synonym Name(s) All <
District or Area A30 < White Mountains
Country A40 4U, SP N, SI State New Hampshire
State Code A50 <3 3 P 3 3 County A60 < Grafton > (Enter code twice from List D)
Position from Prominent Locality A82 < I-93, 3.2 km north of Woodstock, New
Hampshire
Field Checked G1 < 7,9 Q 3p By G2 < McHore , J. Gregory Yr Mo Last name First Initial
Latitude A70 9 4, 3 1 5, 9 5, 4, ND Longitude A80 90 7 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
Township A77 <
Meridian A81 < > Altitude A107 < 260 m
Quad Scale A91 4 , 6, 2, 5, 0, 0> Quad Name A92 < Plymouth (7½' or 15' quad)
Physiographic Province A63 < 0, 1 New England (List K)
Location Comments A83 < 0.95 km north of Exit 31, north lane, east side.
garnet -rich layer near pegmatite base
Location Sketch Map: To Russell Pond Campgrounds
RHX Tripoli Road Tripoli Road Exit 31 I-93 To Plymouth

ØFE 1236 4/19/78

URAN LUM-OCCURRENCE	Quad Name Forcialid
REPORT	Deposit No. 24
Commodities Present:	الساسيا
Commodities Produced:	COPROD 4
SINOR 4	BYPROD 4
Potential Commodities:	qυ, , , , , , , , , , , , , , , , , , ,
Commodity Comments C50 <	
Status of Exploration and Development A20 (1 = occurrence, 2 = raw prospect, 3 = developments on Exploration and Development L1	eloped prospect, 4 = producer)
Property is A21 (Active) (A22) (Inact Workings are M120 (Surface) M130 (Under Description of Workings M220<	
	<u> </u>
Cumulative Uranium Production PROD DH2 accuracy thousands of 1b. G74 U G7A4 G7A4 G7B4LB	
Source of Information D9 <	>
Production Comments D10 <	>
Reserves and Potential Resources EH accuracy thousands of 1b. E19 U P E1A9 E1B9	year of est. grade <u>KLB> E1C</u> <u>% U308</u> >
Source of Information E7 <	
Comments E8 <	

URANIUM-OCCURRENCE	Clad Name Portland
REPORT	Deposit No. 20
Deposit Form/Shape M10 < Thin, tabular si	11 at base of pegmatite
Length M40 < 75 > M41< M >	' Size M15 (circle letter):
Width M50 < 15 > M51 < M >	1b U308
Thickness M60 < .09 > M61< M >	A 0 - 20,000
Strike M70 < NE(varies) >	B 20,000 - 200,000 C 200,000 - 2 million
Dip M80 < 10-20 >	D 2 million - 20 million E More than 20 million
Tectonic Setting N15 < mobile t	pelt
Major Regional Structures N5 <	
Local Structures N70 <	
ascar structures 370	
Host-FM. Name U1 < Littleton	> Member U2 <pegmatite< td=""></pegmatite<>
	1
Host Rock K1 QD,E,V, (Age) (Age)	Rock type, texture, composition, color,
muscovite-quartz-microcline pegmatite w	ith layers or zones of garnet and
alteration, attitude, geometry, structure	, etc.)
feldspars. Basal garnet layer (gravity	cumulate?) is radioactive.
Host-Rock Environment U3 < igneous	intrusive
(Sed. dep. envi	ron., metamorphic facies, ign. environ.)
Associated Rocks U4 < Intrudes	s Littleton fm. shists
Ore Minerals C30 <none observed<="" td=""><td></td></none>	
Gangue Minerals K4 < garnet,	quartz, muscovite, microcline

ORAN LON-OCCURRENCE	Quad Name , 5, 5, 5, 5, 5
REPORT	Deposit No. 24
Alteration N75 < iron staining	
Reductants U5 < iron oxides	
Analytical Data (General) C43 < 15	0 ppm U ₃ 0 ₃ ; 150 ppm Be
Radiometric Data (General) U6 < 55	0-650cps (BG = 60) along 10 cm thick
	(No. times background and dimensions)
layer; 180 cps below (Littleton so	chist) and 150 cps above it (pegmatite).
Ore Controls K5 < apparently gravit	cy or flowage segregation
involving radioactive minerals alo	
	> Class No. U7 43,2,0
Comments on Geology N85 <	

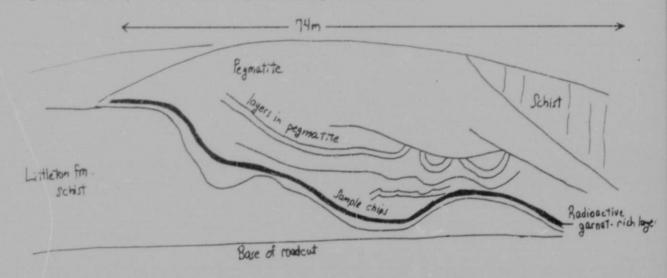
Quad	Name	Portland	

Deposit No. 24

Uranium Analyses:

Sample Description	Uranium Analysis
Chips along 10 cm thick zone (over 12 m)	150 ppm U ₃ O ₃

Geologic Sketch Map and/or Section, with Sample Locations:



References:

Concord, NH Plan. Dev. Comm., 1:62,500.	
¥2 <	
F3 <	d

12/	4.85	TI	TM.	C	CI	DI	REN	101
214	227	20				2762	NAUE.	1102

Quad Name A90 <portland< th=""><th></th><th></th><th></th></portland<>									
Quad	Scale	A1004_	, 2,	5,	0,	0,	0,	OP	
Depos	sit No.	B40<25							

Deposit Name AlO < Hancock Hairpin occurrence >
.Synonym Name(s) All <
District or Area A30 < White Mountains >
Country A40 QU, SÞ [U, S] StateNew Hampshire
State Code A50 < 3,3 [3,3] County A60 < Grafton > (Enter code twice from List D)
Position from Prominent Locality A82 < 14 km east of Lincoln, NH on Rt. 112
(Kancamagus Highway).
Field Checked G1 < 7,9 0,5 By G2 McHone J. Gregory > Yr Mo Last name First Initial
Latitude A70 4,4+0,2+4,2, NP Longitude A80 40,7,1+3,1+1,2,WP Deg Min Sec
Township A77 <
Meridian A81 < > Altitude A107 <700 m >
Quad Scale A91 4 2,4,0,0,0 Quad'Name A92 < Mt. Osceola > (7½' or 15' quad)
Physiographic Province A63 <0 1 New England >
Location Comments A83 < Road cut at Hancock Overlook, zone 1-25m above ground about
32m from NW end of exposure.
Location Sketch Map:
Lincoln.NH - RI II2 Hancock Overlook N Brancy Brancy N N N N N N N N N N N N N
To Conway

mt Osceola

BFE 1236 4/19/78

URANIUM-OCCURRENCE	Quad Name Portland
REPORT	Deposit No. 25
Commodities Present:	
Commodities Produced:	CÓPROD 4
MINOR 4	BYPROD 4
Potential Commodities: POTEN 4 OCCUR	40,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
Commodity Comments C50 <	
Status of Exploration and Development A20 (1 = occurrence, 2 = raw prospect, 3 = de	
Comments on Exploration and Development L	110 <
Property is A21 (Active) (A22) (Inac Workings are M120 (Surface) M130 (Unde Description of Workings M220<	rground) (Circle appropriate labels)
Cumulative Uranium Production PROD DH2 accuracy thousands of 1t. G74 U	years grade
Source of Information D9 <	
Production Comments D10 <	
Reserves and Potential Resources	
EH accuracy thousands of 1b.	year of est. grade 3 <lb> ElC<</lb>
Source of Information E7 <	
Comments E8 <	

Deposit Form/Shape M10 <discontinuous 1.2="" <="" and="" ft="" lamellae="" length="" m="" m40="" pods=""> M41 < M > Size M15 (circle letter): Width M50 < 1 > M51 < M > 1b U308 Thickness M60 < 1 > M61 < M > (A) 0 - 20,000 Strike M70 < 5 > C 200,000 - 2 million Dip M80 < 35 W > E More than 20 million Tectonic Setting N15 < Mobile Belt Major Regional Structures N5 < 40 deg and 90 deg fractures, major NE-trending structures outside of igneous bodies Local Structures N70 < 30 deg and 90 deg fractures in massive granite, many fracture 15 deg at Graham Wangan a few miles east of the Hairpin anomaly. Host-FM. Name U1 < White Mcuntain Magma Ser > Member U2 < Conway Granite Host Rock K1 4E,J,U,R, Medium to coarse, pink biotite granite, unfolia (Age) (Rock type, texture, composition, color,</discontinuous>	URANIUM-OCCURRENCE	Quad Name Portland
Length M40 < 1.2 > M41 < M > Size M15 (circle letter): Width M50 < 1 > M51 < M > 1b U308 Thickness M60 < 1 > M61 < M >	REPORT	Deposit No. 25
Length M40 < 1.2	Deposit Form/Shape M10 < Discontinuous lar	mellae and pods
Thickness M60 < 1	Length M40 < 1.2 > M41 < M >	Size M15 (circle letter):
Strike M70 < 5 > C 200,000 - 200,000	Width M50 < 1 > M51 < M >	1b U308
Dip M80 < 35 W > C 200,000 - 2 million D 2 million - 20 million E More than 20 million Tectonic Setting N15 < Mobile Belt Major Regional Structures N5 < 40 deg and 90 deg fractures, major NE-trending structures outside of igneous bodies Local Structures N70 < 30 deg and 90 deg fractures in massive granite, many fracture 15 deg at Graham Wangan a few miles east of the Hairpin anomaly. Host-FM. Name U1 < White Mountain Magma Ser > Member U2 < Conway Granite Host Rock KI QE, J, U, R, J, J, MMedium to coarse, pink biotite granite, unfolia	Thickness M60 < 1 > M61 < M >	
Dip M80 < 35 W	Strike M70 < 5	B 20,000 - 200,000 C 200,000 - 2 million
Major Regional Structures N5 < 40 deg and 90 deg fractures, major NE-trending structures outside of igneous bodies Local Structures N70 < 30 deg and 90 deg fractures in massive granite, many fracture 15 deg at Graham Wangan a few miles east of the Hairpin anomaly. Host-FM. Name U1 < White Mountain Magma Ser> Member U2 < Conway Granite > Host Rock K1 qE,J,U,R, , , , , , , , , , , , , , , , , ,	Dip M80 < 35 W >	D 2 million - 20 million
Local Structures N70 < 30 deg and 90 deg fractures in massive granite, many fracture 15 deg at Graham Wangan a few miles east of the Hairpin anomaly. Host-FM. Name UI < White Mountain Magma Ser > Member U2 < Conway Granite > Host Rock KI < J. U.R. MMedium to coarse, pink biotite granite, unfolia	Tectonic Setting N15 < Mobile Belt	
Local Structures N70 < 30 deg and 90 deg fractures in massive granite, many fracture 15 deg at Graham Wangan a few miles east of the Hairpin anomaly. Host-FM. Name UI < White Mountain Magma Ser > Member U2 < Conway Granite > Host Rock KI < J. U.R. MMedium to coarse, pink biotite granite, unfolia	Major Regional Structures N5 < 40 deg and	d 90 deg fractures, major NE-trending
Local Structures N70 < 30 deg and 90 deg fractures in massive granite, many fracture 15 deg at Graham Wangan a few miles east of the Hairpin anomaly. Host-FM. Name U1 < White Mountain Magma Ser> Member U2 < Conway Granite > Host Rock K1 < E_J_U_R_ Medium to coarse, pink biotite granite, unfolia		
15 deg at Graham Wangan a few miles east of the Hairpin anomaly. Host-FM. Name U1 < White Mountain Magma Ser> Member U2 < Conway Granite > Host Rock Kl qE,J,U,R, , , , , , , , , , , , , , , , , ,		
with coarse biotite-rich zones, pods and thin lamellae which are more radioactive. alteration, attitude, geometry, structure, etc.)	Host-FM. Name U1 < White Mountain Magma S Host Rock KI <= J_U_R	er> Member U2 < Conway Granite > um to coarse, pink biotite granite, unfoliate Rock type, texture, composition, color, thin lamellae which are more radioactive
Host-Rock Environment U3 < epizonal granite (Sed. dep. environ., metamorphic facies, ign. environ.) Associated Rocks U4 < The Conway granite near this anomaly is more radioactive than normal (see p.4).	Comments on Associated Rocks U4 < The Conway granite	ron., metamorphic facies, ign. environ.)
Ore Minerals C30 < biotite, allanite, zircon	Ore Minerals C30 < biotite, allanite, ziro	con

Gangue Minerals K4 < Quartz, microcline, opaques, fluorite (minor).

Quad	Name	Portland

Deposit No. 25

ALFORI DEPOSIT NO. 25	
lteration N75 < Some pinkish hydrothermal alteration (related to bio	otite enrichmer
eductants U5 < Minor sulfides and iron oxides.	
analytical Data (General) C43 < Anomaly: 103 ppm U ₂ O _g , 150 ppm Ba;	150 ppm La;
00 ppm Y; 50 ppm Mo	
	,
Radiometric Data (General) U6 < Anomaly:1000-1200 cps in 0.9-1.2m zo	
(No. times background and dime	nsions)
Props rapidly to 350 cps (also Graham Wangan value). BG = 90-120 cp	s. Other biot
amellae 1000-1500 cps over 2.5-7.5 cm veins.	>
Ore Controls K5 < The correspondence of U and biotite supports a pri	mary magmatic-
nydrothermal fluid-rich phase, concentrating into late-magmatic pods	and veins.
Deposit Class C40 < Magmatic-Hydrothermal > Class :	No. U7 43,3,0
Comments on Geology N85 < The Conway biotite granite is the latest p	hase of the Wh
lountain magma series of alkalic magmas. It has been compared with	
	the tokan ith.
granite.	
	*

ANTWO	25 X 17	25. 85. 6	NCE

Quad Name Portland

Deposit No. 25

REPORT

Uranium Analyses:

Sample No.	Sample Description	Uranium Analysis
MHM 003	Chips along biotite-rich zone (1.2m long)	103 ppm U ₃ O ₂

References:	
F1 <	
F2 <	
F3 <	
F4 <	

REPORT

Quad	Name A90 Port	lan	d			
Quad	Scale Al004	2, 5	5, 0,	0, 0	000	
Depos	sit No. B40<	26				

Deposit Name AlO < Graham Wangan Occurrence
Synonym Name(s) All <
District or Area A30 <white mountains=""></white>
Country A40 (U, S) U, S State New Hampshire
State Code A50 <33 > 33 County A60 < Grafton > (Enter code twice from List D)
Position from Prominent Locality A82 <14 km east of Lincoln, MH on Rte. 112
(Kancamagus Highway)
Field Checked G1 < 7 9 0 3p By G2 McHone J. Gregory > Yr Mo Last name First Initial
Latitude A70 4 4 4 0 7 4 2 NP Longitude A80 4 0 7 1H 3 1H 1 2 WP Deg Min Sec
Township A77 <
Meridian A81 < > Altitude A107 < 700 m >
Quad Scale A91 4 , 6,2,5,0,0> Quad Name A92 < <u>Crawford Notch</u> > (7½' or 15' quad)
Physiographic Province A63 40,1 New England (List K)
Location Comments A83 < roadcut across from Graham Mangan just south of the
Kancamagus Pass on the south side of the road.
Location Sketch Map:

To Lincoln

Harack Branch Branch Branch MHM 004 & Groham Wangan

Km

To Conway

	4-100		

UKAN LUM- OGCUKKENCE	Quad Name Tortain
	Deposit No. 26
Commodities Present:	
Commodities Produced:	P COPROD 4
IINOR 4	P BYPROD 4 1 1 1 1 1 1 1 P
OTEN 4	CCUR 4 U
Commodity Comments C50 <	
Status of Exploration and Development (1 = occurrence, 2 = raw prospect, 3 = Comments on Exploration and Developmen	= developed prospect, 4 = producer)
Property is A21 (Active) (A22) (1) Workings are M120 (Surface) M130 (1) Description of Workings M220<	Inactive) (Circle appropriate labels) Underground) M140 (Both)
Cumulative Uranium Production PRODUCTION DH2 accuracy thousands of 1b. G74 U	years grade 7B< <u>LB</u> > G7C< > G7D<
Reserves and Potential Resources	
EH accuracy thousands of 1b.	year of est. grade
Source of Information E7 <	
Comments E8 <	

	Page 3	
URANIUM-OCCURRENCE	Quad Name Portland	
REPORT	Deposit No. 26	
Deposit Form/Shape M10 < Discontinuous la	mellae and pods.	>
Length M40 < 1.2 > M41 < M >	Size M15 (circle letter):	
Width M50 < 1 > M51 < M >	· 15 U308	
Thickness M60 < 1? > M61 < M >	A 0 - 20,000	
Strike M70 < 5 >	B 20,000 - 200,000 C 200,000 - 2 million	
Dip M80 < 35W >	D 2 million - 20 million E More than 20 million	
Tectonia Setting N15 < Mobile Belt		>
Major Regional Structures N5 < 40 deg. and	90 deg. fractures, major NE-trending	
structures outside of igneous bodies		
	um to coarse pink biotite granite, un (Rock type, texture, composition, colo	r,
with coarse biotite-rich zones, pods and alteration, attitude, geometry, structure	thin lamellae which are more radioact e, etc.)	ive.
		->
Host-Rock Environment U3 < epizona		>
(Sed. dep. env:	iron., metamorphic facies, ign. enviro	n.)
Associated Rocks U4 < The Conway granite	near this anomaly is more radioactiv	e
than normal		
Ore Minerals C30 < Biotite, allanite, zir	con	
, , , , , , , , , , , , , , , , , , , ,		

Gangue Minerals K4 < Quartz, microcline, opaques, fluorite (minor)

Quad	Name	Portland				
Depos	sit No	. 26				

REPORT Deposit No. 26
Alteration N75 < Some pinkish hydrothermal alteration (related to biotite enrichm
Reductants U5 < Minor sulfides and iron oxides
Analytical Data (General) C43 < 31 ppm U ₃ O ₂ ; 150 ppm Ba; 200 ppm La; 200 ppm Y;
Radiometric Data (General) U6 < 1000-1200 cps in .9-1.2m zone, drops rapidly to (No. times background and dimensions) 350 cps, B6 90-120 cps, other biotite lamellae 1000-1500 cps over 2.5-7.5 cm vein
Ore Controls K5 < The correspondence of U and biotite supports a primary magmatic hydrothermal fluid-rich phase, concentrating into late-magmatic pods and veins.
Deposit Class C40 < Magmatic-Hydrothermal > Class No. U7 < 3,3,0 Comments on Geology N85 < The Conway biotite granite is the latest phase of the
White Mountain Magma Series of alkalic magmas. It has been compared with the
Bokan Mountain granite.

	CCU	

Quad Name	Portland	
Deposit No.	26	

Uranium Analyses:

Sample No.	Sample Description	Uranium Analysis
MHM 004	Chips along 9 m section of roadcut	31 ppm U ₃ O ₉

References:	
F1 <	
	>
F2 <	
	>
F3 <	
	>
T4 <	
	,

RAN!					

Quad	Name A90<_	Portland	
Quad	Scale Al00	9 , 2, 5, 0, 0, 0, 0	
Depo	sit No. B40	< 27	

Deposit Name AlO < Mad River Occurrence
Synonym Name(s) All <
District or Area A30 <
Country A40 4U SP U S State New Hampshire
State Code A50 <3.3 3.3 County A60 < Grafton State Code twice from List D)
Position from Prominent Locality A82 < From Waterville Valley, travel east on the
Livermore Rd After passing two houses, take the road heading north to Flume
Brook. Follow the road until it turns to a trail.
Field Checked Gl < 7,9 1,0 P By G2 < Wagener , H. D. > Yr Mo Last name First Initial
Latitude A70 4 3 5 9 0 9 ND Longitude A80 40 7 1 H2 9 H5 2 WD Deg Min Sec
Township A77 <
Meridian A81 < > Altitude A107 < 550 m
Quad Scale A91 4 6,2,5,0,0> Quad Name A92 < Mt. Chocorua (71/2' or 15' quad)
Physiographic Province A63 < 0, 1 New England (List K)
Location Comments A83 < Take the northern trail to the Mad River
Location Sketch Map: MHM-020 D To Livermore Road
N 0.5 1.0 2.0

BFE 1236 4/19/78

		Page 2
URANIUM-OCCURRENCE	Quad Name	Portland
REPORT	Deposit No.	27
Commodities Present:		
Commodities Produced: MAJOR 4	COPROD 4	· 4
MINOR 4	BYPROD 4	السالسة
Potential Commodities: POTEN 4 OCCUR	40,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	
Commodity Comments C50 <		
		3
Status of Exploration and Development A20 (1 = occurrence, 2 = raw prospect, 3 = de		, 4 = producer)
Comments on Exploration and Development L	110 <	
Property is A21 (Active) (A22) (Inac	tive) (C	ircle appropriate labels)
Workings are M120 (Surface) M130 (Unde	rground) Ml	40 (Both)
Description of Workings M220<		
Cumulative Uranium Production PROD DH2 accuracy thousands of 1b.		
G74 UI P G7A4 G7B4	.B> G7C<	> G7D<
Source of Information D9 <		>
Production Comments D10 <		
		>
Reserves and Potential Resources		
EH accuracy thousands of 1b.	year of e	st. grade % U308>

Source of Information E7 <

Comments E8 <____

URANIUM-OCCURRENCE	Quad Name Portland
REPORT	Deposit No. 27
Deposit Form/Shape M10 < Plutonic stock	
Length M40 < > M41< >	Size M15 (circle letter):
Width M50 < > M51< >	1b U308
Thickness M60 < > M61< >	A 0 - 20,000 B 20,000 - 200,000 C 200,000 - 2 million
Strike M70 <>	
Dip M80 <>	D 2 million - 20 million E More than 20 million
Tectonic Setting N15 < Mobile Belt	
Local Structures N70 <	
Host-FM. Name Ul < White Mountain Magma Se Host Rock Kl. Host Rock Kl. 	e grained, light pink, porphyritic Rock type, texture, composition, color,
Comments on	con., metamorphic facies, ign. environ.)
Ore Minerals C30 < None observed	
Gangue Mitherals K4 < Biotite, quartz, felo	dspar

TID ANTTIM OCCUPATION	
LIBAN LIM-IR LI REPNI	

	yard frame 19161and
REPORT	Deposit No. 27
Alteration N75 < None observed	
Reductants U5 <	
Analytical Data (General) C43 < 18 ppm	U_O_
	-U ₃ U ₈
Radiometric Data (General) U6 < Surface	radioactivity (SR) 250 cps No. times background and dimensions)
	so. cimes background and dimensions,
Ore Controls K5 <	
	•
	>
Deposit Class C40 < Orthomagmatic	> Class No. U7 <3 1 0
Comments on Coolean NOS	

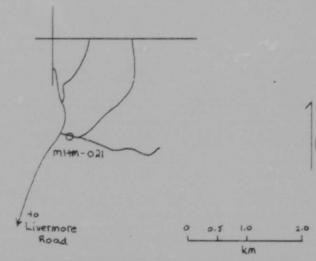
UF			
	REPORT	Deposit No	27
Uranium Anal	ysės:		
Sample No.	Sample Desc	ription	Uranium Analysi
MHM 020	Grab sample for granite	sampling grid	18 pr 1 U ₃ O ₃
N A I			
References:			
References:			

F4 <_

-	44.00	1964 1	F 970 97	C STORY	V / 1 W 2
52 N		UM-(C NO TO	24 14

Quad	Name A	190<	Portland	
Quad	Scale	A1004	, 2, 5, 0,	0, 0, 0
Depos	sit No.	. B40<	28	

Deposit Name AlO < Flume Trail Occurrence
Synonym Name(s) All <>
District or Area A?O <>
Country A40 (U_S) State New Hampshire
State Code A50 <3,3 p [3,3] County A60 < Grafton > (Enter code twice from List D)
Position from Prominent Locality A82 < From Waterville Valley travel east on the
Livermore Rd. After passing two houses take the road leading north to Flume
Brook. Follow the road until it turns to the Flume Trail.
Field Checked G1 < 7,9 1,0 p By G2 Wagener , H. D. > Yr Mo Last name First Initial
Latitude A70 4 3 5 9 0 3 NP Longitude A80 40,7,1 2,9 5,2 WP Deg Min Sec
Township A77 <
Meridian A81 < > Altitude A107 < 550 m >
Quad Scale A91 4 6.2.5.0.0 Quad Name A92 < Mt. Chocorua > (7½' or 15' quad)
Physiographic Province A63 <0,1 New England > (List K)
Location Comments A83 <
Location Sketch Map:



BFE (236 4/19/78

URANIUM-OCCUPRENCE	Quad Name Portland
	Deposit No. 28
Commodities Present:	
Commodities Produced:	COPROD 4
MINOR Q	BYPROD 4
Potential Commodities:	4U, , , , , , , , , , , , , , , , , , ,
Commodity Comments C50 <	
Status of Exploration and Development A20 (1 = occurrence, 2 = raw prospect, 3 = dev	
Comments on Exploracion and Development L.	110 <
	· · · · · · · · · · · · · · · · · · ·
Property is A21 (Active) (A22) (Inac	tive) (Circle appropriate labels)
Workings are M120 (Surface) M130 (Unde	rground) M140 (Both)
Description of Workings M220<	
	>
DIVA	YES NO SML MED LGE (circle) vears grade
G74 U G7A4 G7B4L	years grade B> G7C< > G7D< <u># U308</u> >
Source of Information D9 <	
Production Comments D10 <	
	>
Reserves and Potential Resources	
EH accuracy thousands of 1b.	year of est. grade % U308>
Source of Information E7 <	
Comments E8 <	

URANIUM-OCCURRENCE		Quad Name Portland	
REPORT		Deposit No. 28	
Deposit Form/Shape M10		sk	
Length M40 <	FT/M > M41<>	Size M15 (circle letter):	
Width M50 <	> M51<>	15 U308	
Thickness M60 <	> 861<>	A 0 - 20,000 B 20,000 - 200,000	
Strike M70 <	>	C 200,000 - 2 million D 2 million - 20 million	
Dip M80 <	>	E More than 20 million	
Tectonic Setting N15 <	Mobile Belt		
mjor megronar dergee	Lonway	- Mt. Osceola Batholith	
Local Structures N70 «			
Host-FM. Name Ul < Uh	te Mountain Magma	Ser? Member U2 < Conway Granite	
HOST MOCK KI TENJUR	Age) M	Redium to coarse grained blue porphyritic (Rock type, texture, composition, color,	
		the type, contact, composition, color,	
alkalic granite alteration, attitude,	geometry structu	re err)	
	goometry, beracea		
Host-Rock Environment	113 c Dlutonic		
man more my 11 official	(Sed. dep. en	viron., metamorphic facies, ign environ.	
Comments on			
Associated Rocks U4 <_			
Ore Minerals C30 < No	ine observed		
- IN	objet ved		
Gangue Minerals K4 <	Quartz, feldspar		

	Quad Name Portland
REPORT	Deposit No. 28
Alteration N75 < None observed	
Reductants U5 <	
Analytical Data (General) C43 < 16 pt	pm U ₃ 0 ₈
Radiometric Data (General) U6 < Surfa	ace radioactivity (SR) 250 cps.
	(No. times background and dimensions)
Ore Controls K5 <	

Deposit Class C40 < Orthomagmatic \rightarrow Class No. U7 $\langle 3_1 1_1 0 \rangle$

Comments on Geology N85 <

NIIIM		

Quad	Name	Portland	
Dapos	sit No.	28	

Uranium Analyses:

Sample No.	Sample Description	Uranium Analysis
MHM 021	Grab sample for Conway Granite sampling grid	16 ppm 1/303

References:			
F1 <			
F2 <			
F3 <			
F4 <			

Highway

URANTUM-OCCURRENCE												
	127	SC	8	n	10	C'81	-01	TTM.	m	A 30	TD	۲

REPORT

Quad	Name	A90<	Portland	;
Quad	Scal	e A100<	1 , 2, 5, 0, 0, 0, 0	
Depos	sit N	o. B40<	29	,

Deposit Name AlO < Rob Brook Occurrence >
Synonym Name(s) All <>
District or Area A30 <>
Country A40 4U SD U S State New Hampshire
State Code A50 43,3 p 33 County A60 < Carroll > (Enter code twice from List D)
Position from Prominent Locality A82 < Go 1.4 km north on Bear Notch Rd. from the
intersection with the Kancamagus Highway, then turn NE on to Birch Hill Rd.
Travel 3.4 km until road crosses stream.
Field Checked Gl < 7,9 1,0 p By G2 < Stone , Tom > Last name First Initial
Latitude A70 44400155 ND Longitude A80 40,7,1+2,1 +2,0, WD Deg Min Sec
Township A77 <
Meridian A81 < > Altitude A107 < >
Quad Scale A91 4 6,2,5,0,0 Quad Name A92 < Crawford Notch > (7½' or 15' quad)
Physiographic Province A63 <0,1 New England > (List K)
Location Comments A83 < On north side of road in stream bed there are
exfoliation slabs.
Location Sketch Map: O O
N 0.5 1.0 2.0
t.9 km to Kancamagus

BFE |236 4/19/78

URANI	1704 CC	PRESENT.	THE PARTY AND ADDRESS OF

URANIUM-OCCURRENCE	Quad Name Portland
REPORT	Deposit No. 29
Commodities Present:	
Commodities Produced:	COPROD 4
MINOR 4	BYPROD 4
Potential Commodities:	JR (U
Commodity Comments C50 <	
Status of Exploration and Development A2 (1 = occurrence, 2 = raw prospect, 3 = o Comments on Exploration and Development	developed prospect, 4 = producer)
Property is A21 (Active) (A22) (Inc. Workings are M120 (Surface) M130 (Unc. Description of Workings M220<	derground) (Circle appropriate labels)
Cumulative Uranium Production PROD DH2 accuracy thousands of 1b. G7 U G7A	< <u>LB</u> > G7C< > G7D<
Production Comments D10 <	>
Reserves and Potential Resources EH accuracy thousands of 1b. ElqU	year of est. grade 1B< <u>LB</u> > E1C< <u>, , , </u> > E1D< <u>% U308</u> >
Source of Information E7 <	
Comments E8 <	
	>

URANIUM-OCCURRENCE	Quad Name Portland
REPORT	Deposit No. 29
Deposit Form/Shape M10 < Plutonic	stock
Length M40 < > M41<	Size M15 (circle letter):
Width M50 <> M51<	> <u>1b U308</u>
Thickness M60 <> M61<	
Strike M70 <	
Dip M80 <	D 2 million - 20 million E More than 20 million
Tectonic Setting N15 < Mobile Bel	t
Major Regional Structures N5 <	Conway - Mt. Osceola Batholith
Local Structures N70 <	
Host-FM. Name Ul < White Mountain Ma	gma Ser> Member U2 < Conway Granite >
Host Rock K1 4E J.U.R.	Medium grained buff biotite granite
(Age)	(Rock type, texture, composition, color,
alteration, attitude, geometry, stru	icture, etc.)
	>
Host-Rock Environment U3 < Plutonic	
(Sed. dep.	environ., metamorphic facies, ign. environ.)
A	
	<u> </u>
Ore Minerals C30 < Nonc observed	
Gangue Minerals K4 < Biotite, quar	tz, feldspar

URANIUM-OCCURRENCE	Quad Name _ Portland
REPORT	Deposit No. 29
Alteration N75 < None observed	
	pm U ₃ 0 ₈
Radiometric Data (General) U6 < Surf	(No. times background and dimensions)
Ore Controls K5 <	
Deposit Class C40 < Orthomagmatic	> Class No. U7 43:11:0
Comments on Geology N85 <	

TITO A	AFT?	201	MAL	27.55	-	*
URA	2011	IM-	63E3E	1118	REAL	u eo e

Quad Name	Portland	
Deposit No.	29	

Uranium Analyses:

Sample No.	Sample Description	Uranium Analysis
MHM 388	Granite sample for Conway Granite sampling grid	27 ppm U ₃ O ₈

References:	
F1 <	
F2 <	
F3 <	
F4 <	

URANT		

Quad	Name A90<	Portland	
Quad	Scale Al00<	1 , 2, 5, 0, 0, 0, 0	
Depo	sit No. B40<	30	

Deposit Name AlO < Potash Mountain Occurrence >
Synonym Name(s) All <
District or Area A30 <>
Country A40 QU SP [U S] State New Hampshire
State Code A50 < 3,3 > [3,3] County A60 < Grafton > (Enter code twice from List D)
Position from Prominent Locality A82 < Traveling west on the Kancamagus
Highway, go through Passaconaway and continue approximately 2.6 km to Downe's
Brook. Potash Mountain is to the SW of the intersection of the Kancamagus >
Field Checked G1 < 7,9 1,0 P By G2 < Wagener , H. D. > Yr Mo Last name First Initial
Latitude A70 4 3 15 9 10 0 ND Longitude A80 40 7 1 12 3 11 9 WD Deg Min Sec Deg Min Sec
Township A77 <
Meridian A81 < > Altitude A107 < 732 m >
Quad Scale A91 4 6 2 5 0 0 Quad Name A92 < Mt. Chocorua > (7½' or 15' quad)
Physiographic Province A63 <0,1 New England > (List K)
Location Comments A83 < MHM 084 is directly N of the mountain peak on the
north slope at 732 m elevation
Location Sketch Map:
44°00°
Passacona way

BFE 1236 4/19/78

URAN	IUM-	OCCUR	RENC

URANIUM-OCCURRENCE	Quad Name Fortiand
REPORT	Deposit No. 30
Commodities Present:	
Commodities Produced:	COPROD 4
INOR 4	BYPROD 4
Potential Commodities:	k √U, , , , , , , , , , , , , , , , , , ,
Commodity Comments C50 <	>
Status of Exploration and Development A20 (1 = occurrence, 2 = raw prospect, 3 = de Comments on Exploration and Development I	eveloped prospect, 4 = producer)
Property is A21 (Active) A22 (Inactive) Workings are M120 (Surface) M130 (Under Description of Workings M220<	ctive) (Circle appropriate labels) erground) M140 (Both)
Cumulative Uranium Production PROD OH2 accuracy thousands of 1b. G7 U	years grade LB> G7C<> G7D<
Reserves and Potential Resources CH accuracy thousands of 1b. C1 U	year of est. grade B <lb> E1C </lb>
Comments E8 <	

URANIUM-OCCURRENCE	Quad Name Portland
REPORT	Deposit No. 30
Deposic Form/Shape M10 < Plutonic stock	
Length M40 < > M41< >	Size M15 (circle letter):
Width M50 <> M51<>	1b U308
Thickness M60 <> M61<>	A 0 - 20,000
Strike M70 <>	B 20,000 - 200,000 C 200,000 - 2 million
Dip M80 <>	D 2 million - 20 million E More than 20 million
Tectonic Setting N15 < Mobile Belt	
Major Regional Structures N5 <conway -<="" td=""><td>Mt. Osceola Batholith</td></conway>	Mt. Osceola Batholith
Local Structures N70 <	^
Host-FM. Name U1 < White Mountain Magma Ser	r> Member U2 < Conway Granite
Host Rock K1 (F.J.U.R. 18 Medi	
biotite granite	
alteration, attitude, geometry, structure,	etc.)
Host-Rock Environment U3 < <u>Plutonic</u> (Sed. dep. environm	on., metamorphic facies, ign. environ.)
Comments on	
Ore Minerals C30 < None observed	
Gangue Minerals K4 < Biotite, quartz, fel	denau
BIULILE, QUARTZ, FET	dspar

URANIUM-OCCURRENCE	Quad Name	Portland
REPORT	Deposit No.	30
Alteration N75 < None observed		
		>
Reductants U5 <		
Analytical Data (General) C43 < 19 ppm	U ₃ 0 ₈	
		>
Radiometric Data (General) U6 < Surface	e radioactivity (SP No. times background	R) 450 to 600 cps, nd and dimensions)
BG 150 cps		,
Ore Controls K5 <		
Describe Class CAO & Outhorsenship) (1 N- U7 d2 1 0h
Deposit Class C40 < Orthomagmatic Comments on Geology N85 <		
		,

TTE	1 4 5	***	75.6	00	1280	The second	***	-
UB	CAD		TM-	49U	es i	K K	κn	εн

	D.		

