

OCT 15 1940

- Anti-Ea 3.87 II shown by prelim. tests not to have weakened in 5 yrs. 15 ml. dild. to 25 w. saline conty 1:10000 with. after inactiv. again centrifgd. from trace w/out. ~~small amount contain~~

G.p. compl. (1:12.5 conty. 2 units in 0.1 ml (miss Baker)) dild. w = vol. saline conty. 1:10000 with, killed. centrifgd.

~~Dild. to 50 vol. in one saline.~~ 5.0 ml. ea. ser. diln.: + 5.0 saline; + 4.0 saline + 1.0 Ea conty, 0.068 mg Ea N/ml., to remove in 25% A; + 2.0 saline + 3.0 more Ea soln. mixed, let stand in ice-H<sub>2</sub>O. remove ca 65% antb.

Set up:	1.0 ①	1.0 ①	1.0 ② Dupnt	2.0 ③ Dupnt	2.0 ③ Dupnt.
in dupl.	1.0 Compl. (1:1)	0.5	1.0	0.5	1.0 Ea .044
in ice-H <sub>2</sub> O.	1.0 Saline + month	1.0 Ea conty 0.053 N	0.5 saline	1.0 Ea conty. 0.044 N	0.1 partly anticompl.
			1.0 Ea conty. 0.044		
	1.0 2 Dupnt	1.0 ①	1.0 ①	1.0 ①	Ca 1.5 ml. 1:1 compl. inactd. in H <sub>2</sub> O-bath @ 56° for 40 min. (i.c)
	1.0 Ea 044	1.0 Ea .053	0.5 i.c.	0.3 - 0.35 i.c.	
			1.0 Ea .053		
			0.5 partly anticompl		.5 saline + 0.2 1/2 compl 0.16.

0.14 contained no compl. 0.1 ml. input. contains no compl. 0.14 0.3 0.3 0.5 partly anticompl. 0.5 saline + 0.2 1/2 compl 0.16. 0.14 0.3 0.3 0.5 partly anticompl. 0.5 saline + 0.2 1/2 compl 0.16.

OCT 16 - Tubes centrifgd., ③ tubes st. opalescent, centrifgd. longer. washed down w. 4 drops chilled saline, sonogenized, then w. 2 ml. more. 1st dupts centrifgd. & w/ksps. added to residue from this. 3 w/ksps. altogether.

Compl. H. @ 1/20 (actual compl. diln.) gives complete hemolysis w. 0.2 antygl. red cells. 1/24 incomplete 1/15 used for anticompl. tests.

① 0.057 should have contd. 1 unit ∴ 4 contained < 1 unit not 7 1/6 left.

50 units used.

not 7 1/8 left

110 units used

0.3 dupnt. 0.2 .. not anticompl. higher w/ trial continued w compl.

For 2 dupnt ~~not anticompl~~ 0.3 dupnt.

Oct 25

OCT 24 - Anti Ea 3.87 III : 3 ml. dild. to 10.5. few drops Ph red added, neutral. w. N/10 HCl to a pH 6.8.

Get fresh g.p. serum, 2/3 from day before. 1/2 inactivated. Remainder killed, carefully mixed, w. stirring to pH 6.8 w. N HCl. E test tested w. saline & 1/10 vol. Inactd. compl. also inactivated in a w. way.

OCT 25 - Set up 1.0 dils. 3.87 III 1.0 ser. 1.0 ser 1.0 ser 1.0 ser  
 1.0 Ea conty 0.08 N 1.5 g.p. ser 1.5 inact. g.p.s. 1.5 g.p.s 1.5 i.g.p.s.  
 1.0 Ea 1.0 Ea 1 salt 1 salt

after ca 1 hr. @ room temp. centrifgd. in cold.

Titn: 0.1 acidifd. compl., 1:10 contains 2 hem. units. ∴ 1 ml. contains 200 units.

1 Ea g.p.s + 1 Ea i.g.p.s supt. unfortunately mixed.

Bl inputs - also run again, & all tubes washed 3x C ser Bl.

2 i.c. supt. contains no compl. Dild. 3:10, & 1:10 g.p. ser. 0.1, .2, .25 showed complete hemol. 0.03 undild. 0.3, undild. also.

Ea - ser. + cells + 0.1 compl. - hemol compl. in 0.1, 0.5 not 1, but 1 salt anticompl.

Ea - C - ser supt. 3:10, 0.2, 0.4 no hemol.

" " " " undild: 0.2, 0.3 no hemol.

