

New Silver Refinery

15

February 28, 1951

MEMORANDUM TO: Mr. G.P. Sawyer

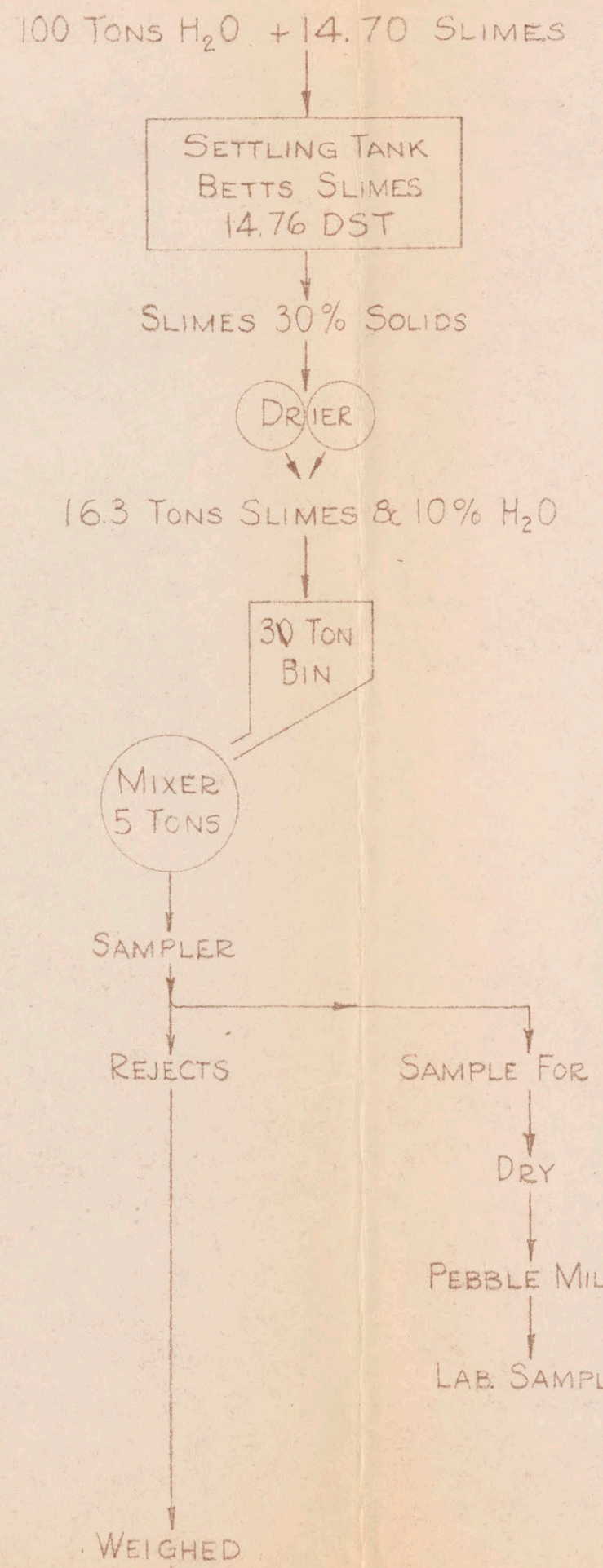
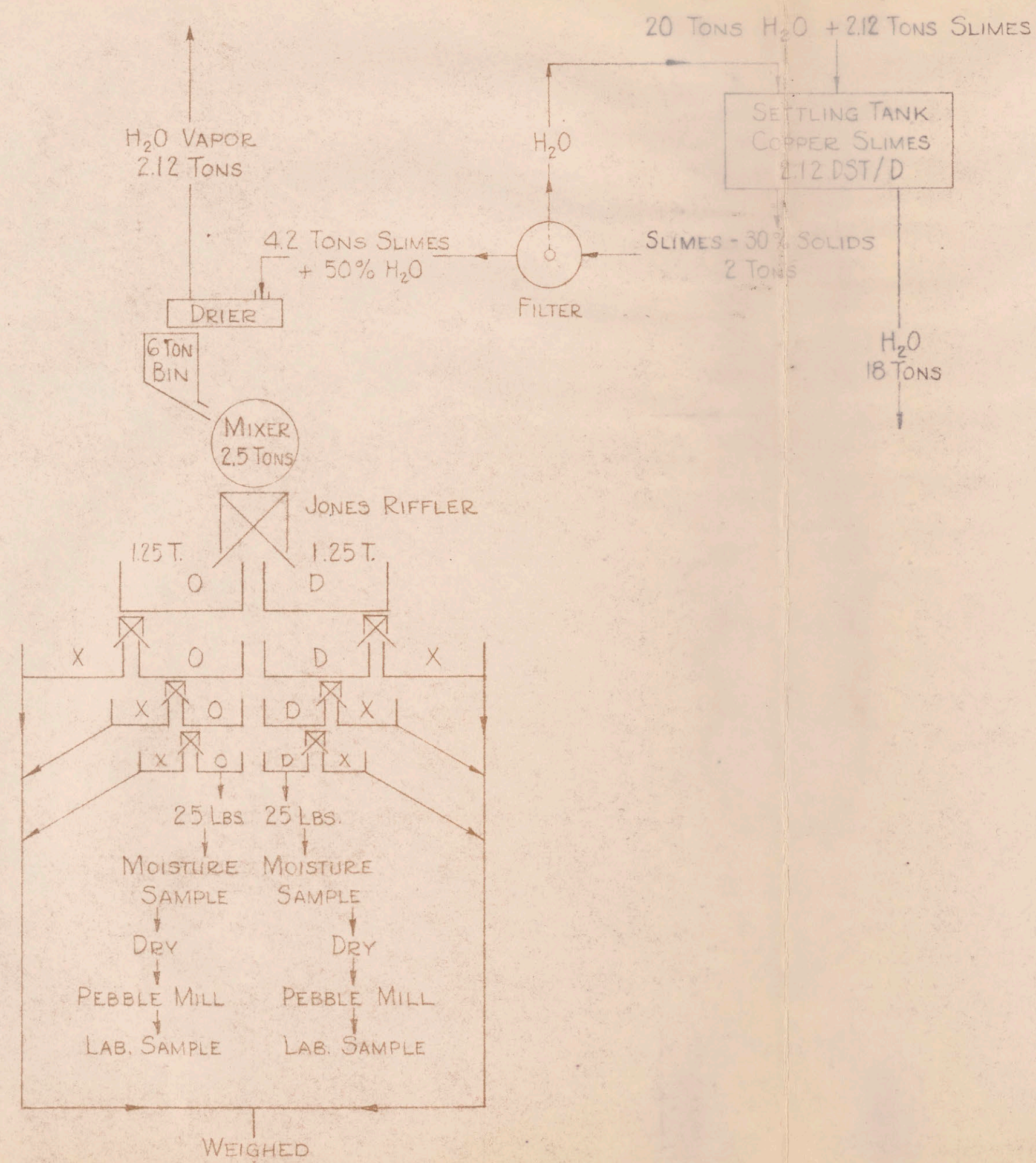
FROM: W.C. Smith

SUBJECT: Anode Residue Plant Investigation - Flow Sheet

1. I have finally developed estimates as to the amount of copper refinery and Betts plant slimes to be expected from the operation of a 13 section copper refinery and a 10 section Betts plant.
2. I have laid out a rough flow sheet but lack considerable data necessary to develop the quantitative figures.
3. I would like to have Peru dig up, or, have ready for me:
 - (a) A typical complete analysis of Betts plant slimes.
 - (b) Weight of the Betts plant slimes treated in the year 1950.
 - (c) Smelting capacity of slime smelting furnaces.
4. Weight and assays of:
 - (a) Antimony bag house dust to antimony plant 1950.
 - (b) Refinery slags to lead smelter.
 - (c) Antimony plant metal returned to anode residue plant.
5. Capacity of convertor furnaces. Weights and assays of metal to convertor furnaces.
6. Capacity of Cupel furnaces.
 - (a) Weights and assays of bismuth slags.
 - (b) Nitre slags.
 - (c) Dore
 - (d) Returns from parting plant to Cupels.
7. Gas capacity of each bag house.
8. