## **New Hampshire Ishikawaite**

Tom Mortimer – Dec 20, 2011

Ishikawaite is **not** on Janet Cares 1990 NH species list that was included in the New Hampshire issue of *Rocks & Minerals*.

Jul-Aug 1990, *Rocks & Minerals* article by Janules & Whittemore on N. Sugarloaf Mtn. Included species list does **not** include ishikawaite. Samarskite is listed with a "?" Quoting this article from the samarskite paragraph, pg. 346: "SEM analysis shows that it is an oxide of U, Nb, Ta, and Fe, with Nb > Ta. This chemistry would indicate the mineral petscheckite  $U^{+4}Fe^{+2}(Nb,Ta)_2O_8$  but xray defraction studies of heated material(900 deg C, 3 hours,CO<sub>2</sub> atmosphere) have narrowed the possibilities to either samarskite or ishikawaite."

March-Apr 1991 *Rocks & Minerals* vol. 66 no. 2 Article by Art Smith and Gene Bearss, The Weeks Pegmatite Mine: the included mineral list does not contain ishikawaite, but does list Samarskite-(Y). Uraninite is **not** listed.

Aug, 2002 *Mineral News* (pg. 8) article by Art Smith: ishikawaite from N. Sugarloaf Mtn., Bethlehem, NH identified by Excalibur Minerals on a specimen collected by Bob Janules. This note is actually an addendum to an earlier article by Art Smith *on Hunting for Uranium Minerals in the Hams-weeks Pegmatite*.

Oct 18, 2002 Excalibur analysis of Moose Pocket Albany, NH sample by Art Smith, (notebook page 2-52) The only analysis plot I could find indicating Ishikawaite. (see page 2)

Ishikawaite is presently listed on mindat as occurring at Ham-Weeks, giving "Rocks & Min. 80:256 (2005)" (July-Aug issue) as the reference. **ERROR**: the reference page for Ham-Weeks in this issue is 246, not 256 as given by mindat.

An ishikawaite specimen collected by Bob Janules from Oliver Trench, Moat Mtn., Hale's Location, has an EDS analysis by Jim Nizamoff from the University of New Orleans instrument that supports an ishikawaite identification. Photo and analysis are on mindatnh.org NH Rare 3 page.

	Tilt:0.0	Take-off:35.0	Det Type:SUTW4	Res: 166	Tc:20		
FS: 456	Lsec	c : 60			18-Oct-2002	12:07:20	
Ka					1		
1	ГаМа		2				
	1						
	1	4.					
		T.C.					
	UN	U Ma					
	NbI						
	NbI NbLa						
	NbI NbLa NbI						
All	NbI NbLa NbI						
1	NbI NbIa NbIi Ka TaMg	-g	Ka	TaLi	TaLb TaLb		
TaM	NbI NbIa NbIi Ka TaMg	8	TIKI. FeKa	TaLi TaL	TaLb		

Element	Wt %	Z	A	F
A1203	7.22	1.1020	0.4395	1.0024
Nb205	25.51	0.9450	0.7681	1.0004
U02	35.56	0.8115	0.9768	1.0004
TiO2	9.50	1.0228	0.7901	1.0042
Fe203	9.57	1.0356	0.9068	1.0067
Ta205	12.64	0.8207	0.9958	1.0018
Total	100.00			1.0010