

Peripheral
Panther
Box
files

Hemlock Grove east of Big Indian Station

185-8

9/23/18 with Dr. Christopher Van Kleeck

OLD BAROMETER

Site	p	Ap	Δe	e calc.	e map	time	R
(A) 2810	30.02	0.30	338	1548	1500	8:25	$\frac{2460 - 1210}{30.32 - 29.21} = \frac{1250}{1.111} = 1126$
(B) Todd Mtn. ^{Summit}	29.21	1.11	1250	2460	2460		
(C) High Mart	29.64	0.68	766	1976??	1890		
(D) Big Indian	30.32	0.00	0	1210	1210	9:00	
(E) parking area	30.28	0.04	45	1255		9:35	
(F) Cross brook	30.12	0.20	225	1435		9:55	
(G) Carriage rd. jr.	30.08	0.24	270	1480	1900 USGS SWS 1450 NY-NJ Trail map 1650	10:05	
(H) corner?	29.95	0.37	417	1627			
(I) lv. main road	29.82	0.50	563	1773			
(J) Cove	29.68	0.64	721	1931		10:53	
(K) P. braunit	29.68??	?				11:03	
(L) on spur	29.62??	?				11:18	
(M) Hem grove bare	29.23?	?					
(N) Bank road at	29.40?	0.92	1036	2246	levels off at 2800' USGS	11:55 am lunch	
(O) grove center	29.38	0.87	980	2190		12:52 lv.	
(P) on log road	29.33? 29.53??					1:10	
(Q) small hem grove	—	—	—	—	—	1:17	
(R) cove	29.64	0.61	687	1897		1:35	
(S) return to main rd.	29.72	0.53	597	1807		1:40	
(T) Big Indian	30.25	0.00	0	0	1210	2:28	
(U) High Mart	29.70	0.55	619	1829	1890	±4:15	
(V) 2810	30.06	0.19	214	1423	1500	±4:40	
(W) Little Peck Nollow	29.92	0.33	371	1582	1580	3:00 to 3:30	

Old Barometer! (D) to (S)

$$\frac{2460 - 1210}{30.32 - 29.21} = \frac{1250}{1.111} = 1126$$

New weather
barometer
 About 1126

Were barometer readings switched at (O)? Maybe also at (W) (U) (M)?
 Test them at Little Peck Nollow bridge (P) at gate (NOT (T) bridge)

Deviation of barometer readings from the actual, using R between $(D) \dagger (B)$.

	USGS	old barometer	DEVIATION	new barometer	DEVIATION
(B)	Todd Mtn. 2460'	2460'			
(C)	Highmant 1890'	1876 & 1829'	-86, -61	1847 & 1810'	-43, -80
(A)	2810 1500'	1546 & 1423'	+48, -77	1553 & 1480'	+53, -20
(D)	Big Indian 1210'	1210'			

From field notes of 6/21/87, pp. 185-1 to 4, it looks like the old barometer was reading too high & new barometer too low at $(F) \dagger (G)$. But at (N) , the old barometer was reading too low & the new too high, i.e. situation reversed!!

Is there a way to project the error between Big Indian (D) and Highmant (C) for both barometers - project the error up to site (N) by proportion?

More times - Current log
 10:13 road to N at blazes on private land
 10:30 stream audible before (I)

Air pressure, Little Peck Hollow bridge (NOT (F) bridge) above Acorns have
 29.98 new to 28.95 barometer
 29.92 old to 28.90 barometer

Hemlock Grove east of Big Indian Station

185-10

9/23/18

Elevation cals with new barometer

With Dr. Chris Vankleeck

Site	p	Δp	Ae	e calc	
(A)	30.02	0.28	343	1553 ⁽²²⁷⁰⁾	New barometer (D) to (B) $\frac{2460' - 1210'}{30 - 30 - 29.28} = \frac{1250'}{1.02''} = 1.225 R_2$
(B)	29.28	1.02	1250	—	
(C)	29.78	0.52	637	1847 ^{High Mt.}	
(D)	30.30	0.00	—	— ^{USGS}	
(E)	30.24	0.06	74	1284	
(F)	30.20	0.10	123	1333	
(G)	30.14	0.16	196	1406	
(H)	30.05	0.25	306	1516	
(I)	29.85	0.45	551	1761	
(J)	29.80	0.50	613	1823	
(K)	29.75	0.55	674	1884	
(L)	29.52	0.78	956	2166	
(M)	29.42	0.88	1078	2288	
(N)	29.16	1.14	1397	2607	
(O) 29.33?	29.53?	0.74	907	2117	
(J)	29.78	0.49	600	1810	
(I)	29.84	0.43	527	1737	
(D)	30.27	0.00	—	—	map 1210
(C)	29.78	0.49	600	1810	map 1890
(A)	30.05	0.22	270	1480	map 1500
(P)	29.98	0.29	355	1565	map 1580

Were both barometers

"going haywire?"

At hemlock grove (N)

old calculated at

2246 & 2190

New calc at 2545 &

2607 !!

Maybe calc, they

telev by triangulation

from (D), but the

horizontal distance

to the grove is needed.

From aerial photos

plotted on USGS,

elev. is ca. 2200 to 2500

& 6500 ft - from (D)

horizontally.

measure angle

?

6500 ft.

(D)

The spring house (EE) is (C) on p. 185-2 map of 6/2/87. Elev. 1294'
 The brook (F) on p. 185-2 is at elev. 1396, here 1435 + 1333'
 The meadow (G) on p. 185-2 is at elev. 1461, here 1480 + 1406'