Quad	Name	Portland	
Depos	sit No.	30	

Uranium Analyses:

Sample No.	Sample Description	Uranium Analysis
MHI1 084	Grab sample as part of sampling grid of Conway	
	Granite	19 ppm U ₃ 0 ₈

References:	
F1 <	
F2 <	
F3 <	
F4 <	

TITS AST T	UM-OCCI	CONTRACTOR
118 AN 1	1 1200 mar (3) (()	PPFNI

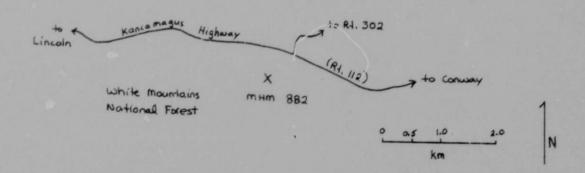
Quad	Name	Portland	

REPORT	Deposit No30
Continuation from p. 1-5:	
Label	
_A82 < Highway and of Downe's Brook. >	

REPORT

Quad	Name	A90<_	Portland	>
Quad	Scal	e A100	2, 5, 0, 0, 0, 0	
Depos	sit N	o. B40	< 31	>

Denovie Name 410 / Paggaganaway Occumpance
Deposit Name AlO < Passaconaway Occurrence
Synonym Name(s) All <>
District or Area A30 < White Mountains National Forest >
Country A40 du Sp [U S] State New Hampshire
State Code A50 <33 > 33 County A60 < Carroll > (Enter code twice from List D)
Position from Prominent Locality A82 < South of Passaconaway, off of the Kanca-
magus Highway approximately 16 km west of Conway
<u> </u>
Field Checked G1 <7 9 1 0 By G2 Stone , Tom > Last name First Initial
Latitude A70 4,3 +5,9 +2,6, NP Longitude A80 40,7,1 + 2,0 + 1,0, WP Deg Min Sec Deg Min Sec
Township A77 <
Meridian A81 < > Altitude A107 < >
Quad Scale A91 4 16,2,5,0,0> Quad Name A92 < Mt. Chocorua > (7½' or 15' quad)
Physiographic Province A63 <0.1 New England >
Location Comments A83 < South on dirt road 0.55 km west of Bear Notch Road and
the Kancamagus Highway intersection; ledge with sample locality 0.39 km south on
Location Sketch Map:



BFE |236 4/19/78

Quad Name Portland

TIDAN	TIIM.	-acci	URRENCE
OTANTA	TOLL		J D. D. L. LY L. E

REPORT	Deposit No. 31
Commodities Present:	
Commodities Produced:	COPROD 4
	P BYPROD 4
Potential Commodities:	
Commodity Comments C50 <	
Status of Exploration and Development (1 = occurrence, 2 = raw prospect, 3) Comments on Exploration and Developme	= developed prospect, 4 = producer)
Property is A21 (Active) (A22) (Workings are M120 (Surface) M130 (Description of Workings M220<	Inactive) (Circle appropriate labels) Underground) M140 (Both)
Cumulative Uranium Production PRO	
	year of est. grade E1B< <u>LB</u> > E1C< <u> </u>
	>

URANIUM-OCCURRENCE	Quad Name Portland
REPORT	Deposit No. 31
Deposit Form/Shape M10 < plutonic stock	
Length M40 < > M41< >	Size M15 (circle letter):
Width M50 <> M51<>	<u>1b U308</u>
Thickness M60 <> M61<>	A 0 - 20,000 B 20,000 - 200.000
Strike M70 <>	C 200,000 - 2 million D 2 million - 20 million
Dip M80 <>	E More than 20 million
Tectonic Setting N15 < Mobile Belt	
Major Regional Structures N5 < Conway- Mt. Local Structures N70 <	>
Host-FM. Name Ul < White Mountain Magma Ser.	
Host Rock Kl (E J U R (Age) (Ro	ck type, texture, composition, color,
biotite granite alteration, attitude, geometry, structure,	erc.)
, geometry, seruciae,	
	>
Host-Rock Environment U3 < Igneous (Sed. dop. environments on Associated Rocks U4 <	n., metamorphic facies, ign. environ.)
	>
Gangue Minerals K4 < Smoky quartz, apatite,	biotite, feldspar

Quad Name Portland

URANIUM-OCCURRENCE

REPORT	Deposit No. 31
Alteration N75 < Slightly weathered	
Reductants U5 < Iron sulfides	
Analytical Data (General) C43 < 18 ppm U ₃	00g
Radiometric Data (General) U6 < BG 90-100 (No	cps; granite two times BG; sample times background and dimensions)
site 225 cps; surrounding rock 185-250 c	ps
Ore Controls K5 <	
Deposit Class C40 < Orthomagmatic	> Class No. U7 <3,1,0
Comments on Geology N85 < Ledge drilled an	nd blasted, sample taken near cored area

-	22	**	-	-	-
- 2	w	Ю		10	м

Quad Name	Portland	
Deposit No	21	

Uranium Analyses:

Sample No.	Sample Description	Uranium Analysis
MHM 882	Granite grid sample	18 ppm U ₃ 0 ₈

References:	
F1 <	
F2 <	
F3 <	
F4 <	

Quad Name Portland

	E		

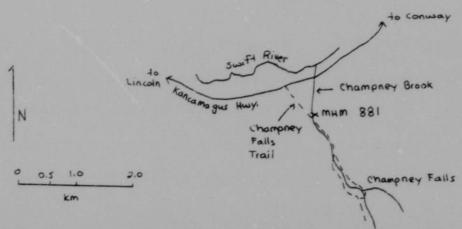
Deposit No. 31

Continuation from p. 1-5: Label A83 < dirt road and to SW of road >

	NI			

Quad	Name A	490< Po	rtland	
Quad	Scale	A1004	, 2, 5, 0, 0, 0, 0	
Deno	eit No	B/100	32	

Deposit Name AlO < Champney Falls Trail Occurrence >>
Synonym Name(s) All <
District or Area A30 < White Mountains National Forest
Country A40 (U, S) U, S State New Hampshire
State Code A50 <3,3 > [3,3] County A60 < Carroll > (Enter code twice from List D)
Position from Prominent Locality A82 < South of the Kancamagus Highway about 14km
west of Conway, on the Champney Falls Trail
Field Checked G1 < 7.9 11.0 P By G2 < Stone > Tom > First Initial
Latitude A70 94,3H5,9H0,8 ND Longitude A80 90,7,1H1,7H3,3 WD Deg Min Sec
Township A77 <
Meridian A81 < > Altitude A107 < 420 m >
Quad Scale A91 4 6,2,5,0,0> Quad Name A92 < Mt. Chocorua > (7½' or 15' quad)
Physiographic Province A63 <0,1 New England (List K)
Location Comments A83 < 0.7 km south on Champney Falls Trail to Champney Brook.
sample taken from low becrock exposure that crosses brook
Location Sketch Map:



8FE 1236 4/19/78

UIGANIUM-OCCURRENCE	Quad Name Portlan	d
REPORT	Deposit No. 32	
Commodities Present: . "		
Commodities Produced:	> COPROD 4	
MINOR 4	> BYPROD 4	
Potential Commodities:	UR QU	Þ
Commodity Comments C50 <		>
Status of Exploration and Development A (1 = occurrence, 2 = raw prospect, 3 = 6		ducer)
Comments on Exploration and Development	L110 <	>
Property is A21 (Active) (A22) (In Workings are M120 (Surface) M130 (Un Description of Workings M220<	active) (Circle app derground) M140 (Both)	ropriate labels)
Cumulative Uranium Production PROD	VES (NO) SMIL MED	CGE (circle)
DH2 accuracy thousands of 1b. G74 U	years	grade
Source of Information D9 <		<u> </u>
Production Comments D10 <		>
Reserves and Potential Resources EH accuracy thousands of 1b. El U	year of est. 1B< <u>LB</u> > E1C< <u>, , , </u> > E1D<	grade % U308>
Source of Information E7 <		
Comments E8 <		

URANIUM-OCCURRENCE	Quad Name Portland
REPORT	Deposit No. 32
Deposit Form/Shape M10 < Plutonic stock	
Length M40 < > M41< >	Size M15 (circle letter):
Width M50 <> M51<>	1b U308
Thickness M60 <> M61<>	A 0 - 20,000
Strike M70 <>	B 20,000 - 200,000 C 200,000 - 2 million
Dip M80 <>	D 2 million - 20 million E More than 20 million
Tectonic Setting N15 < Mobile Belt	,
Major Regional Structures N5 < Conway-Nt.	Osceola Batholith
	,
Local Structures N70 <	
Host-FM. Name Ul < White Mountain Magma Se	Mombou III < Comunitario
Host Rock K1 4EJUR (Age) (1	Rock type, texture, composition, color,
alteration attitude	
alteration, attitude, geometry, structure	, etc.)
	<u> </u>
Host-Rock Environment U3 < Igneous (Sed. dep. envir	ron., metamorphic facies, ign. environ.)
Comments on Associated Rocks U4 <	in the second se
One Mineral COO	>
Ore Minerals C30 < None observed	
	>
Gangue Minerals K4 < Smoky quartz, biotite	e, greenish feldspar

URANIUM-OCCURRENCE	Quad Name Portland
REPORT	Deposit No. 32
Alteration N75 < Slightly weathered	
Reductants U5 < Iron sulfides	
Analytical Data (General) C43 < 19 ppm U ₃ (08
Radiometric Data (General) U6 < Surface (No reading of 400 cps probably due to mass	. times background and dimensions)
Ore Controls K5 <	
Deposit Class C40 < Orthomagmatic	> Class No. U7 <3.11.0
Comments on Geology N85 <	

	HERENCE

	[27]		

Quad Nan	ne	Portland	
Deposit	No.	32	

Uranium Analyses:

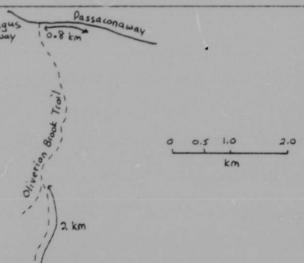
Sample No.	Sample Description	!ranium Analysis
MHM 881	Granite grid sample	19 ppm U ₃ O ₃

References:	
F1 <	
F2 <	
F3 <	
F4 <	

URAN	IUM-	occu	RRE	NC
	RE	PORT		

Quad	Name A90< Po	ortland	>
Quad	Scale Aloo4	, 2, 5, 0, 0, 0, 0>	
Depo	sit No. B40<	33	>

Deposit Name AlO < Oliverian Brook Trail	4
Synonym Name(s) All <	,
District or Area A30 <	>
Country A40 4U State New Hampshire	
State Code A50 < 3 3 P 3 3 County A60 < Carroll (Enter code twice from List D)	
Position from Prominent Locality A82 < Approximately 0.8 km west of Pas	saconaway
on the Kancamagus Highway, take the Oliverian Brook Trail south. Go pa	ist the
assaconaway cut-off and continue approximately 2.0 km.	
Field Checked G1 $< \frac{7}{1}$ $\frac{9}{1}$ $\frac{1}{1}$ $\frac{9}{1}$ By G2< Stone Last name First	Initial
Latitude A70 44,315,7115, No Longitude A80 40,7,1112,1110,8, WD Deg Min Sec	
Township A77 <	FT/M
Meridian A81 < > Altitude A107 < 520	m
Quad Scale A91 4 6,2,5,0,0> Quad Name A92 < Mt. Chocorua (7½' or 15' quad)	
Physiographic Province A63 < 0 1 New England (List K)	
Location Comments A83 < Outcrop is in the center of the brook	
Location Sketch Map: Kancamagus Passaconaway	



O mum 892

N

Quad Name Portland

 		and the same of			
 MAS	TITM	-01	200	000	NICE
 22213	L MIL		43.41	D. D. E.	

REPORT Deposit No. 33	
Commodities Present:	
Commodities Produced: MAJOR 4 COPROD 4	
MINOR A BYPROD A BYPROD A	
Potential Commodities: POTEN 4 OCCUR 4 U	
Commodity Comments C50 <	
	->
Status of Exploration and Development A20 < 1 > (1 = occurrence, 2 = raw prospect, 3 = developed prospect, 4 = producer)	
Comments on Exploration and Development L110 <	- >
Property is A21 (Active) A22 (Inactive) (Circle appropriate labels Workings are M120 (Surface) M130 (Underground) M140 (Both) Description of Workings M220<)
Cumulative Uranium Production PROD YES NO SML MED LGE (circle DH2 accuracy thousands of 1b. years grade G74 U	
Reserves and Potential Resources EH accuracy thousands of 1b. year of est. grade El U	8>
	3

URANIUM-OCCURRENCE	Quad Name Portland
REPORT	Deposit No. 33
Deposit Form/snape M10 < Plutonic stock	-
Length M40 < > M41< >	Size M15 (circle letter):
Width M50 <> M51<>	1b U308
Thickness M60 <> M61<>	A 0 - 20,000 B 20,000 - 200,000
Strike M70 <>	C 200,000 - 2 million D 2 million - 20 million
Dip M80 <>	E More than 20 million
Tectonic Setting N15 < Mobile Belt	
Major Regional Structures N5 < White Mour	ntains
Local Structures N70 <	
Host-FM Name III (White Mountain Massa Ca	> Manham 112 / Community
Host-FM. Name U1 < White Mountain Magma Ser	
Host Rock K1 (Age) (R	ock type, texture, composition, color,
granite	
alteration, attitude, geometry, structure,	etc.)
Host-Rock Environment U3 < Plutonic	on., metamorphic facies, ign. environ.)
Comments on	
Associated Rocks J4 <	
Ore Minerals C30 < None observed	
Gangue Minerals K4 < Quartz, feldspar, bio	tite

URANIUM-OCCURRENCE	Quad Name	Portland
REPORT	Deposit No. 3	3
Alteration N75 < None observed		
		>
Reductants U5 <		
Analytical Data (General) C43 < 32 ppm	1 U ₃ 0 ₈	<u> </u>
		<u> </u>
Radiometric Data (General) U6 < <u>Surfac</u>	e radioactivity 375-5 (No. times background	OOCDS and dimensions)
)	<u> </u>
Ore Controls K5 <		•
		,
Deposit Class C40 < Orthomagmatic		Class No. U7 < 3, 1, 0
Comments on Geology N85 <		

URANTUM-OCCURRENCE							
	TITO A	STATE	A 174.	CORE	nn	***	-
	TINA		M ()	00.00	ĸĸ	34. (A)	юн

•	-	-	246	MARKS.	-
к	ю	ы	0	ĸ	m

Quad	Name	Portland	
Dono	nie Na	22	

Uranium Analyses:

Sample No.	Sample Description	Uranium Analysis
MHM 892	Sample from Conway grid sampling	32 ppm U ₃ 0 ₈

References:	
F1 <	
F2 <	
F3 <	
F4 <	

REPORT

Quad	Name A90 <portland< th=""><th></th></portland<>		
Quad	Scale Al004	, 2, 5, 0, 0, 0, 0	
Deno	eit No. R40<	2/	

Deposit Name AlO < Mount Osceola #2 Occurrence >
Synonym Name(s) All <
District or Area A30 < White Mountains National Forest >
Country A40 (U, S) U, S State New Hampshire
State Code A50 < 3 3 P 3 3 County A60 < Carroll > (Enter code twice from List D)
Position from Prominent Locality A82 < Take Route 113A west from Wonalancet;
then take Chocorua Lake Road north about 1.1 km, and then take dirt road north
to Paugus Mill.
Field Checked Gl < 9 1 0 P By G2 < Wagener , H.D. > Yr Mo Last name First Initial
Latitude A70 4 4 3 5 7 1 1 1 NP Longitude A80 40 7 1 H1 8 H2 8 WP Deg Min Sec
Township A77 <
Meridian A81 < > Altitude A107 < <u>480 m</u> >
Quad Scale A91 4 , 6, 2, 5, 0, 0> Quad Name A92 < Mt. Chocorua > (7½' or 15' quad)
Physiographic Province A63 < 0,1 New England > (List K)
Location Comments A83 < From Paugus Mill Road take the Bolles Trail north
approximately 3 km . >
Location Sketch Map: N Chocorua Lake Road
MHM-087 Bolles Trail Acugus Mill

0 0.5 1.0 2.0 km

MHW 086

Wonalancet

% U308>

Page 2 URANIUM-OCCURRENCE Quad Name Portland Deposit No. 34 REPORT Commodities Present: Commodities Produced: MAJOR 4 COPROD 4 COPROD 5 MINOR 4 Potential Commodities: POTEN 4 OCCUR 4U OCCUR 4U Commodity Comments C50 < Status of Exploration and Development A20 < 1 > (1 = occurrence, 2 = raw prospect, 3 = developed prospect, 4 = producer) Comments on Exploration and Development L110 < Property is A21 (Active) (A22) (Inactive) (Circle appropriate labels) Workings are M120 (Surface) M130 (Underground) M140 (Both) Description of Workings M220< Cumulative Uranium Production PROD YES (NO) SML MED LGE (circle) % U308> Source of Information D9 < Production Comments D10 < Reserves and Potential Resources

accuracy thousands of 1b. year of est. grade E1 U | P E1A | P E1B LB E1C | P E1D |

Source of Information E7 <

Commencs E8 <

URANIUM-OCCURRENCE	Quad Name Portland
REPORT	Deposit No. 34
Deposit Form/Shape M10 < Plutonic stock	
FT/M Length M40 < > M41< >	Size M15 (circle letter):
Width M50 <> M51<>	<u>1b U308</u>
Thickness M60 < > M61< > Strike M70 < >	A 0 - 20,000 B 20,000 - 200,000 C 200,000 - 2 million D 2 million - 20 million
Dip M80 <>	E More than 20 million
Tectonic Setting N15 < Mobile Belt	
Major Regional Structures N5 < White Mountain Local Structures N70 <	
Host-FM. Name U1 < White Mountain Magma Ser Host Rock Kl 4E J U R (Age) (R kalic granite with light brown feldspar, alteration, attitude, geometry, structure, round the weathering rind.	um to coarse grained, homogeneous al- ock type, texture, composition, color,
Comments on	on., metamorphic facies, ign. environ.)
Ore Minerals C30 < None observed	
Gangue Minerals K4 < Feldspar, quartz	

	arabit occomment		Quad Name	101	crana	
	REPORT		Deposit No.		34	
Alteration N7	75 < Weathered,	with a greenish	tinge around	the	weathering	rind.
Reductants U5	· <					
Analytical Da	ata (General) C	43 < 23 ppm U ₃ 0 ₆	3			
Radiometric D	Oata (General)	U6 < Surface radi (No.	oactivity (SF times backgrou	() = und (300 cps and dimensi	ons)
Ore Controls	K5 <					,
						•
Deposit Class	C40 < Orthomac	gmatic		_>	Class No.	U7 <3:1:0
Comments on G	Geology N85 <					
PROPERTY OF THE PERSON NAMED IN COLUMN TWO				-		

TITL A ALTT	181 000	URRENC
IIMANII	1M - (36.60	LIDDERKICH

Quad	Name	Portland	
Denos	sit No	24	

Uranium Analyses:

Sample Description	Uranium Analysis
Grab sample from granite exposure	23 ppm U ₃ 0 ₈

References:	
F1 <	
	,
F2 <	
	,
F3 <	
	<u> </u>
F4 <	

URANI		

BFE 1236 4/19/78

Quad Name A90<		Portland	
Quad	Scale Al00	, 2, 5, 0, 0, 0, 0	
Depo	sit No. B40<	35	

Deposit No. 240	
Deposit Name AlO < Wonalancet Stock	>
Synonym Name(s) All <	>
District or Area A30 < White Mountains	>
Country A40 4U SP U S State New Hampshire	
State Code A50 <3,3 County A60 < Carroll (Enter code twice from List D)	>
Position from Prominent Locality A82 < About 24 km north of Lake Winnip	pesaukee
	>
Field Checked Gl < 7,9 0,8 P By G2 < McHone , J. Green Yr Mo Last name First	initial >
Latitude A70 4 3 5 5 2 5 ND Longitude A80 40.7.1 H2.2 H0.0. WP Deg Min Sec	
Township A77 <	FT/M
Meridian A81 < > Altitude A107 < 540) m >
Quad Scale A91 4 6 2 5 0 0 Quad Name A92 < Mt. Chocorua (7½' or 15' quad)	>
Physiographic Province A63 <0 1 New England (List K)	>
Location Comments A83 < Five samples taken within the Wonalancet st	ock
of Conway granite - see map.	
Location Sketch Map: Wordlancet MHM OII	
N Femcroft	
91.113 A	
1.0 2.0 Wonalancet	
km	lorth.
9/m Hm 013	

t to Center Sandwich

URANIUM-OCCURRENCE	Quad Name Portland
REPORT	Deposit No. 35
Commodities Present:	
Commodities Produced:	COPROD 4
MINOR 4	BYPROD 4
POTEN 4 OCCUR	44
Commodity Comments C50 <	
Status of Exploration and Development A20 (1 = occurrence, 2 = raw prospect, 3 = de Comments on Exploration and Development L	veloped prospect, 4 = producer)
Property is A21 (Active) (A22) (Inactive) Workings are M120 (Surface) M130 (Under Description of Workings M220<	
Cumulative Uranium Production PROD DH2 accuracy thousands of 1b. G7-Q-U	YES NO SML MED LGE (circle) years grade B> G7C< > G7D< % U308>
Production Comments D10 <	
Reserves and Potential Resources EH accuracy thousands of 1b. El U	year of est. grade 3< <u>LB</u> > E1C< <u>% U308</u> >
Comments E8 <	

URANIUM-OCCURRENCE	Quad Name Portland
REPORT	Deposit No. 35
Deposit Form/Shape M10 < Plutonic Stock	
Length M40 < 7.60 > M41 < km >	Size M15 (circle letter):
Width M50 < 5.50 > M51 < km >	1b U308
Thickness M60 < > M61< >	○ - 20,000
Strike M70 <>	B 20,000 - 200,000 C 200,000 - 2 million
Dip M80 <>	D 2 million - 20 million E More than 20 million
Tectonic Setting N15 < Mobile Belt	
Major Regional Structures N5 < Conway-Mt. O	sceola batholith
	>
Local Structures N70 <	
Host-FM. Name Ul White Mountain Magma Ser.	> Member U2 < Conway Granite
Host Rock K1 q E, J, U, R (Age) (Ro	m grained pinkish biotite granite ck type, texture, composition, color,
alteration, attitude, geometry, structure,	etc.)
Host-Rock Environment U3 < Igneous (epi	zonal plutonic)
Comments on	n., metamorphic facies, ign. environ.)
Associated Rocks U4 < Surrounded by Mt. Os	ceola hornblende granite, Passaconaway
syenite, and Littleton Fm. schists	
Ore Minerals C30 < Biotite(?);	allanite(?)
Gangue Minerals K4 < Biotite, quartz, m	icrocline

URANIUM-OCCURRENCE	Quad Name Portland
REPORT	Deposit No. 35
Alteration N75 < Minor hematitic stainin	g; MHM 010 slightly weathered
Reductants U5 < Minor sulfides	· · · · · · · · · · · · · · · · · · ·
Analytical Data (General) C43 <	
Radiometric Data (General) U6 < 150-280 cp (No.	os (BG = 80 - 100 cps); varies mainly by times background and dimensions)
Ore Controls K5 < Primary igneous process and/or other uranium-bearing minerals)	ses (hydrothermal concentrations of biotite
Daniel Clark Onthomagmatic	, , , , , , , , , , , , , , , , , , ,
Deposit Class C40 < Orthomagmatic Comments on Geology N85 < Surprisingly ur	> Class No. U7 < 3,1,0> raniferous considering only moderate radio-
	of analyses suggests zoning of uranium,
	samples (MHM 010?) - note that the two stream
bed exposures (freshest rock?) are highes	
	> 4

Quad	Name	Portland	

Deposit No. 35

Uranium Analyses:

Sample No.	Sample Description	Uranium Analysis
MHM 010	Detrital boulders in roadcut, SW borders	13 ppm U ₃ O ₃
MHM 011	Streambed exposure, NE border	17 ppm U ₃ 0 ₂
MHM 012	Trail ledge in woods, east-central	12 ppm U ₃ 0 ₃
MHM 013	Trail ledge in woods, north-central	1 ppm U ₃ O ₃

Geologic Sketch Map and/or Section, with Sample Locations: Passaconaway Syenite M1. Osceola m1. woralarket Granite Kinsman Quart 2 Monzonite conway Granite ionalancet Village Katherine Littleton Tamworth, N. H. mum ol3 Formation Littleton Formation RI. 113 A_ References: Sandwich, N.H. Kingsley, Louise, and Quinn, A. W., 1939, Geology of F1 < Smith, A. P., the Mt. Chocorua quadrangle, New Hampshire: N.H. Plan. and Devel. Comm., Concord.> F2 < F3 < F4 <

**	****		mores	•	*	***		-	ж
11	RANI	IIM-	HOUSE	ж	ж	36.3	VΙ		

Quad	Name A90< Portland	- >
Quad	Scale A100< 12,5,0,0,0,0	
Deno	sit No. 840< 36	

Deposit No. B40< 36	>
M4 01- #1 01	
Deposit Name AlO < Mt. Osceola #1 Occurrence	>
Synonym Name(s) All <	>
District or Area A30 <	>
Country A40 (U, S) (U, S) State New Hampshire	
State Code A50 < 3,3 D	>
Position from Prominent Locality A82 < Take Rte. 113A east from Wonalancet then t	ake
Chocorua Lake Road North about 1.1 km. Then take dirt road north to Paugus Mill.	>
Field Checked G1 < 7,9 1,0 Ey G2 Wagener , H. D. Yr Mo Last name First Initial	>
Latitude A70 44,3H5,5H5,7, MP Longitude A80 40,7,1H1,8H3,0, MP Deg Min Sec	
Township A77 <	
Meridian A81 < > Altitude A107 < 455 m	>
Quad Scale A91 4 6,2,5,0,0 Quad Name A92 < Mount Chocorua (7½' or 15' quad)	>
Physiographic Province A63 < 0,1 New England (List K)	> -
Location Comments A83 < From Paugus Mill head due NNW up small knoll that is	
SW of Mount Paugus	>
Location Sketch Map:	
1	

Wonal ance+

R4. 113A

Ray Road

Ray Road

N 2.0 km

BFE 1236 4/19/78

ORANIUM-OCCURRENCE	Quad Name Portland
REPORT	Deposit No. 36
Commodities Present:	
Commodities Produced:	COPROD 4
MINOR 4	BYPROD 4
Potential Commodities:	< <u>U</u>
Commodity Comments C50 <	
Status of Exploration and Development A20 (1 = occurrence, 2 = raw prospect, 3 = de Comments on Exploration and Development L	veloped prospect, 4 = producer)
Property is A21 (Active) (A22) (Inac Workings are M120 (Surface) M130 (Unde Description of Workings M220<	
Cumulative Uranium Production PROD OH2 accuracy thousands of 1b. G74 U G784 G784 G784 G784 G784 G784 G784 G784	
Source of Information D9 <	<u> </u>
Production Comments D10 <	
	year of est. grade < <u>LB</u> > E1C % U308>
Comments E8 <	

URANIUM-OCCURRENCE		Quad Name Portland	
REPORT		Deposit No. 36	
Deposit Form/Shape M10 <		>	
Length M40 <	FT/M _> M41<>	Size M15 (circle letter):	
Width M50 <	_> M51<>	<u>1b U308</u>	
Thickness M60 <	_> M61<>	A 0 - 20,000	
Strike M70 <	>	B 20,000 - 200,000 C 200,000 - 2 million	
Dip M80 <	>	D 2 million - 20 million E More than 20 million	
Tectonic Setting N15 <	Mobile Belt	<u> </u>	
Major Regional Structures	N5 < Conway-Mt. Os	ceola batholith	
		<u> </u>	
Local Structures N70 <			
		<u> </u>	
Host-FM. Name U1 < White !	Mountain Magma Ser.	> Member U2 < Mount Osceola Granite >	
Host Rock K1 4E J U R	Medium-	coarse grained homogeneous	
alkalic granite with brow alceration, attitude, geo	metry, structure,	etc.)	
		>	
Host-Rock Environment U3	< Plutonic		
Comments on	(Sed. dep. enviro	n., metamorphic facies, ign. environ.)	
Associated Rocks U4 <			
Ore Minerals C30 < None	observed		
Gangue Minerals K4 < Fel	dspar, smoky quart	Z	

Portland

URANIUM-OCCURRENCE

_
_>
_
_>
_>
- _> _
_> 0.Þ
_
>

Onad Name

TITEL A ST	TIDA	1300	TIDI	PRIME
URAN	EUP!-	-(11)	шкв	CHINELE.

Quad Name	Portland	
Deposit No.	26	

Uranium Analyses:

Sample No.	Sample Description	Uranium Analysis
MHM 036	Grab sample of sampling grid of Mount Osceola Granite	19 ppm U ₃ 0 ₈

References:	
F1 <	
F2 <	
F3 <	
F4 <	

 TY A	BET T	TM-C	200	** **	n n	773	TA	**
 ка	DC 1 1	100 6	36		кк	20.0		ъ.

Quad	Name A90<_	Portland	
Quad	Scale Al00	4 , 2, 5, 0, 0, C, OP	
Depos	sit No. B40	< 37	

Deposit Name AlO < Wonalancet Occurrence >>
Deposit Name AIO < Wondrancet occurrence >
Synonym Name(s) All <
District or Area A30 < White Mountains >
Country A40 4U, SP U, S State New Hampshire
State Code A50 3 3 D 3 3 County A60 < Carroll > (Enter code twice from List D)
Position from Prominent Locality A82 < About 24km north of Lake Winnipesaukee
Field Checked G1 < 7, 9, 0, 8p By G2< McHone , J. Gregory >
Field Checked G1 < 7,9 0,80 By G2
Latitude A70 9 4 3 1 5 4 3 5 ND Longitude A80 90 7 1 1 1 9 1 1 WD Deg Min Sec Deg Min Sec
Township A77 <
Meridian A81 < > Altitude A107 < 360 m >
Quad Scale A91 4 6, 2, 5, 0, 0 Quad Name A92 < Mt. Chocorua > (7½' or 15' quad)
Physiographic Province A63 < 0, 1 New England New Engl
Location Comments A83 < Stream bed exposure east of Wonalancet on north side
of Rte 113A.
Location Sketch Map:

1 N

Wonalancat R4.113A

TITO A BT	IUM-0	A 100 1 1 1 1 1 1	ロアストノスア
LIKAN	1 1 1 1 7 1 1 1 1 1	COLUMN 1	K K DUL H

URANIUM-OCCURRENCE	Quad Name Portland
REPORT	Deposit No. 37
Commodities Present:	
Commodities Produced:	COPROD 4
MINOP 4	BYPROD 4
Potential Commodities: POTEN OCCUR	< <u>√</u>
Commodity Comments C50 <	
Status of Exploration and Development A20 (1 = occurrence, 2 = raw prospect, 3 = de Comments on Exploration and Development L	veloped prospect, 4 = producer)
Property is A21 (Active) (A22) (Inac Workings are M120 (Surface) M130 (Unde Description of Workings M220<	tive) (Circle appropriate labels) rground) M140 (Both)
Cumulative Uranium Production PROD DH2 accuracy thousands of 1b. G74 U G7A4 G7A4 G7B4L	YES NO SML MED LGE (circle) years grade B> G7C< > G7D< % U308>
Source of Information D9 <	<u> </u>
Production Comments D10 <	>
Reserves and Potential Resources EH thousands of 1h	war of out
Elqui P ElAq ElB	year of est. grade
Source of Information E7 <	
Comments E8 <	

URANIUM-OCCURR)	ENCE	Quad Name	Portland	
REPORT		Deposit No.	37	
Deposit Form/Shape M10 <		ock		,
Length M40 <	FT/M > M41<>	Size M15 (circ	le letter):	
Width M50 <	_> M51<>	1b U308		
Thickness M60 <	_> M61<>	A 0 - 20,000		
Strike M70 <	>	B 20,000 - 20 C 200,000 - 2	million	
Dip M80 <	>	D 2 million - E More than 2		
Tectonic Setting N15 <	Mobile Belt			2
Local Structures N70 <				
Host-FM. Name U1 < White Host Rock K1 < E J U R (Age	e) Med	ium grained, pin		
Host-Rock Environment U3 Comments on Associated Rocks U4 <	(Sed. dep. enviro	on., metamorphic		iron.)
Ore Minerals C30 < Biotis	te(?) Allani	te(?)		
Gangue Minerals K4 <	Biotite, qua	rtz, microcline		

Portland

URANIUM-OCCURRENCE	Quad Name Portland
REPORT	Deposit No. 37
lteration N75 < Minor hematite stain	
eductants U5 <	
	0 ppm U ₃ 0 ₈
	·
adiometric Data (General) U6 < 150-2	80 cps BG 80-100 cps o. times background and dimensions)
	>
	ess (hydrothermal concentrations of biotite
or other uranium bearing minerals)	
	<u> </u>
Deposit Class C40 < Orthomagmatic	> Class No. U7 < 3, 1, 0>
omments on Geology N85 <	
	,

Territoria.	THE RESERVE				
1110	A -IT	UM-C	20000	TENTS.	TOTAL COLUMN
LUB.	ALIV I		H (4 (1)	IKK	K DIE O

Quad Name	Portland	
Deposit No.	37	

Uranium Analyses:

Sample Description	Uranium Analysis
Streambed exposure	20 ppm U ₃ O ₉

Geologic Sketch Map and/or Section, with Sample Locations:

References:

Mt. Chocorua Quadrangle, New Hampshire:	New Hampshire Planning and Development
72 <	
F3 <	
F4 <	

PEPOPT

Quad Name	Portland	
		A
Donneit No.	37	

		KEPOKI		Deposit No.	<u> </u>
Conti	nuation	from p. 1-5:			
Label					
F1	<	Commission, Concord.	>		
-					
-					
-					
910					
-					
-					
-					
_					
7					

C T PL	ANT	W # 14		100	P34 1	-	***	* **	•
	0.71		a			v v		u e	w

Quad	Name A90<_	Portland	_ >
Quad	Scale Al00	4 , 2, 5, 0, 0, 0, 0	
Depo	sit No. B40	< 38	3

Meridian A81 > Altitude A107 < 300 m Quad Scale A91 < 16 2 5 0 0 > Quad Name A92 < North Conway (7½' or 15' quad)				De	posit No. B	40< 38	
District or Area .30 <white a40<="" country="" forest="" mountain="" national="" th=""><th>Deposit 1</th><th>Name AlO <</th><th>Lower Falls</th><th>Occurrence</th><th></th><th></th><th></th></white>	Deposit 1	Name AlO <	Lower Falls	Occurrence			
District or Area .30 <white a40<="" country="" forest="" mountain="" national="" td=""><td>Synoaym !</td><td>Name(s) All</td><td><</td><td></td><td></td><td></td><td></td></white>	Synoaym !	Name(s) All	<				
State Code A50 q3.3 P							
State Code A50 43.3.P [3.3] County A60 < Carroll Position from Prominent Locality A82 < About 10 km WNW of Corway, N.H. Field Checked G1 47.9 0.8 By G2 < McHone Last name First Initia Latitude A70 4.4.4.0.0.5.5.NP Longitude A80 40.7.1H1.4H4.9.WP Deg Min Sec Township A77 <						re	
(Enter code twice from List D) Position from Prominent Locality A82 < About 10 km WNW of Corway, N.H. Field Checked G1 < 7.9 0 8 By G2 < McHone							
Field Checked G1 Township A77					A60 < <u>tar</u>	roll	
Latitude A70 4 4 0 0 5 5 N Deg Min Sec Township A77 4 PRAnge A78 4 PRANGE A78 Altitude A107 Altitude A107 Altitude A107 A10 Meridian A81 A10 Physiographic Province A63 4 01 New England (List K) Location Comments A83 A10 New England Parking Incompany Inco	Position	from Promine	ent Locality A	A82 < Abou	t 10 km WNW	of Conway, N	.н.
Latitude A70 4 4 0 0 5 5 N Longitude A80 40 7 H1 4 H4 9 N Deg Min Sec Township A77 4 P Range A78 4 P Section A79 4 P E/W Meridian A81 4 Altitude A107 300 m Quad Scale A91 4 6 2 5 0 0 Quad Name A92 North Conway (7½ or 15' quad) Physiographic Province A63 4 01 New England (List K) Location Comments A83 Sampled in chips along roadcut west of parking 1 Lower Falls Recreation Area Location Sketch Map:							
Deg Min Sec Deg Min Sec Township A77 <	Field Ch	ecked G1 <	7, 9 Q 3> By Yr Mo	G2< McHone Last na	ime	J. First	Gregory Initia
Meridian A81 <	Latitude	A70 4 4 Deg M	0 0-5.5 N> in Sec	Longitude /	A80 40.7.1 P	114 H 4.9 W	
Quad Scale A91 4 6 2 5 0 0 Quad Name A92 North Conway (7½' or 15' quad) Physiographic Province A63 4 01 New England (List K) Location Comments A83 Sampled in chips along roadcut west of parking 1 Lower Falls Recreation Area Location Sketch Map:	Township	A77 <	Range A	78 4 E/W	> Section A	79 4P	F
Physiographic Province A63 QOI New England (List K) Location Comments A83 < Sampled in chips along roadcut west of parking I Lower Falls Recreation Area Location Sketch Map:	Meridian	A81 <			_> Altitude	A107 <	300 m
Location Comments A83 < Sampled in chips along roadcut west of parking 1 Lower Falls Recreation Area Location Sketch Map:	Quad Sca (7½	le A91 4 ' or 15' qua	_6 ,2 ,5 ,0 ,0 ▷	Quad	Name A92 <_	North Conway	
Location Sketch Map: O 1.0 km /N	Physiogr	aphic Provin	(List K)	New Engla	nd		
Location Sketch Map: O 1.0 km N	Location	Comments A8	3 < <u>Sam</u>	pled in chips	along road	cut west of	parkir 1
Conway	Lower F	alls Recreat	tion Area				
Conway	Location	Sketch Map:					de Norti
		0		1.0	1		A SCHOOL SCHOOL SCHOOL
		_	km	-	/N		
	Lower	Falls Recreation	in Area				1
Lower Falls Recreation Area		_		R4.112	Ushway		/ 04.11
			~	Kancamagus	11311-17	R+.16	
						con	way
	6					/	

URANIUM-OCCURRENCE	Quad Name	Portland
REPORT	Deposit No.	38
Commodities Present:		
Commodities Produced:	COPROD 4	
MINOR 4	BYPROD 4	
Potential Commodities: POTEN 4 OCCUR	40	
Commodity Comments C50 <		
Status of Exploration and Development A20 (1 = occurrence, 2 = raw prospect, 3 = decomments on Exploration and Development Li	veloped prospect	, 4 = producer)
Property is A21 (Active) A22 (Inactive) Workings are M120 (Surface) M130 (Under Description of Workings M220<		ircle appropriate labels) 40 (Both)
Cumulative Uranium Production PROD DH2 accuracy thousands of 1b. G7 U	B> G7C<	grade % U308>
Reserves and Potential Resources EH accuracy thousands of 1b. El \(\text{U} \) \(\text{P} \) ElA \(\text{P} \) \(\text{P} \) ElB Source of Information E7 <	2	>

Marine Street,				
URAN	T T TRA	Carren	1 PO PO PO N	200
UPLANIN			KKE	ME CH

ORANI DIN-OCCURRENCE	Quad Name Portland
REPORT	Deposit No. 38
Deposit Form/Shape M10 < Discordant	Pluton
Length M40 <> M41<>	Size M15 (circle letter):
Width M50 <> M51<>	1b U308
Thickness M60 < > M61< >	Ø 0 - 20,000
Strike M70 <>	B 20,000 - 200,000 C 200,000 - 2 million
Dip M80 <>	D 2 million - 20 million E More than 20 million
Major Regional Structures N5 < Northeast	
Merrimack synclinorium).	
Local Structures N70 < Northeaster	rly fractures
Host-FM. Name U1 < White Mountain Magma S Host Rock K1 $\triangleleft E_{i}J_{i}U_{i}R_{i}$ (Age) (biotite-orthoclase syenite alteration, attitude, geometry, structure	nk medium-grained porphyritic quartz- (Rock type, texture, composition, color,
Host-Rock Environment U3 < Epizonal Plus	tonic (igneous)
(Sed. dep. envi	ron., metamorphic facies, ign. environ.)
	Conway granite plutons are less than 3.1
	The site is in the southeast part of the
White Mountain batholith.	
Gangue Minerals K4 <	
Sangee minerals K4	

REPORT Deposit No. 38
Alteration N75 < Minor iron staining
Reductants U5 < Minor primary sulfides
Analytical Data (General) C43 < 28 ppm U ₃ 0 ₈ ; 300 ppm La; 5 ppm Mo; 70 ppm Y; 200 ppm Zr.
· · · · · · · · · · · · · · · · · · ·
Radiometric Data (General) U6 < The roadcut is uniformly 350-400 cps (BG = 110) (No. times background and dimensions)
over a 60m length.
Ore Controls K5 < Probably authigenic (primary) uranium-bearing minerals (allanite
biotite, zircon). Visible fractures had no influence on the radioactivity, nor a
there any pods or veins of radioactive biotite as in the Conway granite.
Deposit Class C40 < Authigenic > Class No. U7 <3 6 0 >
Comments on Geology N85 < The highly uraniferous nature of this syenite makes it
a good candidate for allogenic deposits, despite the lack of any such occurrences
in this outcrop.

