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Sparta-Tomah figures incomplete. [between 1920 and 1930?]

Thwaites, F. T. (Fredrik Turville), 1883-1961

[s.l.]: [s.n.], [between 1920 and 1930?]

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ILLUSTRATIONS

Plate		Illustration Sheet.
I	Chicago and Northwestern Railway cut, Tunnel City.	" "
II	Pebbles from Windrow Formation.	" "
III	Concretions in Jordan sandstone.	" "
IV	Older terrace gravels overlying Dresbach sandstone.	" "
V	Franconia bench.	" "
VI	Oneota upland.	" "
VII	Cliff at contact of Franconia and Dresbach sandstones	" "
VIII	Dutch valley	" "
IX	Franconia bench in Kickapoo valley	" "
X	Minor terraces near Wilton	" "

ILLUSTRATIONS

Plate I

Plate II

Plate III

Plate IV

Plate V

Plate VI

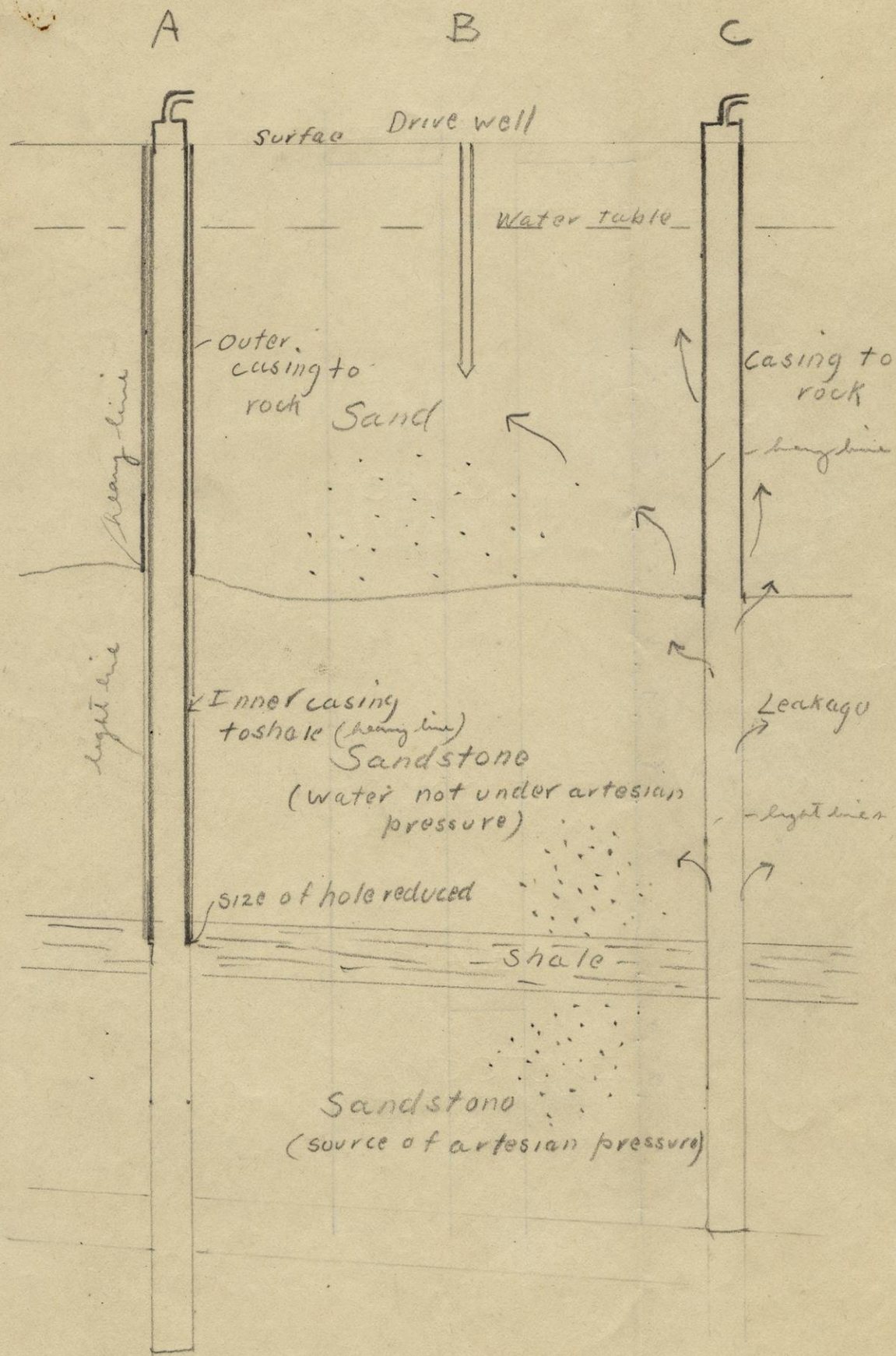
Plate VII

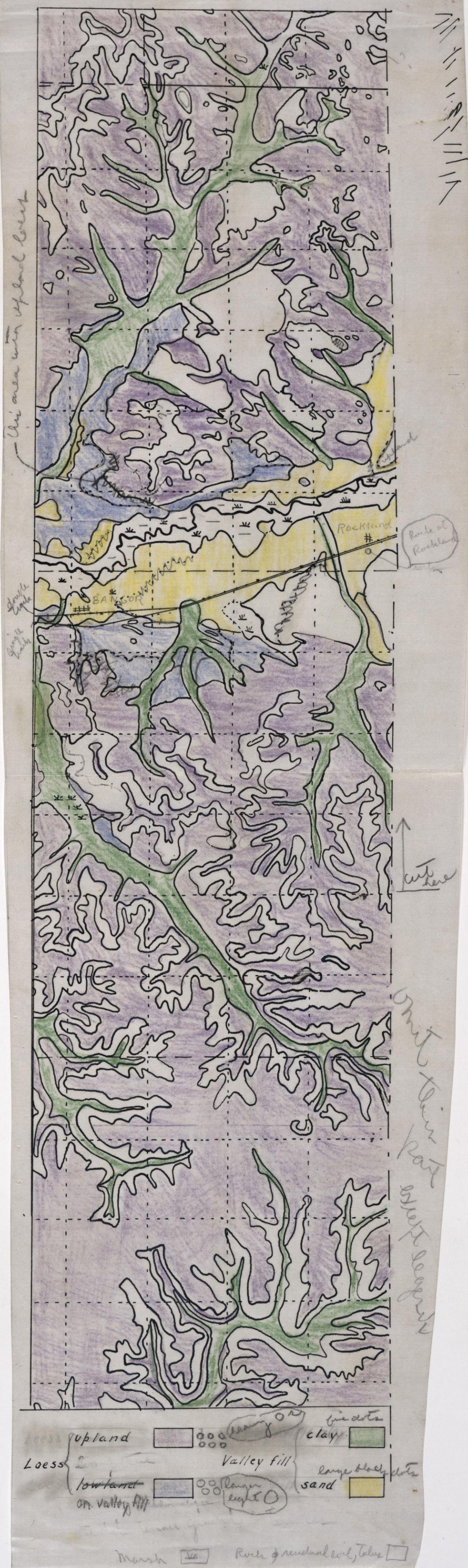
Plate VIII

Plate IX

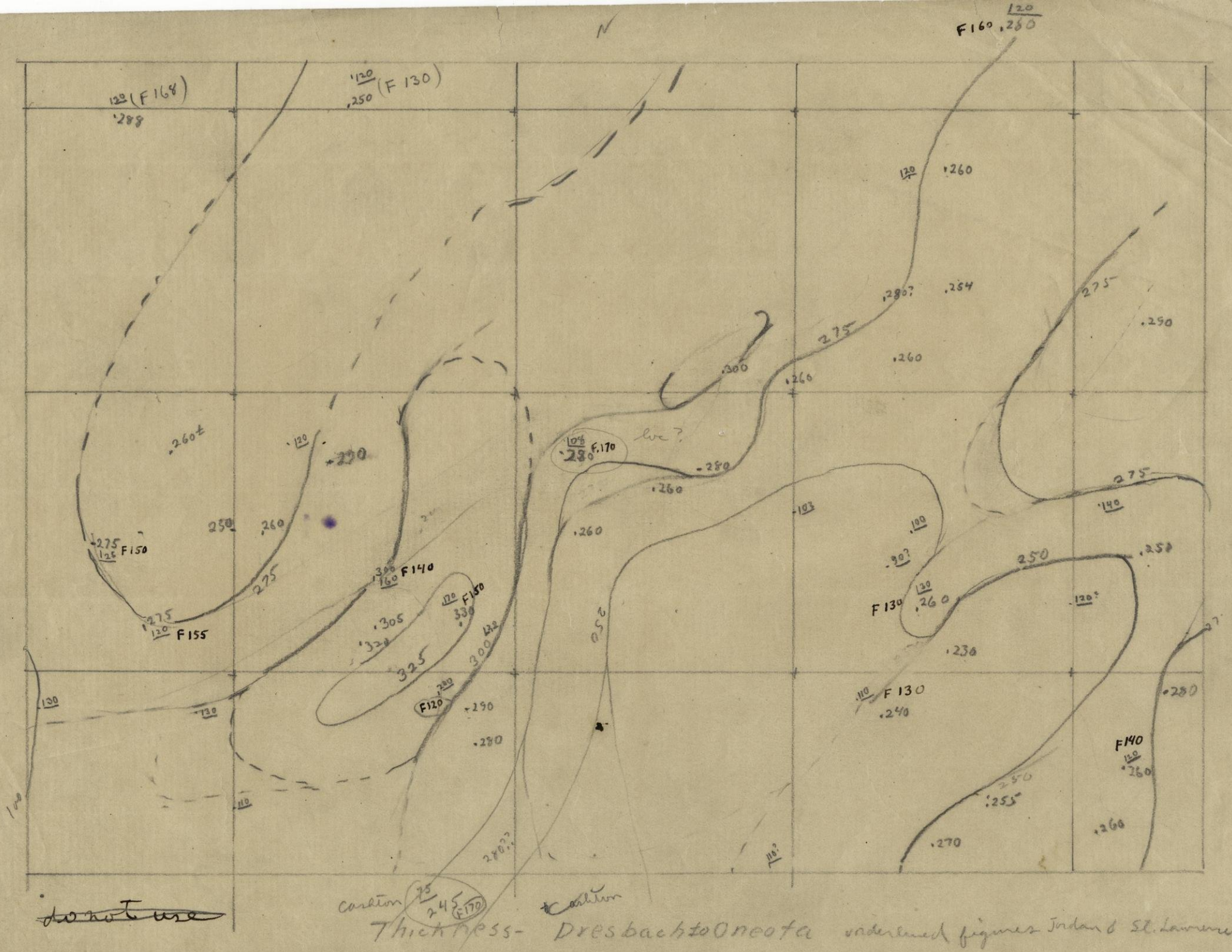
Plate X

This page shows arrangement of illustration sheet
It is not full size.

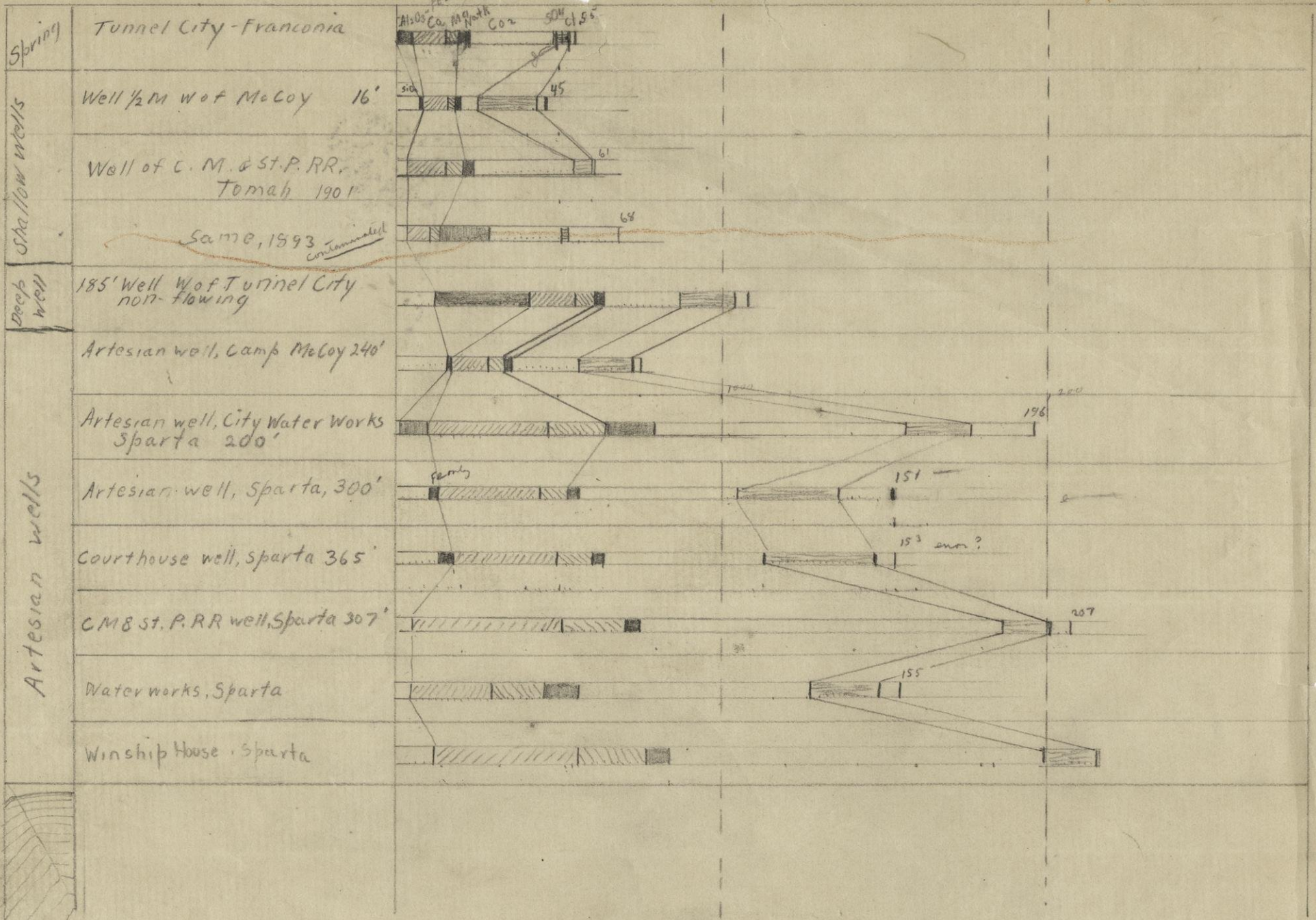








2 1/2" = 100 ft
 100 200 300 ft



Sparta Creek, Sparta

Council Creek, Tomah

Lemonweir R, Wyerville

Spring, Tunnel City

Well, Wyerville

Well, Sparta

Well 1/2 M W of McCoy

RR well, Tomah

Farm well, N, Tomah

Well, Kendall

probably rock

Bridge shop well
Tomah (contaminated)

Well W of Tunnel City

Well, Kendall

Wells, McCoy

Mixed with surface water

(probably part shallow wells)
Water works, Sparta

Private well, Sparta

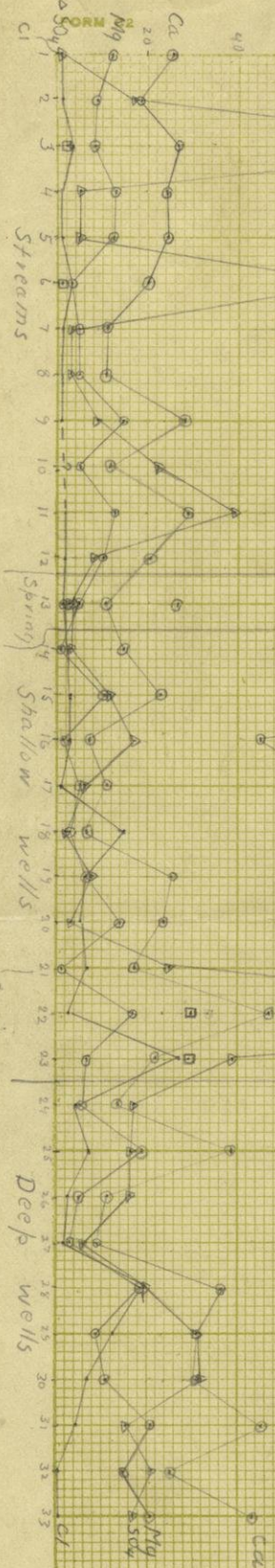
Court House well, Sparta

Crest P well, Sparta

Water works, Sparta (well?)

