

CHAPTER 26

STANDARD READINGS AND IRON STANDARD CURVE

The results of Standardisation are presented in a tabular form in the following table.

Table No. 37 A shows the results of standardisation obtained at the first experiment; B, C, D, E thereof show the results obtained at the subsequent experiments.

The results of standardisation, when plotted on a graph paper, show a straight line relationship between the Iron Concentration in microgram per 100 ml. and the optical Density. This linear relationship is represented photographically.

TABLE NO. 37 A
STANDARDISATION

Sam- ple	Iron concen- tration in r per 100 ml.	Readings		Mean O.D.	Calculated O.D. for 50 r per 100 ml.	Mean O.D.
		I	II			
B	00	.000	.000	.000	.000	
S1	50	.023	.023	.023	.023	
S2	100	.047	.045	.046	.023	
S3	150	.150	.150	.150	.050	.032
S4	200	.146	.142	.144	.036	
S5	250	.154	.155	.155	.031	

TABLE NO. 37 B
STANDARDISATION

Sam- ple	Iron concen- tration in r per 100 ml.	Readings		Mean O.D.	Calculated O.D. for 50r per 100 ml.	Mean O.D.
		I	II			
B	00	.000	.000	.000	.000	
S1	50	.032	.034	.033	.033	
S2	100	.071	.073	.072	.036	
S3	150	.105	.105	.105	.035	.035
S4	200	.137	.135	.136	.034	
S5	250	.186	.185	.185	.037	

TABLE NO. 37 C
STANDARDISATION

Sam- ple	Iron concen- tration in r per 100 ml.	Readings		Mean O.D.	Calculated O.D. for 50 r per 100 ml.	Mean O.D.
		I	II			
B	00	.000	.000	.000	.000	
S1	50	.035	.033	.034	.034	
S2	100	.071	.070	.070	.035	
S3	150	.104	.106	.105	.035	.035
S4	200	.140	.141	.140	.035	
S5	250	.182	.178	.180	.036	

TABLE 37 D
STANDARDISATION

Sam- ple	Iron concen- tration in r per 100 ml.	Readings		Mean O.D.	Calculated O.D. per 50 r per 100 ml.	Mean O.D.
		I	II			
B	00	.000	.000	.000	.000	
S1	50	.034	.034	.034	.034	
S2	100	.071	.069	.070	.035	
S3	150	.105	.106	.105	.035	.035
S4	200	.141	.140	.140	.035	
S5	250	.180	.180	.180	.036	

TABLE NO. 37 E
STANDARDISATION

Sam- ple	Iron concen- tration in r per 100 ml.	Readings		Mean O.D.	Calculated O.D. for 50 r per 100 ml.	Mean O.D.
		I	II			
B	00	.000	.000	.000	.000	
S1	50	.035	.036	.035	.035	
S2	100	.070	.070	.070	.035	
S3	150	.106	.104	.105	.035	.035
S4	200	.140	.141	.140	.035	
S5	250	.174	.177	.175	.035	

∴ 0.035 O.D. \equiv 50 r Iron per 100 ml.

