

DEPARTMENT OF COMMERCE

Bureau of Standards

Certificate of Analysis

STANDARD SAMPLE No. 15a

BASIC OPEN-HEARTH STEEL, 0.1% CARBON

ANALYST	CARBON			SILICON		PHOSPHORUS			SULPHUR			MANGANESE					
	DIRECT DETERMINATION	DIFFERENCE AND CALCULATION	COLORIMETRY	BROWN METHOD	OTHER METHODS	ASPHALT SULFATE	MOLYBDENUM SULFATE	WATER-SOLUBLE PHOSPHATE	ORINATION	EVOLUTION (WATER-SOLUBLE)	ORINATION	TOTAL (AS REPORTED)	FORDE-WILLIAMS	VOUGARD	PERMANGANATE	COLOR (PERMANGANATE)	CUPFER
1	108				007	007			004		007*				308*		
2	104				010		004		003		007*				303		01
3	116	110			006		008	005	007	013					307		
4	114	110		008	006		007		004		001*				300		
5	110		110	007				007	002	001					300		07
6	107	108				008			009	009			08				40
7		100	110	006		006		008	008			003					
8		114		013	013	007		007	008	009		070					07*
9		113		013				007		000							05
10	106		100	010		005		008	009	001*			08		300		
AVERAGE	109	110	107	009	008	007	006	007	008	000	007	002	06	08	301	00	01
GENERAL AVERAGE		111		009		006		007	008					07			

* Evolution—H₂O (H₂O), * With arsenic titration * Evolution—PbS (H₂O), distilled from averages * Evolution—ZnS (H₂O)

INDEX TO ANALYSTS

- 1. Joseph L. Lutz, Bureau of Standards
- 2. J. L. Lutz, Bureau of Standards
- 3. J. L. Lutz, Bureau of Standards
- 4. J. L. Lutz, Bureau of Standards
- 5. J. L. Lutz, Bureau of Standards
- 6. George P. Vauver, Pennsylvania Steel Co., Steelton, Pa.
- 7. W. H. Brown, Carnegie Steel Co., Homestead Works
- 8. C. H. Lutz, Carnegie Steel Co., Homestead Works
- 9. J. L. Harvey, Carnegie Steel Co., Homestead Works
- 10. Carnegie Steel Co., Edgar Thomson Works

This standard is not recommended for commercial carbon determinations, because of uncertainty as to the amount of the carbon.

S. W. STRATTON,
Director