Artesian well, Sparta

Total solids



not in shape to use

BEAN "QUARY" AND C. & N.W. CUT, TUNNEL CITY

NE 23, 8 SWNW 25, 18-2W

F.T. Thwaites, Aug 10 & Oct. 14, 1916

JORDAN 48

ST. LAWRENCE 71' ±

FRANCONIA 161' ±

1400. Anetia	15	10.0		Sandstone, coarse, gray to yellow, heavily bedded, case hardened at top ("clinkstone") clay lumps (oneota float on top of hill ss.)	Fucoids
	14	26.0		Talus covered slope, probably like #15	
	13	8.0		Sandstone, fine with some large grains, light yellowish to gray, platy bedding	Trilobites, few worm holes
	12	4.0		Conglomerate, matrix coarse yellow-brown ss. pebbles fine ss to 3" long	
	11	36.0		Sandstone, very fine, gray & yellow mottled, heavily bedded, thin seam greenish shale about 15' from base	Worm holes abundant
	10	7.0		Sandstone, fine, gray to brownish, micaceous, thinner bedded (3"-6")	Trilobites at top
	9	1.0		Shale, yellowish, sandy, mud cracks	
	8	7.5		Sandstone, fine, gray, like #10, beds 2"-2'. Lenses 1"-2", shale like #9	
	7	13.5		Sandstone, very fine, yellowish, very calcareous, beds 1"-3" almost a shale	Worm holes
	6	6.0		Sandstone, fine, yellow to gray, glauconitic, nodular, in part pebbles of fine yellowish.	
1281? Location	5	22.5		Poorly exposed, sandstone like #3 & 4	
	4	4.0		Sandstone, medium to fine, very glauconitic	Worm holes with yellow filling
	3	28.0		Greensand, medium-fine, red, yellow or gray in some layers, beds	Trilobites, worm holes

↓ ↓

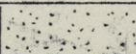
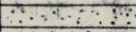
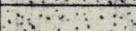
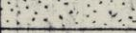
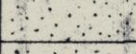
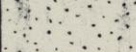
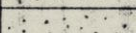
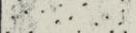
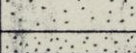
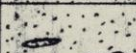
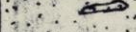
BEAN QR. & C & NW CUT, 2

FRANCONIA

DRESBACH

3 cont					
Yellow Sandstone 55±	2	10.0		Sandstone, fine, light yellow & gray mottled, nodular, thin bedded (1"-3") hard at top	
	1	9.0		Sandstone, fine, yellow to gray, beds 1"-4"	
		35.5±		Covered interval of over a mile, level determined from poor outcrop near Bean quarry	
Lower Greensand 32.5	12	1.0		Sandstone, fine, yellow, hard, 1"-3" r.h. mks	Trilobites
	11	17.0		Greensand, medium, beds very thin to 2', cross-bedded, ripple marks, mud-cracks	Trilobites, fucoids, Gastropods
	10	15.5		Sandstone, fine, gray to green, glauconitic, along laminations, beds 1/2"-12", micaceous, small cross-bedding	Trilobites
	9	14.0		Shale, sandy, yellow, micaceous, beds to 12"	Trilobites, Gastropods
	8	5.0		Conglomerate, matrix greensand with much calcite. Pebbles fine vel. sandy sh.	Brachiopods
Wormstone 1124	4-7	4.5		Ss. hard, vel. ss. white, conc. 1.0; ss. yellow, nodular 1/2", all coarse	Brachiopods, trilobites, worm holes
	3	26.0		Sandstone, medium, yellow to gray, much limonite cement especially at base, slight green shale seams, about 8 layers harder than rest, beds 1'	
	2	32.5		Sandstone, medium, gray to yellow, soft, beds 2"-1', small cross bedding, irregular limonite cement, thin partings of green shale	
1054 1053	1	8.0		Sandstone, medium, gray to yellow, soft, abundant partings of green shale, beds 3" or less	