" " " " " , 0.2, 0.3 + Compl.: 0.2 hemol complete 0.3 almost "

OCT 26 - Freshly dild. compl. units could. 2 units in 0.12 ml.

1" wshy compl. tube - No hemol. w. 0.3 - 0.6 inclusive.

1" " C, Ea " - " " " " " " " "

" " " " " - Not anticompl. in 0.4

i.c Bl - 0.2 not anticompl., 0.3, & higher anticompl.

w saline - methyl., untd. 5% w. chilled.

OCT 29 - Anti P<sub>III</sub> cat. ser 6062B centrifgd. 1/2 ind. dild. to 14, inactvd. @ 56°.

Compl. - g.p. ser. for 3 prep.

t = 18°C. 1.0 ml. portions dild. ser. in all tubes.

1.0 " compl. in bls., 1.5 in s-ser tubes. 1 saline also in bls.

1.5 " inactvd compl in bls. x s-ser " 1 saline in s-c & s-i tubes

1.0 ml. S III conty 0.04 ang. used in all s-ser tubes, as this leaves some A.

Tubes washed 3x.

250  
 hem. units  
 used

Titn: of compl. 1:10 dils. 0.03 - 0.08 + .4 saline + .2 untd. cells  
 .04 contains min. hem. dose. 4 ml. dild. to 5 so .1 would contain 2 units.

Compl - ser. - saline bl. sup - 0.15 dild to 5 w. saline, 0.4, 0.5, 0.6, 0.7 set up w. .2 ml.

Hemol. complete in all, showing 0.02 to 0.04 + since not anticompl. in dils. used.

375  
 8 g.p. supt.

Compl - ser. 5 supts 0.5 .1 .2 .3 .4 .5 5 (1 w. 0.15 x .5 = .21 compl)

saline .4 .3 .2 .1  
 i.c. .2 none in any tubes.

370 used

No compl. in 1" wshy. of C-ser-Ea.

2 units compl. added to ea. Complete hemol. in all tubes.

OCT 25 1938 - Soln. 204A, which had been standing in cold in cotton-plugged bottle, centrifgd. cold from sl. sediment, inactivated @ 60° for 48 hrs., chilled overnight. 26" - Centrifgd. Duplt. found barely anticompl. @ 1:5 by Mrs. Lipman. Accordingly following set up in cold

2.0 ml. 204A + 1.0 ml. saline conty 1:20 000 methyl + 10% p. serum (compl. action evident only undild.).

Same, + 0.2 mg. S III

2.0 ml. 204A + 8 same saline, + 0.2 mg. S III.

S: 1.6 mg with N/ml.

NOV

- Ca. 1.8 ml. Ser. 4.75, dild. w. ca 6 ml. saline, set up as follows w. g.p. complement from Miss Baker, Wassermann Lab. same day, 20 units/ml.

Bls. : 1.0 ml. x 41 475 dild. + 1.7 saline

Dupl. 1.0 ml. portions 4.75 dild. w. 0.7 compl.; 1.7 saline + 0.15 SI

123-4 in 0.15 ml.; 1 saline + 0.7 compl. + 0.15 SI, all at 0°.

2" - Pts. sized 2x, but as settled rapidly, centrifgd. cold, washg. w. 3 or 2 1/2 ml. chilled saline.

3" - 5 ml. same ser. dild. sterily w. 15 saline, inactivated.

4" - Tests on suppts. from Nov. 2 w. sensitized cells & compl. 1:10 from 475, Saline - Not anticompl; no compl. up to 0.4 ml. 0.1 + 0.2 compl. lysed 0.2 + 0.2

" " G.P. No compl. left in 0.05, 0.1, 0.2 sl. in 0.4?

5" - Dild. of Ser. 475 5:15 (Nov. 3, inactivated.) used. This & compl. centrifgd. cold. Compl. active 1:10, 0.1 ml., test at beginning of expt.

Set up at room temp.: 25-6° Tubes in dupl.

	1	2	3	4	5	6	
475 dild.	1.0	1.0	1.0	1.0	1.0	0	mixed
G.P. ser.	0	1.0	0	1.0	1.5	1.5	occas.
(proclad, 2 animals w. strept adenatis?)							
7. Serum							
Saline	1.5	0.5	1.5	0.5	0.5	1.5	
S	0	0	0.2	0.2	0.2	0.2	

Centrifgd. room temp. Dupl. suppts. combined. Pts washed 2x w. saline

@ room temp. No whirl in Ser. 1, 2, 6. Bl. ppt. considered neg.

Rdgs after 15 min. Suppts: 1 - 0.2 sl. anticompl. 2 - .025 + + 0.5 compl.

2 .03, .04 hand. complete 4 - 0.1, .2 no hand 5 - .10, .2 ±

2 0.6 " " 4 - 0.4, 0.6 " " 5 - 0.4, 0.6 0

In absence of other controls, act > 1/20 orig. compl. present in (4), (5).

5 - 1" wash. 0.5, 0 .2 0 .4 0 0.35 not anticompl.

S made up in Oct. 2" - Suppts + v. S S should have been added w. calibr. ppt.

Miss Pauli

B 210

Nov. 10 - 1.0 ml. portions same 4.75 diln. - centrifgd., set up w. following in dupl.; 1.0 fresh compl. from Miss Baker (has titrn. 2 hem. units per 0.1 ml.) (mine, ), 0.25 mg. in 0.25 ml. S 123-4 Soln. of Oct 1, '32; 1.0 ml. same compl., lat. inactvd.; 0.25 S; 1.0 ml. old compl. from Miss Lipman now only 0.8 unit in 0.1 ml.); 0.25 S, 0.5 4.75 diln., 1.0 old compl., lat. inactvd.; 0.125 S. + 0.5 saline @ room temp. <sup>22°</sup> Ppr. settled quite rapidly. 1 drop toluene added to ea. & covered w. card.

11" - P.M. 0.1 good compl. diln. still hemolyzed. .05 also  
Supnt., 1.0 ml. <sup>good</sup> compl. : no hemol. in 0.1, 0.4, 0.6  
" 1 ml. old " " " " 0.2, 0.4, 0.6

Soln. 205 D' 0.46 mg. antib. N/ml, 0.05 SIII brings down red.

23" - Portion w/ ser. mixt. 556 & 633 inactvd. after centrifgd. Centrifgd. again. On basis of prelim. test., all at vol. 3.0 ml., 0, 4, 8, 12, 16, 20 units compl. added to 0.50 ser., mixed, <sup>warmed in H<sub>2</sub>O @ 37°</sup> to all but ser-compl & (15) 1.0 ml. 9 III soln. contg. 0.07 mg. S added. Set stand ca 37° <sup>u</sup> for 15 min. (flooded after few moments), w. occas. mixing. Centrifgd.

In 4 ml. vol., 0.2 sensitized cells hemolyzed in 15 min. @ 38-40° by 4 unit compl., in ca 40 min. by 2 units. If 0.5 ml. above ser. present, 2 units showed consid. culicid. in 15 min. but compl. hemol. complete in ca 40.

4 ml. Duplts. of 8 & 20 set up w. 0.2 sensitized cells. At end of 15 min. little hemol. noticeable, but after ca 40 min. hemol. partial in 8, almost compl. in 20. ∴ ca 1.5 units in 8, 2 in 20.

Nov. 29 - 5 ml. 4.75 dild. to 25 w. saline, inactvd. 15 more ml. saline, contg 0.15 ml. methyl. added. Compl. from Miss Baker, said to be 2 units in 0.1 ml. 1:10, but on test req. 0.15 ml. 1:10 for 15 min. hemol. @ 37-40°. This called 2 units. Bl 4.75 diln + saline + 1.5 ml. 1:10 compl. diln. set up (20 units). Also 0, 4, 12, 20, 50 units compl., last being 0.375 ml. freshly centrifgd. undild. compl. all made up to 2.3-2.5 ml. w. saline, warmed to 37°, 0.125 ml. S I, 1:1000 added to ea, mixed, let stand 20 min, w. occas. mixing. Centrifgd. in C centrifgs; 0.15 ml. of 20, 50 dupts. did not cause hemol., nor 0.6

Entire remainder of 50 caused <sup>early</sup> incomp. hemol., 20 Bl. complete  
∴ Duplt of 50 contained not > 2 units compl. 0 dupt. + ser - , + S ±

B 210

NOV. 5 - 2.0 ml. same 6.062f dild - w. 12 saline - with, inactvd. @ 56°,  
Serum taken from 3 large gips.