Quad Name

Portland

TID A SIT	TTM /	2001	DDEN	70
URANI	UM-		KKEN	6

Quad 1	Name	Portland	
Deposi	i + No	30	

Uranium Analyses:

Sample No.	Sample Description	Uranium Analysis
MHM 006	Chips along 15m length of 60m roadcut	28 ppm U ₃ O ₈
	The state of the s	

References:		
F1 <		
F2 <		
F3 <		
F4 <		

	UM-O		

Quad	Name A90< Portland	>
Quad	Scale A100 1, 2, 5, 0, 0, 0, 0	
Depo	sit No. B40< 39	>

State Code A50 43,30 3,31 County A60 < Carroll (Enter code twice from List D) Position from Prominent Locality A82 < 9 km west of Conway on Rt. 16, west on Pi Trail 1.6 km, sample from uppermost portion of Nickerson Ledge 90 m NF of Pipe Trail.		Initial	Longitude A80 4 0, 7, 1H 1, 4H 3, 5, WP Deg Min Sec	atitude A70 94,3H5,6H0,0,NP Deg Min Sec
Country A40 QU, SP QU, SJ State New Hampshire State Code A50 Q3, 3P B, 3J County A60 < Carroll (Enter code twice from List D) Position from Prominent Locality A82 < 9 km west of Conway on Rt. 16, west on Pi Trail 1.6 km, sample from uppermost portion of Nickerson Ledge 90 m NF of Pipe Trail. Field Checked G1 < 7,9 1,0P By G2 < Stone Tom Last name First Initial		Initial	Last name First	Yr Mo
Country A40 (U, S) (U, S) State New Hampshire State Code A50 (3,3) (2,3) (2,3) (2,3) (2,3) (2,3) (2,3) (3,3) (3,3) (4,3	_>		2< Stone , Tom	ield Checked Gl < 7,911,0P By G2
Country A40 QU, SP QU, SI State New Hampshire State Code A50 Q 3, 3P 3, 3I County A60 < Carroll (Enter code twice from List D) Position from Prominent Locality A82 < 9 km west of Conway on Rt. 16, west on Pi	_>			
Country A40 QU SP U S State New Hampshire State Code A50 Q 3 3P 3 3 County A60 < Carroll (Enter code twice from List D)				
Country A40 QU SP U S State New Hampshire State Code A50 Q 3 3P 3	iner	west on Pi		
			County A60 < Carroll	tate Code A50 4 3, 3P 3 13
District or Area 430 < White Mountains National Forest				
Synonym Name(s) All <	- '			
Deposit Name AlO < Nickerson Ledge Occurrence	->			

Weetamoo Km

Pequawtet

N

BFE 1236 4/19/78

TITL AT	ATT THE	anar	THE PURE NAME OF
UKA	N L UM-	-000	IRRENCE

URANIUM-OCCURRENCE	Quad Name Portland
REPORT	Deposit No. 39
Commodities Present:	
Commodities Produced:	COPECD 4
INOR 4	BYPROD 4
Potential Commodities:	R q U 1 1 1 1 1 1 1 P
Commodity Comments C50 <	
Status of Exploration and Development A2 (1 = occurrence, 2 = raw prospect, 3 = d Comments on Exploration and Development	eveloped prospect, 4 = producer)
Property is A21 (Active) A22 (Inate Norkings are M120 (Surface) M130 (Und Description of Workings M220<	(Circle appropriate labels) erground) M140 (Both)
Cumulative Uranium Production PROD OH2 accuracy thousands of 1b. G7 U G7A G7A G7A G7A G7B	years grade
Productión Comments D10 <	
Reserves and Potencial Resources EH accuracy thousands of 1b. E1 U	year of est. grade B< <u>LB</u> > E1C<
Comments E8 <	

IID.	ANIT	UM-	ac	CITI	DD	27 KT	mo
UTW	J. 1. 1. T.	MAY -	100	W 10	D.D	ALC: UK	G.E

URANIUM-OCCURRENCE	Quad Name Portland
REPORT	Deposit No. 39
Deposit Form/Shape M10 < Plutonic stock	
Length M40 <> M41<>	Size M15 (circle letter):
Width M50 <> M51<>	<u>1b U308</u>
Thickness M60 < > M61< >	A 0 - 20,000 B 20,000 - 200,000
Strike M70 <>	C 200,000 - 2 million D 2 million - 20 million
Dip M80 <>	E More than 20 million
Tectonic Setting N15 < Mobile Belt	
Major Regional Structures N5 < Conway-Mt. Os	sceola batholith
Local Structures N70 <	
Host-FM. Name U1 < White Mountain Magma Ser > Host Rock Kl < E J U R	
alteration, attitude, geometry, structure, e	tc.)
Host-Rock Environment U3 < Igneous (Sed. dep. environ Comments on Associated Rocks U4 <	., metamorphic facies, ign. environ.)
Ore Minerals C30 < None observed	
Gangue Minerals K4 < Biotite, quar	rtz, feldspar

URANIUM-OCCURRENCE	Quad Name Portland
REPORT	Deposit No. 39
Alteration N75 < None observ	
Reductants U5 <	None observed
	>
Analytical Data (General) C43	< 19 ppm U ₃ 0 ₈
Radiometric Data (General) U6	< BG 100-125 cps rocks 250-320, 400 cps (No. times background and dimensions)
Ore Controls K5 <	
Deposit Class C40 < Orthomagn Comments on Geology N85 <	natic > Class No. U7 < 3, 1, 0

URA	ATTIT	1 12	MARK	DDD	18 1 C 12
11 25 74	D4 1 1 1 1	71		RRH	DUE: H

Quad Name	Portland	
Deposit No.	39	

Uranium Analyses:

Sample No.	ample No. Sample Description	
мнм 889	Grab sample as part of sampling grid of Conway Granite	19 ppm U ₃ 0 ₈

References:		
F1 <		
		>
F2 <		
	8	>
F3 <		
		>
F4 <		
		>

km

ANI			

REPORT

Quad	Name /	190<_	Portland	
Quad	Scale	A100	1 , 2, 5, 0, 0, 0, 0	
Depo	sit No	. B4()<	40	

Deposit No. B40< 40
Deposit Name AlO < Band M Ledge Occurrence
Synonym Name(s) All <
District or Area A30 <
Country A40 (U, S) [U, S] State New Hampshire
State Code A50 43 3 P 3 3 County A60 < Carroll (Enter code twice from List D)
Position from Prominent Locality A82 < On Rte. 16 west of Albany take quarry
road and then take trail leading due S. MHM 088 is in small quarry on small kno
to the east of the quarry.
Field Checked G1 <79 10 P By G2 Wagener , H. D. Yr Mo Last name First Initial
Latitude A70 4 3 5, 7 1, 8 NP Longitude A80 40,7,1 H0,9 H4,5, WP Deg Min Sec
Township A77 <
Meridian A81 < > Altitude A107 < 190 m
Quad Scale A91 4 6, 2, 5, 0, 0 Quad Name A92 < Ossipee Lake (7½' or 15' quad)
Physiographic Province A63 < 0, 1 New England (List K)
Location Comments A83 <
Location Sketch Map: Albany Albany
Pond 0 1,0 2.0

BFE 1236 4/19/78

URAN		

URANIUM-OCCURRENCE	Quad Name	Portland
REPORT	Deposit No	40
Commodities Present:		→
Commodities Produced:	> COPROD 4	
MINOR 4	> BYPROD 4	
Potential Commodities:	UR < U	
Commodity Comments C50 <		
Status of Exploration and Development A (1 = occurrence, 2 = raw prospect, 3 = 6	developed prospect,	4 = producer)
Comments on Exploration and Development	L110 <	,
Property is A21 (Active) (A22) (In Workings are M120 (Surface) M130 (Un Description of Workings M220<		
Cumulative Uranium Production PROD DH2 accuracy thousands of 1b. G74 U	0	
Source of Information D9 <		>
Production Comments D10 <		>
Reserves and Potential Resources		
EH accuracy thousands of 1b.	year of est	> E1D<
Source of Information E7 <		
Comments E8 <		

URANIUM-OCCURRENCE	Quad Name Portland
REPORT	Deposit No. 40
Deposit Form/Shape M10 < Plutonic Stock	
FT/M Length M40 < > M41< >	Size M15 (circle letter):
Width M50 <> M51<>	1b U308
Thickness M60 <> M61<>	A 0 - 20,000 B 20,000 - 200,000
Strike M70 <>	C 200,000 - 2 million D : million - 20 million
Dip M80 <>	E More than 20 million
Tectonic Setting N15 < Mobile Belt	
Major Regional Structures N5 < Conway-Mt. 09	sceola Batholith
Local Structures N70 <	
Host-FM. Name U1 < White Mountain Magma Ser	> Member U2 < Conwav Granite
Host Rock K1 (E,J,U,R,)	ck type, texture, composition, color,
buff biotite granite	
alteration, attitude, geometry, structure,	etc.)
Host-Rock Environment U3 < Igneous (Sed. dep. environment U3)	on., metamorphic facies, ign. environ.)
Comments on Associated Rocks U4 <	
One Winnerster COO & None observed	
Ore Minerals C30 < None observed	
Gangue Minerals K4 < None observed	

Portland

Quad Name

REPORT Deposit No.	40
Alteration N75 < None observed	
	>
Reductants U5 <	
Analytical Data (General) C43 < 22 ppm U ₃ O ₈	
	>
Radiometric Data (General) U6 < Surface radioactivity (9) (No. times backgro	SR) in quarry 400-500, in larger und and dimensions)
quarry to the west SR 300-450 except for SR 550 along	one zone enriched in quartz
and this rock is a deeper pink than at 088 quarry.	<u> </u>
Ore Controls K5 <	
	<u> </u>
Deposit Class C40 < Orthomagmatic	> Class No. U7 43,1,0>
Comments on Geology N85 <	
	>

URA	ATT T	Dut .	130	C111	TO D	F75.5	P 90
UBA	2% I I	1177 —	4910	ш	R R	94. N	ROOM.

Quad	Name	Portland	
Dono	nie No	40	

Uranium Analyses:

Sample No.	Sample Description	Uranium Analysis
MHM 088	Grab sample as part of Conway granite sampling grid	22 ppm U ₃ O ₈

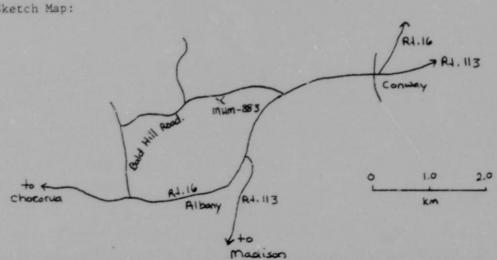
N

URANIUM-OCCURRENCE

REPORT

Quad Name A90< Por	rtland	3
Quad Scale A100	, 2, 5, 0, 0, 0, 0	
Deposit No. B40<	41	3

Deposit Name AlO <chase hill="" occurrence<="" th=""></chase>
Synonym Name(s) All <>
District or Area A30 < Conway >
Country A40 4U_SP U_S State New Hampshire
State Code A50 q 3 3p B 3 County A60 < Carroll > (Enter code twice from List D)
Position from Prominent Locality A82 < South side of Bald Hill Road, 1.2 km west of
intersection with Rts. 16 and 113, west of Conway
>
Field Checked Gl $< 17.9 1.0 >$ By G2< Stone , Tom > First Initial
Latitude A70 4 3 5 8 2 4 ND Longitude A80 4 0, 7, 1 H 0, 9 H 0, 8, WD Deg Min Sec
Township A77 <
Meridian A81 < > Altitude A107 < 216 m >
Quad Scale A91 4 6,2,5,0,0 Ouad Name A92 < Ossipee Lake > (7½' or 15' quad)
Physiographic Province A63 <0.1 New England > (List K)
Location Comments A83 < Sample from roadcut on south side of Bald Hill Road,
exposure on both sides of it but majority is on south side.
Location Sketch Map:
^



BFE 1236 4/19/78

Portland

URANIUM-OCCURRENCE

REPORT	Deposit No	. 41	
Commodities Present:			
Commodities Produced:	COPROD 4		_>
MINOR 4	BYPROD 4		_}
Potential Commodities:	OCCUR (U		
Commodity Comments C50 <			
Status of Exploration and Devel (1 = occurrence, 2 = raw prospection and Developments on Exploration and Developments on Explo	ect, 3 = developed prospe	ect, 4 = producer)
Property is A21 (Active) (Workings are M120 (Surface) Description of Workings M220<			ate labels)
Cumulative Uranium Production DH2 accuracy thousands of G79 U P G7A9 Source of Information D9 < Production Comments D10 < P	1b. year	rs grade > G7D<	
Reserves and Potential Resource EH accuracy thousands of E1 U P E1A Source of Information E7 <	f lb. year o		
Comments E8 <			
			3

Quad Name

URANIUM-OCCURRENCE	Quad Name Portland		
REPORT	Deposit No. 41		
Deposit Form/Shape M10 < Plutonic stock			
Length M40 <> M41<>	Size M15 (circle letter):		
Width M50 <> M51<>	<u>1b U308</u>		
Thickness M60 <> M61<>	A 0 - 20,000 B 20,000 - 200,000		
Strike M70 <>	C 200,000 - 2 million		
Dip M80 <>	D 2 million - 20 million E More than 20 million		
Tectonic Setting N15 < Mobile Be	lt ,		
Major Regional Structures N5 <			
Local Structures N70 <			
Host-FM. Name U1 < White Mountain Magma Ser:	Member U2 < Two-mica granite		
Host Rock KI (L.D.E.V. 18 Coarse			
alteration, attitude, geometry, structure, e	etc.)		
Host-Rock Environment U3 < Igneous			
Comments on	., metamorphic facies, ign. environ.)		
Associated Rocks U4 <			
Ore Minerals C30 < None observed			
Gangue Minerals K4 < Quartz, biotite, feld	spar, muscovite		
	AND STREET STREET		

URANIUM-OCCURRENCE	Quad Name Portland
REPORT	Deposit No. 41
Alteration N75 <none observed<="" th=""><th></th></none>	
Reductants U5 < None observed	·
Analytical Data (General) C43 < 16 ppm	U ₃ 0 ₈
Radiometric Data (General) U6 < BG 125 (No. 225-270 cps	cps, rocks up to twice BG, rocks o. times background and dimensions)
Ore Controls K5 <	
Deposit Class C40 < Orthomagmatic	> Class No. U7 <3 1 10
Comments on Geology N85 <	

			Portland
	REPORT	Deposit No	41
ranium Anal	yses:		
ample No.	Sample Descri	otion	Uranium Analysi
MHM 883	Granite grid sample		16 ppm U ₃ O ₈
Geologic Ske	tch Map and/or Section, wit	h Sample Locations:	
Geologic Ske	tch Map and/or Section, wit	h Sample Locations:	
Geologic Ske	tch Map and/or Section, wit	h Sample Locations:	
Geologic Ske	tch Map and/or Section, wit	h Sample Locations:	
Geologic Ske	tch Map and/or Section, wit	h Sample Locations:	
References:	tch Map and/or Section, wit	h Sample Locations:	
	tch Map and/or Section, wit	h Sample Locations:	

F3 <_

F4 <

•	-	***	****	OCC	** ***	-	5 T C W
	U A		11100	4.36-1.	-1192	W W	POLE THE

Quad Name A90< Portland	>
Quad Scale A100 (, 2, 5, 0, 0, 0, 0)	
Deposit No. B40< 42	>

	Deposit No. B40< 42
Deposit Name Alo < Conway Occurrence	
Synonym Name(s) All <	
District or Area A30 < White Mc	ountains
	ate New Hampshire
State Code A50 933 P 33 Co (Enter code twice from List D)	our.cy A60 < <u>Carroll</u> >
Position from Prominent Locality A82 <	North of Conway, NH
	<u> </u>
Field Checked G1 <7908 By G2<	McHone , J. Gregory > ast name First Initial
Latitude A70 4 4 Q 0 Q 4 NP Longin	Deg Min Sec
Township A77 <	FT/M
Meridian A81 <	> Altitude Al07 < 150 m >
Quad Scale A91 4 62500> (7½' or 15' quad)	Quad Name A92 < North Conway >
Physiographic Province A63 (0,1 N (List K)	ew England >
Location Comments A83 < East side of	Rt. 16, 2.8 km north of intersection with
113 in Conway, NH.Northernmost of 3 outcr	ops in roadcut adjacent to Hitching Post
Location Sketch Map: Tomen-oon	
	Center Conway
)	
t (
f /2 65	.113
2 9/2	0 1.0 2.0 1
mail	km N
600 M + 113	
1/ats. 4	

BFE 1236 4/19/78

CTTS A NO	17:34	manu	THE RESERVE	er un
UKAN	LUM-	-OCCI	RRENG	DIE.

URAN I UM-OCCURRENCE	Quad Name	Portland
REPORT	Deposit No.	42
Commodities Present:		
Commodities Produced:	COPROD 4	<u> </u>
MINOR 4	BYPROD 4	
Potential Commodities:	 Li A. 	IN: B ▶ *
Commodity Comments C50 <		
Status of Exploration and Development A20 (1 = occurrence, 2 = raw prospect, 3 = decomments on Exploration and Development L	veloped prospect	, 4 = producer)
Property is A21 (Active) A22 (Inac Workings are M120 (Surface) M130 (Under Description of Workings M220<		
Cumulative Uranium Production PROD DH2 accuracy thousands of 1b. G74 U	B> G7C<	> G7D< grade % U308>
Reserves and Potential Resources EH accuracy thousands of 1b. E1		>

URANIUM-OCCURRENCE	Quad Name Portland
REPORT	Deposit No. 42
Deposit Form/Shape M10 <	
Length M40 < 1 > M41 < m >	Size M15 (circle letter):
Width M50 < 0.3 > M51 < m>	<u>1b U308</u>
Thickness M60 < 1 > M61 < m> Strike M70 < 90 >	A 0 - 20,000 B 20,000 - 200,000 C 200,000 - 2 million
Dip M80 < 47 S >	D 2 million - 20 million E More than 20 million
Tectonic Setting N15 < Mobile Belt	
Major Regional Structures N5 < Occurrence w	within the Merrimack Synclinorium,
northeasterly faults, fractures and folds	
Local Structures N70 < Scattered 30 deg an	nd 90 deg fractures in massive granite
Host-FM. Name U1 < White Mountain Magma Ser Host Rock K1 < E.J.U.R. 18 Media (Age) (Ro	
granite; black shear or lamellae is radio alteration, attitude, geometry, structure,	pactive contains quartz hintite (2)
Host-Rock Environment U3 < Epizonal granite	
Comments on	on., metamorphic facies, ign. environ.)
Associated Rocks U4 < Wilson (1969) shows	
just east of this occurrence.	
0 Wi1- 620	
Gangue Minerals K4 < Quartz, biotite, feld	Ispar

Quad	wame	Portiano	
Depos	sit No	. 42	

	REPORT Deposit No. 42
Alteration N7	<pre>Minor hematitic staining</pre>
Reductants U5	< None observed
Analytical Dat	a (General) C43 < 110 ppm U O , 500 ppm LA, 300 ppm MB, 700 ppm Y,
700 ppm ZR, 1	
Radiometric Da	ta (General) U6 < Granite 300 cps, surface radioactivity (SR) to (No. times background and dimensions)
550 cps over	a 3 cm band; traceable only across 0.6 m x 0.75 m dimension of
outcrop	
Ore Controls 1	5 < Infilling silicified fracture; late degassing (F,CL,H20) of
granite may b	e responsible for U/Th migration into fracture
Deposit Class	C40 < Magmatic-hydrothermal > Class No. U7 < 3 3 0
	eology N85 < Silicified vein, probably with disseminated pitchblende
in a high ura	anium type A granite (often compared with Bokan Mountain). May also
qualify as c	lass 350 or class 360.

TITO A BY	TITLE	COCK	FRY WE WY	55 F 55 50
URAN	11123-1	EL GAK GALLE	RKKH	DOM: N

Quad	Name _	Portland	
Dana	oit Mo	12	

Uranium Analyses:

Sample No.	Sample Description	Uranium Analysis
MHM 007	Chips along zone, containing dark band and 2cm - 8cm of adjacent rock	110 ppm U ₃ 0 ₈

Geologic Sk Map and/or Section, with Sample Locations:

References:

N.H. Dept. Res. Econ. Dev., Bull.3, 115 p.	>
F2 <	
	<u> </u>
F3 <	
	<u> </u>
F4 <	

URANIUM-OCCURRENCE	Quad Name Portland
REPORT	Deposit No. 42
Continuation from p. 1-5:	
Label	
A83 < Motel. >	
C10 < OCCUR < TH Y > >	

m	DI	ANT	т	UM	0	ci	2	TD	D	27	ä	0	۲
w	174	27.2	*	OLI	v	503	us.	125	m	Sec.	ж	54	×

Quad	Name A90<_	Portland	
Quad	Scale Al00	< 1 2, 5, 0, 0, 0, 0p	
Depos	sit No. B40	< 43	3

REPORT	Deposit No. B40< 43 >
Deposit Name AlO < Redstone Quarry Core	>
Synonym Name(s) All <	>
District or Area A30 <	
Country A40 4U, SP [U, S] St	ate New Hampshire
State Code A50 < 3,3 > 3,3 Co (Enter code twice from List D)	unty A60 < Carroll >
Position from Prominent Locality A82 < So	uth of N. Conway, N.H., east on Rt. 302 to
Redstone and Redstone Quarry (0.62 km), co	res taken from this quarry
Field Checked Gl < 7,909 By G2< Wag	ener , H. D. > st name First Initial
Latitude A70 4 4 4 0 1 1 0 ND Longit	ude A80 <0 7 1 +0 5 +5 1 WP Deg Min Sec
Township A77 <	E/W Section A79 4 P
Meridian A81 <	> Altitude Al07 < 195 m >
Quad Scale A91 4 , 6,2,5,0,0> (7½' or 15' quad)	Quad Name A92 < North Conway >
Physiographic Province A63 (0,1) New E (List K)	ngland >
Location Comments A83 < The 900 m core is	stored at the Department of Farth
Sciences, the University of New Hampshire	e, Durham, NH.
Location Sketch Map: North Canway airport to Conway	Redstone Redstone Maine Central RR to Center Conway

URAN	TII	M.	OC	CIII	DD	PIN	ĕ
DESCRIPT.	LU	K.K.	20	~~	42.52	Aug L. T.	м

URANIUM-OCCURRENCE	Quad Name Portland
REPORT	Deposit No. 43
Commodities Present:	
Commodities Produced:	COPROD 4
MINOR 4	BYPROD 4
Potential Commodities:	<u> </u>
Commodity Comments C50 <	
	<u> </u>
Status of Exploration and Development A20 (1 = occurrence, 2 = raw prospect, 3 = dev	<1 > veloped prospect, 4 = producer)
Comments on Exploration and Development L.	110 <
	>
Property is A21 (Active) (A22) (Inac	tive) (Circle appropriate labels)
Workings are M120 (Surface) M130 (Under	rground) M140 (Both)
Description of Workings M220<	
	,
Cumulative Uranium Production PROD DH2 accuracy thousands of lb. G74 U	YES NO SML MED LGE (circle) years grade B> G7C< > G7D< % U308>
Source of Information D9 <	>
Production Comments D10 <	
	>
Reserves and Potential Resources EH accuracy thousands of 1h	year of est grade
ElqU ElAq ElB	year of est. grade < <u>LB</u> > E1C<
Source of Information E7 <	
Comments E8 <	

	URANIUM-OCCURRENCE	Quad Name Portland
	REPORT	Deposit No. 43
Deposit	Form/Shape M10 < 10	core samples
Length	M40 < FT/	M Size Ml5 (circle letter):
	M50 <> M51<	
Thicknes	s M60 <> M61<	
Strike	M70 <	B 20,000 - 200,000 C 200,000 - 2 million
	M80 <	D 2 million - 20 million E More than 20 million
Tectonic	Setting N15 < Mobile Be	
Major Re	gional Structures N5 < Son	uthern edge of White Mountain Batholith
		agma Ser > Member U2 Conway Granite Ky see page 6 (Rock type, texture, composition, color,
alteratio	on, attitude, geometry, str	
Comments	on	ic . environ., metamorphic facies, ign. environ.
	rals C30 < None observe	
Gangue Mi	inerals K4 < Quartz, feld	spar, muscovite, biotite, epidote, calcite,

IUM-(

UFANIUM-OCCURRENCE	Quad Name _	Portland
REPORT	Deposit No.	43
Alteration 1175 < Deuteric or later hydroth	ermal alteratio	n has produced vuggy
(miarolitic) zones of sericiticized feldsp	ar, in which ep	idote and chlorite
replace mafic minerals, and calcite replac	es quartz.	<u> </u>
Reductants U5 <		
		·
Analytical Data (General) C43 < Sample	s MHM 807 to 81	7 range from 3 ppm U ₃ O ₈
and 22 ppm U_30_8 to 37 ppm U_30_8 , see page	5	
		,
Radiometric Data (General) U6 < Surface ra	adioactivity (SR	R) of granite in Redstone
	times backgrou	nd and dimensions)
Quarry 400 to 550 cps		
		· · · · · · · · · · · · · · · · · · ·
Ore Controls K5 < Magmatic differentiation	and hydrothern	nal alteration along
steeply dipping tensile fractures.		
		<u> </u>
Deposit Class C40 < Orthomagmatic		> Class No. U7 43 1 0
Comments on Geology N85 <		

Quad 1	Name	Po	r	t1	a	nd	

Deposit No. 43

Uranium Analyses:

Sample Description	Uranium Analysis
Core sample *	28 ppm U ₃ O ₈
Core sample *	32 ppm U30g
Core sample *	22 ppm U ₃ 0 ₈
Core sample *	22 ppm U30g
Core sample *	23 ppm U308
Core sample *	25 ppm U ₃ 0g
Core sample *	23 ppm U ₃ 0 ₈
Core sample *	37 ppm U ₃ 08
Core sample *	22 ppm U308
Core sample *	24 ppm U ₃ 0g
Core sample *	3 ppm U ₃ 0 ₈
	Core sample *

*See p.ô Geologic Sketch Map and/or Section, with Sample Locations:

A service of the serv	
F1 <	
F2 <	
F3 <	
F4 <	

REPORT

Quad Name	Portland	
	40	
Deposit No.	43	

Continuation from p. 1-5:

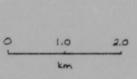
Label

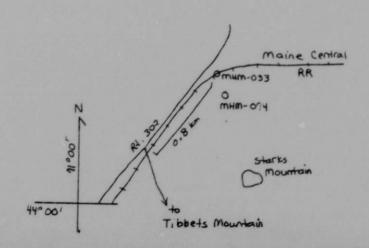
		Position	
Sample	Length	In Core	Petrography
MHM 307		355.25 m	Coarse-grained gray-white biotite granite
MHM 808	9 cm	364.55 m	Coarse-grained gray-white biotite granite with vuggy segregations of partly graphic pegmatoid rock. Euhedra
			of quartz, feldspar and epidote (?) project into the vugs and are partly coated with chlorite (?). Feld-
MHM 809	10 cm	417.15 m	spar in graphic intergrowths is pinkish. Altered coarse-grained biotite or biotite-hornblende
			granite with pinkish buff feldspars. Mafic minerals altered to chlorite (?). Thin seam of pink feldspar
			with minor quartz cuts one corner of specimen. There may be a good bit of epidote.
MHM 810		1 1 0 L 111	Coarse-grained buff biotite granite
MHM 811	7.6 cm	472.86 m	Altered coarse-grained light buff biotite granite
			with minute vugs along steeply dipping fractures
			Biotite altered to chlorite. Vugs may be a function
			of drilling (removal of chlorite and sericite from fractures).
MHM 812	7.6 cm	531.40 m	
		331.40 m	Coarse-grained "red" biotite granite. Feldspar is precisely salmon pink. The coloration does not appear
			to be the result of alteration. Microfractures are
			filled with black or dark green material.
MHM 813	7.5 cm	538.42 m	Altered coarse-grained biotite granite. Feldspars
			are pink to buff and appear to have been argillized or
			sericitized. Matic minerals have cone to enidote
			and epidote-like staining occurs as spots in the
	1000		feldspars. Small yugs occur here and there, and
1811 OT 4	-		appear to be solution cavities, rather than miaroles
mm 314	7.6 cm	541.36 m	Thoroughly altered coarse-grained granite, full of vugs that appear to be both solution pits and miarolity
			cavities. Epidote and calcite are prominent secondary
			minerals. Calcite has replaced much of the quartz.
			Feldspar is buff-pink.
MHM 815	the second second	580.87 m	Coarse-grained, pink, quartz-rich biotite granite.
MHM 816		666.55 m	Coarse-grained gray-white biotite granite.
MHM 817	7.6 m	915.31 m	Altered medium to fine-grained pink-and-white granite
			or adamellite. Sulphidic and stained with limonite
			Flakes of molybdenite (?) observed. Green staining
			mixed with the brown. Minute quartz-filled fractures.

REPORT

Quad	Name /	A90<_	Port1	and			_ >
Quad	Scale	A100	1 2	5, 0,	0, 0, 0	90	
Deno	sit No	. B40	< 44				3

Deposit Name AlO < Starks Mountain Occurrence >
Synonym Name(s) All <
District or Area A30 < Fryeburg
Country A40 (U, S) [U, S] State Maine
State Code A50 < 2,3 D
Position from Prominent Locality A82 < 0.8km NE of intersection of Highway 302
and road to Tibbets Mountain (in Brownfield Quadrangle), east of Highway 302 in
railroad cut (Maine Central RR).
Field Checked G1 < 7,8,1,0 By G2< Wagener , H. D. > Yr Mo Last name First Initial
Latitude A70 4 4 4 0 0 2 8 ND Longitude A80 4 0 7 0 5 9 1 5 WP Deg Min Sec Deg Min Sec
Township A77 <
Meridian A81 < > Altitude A107 < 140m >
Quad Scale A91 4 2,4,0,0,0 Quad Name A92 < Fryeburg > (7½' or 15' quad)
Physiographic Province A63 <0,1 New England > (List K)
Location Comments A83 < Cut in bedrock in curve of railroad around N end of Starks
Mountain is immediately adjacent to parking lot of Northland Shoe Company, inside
Location Sketch Map:





BFE |236 4/19/78

URANIUM-OCCURRENCE Quad Name Portland
REPORT //2posit No. 44
Commodities Present:
Commodities Produced: MAJOR 4 COPROD 4
MINOR 4 BYPROD 4 BYPROD 4
Potential Commodities: POTEN 4 OCCUR 4 MININI D
Commodity Comments C50 <
Status of Exploration and Development A20 < 1 > (1 = occurrence, 2 = raw prospect, 3 = developed prospect, 4 = producer) Comments on Exploration and Development L110 <
Property is A21 (Active) (A22) (Inactive) (Circle appropriate labels) Workings are M120 (Surface) M130 (Underground) M140 (Both) Description of Workings M220<
Cumulative Uranium Production PROD YES NO SML MED LGE (circle) DH2 accuracy thousands of 1b. years grade G74 U
Source of Information D9 <
Production Comments D10 <
Reserves and Potential Resources EH accuracy thousands of 1b. year of est. grade El U
Source of Information E7 <
Comments E8 <

URANIUM-OCCURRENC	CE	Quad Name Portland
REPORT		Deposit No. 44
Deposit Form/Shape M10 <		>
Length M40 <	FT/M > M41<>	Size M15 (circle letter):
Width M50 <	> M51<>	<u>1b U308</u>
Thickness M60 <	> M61<>	A 0 - 20,000 B 20,000 - 200,000
Strike M70 <	>	C 200,000 - 2 million
Dip M80 <	>	D 2 million - 20 million E More than 20 million
Tectonic Setting N15 <	Mobile B	elt
Major Regional Structures	N5 < Sebago L	ake batholithic sheet
		>
Local Structures N70 < Pe	gmatite dikes in	granite are vertical to horizontal
Hant III V Sahara	Laka Divton	No. 1 - 10 - 10 - 10 - 10 - 10 - 10 - 10 -
		> Member U2 < <u>Two-mica granite</u> >
Host Rock Kl ⟨D ₁ E ₁ V ₁ (Age)	(R	um-coarse-grained gray two-mica granite ock type, texture, composition, color,
		ink spots occur at 500 cps anomalies in
alteration, attitude, geom	etry, structure,	etc.)
ledges sampled for specin	men MHM 074	
Host-Rock Environment U3 <	Plutonic, synor	ogenic sheet batholith on., metamorphic facies, ign. environ.)
Comments on	(Sed. dep. envir	on., metamorphic facies, ign. environ.)
Associated Rocks U4 <		
Ore Minerals C30 < None o	bserved	
Gangue Minerals K4 < Qu	artz, feldspar.	biotite, muscovite

URANIUM-OCCURRENCE	Quad Name Purtiand
REPORT	Deposit No. 44
Alteration N75 < None observed at MHM 033; at MHM 074.	hematitic staining of feldspars occurs
Reductants U5 <	>
Analytical Data (General) C43 < 10 ppm U ₃ 0	g for sample MHM 033 and 54 ppm U ₃ 0 ₈
for sample MHM 074, 1000 ppm MN for sample	MHM 074
Radiometric Data (General) U6 < Surface rad (No. t	imes background and dimensions)
and 75 in woods).	>
Ore Controls K5 < Igneous differentiation	
Deposit Class C40 < Orthomagmatic	> Class No. U7 < 3 i 0>
Comments on Geology N85 < This specimen was	collected outside of the Portland
Quadrangle because of the scarcity of rock	exposures in the Saco River Valley.
Most roadcuts in this region are in sand.	NOTE: Uphill from the RR cut, on the
northwestern slopes of Starks Mountain, gra	anite and pegmatite are profusely exposed

as flat rock and quarried ledges. Well-defined variations of radioactivity and > *

URANI	7774	3/2/211	D.D.	FEST CLE

Quad Name _	Portland	
Deposit No.	44	

Uranium Analyses:

Sample No.	Sample Description	Uranium Analysis
MHM 033	Grab sample of granite	10 ppm U ₃ 0 ₈
MHM 074	Chip sample along edges of ledges having SR 300-	54 ppm U ₃ 0 ₈

Geologic Sketch Map and/or Section, with Sample Locations:

References:	
F1 <	
	<u> </u>
F2 <	
	>
F3 <	
	,
F4 <	

Quad	Name _	Portland	

REPORT

Continuation from p. 1-5:

Label

N85 < lithology are exposed. Horizons having the lower radioactivities have surface radioactivities of around 150 cps, and consist of medium-grained, gray-white, two-mica granite. The more radioactive horizons are coarser-grained, pinkish, and sparkle in sunlight because of a greater abundance of muscovite.

Surface radioactivities in these horizons vary commonly from 150 to 325 cps. One ledge along a small quarried face had 300 to 500 cps. In another ledge, a spot anomaly of 300 to 550 cps about 0.5m across was associated with, but not restricted to, biotite-rich schlieren. Horizontal gradational changes in radioactivity occur within the more radioactive horizons. As usually within these horizons, radioactivities decrease abruptly in pegmatite.

near the top of one quarried face (the one closest to the block pile below a bunker of some sort with pipe lines in it), but I failed to study it. As I recall, it was a fairly sharp contact. We may be dealing with multiple intrusions, rather than repetitive vertically differentiated layers.

The top of Starks Mountain consists of a thick horizontal pegmatite at background. BG = app .

Specimen MHM 074 taken from the quarried ledge. This little quarry is immediately N of an underground pipeline vault. Dirt road (trail) leads up the mountain to this vault, from the place where the dashed road east of 033 RR cut used to cross the RR. Sighting on the 135 deg azimuth from the quarry to the dirt road, one finds exposed bedrock in ditch beside road, and in just the right place (on the azimuth), the SR of the bedrock increases from 200 to 300 cps. BG is 150 on bedrock and 75 in woods. >

A83 < Fryeburg town limit. Specimen came from central portion of cut. >

Quad Scale A100 \(\text{ _2, 5, 6, 0, 0, 0} \) Deposit Name A10 \(\text{ Haley Pond Occurrence} \) Synonym Name(s) A11 \(\text{ _District or Area A30 \(\text{ _Fryeburg} \) Country A40 \(\text{ _U _ SP } \) \(\text{ _U _ S} \) State Code A50 \(\text{ _2 3 P } \) \(\text{ _2 3} \) (Enter code twice from List D) Position from Prominent Locality A82 \(\text{ _2km south of intersection with High on Tibbetts Mountain Road} \) Field Checked G1 \(\text{ _7,8 1,0P } \) Field Checked G1 \(\text{ _7,8 1,0P } \) Field Checked G1 \(\text{ _7,8 1,0P } \) Field Checked A50 \(\text{ _2 3 P } \) First In Latitude A70 \(\text{ _4 3+5,9+1,4,NP } \) Deg Min Sec Township A77 \(\text{ _1 1 P } \) N/S Range A78 \(\text{ _1 1 P } \) E/W Meridian A81 \(\text{ _ N/S} \) Quad Scale A91 \(\text{ _1 2,4,0,0,0P } \) Quad Name A92 \(\text{ _Brownfield } \) Clist K) Location Comments A83 \(_5 Pecimen taken from one of the larger boulders in along west side of paved road about 30m north of dirt road Location Sketch Map: Haley Mun 032			
Deposit Name AlO < Haley Pond Occurrence Synonym Name(s) All < District or Area A30 < Fryeburg Country A40	REPORT	Quad Scale Al00	, 2, 5, 0, 0, 0, 0p
Synonym Name(s) All < District or Area A30 < Fryeburg Country A40		Deposit No. B40<	45
Country A40	Deposit Name AlO < Haley Pond Occurr	ence	
State Code A50 <2 3 P	Synonym Name(s) All <		
County A60 < Oxford (Enter code twice from List D) Position from Prominent Locality A82 < 2km south of intersection with High on Tibbetts Mountain Road Field Checked G1	District or Area A30 < Fryeburg		
Position from Prominent Locality A82 < 2km south of intersection with High on Tibbetts Mountain Road Field Checked G1 < 7,8 1,0 p By G2 < Wagener	Country A40 QU SP U S	State Maine	
Field Checked G1		County A60 < Oxford	
Field Checked G1	Position from Prominent Locality A82	< 2km south of intersec	tion with Highwa
Latitude A70 44, 31, 5, 91, 1, 4, NP Deg Min Sec Township A77 4	on Tibbetts Mountain Road		
Latitude A70 44, 31, 5, 91, 1, 4, ND Deg Min Sec Township A77 4			
Latitude A70 44, 31, 5, 91, 1, 4, ND Deg Min Sec Township A77 4	Field Checked G1 < 7,8 1,0 By G2<	Wagener Last name	, H. [
Meridian A81 < > Altitude A107 < 175m Quad Scale A91			
Quad Scale A91 (7½' or 15' quad) Physiographic Province A63 (0,1) New England (List K) Location Comments A83 (Specimen taken from one of the larger boulders in along west side of paved road about 30m north of dirt road Location Sketch Map: Haley Province A63 (0,1) New England (List K) Haley Brook MHM 032	Township A77 < Range A78	Section A79	4
Physiographic Province A63 < 0,1 New England (List K) Location Comments A83 < Specimen taken from one of the larger boulders in along west side of paved road about 30m north of dirt road Location Sketch Map: Haley Province A63 < 0,1 New England (List K) New England (Haley Brook) Haley Brook MHAIN 032	Meridian A81 <	> Altitude Al	.07 < <u>175m</u>
Location Comments A83 < Specimen taken from one of the larger boulders in along west side of paved road about 30m north of dirt road Location Sketch Map: Haley Pord Haley Brook MHM 032	0 60010 401 4 24000	0 1 N 102 / [rownfield
along west side of paved road about 30m north of dirt road Location Sketch Map: Haley Pord Haley Brook MHM 032	(7½' or 15' quad)	Quad Name A92	
Location Sketch Map: Haley Pord Haley Brook mum 032	Physiographic Province A63 (0,1)		
Haley Brook MHm 032	Physiographic Province A63 <0,1 (List K)	New England	
Pond Haley Brook MHM 032	Physiographic Province A63 < 0,1 (List K) Location Comments A83 < Specimen tal	New England Ken from one of the large	
S 302 MHm 032 MHm 032	Physiographic Province A63 < 0,1 (List K) Location Comments A83 < Specimen tal along west side of paved road about	New England Ken from one of the large	
m+m 032	Physiographic Province A63 < 0,1 (List K) Location Comments A83 < Specimen tal along west side of paved road about Location Sketch Map:	New England Ken from one of the large	
	Physiographic Province A63 < 0,1 (List K) Location Comments A83 < Specimen tal along west side of paved road about Location Sketch Map:	New England Ken from one of the large 30m north of dirt road	
	Physiographic Province A63 <0,1 (List K) Location Comments A83 < Specimen tal along west side of paved road about Location Sketch Map:	New England Ken from one of the large 30m north of dirt road	
	Physiographic Province A63 <0,1 (List K) Location Comments A83 < Specimen tal along west side of paved road about Location Sketch Map:	New England Ken from one of the large 30m north of dirt road	

km

BFE |236 4/19/78

URANIUM-OCCURRENCE	Quad Name Portland
REPORT	Deposit No. 45
Commodities Present:	
Commodities Produced:	COPROD 4
MINOR 4	BYPROD 4
Potential Commodities:	DCCUR QU, BA, I
Commodity Comments C50 <	
Status of Exploration and Development (1 = occurrence, 2 = raw prospect, 3 Comments on Exploration and Developme	= developed prospect, 4 = producer)
Property is A21 (Active) A22 (Workings are M120 (Surface) M130 (Description of Workings M220<	(Inactive) (Circle appropriate labels) (Underground) M140 (Both)
Cumulative Uranium Production PRODH2 accuracy thousands of 1b. G74 U	years grade
Production Comments D10 <	
Reserves and Potential Resources	
accuracy thousands of 1b.	year of est. grade E1B <lb> E1C<</lb>
	<u> </u>
Comments E8 <	

							Page 3
	URANIUM-OCCUR	RENCE		Quad Name	Pr	ortland	
	REPORT			Deposit N	0.	45	
Deposit F	orm/Shape M10			ive zone	in bould	er (small))
ength	M40 <	> M41<	M _>	Size M15	(circle	letter):	
Vidth	M50 <	> M51<	_>	15_U	308		
hickness	M60 <	> M61<	>	A 0 - 20			
trike	M70 <		>	C 200,000	- 200,0 0 - 2 mi		
	M80 <		>	D 2 mill E More t			
ectonic	Setting N15 <_	Mobile	Belt				
lajor Reg	ional Structur	es N5 < 1	Merrimack	Synclinor	fum		
	, Delaceur		ic i index	Sylicition	i din		
				7.1			
Local Str	ructures N70 <_						
Host-FM.	Name U1 < White	Mountain M	agma Ser.>	Member U	2 < Conw	ay granit	e
Host Rock	K1 < M .E. S		W Coarse-	-grained n	ink alka	lic grani	to with
TOBE ROCK	KI OMES	ige)	(Roc	k type, te	xture,	compositio	on, color,
somewhat	t norphyritic						
alteration	t porphyritic on, attitude, g	eometry, sti	ructure, e	tc.)	Specim	en nas a	weathered
Tillu I.	om thick. No	The spi	ecimen is	a two-mic	a granit	e; muscov	ite occurs
large th	hin books (late	e phenocryst	s).				
Host-Rock	Environment U	3 < Not kn	own				
		(Sed. der	p. environ	., metamor	phic fac	cies, ign.	environ.
Comments Associate	on ed Rocks U4 <	Admixed bou	lders of t	two-mica S	ebago La	ke granit	e, mafic
and sal	ic volcanic ro	cks, and Seb	ago Lake p	pegmatite.	No exp	osures of	any signi
ficance	in this area.	Electrical.		A FORTER			
					THE RESERVE AND ADDRESS OF THE PERSON NAMED IN		

Ore Minerals C30 < None observed.