NORWALK 2

FRANCONIA 125'	Upper	16	5.5		Poorly exposed. Greensand, fine, soft	
		15	2.5		Greensand, fine, hard	
		12, 13, 14	12, 13, 14		Greensand, fine, x-b; nodular yel ss; ss. gray, glauc.	Worm holes
		11	2.0		Greensand, medium, x-b; nodular yel fine ss	" "
		10	5.5		Sandstone, fine, yellowish, glauconitic, heavily bedded, hard	" "
	Lower Greensand 46' Yellow beds 40'	9	10.0		Poorly exposed. Sandstone, fine to medium, brownish, glauconitic, thin bedded	
		8	7.5		Sandstone, fine, gray to yellowish, non-glauconitic, hard, heavily bedded	
		7	14.5		Sandstone, like adjacent beds, little glauconite, poorly exposed	
		6	2.5		Sandstone, fine, yel. to gr. soft, heav. b.	
		5	11.0		Sandstone, fine, greenish (greensand) lenses fine calc. yel. ss like #4, cross bedded, rather heavily bedded, hard at top	
		4	1.5		ss. very fine, yel. calc. hard, some gd. layers	
		3	13.0		Sandstone, fine, white to green, beds 1'-2', cross bedding (glauconitic)	
		2	19.5		Sandstone, fine, white & green (glauconitic), layers undulate, ripple marks. 4"-6" shale at top, bluish gray ss. micaceous, shale lenses as below	
	1030	1	1.0		Sandstone, fine, yel. micac. hard, bl. sh	

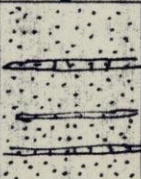
SOUTH RIDGE ROAD
SESE 7, NENE 18, NNNW 17, 15-1W
F.T. Thwaites, Sept. 17, 1916
Thicknesses affected by dip

JORDAN 63'	ONEOTA	1257	18	10.0		Dolomite, gray; oolitic chert; coarse yellow greenish pebble conglomerate, sandstone, fine yellowish; all poorly exposed	
			17	46.0		Sandstone, coarse yellow to gray, heavily bedded, large cross bedding. 2' "clinkstone" at top	Probably includes 8' at top that belongs to Lower Greenish - possibly to the Middle section. Bedded thin, made by rounded conglomerate material
	ST. LAWRENCE 58.5'	1194	16	16.0		Sandstone, fine, yellowish to gray laminated	Trilobites, worm holes
			15	1.0		Conglomerate, matrix medium yellow ss; pebs. brown fine ss	
		Quarry Rock	14	30.0		Sandstone, fine, yellowish, thin to heavily bedded, soft. Dolomitic layers above base	Trilobites, 2' from base
			13	9.0		Shale, yellow, calcareous, sandy & sandstone, very fine, yellow, calc, thin bedded	
	Yellow shales		12	1.5		Dolomite, yellow-gray, glauc.; & gd. co.	Brachiopods
			11	9.0		Shale, yellowish, sandy, calcareous, often almost a sandstone	
			10	9.0		Conglomerate, matrix greensand, pebs. hard calc. vel. fine ss; layers of greensand; layers & nodules of sandstone, very fine, vel. very calc. hard	Trilobites. D. minn.
	1136	Upper Greensand	9	8.0		Greensand, medium, with layers of sandstone, very fine, yellow, calcareous, hard; pseudo-conglomerate? Layers 1'-3'	
			8	35.5		Unexposed	

SOUTH RIDGE ROAD, 2

FRANCONIA 148'	Yellow ss.	8 cont	7	5.0		Sandstone, fine, gray & brownish streaked, greensand specks	
			6	6.5		Sandstone, fine, grayish to yellow, pseudo-conglomeritic, nodular	Worm holes
			5	5.5		Sandstone, fine, yellowish, glauconitic	Worm holes
			4	75.0		Unexposed	
	Lower Greensand						
	Micaceous shale		3	5.5		Shale, yellow, sandy, micaceous, interb. with purplish & greenish color	
			2	5.5		Conglomerate, matrix coarse red greenss, pebs. large, calc. vel. ss.	
			1	5.0		Sandstone, coarse, gray, heavily bedded, iron concretions ("wormstone")	Worm holes
			0	28.0		Unexposed	
DRESBACH	955						