6 = Compl. ser. centrifgd. compl. neutral. & ca 1/4 7.4 w. N HCl. 45 ml.  
1/2 inactvd. 4.0 ml. compl. Bts. + 0.8 ser. + 0.03 S III.  
1.0 ml. ser. bt.

t = 23°

Duplicate 1.0 ml. ser. + 5.0 compl. + 1.0 S III - with only 0.045.  
1.0 .. " + 5.0 inactvd. " + .. " .. " .. "  
Inactvd. compl. bts. : 3.0 ml. + 0.6 ser., 0.024 S III. also: 1.0 ser.  
i.c. tube flocced before c tube. + 1.0 S III soly.  
in tripl.

Compl. titry.: 0.1 ml. made up to 10. 0.3 - 0.7 set up w. 0.2 antipd.  
red cells. 3 almost fully hemd., 0.4 compl. : 250 hem. u/ml.

Compl. ser - Bt. titry: 0.12 made up to 10, 0.4 - 7. Complete sermot.,  
showing no anticmpl. action of 606 ser - present.  
0.06 undild. gave complete const.

Compl. - ser. - S. input: 0.05 ml. no hemol.  
0.1 - 0.7 : No hemol. 2 u. compl. bt. added to ser.: Compl. hemol. in all.  
Inactvd. Compl. - ser. - S. input. 0.3 - 0.7 + 2 u. compl. ser. bt. 1:10  
No hemol in any! 0.2 antipd. cell, hemol.

2 vials in samples.

0.2 ml. ser. antipd. red cells. Count made by Mrs. Smith on 3 successive  
samples. 1,590,000, 1,470,000, 1,780,000 per cu. mm.; last probably in error.

Ea - anti Ea 3.87 II 15:25

0.1 made up to 10 w. saline. 0.24 portions. Compl. titrated  
0.3 ml. 1:10 above c-ser. bt. with 6 u. compl. 0.06 + 1 u.

0.0011 Ea N/ml., 0.2 should be α. Soln. made up 0.0044 Ea N/ml.

0.05 to .3 set up. w. .2 ser. dils. - after addn. of 6 u. compl.

7 tubes. 1/2 hr. @ 37°, then 0.2 serotd. red cells added.

9 in 10 min @ 37° 1 tube ++ hemol. 1 + .15 no hemol., 2, 3 complete.  
" 20 " " 37 05 +++ 1 + " " " " " " " "

Repetition of above w. 2 u. compl. gave complete fixation bet 0.05 - 0.4

orig ca 8.  
2hr  
water 5  
+ 4u 7.3 u  
+ 10 drop N  
HCl.

NOV 11 - 2.0 ml. 6.062g dild. to 20 w. saline - mostly inactivated. chilled, filtered through collodion disk filter (700 up) sent to Ph. lab. (2 drops in cu). Filter. very rapid. Ca 60 ml. fresh y.p. serum filtered in same way, running through fast at 1", but filter clogged rapidly & ca 1/2 had to be filtered through another.

12" - 52 ml. compl. 22 inactivated, centrifgd. cold.  
4 5.0 ml. portions, w. 1.0 dild. ser., 1.0 ml SIII contg. SIII, 1 w. ~~1.0 dild. ser.~~ 0.5 SIII ser. Sent centrifgd. w. others, reph. centrifgd, decanted into fresh tube, 0.50 ser. dild. added, set stand (1 hr), centrifgd.  
Compl. bl. 1: 5.0 compl., 1.0 ser., 1 saline  
1: 4.5 " 0.4 " 0.4 "  
3 5.0 ml. portions i.c. + 1.0 SIII ser.  
In. compl. bl. : 1 5.0 ml. + 1.0 ser. + 1.0 saline + 1.0 ml. + 0.2 ml. SIII ser.

t = 23°  
to 25°

Dupl. ser - 4 ml. saline bls.  
Duplicate 1.0 ser. - 4 ml. saline - 1.0 SIII ser.  
Tubes without q.p. ser & i.c. tubes floccled more coarsely than compl. tubes

Compl. titron: 1:100 1" time Get 0.4 & 0.5  
2" time 11 w. ↓ 0.3+++ 0.4 compl. 0.45 compl. 0.5 - .6 compl  
Compl. ser. bl. 0.14 to 10 ml. : 0.3+++ 0.4 " " " "

0.2 ml. sensitized red cells: only 980,000, 990,000, 965,000 per cu. mm.

