St. Louis, Missouri

Mr. H. I. Armstrone

Massra.

G. R. Buchenen - Robts. R. E. Hatton - M.C.

F. H. Lengenfeld-Robts. H. S. Litzeinger-Robts. January 21, 1957 G. R. Sido-Washington, D.

Roberts Building

PYDRAUL 150

Dr. Treon and I apent an afternoon with the Mavy people to Gistuat Pydraul 150. Those present were Captain Shone, Captain Alvis, Captain Sessions, Commander Siegal and Mr. Mickey Albert. They discussed their information concerning Tydraul 150 which was obtained at the Maval Institute of Medical Research. While reports were not available, they had the following surgeral datas had the following constal datas

fide applications of Fydraul 150 esused don't in all of the rebbits tested. (The amount edministered was not given.) A like amount of Collubbe 220 did not cause any deaths.

The inhelation of 10 milligrams of Pydraul 150 per ouble meter or approximately 2 tenths of a part of the Arcelor somponent por million for f4 hours a day for 50 days soused, statistically, definite liver damage. He matter now we discussed the liver damage. No matter now we discussed the Lituation, it was impossible to change their thinking that Pydraul 150 is just too texts for use in a submarine. It may be that such senson-trations would never be reached in the submarine but the Nevy does not appear willing to even put the material in a trial run to see if it will work.

It would appear, therefore, that we should discontinue to soll Pydraul 150 for this particular application and try to develop a hydraulic fluid without Arcelor as one of its components. In this connection, Callulube 220 is not used in a submarine but it was used in this test morely as a yardstick.

The Mary said they did not have any equpetitive fluid far anough along engineering-wise to aven consider the toxicity of it.

R. Empt Kelly, M.D.

REKIEND

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