Gangue Minerals K4 < Muscovite, biotite, feldspars, quartz

URANIUM-OCCURRENCE	Quad Name _	Portland
REPORT	Deposit No.	45
Alteration N75 < None observed		
		>
Reductants U5 <		
Analytical Data (General) C43 < 50 pp	m U ₃ 0 ₂ ; 700 ppm BA	<u> </u>
		>
Madiometile bata (General) 00		f boulder 150-250 cps, excep
up to 500 cps in elongated area about	25 cm wide. Quart	z in the more radioactive
area is very dark gray. BG 90 cps he	ere and northward i	nto Haley Pond Valley. >
Ore Controls K5 <	/	
		> Class No. U7 <3,2,0>
Comments on Geology N85 < Along this ro the sampling site, boulders of two-mi		
of coarse -grained Conway granite. T	he latter generally	y predominate. Surface
radioactivities of both types of boul	ders vary generally	y from 100 to 250 cps. At
the sampling site, till in the road c	ut has surface rad	ioactivity of 120 cps. >

	****	- ANN COL	-
URANI	[[M ()(CUIR	RENCE

Quad	Name	Portland	
Depos	sit No	. 45	

Uranium Analyses:

Sample No.	Sample Description	Uranium Analys		
MHM 032	Grab sample of granite	50 ppm U ₃ O ₈		

Geologic Sketch Map and/or Section, with Sample Locations:

References:	
F1 <	
	<u> </u>
F2 <	
	·
F3 <	
	<u> </u>
F4 <	
	3

THE.	2.01	MT	UM-	0	CC	21.5	R	RI	EN	31	ġ
u											

Quad	Name A	A90<	Portland	
Quad	Scale	A1004	, 2, 5, 0, 0, 0, 0	
Dano	eir No	B40<	46	

	Deposit No. B40< 46
Deposit Name AlO < Burnt Meadow Mount	ains #1 Occurrence
Synonym Name(s) All < Durgin Brook	
District or Area A30 <brownfield< td=""><td></td></brownfield<>	
Country A40 QU SD U S	State Maine
State Code A50 23 P 23 (Enter code twice from List D)	County A60 < Oxford
Position from Prominent Locality A82	< 0.51 km N of road intersection 445
(intersection of Highway 160 and jee	p trail).
Field Checked Gl < 7, 8 1, 0 By G2<	Wagener , H. D. Last name First Initial
Latitude A70 4 3 5 4 3 1 NP Lo	Deg Min Sec
Township A77 < Range A78 < N/S	E/W Section A79 4 P
Meridian A81 <	> Altitude A107 < 140 m
Quad Scale A91 (7½' or 15' quad)	Quad Name A92 <brownfield< td=""></brownfield<>
Physiographic Province A63 <0,1 (List K)	New England
Location Comments A83 < Roadcut in re	ock on east side of highway on hill above Du
Brook. Specimens are from the only	anomalous pegmatite.
Location Sketch Map:	
	12
Rt. 160	mHm-034
meadow Hond	Durgin Brook
	1.0 2.0
to E. Brownfield	km

TITLES	*****	non.	
UKAN	NIUM	-000	RRENCE

URANIUM-UCCURRENCE	Quad Name Portraild
REPORT	Deposit No. 46
Commodities Present:	
Commodities Produced:	COPROD 4
MINOR 4	BYPROD 4
Potential Commodities:	4M,N, Y, T, 1B,E, 1>
Commodity Comments C50 < Average surface re	adioactivity of 3 sampling points was 1030
cps. U30g content of mixed chip specimens	was 850 ppm. Surface radioactivity >
Status of Exploration and Development A20 (1 = occurrence, 2 = raw prospect, 3 = dev	< 1 > eloped prospect, 4 = producer)
Comments on Exploration and Development L1	10 <
Property is A21 (Active) (A22) (Inact Workings are M120 (Surface) M130 (Under Description of Workings M220<	ive) (Circle appropriate labels) ground) M140 (Both)
Cumulative Uranium Production PROD DH2 accuracy thousands of 1b. G7 U	years grade
Reserves and Potential Resources EH accuracy thousands of 1b. E1 U	year of est. grade <u>LB</u> > E1C
Comments E8 <	

-	RA	-	~	20.0		 -	-	-	-		-
	ж а			1200	_		- 12	-		32.	

URANIUM-OCCURRENCE	Quad Name Portland
REPORT	Deposit No. 46
Deposit Form/Shape M10 < Tabular (?) ano	malous zone in pegmatite >
Length M40 < 2.5 > M41 < m >	Size M15 (circle letter):
Width M50 < 0.6 > M51 < m >	1b U308
Thickness M60 < > M61 < m >	A 0 - 20,000 B 20,000 - 200,000
Strike M70 < Due north >	C 200,000 - 2 million
Dip M80 < ? >	D 2 million - 20 million
	E Pole than 20 million
Tectonic Setting N15 < Mobile Belt	>
Major Regional Structures N5 < Merrima	ck synclinorium
Local Structures N70 < Concordant and d	iscordant pegmatites in vertical schists.
Host-FM. Name Ul Metamorphic rocks	> Member U2 < Pegmatite in schist >
Host Rock Kl & D. E. V	covite pegmatite with tourmaline and (Rock type, texture, composition, color,
(Age)	(Rock type, texture, composition, color,
graphic texture, and pods of smoky qua alteration, attitude, geometry, structur	rtz and smoky quartz plus pink potassium
feldspar. Coatings of torbernite(?) o	hearved along a weathered schlippen
relaspar. Code may or corbernice(:) o	bserved along a weathered schilleren.
	<u> </u>
Host-Rock Environment U3 < Metamorphic,	sillimanite facies >
(Sed. dep. env	riron., metamorphic facies, ign. environ.)
	fidic schists have surface radioactivities
	The same same same same same same same sam
of 100-150 cps	
	<u> </u>
Ore Minerals C30 < Torbernite(?)	
The second second second	
	>
Gangue Minerals K4 < Smoky quartz-felds	par-muscovite-tourmaline

URANIUM-OCCURRENCE	Quad Name P	Portland		
REPORT	Deposit No.	46		
Alteration N75 < None observed				
Reductants U5 <		>		
neductants of -				
Analytical Data (General) C43 < 850 ppm				
than 200 ppm Y1.		>		
	o. times backgroun	nd and dimensions)		
occur, and the remainder of the zone h	as surface radioa	ctivities (SR) of around		
Ore Controls K5 < Differentiation in peg discordant contact with contorted schi		e anomalous zone follows		
		>		
Deposit Class C40 < Pegmatitic		> Class No. U7 43 12 10 >		
Comments on Geology N85 <				
		>		

		OCC		

Quad Name	Portland	
Denogit No	16	

Uranium Analyses:

Sample No.	Sample Description	Uranium Analysis
MHM 034	3 "chip" pieces from anomalies of 800, 1000, and	850 ppm U ₃ 0 ₈
	1300 cps along strike of central portion of anom-	-6
	alous zone	

Geologic Sketch Map and/or Section, with Sample Locations:

71 <	
F2 <	
F3 <	
F4 <	

Quad Name Portland
Deposit No. 46

REPORT

Continuation from p. 1-5:

Label

C50 < of anomalous zone in pegmatite between anomalous points was

around 200 cps. Using the direct ratio of 850 ppm $\rm U_3O_8$ per 1030 cps

the anomalous zone could average greater than 100 ppm U_3^0 8.

U6 < One-minute Spectrometer Counts MHM 034

Station	Totct	K _{ct}	Uct	Thct	%eK	eUppm	eThppm
01	8870	900	265	93	3.51	9.17	8.40
02 03	47520 27390	3066 1911	2680 1344	151 122	6.59	125.22 60.92	16.13
04 05	19080 10660	1408 1104	919 337	94 78	3.91 4.59	41.04	8.53 6.40
06 07	11890 22880	1417 1746	370 1089	67	6.54	15.08	4.93
08 09	23110 9920	1736 966	1168 343	130 74	4.75	52.10	13.33
10	10180	1062	318	83	4.38	12.05	7.07

Plan View of Spectro	3.0m	1.5m	05m
N	07	OS	01)
	Pegmatite	04	
10	08 06	05	02
	9 Sulfidic Schis	9 Ts	
			,

URAN	NIUM	-OC	CUR	REN	CE

Quad	Name A90< Portland	_>
Quad	Scale A100 , 2, 5, 0, 0, 0, 0p	
Depo	sit No. B40< 47	3

km

	Deposit No. B40< 47
Deposit Name AlO < Great Falls Occurre	ence
Synonym Name(s) All < Hiram Falls	
District or Area A30 < Hiram	
Country A40 QU SP U S	State <u>Maine</u>
State Code A50 4 2, 3 [2,3] (Enter code twice from List D)	County A60 < Oxford
Position from Prominent Locality A82	< At the dam on the Saco River NW of West
Baldwin, at Great Falls.	
Field Checked G1 < 7,8 1,0 By G2<	Wagener , H. D. Last name First Initia
Latitude A70 4, 3 5, 1 0, 9, ND Lo Deg Min Sec	ngitude A80 4 0 7, 0 4 7 5 0 WD Deg Min Sec
Township A77 <	E/W Section A79
Meridian A81 <	> Altitude Al07 < 95 m
Quad Scale A91 4 2, 4, 0, 0, 0 (7½' or 15' quad)	Quad Name A92 < Cornish, Maine
Physiographic Province A63 < 0,1 Ne (List K)	w England
Location Comments A83 < Specime	n came from spillway directly below NF er
of dam.	
Location Sketch Map:	
	4
5 Aco (5)	
	to west
MHM- 031	Maine Central RR. Baidwin
RIVER Pasy access from	0 0.5 1.0
this side via road	0 0.5 1.0

Quad Name	Portland
Deposit No	47
COPROD 4	
BYPROD 4	
R 4U, , , B, , ,	L I > *
0 < 1 > eveloped prospect,	
erground) M14	ircle appropriate labels) 40 (Both)
	MED LGE (circle) grade > G7D<
	st. grade > E1D<
	Deposit No

URANIUM-OCCURRENCE	Quad Name Portland
REPORT	Deposit No. 47
Deposit Form/Shape M10 < Anomalously rad	
FT/M	Size M15 (circle letter):
Width M50 < 3+ > M51< m >	1b U308
Thickness M60 <6 > M61 < _m >	A 0 - 20,000
Strike M70 < >	B 20,000 - 200,000 C 200,000 - 2 million
Dip M80 <>	D 2 million - 20 million E More than 20 million
Tectonic Setting N15 < Mobile B	elt >
Major Regional Structures N5 < Merrimac	k synclinorium
Local Structures N70 < Discorda and schists with ptygmatic veining.	nt pegmatite in steeply dipping gneisses
Host-FM. Name U1 < Lower Rindgemere	> Member U2 < Pegmatite >
Host Rock K1 $\triangleleft D_1E_1V_1$ (Age) (1	Rock type, texture, composition, color,
alteration, attitude, geometry, structure	, etc.)
	<u> </u>
Host-Rock Environment U3 < Pegmatite dike (Sed. dep. environments on Associated Rocks U4 < Exquisite display of	ron., metamorphic facies, ign. environ.)
to be related to any anomalous radioactiv	
Ore Minerals C30 < None observed	
Gangue Minerals K4 < Rlack tourmaline	> cuantz foldenan museuite bistite

red garnet

URANIUM-OCCURRENCE	Quad Name	ortland
REPORT	Deposit No.	47
Alteration N75 < None observed		
Reductants U5 <		>
		>
Analytical Data (General) C43 < 50 ppm	U ₃ 0 ₈ ; 200 ppm B;	500 ppm Li; 100 ppm Sr
Radiometric Data (General) U6 < Of the (No	o. times backgrou	and dimensions)
of 100 cps. The large pegmatite adjacen		of the snillway
Ore Controls K5 < Differentiation within		
Deposit Class C40 < Pegmatitic		> Class No. U7 < 3, 2, 0
Comments on Geology N85 <		
		

Quad Name Portland
Deposit No. 47

REPORT

Uranium Analyses:

Sample Description	Uranium Analysis		
Grab smaple of pegmatite	50 ppm U ₃ O ₈		

OR 1 1 800 CPS X 2700 CPS (N) (BEDROCK) CHUTE	Power Plant Rock face 200-300 cps
References:	
F1 <	<u> </u>
F2 <	. >
F3 <	>
F4 <	<u> </u>

Quad Name Portland

Deposit No. 47

REPORT

Cont	inuat	ion from p. 1-5:
Labe	1	
C10	<	OCCUR < SN >>
M10	<	defined. >
U6	<	has the anomalous zone defined at the top of page 3. The surface
		radioactivity in this zone runs generally 150-250 cps. Four or five spot
		anomalies of 500 to 1000 cps and several of 300 to 500 cps were located.
		The only samplable anomaly was in a mica-rich pod, and had a maximum
-		of 800 cps. At the point of collection, the count was 500.
		In proceeding up the spillway from the turbine building, the first
		large pegmatite is exposed in a vertical face 1.6 to 2 m high. The face
		has remarkably uniform surface radioactivity of 200-300 cps. The
_		flat rock surface above this face contains several small anomalies, and
		one of 2700 cps. The large one occurs in a small pothole-like depression
_		but can be traced for 1 to 1.3 m northeastward. None of these anomalies
_		are samplable. The radioactivity of this dike decreases southwestward,
		so that on the SW side of the spillway it is barely anomalous.
-		
-		

Quad Name Portland

REPORT

Deposit No. 47

Continuation from p. 6

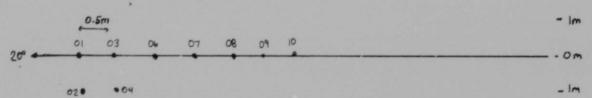
Label

U6 $< p^1$ Pegmatite Adjacent to Dam - One Minute Spectrometer Counts

Station	Totat	Kct	Uct	Thct	%eK	eUppm	eThppm
p ¹ 01	10000	1282	255	46	6.32	10.10	2.13
02	12130	1241	420	52	5.26	17.97	2.93
03	10590	1179	342	34	5.29	14.71	0.53
04	17680	1508	784	58	5.35	35.54	3.73
05	15890	1506	697	47	5.78	31.63	2.27
06	45810	2929	2578	T36	6.24	120.69	14.13
07	12650	1378	463	32	6.07	20.67	0.27
08	14310	1315	62T	61	4.80	27.50	4.13
09	10490	826	496	27	2.36	22.43	-0.40
10	9090	1132	459	24	5.41	10.96	-0.80
11	32670	2205	1793	85	5.28	83.95	7.33
12	7230	789	223	26	3.33	9.14	-0.53
13	14090	1228	659	27	4.25	30.38	-0.40
14	8630	1025	174	99	4.69	4.55	9.20

Plan View p'

. 13 - 2m

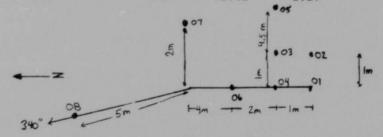


908

• 05 - 2m p² Power Plant Pegmatite

Station	Totct	Kct	Uct	Thct	%eK	eUppm	eThppm	
01	83480	4629	5011	286	5.73	234.84	34 13	
02	17090	1175	850	61	2.88	38.67	4.13	
03	16680	1527	733	45	5.77	33.45	2.00	
04	26440	1662	1482	89	3.10	68.65	7.87	
05	18720	1062	1065	66	1.17	49.01	4.80	
06	9760	1035	345	54	4.24	14.25	3.20	
07	13190	1136	498	59	4.19	21.56	3.87	
08	10900	1323	295	47	6.37	12.02	2.27	

Plan View p2



TO DENMARK

URAN	IUM	-0	CC	UR	RE	N	C
	10	PD	OP	T			

N BFE |236 4/19/78

Quad Na	ame A90< Portland	×
Quad So	cale A100< , 2, 5, 0, 0, 0, 0	
Deposit	No. B40< 48	S

Deposit No. B40< 48
Deposit Name AlO < Pleasant Mountain Creek Occurrence >
Synonym Name(s) All <>
District or Area A30 < Pleasant Mountain >
Country A40 QU SP U S State Maine
State Code A50 < 2,3 D
Position from Prominent Locality A82 < From Road Junction 461 on Highway 302 west of
West Bridgton, proceed southward to junction with trail up Pleasant Mtn. to look out
tower. Anomalous zones are on either side of the wooden bridge across Pleasant >*
Field Checked Gl < 7,9 0,6 By G2 < Wagener , H. D. > Yr Mo Last name First Initial
Latitude A70 4 4 10 2 10 6 NP Longitude A80 4 0, 7, 0 1 5, 0 1 4, 6 WP Deg Min Sec
Township A77 <
Meridian A81 < > Altitude A107 < <u>180 m</u> >
Quad Scale A91 4 12,4,0,0,0> Quad Name A92 < Pleasant Mountain > (7½' or 15' quad)
Physiographic Province A63 < 0,1 New England >
Location Comments A83 <
Location Sketch Map: Continue Continue

	1 4 5 0	-
URANIUM-OCCURRENCE	Quad Name Portland	
REPORT	Deposit No. 48	
Commodities Present:		
Commodities Produced: MAJOR 4 P	COPROD 4	
MINOR 4	BYPROD 4	
Potential Commodities: POTEN 4 OCCUP	R 4 U	
Commodity Comments C50 <		
		3
Status of Exploration and Development A20 (1 = occurrence, 2 = raw prospect, 3 = de Comments on Exploration and Development I	eveloped prospect, 4 = producer)	
Property is A21 (Active) A22 (Inactive) Workings are M120 (Surface) M130 (Under Description of Workings M220<	ctive) (Circle appropriate 1 erground) M140 (Both)	abels)
Cumulative Uranium Production PROD DH2 accuracy thousands of 1b. G74 U	years grade LB> G7C< > G7D<	
Reserves and Potential Resources EH accuracy thousands of 1b. ElqU	year of est. grade B< <u>LB</u> > E1C<	% U308

Comments E8 <_

URANIUM-OCCURRENCE	Quad Name Portland
REPORT	Deposit No. 48
Deposit Form/Shape M10 <ft m<="" td=""><td>></td></ft>	>
	Size M15 (circle letter):
Width M50 <> M51<>	<u>1b U308</u>
Thickness M60 <> M61<>	A 0 - 20,000
Strike M70 <>	B 20,000 - 200,000 C 200,000 - 2 million
Dip M80 <>	D 2 million - 20 million E More than 20 million
Tectonic Setting N15 < Mobile Belt	>
Major Regional Structures N5 < Sebago Lak	e Pluton
	>
Local Structures N70 <	
	>
Host-FM. Name U1 < Sebago Lake Pluton	> Member U2 < Two-mica granite >
Host Rock Kl DIEIVI (Age) (Ro	geneous, pink to buff two-mica granite ock type, texture, composition, color,
with large poikilitic muscovite phenocrysts alteration, attitude, geometry, structure,	of the flake (not book) type; pheno-
crysts are of feldspar also; pegmatoid segr	regations are common, and some are enriched
in muscovite. Along zones of alteration, f	
Host-Rock Environment U3 < Plutonic, synore (Sed. dep. environment U3)	on., metamorphic facies, ign. environ.)
Comments on Associated Rocks U4 < Dikes of mafic hypaby	
but are not related to the alteration, desp	
granite immediately adjacent to the borders	
Ore Minerals C30 < None observed	
Gangue Minerals K4 < Quartz, al	kali feldspar, hematite, molybdenite
	>

Quad	Name	Portland	
Dono	ada Na	48	4

URANIUM-UCCURRENCE	Quad Name
REPORT	Deposit No. 48
Alteration N75 < Red stains in feldspars	s, partial replacement of micas and feldspa
by hematite. Introduction of flakes of	molybdenite. Feldspathization of granite.
	,
Reductants U5 <	
	,
Analytical Data (General) C43 < MHM 068	8 19 ppm U ₃ 0 ₈ ; MHM 069 150 ppm U ₃ 0 ₈ ;
MHM 070 282 ppm U ₃ 0 ₈	
00.150	>
Radiometric Data (General) U6 < BG 150	No. times background and dimensions)
Ore Controls K5 < Differentiation with	in granitic magma, and concentration
of urarium along fractures in the more	uraniferous portions of the melt.
Deposit Class C40 < Pegmatitic	> Class No. U7 43 2 0
Comments on Geology N85 < This type of	mineralization has been observed around the
base of Pleasant Mountain on the west,	south and east sides.

Quad Name Portland
Deposit No. 48

REPORT

Uranium Analyses:

Sample No.	Sample Description	Uranium Analysis
MHM 068	Sample of five chips from Zone C, where bedrock has surface radioactivity of 275-400 cps, (weathered	
MHM 069	Five chips from Zone E, at points where SR varied from 700-1300 cps (weathered)	150 ppm U ₂ O ₂
MHM 070	From corner of detached bedrock slab, SR at collection point 1500 (grab sample)(weathered)	282 ppm U ₃ O ₃

References:	
F1 <	
F2 <	
	· ·
F3 <	
	,
F4 <	

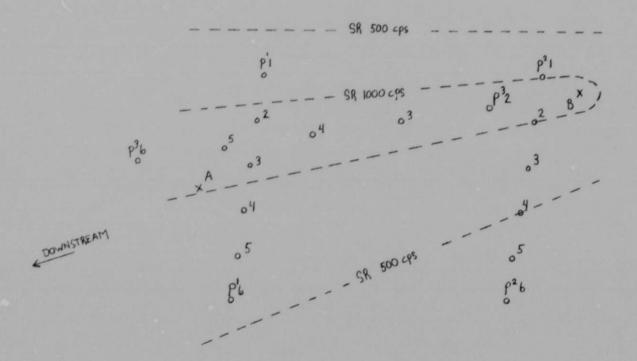
	URA	NIUM-OCCU	RRENCE	Quad	Name	Portland	
		REPORT		Depo	sit No.	48	
Continua	tion	from p. 1	-5:				
Label							
A82 <	Mou	intain Cre	eek (not named	on map) on t	his trai	1, direct	ly upstream
	fro	m BM 477	, >				
K1 (en	echelon o	pen fractures	are filled w	ith quar	tz. The	uraniferous
	zon	e in bed	rock on the wes	t side of the	e bridge	was prof	filed spec-
	tro	metrical	ly. A sketch o	f the zone a	nd profi	les is at	tached on
	p.	7, and th	ne spectrometri	c data are t	abula ted	d below.	>
U6 <	Tab	le of Spe	ectrometric Dat	a		1.00	
	Pro	files on	bedrock immedi	ately west o	f bridge	9	
pl ₁ (eK,%	eU,ppm 56	eTh, ppm	521	eK,%	eU,ppm	eTh,ppm
plo	5.0	107	30 44	22	3.7 5.5	103	43
P12 P13 P14 P15		173	40	p22	3.1	47	34
p14	3.4	92	34	D21	3.5	38	37
p15	3.7	111	36	p25			36
P16	2.8	110	36	P21 P22 P23 P24 P25 P26	3.3	29 48	31 32
31/01	eK,%		eTh,ppm				
P31(B)	5.2	522	79				
p32	2.0	113	30				
D3/	6.4	115 257	28				
p35	4.0	257 · 135					
P31(B) P32 P33 P34 P35 P36	5.0	129	39 29				
omaly A		285	45				
Average	of (F	11 - P16	$+ (P^21 - P^23)$	+ (P ³ 1 - P ³	6) + (Ar	nomaly A)	
Herage							
Average	eK,%	eU,pp	m eTh,ppm				

MHM 068 Locality (19 ppm ell)

eK,% eU,ppm eTh,ppm

6.7 18.5 31

U	RANIUM-	OCCURRENCE		Quad Name _	Portland
	RE	PORT		Deposit No.	48
Continuatio	n from	p. 6:			
abel					
J6 <					
-					
MHM 069 Loc	rality (5 chin sam	ples, 150 ppm	all)	
1111 000 200	eK,%		eTh,ppm		
2	7.7	90	21		
3	8.7	160 193	31 35		
2 3 4 5 Average	8.5	193	35 17		
Average	8.5	138	17 27		
Anomaly C	6.0	269	40	>	



SCALE: 2.54cm = 1m SR = Surface Radioactivity

PLAN OF PROFILES P', P2, AND P3, AND ANOMALIES A AND B, ON BEDROCK WEST OF JEEP TRAIL BRIDGE OVER PLEASANT MOUNTAIN CREEK

Portland 48

Deposit

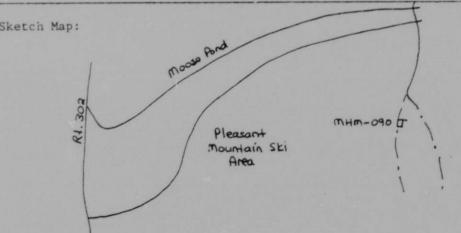
Page

NL

URANIU	JM-OCCU	RRENC
	REPORT	

Quad	Name A90<	Portland	>
Quad	Scale A100<	, 2, 5, 0, 0, 0, 0	
Depos	sit No. B40<	49	>

Deposit Name AlO < Pleasant Mountain East #1 Occurrence >
Synonym Name(s) All <>
District or Area A30 <>
Country A40 QU SP U S State Maine
State Code A50 q 2, 3 County A60 < Cumberland > (Enter code twice from List D)
Position from Prominent Locality A82 < From Rte. 302, take road south to Pleasant
Mountain Ski Area. Pass ski area and continue south for 3.1 km.
>
Field Checked G1 < 7,9 1,0 By G2 Wagener , H. D. > Yr Mo Last name First Initial
Latitude A70 4 4 4 0 2 4 8 ND Longitude A80 4 0 7 0 4 8 4 8 ND Deg Min Sec
Township A77 <
Meridian A81 < > Altitude A107 < 330 m >
Quad Scale A91 4 , 2,4,0,0,0 Quad Name A92 < Pleasant Mountain > (7½' or 15' quad)
Physiographic Province A63 <0,1 New England (List K)
Location Comments A83 < Follow stream west uphill approximately 0.6 km
Location Sketch Map:



1.0

0.5

km

BFE 1236 4/19/78 west

Bridgeton

0

Quad Name Portland

TITS A ST	TTTLE !	Amount	nnn	***
URAN	LUM-	JECU	KKE	NEE

REPORT	Deposit No. 49
Commodities Present:	
Commodities Produced:	P COPROD 4
MINOR 4	P BYPROD 4
POTEN 4 1 1 1 1 00	CUR (U, ,)
Commodity Comments C50 <	
Status of Exploration and Development (1 = occurrence, 2 = raw prospect, 3 = Comments on Exploration and Developmen	developed prospect, 4 = producer)
Property is A21 (Active) (A22) (I Workings are M120 (Surface) M130 (U Description of Workings M220<	(Circle appropriate labels) Inderground) M140 (Both)
Cumulative Uranium Production PROD DH2 accuracy thousands of 1b. G7 4 U	
Source of Information E7 < Comments E8 <	

URANIUM-OCCURRENCE	Quad Name Portland
REPORT	Deposit No. 49
Deposit Form/Shape M10 <	
Length M40 < > M41< >	Size M15 (circle letter)
Width M50 < > M51< >	<u>1b U308</u>
Thickness M60 < > M61< >	(A) 0 - 20,000 B 20,000 - 200,000
Strike M70 <>	C 200,000 - 2 million
Dip M80 <>	D 2 million - 20 million E More than 20 million
Tectonic Setting N15 < Mobile B	elt
Major Regional Structures N5 < Sebago L	ake Batholithic sheet
Local Structures N70 <	
Host-FM. Name U1 < Sebago Lake Pluton	> Member U2 < Two-mica granite
Host Rock K1 QDEV	Medium-grained pink porphyritic biotite- (Rock type, texture, composition, color,
muscovite granite with phenocrysts of alteration, attitude, geometry, structu	
Host-Rock Environment U3 < Plutonic sy	norogenic sheet batholith
(Sed. dep. er	nviron., metamorphic facies, ign. environ.)
Comments on Associated Rocks U4 <	
Ore Minerals C30 < None observed	
Gangue Minerals K4 < Biotite, muscovit	te, feldspar, quartz

URANIUM-OCCURRENCE	Quad Name Portland
REPORT	Deposit No. 49
Alteration N75 < None observed	
Reductants U5 <	>
Analytical Data (General) C43 < 123	ppm U ₃ O ₂ ; 500 ppm BA
	>
	Surface radioactivity (SR) 700 cps, (No. times background and dimensions)
in which anomalies SR 3200 cps were ob	indistinct zones that range SR 300-SR 700 c
Ore Controls K5 <	
	>
Deposit Class C40 < Pegmatitic	> Class No. U7 <31210
Comments on Geology N85 <	

TIRAN	ITIIM-	-OCC	IIRRI	FNCF

Quad Name Portland

Deposit No. 49

REPORT

Uranium Analyses:

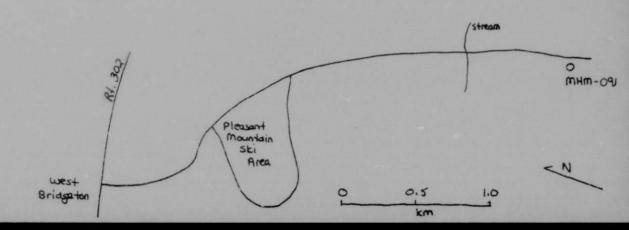
Sample No.	Sample Description	Uranium Analysis
11HM 090	Grab sample as part of granite sampling	123 ppm U ₃ O ₈

References:	
F1 <	
	>
F2 <	
F3 <	
F4 <	

RA						

Quad	Name A90<	Portland	>
Quad	Scale A1004	, 2, 5, 0, 0, 0, 0	
Depo	sit No. B40<	50	

Deposit Name AlO < Pleasant Mounta	in East #2 Occur	rrence	>
Synonym Name(s) All <			· · ·
District or Area A30 <			>
Country A40 4U, SP U, SI	StateMaine	9	
State Code A50 42 3 p 2 3 (Enter code twice from List D)	County A60 <_	Oxford	>
Position from Prominent Locality A82	Take road to I	Pleasant Mountair	Ski Area sout
off of Rte. 302. Take this road abou	t 3.9 km. Samp	le site is on qua	rried ledge or
west side of road.			>
Field Checked G1 < 7, 9 1, 00 By G2<	Wagener Last name	First	> Initial
Latitude A70 4 4 4 0 2 2 2 0 ND Lo	ngitude A80 4 Q	7 0-4 8 H1 2 MP eg Min Sec	
Township A77 < Range A78 <	E/W Sect	ion A79 4P	FT/M
Meridian A81 <	> Alt	itude Al07 <	150m >
		2 < Pleasant	
Physiographic Province A63 < 0,1 (List K)	New England		<u> </u>
Location Comments A83 <			
			>
Location Sketch Map:			



BFE 1236 4/19/78

Quad	Name	Por	tland	

REPORT Deposit No. 50
Commodities Present:
Commodities Produced: MAJOR 4 COPROD 4
MINOR 4
Potential Commodities: POTEN 4
Commodity Comments C50 <
Status of Exploration and Development A20 < 1 > (1 = occurrence, 2 = raw prospect, 3 = developed prospect, 4 = producer)
Comments on Exploration and Development L110 <
Property is A21 (Active) (A22) (Inactive) (Circle appropriate labels)
Workings are M120 (Surface) M130 (Underground) M140 (Both)
Description of Workings M220<
Cumulative Uranium Production PROD YES NO SML MED LGE (circle)
DH2 accuracy thousands of 1b. years grade G7
Source of Information D9 <
Production Comments D10 <
Reserves and Potential Resources
EH accuracy thousands of 1b. year of est. grade ElqU P ElAq
Source of Information E7 <
Comments E8 <

URANIUM-OCCURRENCE	Quad Name Portland
REPORT	Deposit No. 50
Deposit Form/Shape M10 <	
Length M40 < > M41< >	Size M15 (circle letter):
Width M50 <> M51<>	<u>1b U308</u>
Thickness M60 <> M61<>	A 0 - 20,000 B 20,000 - 200,000
Strike M70 <>	C 200,000 - 2 million D 2 million - 20 million
Dip M80 <>	E More than 20 million
Tectonic Setting N15 < Mobile Belt	
Major Regional Structures N5 < Sebago La	
Local Structures N70	
Local Structures N70 <	
Host-FM. Name U1 < Sebago Lake Pluton Host Rock K1 < D E V Wed (Age) (Figure 1) Wed (Age) (Figure 2) Wed (Age) (Figure 3) Wed (Age) (Figure 3) Wed (Age) (Figure 4) Wed (A	ium-coarse grained porphyritic pink Rock type, texture, composition, color, t of feldspar and muscovite
	,
Host-Rock Environment U3 < Plutonic syno	rogenic sheet batholith
Comments on	rogenic sheet batholith ron., metamorphic facies, ign. environ.)
Ore Minerals C30 < None observed	
Gangue Minerals K4 < None observed	

URANIUM-OCCURRENCE	Quad Name Portland
REPORT	Deposit No. 50
Alteration N75 < None observed	
Reductants U5 <	
Analytical Data (General) C43 < 54 pp	om U ₃ 0 ₈
	,
Radiometric Data (General) U6 < Surface	(No. times background and dimensions)
Deposit Class C40 < Pegmatitic	> Class No. U7 431210
Comments on Geology N85 <	

TITO A	ATT TOW	ann	THE PLAN	FNCF
LIKA	OLI LIM		HKK	P. N.L. P.

Quad Name	Portland		
Deposit No.	50	The same	

Uranium Analyses:

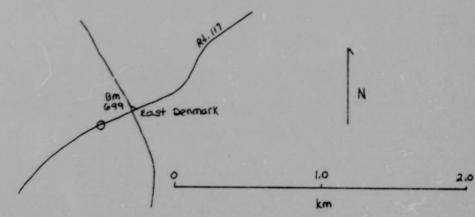
Sample No.	Sample Description	Uranium Analysis
MHM 091	Grab sample from anomalous ledge	54 ppm U ₃ 0 ₈

References:	
F1 <	
F2 <	
F3 <	
F4 <	

TIDA	STTI	794	ann	T 1 TO 1	RENO	1182
DINA	19 1	1171	5 75 Jb J	2 2 PC 1	PE PE PAGE	100

Quad	Name A90<_	Portland	
Quad	Scale A100	1 2, 5, 0, 0, 0, 0	
Deno	sit No. B40	< 51	,

Deposit Name AlO < East Denmark Occurrence >
Synonym Name(s) All <
District or Area A30 < Pleasant Mountain District >
Country A40 QU, SP [U, S] State Maine
State Code A50 < 2,3 \ (Enter code twice from List D) County A60 < Oxford >
Position from Prominent Locality A82 < 0.2 km west of East Denmark on Rt. 117.
,
Field Checked G1 < 7.9 0,5 By G2 Wagener , H. D. > Yr Mo Last name First Initial
Latitude A70 4 4 3 1 5 9 1 1 6 ND Longitude A80 4 0 7 0 4 6 4 0 WD Deg Min Sec Deg Min Sec
Township A77 <
Meridian A81 < > Altitude A107 < 230 m >
Quad Scale A91 4 2.4.0.0.0 Quad Name A92 4 Hiram (7½' or 15' quad)
Physiographic Province A63 (0,1) New England (List K)
Location Comments A83 <
Location Sketch Map:



Quad Name	Portland	
Deposit No	. 51	

REPORT Deposit No. 51	
Commodities Present:	
Commodities Produced: MAJOR 4 COPROD 4 COPROD 4	
MINOR 4 BYPROD 4 BYPROD 4	
Potential Commodities: POTEN 4 OCCUR 4 U	
Commodity Comments C50 <	-
Status of Exploration and Development A20 < 1 > (1 = occurrence, 2 = raw prospect, 3 = developed prospect, 4 = producer) Comments on Exploration and Development L110 <	>
Property is A21 (Active) (A22) (Inactive) (Circle appropriate labels, Workings are M120 (Surface) M130 (Underground) M140 (Both) Description of Workings M220<	
Cumulative Uranium Production PROD YES NO SML MED LGE (circle) DH2 accuracy thousands of 1b. years grade G74 U	
Reserves and Potential Resources EH accuracy thousands of 1b. year of est. grade El U	> 3> >

URANIUM-OCCURRENCE	Quad Name Portland
REPORT	Deposit No51
Deposit Form/Shape M10 <	
Length M40 < > M41< >	Size M15 (circle letter):
Width M50 <> M51<>	<u>1b U308</u>
Thickness M60 <> M61<>	A 0 - 20,000
Strike M70 <>	B 20,000 - 200,000 C 200,000 - 2 million
Dip M80 <>	D 2 million - 20 million E More than 20 million
Tectonic Setting N15 < Mobile Belt	<u> </u>
Major Regional Structures N5 <	
	>
Local Structures N70 <	
Host-FM. Name U1 < Sebago Lake Pluton	> Member 112 < Tue -ii-
Host Rock Kl ⟨D,E,V, , , , , , 16 Medi (Age) (F	Rock type, texture, composition, color,
granite. Texture inhomogeneous and part alteration, attitude, geometry, structure,	ly pegmatoid. Phenocrysts of white
feldspar and large late-forming flakes of	f muscovite. Color is gray-white except
for scattered pink spots in feldspars.	> miles except
	morogenic cheet baticalith
Host-Rock Environment U3 < Plutonic, sy (Sed. dep. envir	ron., metamorphic facies, ign. environ.)
Associated Rocks U4 <	
	>
Ore Minerals C30 < None observed	
	>
Gangue Minerals K4 < Biotite, muscovite,	quartz, feldspar

URANIUM-OCCURRENCE	Quad Name Portland
REPORT	Deposit No. 51
Alteration N75 < None observed	
Reductants U5 <	
Analytical Data (General) C43 <68	3 ppm U ₃ 0 ₈
	>
	ce radioactivity (SR) of boulder 300 to 600
	(No. times background and dimensions)
(BG 80) and 500-600 at sampling point.	•
	>
Ore Controls K5 <	
Descrit Class C/O / Degratitie	01 No. 117 do N
Deposit Class C40 < Pegmatitic	> Class No. U7 <3 2 0
Comments on Geology N85 < Boulders	not in place - source unknown

URANIU	M-OCCU	RRENC	E
O MANUEL CO	1-0000	DUTTHE	150

Quad Name	Portland	
Deposit No.	51	

Uranium Analyses:

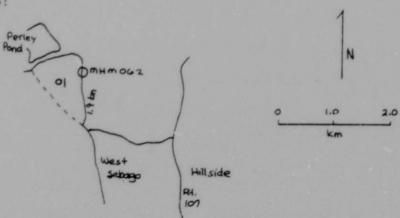
Sample No.	Sample Description	Uranium Analysis
MHM 059	Grab sample of split boulder in rock wall	68 ppm U ₃ 0 ₈

F1 <			
F2 <			
F3 <			
F4 <			

REPORT

Quad	Name A90	Portland	>
Quad	Scale Al0	0 < 12, 5, 0, 0, 0, 0	
Deno	sit No. B4	0< 52	

Deposit Name AlO Perley Pond Occurrence
Synonym Name(s) All <
District or Area A30 <
Country A40 QU, SP [U, S] State Maine
State Code A50 < 2, 3 2,3 County A60 < Cumberland (Enter code twice from List D)
Position from Prominent Locality A82 < From West Sebago proceed north for 1.9 km.
Field Checked G1 < 7, 9 Q 5p By G2< Wagener , H. D. Yr Mo Last name First Initial
Latitude A70 4 3 5 7 4 4 ND Longitude A80 40 7 0 H4 4 H1 7 WP Deg Min Sec Deg Min Sec
Township A77 <
Meridian A81 < > Altitude A107 < 165 m
Quad Scale A91 4 16, 2, 5, 0, 0 Quad Name A92 < Sebago Lake (7½' or 15' quad)
Physiographic Province A63 < 0, 1 New England (List K)
Location Comments A83 < Specimen came from central portion of long road cut in
rock on west side of road.
Location Sketch Map:



TID AT	STTT	25.6	no	***	221	PERMI	ä
URA	$N \perp i$	MI	o_{U}	GU!	SKI	ENNER	

URANIUM-OCCURRENCE	Quad Name Portland
REPORT	Deposit No. 52
Commodities Present:	
Commodities Produced:	P COPROD 4
MINOR 4	BYPROD 4
Potential Commodities:	CUR < U, , , , , , , , , , , ,
Commodity Comments C50 <	
Status of Exploration and Development A (1 = occurrence, 2 = raw prospect, 3 = Comments on Exploration and Development	developed prospect, 4 = producer)
Property is A21 (Active) (A22) (In Workings are M120 (Surface) M130 (Un Description of Workings M220<	active) (Circle appropriate labels) derground) M140 (Both)
Cumulative Uranium Production PROD DH2 accuracy thousands of 1b. G7 Q U	
Production Comments D10 <	
Reserves and Potential Resources EH accuracy thousands of 1b. E1 U	

URANIUM-OCCURRENCE	Quad Name Portland
REPORT	Deposit No. 52
Deposit Form/Shape M10 <	
Length M40 < > M41< >	Size M15 (circle letter):
Width M50 <> M51<>	1b U308
Thickness M60 <> M61<>	Ø 0 - 20,000
Strike M70 <>	B 20,000 - 200,000 C 200,000 - 2 million
Dip M80 <>	D 2 million - 20 million E More than 20 million
Tectonic Setting N15 < Mobile Belt	E More than 20 million
Major Regional Structures N5 < Sebago L	ake Pluton
Local Structures N70 <	
Host-FM. Name U1 < Sebago Lake Pluton Host Rock Kl < D_E_V 16 Medi (Age) (irregular pods and dikes of pegmatite. alteration, attitude, geometry, structure	um-grained gray two-mica granite with Rock type, texture, composition, color,
Host-Rock Environment U3 < Plutonic synor (Sed. dep. envi	ogenic sheet batholith
Comments on Associated Rocks U4 <	
	<u> </u>
Ore Minerals C30 < None observed	
Gangue Minerals K4 < Biotite, muscovite,	quartz

**** * **	+	 -	
URAN	LUM-	RR	ENCE

URANIUM-OCCURRENCE	Quad Name Portland
REPORT	Deposit No. 52
Alteration N75 < None observed	
Reductants U5 <	
Analytical Data (General) C43 < 7 pp	m U ₃ 0 ₈
at collection point 200	No. times background and dimensions)
Ore Controls K5 <	
Donasit Class C/O & Darmatiti	
Deposit Class C40 < Pegmatitic Comments on Geology N85 <	> Class No. U7 <3 2 0

Quad Name Portland

REPORT

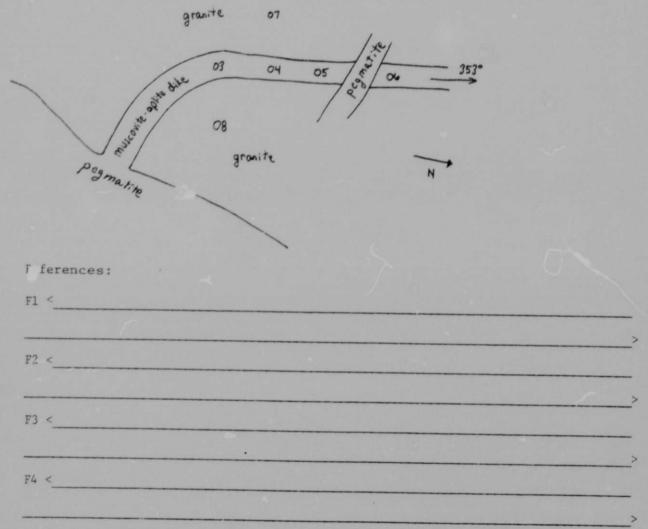
Deposit No. 52

Uranium Analyses:

Sample Description	Uranium Analysis
Homogeneous two-mica granite (grab sample)	7 ppm U ₃ 0 ₈

Geologic Sketch Map and/or Section, with Sample Locations:

Plan view - Upper dike : Spectrometer Stations



Quad Name Portland

Deposit No. 52

REPORT

Continuation from p. 1-5:

Label

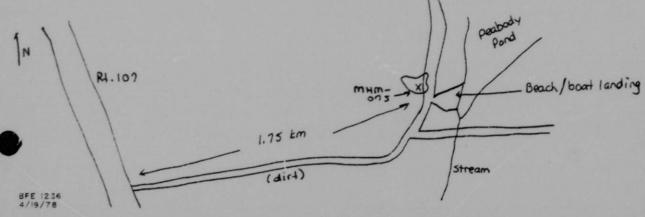
U6 < One Minute Spectrometer Counts, Gain 4.90, Counts taken at (01) on Location Sketch Map

				OII 3KCC				
Location	Station	Totet	Ket	Uct	Thct	%eK	eUppm	eThppm
1700 cps Anomaly	01	52170	3323	2988	311	C 04	135.00	37.46
	02	27460	2079	1450	194	5.40	64.00	21.80
Upper Dike	03	26950	1886	1434	106	4.68	65.80	10.13
	04	24170	1771	1266	99	4.71	57.81	9.20
	05	26360	1897	1341	121	5.08	60.81	9.20
	06	14840	1309	649	94	4.46	27.87	8.53
		11980	1105	446	87	4.07	18.18	7.60
	08	10910	1097	388	101	4.20	14.92	9.46
ower Dike	09	37150	2447	2110	171	4 00	96.80	18.30
The same of the sa	10	27760	1826	1476	141	4.98 3.91	66.79	14.80
Quartz Pods	11	19330	1642	849	93	5.74	37 35	8.40
	12	75110	862	190	84	3.64	5.78	7.20

TITO A ST	TITLE O	CONTEN	RENCE
UKAN	I IIM-U	H. J. HIR	K M NA C . H

Quad	Name A90<	Portland	>
Quad	Scale Al00	, 2, 5, 0, 0, 0, 0	
Depo	sit No. B40<	53	3

Deposit Name AlO Peabody Pond Occurrence
Synonym Name(s) All <>
District or Area A30 < Sebago Lake >
Country A40 QU, SP [U, S] State Maine
State Code A50 < 2, 3 County A60 < Cumberland > (Enter code twice from List D)
Position from Prominent Locality A82 < 1.75km down dirt road from its inter-
section with Rte. 107. Intersection is 3.4km north of Sebago Village also on
Rte. 107.
Field Checked Gl < 7,9 0,9 By G2 Stone Thomas A > Yr Mo Last name First Initial
Latitude A70 94,315,514,2, ND Longitude A80 90,7,014,1113,8,WP Deg Min Sec Deg Min Sec
Township A77 <
Meridian A81 < > Altitude A107 < >
Quad Scale A91 4 6,2,5,0,0 Quad Name A92 < Sebago Lake > (7½' or 15' quad)
Physiographic Province A63 <0.1 New England > (List K)
Location Comments A83 < Sample location directly opposite short dirt road that
leads to beach and boat landing on Peabody Pond >
Location Sketch Map:
11



URANIUM-OCCURRENCE	Quad Name Portland
REPORT	Deposit No53
Commodities Present:	
Commodities Produced: MAJOR O COMMODITIES Produced:	OPROD 4
MINOR 4	YPROD 4
Potential Commodities: POTEN 4 OCCUR	U
Commodity Comments C50 <	
Status of Exploration and Development A20 < (1 = occurrence, 2 = raw prospect, 3 = deve	loped prospect, 4 = producer)
Comments on Exploration and Development Lll	0 <
Property is A21 (Active) A22 (Inacti Workings are M120 (Surface) M130 (Underg	ve) (Circle appropriate labels) round) M140 (Both)
Description of Workings M220<	
Cumulative Uranium Production PROD DH2 accuracy thousands of lb. G7 Q U	
Source of Information D9 <	
Production Comments D10 <	
Reserves and Potential Resources EH accuracy thousands of 1b. ElqU P ElAq P ElBq	year of est. grade _B> E1C<> E1D<% U308:
Source of Information E7 <	
Comments F8 <	

URANIUM-OCCURRENCE	Quad Name Portland
REPORT	Deposit No. 53
Deposit Form/Shape M10 < Circular area FT/M	of anomalous radioactivity
Length M40 < 0.30 > M41 < m >	Size M15 (circle letter):
Width M50 < 0.30 > M51< m >	1b U308
Thickness M60 < > M61< >	A 0 - 20,000 B 20,000 - 200,000 C 200,000 - 2 million D 2 million - 20 million E More than 20 million
Strike M70 <>	
Dip M80 <>	
Tectonic Setting N15 < Mobile Belt	,
Major Regional Structures N5 < Western side	of Sebago Lake Pluton
Local Structures N70 <	
	,
Host-FM. Name U1 < Sebago Lake Pluton >	Member U2 < Two-mica granite
Host Rock K1 (DIE, V) (Age) (Roc	-coarse grained granite k type, texture, composition, color,
alteration, attitude, geometry, structure, e	tc.)
Host-Rock Environment U3 < Plutonic, syn	orogenic sheet batholith ., metamorphic facies, ign. environ.)
Comments on Associated Rocks U4 < Pegmatite dikes comm	
Small aplitic dikes common, sample MHM 841	
Ore Minerals C30 < None observed	
Gangue Minerals K4 < Pintita musecuita	yantz foldenan
Gangue Minerals K4 < Biotite, muscovite, o	uai cz, ieiuspar

URANIUM-OCCURRENCE REPORT	Quad Name Portland Deposit No. 53
Reductants U5 <	<u> </u>
Analytical Data (General) C43 < 93 pp	m U ₃ O ₈
	,
Radiometric Data (General) U6 < Modal (1	surface radioactivity (SR) 125-185 cps No. times background and dimensions)
	t had value of 400 cps. Background 90 cps.
Ore Controls K5 <	
Deposit Class C40 < Pegmatitic	> Class No. U7 <3,2,0
Comments on Geology N85 <	

	RRENCE

Quad Name Portland

Deposit No. 53

REPORT

Uranium Analyses:

Sample No.	Sample Description	Uranium Analysis
MHM 075	Chip sample from point having SR 400 cps	93 ppm U ₃ 0 ₈

Brush

anomalous spot
4.5 m from
road edge

Geologic Sketch Map and/or Section, with Sample Locations:

Referen	nces:			
F1 <				
F2 <				
F3 <				
F4 <				

URAN:			

Quad	Name /	490<_P	ortland		>
Quad	Scale	A1004	2, 5, 0, 0, 0	00	
Depo	sit No	. B40<	54		3

	Deposit No. 8404 54	
Deposit Name AlO < Sebago Occurre	nce	
Synonym Name(s) All <		>
District or Area A30 < Sebago Lake		>
	eMaine	
State Code A50 <2 3 > 2 3 Coun (Enter code twice from List D)	ty A60 < Cumberland	>
Position from Prominent Locality A82 < At	the intersection of High	way 107 and the
road to Peaked Mountain, NW of Sebago,		
		>
Field Checked Gl < 7,8 1,0 By G2 Wagen	er , H. First	n >
Latitude A70 44,3+5,4+0,8,NP Longitud	le A80 <u>40,7,0H4,2H2,3</u> Deg Min Sec	<u>₩</u> >
Township A77 <	Section A79 Q	FT/M
Meridian A81 <	> Altitude Al07 <	175 m
Quad Scale A91 4 16,2,5,0,0> Quad (7½' or 15' quad)	ad Name A92 < Sebago 1	ake
Physiographic Province A63 (0,1) [New Eng] (List K)	and	;
Location Comments A83 < Specimen taken from	base of central portion	on of prominent
cut in rock on E side of road just NW of in	itersection.	
Location Sketch Map: Peabody Pond		
	to Peaked M	UHL
Hill Brook	R1.102	
	m Hm - 029	
0 1.0 2.0 km		bago

URANIUM-OCCURRENCE	Quad Name Portland
REPORT	Deposit No. 54
Commodities Present:	
Commodities Produced:	COPROD 4
MINOR 4	BYPROD 4
Potential Commodities:	
Commodity Comments C50 <	
	· · · · · · · · · · · · · · · · · · ·
Status of Exploration and Development A20 (1 = occurrence, 2 = raw prospect, 3 = dev	<1 > veloped prospect, 4 = producer)
Comments on Exploration and Development Ll	10 <
Property is A21 (Active) (A22) (Inact Workings are M120 (Surface) M130 (Under	
Description of Workings M220<	
	,
Cumulative Uranium Production PROD DH2 accuracy thousands of 1b. G7 Q U	
Source of Information D9 <	>
Production Comments D10 <	
	>
Reserves and Potential Resources	
EH accuracy thousands of 1b.	year of est. grade <lb> E1C<</lb>
Source of Information E7 <	·
Comments E8 <	

URANIUM-OCCURRENCE	Quad Name Portland
REPORT	Deposit No. 54
Deposit Form/Shape M10 < Dike FT/M	>
	Size M15 (circle letter):
Width M50 <> M51<>	1b U308
Thickness M60 < 2 > M61<>	A 0 - 20,000 B 20,000 - 200,000
Strike M70 < 105 > Dip M80 < 30 N >	C 200,000 - 2 million D 2 million - 20 million E More than 20 million
Tectonic Setting N15 < Mobile Belt	L Pare than 20 million
Major Regional Structures N5 < Sebago Lake	batholithic sheet
Host-FM. Name U1 < Sebago Lake Pluton Host Rock K1 < D.E.V.	>
(Age) (Ro	ock type, texture, composition, color,
alteration, attitude, geometry, structure,	etc.)
Host-Rock Environment U3 < Plutonic, synoro (Sed. dep. environments on Associated Rocks U4 < Two-mica granite, a dikes.	on., metamorphic facies, ign. environ.)
Ore Minerals C30 < None observed.	>
Gangue Minerals K4 < Quartz, feldspar, mus	covite, biotite.

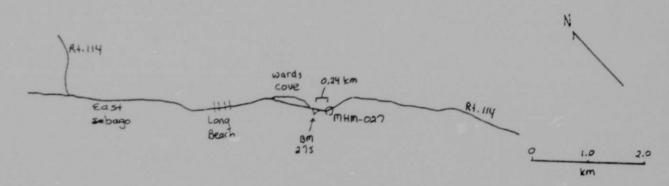
URANIUM-OCCURRENCE	Quad Name	Portland
REPORT	Deposit No.	54
Alteration N75 < None observed		
Reductants II5 <		3
Reductants U5 <		
Analytical Data (General) C43 < 47 ppr	m U ₃ 0 ₈ in aplite	
Radiometric Data (General) U6 < Surface		
and weathered aplite at top of cut 150	No. times backgroun	
		THE RESERVE OF THE PERSON NAMED IN COLUMN 2 IS NOT THE OWNER.
base of the cut has 300-450 cps. BG 8		
Ore Controls K5 <		
		7
Deposit Class C40 < Pegmatitic		> Class No. U7 43,2,00
Comments on Geology N85 < The dike	occurs near the sout	thern contact of the
batholith.		

		Quad Name	Portland
	REPORT	Deposit No	54
ranium Ana	ilyses:		
Sample No.	Sample Descr	iption	Uranium Analysi
MHM 029	Grab sample of aplite from	radioactive zone	47 ppm U ₃ 0 ₈
-			
References			
References:			

REPORT

Quad	Name A90<_	Portland	
Quad	Scale Aloo	14 , 2, 5, 0, 0, 0, 0	
Depos	sit No. B40	< 55	

Deposit Name AlO < Wards Cove Occurrence	>
Synonym Name(s) All <	>
District or Area A30 < Sebago Lake	>
Country A40 (U,S) U,S) State Maine	
State Code A50 <23 P 23 County A60 < Cumberland (Enter code twice from List D)	>
Position from Prominent Locality A82 < 0.24 km southeast of south entrar	nce to
Wards Cove (near BM 275), on Highway 114 in long road cut in rock.	
	>
Field Checked G1 < 7,8 1,0 By G2 Wagener , H. Yr Mo Last name First	D. >
Latitude A70 4 4 3 4 9 4 7 NP Longitude A80 0 7 0 H3 6 H1 8 WP Deg Min Sec Deg Min Sec	
Township A77 <	FT/M
Meridian A81 < > Altitude A107 < <u>90 m</u>	>
Quad Scale A91 4 6,2,5,0,0 Quad Name A92 < Sebago Lake (7½' or 15' quad)	>
Physiographic Province A63 < 0, 1 New England (List K)	>
Location Comments A83 < Specimen MHM 027 taken from blasted crevasse at	bout 9 m eas
of basaltic dike that cuts through mid-portion of road cut, northside or	
Location Sketch Map:	



URANIUM-OCCURRENCE	Quad Name Portland
REPORT	Deposit No. 55
Commodities Present:	
Commodities Produced:	COPROD 4
MTNOR 4	P BYPROD 4
Potential Commodities:	CUR (LILLIA)
Commodity Comments C50 <	
Status of Exploration and Development A (1 = occurrence, 2 = raw prospect, 3 = Comments on Exploration and Development	developed prospect, 4 = producer)
Property is A21 (Active) A22 (In Workings are M120 (Surface) M130 (Un Description of Workings M220<	nactive) (Circle appropriate labels) nderground) M140 (Both)
Cumulative Uranium Production PROD	YES (NO) SML MED LGE (circle)
DH2 accuracy thousands of 1b.	years grade
Source of Information D9 <	>
Production Comments D10 <	
Reserves and Potential Resources	
EH accuracy thousands of 1b.	year of est. grade E1B< <u>LB</u> > E1C< <u>, , , , </u> > E1D< <u>% U308</u> >
	<u> </u>
Comments E8 <	

Page 3 URANIUM-OCCURRENCE Quad Name Portland REPORT Deposit No. 55 Deposit Form/Shape M10 < See K1 for MHM 027; MHM 028 is from spot anomaly Length > M41< > Size M15 (circle letter): Width M50 < > M51< > 1b U308 Thickness M60 < > M61< (A) 0 - 20,000 20,000 - 200,000 M70 < Strike C 200,000 - 2 million D 2 million - 20 million M80 < Dip E More than 20 million Tectonic Setting N15 < Mobile Belt Major Regional Structures N5 < Sebago Lake Batholithic Sheet Local Structures N70 < Steeply dipping planar micaceous partings strike approximately 135 deg. Dikes of granitic rock in this area have similar attitudes. Host-FM. Name U1 < Sebago Lake Pluton > Member U2 < Two-mica granite and > * Host Rock K1 |D E V (Rock type, texture, composition, color, apparently slightly altered along ill-defined zones, where feldspars have brown alteration, attitude, geometry, structure, etc.) spots. Pegmatite is muscovite-biotite pegmatite with granitoid texture. Specimen taken from one arm of a splay of dikes. Host-Rock Environment U3 < Plutonic, synorogenic, sheet batholith (Sed. dep. environ., metamorphic facies, ign. environ.) Associated Rocks U4 < Associated pegmatite is of the type common to the Sebago Lake pluton. Other pegmatite dikes in this roadcut are not anomalous.

Ore Minerals C30 < None observed.

Gangue Minerals K4 < Muscovite-biotite-feldspar-quartz

URANIUM-OCCURRENCE	Quad Name	Portland
REPORT	Deposit No.	55
Alteration N75 <in :<="" certain="" ill-defined="" td=""><td>zones, feldspars</td><td>s have brown spots.</td></in>	zones, feldspars	s have brown spots.
Reductants U5 <		>
120		>
Analytical Data (General) C43 $<$ 130 ppm U $_3$ 0. Granite from zone of brown spotting has 3		
Wagener, unpublished data).		>
	times backgroun	nd and dimensions)
150-200 cps. Altered granite has common	surface radioact	tivity of around 225 cps.
Ore Controls K5 <		
Deposit Class C40 < Pegmatitic Comments on Geology N85 < Other pegmatite		

	Marketine of the contract of	
TIDAN	IUM-OCCI	IDDENICI
URAIN	T UNITED TO	DERF.NL.

Quad	Name	Portland		
Deno	eit No	55		

Uranium Analyses:

Sample No.	Sample Description	Uranium Analysis
MHM 027	Grab sample of granite	3 ppm U ₃ O ₈
MHM 028	Grab sample of pegmatite dike	130 ppm U ₃ 0 ₈

Geologic Sketch Map and/or Section, with Sample Locations:

References:	
F1 <	
F2 <	
F3 <	
F4 <	

Quad Name

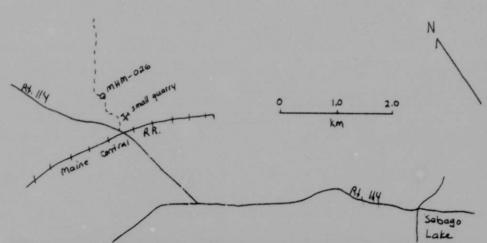
Portland	

Deposit No. 55
Continuation from p. 1-5:
<u>Label</u>
A83 < Specimen MHM 028 taken from pegnatite in central portion of SW
side of road cut, in blast crevasse. >
U6 < vities are around 300 cps. BG in woods above road cut 70 cps.
Maximum radioactivity on pegmatite 800 cps in crevasse, or 8 x BG of 100 cps. >
U2 < pegmatite >

REPORT

Quad	Name A90< Po	ortland	>
Quad	Scale A100	, 2, 5, 0, 0, 0, 0	
Deno	eit No. B40<	56	-

Deposit Name AlO < Rich Mill Pond Occurrence >	
Synonym Name(s) All <>	
District or Area A30 < Sebago Lake >	
Country A40 QU, SP [U, S] State Maine	
State Code A50 (2,3) 2,3 County A60 < Cumberland > (Enter code twice from List D)	
Position from Prominent Locality A82 < Immediately north of the grade crossing of	th
Maine Central Railroad on Highway 114 (northeast of town of Sebago Lake), a dirt	roa
leads northeastward to the lake. Sample came from this road.	
Field Checked Gl < 7,8 1,0 P By G2 Wagener , H. 9. > Yr Mo Last name First Initial	
Latitude A70 4 3 4 8 1, 8 ND Longitude A80 40,7,0 13,4 10,5 WD Deg Min Sec	
Township A77 <	
Meridian A81 < > Altitude A107 < 120 m >	
Quad Scale A91 4 6 2 5 0 0 Quad Name A92 < Sebago Lake > (7½' or 15' quad)	
Physiographic Province A63 <0 1 New England >	
Location Comments A83 <	
Location Sketch Map:	



BFE 1236 4/19/78

IIUM-		

URAN1UM-OCCURRENCE	Quad Name Portland
REPORT	Deposit No. 56
Commodities Present:	
Commodities Produced:	COPROD 4
MINOR 4	BYPROD 4
Potential Commodities:	OCCUR (U, BA, I)
Commodity Comments C50 <	
	>
Status of Exploration and Develop (1 = occurrence, 2 = raw prospect Comments on Exploration and Devel	, 3 = developed prospect, 4 = producer)
	>
Workings are M120 (Surface) M1 Description of Workings M220<	, , , , , , , , , , , , , , , , , , , ,
	>
Cumulative Uranium Production DH2 accuracy thousands of 1b G7 U	· years grade
Source of Information D9 <	
Production Comments D10 <	
Reserves and Potential Resources	
	b. year of est. grade > E1B< <u>LB</u> > E1C< <u></u> E1D<
Source of Information E7 <	· · · · · · · · · · · · · · · · · · ·
	>

URANIUM-OCCURRENCE	Quad Name Portland
REPORT	Deposit No. 56
Deposit Form/Shape M10 <	,
Length M40 < 0.40 > M41< m >	Size M15 (circle letter):
Width M50 < 0.20 > M51 < m >	<u>1b U308</u>
Thickness M60 <> M61<>	A 0 - 20,000
Strike M70 <>	B 20,000 - 200,000 C 200,000 - 2 million
Dip M80 <>	D 2 million - 20 million E More than 20 million
Tectonic Setting N15 < Mobile	Belt >
Major Regional Structures N5 < Sebago	Lake batholithic sheet
	>
Local Structures N70 < Steenly dinning o	lanam microscopia acutica at the (105 to 1
Local Structures N70 < Steeply dipping p	
(see N85, p. 4)	
	<u> </u>
Host-FM. Name U1 < Sebago Lake Pluton	> Member U2 < <u>Two-mica granite</u> >
Host Rock K1 < D, E, V, (Age)	mica granite, medium-coarse-grained, gray
white with large late poikilitic phenocr alteration, attitude, geometry, structure	ysts of muscovite, and segregations of , etc.)
pegmatite.	
	>
Host-Rock Environment II3 < Dlutonic	company of the base of the state of the stat
	ron., metamorphic facies, ign. environ.)
Comments on Associated Rocks U4 <	
Ore Minerals C30 / No II minerals of	
Ore Minerals C30 < No U minerals observed	
	· · · · · · · · · · · · · · · · · · ·
Gangue Minerals K4 < Quartz, feldspar, m	uscovite, biotite

URANIUM-OCCURRENCE	Quad Name Portiand
REPORT	Deposit No. 56
Alteration N75 < None observed	
Reductants U5 <	
	>
Analytical Data (General) C43 < U30g,	27 ppm; Ba, 1000 ppm.
	>
(ck ledges have surface radioacitivity (SR) o No. times background and dimensions)
150 to 250 cps in gradational zones.	Blasted boulders scattered profusely about i
woods commonly have surface radioactiv	ity of 200-250 cps. Specimen is from >
Ore Controls K5 <	
Alleger - September	
	·
Deposit Class C40 < Pegmatitic	> Class No. U7 431210>
Comments on Geology N85 < At the first of	cut in rock on Highway 114 north of the
Maine Central RR crossings, sills of me	edium-coarse-grained granite in fine-grained
granite strike 135 , dip steeply west.	Surface radioactivity 150-250 cps, higher
especially in fine-grained granite and	along some contacts. Pegmatite is at RG.

			CCU		

Quad	Name	Portland	
Deno	sir No	56	

Uranium Analyses:

Sample No.	Sample Description	Uranium Analysis
ини 026	Grab sample from blasted boulder (sappy)	23 ppm U 27 ppm U ₃ 0 ₈

Geologic Sketch Map and/or Section, with Sample Locations:

References:		
F1 <		
F2 <		
F3 <		
F4 <		

Quad Name	Portland	
Deposit No.	56	

REPORT

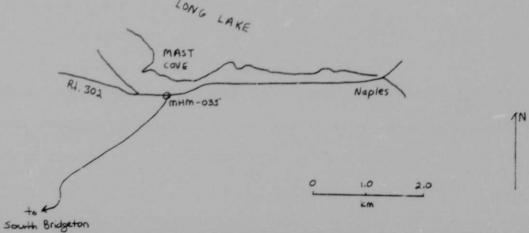
Continuation from p. 1-5:

Label
U6 < one such boulder having surface radioactivity of up to 275 near collecti
point. Small elongated spot anomaly in ledge in granite of up to 575 cps could no
be sampled (anomaly is about 60 m SE of the road). Background along road over
boulders 95 cps. >

TIRAN			

Quad	Name A90< Portland	
Quad	Scale A100< _ , 2, 5, 0, 0, 0, 0	
Depos	sit No. B40< 57	

Deposit Name AlO < Mast Cove Occurence >
Synonym Name(s) All < Naples, North >
District or Area A30 < Long Lake >
Country A40 (U, S) (U, S) State Maine
State Code A50 <23 >
Position from Prominent Locality A82 < 160 m west of the intersection at BM 359.
where the road to South Bridgton intersects Highway 302, NW of Naples.
>
Field Checked G1 < 7,8 1, 0 By G2 < Wagener , H. D. > Yr Mo Last name First Initial
Latitude A70 4 3 5 9 1 4 NP Longitude A80 40 7 0 H3 8 H4 6 WP Deg Min Sec Deg Min Sec
Township A77 <
Meridian A81 < > Altitude A107 < 100 m >
Quad Scale A91 4 6,2,5,0 Quad Name A92 < Sebago Lake > (7½' or 15' quad)
Physiographic Province A63 < 0, 1 New England New Engl
Location Comments A83 < The anomaly is in a low bedrock ledge just above the
ditch on the west side of Highway 302.
Location Sketch Map:
LONG LAKE
MAST
CONE O



BFE |236 4/19/78

URANIIM-OCCURRENCE	Quad Name Portland
REPORT	Deposit No. 57
Commodities Present:	
Commodities Produced:	COPROD 4
MINOR 4	BYPROD 4
Potential Commodities:	JR < U , , B,A, , , , >
Commodity Comments C50 <	
Status of Exploration and Development A2 (1 = occurrence, 2 = raw prospect, 3 = 6 Comments on Exploration and Development	developed prospect, 4 = producer)
Property is A21 (Active) A22 (Inate of Workings M220) (Inate of Workings M220)	derground) (Circle appropriate labels)
Cumulative Uranium Production PROD DH2 accuracy thousands of 1b. G7 Q U	years grade < <u>LB</u> > G7C< > G7D<
Source of Information D9 <	
Production Comments D10 <	
Reserves and Potential Resources	
EH accuracy thousands of 1b.	year of est. grade 1B< <u>LB</u> > E1C< <u>, , , , > E1D</u> < <u>% U308</u> >
Source of Information E7 <	
Comments E8 <	

URANIUM-OCCURRENCE	Quad Name Portland
REPORT	Deposit No. 57
Deposit Form/Shape M10 <	·
Length M40 < 1 + > M41 < m >	Size M15 (circle letter):
Width M50 <> M51<>	<u>1b U308</u>
Thickness M60 <appx .20=""> M61< m ></appx>	
Strike M70 <>	B 20,000 - 200,000 C 200,000 - 2 million
Dip M80 <>	D 2 million - 20 million E More than 20 million
Tectonic Setting N15 < Mobile belt	>
Major Regional Structures N5 < Sebago Lak	ke batholithic sheet
Local Structures N70 < Gently dipp	oing biotite-muscovite schlieren in
granite.	Service sentreren III
	>
Host-FM. Name U1 < Sebago Lake Pluton	
Host Rock K1 (DEV) (Age) (R	m-grained two-mica granite, gray and pink lock type, texture, composition, color,
Varies to coarse-grained pink granite and alteration, attitude, geometry, structure,	tends to be porphyritic Pictita in
the dominant mica, but muscovite occurs,	
Schlieren are of coarse-grained biotite a	
Host-Rock Environment U3 < Plutonic, synor	
Comments on	
Associated Rocks U4 < Fine-grained graniti	c rock, possibly granodiorite, may be
intrusive into the two-mica granite.	
	>
Ore Minerals C30 < None observed.	
	>
Gangue Minerals K4 < Quartz, feldspars,	biotite, muscovite, hematite

OAAN TON-OCCURRENCE	Quad Name Portland
REPORT	Deposit No. 57
Alteration N75 < Feldspars have been subjection	ected to intense hematite staining,
approaching partial replacement of some	grains.
	<u> </u>
Reductants U5 <	
	>
Analytical Data (General) C43 < 125 ppm	U ₃ 0 ₈ ; 5 ppm Mo; 700 ppm Ba
	>
Radiometric Data (General) U6 < Maximum m	measured radioactivity (1700 cps) occurs
	. times background and dimensions)
in association with the most intense her	matite staining. Biotite schlieren that
intersects the deep pink spot also is an	nomalous. Surface radioactivity (SR) >
Ore Controls K5 <	
	>
Deposit Class C40 < Pegmatitic	> Class No. U7 <3,2,0>
Comments on Geology N85 < 0.48 km NW of the	nis locality, a road leads northward from
Highway 302 toward lake shore properties	s; 0.32 km up this road is a bridge over a
	in this stream are of medium to coarse-
	grained phases tend to be pink, and have
	toid segregations. SR of bedrock and >

TITE A KI	TIM-OCC	ם מוזי	TO STATE OF THE
ODCHY	IUM-OCC	UBB	ENDLE

Quad Name	Portland	
Deposit No.	57	

Uranium Analyses:

Sample No.	Sample Description	Uranium Analysis
MHM 035	Grab sample of altered granite	106 ppm U 125 ppm U ₃ 0 ₈

Geologic Sketch Map and/or Section, with Sample Locations:

F1 <	
F2 <	
F3 <	
F4 <	

URANIUM-OCCURRENCE Quad Name Portland

REPORT

Deposit No. 57

Continuation from p. 1-5:

abel	
K1 < f	function of hematite staining. At one point in the exposure, hematite
staining	g of feldspars is intense, so that some grains are brick red. Yellowish
coatings	along sheet fractures may indicate leaching of uranium. >
N85 < m	negaboulders varies generally from 150 to 325 cps. The higher radio-
activiti	les are in the coarser grained rock, except in the pegmatoid segregations,
	eve the same SR or lower SR than the surrounding rock. In one
megaboul	der adjacent to the main stream about 60 m downstream from the bridge,
	gated spot anomaly of 500 cps seems to follow a very thin quartz-rich
	tion or discolored joint in the boulder face. No specimen could be obtained
	n weathered boulders along the shore of the south end of Long Lake, beginni
	drawbridge (at Naples), at low water due to draught, the same relations
	rock and radioactivity were observed (up to 500 cps in coarse-grained
	. BG over the boulders at waist height 125 cps. >
U6 < 0	of sampling point approximately 1000 cps BG 95 cps. > ★

97.20

60.27

40.93

Quad Name Portland

REPORT

Deposit No. 57

3.44

4.64

61.01

10.34

15.50

Continuation from p. 6

Label

06

116

00	Sample :	site, one	minute :	spectrometer	r Counts (u	sing GR-410)	
Station	Totot	Kct	Uct	Thct	%eK	eUppm	eThppm
01	49070	3194	2591	590	5.46	107.60	74.67
02	24640	1915	983	534	4.55	30.35	67.20
03	17210	1480	516	507	3.94	8.89	63.60
04	21430	1729	740	560	4.28	18.21	70.67
05	22690	1894	702	759	4.44	10.34	97 20

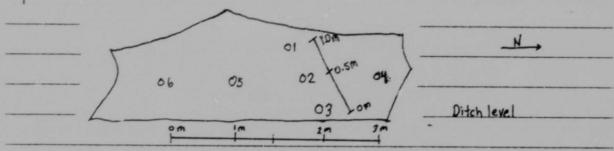
482

Spectrometer Stations - Sample Site

18060

1464

636



One Minute Spectrometer Counts of Anomalous Mega-Boulders in Creek (using GR-410) Megaboulder SR(cps) Totet Ket Uct Thet eUppm %eK eThppm 01 500 28100 1894 1325 432 3.46 50.62 53.60 02 250 13520 1157 533 185 3.50 19.46 20.57 03 500 28970 2103 1479 337

Quad Name Portland

REPORT

Deposit No. 57

Continuation from p. 7

Label

U6

Station	Totet	Kct	Uct	That	%eK	eUppm	eThppm	
01	16550	1322	490	539	2.85	6.65	67.87	
02	13540	1407	390	343	4.90	7.70	41.73	
03	11950	1266	312	251	4.83	6.68	29.47	
04	7730	954	132	128	4.26	1.62	13.07	
05	15040	1243	557	364	2.99	15.22	44.53	
06	18090	1508	567	579	3.50	9.20	73.20	
07	17150	1417	506	549	3.34	7.13	69.20	
08	17990	1588	530	496	4.63	9.90	62.13	
09	10560	1000	309	248	3.13	6.63	29.07	
010	11450	1126	390	128	4.23	14.21	13.07	
011	10220	1001	279	188	3.59	6.98	21.07	> *
	(Diagr	am on pag	e 9.)					