Compl. - ser - S sup. : 0.5, .1, .3, .5, .7 almost complete hemol. 3, less on ea side.  
" " " .1, .15, .2, .25, .3, .35  
almost complete hemol. .2, less on either side.  
1" using " " : no hemol. 0.1 - 0.7 Complete hemol. after adding 1/4 u compl. .15, .2, .25, .3, .35

1 u in 2  
35 u left  
=

2.00 u 1/2 S ser: Complete hemol. 0.5 sup. 1:10 set up .1 - .4  
0.3 " tube completely hem.

left  
=

0.2 sensd. red cells + saline + 1:10 rabbit ser. 0.5 .1 .15 .20 .25  
Compl.

NOV 13 - C-Bl - sup. ser requires 0.3 1:50 for complete hemol.  
C - ser - S sup. 0.15 almost complete hemol. .2 rep, complete. Repeated, starting @ 0.5: same results.  
2" whq. : no hemol. 0.2 - .7 1 u. compl. added. no hemol.  
1" whq. 1/2 S-ser-C : no hemol. .1, .3, .5, .7, 1 1/3 u. " " Complete "

40  
u  
=

Rabbit plasma 1:10, no hemol. in 0.05 - 0.2

Dec 3 Cp ser Bl sup - still compl. hemol. w. 0.02 & 0.05 undil.  
Cp " " " - no hemol. 0.1, 0.3.

NOV 15 1940

NOV 15 1940

"5%" sheep cell susp. gave 640,000, 630, 650 per cu mm. (1:1)

12 1/2 ml. centrifgd. in cold. cell vol. 4%. Made up to 8. Count now 820, 815, 800 instead of expected millions. Centrifgd. again. Cells taken up to 7 ml. 0.50 ml. cells + 1.0 saline; 0.80 ml. idm. for Kij.

Suppt. 2. Softly. 400 cu mm. for Hb. Count 1,600,000 per cu mm. Hb 1.35% = 1.95g.

all 3 sets w. same 1:50 compl. 0.2 ml. susp. +

2 ml. susp. + 1.33 1:1250 sensitizes ser.

Compl. .1	.15	.2	.25	.3	.35	.4
Complete hemol. in all						
1:100	+	++	+++	+++	+++	not used

Made up to 0.6 w. saline before reading.

2 ml. susp. + 2 sensitizes diln.	1:100	?	±	++	+++	+++	compl
Complete hemol. in all							

Count 660,000 per cu mm.

2 ml. susp. + 3 sensitizes diln.	1:100	?	+	++	+++	+++	+++
Complete hemol. if rest							

2 ml. contain .12 orig cell susp. " " " .08 hemolysin diln. 2 ml contain .1 orig cell susp. .1 hemolysin diln. 2 " " .08 " " .12 hemolysin diln.

NOV 16

Same 1:1 sensit. susp. set up w. fresh 1:50 diln. same compl. 0.75 + ++ +++ complete also 1:1.5 vol with. sp.: 1 ml. + 0.2 saline ← to give same amt. cells. or fewer cells.

Unit in # expt. of Nov. 12 was not < that in preceding expt., although no. of red cells in Com. unit was smaller

- ① 0.25 undil. compl. + 0.05 1:3 15:25 3.87 II diln.
- ② " " " + 0.01 HS 902 (w. known.)

Remainder of 902 could w. 1/100 vol 1:5 diln., centrifgd. 0.06 to 0.5

0.2 1:50 diln. ① gave +++ hemol.; 0.25 complete. Compl. positive, weaker owing to sp. @ 1:1. 0.2 1:50 " ② " +++ " ; 0.25 " "

Rebs. A 19, B 31 ser. Good count on dist. 1:10 .1, .4 no hemol. .1 ±, .4 +++

Human, James Mitchell, 2. mixed bleed, ser. drawn on 14", 1:10. .1 ++, .4 complete

Wt. of g.p. clot, ca 5 ml.  
 1/50 3 +++ 4 +++±

B 210

NOV 18 1940 - 8 ml. 3.87 II 15:25, inactivated, dild. w. 16 ml. saline nuth, again centrifgd. Neutral. w. N HCl to ca pH 6.5. Centrifgd.  
 402 ser. also neutral, centrifgd.

65 ml. g.p. 2-7. neutral, again centrifgd. in 2 centrif. in 41 cups, run through 3 of same collodion filters.

NOV 19 - 10 ml. 5% sheep cell susp + 10 1.1250 hemolysis (from Wasserman)  
 2 tnd. w. above gp. compl. 1:100  
 ↓ ser = 775,000; 840,000; 940,000 <sup>cells</sup>/cu mm.