TOMAH-WILTON ROAD
NE 18, 16-1W
F. T. Thwaites, Sept 13, 1916

JORDAN	1354	8	1.0		Conglomerate, matrix coarse yel. ss. Pebs chert & green shale	
		7	60.0		Sandstone, mainly coarse yellow, heavy to thin bedded, top case hardened ("clinkstone" 5-6'), base fine, sugary, not as well exposed and possibly in part St. Lawrence	
		6	17.0		Unexposed, probably conceals contact	
		5	36.0		Sandstone, fine, variable grain, yellowish, laminated, cross bedded	
ST. LAWRENCE	Yellow Sh Quarry Rock	4	11.0		Shale, yellowish, sandy, calcareous; 3' below top 1' gray dolomite, purplish stains	
		3	12.0		Conglomerate, matrix greensand, medium. Pebs & layers of fine yel. calc. ss. Layers of greensand. Top very calcareous, less greensand	
		2	19.0		Greensand, medium, thin bedded. Shale layers, fine sandy, yellow, calc. like pebs. above, usually 1"-4" thick	
FRANCONIA	Upper Greensand	1	27.0		Unexposed	

JORDAN

ST. LAWRENCE

FRANCONIA

Probable Contact →

Yellow Sh Quarry Rock

1218

Upper Greensand

Daily gage height, in feet, and discharge, in second-feet, of

LA CROSSE

River ~~at~~
Creek near

WEST SALEM, WIS

...for the year ending Sept. 30, 1917 REVISION

Drainage area 412 square miles

Henry Schuch

Gage read to Quarter-tenths ~~once~~^{twice} a day

Daily gage height, in feet, and discharge, in second-feet, of La Crosse

River at
Creek near

West Salem Wis. for the year ending Sept. 30, 1916

Table of use: Half tenths 1.0 ft. to 2.0 ft.
Used rating table dated 10/1-3/23 (10/4/14) 3/24 2/30 (10/6/16)

Drainage area 412 square miles.

Henry Schucht, observer

Gage read to $\frac{1}{4}$ tenths ~~once~~ ^{twice} a day

...for the year ending Sept. 30, 1916

File Number { Washington
District

Table of use: Half tenths 1.0 ft. to 2.0 ft.
Used rating table dated 11-26-15 (Oct 1 - Nov 26)
12-1-16 (Nov 27 - Sept 30)

Drainage area 6.33 square miles

J. Johnson observer

Page read to $\frac{1}{4}$ tenths ~~one~~ a day

...for the year ending Sept. 30, 1916.

File Number { Washington
District

Johanna Liebl Oct 1 - Mar 31
William Ploetz Apr 1 - Sept. ³⁰ observer

Gage read to $\frac{1}{4}$ tenths ~~once~~ twice a day

Table of use: Half tenths 1-5 ft. to 25 ft.
Used rating table dated 1-10-16 [Oct 1 to May 26]
10-17-16 [May 27 to Sept 30]

Daily gage height, in feet, and discharge, in second-feet, of

Namakagon

River at
Gage near

Trego, Wis.

for the year ending Sept. 30, 191

File Number { Washington
District

Table of use: Half tenths 1.0 ft. to 2.5 ft.

Used rating table dated Oct. 30 (10/9/14)

Drainage area 420 square miles.

G. E. Krenz

observer.