)

* midpoint of edge of concrete slab under bridge

01

.06

.03

•08 •09

• 04

• 010

05

NEOF

100	PH 1	A 19 15 15	LUN	4 1	200	F 2 1 1	1996	wii	PO NO	100	wii
	PC 2	2.70	ши	7-6	ж		ж	ж	κn	100	м

Quad	Name A90< Port	tland	>
Quad	Scale Al00	2, 5, 0, 0, 0, 0	
Depos	sit No. B40<	88	>

	Deposit No	. B40< 58	>
Deposit Name AlO < Randall Hill O	ccurrence		,
Synonym Name(s) All <			>
District or Area A30 < Sebago Lake			>
Country A40 4U, SP U, SI	State Maine		
State Code A50 <23 > 23 (Enter code twice from List D	County A60 <	Cumberland	
Position from Prominent Locality A8	32 < Road cut on wes	t side of Route	35 160 m nort
of town boundary between Naples an	nd Harrison		
			>
Field Checked G1 < 7, 9 1, 0 By C	G2< Stone Last name	, Thomas First	A. >
Latitude A70 4 4 4 0 1 2 0 ND Deg Min Sec	Longitude A80 40 7 Deg	0 H 3 7H Q 8 WP Min Sec	
Township A77 <	B Section E/W	n A79 4P	FT/M
Meridian A81 <	> Altit	ude A107 < 177	
Quad Scale A91 < _ , 6, 2, 5, 0, 0> (7½' or 15' quad)	Quad Name A92	< Norway	>
Physiographic Province A63 < 0, 1 (List K)	New England		>·
Location Comments A83 <			
			>
Location Sketch Man: 1			

Randall
Hill
Randall
Hill
RANDAL RAND

TITE A	***	TRE 1	1000	272.73	TINTON
UKA	AIN I I		$m_{\rm GGU}$	JKK	ENCE

URANIUM-OCCURRENCE	Quad Name Portland
REPORT	Deposit No. 58
Commodities Present:	
Commodities Produced:	COPROD 4
MINOR 4	BYPROD 4
Potential Commodities:	₩
Commodity Comments C50 <	
Status of Exploration and Development A20 (1 = occurrence, 2 = raw prospect, 3 = dev Comments on Exploration and Development L1	veloped prospect, 4 = producer)
Property is A21 (Active) (A22) (Inact	cive) (Circle appropriate labels)
Workings are M120 (Surface) M130 (Under Description of Workings M220<	ground) M140 (Both)
Cumulative Uranium Production PROD DH2 accuracy thousands of 1b. G74U	
Source of Information D9 <	<u> </u>
Production Comments D10 <	>
Reserves and Potential Resources EH accuracy thousands of 1b. E1 U E1A E1A	year of est. grade <lb> ElC<</lb>
Source of Information E7 <	
Comments E8 <	

URANIUM-OCCURRENCE	Quad Name Portland
REPORT	Deposit No. 58
Deposit Form/Shape M10 <	<u> </u>
Length M40 < 1 > M41< m >	Size M15 (circle letter):
Width M50 < 0.30 > M51 < m >	1b U308
Thickness M60 <> M61<>	A 0 - 20,000
Strike M70 <>	B 20,000 - 200,000 C 200,000 - 2 million
Dip M80 <>	D 2 million - 20 million E More than 20 million
Tectonic Setting N15 < Mobile Belt	>
Major Regional Structures N5 < Central	Portion Sebago Pluton
Local Structures N70 < At least two larg	e (1.5 m thick) basaltic dikes striking
	ear with above. Gneiss and Schist presen
was view as reast one chimner trice corin	ear with above. Gneiss and Schist presen
	>
Host-FM. Name U1 < Sebago Lake Pluton	> Member U2 < Biotite granite >
Host Rock KI QD_E_V 18 Massi (Age) (Ro	ve weathered biotite segregation in quart ock type, texture, composition, color,
monzonite surrounded by rusty and sulfid alteration, attitude, geometry, structure,	ic schist/gneiss near contact of small etc.)
metamorphic zone and local quartz monzoni	
Host-Rock Invironment U3 < Plutonic, synor	ogenic sheet batholith on., metamorphic facies, ign. environ.)
Comments on Associated Rocks U4 < North and south porti	
coarse grained quartz monzonite. Garnetoi	d pegmatite observed in south center
portion of outcrop.	>
Ore Minerals C30 < None observed	
	>
Gangue Minerals K4 < Quartz, feldspar, biot	ite

A STATE OF THE REAL PROPERTY.		
TID ARTT	TIME OF OUR	TO DO DISTORD
UPSTATE	リバーひししし	RRENCE

URANIUM-OCCURRENCE	Quad Name	Portland
REPORT	Deposit No.	58
Alteration N75 < None observed		
Reductants U5 <		<u> </u>
Analytical Data (General) C43 < 104	ppm U ₃ O ₈ ; 1500 ppm B	>; 150 ppm Cr;
Radiometric Data (General) U6 < Sur	face radioactivity (S	
A CONTRACTOR		,
Ore Controls K5 <		
Deposit Class C40 < Pegmati'ic		> Class No. U7 43 2 7 >
location, found to have 8 ppm U ₃ 0 ₈		

WHEN A		***	the later which		
URA	NTI	IM(1CCI	IRRI	$^{7}NC1$

Ouad	Name	Portland

Deposit No. 58

Uranium Analyses:

Sample No.	Sample Description	Uranium Analysis
MHM 901	Granite grid sample	104 ppm U ₃ O ₃

Geologic Sketch Map and/or Section, with Sample Locations:

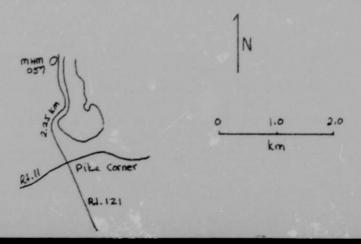
Drawing made looking west at road cut from highway marker. More autorop is to the north and on opposite side of road.

5		~
•	31 m	
won zonie	pegmatik RASALT PELMATITE BASALT METAMORPHICS POX MONZONITE Greiss granite	PEGMATAT
	META MOKPHICS References:	
	F1 <	
		>
	F2 <	
		>
	F3 <	
		>
	F4 <	
		5

TED ANT	TTRA-	ar	2011	D	D	CAL	0	77
URANI	LUM-	UL	JU	K	K,	EN	v	L

Quad	Name	A90<_	Port1and	,
Quad	Scale	A100	1 2, 5, 0, 0, 0, 0	
Depo	sit No	B40	< 59	3

Company None (a) All			
Synonym Name(s) All <			
District or Area A30 < Sebago Lake			
Country A40 4U, SP [U, S]	State	Maine	
State Code A50 92,30 [2,3] (Enter code twice from List D)	County A60 <_	Cumberland	
Position from Prominent Locality A82	< From intersect	ion of Rte. 21 and	d Rte. 11
go north on Rte. 121 for 2.25 km			
Field Checked Gl < 7,9 0,5 By G2<	Wagener Last name	, H. First	D. Initial
Latitude A70 44,3-5,9-5,6 ND Lo Deg Min Sec	ngitude A80 40.	7,0H3,1H1,0,WP g Min Sac	
Township A77 <	Secti	on A79 4	FT/M
Meridian A81 <	> Alti	tude A107 < 134	m
Quad Scale A91 4 6,2,5,0,0> (7½' or 15' quad)	Quad Name A92	< Sebago Lake	
Physiographic Province A63 (0,1) No. (List K)	ew England		
Location Comments A83 < Within about	20 m of the N en	d of the long cut	in rock on



8FE 1236 4/19/78

URANIUM-OCCURRENCE	Quad Name	Portland
REPORT	Deposit No.	59
Commodities Present:	111111111	>
Commodities Produced:	> COPROD 4	
MINOR 4	BYPROD 4	
Potential Commodities:		
Commodity Comments C50 <		
Status of Exploration and Development A2 (1 = occurrence, 2 = raw prospect, 3 = d Comments on Exploration and Development	developed prospect, 4	= producer)
Property is A21 (Active) A22 (Ina Workings are M120 (Surface) M130 (Und Description of Workings M220<		ele appropriate labels) (Both)
Cumulative Uranium Production PROD OH2 accuracy thousands of 1b. G7 U	-	MED LGE (circle) grade G7D< % U308:
Source of Information D9 <		
Production Comments D10 <		
Reserves and Potential Resources		
EH accuracy thousands of 1b.	year of est. B< <u>LB</u> > E1C<	grade E1D< % U308
Source of Information E7 <		
Comments E8 <		

URANIUM-OCCURRENCE .	Quad Name Portland	
REPORT	Deposit No59	
Deposit Form/Shape M10 < Not determined.	Appears to follow foliation.	>
Length M40 < 10 > M41 < m >	Size M15 (circle letter):	
Width M50 <> M51<>	1b U308	
Thickness M60 <> M61<>	A 0 - 20,000	
Strike M70 < NNE >	B 20,000 - 200,000 C 200,000 - 2 million	
Dip M80 < gentle >	D 2 million - 20 million E More than 20 million	
Tectonic Setting N15 < Mobile Belt		>
Major Regional Structures N5 <		
		,
Local Structures N70 < Banding and folia	in anaissaid	
Host-FM. Name U1 < Sebago Lake Pluton Host Rock Kl < D E V		
granite with phenocrysts of muscovite a alteration, attitude, geometry, structure,	nd pink feldspar. The feldspar ph	enocrysts
are of various sizes and are distribute	d irregularly. Folia rich in biot	ite produce
black bands in the rock.		>
Comments on	on., metamorphic facies, ign. envi	
Associated Rocks U4 < The central portion of muscovite aplite. The southern portion		
two-mica granite with segregations of pe		ke-type
Ore Minerals C30 < None observed	granite.	
		>
Gangue Minerals K4 < Biotite, muscovite.	, feldspar, quartz	

H	RA	NIT	UM	-6	C	CII	p	D	EN	CI
~	m 140	64.7 A	- WES		100	ww	20	EV.	27.3	No E

URANIUM-OCCURRENCE	Quad Name _	Portland
REPORT	Deposit No.	59
Alteration N75 < None observed		
Reductants U5 <		
Analytical Data (General) C43 < U ₃ 0 ₈ - 079 27 ppm, 080 15ppm, 081 7 ppm, 082		077 4ppm, 078 74ppm,
Radiometric Data (General) U6 < BG 75 cps (No	o. times backgroun	nd and dimensions)
probably a little less than 300. One		
Ore Controls K5 < Differentiation within uraniferous fluids.		
Paradit Class Class	Pegmatitic	>
Deposit Class C40 <	regnation	> Class No. U7 43,20
Comments on Geology N85 <		
		<u> </u>

Portland Quad Name

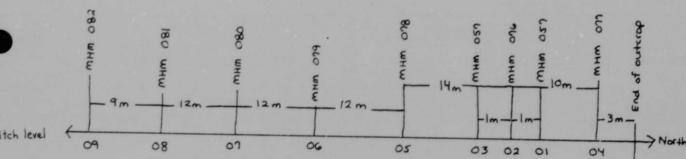
REPORT

59 Deposit No.

Uranium Analyses:

Sample No.	Sample Description	Uranium Analysis
MHM 057	3 chips from point having SR about 400 cps; two chips from points having SR about 300 cps	
MHM 076 MHM 077	Granite, SR 400 cps Weathered granite, SR 130 cps	93 ppm U ₃ O ₃ 93 ppm U ₃ O ₃ 4 ppm U ₃ O ₂
MHM 078 MHM 079	Granite, SR 280 cps Granite, SR 300 cps	74 ppm U ₃ 0 ₈ 27 ppm U ₃ 0 ₈
MHM 080	Aplite, SR 200 cps	15 ppm U ₃ O ₈
MHM 081	Aplite, SR 230 cps	7 ppm U ₃ 0 ₈
MHM 082	Granite, SR 140 cps	3 ppm U ₃ O ₉

Geologic Sketch Map and/or Section, with Sample Locations:



Ditch level

References:

F1 <	
	>
F2 <	
	<u> </u>
F3 <	
	· · · · · · · · · · · · · · · · · · ·

Quad Name Portland

REPORT

Deposit No. 59

Continuation from p. 1-5:

	b	

A83 < 2 m thick strikes out of the roadcut. The anomalous zone principally

lies north of this dike. >

U6 < zone about 20 cm thick containing clusters of muscovite. This anomaly

is near the north side of a 2 m basaltic dike. The SR of biotite

schlieren and bands is the same as that of enclosing rock. The aplite

and the more normal two-mica granite toward the south end of the cut

have SR around 175 cps. Pegmatoid segregations within the two-mica

granite are gray-white, and are not anomalous.

One-Minute Spectrometer Counts, Gain	One-minute	4.70
--------------------------------------	------------	------

Station	Totet	Kct	Uct	Thet	%eK	eUppm	eThppm	
01	22230	2104	990	79	8.20	44.96	6.53	
02	24750	2023	1132	133	6.76	50.25	13.73	
03	26450	1961	1280	187	5.41	55.84	20.93	
04	7840	829	234	83	3.24	7.96	7.10	
05	19080	1626	829	165	5.34	34.50	18.00	
06	15940	1553	628	149	5.34	25.18	15.86	
07	14110 15400	1388 1394	446	256	5.00	13.07	0.13	
08	14450	1329	487 447	385 408	3.54	11.16 8.52	47.33 50.40	
09	11650	1379	260	251	5.79	4.15	29.47	>

	RENCE

Quad	Nam	e A	90< Po	rtland		>
Quad	Sca	1e	A100<_	, 2, 5,	0, 0, 0, 0	
Depoi	sit	No.	B40<	60		>

Deposit Name AlO < Thompson Lake Grid Sample
Synonym Name(s) All <
District or Area A30 < Sebago Lake
Country A40 QU SP U S StateMaine
State Code A50 < 2, 3 County A60 < Cumberland (Enter code twice from List D)
Position from Prominent Locality A82 < 1.4 km west of bridge over southern end of
Thompson Lake on Mayberry Hill Road, west of Rt. 11
Field Checked G1 < 7,9 0,9 By G2 Stone , Tom Yr Mo Last name First Initial
Latitude A70 4,4 H 0,1 H 1,0 NP Longitude A80 40 7 0 H 2 9 H 3 WP Deg Min Sec Deg Min Sec
Township A77 <
Meridian A81 < > Altitude A107 < 170 m
Quad Scale A91 4 6,2,5,0,0> Quad Name A92 < Poland (7½' or 15' quad)
Physiographic Province A63 <0,1 New England (List K)
Location Comments A83 <
Logation Skatch Man.

Location Sketch Map:

Thomeson
Lake

Rt. 302

		Carlotte State Co.	
TIDAN	ATTTM.	-000011	RRENCE
11 55 251			K K F TULL

URAN IUM-OCCURRENCE	Quad Name Portland
REPORT	Deposit No. 60
Commodities Present:	
Commodities Produced:	COPROD 4
MINOR Q	SYPROD 4
Potential Commodities: POTEN 4 OCCUR	14.1
Commodity Comments C50 <	
Status of Exploration and Development A20 < (1 = occurrence, 2 = raw prospect, 3 = development Comments on Exploration and Development L11	loped prospect, 4 = producer)
Property is A21 (Active) (A22) (Inactive) Workings are M120 (Surface) M130 (Undergous) Description of Workings M220<	ground) (Circle appropriate labels)
Cumulative Uranium Froduction PROD DH2 accuracy thousands of 1b. G74 U G7A4 G7A4 G7B <lb3< td=""><td></td></lb3<>	
Source of Information D9 <	<u> </u>
Production Comments D10 <	
	<u> </u>
Reserves and Potential Resources EH accuracy thousands of 1b. E1	year of est. grade LB> E1C<> E1D<
Source of Information E7 <	>
Comments E8 <	

URANIUM-OCCURRENCE	Quad Name Portland
REPORT	Deposit No. 60
Deposit Form/Shape M10 <	>
Deposit Form/Shape M10 < FT/M Length M40 < > M41<	Size M15 (circle letter):
Width M50 < > M51<	> <u>1b U308</u>
Thickness M60 < > M61<	
Strike M70 <	B 20,000 - 200,000 C 200,000 - 2 million D 2 million - 20 million
Dip M80 <	> E More than 20 million
Tectonic Setting N15 < M	obile Belt >
Major Regional Structures N5 < Se	ebago Lake Pluton
	<u> </u>
Local Structures N70 <	
Host-FM. Name U1 < Sebago Lake Dlutz	on > Member U2 < 2-mica granite >
(Age)	(Rock type, texture, composition, color,
alteration, attitude, geometry, stru	ecture, etc.)
	<u> </u>
Host-Rock Environment U3 < Pluto	onic, synorogenic, sheet batholith >
Comments on	environ., metamorphic facies, ign. environ.)
Associated Rocks U4 <	
	>
Ore Minerals C30 < None observed	
	>
Gangue Minerals K4 < Quartz, feldspa	ar, biotite, muscovite

Quad Name Portland

URANIUM-OCCURRENCE

REPORT	Deposit No. 60
Alteration N75 < None observed	
Reductants U5 <	*
	>
Analytical Data (General) C43 <	25 ppm U ₃ O ₈
	<u> </u>
Radiometric Data (General) U6 <	(No. times background and dimensions)
	(No. times background and dimensions)
	>
Ore Controls K5 <	
	> Class No. U7 431210>
Comments on Geology N85 <	
	>

TID ANT	TRA COCC	TIPPENCE
TAINFALL	UM-OCC	URRENCE

Quad	Nan	ne	Portland	
Depos	sit	No.	60	

Uranium Analyses:

Sample No.	Sample Description	Uranium Analysis
MHM 848	Chip across granite, grid sample	25 ppm U ₃ O ₈

REPORT

Quad	Name A90< Portland	_>
Drug	Scale A1004 _ 2, 5, 0, 0, 0, 0p	
Depos	sit No. B40< 61	>

n
Deposit Name AlO < Black Cat Mountain Grid Sample >
Synonym Name(s) All <>
District or Area A30 < Sebago Lake >
Country A40 QU, SP [U, S] State Maine
State Code A50 <2,3 > [2,3] County A60 < Androscoggin > (Enter code twice from List D)
Position from Prominent Locality A82 < From West Poland, go SE until you
intersect Rte. 11. (This point is 2.7 km north of the Androscoggin-Cumberland
County line on Rte 11). Cross Rte. 11 and take dirt road for 0.8 km and then >
Field Checked G1 <7,9,1,0 p By G2< Stone , T. > Yr Mo Last name First Initial
Latitude A70 444000128 ND Longitude A80 40,7,012,5118 WD Deg Min Sec
Township A77 <
Meridian A81 < > Altitude A107 < 180 m >
Quad Scale A91 4 6,2,5,0,0 Quad Name A92 < Poland > (7½' or 15' quad)
Physiographic Province A63 <0 1 New England > (List K)
Location Comments A83 < At the first fork in the jeep trail go SE, then at
second fork go 230° ESE to a ledge where sample was taken.
Location Sketch Map:

BFE |236 4/19/78

URA	NITI	TM-0	CCI	TDI	FN	CI
UMA	HAT.	OLL	1000	22/2	PETA	101

URANIUM-OCCURRENCE	Quad Name	Portland
REPORT	Deposit No	61
Commodities Present:		
Commodities Produced:	COPROD 4	
MINOR 4	BYPROD 4	
Potential Commodities:	R QU	
Commodity Comments C50 <		
Status of Exploration and Development A2 (1 = occurrence, 2 = raw prospect, 3 = d Comments on Exploration and Development	developed prospect.	, 4 = producer)
Property is A21 (Active) A22 (Ina Workings are M120 (Surface) M130 (Und Description of Workings M220<		ircle appropriate labels) 40 (Both)
Cumulative Uranium Production PROD DH2 accuracy thousands of 1b. G7 U G7A	-	
Source of Information D9 <		>
Production Comments D10 <		
Reserves and Potential Resources EH accuracy thousands of 1b.	year of e	st. grade
EH accuracy thousands of 1b.		
Source of Information E7 <		
Comments E8 <		

URANIUM-OCCURRI	ENCE	Quad Name Portland	
REPORT		Deposit No. 61	
Deposit Form/Shape M10 <			>
Length M40 <	FT/M > M41<>	Size M15 (circle letter):	
Width M50 <	_> M51<>	<u>1b U308</u>	
Thickness M60 <	_> M61<>	A 0 - 20,000 B 20,000 - 200,000	
Strike M70 <	>	C 200,000 - 2 million D 2 million - 20 million	
Dip M80 <	>	E More than 20 million	
Tectonic Setting N15 <	Mobile Belt		>
Major Regional Structures	N5 < Sebago Lak	e Sheet Batholith	
Local Structures N70 <			
			-
			>
Host-FM. Name U1 < Sebag	o Lake Pluton	> Member U2 < Two-mica granite	_>
Host Rock K1 QDEV	Rust	cy, coarse-grained biotite-muscovite g Rock type, texture, composition, color	ranit
16		cock type, texture, composition, color	,
alteration, attitude, geo	metry, structure	, etc.)	-
Host-Rock Environment U3	> Plutonic syno	arogenic sheet batholith	
		ron., metamorphic facies, ign. environ	1.)
Comments on Associated Rocks U4 <			
			_
Ore Mineral - 620 - None	cheanuad		>
Ore Minerals C30 < None	observed		-
			_>
Gangue Minerals K4 < Qu	artz, feldspar, b	piotite, muscovite	
			5

			F	age 4		
URANIUM-OCCURRENCE	Quad Name	Portland			_	
REPORT	Deposit No.	61				
Alteration N75 <					_	
Reductants U5 <					_	
Analytical Data (General) C43 < 18 pp	om U ₃ 0 ₈	*				
						>
Radiometric Data (General) U6 < BG is	high, 115 to 125 cp (No. times background				BG	
Boulders of granite and pegmatite as						
Ore Controls K5 <						,
				-		
						>
Deposit Class C40 < Pegmatitic		_> Class	No. U	7 43	20	>
Comments on Geology N85 < This	sample is part of a	sampling	grid o	of the	Seb	a
Lake Sheet Batholith.						

**** A	STTTT		mm.	CHERRY	-	***
URA	$\mathbf{N} \perp \mathbf{U}$	M=1	UC	UUK	KEI	NGE

Quad	Name	Portland	
Dono	eit No	61	

Uranium Analyses:

Sample No.	Sample Description	Uranium Analysis
мни 018	Chip sample of ledge	18 ppm U ₃ O ₈

References:	
F1 <	
F2 <	
F3 <	
F4 <	

T 175 A 37 7	7754 00	5 / 1 5 / 45		AT CEPS
TIRANT	1 1 March 31		C 86 (84)	POLICE IN

Quad Name Portland
Deposit No. 61

REPORT

Continuation from p. 1-5: Label A82 < take the jeep trail that heads S to SW. >

REPORT

Quad	Name /	A90<	Portland	
Quad	Scale	A1004	, 2, 5, 0, 0, 0, 0	
Depos	sit No.	. B40<	62	

name to the state of the state
Deposit Name AlO < East Raymond Occurrence
Synonym Name(s) All <
District or Area A30 <
Country A40 QU, SP [U, S] State Maine
State Code A50 q2,3p [2,3] County A60 < Cumberland (Enter code twice from List D)
Position from Prominent Locality A82 < From East Raymond, proceed south on
Rte. 85 for 0.6 km and take dirt road heading west for 0.4 km.
Field Checked G1 < 7.9 0.8 p By G2< Plano , J. A. Yr Mo Last name First Initial
Latitude A70 4 3 4 5 5 5 5 3 ND Longitude A80 4 0 7 0 2 6 3 1 WD Deg Min Sec Deg Min Sec
Township A77 <
Meridian A81 < > Altitude A107 < 155 m
Quad Scale A91 4 6,2,5,0,0 Quad Name A92 < Gray (7½' or 15' quad)
Physiographic Province A63 < 0, 1 New England (List K)
Location Comments A83 < Outcrop is on north side of the woods
Location Sketch Map:
0.47 Rt. 85 0 1.0 2.0 km

URANIUM-OCCURRENCE	Quad Name Portland
REPORT	Deposit No. 62
Commodities Present:	
Commodities Produced:	COPROD 4
MINOR 4	BYPROD 4
Potential Commodities:	R (U, ,)
Commodity Comments C50 <	
	>
Status of Exploration and Development A2 (1 = occurrence, 2 = raw prospect, 3 = d	
Comments on Exploration and Development	L110 <>
Property is A21 (Active) (A22) (Ina	ctive) (Circle appropriate labels)
Workings are M120 (Surface) M130 (Und	erground) M140 (Both)
Description of Workings M220<	
	· ·
Cumulative Uranium Production PROD DN2 accuracy thousands of 1b. G74 U G7A4 G7A4 G7B4	
Source of Information D9 <	,
Production Comments D10 <	
	>
Reserves and Potential Resources	
EH accuracy thousands of 1b.	year of est. grade B <lb> E1C<</lb>
Source of Information E7 <	>

Comments E8 <

	JM-			

	UKANIUM-OCCURRENC	E	Quad Name Portland
	REPORT		Deposit No. 62
Deposit Fo	orm/Shape M10 <	Plutonic sto	ck
Length	M40 <>	FT/M M41<>	Size M15 (circle letter):
Width	M50 <>	M51<>	1b U308
Thickness	M60 <>	M61<>	A 0 - 20,000 B 20,000 - 200,000
Strike	M70 <	>	C 200,000 - 2 million
Díp	M80 <	>	D 2 million - 20 million E More than 26 million
Tectonic S	etting N15 < Mob	ile Belt	
	onal Structures N	Sebago Lake	Sheet Batholith
Host-FM N	Iomo III > Sehago La	ke Pluton	Member U2 < 2-mica granite
	K1 \(\frac{D_E_V}{(Age)}\)	Biot	tite muscovite granite k type, texture, composition, color,
alteration	, attitude, geomet	try, structure, e	tc.)
Host-Rock Comments o	(5		nic sheet batholith ., metamorphic facies, ign. environ.)
Associated	Rocks U4 <		
Ore Minera	ls C30 < None obs	erved	
Gangue Min	erals K4 < Biotit	e, muscovite, qua	artz, feldspar

URANIUM-OCCURRENCE	Quad Name _	Portland	
REPORT	Deposit No.	62	
Alteration N75 < None observed			
			>
Reductants U5 <			
Analytical Data (General) C43 < 19 ppr	n U ₃ 0 ₈		
Radiometric Data (General) U6 <			
Madiometric Data (General) 00 C	(No. times backgrou	nd and dimension	s)
Ore Controls K5 <			
Deposit Class C40 < Pegmatitic		> Class No. U	43,2,0
Comments on Geology N85 <			9
			1

URANTIM-OCCURRENC	
	u
	•

Quad Name	Portland	
Deposit No	62	

Uranium Analyses:

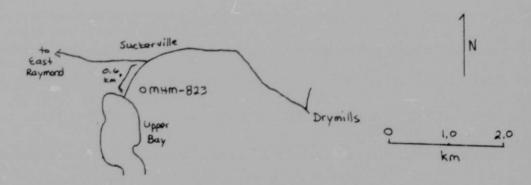
Sample Description	Uranium Analysis
Granite grid sample	19 ppm U ₃ O ₃

References:	
F1 <	
F2 <	
F3 <	
F4 <	

CONTRACTOR OF THE PARTY OF			
URANII	TM - OCC	I D D C N	00
O DOME TO	ロバーししし	UKKEN	NUE

Quad	Name A90<_	Portland	>
Quad	Scale Al00	Q , 2, 5, 0, 0, 0, 0p	
Depos	sit No. B40	< 63	>

Deposit Name AlO < Suckerville Grid Sample >
Synonym Name(s) All <
District or Area A30 < Sebago Lake >
Country A40 (U, S) U, S State Maine
State Code A50 <2,3 p
Position from Prominent Locality A82 < From Suckerville take dirt road SSW for
0.6 km. Head west 25 m.
,
Field Checked Gl <7.9 1.0 P By G2< Stone , T. > Yr Mo Last name First Initial
Latitude A70 4 3 5 5 1 7 ND Longitude A80 40 7 0 H2 3 H3 0 WP Deg Min Sec Deg Min Sec
Townst = A77 <
Meridian A81 < > Altitude A107 < >
Quad Scale A91 4 62500 Quad Name A92 < Gray > (7½' or 15' quad)
Physiographic Province A63 Q 0, 1 New England >
Location Comments A83 <
,
Location Sketch Map:



URANIUM-OCCURRENCE	Quad Name Portland
REPORT	Deposit No. 63
Commodities Present:	
Commodities Produced:	COPROD 4
MINOR 4	BYPROD 4
Potential Commodities:	R (U, , ,)
Commodity Comments C50 <	· · · · · · · · · · · · · · · · · · ·
Status of Exploration and Development A2 (1 = occurrence, 2 = raw prospect, 3 = decomments on Exploration and Development	eveloped prospect, 4 = producer)
	· >
Property is A21 (Active) (A22) (Ina Workings are M120 (Surface) M130 (Und	ctive) (Circle appropriate labels) erground) M140 (Both)
Description of Workings M220<	
Cumulative Uranium Production PROD DH2 accuracy thousands of 1b. G7 U	
Source of Information D9 <	<u> </u>
Production Comments D10 <	
Reserves and Potential Resources EH accuracy thousands of 1b. E1	year of est. grade B< <u>LB</u> > E1C
Source of Information E7 <	
Comments E8 <	

3
-
-
-
-
-
1 1
-
-
>
- >
)
_
>
- >
-

URANIUM-OCCURRENCE	Quad Name Portland
REPORT	Deposit No. 63
Alteration N75 <	
Reductants U5 <	
Analytical Data (General) C43 < 26 pp	om U ₃ 0 ₈
	<u> </u>
	(No. times background and dimensions)
125-175 cps	
	>
Ore Controls K5 <	
Deposit Class C40 < Pegmatitic	> Class No. U7 <3 2 0
Comments on Geology N85 < This sample	is a member of the Sebago Lake Pluton
sample grid.	

****	****	more	THE REAL PROPERTY.	WINE P	-
11114 0 1	JIIM-		1 52 52	K NIC	-

Quad Name _	Portland
Deposit No.	63

Uranium Analyses:

Sample No.	Sample Description	Uranium Analysis
MHM 823	Chip sample of granite	26 ppm U ₃ 0 ₈

References:	
F1 <	
F2 <	
F3 <	
F4 <	

REPORT

Quad	Name A90< Po	ortland
Quad	Scale Al00	2,5,0,0,0,0
Depos	sit No. B40<	64

Deposit Name AlO < Pownal Occurrence
Synonym Name(s) All <
District or Area A30 < Bradbury-Brunswick Pegmatite District
Country A40 QU, SP [U, S] State Maine
State Code A50 23 County A60 Cumberland (Enter code twice from List D)
Position from Prominent Locality A82 < From Pownal Center, go NW on road 2.1 km
to next intersection, go north 160 m to small bank on west side of road, sample is
from boulder in bank.
Field Checked G1 < 7.9 0.4 P By G2 < Poer , Anne T. Yr Mo Last name First Initial
Latitude A70 4 3 15 4 11 5 ND Longitude A80 40,7,0 11 2 12,0 WD Deg Min Sec
Township A77 < P Range A78
Meridian A81 < > Altitude A107 < 55 m
Quad Scale A91 4 6,2,5,0,0 Quad Name A92 < Freeport (7½' or 15' quad)
Physiographic Province A63 <0 1 New England (List K)
Location Comments A83 < Boulder is on west side of road at north end of bank with
0.3 m x 0.3 m section exposed, is 6 m from road
Location Sketch Map: Tryon min. Tryon min. Roadbury min. Pownal center o 1.0 2.0

RAN			

URAN IUM-OCCURRENCE	Quad Name Fortrand
REPORT	Deposit No. 64
Commodities Present:	
Commodities Produced:	COPROD 4
MINOR 4	BYPROD 4
Potential Commodities:	R JULI Y TILL
Commodity Comments C50 <	
Status of Exploration and Development A20 (1 = occurrence, 2 = raw prospect, 3 = de Comments on Exploration and Development	eveloped prospect, 4 = producer)
Property is A21 (Active) (A22) (Inactive) Workings are M120 (Surface) M130 (Under Description of Workings M220<	ctive) (Circle appropriate labels) erground) M140 (Both)
Cumulative Uranium Production PROD DH2 accuracy thousands of 1b. G74 U G7A4 G7A4 G7B4	years grade
Source of Information D9 <	
Production Comments D10 <	
Reserves and Potential Resources	
EH accuracy thousands of 1b. E1 U E1A E1A E1	year of est. grade B< <u>LB</u> > E1C< > E1D<
Source of Information E7 <	
Comments E8 <	

	Page 3
URANIUM-OCCURRENCE	Quad Name Portland
REPORT	Deposit No. 64
Deposit Form/Shape M10 < Irregular area	of anomalous radioactivity in boulder
Length M40 < 0.25 > M41 < m >	Size M15 (circle letter):
Width M50 < 0.12 > M51 <m></m>	1b U308
Thickness M60 < 0.12 > M61 <m></m>	A 0 - 20,000
Strike M70 <>	B 20,000 - 200,000 C 200,000 - 2 million
Dip M80 <>	D 2 million - 20 million E More than 20 million
Tectonic Setting N15 < Mobile B	elt
Major Regional Structures N5 < Bradbury	-Brunswick Pegmatite District
Local Structures N70 <	
Host-FM. Name U1 < Berwick Fm.	> Member U2 < Pegmatite
Host Rock K1 4 Peg	
alteration, attitude, geometry, structure	e, etc.)
Host-Rock Environment U3 < Sed. dep. envi	iron., metamorphic facies, ign. environ.)
Ore Minerals C30 < None observed	
Gangue Minerals K4 < Quartz, feldspar, b	iotite

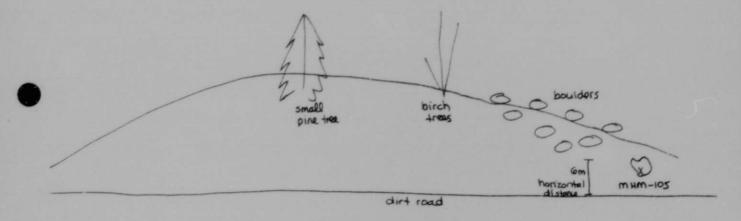
URANIUM-OCCURRENCE	Quad Name Portland
REPORT	Deposit No. 64
Alteration N75 < Discoloration	
Reductants U5 < Boulder partially buri	ed in bank
Analytical Data (General) C43 < 23 ppm	U ₃ 0 ₈ ; greater than 200 ppm YT
	x BG (50) in a .25 m x .12 m x .12 m area (No. times background and dimensions)
Ore Controls K5 <	>
Deposit Class C40 < Pegmatitic Comments on Geology N85 <	> Class No. U7 < 3, 2, 0

**** * *	www.	e mini		-
URA	NILUM	1-0C0	SURK	(ENG)

Quad Name	Portland	
Deposit No.	64	

Uranium Analyses:

Sample Description	Uranium Analysis
Chip of boulder	23 ppm U ₃ O ₈



>
-

REPORT

Quad	Name A90 Portland	
Quad	Scale A1004 2, 5, 0, 0, 0, 0p	
Depos	sit No. B40< 65	

Deposit No. 1940.
Deposit Name AlO < Tryon Mountain Occurrence >
Synonym Name(s) All <
District or Area A30 < Bradbury-Brunswick Pegmatite District >
Country A40 (U, S) U, S State Maine
State Code A50 42,3
Position from Prominent Locality A82 < From Pownal Center take Pownal Road west
2.0 km to intersection, go north 1.6 km to an old dirt road on the east side with
cable across front of it, walk road to top and go straight past fork to left in >
Field Checked Gl < 7,9 0.4 P By G2< Poer , Anne T > Yr Mo Last name First Initial
Latitude A70 44.3 H5.4 H3.4 ND Longitude A80 40.7.0 H1.1 H4.2 WD Deg Min Sec
Township A77 <
Meridian A81 < > Altitude A107 < 35 m >
Quad Scale A91 4 6,2,5,00 P Quad Name A92 < Freeport > (7½' or 15' quad)
Physiographic Province A63 <0 1 New England > (List K)
Location Comments A83 < Facing small half-circle shaped quarry, hot spot is 2 m
from right side, 1 m up from ground (tailings).
Location Sketch Map:
Tryon Mhn. m Hm-106
Bradbury man.
Powral center

BFE 1236 4/19/78

URANIUM-OCCURRENCE	Quad Name Portland
REPORT	Deposit No. 65
Commodities Present:	
Commodities Produced:	OPROD 4
MINOR 4	YPROD 4
Potential Commodities: POTEN 4 OCCUR <	U , , M,N , , , , , , , , , , , , ,
Commodity Comments C50 <	
	<u> </u>
Status of Exploration and Development A20 < (1 = occurrence, 2 = raw prospect, 3 = deve	
Comments on Exploration and Development L11	0 <
	,
Property is A21 (Active) (A22) (Inacti	ve) (Circle appropriate labels)
Workings are M120 (Surface) M130 (Underg	round) M140 (Both)
Description of Workings M220<	
	<u> </u>
Cumulative Uranium Production PROD	YES NO SML MED LGE (circle)
DH2 accuracy thousands of 1b. G74 U	years grade > G7C< > G7D<
Source of Information D9 <	<u> </u>
Production Comments D10 <	
	>
Reserves and Potential Resources	
EH accuracy thousands of 1b. E1 4 U	year of est. grade LB> ElC<
Source of Information E7 <	*

Comments E8 <

URANIUM-OCCURRENCE	Quad Name Portland
REPORT	Deposit No. 65
Deposit Form/Shape M10 < Irregular area of	anomalous radioactivity >
Length M40 < 0.3 > M41 < m >	Size M15 (circle letter):
Width M50 < 0.2 > M51 < m >	<u>1b U308</u>
Thickness M60 <0.05 > M61< _m >	A 0 - 20,000
Strike M70 <>	B 20,000 - 200,000 C 200,000 - 2 million
Dip M80 <>	D 2 million - 20 million E More than 20 million
Tectonic Setting N15 < Mobile Belt	>
Major Regional Structures N5 < Sebago Lake	Pluton
	· · · · · · · · · · · · · · · · · · ·
Local Structures N70 <	
	>
Host-FM. Name U1 < Two-mica granite	> Member U2 < Pegmatoid-granitoid >
Host Rock K1	
Lake granite. Pegmatoid pods and segregat	,
alteration, attitude, geometry, structure,	etc.)
	>
Host-Rock Environment U3 < Plutonic, synoro (Sed. dep. enviro	genic sheet batholith >
Comments on	
Associated Rocks U4 <	
	>
Ore Minerals C30 < None observed	
Gangue Minerals K4 < Feldspar, mus	covite, biotite

Ouad Name Portland

URANIUM-OCCURRENCE

REPORT	Deposit No.	65
Alteration N75 < None observed		
		
Reductants U5 <		
		>
Analytical Data (General) C43 < 180 ppm	n U ₃ 0 ₈ , 65000 ppm Mr	1
		<u> </u>
Radiometric Data (General) U6 < 14 to	20 times BG (70) ir	n a 30 cm x 20 cm x 5 cm ard and dimensions)
One-half acre pavement exposure has su	urface radioactivity	(SR) 200-400 cps. Anomalo
zones trending roughly N-S have SR 600	0-1000 cps. Gneisso	oid banding occurs in > *
Ore Controls K5 <		
		>
Deposit Class C40 < Pegmatitic		> Class No. U7 <3 2 0 >
Comments on Geology N85 < This mountain	is covered with qua	arries which are in giant-
crystal muscovite-biotite graphic gran	nite. SR of this ro	ock is low but rare
anomalies of up to 2100 cps occur in		
clusters are rarely mildly anomalous.		
		>

WHEN SHIP IN STREET	and the second second	
TITL A STATE	IM-OCCI	TITLE BY STATISTICS

Quad Name Portland

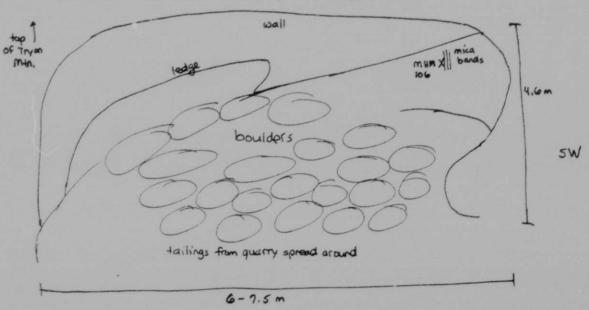
REPORT

65 Deposit No.

Uranium Analyses:

Sample No.	Sample Description	Uranium Analysis
MHM 106	Chip in area of anomalous radioactivity	180 ppm U ₃ 0 ₈

Geologic Sketch Map and/or Section, with Sample Locations:



References:		
F1 <		
72 <		
F3 <		
FA <		

NE

TITL A ST.T	TTRE MINI	CHERENCE
THANT	11/21-0100	REFNIE

Quad Name Portland
Deposit No. 65

REPORT

Continuation from p. 1-5:

Label

U6 < the southeastern exposure. Banding trends 150-160 deg. Anomalies occur in a zone about 1 m wide that follows the foliation of banding and has SR generally of 300-500 cps. This zone can be traced for at least 30 m. The 2100 cps anomaly occurs in humus-covered bedrock immediately NW of the northern-most dump pile of the small quarry at MHM 106.