11 AM	0.2	.25	.3	.35	.4	.45	.50
					+++	+++±	Complete
Repetition	"			+++	+++	+++±	"
Compl. 1/50 from 1/10	+++		Complete		Complete		<div style="border: 1px solid black; padding: 2px;">           Red cell susp. f            = 1:100            1:100         </div>
Hum. ser. "	.03 + ser. Complete	.04 + ser. Complete	.06 + ser. Complete				
" " 1/10	.3 Complete	.25 almost					
Horse Ser 402	1.0	1.0	1.0	1.0			
Salt	30	30					
iC				30			
C							30
Mixed.							

SI, 0.5 cm<sup>3</sup>/ml. 1.0 1.0 1.0  
 Lab stand 1 hr. @ room temp. 20° centrifgd. cold.

Supnts. centrifgd. again. Ppt. 4. washed 3x w. 10 ml. chilled saline,  
 Pl. also. supnts. recentrifgd. 20" - Ppt. diss. in alk., made up to 20.0, 6.0 ml. for anal. in dupl.

19" - supnt.  
 5.5 ml. i.C. in all tubes: 1.0 3.87 II 173, 1.0 Ea with 0.036 mg N } 1 ser  
 " " " " " " " " " } 1 Ea  
 4.5 hum. ser., " " " " " " " " " } pl.  
 5.0 g.p. clot w/kg. " " " " " " " " " } with  
 1.5 orig C, 0.05 SI ser. no visible ppt. } 307 Ea M

Titon. of Remaining portion of C supnt. : 0.11 ml. up to 5 = 1/50  
 .2 .225 .25 .275 .3 .35  
 +++ +++± Pract compl

Hum. Opt. now @ 45  
 0.50 C mp. dild. to 5 w. saline 1.1 to 5 to give 1:50

21/32 / 0.13  
 250 / 240 / .04  
 225  
 150



B 210  
Compl. Titers

820 P.M.

Orig compl. 1:100  
HS Compl input 1:50  
HS " Ser Bl 1:50

	.2	.25	.3	.35	.4	.45	.5	.55	.6
				+++	Repetn. +++±	now <del>Almost compl.</del> +++++	++++ Complete	Complete	Complete
			+++	Repetn. +++±	Complete	Complete	Complete		

	.05	.1	.3	.5	.6		
Undid. " " Ser Ea Sup. :	No hemol	---	---	( )	no hemol	} +	Compl hemol. -05 .1
" Hum " " " :	"	"	"	"	"		11/16
" GP Whg. Compl :	"	+			++	} "	.05 almost hemol.
" i.c Ser. <del>BE</del>	"		no hemol		no hemol		no hemol.

	0	0	0	0	0		
1" whg. Ser Ea ppt :	0	0	0	0	0	} +.15 (20 days' hem. unit) 1/10 HS Compl input. Complete in .1, pres. so in .3, .6	
1" " GPW "	0	0	0	0	0		
1" " Hum "	0	0	0	0	0		
Repetn. of			4			} "	" .1+++± in .3 +++ in .6
C Ser Ea input!			0	0	0		
Hum -	0	0	0	0	0		

Orig. compl. : 200 units per ml. In 30 ml., 6000 units.  
 HS " input : 100 " " " " " 3000 "  
 HS " ser Bl. 125 " " " " " 3750 "  
 " 5 ml **625** "

NOV 22 — New compl., undid., from Wassermann lab. <sup>1 → 5</sup> Sild. 1:50.  
 with same pipette, portion of 1/4 wimpl. " 1:50, also w.  
 same pipette, HS Compl. input, HS Compl Ser Bl ~~400~~ " 1:50.  
 W. same pipette, 0.2 ml compl. 1/19 + (w. 0.2 ml. pipette) 0.0067 ml. 902 ser, at stand 1 hr., ~~sild~~ 1:50.

All dilns measured out w. same pipette.

.15 .2 .25 .3 .35 .4 .45 .5 .6

	+++	+++±	C	C	+++±	almost	C	C	C		
new compl.	+++	+++±	C	C	+++±	almost	C	C	C	} Dec. 3 - no hemol. ← .02, .05 undid. + 1 hem d. sp. - C =	
1/19 " HS up							+++	+++±	+++±		← .02 - .05 ± ±
" " Ser							+++	+++±	+++±		no hemol after 4 added
1/19 Compl + HS	+++	+++±			+++	+++±	almost compl.	almost compl.	almost compl.	← .1 .2 .3 .5 -	
HS i.c i.c Ea Bl Ea Bl to										(also anti-compl.) + 1 sp. normal anti-w. 1 cts " " " "	