

**Tracer Test from Swan Pond
Spring to Opequon Creek,
Berkeley County, WV**

**William K. Jones
Environmental Data**

Tracer Tests on the Sink of Water from Swan Pond Spring, Berkeley County, WV

Swallet	Resurg	Tracer	Date	Travel Time	Distance
Swan @ Grove Farm	Karst Window	2 lbs Fluor	8/11/2005	< 4 Days	0.9 Miles
Karst Window	Opequon Creek	4 lbs Fluor	9/22/2005	4 Hours	800 Feet

2 lbs fluorescein sodium dye at Grove farm sink



Recovery at Karst Window and in the bed of Opequon Creek



**Tracer Tests to Boiling Springs on
the Jackson River, Bath County,
Virginia, 2005**

Philip C. Lucas

Virginia Speleological Survey

William K. Jones

Chimney Run Farm

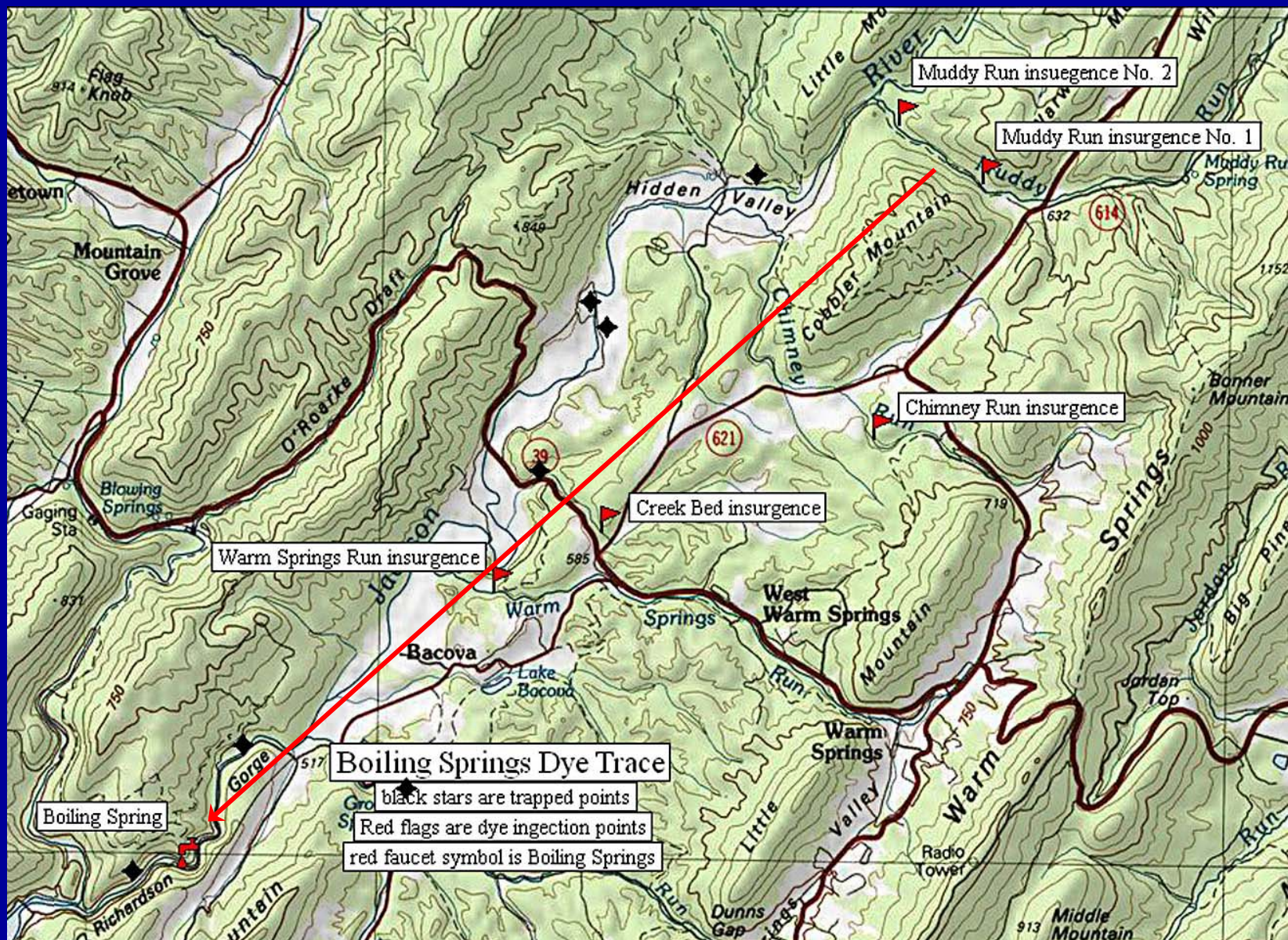
Boiling Springs, Jackson River



Dye Injection at Creek Bed Cave and Muddy Run # 1



Boiling Spring Tests



Boiling Springs Tracer Tests

SWALLET	DATE	DYE (LBS)	DAYS	MILES
Chimney Run	10/3/05	SRB 3	<10	6
Creek Bed Cave	8/16/05	FL 2	<5	4
Muddy Run #1	8/16/05	RWT 3	4<11	7.75
Muddy Run #2	9/28/05	FL 1	<4	7.6
Warm Sprs Run	9/14/05	EOS 2	<3	3

Streamflow

- Boiling Spring rises in the bed of the Jackson river about 0.3 miles downstream of the gaging station near Bacova.
- A discharge measurement of the spring showed a Q of 12.8 CFS while the Q at the gaging station was 27 CFS (10/02/05)
- The reported catchment for the Jackson River gage is 158 sq. mi. The mean annual Q is 170 CFS or 14.6 inches/year.
- The gaging station for the Bullpasture River at Williamsville drains 110 sq.miles. It has a mean annual Q of 163 CFS or 20 inches/year of runoff.