One-Minu	te Spectr	ometer C	ounts	Ga	in 5.14				
Station	Totct	Kct	Uct	Thct	%eK	eUppm	eThppm		
01	18960	1431	696	270	4.09	24.84	32		
02	14490	1127	482	308	2.87	13.25	37.07		
03	28650	1888	1374	457	3.06	52.25	56.93		
04	17580	1355	655	344	3.39	20.60	41.87		
05	28400	1978	1217	624	3.44	39.55	79.20		
06	42280	2635	2186	558	3.80	88.81	70.4		
07	41980	2714	2097	551	4.73	84.68	69.47		
08	37500	2266	1672	829	2.19	55.54	106.53		
09	42080	2655	2153	476	4.50	89.68	59.47	>	

A82 < clearing, back in woods is small quarry pit to left of trail from which sample was taken, tailings all over area. >

	facies	>		0		

REPORT

Quad	Name A90<	Portland	>
Quad	Scale Al004	, 2, 5, 0, 0, 0, 0	
Depo	sit No. B40<	66	>

Deposit No. 840 06
Deposit Name AlO < Pownal Center Occurrence >
Synonym Name(s) All <>
District or Area A30 < Bradbury-Brunswick Pegmatite District >
Country A40 (U S) U S State Maine
State Code A50 < 2, 3 County A60 < Cumberland > (Enter code twice from List D)
Position from Prominent Locality A82 < 0.9 km east of Pownal Center, on Pownal Road
go northeast on dirt road to intersection of 3 used dirt roads and 1 old dirt road to
west, sample from outcrop in ridge 90 m west down old dirt road.
Field Checked Gl < 7,910,4p By G2< Poer , Anne T. > Yr Mo Last name First Initial
Latitude A70 4 4 3 5 3 5 4 ND Longitude A80 4 0 7 0 9 3 6 WD Deg Min Sec Deg Min Sec
Township A77 <
Meridian A81 < > Altitude A107 < 110 m >
Quad Scale A91 4 6,2,5,0,0> Quad Name A92 < Freeport > (7½' or 15' quad)
Physiographic Province A63 < 0,1 New England > (List K)
Location Comments A83 < Sample is 90 m west of dirt road, north of red house, in
second ridge which is 25 m from first ridge. Both parallel main dirt rd. to east.
Bradbury Men. State Park Pownal Corner Pownal Corner Pownal Corner Rf. 136

Pounal Rd. Rt. 136 and I-95

Yarmouth

URANIUM-OCCURRENCE	Quad Name _	Portland	
REPORT	Deposit No.	66	
Commodities Present: ,			
Commodities Produced:	COPRCO 4		
MINOR 4	BYPROD 4		
Potential Commodities: POTEN 4 OCCUR	⟨U , , , , , , , , , , , , , , , , , , ,		
Commodity Comments C50 <			-
Status of Exploration and Development A20 (1 = occurrence, 2 = raw prospect, 3 = de Comments on Exploration and Development L	veloped prospec	t, 4 = producer)	
Property is A21 (Active) (A22) (Inac Workings are M120 (Surface) M130 (Unde Description of Workings M220<			5)
Cumulative Uranium Production PROD DH2 accuracy thousands of 1b. G7 Q U	years	grade	
Source of Information D9 <			_>
Production Comments D10 <			
Reserves and Potential Resources EH accuracy thousands of 1b. Elqui P ElAq ElAq Elaq Elaq Elaq Elaq Elaq Elaq Elaq Ela			
Comments E8 <			

URANIUM-OCCURRENCE	Quad Name Portland
REPORT	Deposit No. 66
Deposit Form/Shape M10 < Circular area of FT/M	anomalous radioactivity
Length M40 < 0.3 > M41 < m >	Size M15 (circle letter):
Width M50 < 0.15 > M51< m >	1b U308
Thickness M60 < 0.05 > M61< m >	A 0 - 20,000 B 20,000 - 200,000
Strike M70 <>	C 200,000 - 2 million D 2 million - 20 million
Dip M80 <>	E More than 20 million
Tectonic Setting N15 Mobile Belt	
Major Regional Structures N5 < Bradbury-B	runswick Pegmatite District
Local Structures N70 <	
Host Rock Kl	> Member U2 < Pegmatite ite in biotite schist ock type, texture, composition, color,
alteration, attitude, geometry, structure,	etc.)
Comments on	llimanite facies on., metamorphic facies, ign. environ.)
Ore Minerals C30 < None observed	
Gangue Minerals K4 < Quartz, feldspar	

URANIUM-OCCURRENCE Quad Name Portland REPORT Deposit No. 66 Alteration N75 < None observed Reductants U5 < Analytical Data (General) C43 < 30 ppm U₃O₉ Radiometric Data (General) U6 < 12 to 16 times BG (50) in a 0.3 m \times 0.15 m \times (No. times background and dimensions) 0.05 m area Ore Controls K5 < Deposit Class C40 < Pegmatitic > Class No. U7 <3 2 0 >

Comments on Geology N85 <

Quad	Name Po	rtland	

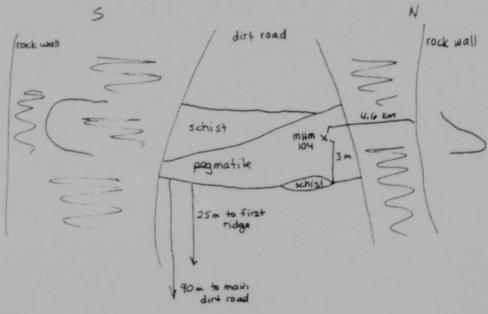
REPORT

Deposit No. 66

Uranium Analyses:

Sample No.	Sample Description	Uranium Analysis
MHM 104	Chip across area of anomalous radioactivity	30 ppm U ₃ 0 ₈

Geologic Sketch Map and/or Section, with Sample Locations:



References:

r1 <	
72 <	
F3 <	
Ph <	

URANIUM-OCCURRENCE	Quad Name A90< Portland	>
REPORT	Quad Scale A1004 , 2, 5, 0, 0, 0, 0	
and the same	Deposit No. B40< 67	>
Deposit Name AlO < I-95 Occurrence		>
Synonym Name(s) All <		>
District or Area A30 <bradbury-brunswi< td=""><td>ck Pegmatite District</td><td>></td></bradbury-brunswi<>	ck Pegmatite District	>
Country A40 4U SP U S	State Maine	
State Code A50 42,30 [2,3] (Enter code twice from List D)	County A60 < Cumberland	>
Position from Prominent Locality A82	<on and="" e<="" lane="" of="" side="" southbound="" td="" west=""><td>ast side</td></on>	ast side
of northbound lane of I-95, 6.5 km sou	uth of Rte. 1 exit and 2.4 km north of	northbou
exit off I-95 to Brunswick.		>
	Poer and Wagener , First Ini	>
	Poer and Wagener , First Ini	>
Field Checked Gl < 7,9 0,40 By G2< Yr Mo	Poer and Wagener Last name First Ini ongitude A80 9 0, 7, 0 10, 4 4, 3 WP Deg Min Sec	>
Field Checked G1 < 7,9 0,4 By G2 < Yr Mo Latitude A70 < 4,3 5,3 5,8 N Lo Deg Min Sec Township A77 <	Poer and Wagener Last name First Ini ongitude A80 9 0, 7, 0 10, 4 4, 3 WP Deg Min Sec	> tial FT/M
Field Checked G1 < 7,9 0,4 By G2 < Yr Mo Latitude A70 < 4,3 5,3 5,8 MP Lo Deg Min Sec Township A77 <	Poer and Wagener Last name First Ini ongitude A80 9 0, 7, 0H 0, 4H 4, 3 WP Deg Min Sec 4 1 1 P Section A79 9 P E/W	tial >
Field Checked G1 < 7,9 0,4 By G2 < Yr Mo Latitude A70 < 4,3 5,3 5,8 M Lo Deg Min Sec Township A77 < Range A78 < Meridian A81 < Quad Scale A91 < 6,2,5,0,0	Poer and Wagener Last name First Ini Ongitude A80 9 0, 7, 0 10, 41 4, 3 WP Deg Min Sec 9 1 1 P Section A79 9 P E/W Altitude A107 < 55 m Quad Name A92 < Freeport, Maine	tial >
Field Checked G1 < 7,9 0,4 By G2 < Yr Mo Latitude A70 < 4,3 5,3 5,8 N Lo Deg Min Sec Township A77 <	Poer and Wagener Last name First Ini Ongitude A80 9 0, 7, 0 10, 41 4, 3 WP Deg Min Sec 9 1 1 P Section A79 9 P E/W Altitude A107 < 55 m Quad Name A92 < Freeport, Maine	> tial > FT/M > > > > > > > > > > > > > > > > > > >

Rt. 1 exit Location Sketch Map: Brunswick N 24.1 2.0 northbound exit to

Brunswick and entrance

Freeport

BFE |236 4/19/78

	Page Z
URANIUM-OCCURRENCE	Quad Name Portland
REPORT	Deposit No. 67
Commodities Present:	
Commodities Produced:	> COPROD 4
MINOR 4	P BYPROD 4
Potential Commodities:	CUR QUI
Commodity Comments C50 <	
Status of Exploration and Development (1 = occurrence, 2 = raw prospect, 3 = Comments on Exploration and Development	developed prospect, 4 = producer)
Property is A21 (Active) A22 (I Workings are M120 (Surface) M130 (U Description of Workings M220<	nactive) (Circle appropriate labels) Inderground) M140 (Both)
Cumulative Uranium Production PROD DH2 accuracy thousands of 1b. G7 Q U	YES NO SML MED LGE (circle) years grade B <lb> G7C< > G7D< % U308</lb>
Source of Information D9 <	
Production Comments D10 <	
Reserves and Potential Resources	
EH accuracy thousands of 1b.	year of est. grade E1B <lb> E1C <pre># B1D</pre> ### U308</lb>

Source of Information E7 <

Comments E8 <___

URANIUM-OCCURRENCE	Quad Name Portland
REPORT	Deposit No. 67
Deposit Form/Shape M10 : Irregular zone of	anomalous radioactivity in a pegmatite
Length M40 < 0.10 > M41 < m >	Size M15 (circle letter):
Width M50 < 0.3 > M51 < m >	1b U308
Thickness M60 < 0.15 > M61 < m >	A 0 - 20,000
Strike M70 <>	B 20,000 - 200,000 C 200,000 - 2 million
Dip M80 <>	D 2 million - 20 million E More than 20 million
Tectonic Setting N15 < _ Mobile Belt	
Major Regional Structures N5 <	
Host-FM. Name U1 < Berwick Host Rock K1 <	nitoid-pegmatoid rock. Generally con-
Host-Rock Environment U3 <	
Comments on	on., metamorphic facies, ign. environ.)
Associated Rocks U4 < Country Rock is mas	sive granitoid metagraywacke (?) and
amphibolite.	
Ore Minerals C30 < None observed.	
Gangue Minerals K4 < Quartz, feldspar	

URANIUM-OCCURRENCE	Quad Name Portland
REPORT	Deposit No. 67
Alteration N75 < None	
	>
Reductants U5 <	
Analytical Data (General) C43 < 17 to 3	94 ppm U ₃ 0 ₈
Radiometric Data (General) U6 < MHM 10	l is a spot anomaly in otherwise non-
	o. times background and dimensions)
nomalous pegmatite (maximum surface rad	ioactivity (SR) 500 cps). At locality
HM 064, surface radioactivity (SR) of p	egmatite is generally 300 to 500 cps
Ore Controls K5 < Differentiation in gr	anitic magma, and separation of uraniferou
pegamtite-forming fluids.	
Deposit Class C40 < Pegmatitic	> Class No. U7 <3 2 0
Comments on Geology N85 <	

Quad Name Portland

REPORT

Deposit No. 67

Uranium Analyses:

Sample No.	Sample Description	Uranium Analysis
MHM 101	Chip from area of anomalous radioactivity (500 cps	17 ppm U ₃ 0 ₈
MHM 064	Sample taken from area of maximum radioactivity (1800 cps)	394 ppm U ₃ 0g
MHM 065	Chip samples from anomalous zone (400-900 cps)	137 ppm U ₃ O ₃

Geologic Sketch Map and/or Section, with Sample Locations:

N 5 SMHM-IOI I-95 southbound lane 60m to culvert References: F1 < F2 <

Quad Name Portland

REPORT

Deposit No. 67

Continuation from p. 1-5:

Label

A83 < bound lane of I-95, 0.50 km south of the Freeport-Brunswick town line.

MHM 064 was taken 57 m north of the southern end of the exposure.

MHM 065 is 40 m north of MHM 064. >

U6 < with spot anomalies of 800 and 1800 cps; at locality MHM 065, pegmatite

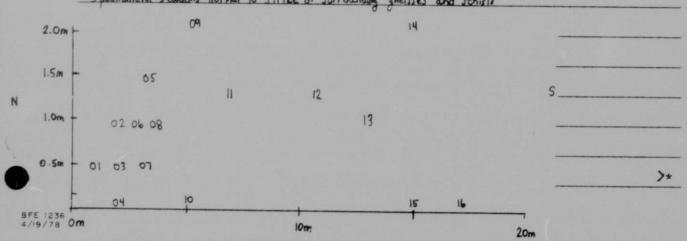
has SR 200-400 cps, except near its northern contact, where a zone about

3 m long has SR 400-900 cps. These readings taken against BG of 80 cps.

One-Minute Spectrometer Counts

MHM 064

Station	Totet	Ket	Uct	Thet	%eK	eUppm	eThppm	
01	17950	1642	786	79	6.10	35.01	6.53	
02	49650	2825	2875	153	4.16	134.67	16.40	
03	30190	2115	1616	92	5.44	75.10	8.27	
04	24320	1698	1253	95	4.32	57.30		
05	28340	2254	1366	101	6.27	58.88	8.67	
06	2738	2002	1454	107	7.36	62.45	9.47	
07	25850	1791	1377	106	5.35	66.68	10.27	
08	24840	2229	1191	104	7.99	54.01	10.13	
09	30250	2278	1553	113	6.66		9.87	
10	18090	1652	736	59	6.49	71.39	11.07	
11	12420	1230	454	55	5.02	33.17	3.87	
12	21220	1927	934	117	7.09	19.54	3.33	
13	45120	3139	2217	159		41.08	11.60	
14	15970	1397	716	86	9.07	102.39	17.20	
15	20150	1624	909	79	4.78	31.38	7.47	
16	19780	1705	909	94	5.44	41.00	6.53	
	er Stations no				5.89	40.55	8.53	



Quad Name Portland

REPORT

Deposit No. 67

Continuation from p. 6:

Label

N

U6 < Spectrometer Station MHMO65

06 10 13 16
02 06 09 12 15 S
04 08 14

MHM 065

One-Minute !	Spectrome	ter Cour	nts				
Station	Totct	Ket	Uct	Thct	%eK	eUppm	eThppm
01	25690	1956	1256	152	5.67	55.72	16.27
02	33720	2609	1715	182	7.70	77.11	20.67
03	32360	2465	1642	136	7.36	75.04	14.13
04	27190	2096	1332	148	6.27	59.55	15.73
05	24920	2145	1199	148	7.17	53.06	15.73
06	25950	-2211	1267	165	7.21	55.87	13.00
07	41000	3286	3210	421	4.23	142.91	52,13
08	39920	2904	2167	179	7.66	99.35	19.87
09	30380	2095	1579	135	5.24	71.99	14.00
10	27530	1855	1491	158	3.95	67.01	17.07
11	20930	1964	901	106	7.54	39.80	10.13
12	26320	2013	1341	126	5.81	60.66	12.30
13	29280	2199	1455	140	6.44	65.79	14.67
14	21110	1482	944	216	3.63	38.57	24.30
15	29280	1740	1599	218	2.40	70.46	25.07
16	21450	1481	1021	159	3.59	44.05	17.20

URANIUM-OCCURRENCE Quad Name Portland Daposit No 67 REPORT Continuation from p. 7: Label U6 < MHM 101 One-Minute Spectrometer Counts Station Totat Kat Uct That Mek eUppm eThopm Sample Site 26110 2024 1328 160 5.75 58.99 17.33 1 m north of Sample Site 23350 1967 1069 136 6.65 47.09 14.13 1 m below Sample Site 26730 2175 1312 163 6.79 58.12 17.73

Ü	RA	IN	I	UM-	0	CC	U	R	R	E	V	C	E

REPORT

Quad	Name A9	90< Portland	
Quad	Scale A	A100< 12, 5, 0, 0, 0, 0p	
Depos	sit No.	B40< 68	

Deposit No. B40< 68
Deposit Name AlO < Route 1 Occurrence
Synonym Name(s) All <
District or Area A30 < Bradbury-Brunswick Pegmatite District
Country A40 QU SP [U S] State Maine
State Code A50 <2.3 County A60 < <u>Cumberland</u> (Enter code twice from List D)
Position from Prominent Locality A82 < Outcrop is in ridge on west side of Rt. 1
0.25 km south of Freeport-Brunswick Town Line, 0.3 km north of dirt road to west
cross from antique store. Ridge is 60 m behind white mobile home trimmed in red.
Field Checked G1 < 790.4 P By G2 Poer Anne T Initial
Latitude A70 4 3 5 3 4 9 ND Longitude A80 40,7,0 H 0,3 WD Deg Min Sec
Township A77 <
Meridian A81 < > Altitude A107 < 55 m :
Quad Scale A91 4 6,2,5,0,0 Quad Name A92 < Freeport (7½' or 15' quad)
Physiographic Province A63 <0 1 New England (List K)
Location Comments A83 <sample 40="" behind="" from="" in="" is="" line<="" m="" n80w="" td="" trailer="" treehouse=""></sample>
nd 1.5 m from old road or trail
Location Sketch Map:
Figure 1.0 2.0

	IUM			

URANIUM-OCCURRENCE	Quad Name Portland
REPORT	Deposit No. 68
Commodities Present:	
Commodities Produced:	COPROD 4
INOR 4	BYPROD 4
Potential Commodities:	UR <u< td=""></u<>
Commodity Comments C50 <	
Status of Exploration and Development Al (1 = occurrence, 2 = raw prospect, 3 = o Comments on Exploration and Development	developed prospect, 4 = producer)
Property is A21 (Active) (A22) (In: Workings are M120 (Surface) M130 (UnDescription of Workings M220<	active) (Circle appropriate labels) derground) M140 (Both)
Cumulative Uranium Production PROD DH2 accuracy thousands of 1b. G7 U	> G/D<
	·
Reserves and Potential Resources	
Eld I Eld	year of est. grade E1B <lb> E1C<</lb>
Source of Information E7 <	
Comments E8 <	
	and the state of the state of the state of

URANIUM-OCCURRENCE	Quad Name Portland
REPORT	Deposit No. 68
Deposit Form/Shape M10 < Circular area	of anomalous radioactivity
Length M40 < 0.6 > M41 < m >	Size M15 (circle letter):
Width M50 < 0.3 > M51 < m >	1b U308
Thickness M60 < 0.09 > M61< m >	A 0 - 20,000
Strike M70 <>	B 20,000 - 200,000 C 200,000 - 2 million
Dip M80 <>	D 2 million - 20 million E More than 20 million
Tectonic Setting N15 < Mobile 1	Belt
Major Regional Structures N5 < Bradbur	y-Brunswick Pegmatite District
Local Structures N70 <	
Hart TW. War III & Bowrick En	h W 1 W2 - Demotite
	> Member U2 < Pegmatite
Host Rock Kl (Age)	Rock type, texture, composition, color,
alteration, attitude, geometry, structur	re, etc.)
Host-Rock Environment U3 <	
Comur ts on	viron., metamorphic facies, ign. environ.)
Associated Rocks U4 <	
Ore Minerals C30 < None observed	
Gangue Minerals K4 < Quartz, feldspar	

URANIUM-OCCURRENCE	Quad Name	Portland
REPORT	Deposit No.	68
Alteration N75 < None observed		
Reductants U5 <		<u> </u>
Analytical Data (General) C43 <	83 ppm U ₃ O ₈	<u> </u>
Radiometric Data (General) U6 < 20 to	0 40 times BG (50) i (No. times background	n a 0.65 x 0.30 y 0.10 m und and dimensions)
Ore Controls K5 <		>
	·	
Comments on Coology N95		> Class No. U7 <3 2 0

			ENCH

Quad Name Portland

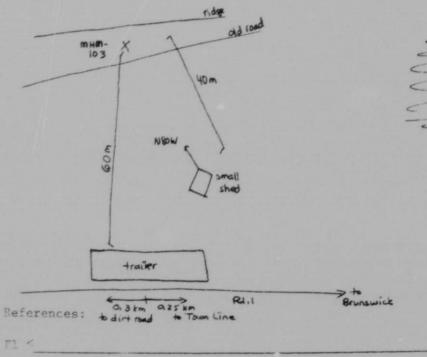
Deposit No. 68

REPORT

Uranium Analyses:

Sample No.	Sample Description	Uranium Analysis
MHM 103	Chip across area of anomalous radioactivity	83 ppm U ₃ 0 ₈

Geologic Sketch Map and/or Section, with Sample Locations:





enlargement of exposed area on ridge from which sample was taken

72 <	

REPORT

Quad	Name A90< Por	rtland	>
Quad	Scale Al00	, 2, 5, 0, 0, 0, 0	
Depo	sit No. B40<	69	- 3

Deposit No. B40< 69 >
Deposit Name AlO < Growstown Occurrence >
Synonym Name(s) All <
District or Area A30 < Bradbury-Brunswick Pegmatite District
Country A40 QU, SP [U, S] State Maine
State Code A50 < 2 3
Position from Prominent Locality A82 < Outcrop is in Growstown, south of Brunswick
on east side of Church Road 0.4 km north of intersection with Raymond Road and 160
south of intersection with road to east >
Field Checked Gl < 7 9 0 4 P By G2 < Poer , Anne T. > Yr Mo Last name First Initial
Latitude A70 4 3 5 3 5 1 NP Longitude A80 40.7.0 H0.0 H0.0 WP Deg Min Sec Deg Min Sec
Township A77 <
Meridian A81 < > Altitude A107 < 42 m >
Quad Scale A91 4 6 2 5 0 0 Quad Name A92 < Freeport > (7½' or 15' quad)
Physiographic Province A63 <0 1 New England > (List K)
Location Comments A83 < Sample is 0.5 m to right of telephone pole, 1.5 m up from
road level, 3 - 5 m off of road (horiz. distance), 17 m south of large block of
Location Sketch Map:
T-95 Prinswick N
200 km
4.11 Rd. 20.

BFE 1236 4/19/78

TIRA	 40 00	DESCRIPTION OF THE PARTY OF THE		
111111111111111111111111111111111111111	 m = 0	10.0	52 N. I.C	

DRAN LUM-OCCURRENCE	Quad Name Portland
REPORT	Deposit No. 69
Commodities Present:	
Commodities Produced:	COPROD 4
MINOR 4	BYPROD 4
Potential Commodities:	< <u>U, , , , , , , , , , , , , , , , , , ,</u>
Commodity Comments C50 <	,
Status of Exploration and Development A20 (1 = occurrence, 2 = raw prospect, 3 = de Comments on Exploration and Development L	veloped prospect, 4 = producer)
Property is A21 (Active) (A22) (Inac Workings are M120 (Surface) M130 (Unde	tive) (Circle appropriate labels)
Description of Workings M220<	rground) m140 (Both)
Cumulative Uranium Production PROD DH2 accuracy thousands of lb. G74 U G784 G784 G784	YES NO SML MED LGE (circle) years grade B> G7C< > G7D< % U308>
Source of Information D9 <	<u> </u>
Production Comments D10 <	
Reserves and Potential Resources	
ELACTIC ELACTIC ELACTIC ELACTIC ELACTIC ELECTRICA EL ELECTRICA EL ELECTRICA EL	year of est. grade 3 <lb> E1C<</lb>
Source of Information E7 <	<u> </u>
Comments E8 <	

URANIUM-OCCURRENCE	Quad Name Portland	
REPORT .	Deposit No. 69	
Deposit Form/Shape M10 < circular area of	anomalous radioactivity	>
Length M40 < 0.2 > M41 < M >	Size M15 (circle letter):	
Width M50 < 0.25 > M51 < M >	1b U308	
Thickness M60 < 0.04 > M61< M >	A 0 - 20,000	
Strike M70 <>	B 20,000 - 200,000 C 200,000 - 2 million	
	D 2 million - 20 million E More than 20 million	
Tectonic Setting N15 < Mobile Bel	t	_>
Major Regional Structures N5 < Bradbury-B	runswick Pegmatite District	
		_>
Local Structures N70 <	1.	
		>
Host-FM. Name U1 < Cushing Fm.	> Member U2 < Pegmatite	>
Host Rock K1 4	tite with segregated band of biotite	locate
	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	
above hottest spot (2500 cps) and to left alteration, attitude, geometry, structure,	of sampled spot (700-2000 cps) etc.)	
		>
Host-Rock Environment U3 <		>
(Sed. dep. environments on	on., metamorphic facies, ign. environ.)
Associated Rocks U4 <		_
		1
		_>
Ore Minerals C30 < None observed		
Z Company of the Comp		>
Gangue Minerals K4 < Quartz, feldspar		

URANIUM-OCCURRENCE	Quad Name Portland
REPORT	Deposit No. 69
Alteration N75 < None observed	
	,
Reductants U5 < Outcrop partially	covered by shallow soil vegetation
Analytical Data (General) C43 <	57 ppm U ₃ O ₃
	,
Radiometric Data ('eneral) U6 <	(No. times background and dimensions)
area	
	·
Ore Controls K5 <	
	The second secon
Deposit Class C40 < Pegmatitic	> Class No. U7 < 3, 2, 0>
Comments on Geology N85 <	

Quad Name Portland

REPORT

Deposit No. 69

Uranium Analyses:

Sample No.	Sample Description Uranium A		
MHM 102	Chip from area of anomalous radioactivity	57 ppm U ₃ O ₈	

Geologic Sketch Map and/or Section, with Sample Locations:

			telephone pole		
N				5	
			T 7 mum-	/ Crock	
	rock		1.5 m up from road (vertical)		
			1	bushes	
rock			3-5 m back from road (norizontal)		
1002					
1002		_	rock		
		_		Chun	ch Ro
References:				Chun	ch Ro
				Chun	ch Ro
References:				Chur	ch Ro
References:				Chun	ch Ro
References:				Chun	ch Ro
References:			rock	Chun	ch Ro
References:				Chur	ch Ro
References:			rock	Chur	ch Ro
References:			rock	Chun	ch Ro

REPORT

Quad	Name _	Portland	
Depos	sit No.	69	

Deposit no0;	
Continuation from p. 1-5:	
<u>Label</u>	
A83 < rock at north end of outcrop. >	

*	4 27	~ .	***		200	PS 8 1	m.	m	9791		~	۰
м.	AN	-	m.	-	-	•	-	×	-	DU I	•	
ĸ.	227.4	2. %	28:3		100		20	ĸ.	-	•	м.	٠.

REPORT

Quad	Name	A90<	Portland	
Quad	Scale	A1004	2. 5, 0, 0, 0, 0	
Depoi	sit No	. B40<	70	3

Deposit No. B40< 70 >	
Deposit Name AlO < Flying Point Road Occurrence >	
Synonym Name(s) All <>	
District or Area A30 < Bradbury-Brunswick Pegmatite District >	
Country A40 (U, S) (U, S) State Maine	
State Code A50 92,30 2 3 County A60 < Cumberland > (Enter code twice from List D)	
Position from Prominent Locality A82 < 2 km south of intersection at Runganuc Landi	ng
2.1 km north of intersection with road leading to Flying Point Neck	
Field Checked Gl < 7,9 0,4 By G2 Bruton , Keith A > Yr ho Last name First Initial	
Latitude A70 44,3H5,1H0,1,NP Longitude A80 40 7 0 H0 2 H1 2 WP Deg Min Sec Deg Min Sec	
Township A77 <	
Meridian A81 < > Altitude A107 < 24 m >	
Quad Scale A91 4 6,2,5,0,0 Quad Name A92 < Freeport > (7½' or 15' quad)	
Physiographic Province A63 <0,1 New England > (List K)	
Location Commencs A83 < Outcrop on east side of Flying Point Road, 2.1 km	
north of intersection with road to Flying Point Neck, or 2 km south of Bunganuc >	*
Location Sketch Map: N N N N N N N N N	
Aller Elika	

Flying foint Neck

Portland |

URANT		

REPORT Deposit No. 70
Commodities Present:
Commodities Produced: MAJOR Q COPROD Q
MINOR 4 BYPROD 4
Potential Commodities: POTEN 4 OCCUR 4 U
Commodity Comments C50 <
Status of Exploration and Development A20 < 1 > (1 = occurrence, 2 = raw prospect, 3 = developed prospect, 4 = producer) Comments on Exploration and Development L110 <
Property is A21 (Active) (A22) (Inactive) (Circle appropriate labels) Workings are M120 (Surface) M130 (Underground) M140 (Both) Description of Workings M220<
Cumulative Uranium Production PROD YES NO SML MED LGE (circle) DH2 accuracy thousands of 1b. years grade G7 U
Production Comments D10 <
Reserves and Potential Resources EH accuracy thousands of lb. year of est. grade EI U
Source of Information E7 <
Comments E8 <

	URANIUM-OCCURRENCE	Quad Name Portland	-
	REPORT	Deposit No. 70	
Deposit Fo	orm/Shape M10 < Area of ano	malous radioactivity	>
	M40 < FT/M >		
Vidth	M50 <> M51<>	<u>1b U308</u>	
Thickness	M60 <> M61<>	© 0 - 20,000 B 20,000 - 200,000	
Strike	M70 <>	C 200,000 - 2 million D 2 million - 20 million	
Dip	M80 <>	E More than 20 million	
Tectonic S	Setting N15 < Mobile Belt		>
lajor Regi	ional Structures N5 < East flank o	of Cushing Anticline of the Casco Bay	Grou -
			_>
Local Str	uctures N70 <		
			_
			- >
Host-FM.	Name U1 < Cushing Fm	> Member U2 < Peqmatite	- > >
		> Member U2 < Pegmatite rse grained, iron stained, pegmatite	_ > _ >
	KI 4 L L L L L L L L L L L L L L L L L L	> Member U2 < Pegmatite rse grained, iron stained, pegmatite ck type, texture, composition, color,	_ > _ > _ compo
Host Rock	(Age) (Ro	rse grained, iron stained, pegmatite ck type, texture, composition, color,	_ > _ > _ compo
Host Rock	(Age) (Ro	rse grained, iron stained, pegmatite ck type, texture, composition, color,	_ > _> _compo
Host Rock	(Age) (Ro	rse grained, iron stained, pegmatite ck type, texture, composition, color,	_ > _> compo
Host Rock	(Age) (Ro	rse grained, iron stained, pegmatite ck type, texture, composition, color,	_ > _ > _ compo
of clear alteratio	(Age) (Ro to smoky quartz, biotite and fellon, attitude, geometry, structure,	rse grained, iron stained, pegmatite ck type, texture, composition, color, dspar etc.)	- >
Of clear alteratio	(Age) (Ro to smoky quartz, biotite and fellon, attitude, geometry, structure, Environment U3 < (Sed. dep. environment us)	rse grained, iron stained, pegmatite ck type, texture, composition, color,	- >
Of clear alteratio	(Age) (Ro to smoky quartz, biotite and fellon, attitude, geometry, structure, Environment U3 < (Sed. dep. environment U3)	rse grained, iron stained, pegmatite ck type, texture, composition, color, dspar etc.)	- - - - -
Of clear alteratio Host-Rock Comments Associate	(Age) (Ro to smoky quartz, biotite and fellon, attitude, geometry, structure, Environment U3 < (Sed. dep. environment U3)	rse grained, iron stained, pegmatite ck type, texture, composition, color, dspar etc.)	- - - - -
Of clear alteratio Host-Rock Comments Associate	(Age) (Ro to smoky quartz, biotite and fellow, attitude, geometry, structure, (Sed. dep. environment U3 < (Sed. d	rse grained, iron stained, pegmatite ck type, texture, composition, color, dspar etc.)	- - - - -
Of clear alteratio Host-Rock Comments Associate N39E and	(Age) (Ro to smoky quartz, biotite and fellow, attitude, geometry, structure, (Sed. dep. environment U3 < (Sed. d	rse grained, iron stained, pegmatite ck type, texture, composition, color, dspar etc.)	- - - - -
Of clear alteratio Host-Rock Comments Associate N39E and	(Age) (Ro to smoky quartz, biotite and fellow, attitude, geometry, structure, (Sed. dep. environment U3 < (Sed. d	rse grained, iron stained, pegmatite ck type, texture, composition, color, dspar etc.)	- - - - -
Of clear alteratio Host-Rock Comments Associate N39E and	(Age) (Ro to smoky quartz, biotite and fellow, attitude, geometry, structure, (Sed. dep. environment U3 < (Sed. d	rse grained, iron stained, pegmatite ck type, texture, composition, color, dspar etc.) on., metamorphic facies, ign. environ. into biotite gneiss with a strike of	- - - - -

REPORT	Deposit No. 70
Alteration N75 < Hematite-stainin	ng in pegmatite
	<u> </u>
Reductants U5 <	
	·
Analytical Data (General) C43 < 50 pp	m U ₃ O ₈
	>
Radiometric Data (General) U6 < BG 50	0-60 cps, biotite gneiss 50-120 cps, pegmatite
	(No. times background and dimensions)
	te averages 200-400 cps
	
Ore Controls K5 <	
	> Class No. U7 < 31210
Comments on Geology N85 <	

-	AND DESCRIPTION OF THE PARTY NAMED IN		
TID A ST	IUM-OC	CHERR	TO KI COL
UPLANT	レルビーいし	ルルフちお	7.174.6.12

Quad Name Portland

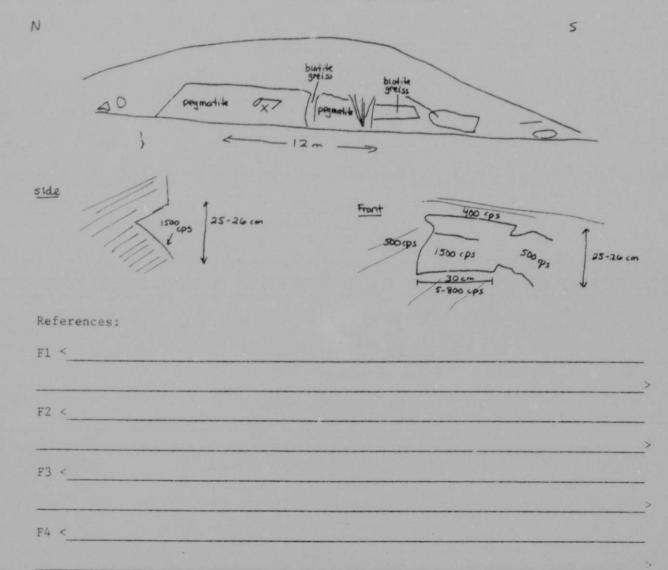
REPORT

Deposit No. 70

Uranium Analyses:

Sample No.	Sample Description	Uranium Analysis
MHM 301	Chip sample from most radioactive spot	50 ppm U ₃ 0 ₈

Geologic Sketch Map and/or Section, with Sample Locations:



UNANTON-OCCURRENCE						Quad Name For Cland				
REPORT						Deposit No. 70				
Continuation from p. 1-5:										
Labe	1									
A83	<	Landing	g. >							
U6	4	2.0 mir	nute sp	ectrome	ter cour	nt, det	ector 0	.6 m from	anomaly	
-		Totct	Kct	Uct	Thet	%eK	eUppm	eThppm		
		16320	1321	547	134	2.05	10.37	4.93	>	
							779			
		1								
				N						
-										
-										
-										
-										

U	R	AN	II	JМ	-0	C	CU	R	R	El	Œ1	CI

REPORT

Quad	Name A90Portland	
Quad	Scale A1004 , 2, 5, 0, 0, 0, 0	
Depo	sit No. B40< 71	

Deposit No. B404/1
Deposit Name AlO < Hunter Road Occurrence
Synonym Name(s) All <
District or Area A30 < Bradbury-Brunswick Pegmatite District
Country A40 qu, SP [U, S] State Maine
State Code A50 <2.3 p [2.3] County A60 < Cumberland (Enter code twice from List D)
Position from Prominent Locality A82 <150 m east of intersection of Webster Rd.
and Hunter Rd., north side of Hunter Rd., west of Freeport, Me.
Field Checked Gl < 7,8 10 p By G2 < Bruton and Poer , Yr Mo Last name First Initial
Latitude A70 4 3 1 5 1 5 1 NP Longitude A80 40 7 0 H0 9 H5 1 WP Deg Min Sec
Township A77 <
Meridian A81 < > Altitude A107 < 60 m
Quad Scale A91 4 6, 2, 5, 0, 0 Quad Name A92 < Freeport (7½' or 15' quad)
Physiographic Province A63 < 0, 1 New England (List K)
Location Comments A83 < Sampled area 8 m east of west end of outcrop 1 m up
from ditch
Location Sketch Map:
1
W Mercill Rd Paurel & E 0 1.0 2.0 N
\ \\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\
150 m mil at
mum-052
0.25 km Hunk Free port
Perent Proport
Desert of Marka R.