Gage read to half tenths

once a day

Day.	OCT.		NOV.		DEC.		JAN.		FEB.		MAR.		Day.	APR.		MAY		JUNE		JULY		AUG.		SEPT.		Day.	4th	3rd	2nd	1st	Quarter	Discharge	Date	
	Gage height.	Discharge.	Gage height.	Discharge.	Gage height.	Discharge.	Gage height.	Discharge.	Gage height.	Discharge.	Gage height.	Discharge.		Gage height.	Discharge.	Gage height.	Discharge.	Gage height.	Discharge.	Gage height.	Discharge.	Gage height.	Discharge.	Gage height.	Discharge.									Gage height.
1	17	417	195	564	18	472		340	27	417		369	1	19	532	26	1020	215	698	26	1020	17	417	17	417	1								
2	175	444	175	444	18	472	24	335		393	26	369	2	20	597	26	1020	21	664	24	873	17	417	17	417	2								
3	18	472	17	417	19	532		332	26	369		338	3	24	873	25	944	21	664	245	908	175	444	17	417	3								
4	195	564	17	417	19	532	245	331		381	235	308	4	235	838	25	944	20	597	24	873	17	417	16	369	4								
5	19	532	165	393	185	502		329	26	393		308	5	25	944	24	873	20	597	22	733	175	444	18	472	5								
6	195	564	17	417	185	502	23	328		372	235	308	6	23	803	24	873	215	698	20	597	175	444	185	502	6								
7	20	597	17	417	185	502		326	26	350		308	7	23	803	235	838	195	564	20	597	17	417	19	532	7								
8	20	597	195	564	18	472	225	325		350	24	308	8	225	768	235	838	21	664	20	597	175	444	20	597	8								
9	19	532	20	597	18	472		323	26	350		308	9	235	838	23	803	21	664	19	532	17	417	20	597	9								
10	185	502	21	664	19	532	24	322		350	24	308	10	23	803	225	768	215	698	19	532	18	472	185	502	10								
11	185	502	22	733	18	472		323	26	350		308	11	24	873	22	733	20	597	19	532	18	472	19	532	11								
12	18	472	225	768	19	532	24	324		350	245	308	12	26	1020	22	733	20	597	19	532	185	502	19	532	12								
13	18	472	22	733	185	502		326	26	350		320	13	28	1170	21	664	21	664	18	472	175	444	195	564	13								
14	19	532	22	733	185	502	235	328		384	25	320	14	28	1170	21	664	20	597	18	472	175	444	195	564	14								
15	18	472	215	698	17	417		330	27	417		332	15	29	1250	215	698	21	664	19	532	17	417	19	532	15								
16	175	444	21	664	18	417	23	332		417	25	332	16	28	1170	23	803	21	664	19	532	175	444	185	502	16								
17	175	444	20	597	20	412		334	27	417		332	17	28	1170	22	733	20	597	185	502	17	417	185	502	17								
18	18	472	20	597	20	408	245	336		428	23	350	18	28	1170	225	768	20	597	18	472	17	417	18	472	18								
19	18	472	175	444	20	403		338	28	440		369	19	28	1170	22	733	20	597	18	472	175	444	18	472	19								
20	19	532	18	472		398	24	343		416	235	369	20	28	1170	21	664	19	532	18	472	18	472	18	472	20								
21	17	417	175	444	27	393		347	26	393		369	21	28	1170	215	698	185	502	17	417	18	472	185	502	21								
22	18	472	175	444		387	25	352		380	245	417	22	30	1330	215	698	18	472	17	417	18	472	19	532	22								
23	18	472	195	564	34	381		356	26	369		472	23	30	1330	22	733	20	597	17	417	18	472	19	532	23								
24	175	444	19	532		375	24	362		369	19	532	24	30	1330	21	664	21	664	16	369	18	472	185	502	24								
25	185	502	18	472	32	369		369	26	369		502	25	30	1330	215	698	20	597	16	369	175	444	18	472	25								
26	175	444	195	564		367	245	373		338	18	472	26	28	1170	215	698	20	597	20	597	17	417	185	502	26								
27	175	444	19	532	295	364		377	235	308		534	27	27	1090	22	733	21	664	20	597	17	417	18	472	27								
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30	17	417	175	444		350	26	389			18	472	30	26	1020	225	768	225	768	18	472	17	417	20	597	30								
31	17	417			25	345		393				502	31			22	733			16	369	17	417			31								
TOTAL		14952		16363		13497		10689		10927		11975			30942		23968		18907		17310		13640		15271									
per mile		482		545		435		345		377		386			1030		773		630		558		440		509									
depth		1.15	1.10	1.30	1.24	1.04	9.89	8.21	7.84	8.98	8.57	9.20	8.77		2.45	2.34	1.84	7.76	1.50	7.43	1.33	7.27	1.05	7.00	1.21	7.16								
in acre-		1.33	1.27	1.45	1.38	1.20	1.14	.95	.90	.97	.92	1.06	1.01		2.73	2.61	2.12	2.03	1.67	1.60	1.53	1.46	1.21	1.15	1.35	1.29								
Maximum		597		768		532		393		440		597			1330		1020		768		1020		502		597									
Minimum		417		393		345		322		308		308			532		664		472		369		417		369									
Year period																																		

Note—

Recomputed from figures sent in by 10/15/14

Daily gage height, in feet, and discharge, in second-feet, of *TREMPEALEAU*

River at
~~Creek~~ near

DODGE, WIS.

for the year ending Sept. 30, 1917

Drainage area 633 square miles.

J. Johnson

Page read to *Quarter-tenths* ~~once~~ *twice* a day

