COPY

Standard Oil Development Company

General Engineering Department

Your File: C-211-9   Elizabeth, N.J.
                                        P.O.Box 37   Jan. 18,1934

                                        SS "CHARLES PRATT" and
                                        SS "F.Q.BARSTOW"

Mr. C. E. Klitgaard
30 Rockefeller Plaza, N.Y.

Dear Sir:

　　　　We have read with interest Dr. Ripley's report on shell plates removed from the above vessels, sections of which we examined at your request.

　　　　The conclusion reached by Dr. Ripley that a combination of corrosion and poor quality material was responsible for the failures agrees with our findings on sections of plating from the SS "CHARLES PRATT", as reported to you in our letter of April 10, 1933. Dr. Ripley stresses poor quality as a main factor, while in our opinion corrosion was the direct cause of failure. Our opinion is based on the fact that the vessel was in service for sixteen years before trouble with cracked plates was encountered. It appears that Dr. Ripley has overlooked this point.

　　　　It is evident that the plate from the "CHARLES PRATT" examined by Dr. Ripley was not the same plate or was from a different location in the plate than the section we examined. His results indicate good ductility while our tests showed low ductility. Reporting on the microstructure, Dr. Ripley notes the large grain structure but does not mention the inclusions found in our examination.

　　　　It is believed that steel manufactured to the analyses given by Dr. Ripley and representing what he considers good ship plate, would not have the minimum strength required by the American Marine Standards Committee specifications for structural steel.

　　　　As we made no investigation of fractured plates from the "F". Q. BARSTOW" we cannot compare results with those of Dr. Ripley. We do, however, agree with him that the microstructure, as shown in his report, is abnormal and undesirable.

　　　　We appreciate your sending us this report and will keep it for our files unless you wish us to return same.

                                        Yours truly,

                                        E. H. BARLOW

                                        Per (sgd(F. C. Fyke

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