BFE 1236 4/19/78

OTTO TO STATE OF THE STATE OF T	Vada Name Torcrand
REPORT	Deposit No. 71
Commodities Present:	
Commodities Produced:	COPROD 4
MINOR 4	BYPROD 4
Potential Commodities:	4 <u>U, , , B,A, , , , , , </u>
Commodity Comments C50 <	
Status of Exploration and Development A20 (1 = occurrence, 2 = raw prospect, 3 = dev Comments on Exploration and Development L1	eloped prospect, 4 = producer)
Property is A21 (Active) (A22) (Inact Workings are M120 (Surface) M130 (Under Description of Workings M220<	
Cumulative Uranium Production PROD DH2 accuracy thousands of 1b. G74 U	YES NO SML MED LGE (circle) years grade
Production Comments D10 <	
	year of est. grade <u>LB> E1C< </u>
Comments E8 <	

URANIUM-OCCURRENCE	Quad Name Portland
REPORT	Deposit No. 71
Deposit Form/Shape M10 < Irregular disem	ination >
FT/M	Size Ml5 (circle letter):
Width M50 < 0.15 > M51 < M >	1b U308
Thickness M60 < 0.20 > M61 < M > Strike M70 < > Dip M80 < > Tectonic Secting N15 < Mobile Belt	© 0 - 20,000 B 20,000 - 200,000 C 200,000 - 2 million D 2 million - 20 million E More than 20 million
Major Regional Structures N5 < Bradbury	-Brunswick Pegmatite District
Host Rock K1 4 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	> Member U2 < Pegmatite > matite (Rock type, texture, composition, color,
alteration, attitude, geometry, structure	e, etc.)
Host-Rock Environment U3 < Pegmatite inj (Sed. dep. env: Comments on Associated Rocks U4 < Pegmatite dike loca are quartzite, calcareous metasedimentar	iron., metamorphic facies, ign. environ.) ated in granite, also present in outcrop
Ore Minerals C30 < None observed	
Gangue Minerals K4 < Quartz, feldspar	

URANIUM-OCCURRENCE	Quad Name Fortiand
REPORT	Deposit No. 71
Alteration N75 <none observed<="" td=""><td></td></none>	
Reductants U5 <	
	>
Analytical Data (General) C43 < 24 ppr	m U ₃ O ₈ , 700 ppm BA
Radiometric Data (General) U6 < BG 70	, rock 200-600 cps, sampled area 400 cps (No. times background and dimensions)
	(No. 21mes background and dimensions)
Ore Controls K5 <	
Deposit Class C40 < Pegmatitic	> Class No. U7 <3,2,0
Comments on Geology N85 <	

URANTUM-OCCURRENC	

Quad Name Portland

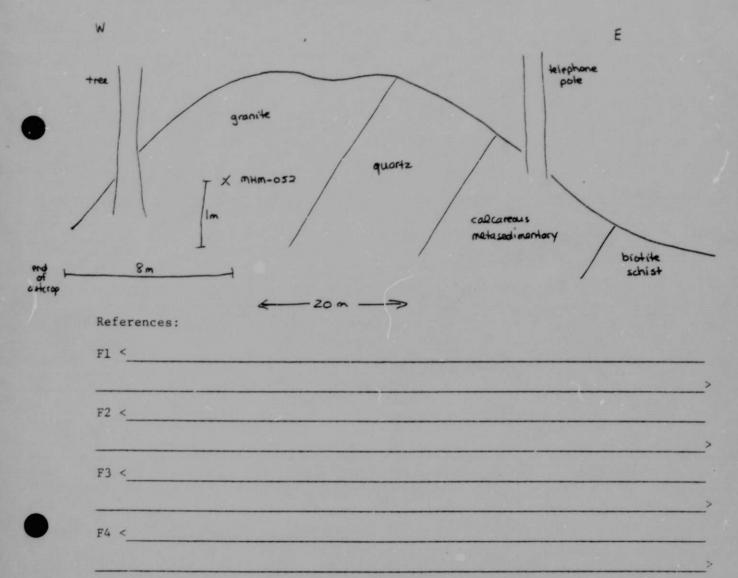
REPORT

Deposit No. 7]

Uranium Analyses:

Sample No.	Sample Description	Uranium Analysis		
ИНМ 052	Chip of pegmatite	24 ppm U ₃ 0 ₈		
-				

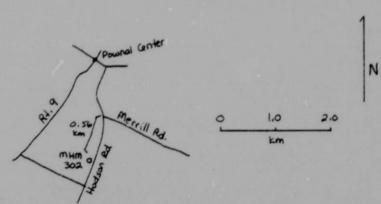
Geologic Sketch Map and/or Section, with Sample Locations:



REPORT

Quad	Name A90<	Portland	
Quad	Scale Al00<	1 , 2, 5, 0, 0, 0, 0	
Depos	sit No. B40<	72	- 3

Deposit Name AlO < Hodson Road Occ	currence		>
Synonym Name(s) All <			>
District or Area A30 < Bradbury-Brun	nswick Pegmatite Di	strict	>
Country A40 QU SP U S	State Maine		
State Code A50 \triangleleft 2, 3 \triangleright \mid 2, 3 \mid (Enter code twice from List D)	County A60 <_	Cumberland	>
Position from Prominent Locality A82	2 < From Pownal Ce	nter travel east o	n Pownal Roa
ake Hodson Road south off of Pownal			
unction with Merrill Road			>
Field Checked G1 < 7,9 0,4 By G	2< Bruton Last name	, <u>Keith</u> First	A. >
Latitude A70 44,3 H 5,2 H 2,9, NP Deg Min Sec	Longitude A80 40,	7.0H 1.1H 5.5.WP g Min Sec	
Township A77 <	Secti	on A79 4P	
N/S	E/W		FT/M
Meridian A81 <	> Alti	tude A107 < 49 m	>
Quad Scale A91 (7½' or 15' quad)	Quad Name A92	< Freeport	>
Physiographic Province A63 (0,1) (List K)	New England		>
Location Comments A83 < Outcrop or	n west side of Hods	on Road .56 km sou	ith of
ntersection with Merrill Road, outc	rop in pulloff in f	ront of green hous	se with >
Location Sketch Map:			



	rage	-
URANIUM-OCCURRENCE	Quad Name Portland	
REPORT	Deposit No. 72	
Commodities Present:		
Commodities Produced:	COPROD 4	
MINOR 4	BYPROD 4	
Potential Commodities: POTEN 4 OCCUR	4 U	
Commodity Comments C50 <		
Status of Exploration and Development A20 (1 = occurrence, 2 = raw prospect, 3 = dev Comments on Exploration and Development L1	veloped prospect, 4 = producer)	
Property is A21 (Active) A22 (Inact Workings are M120 (Surface) M130 (Under Description of Workings M220<		labels)
Cumulative Uranium Production PROD DH2 accuracy thousands of 1b. G7 Q U	years grade B> G7C<> G7D<	% U308
Reserves and Potential Resources EH accuracy thousands of 1b. E1 E1 E1 E1B E1B	year of est. grade < <u>LB</u> > E1C<> E1D<	% U308

Comments E8 <__

URA	BITITIS	$\alpha - \alpha$	COLL	DD	EP MI	CP
URM	TA T OI	2-0	uuuu	ĸĸ	E/IN	G.E.

URANIUM-OCCURRENCE	Quad Name Portland
REPORT	Deposit No. 72
Deposit Form/Shape M10 < Circular area of a	nomalous radioactivity >
Length M40 <> M41<>	Size M15 (circle letter):
Width M50 <> M51<>	<u>1b U308</u>
Thickness M60 < > M61< >	A 0 - 20,000 B 20,000 - 200,000
Strike M70 <>	C 200,000 - 2 million
Din M90	D 2 million - 20 million
Dip M80 <> ·	E More than 20 million
Tectonic Setting N15 < Mobile Belt	>
Major Regional Structures N5 < West flank	Cushing anticline
Local Structures N70 <	
-	
Host-FM. Name U1 <	> Member U2 < Pegmatite >
Host Rock Kl (Age) (Ro	atite of smoky quartz, feldspar.
(Age) (Ro	ck type, texture, composition, color,
piotite, scattered garnets and muscovite, ve	ry weathered and iron-stained
alteration, attitude, geometry, structure,	etc.)
Host-Rock Environment U3 < Plutonic dike	
(Sed. dep. enviro	n., metamorphic facies, ign. environ.)
Comments on	,,
Associated Rocks U4 <	

Ore Minerals C30 < None observed	
Gangue Minerals K4 < Garnet, muscovite, qua	rtz, feldspar, biotite

	rage 4	
URANIUM-OCCURRENCE	Quad Name Portland	_
REPORT	Deposit No. 72	
Alteration N75 < Hematite-staining		_
		_>
Reductants U5 <		
		_>
Analytical Data (General) C43 < 64 ppm (U ₃ 0 ₈ ; greater than 200 ppm YT	
		_>
Radiometric Data (General) U6 < BG 55 c	ps 14 to 17 times BG (300 cm ²)	
	No. times background and dimensions)	
Average 200 cps		-
Ore Controls K5 <		-
		-
		-
		_
		_
		_
		_>
Deposit Class C40 < Pegmatitic	> Class No. U7 <312	طور
Comments on Geology N85 <		

TIRAL			

Quad Name	Portland		
Deposit No.	72		

REPORT

Uranium Analyses:

Sample No.	Sample Description	Uranium Analysis
MHM 302	Chip sample across most radioactive part	64 ppm U ₂ O _g

Geologic Sketch Map and/or Section, with Sample Locations:

References:	
F1 <	
F2 <	
F3 <	
F4 <	

REPORT

Quad Name Portland
Deposit No. 72

Continuation	from	p.	1-5

<	black	shingle	s. >						
<	2.0 Mi	nute Sp	ectrome	ter Coun	t				
				Thct	%eK	eUppm	eThppm		
	21040		827	358	2.64	28.56		>	

TITLE A S. T.	THE OPPOSE	COSTRACT
II K A N I	M-(36.6)	URRENCE

REPORT

Quad	Name A90<	Portland	
Quad	Scale A1004	2, 5, 0, 0, 0, 0	
Depo	sit No. B40<	73	

Deposit No. D404 /3
Deposit Name AlO < The Ladges Occurrence >
Synonym Name(s) All <>
District or Area A30 < Bradbury-Brunswick Pegmatite District >
Country A40 4U, SP U, S State Maine
State Code A50 4 2 3 County A60 < Cumberland > (Enter code twice from List D)
Position from Prominent Locality A82 < 240 m west of the ledges on Royal Road
in North Yarmouth about 150 m into the woods on the south side of Royal Road
on county map Royal Road = Town Line Road)
Field Checked Gl < 7.8 1.0 By G2 < Bruton and Poer , > Trist Initial
Latitude A70 44,3 H5,0 H3,7, NP Longitude A80 40,7,0 H1,0 H3,5, WP Deg Min Sec
Township A77 <
Meridian A81 < > Altitude A107 < 67 m >
Quad Scale A91 4 6,2,5,0,0> Quad Name A92 < Freeport > (7½' or 15' quad)
Physiographic Province A63 <0,1 New England > (List K)
Location Comments A83 < Filled in quarry adjacent to road behind which is large
outcrop about 150 m from the road
Location Sketch Map: Polytop Page N N N N N N N N N
Yarmouth Sodom

4/19/78

URANIUM-OCCURRENCE	Quad Name	Portland
REPORT	Deposit No.	73
Commodities Present:		
Commodities Produced:	COPROD 4	
MINOR 4	BYPROD 4	
Potential Commodities: POTEN OCCUR	< <u>U, , B, ,</u>	
Commodity Comments C50 <		
Status of Exploration and Development A20 (1 = occurrence, 2 = raw prospect, 3 = dev		, 4 = producer)
Comments on Exploration and Development Ll	10 <	
Property is A21 (Active) (A22) (Inact	ive) (C	ircle appropriate labels)
Workings are M120 (Surface) M130 (Under	ground) M1	40 (Both)
Description of Workings M220<		
Cumulative Uranium Production PROD DH2		
G74 U G7A4 G7B4LI	> G7C<	grade > G7D< % U308
Source of Information D9 <		
Production Comments D10 <		
Reserves and Potential Resources		
EH accuracy thousands of 1b.	year of e	st. grade
EH accuracy thousands of 1b.	LB> E1C	> E1D< % U308
Source of Information E7 <		

Comments E8 <

Quad Name Portland

URA			

REPORT	Deposit No73
Deposit Form/Shape M10 < Spot occurrence in	pegmatite >
FT/M Length M40 <> M41<>	Size M15 (circle letter):
Width M50 <> M51<>	1b U308
Thickness M60 <> M61<>	A 0 - 20,000 B 20,000 - 200,000
Strike M70 <>	C 200,000 - 2 million D 2 million - 20 million
Dip M80 <>	E More than 20 million
Tectonic Setting N15 < Mobile Belt	>
Major Regional Structures N5 < Sebago Lake	>>
Host Rock K1	> Member U2 < Pegmatite > eathered muscovite, biotite pegmatite ck type, texture, composition, color,
alteration, attitude, geometry, structure,	etc.)
Host-Rock Environment U3 < (Sei. dep. environments on Associated Rocks U4 < Host rock for pegmatit sillimanite zone.	n., metamorphic facies, ign. environ.)
Ore Minerals C30 < None observed	
Gangue Minerals K4 < Schorl, quartz, feldspa	ar, muscovite, biotite >

URANIUM-OCCURRENCE	Quad Name Portland
REPORT	Deposit No. 73
Alteration N75 < None observed	
Reductants U5 <	
	N U ₃ 0 ₈ ; 2000 ppm B
	5 to 7 times BG in a 15 cm x 5 cm x 2.5 c (No. times background and dimensions) SR) is 200-600 cps
	
	·
Deposit Class r40 < Pegmatitic Comments on Geology N85 < Probable pegm	> Class No. U7 43,2,0 > matoid-granitoid facies of Sebago Lake granite
	>

11	TO A	- 8.7	•	UM		13	nn	** 1		P) 1	23.1	~	-
	PL 24	un vi	•	l lin	_	• 3		-	100	к 1	r ni		м

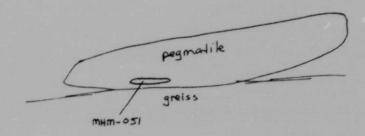
Quad N	lame	Portland	
Dence!			

REPORT

Uranium Analyses:

Sample No.	Sample Description	Uranium Analysis
MHM 051	Chip sample across most radioactive layer of peg-	
	matite	45 ppm U ₃ 0 ₈

Geologic Sketch Map and/or Section, with Sample Locations:

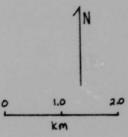


References	s:			
F1 <				
F2 <				
F3 <				
F4 <				

REPORT

Quad	Name A90	Portland	>
Quad	Scale Al0	04 , 2, 5, 0, 0, 0, 0	
Depo	sit No. B4	0< 74	,

Deposit No. B40< /4 >
posit Name Alo < Hadlock Road Occurrence >
monym Name(s) All <
strict or Area A30 <>
ountry A40 QU, SD [U, S] State Maine
(Enter code twice from List D)
osition from Prominent Locality A82 < Anomaly on Highway 26 and 100, 0.5 km sout
f Hadlock Road, 1 km north of power lines crossing highway, and 2.2 km north of
ountain Road
Leld Checked G1 <7.9 0.8 p By G2< Wagener , H. D. Yr Mo Last name First Initial
Deg Min Sec Longitude A80 40,7,0H1,8H0,0, WP Deg Min Sec
ownship A77 <
eridian A81 < > Altitude A107 < 55 m
uad Scale A91 4 6,2,5,0,0 Quad Name A92 < Gray (7½' or 15' quad)
hysiographic Province A63 40,1 New England (List K)
ocation Comments A83 < Anomaly is in low bedrock ledge on east side of highway
nd is adjacent to logging road leading to the east.
ocation Sketch Map:



п	RAN	TIT	M_/	301	CIT	DD	THE	CE
	TAXALL	エン			u lu	nn	EUN	N/E

OKAN I DIN-OCCURRENCE	Quad Name FORCIANO
REPORT	Deposit No. 74
Commodities Present:	
Commodities Produced:	COPROD 4
MINOR 4	BYPROD 4
Potential Commodities: POTEN 4 OCCUR	
Commodity Comments C50 <	
Status of Exploration and Development A20 (1 = occurrence, 2 = raw prospect, 3 = dev Comments on Exploration and Development L1	veloped prospect, 4 = producer)
Property is A21 (Active) (A22) (Inactive) Workings are M120 (Surface) M130 (Under Description of Workings M220<	rground) (Circle appropriate labels)
Cumulative Uranium Production PROD DH2 accuracy thousands of 1b. G74 U	years grade B> G7C<> G7D<
Reserves and Potential Resources EH accuracy thousands of 1b. E1 E1A E1B Source of Information E7 <	<u> </u>
Comments E8 <	

URANIUM-OCCURRENCE	Quad Name Portland
REPORT .	Deposit No. 74
Deposit Form/Shape M10 < Anomaly #1 - Para	lleling lineation, surficial feature >
Length M40 < Anomaly 1, 1 > *M41 < m >	Size M15 (circle letter):
Width M50 < Anomaly 1,1 > *M51 < m >	<u>1b U308</u>
Thickness M60 <> M61<>	A 0 - 20,000 B 20,000 - 200,000
Strike M70 < Anomaly 1 - N55E >	C 200,000 - 2 million
Dip ' M80 <>	D 2 million - 20 million E More than 20 million
Tectonic Setting N15 < Mobile Belt	<u> </u>
Major Regional Structures N5 < Sebago Lak	e Pluton
	,
Local Structures N70 <	
Host-FM. Name U1 < Sebago Lake Pluton	> Member U2 < Granite >>
Host Rock K1 dD.E.V.	
Host Rock Kl (D E V (Age) (R	ock type, texture, composition, color,
alteration, attitude, geometry, structure,	
services, decrease, geometry, structure,	etc.)
	>
Host-Rock Environment U3 < Plutonic, synoro (Sed. dep. envir	on., metamorphic facies, ign. environ.)
Comments on Associated Rocks U! <	
Ore Minerale C30 /	
Ore Minerals C30 <	
Compute Mineral - W/	<u> </u>
Gangue Minerals K4 <	
	>

URANIUM-OCCURRENCE	Quad Name	Portland
REPORT	Deposit No.	74
Alteration N75 < None observed		
Reductants U5 <		
Analytical Data (General) C43 <		
Padiometria Data (Grant) at 20 70		
Radiometric Data (General) U6 < BG 70 cps (No.	Anomaly #1 4.	.5 - 22 times BG nd and dimensions)
(1.5 m x 1 m); Anomaly #2 4 - 7 times	BG (2 m x 10 m)	and almonotons)
Ore Controls K5 <		
		· · · · · · · · · · · · · · · · · · ·
Deposit Class C40 < Pegmatitic		> Class No. U7 <3,2,0
		>

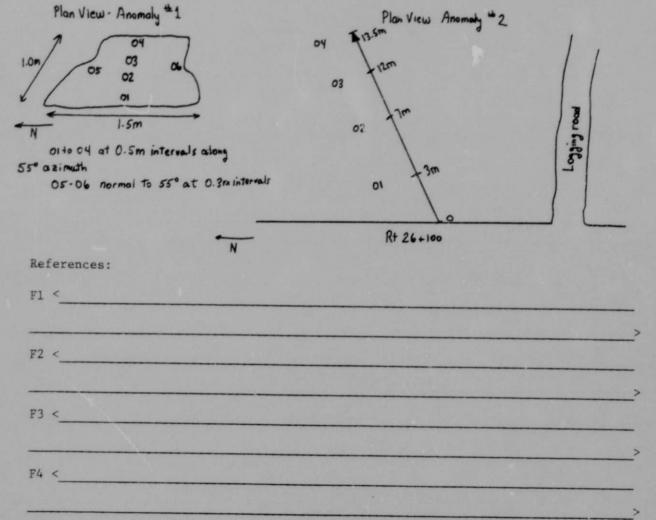
Quad	Name	Portland
STREET	TACTITUDE.	rui tianu

Deposit No. 74

Uranium Analyses:

Sample No.	Sample Description	Uranium Analysis
	No samples taken	

Geologic Sketch Map and/or Section, with Sample Locations: Spectrometer Station;



CONTRACTOR OF THE PARTY OF			
URANT	TIM OU	CHARLES !	D TONT O'T
LUB AIN I		CHORINE	K F NI F

Quad Name Portland

Deposit No. 74

REPORT

Continuation from p. 1-5:

Label

M10 <	Anomaly	2 -	elongated	area	of	anomalous	radioactivity	>
-------	---------	-----	-----------	------	----	-----------	---------------	---

M40 < Anomaly 2 = 10 >

M50 4 Anomaly 2 = 2 >

U6	<	Anomaly	#1	One Minute	Spectrometer	Counts,	Gain	5.0
		THE RESERVE THE PERSON NAMED IN	_	AND DESCRIPTION OF THE PERSON NAMED IN COLUMN 2 IS NOT THE OWNER, THE PERSON NAMED IN THE OWNER, THE PERSON NAMED IN THE PERSON NAMED IN THE OWNER, THE PERSON NAMED IN THE PERSON NAMED IN THE PERSON NAMED IN THE P		Contract of the Contract of th		And in case of the last of the

Station	Totat	Kct	Uct	Thct	%eK	eUppm	eThppm
01	2994	2112	1659	185	4.73	74.38	20.67
02	45390	2951	2592	212	5.91	119.03	24.27
03	63530	4021	3676	299	7.60	169.33	35.87
04	60340	3790	3408	325	7.15	155.47	39.33
05	59930	3786	3484	273	7.06	160.75	32.40
06	19260	1620	857	144	5.29	36.50	15.20

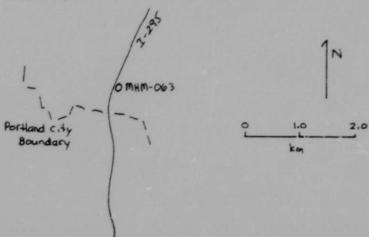
Anomaly #2 One Minute Spectrometer Counts, Gain 5.0

tation	Totct	Kct	Uct	Thet	%eK	eUppm	eThppm	
01	31640	2445	1561	167	7.42	70.15	18.27	
02	29830	1847	1567	168	3.50	70.41	13.40	
03	30930	2301	1609	189	6.15	71.82	21.20	
04	41210	2678	2176	299	5.50	96.16	35.87	>

REPORT

Quad	Name A	490< P	ortland	>
Quad	Scale	A1004	, 2, 5, 0, 0, 0, 0	
Depo	sit No.	. B40<	75	3

Deposit Name AlO < Pleasant Hill Occurrence >
Synonym Name(s) All <>
District or Area A30 < Southern limit, or south of Bradbury-Brunswick pegmatite >
Country A40 QU, SP [U, S] State Maine
State Code A50 42,3 2,3 County A60 < Cumberland > (Enter code twice from List D)
Position from Prominent Locality A82 < Come out of Portland on I-295. First large
road cut in rock is on I-295, North of exit for Falmouth and US 1. Anomaly is
in main body of roadcut near south end, 0.97 km south of bridge over
Field Checked Gl $< 17.9 0.6 P$ By G2< Wagener , H. D. > Yr Mo Last name First Initial
Latitude A70 44,3 H4,2 H1,9, NP Longitude A80 40,7,0 H1,5 H2,3, WP Deg Min Sec
Township A77 <
Meridian A81 < > Altitude A107 < <u>18 m</u> >
Quad Scale A91 4 16,2,5,0,0 Quad Name A92 < Portland > (7½' or 15' quad)
Physiographic Province A63 <0.11 New England > (List K)
Location Comments A83 < Long road cut in rock on east side of northbound lane.
Anomalies are near base and central portion of cut near south end.
Location Sketch Map:



BFE 1236 4/19/78

UKAN IUM-OCCURRENCE	Quad Name Portland
REPORT	Deposit No75
Commodities Present:	
Commodities Produced:	COPROD 4
MINOR 4	BYPROD 4
Potential Commodities:	<u> </u>
Commodity Comments C50 <	
Status of Exploration and Development A20 (1 = occurrence, 2 = raw prospect, 3 = de Comments on Exploration and Development L	veloped prospect, 4 = producer)
Property is A21 (Active) (A22) (Inac Workings are M120 (Surface) M130 (Unde Description of Workings M220<	ctive) (Circle appropriate labels) erground) M140 (Both)
Cumulative Uranium Production PROD DH2 accuracy thousands of 1b. G74 U	
Production Comments D10 <	
Reserves and Potential Resources EH accuracy thousands of 1b. E1 U E1A E1B Source of Information E7 <	year of est. grade
Comments E8 <	

URANIUM-OCCURRENCE	Quad Name Portland
REPORT	Deposit No. 75
Deposit Form/Shape M10 < Sill	
Length M40 < 3 > M41 < m >	Size M15 (circle letter):
Width M50 < 2+ > M51< m >	1b U308
Thickness M60 < 2 > M61< m >	A 0 - 20,000
Strike M70 < N43E >	B 20,000 - 200,000 C 200,000 - 2 million
Dip M80 < >	D 2 million - 20 million E More than 20 million
Tectonic Setting N15 < Mobile B	elt
	Is of tourmaline-garnet pegmatite in Rock type, texture, composition, color,
banded gneissoid and schistose rocks, incalteration, attitude, geometry, structure	cluding pebble-bearing horizons. Every-
thing seems to be on one limb of a large	
isoclinal folds. Much of the pegmatite	
Host-Rock Environment U3 < Plutonic sill (Sed. aep. envi)	ron., metamorphic facies, ign. environ.)
Ore Minerals C30 < None observed	
Gangue Minerals K4 < Feldspar-quartz-blac	

VAANIUM-OCCURRENCE	Quad Name Portland
REPORT	Deposit No. 75
Alteration N75 < None observed, other	than a small concentration of radio-
activity along a joint on the weathered to	
	,
Reductants U5 <	
	,
Analytical Data (General) C43 < 201 ppm U ₃ (08
	·
Radiometric Data (General) U6 < Four or fiv	ve spot anomalies of 800-1300 cps(up to times background and dimensions)
$16 \times BG$) the largest being about one meter	in diameter. Surface radiation (SR) of
remainder of pegmatite 200-300 cps. Radioa	
Ore Controls K5 < Differentiation in magmat	
D	· · · · · · · · · · · · · · · · · · ·
Deposit Class C40 < Pegmatitic	> Class No. U7 43 2 0 >
Comments on Geology N85 < Typical of relati	
gneisses in Bradbury-Brunswick pegmatite di	strict.

Quad Name Portland

REPORT

Deposit No. 75

Uranium Analyses:

Sample No.	Sample Description	Uranium Analysis
MHM 063	5 fist-size chip samples from near point of maxi- mum radioactivity. All chips have SR of about 150 cps (2 x BG).	201 ppm 11303

Geologic Sketch Map and/or Section, with Sample Locations:

	Top of road cut
/ 13 X	Degranging ledge Pegmatite
7" 200	Pegmatite
	(Gno.
A	Smatile X 600 X 800
	100 X 800 cps
Top of grass slope	x marks this samples
References:	
F1 <	
	>
F2 <	
	>
F3 <	
	· · · · · · · · · · · · · · · · · · ·
F4 <	
	>

Quad Name Portland Deposit No. 75

REPORT

Continuation from p. 1-5:

Label

A82 < Presumpscot River.>

A30 < district. >

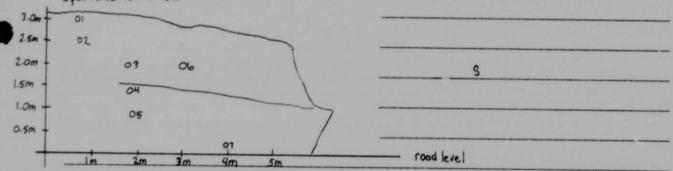
K1 < rock. >

U6 80 cps.

One-Minute Spectrometer Counts

tation	Totet	Kct	Uet	Thet	%eK	eUppm	eThppm
01	69200	4526	3925	310	9.72	181.41	37.33
02	67590	4685	3750	245	11.88	174.57	28.66
03	11470	1268	354	130	5.31	12.39	13.33
04	23770	1834	1112	120	5.69	49.67	12.00
05	25870	1849	1288	170	4.74	56.74	18.67
06	34690	2252	1793	165	5.15	81.53	13.00
07	30820	2172	1702	134	5.20	78.03	13.87

Spectrometric Stations



Small Outcrop South of MHM 063 One-Minute Spectrometer Counts, Gain 4.85

Station	Totct	Kct	Uct	Thct	%eK	eUppm	eThppm	
01	10830	996	331	136	3.60	11.08	14.13	
02	42110	2938	2227	299	6.97	98.64	35.86	
03	37790	2570	1951	248	6.07	86.72	29.07	
04	33970	2571	1714	235	7.19	75.56	27.33	
05	17050	1521	748	100	5.37	32.51	9.33	
06	88510	5001	5361	399	5.98	248.50	49.20	
07	11190	1206	341	164	4.77	10.73	17.87	>*

URANIUM-OCCURRENCE				Quad Name Portland			
	RE	PORT			Deposit No.	75	
Continuati	on from	p. 6:					
<u>Label</u>	Spectromet	ter Stations					
1.5m		02	05				
1.0m	01	oz		26	07		
0.5m		04					
d level	lm	2m	3m	4m	Sm		

N

APPENDIX D. RESULTS OF CHEMICAL ANALYSES OF ROCK SAMPLES FROM URANIUM OCCURRENCES

Uranium Occurrence	Chemical Sample Number	U308 (ppm)	Uranium Occurrence	Chemical Sample Number	U308 (ppm)
1	MHL 214	704	16	MHM 042	17
	MHL 215	205		MHM 043	8
2	MHL 208	16		MHM 044	16
3	MHM 055	36		MHM 045	4
4	MHM 306	23		MHM 046	4
5	MHM 067	59		MHM 047	75
	MHM 092	5		MHM 048	3
6	MHM 312	187	17	MHM 107	17
7	MHM 303	25	18	MHM 066	38
	MHM 304	7	19	MHM 954	37
8	MHM 110	46	20	MHM 015	23
	MHM 111	114	21 .	MHM 018	30
9	MHM 072	100	22	MHM 016	15
	MHM 309	67	23	MHM 019	26
10	MHM 313	32	24	MHM 002	150
11	MHM 878	15	25	MHM 003	103
12	MHM 957	17	26	MHM 004	31
13	MHM 050	16	27	MHM 020	13
	MHM 060	2	28	MHM 021	16
14	MHM 041	65	29	MHM 888	27
	MHM 061	54	30	MHM 084	19
15	MHM 040	26	31	MHM 882	18

APPENDIX D. (CONTINUED)

Uranium Occurrence	Chemical Sample Number	U308 (ppm)	Uranium Occurrence	Chemical Sample Number	U308 (ppm)
32	MHM 881	19		MHM 316	24
33	MHM 892	32		MHM 817	3
34	MHM 310	23	44	MHM 033	10
35	MHM 010	13		MHM 074	54
	MHM 011	17	45	MHM 032	50
	MHM 012	12	46	MHM 034	850
	MHM 013	1	47	MHM 031	50
36	MHM 086	19	48	MHM 068	19
37	MHM 014	20		MHM 069	150
38	MHM 006	28		MHM 070	282
39	MHM 889	19	49	MHM 090	123
40	MHM 088	22	50	MHM 091	54
41	MHM 883	16	51	MHM 059	68
42	MHM 007	110	52	MHM 062	7
43	MHM 807	28	53	MHM 075	93
	MHM 808	32	54	MHM 029	47
	MHM 809	22	55	MHM 027	3
	MHM 810	22		MHM 028	130
	MHM 811	23	56	MHM 026	27
	MHM 812	25	57	MHM 035	125
	MHM 813	23	58	MHM 901	104
	MHM 814	37	59	MHM 057	144
	MHM 815	22		MHM 076	93

APPENDIX D. (CONTINUED)

Uranium Occurrence	Chemical Sample Number	U308 (ppm)	Uranium Occurrence	Chemical Sample Number	U308 (ppm)
59	MHM 077	4	73	MHM 051	45
	MHM 078	74	75	MHM 063	201
	MHM 079	27			
	MHM 080	15			
	MHM 081	7			
	MHM 082	3			
60	MHM 848	25			
61	MHM 018	18			
62	MHM 806	19			
63	MHM 823	26			
64	MHM 105	23			
65	MHM 106	180			
66	MHM 104	30			
67	MHM 101	17			
	MHM 064	394			
	MHM 065	137			
68	MHM 103	83			
69	MHM 102	57			
70	MHM 301	50			
71	MHM 052	24			
72	MHM 302	64			



United States Department of the Interior BUREAU OF MINES

TUSCALOOSA METALLURGY RESEARCH LABORATORY P. O. BOX L UNIVERSITY, ALABAMA 35186

October 22, 1976

Memorandum

To:

G. V. Sullivan, Research Supervisor, Tuscaloosa Metallurgy

Pesearch Center

From:

Metallurgist, Tuscaloosa Metallurgy Research Center

Subject: Progress Report on Processing New Hampshire Granite

SUMMARY

Four samples of granite from the Conway Granite in New Hampshire were received for characterization and beneficiation studies. Mineralogical and chemical analyses showed the presence of trace amounts of uranium in addition to feldspar and quartz as the only potential values present in the samples. Beneficiation studies showed that it was possible to produce a glass sand meeting industry specifications. However, feldspar concentrates contained excess iron for most uses. The studies also revealed that the uranium tended to concentrate in the biotite product. Samples of biotite concentrate were prepared and submitted to the Salt Lake City Metallurgy Research Center for preliminary uranium extraction studies.

INTRODUCTION

New Hampshire produces dimension stone which are mainly used for building and memorial purposes. Generally, recovery of usable stone amounts to less than 50 percent of the rock quarried. This waste stone may be a result of the rock imperfection, such as overlying strata or blocks of quarried stone that contained cracks, veins and knots1. Waste stone is also generated during the wire sawing and polishing required to make the final marketable product2. Most of the stone produced in New Hampshire comes from the Conway

Barton, William R. Dimension Stone. BuMines I. C. 8391, 1968, p. 147. ² Fitch, R. W. Special Report, Wire Sawing--An Operation Guide (Part I). Stone Magazine, February 1968, pp. 16-18.

Memo to G. V. Sullivan Subj.: Progress Report on Processing New Hampshire Granite

Cranite which is exposed over an area of about 300 square miles³. Reports indicate that the Conway granite analyzes 0.001-0.003 percent U_3O_8 and is estimated to contain about 7.5 million tons of 3U_3O_8 . It also has been suggested that the Conway granite also contains minor amounts of tin, lead, zinc, tantalum, tungsten, columbium, and beryllium.

Considering the large tonnage of waste granite being produced together with the existence of huge granite deposits in the state of New Hampshire it was proposed that metallurgical procedures for processing granite be developed. The proposal for the investigation was submitted to the Federal Bureau of Mines by the New Hampshire Governor's Mineral and Energy Resources Council. The investigation was initiated under Authorization 9365, Component 2C, Processing New Hampshire Granite. The purpose of this investigation was to initiate characterization, liberation, and beneficiation studies of New Hampshire granite samples and to develop a fully integrated system for the separation and recovery of all economic minerals. This report summarizes the progress made in the first year of the investigation.

SAMPLE DESCRIPTION

Four Conway granite samples were submitted by the New Hampshire State Geologist through the Liaison Officer—New Hampshire, for characterization and beneficiation studies. Data in table 1 show the designation, quarry, and geographical location of each of the samples.

TABLE 1. - New Hampshire granite samples

	Sample designation	Source (quarry)	Location	
A.	Conway pink	Gumb	Madison	
B.	Conway pink	Redstone	North Conway	
C.	Conway rottenstone	Government pit	Albany	
	Conway green	Greenstone	North Conway	

Samples A, B, and D were massive pieces which were taken from waste piles at inactive granite quarries, and C was taken at random points across the face of an active "rottenstone" gravel pit.

The samples were earth crushed to pass a 10-mesh screen, thoroughly mixed and representative portions riffled out for chemical, spectrographic, and mineralogical analyses and preliminary beneficiation studies. Chemical analysis of the four samples are shown in table 2.

Finch, W.I., A. P. Butlerdn, F. C. Armstrong, A. E. Weissenborn, M.H. Staatz, and J. C. Olsen, Nuclear Fuels, Chapter in United States Mineral Resources, U. S. Geological Survey Prof. Paper 820, p. 465.

Memo to G. V. Sullivan Hampshire Granite

Subj.: Progress Report on Processing New

TABLE 2. - Chemical analysis of Conway granite samples

Sample	Anal	yses, Per	cent of	Total	Sample As	Received	
identification	CaO	Fe203	K20	Na ₂ O	SiO ₂	Al ₂ 0 ₃	LOI
A	0.62	1.6	5.2	4.0	74.69	12.43	0.42
В	0.69	1.8	5.2	4.4	72.59	13.73	0.42
C	0.76	2.1	5.2	3.8	72.88	12.59	0.79
D	0.94	2.5	5.6	3.9	71.54	13.18	0.39

The uranium content of the samples was determined at the Salt Lake City Metallurgy Research Center using a spectrophotometric method and the results are shown in table 3.

TABLE 3. - Uranium analyses of Conway granite samples*

Sam	ple	308, percent
Α		. 0.0030
В		. 0.0020
C		. 3.0015
D		. 0.0015

^{*} The Uranium results are in the same range normally reported for the Conway granite materials from the New Hampshire area.

Semi-quantitative spectrographic analyses detected Be, Cb, Sn, Pb, and Zn in an estimated range of 0.003 - 0.03 percent.

Preliminary microscopic examination of the four samples showed that they had about the same general mineralogical composition, mainly potassium and sodium feldspar, quartz, and biotite.

The preliminary examination showed that significant liberation of the major minerals was obtained at 35-mesh. Therefore, a representative portion of each was ground to pass 35 mesh for detailed mineralogical study. Heavy liquid separations were made at specific gravities of 2.68 and 3.30 to separate the major mineral components and to concentrate any heavy minerals present. The weight percentages in the gravity fractions was almost identical for the four samples. The float at 2.68 principally contained feldspar and quartz

Memo to G. V. Sullivan Hampshire Granite

Subj.: Progress Report on Processing New

and represented about 94 percent of the total weight. The float fraction at 3.30, mainly biotite, represented 5 percent of the weight while the sink fraction (3.30) was about 1.0 percent of the total weight. Examination of sized fractions of the float 2.68 products showed essentially complete liberation of the feldspars and quartz in the minus 48-mesh fractions. Some locking of feldspar with biotite was noted even in the very fine sizes. Mineralogical determination of the sink fraction of each sample at specific gravity of 3.3, revealed that they contained principally amphibole, minor amounts of epidote and fluorite, some garnet, and traces of zircon and sphalerite. Minerals containing Sn. W. Cb. Ta, Pb, U or Th were not identified in any of these sink fractions. Beryllium minerals were not identified in any of the specific gravity fractions examined.

BENEFICIATION STUDIES

Preliminary flotation tests were made to determine the feasibility of producing specification grade feldspar and glass sand concentrates from these materials. Each granite sample was stage ground in a pebble mill to pass a 48-mesh screen (mineral liberation size). The ground pulp was blunged with sodium hydroxide and deslimed at 400-mesh. The deslimed pulp was conditioned with sulfuric acid, tallow amine acetate, kerosene and methyl isobutyl carbinol. A biotite product was then floated. The biotite tailing was then thickened to 35 percent solids and conditioned with hydrofluoric acid, tallow amine acetate, fuel oil, and pine oil, and a feldspar concentrate floated. Both the feldspar concentrate and tailing (sand) from each sample were treated by wet high intensity magnetic separation to lower the iron content. Analyses of the nonmagnetic products from a typical test on each of the four samples are shown in table 4.

TABLE 4. - Nonmagnetic feldspar concentrates and tailings (sand) for Conway granite samples

		Weight-	Analysis, percent					
Sample	Product	percent	CaO	F€203	K20	Na203	S102	A1203
A	feldspar conc. quartz	47.2 24.2	0.42	0.13	7.00 0.12	6.00	67.14 98.28	
В	feldspar conc.	46.3 16.1	0.48	0.17	6.40	6.10	67.09 97.62	
С	feldspar conc. quartz	45.8 20.0	0.54	0.19	7.40 0.25	5.30 0.16	67.01 97.78	
D	feldspar conc. quartz	40.8	0.52	0.35	7.40 0.24		67.17 98.54	18.82

Memo to G. V. Sullivan Hampshire Granite Subj.: Progress Report on Processing New

Data in the table show that the iron content of all of the feldspar concentrates is in excess of the 0.10 percent Fe_2O_3 specifications for most uses. Microscopic examination of the feldspar concentrates showed locking of biotite with some of the feldspar; however, the biotite particles were not large enough to cause the particles to react as magnetic. The quartz, on feldspar tailings, contained small amounts of alumina in the form of feldspar which would have to be removed to meet Al_2O_3 specifications for glass sand. Microscopic examination indicated that the feldspar and quartz appeared to be liberated. The use of more collector or longer flotation times in the feldspar step should lower the Al_2O_3 content of the quartz product. Rational analyses of the feldspar concentrates showed them to contain 94 to 89 percent feldspar, additional quartz would not be detrimental in this product.

Although the feldspar products obtained in these tests were already finer than the 20-mesh product desired by the glass industry, the effect of finer grinding was studied in an attempt to meet iron specifications. Therefore, additional flotation tests were made in which the granite samples were ground to minus 65-mesh and deslimed at 400-mesh. All other test variables, such as conditioning and flotation time, pulp pH, and amount of reagents remained constant. Evaluation of feldspar and quartz products from these tests showed only minor improvement in the Fe₂O₃ content of the products.

John K. Frye reported that the biotite in the Conway granites contained uranium; therefore, the biotite rougher flotation concentrates obtained from the four granite samples were submitted for spectrophotometric analyses to determine if any concentration occurred. The results are presented in table 5.

TABLE 5. - Uranium analyses and distribution on biotite rougher concentrates from Conway Granite samples

Sample	Biotite Product			
	Head, U ₃ O ₈ analysis, percent	Weight- percent	U ₃ O ₈ Analysis, percent	U ₃ O ₈ Distribution, percent
A	0.0030	6.5	0.038	83.3
В	0.0020	5.0	0.037	90.0
С	0.0015	6.0	0.017	66.6
D	0.0015	7.5	0.012	60.0

The data in table 5 indicate that the biotite concentrates from samples A and B contained, respectively, 83.3 and 90.0 percent of the total U_3O_8 , and this represents concentration ratios of 12.7 and 18.5:1.

Composition and Crystallization History of the Conway Granite of New Hampshire, Ph.D. Thesis, Penn. State University, 1965, 130 pp.

Memo to G. V. Sullivan Subj.: Progress Report on Processing New Hampshire Cranite

Flotation tests were made on the two granite samples having the highest U_3O_8 analyses (samples A and B) to produce a sufficient quantity of biotite concentrate for uranium extraction studies. The samples were forwarded to Salt Lake City Metallurgy Research Center. As a result of this work, all the Conway granite samples on hand have been exhausted. However, a fifth sample of Conway granite was received late in the fiscal year. Characterization studies on this material are currently underway.

Thomas O. Llewellyn

Metallurgist