

Department of Commerce and Labor

# Bureau of Standards

## Certificate

OF

### ANALYSES OF STANDARDIZED IRON

SAMPLE D. THIRD SET

#6

| ANALYST.                              | TOTAL CARBON. | GRAPHITE. | COMBINED CARBON. | SILICON. | TITANIUM. | PHOSPHORUS, GRAVIMETRIC. | PHOSPHORUS, PERMANGANATE TITRATION. | PHOSPHORUS, ALKALI TITRATION. | SULPHUR, TOTAL BY OXIDATION. | SULPHUR, EVOLVED AS HYDROGEN SULPHIDE. | MANGANESE. |
|---------------------------------------|---------------|-----------|------------------|----------|-----------|--------------------------|-------------------------------------|-------------------------------|------------------------------|----------------------------------------|------------|
| John R. Cain, Bureau of Standards.... | 2.86          | 2.33      | 0.53             | 2.68     | 0.152     | -----                    | 0.598                               | -----                         | 0.032                        | 0.027                                  | 1.38       |
| Booth, Garrett & Elair, Philadelphia. | 2.87          | 2.20      | 0.67             | 2.66     | 0.130     | 0.589                    | -----                               | -----                         | 0.035                        | 0.028                                  | 1.43       |
| Cremer & Case, Cleveland.....         | 2.92          | 2.23      | 0.69             | 2.61     | -----     | 0.606                    | -----                               | -----                         | 0.038                        | 0.025                                  | 1.42       |
| Andrew S. McCreath & Son, Harrisburg. | 2.90          | 2.27      | 0.63             | 2.61     | 0.126     | 0.604                    | -----                               | -----                         | 0.031                        | 0.026                                  | 1.42       |
| Albert W. Smith, Cleveland.....       | 2.88          | 2.22      | 0.66             | 2.64     | 0.123     | 0.605                    | 0.606                               | 0.603                         | 0.038                        | 0.030                                  | 1.42       |
| AVERAGE .....                         | 2.89          | 2.25      | 0.64             | 2.64     | 0.133     | 0.601                    | 0.602                               | 0.603                         | 0.035                        | 0.027                                  | 1.41       |

Director.

Test No.

In charge of Analyses.

Washington, D. C.

Form 91  
D IRON CERTIFICATE  
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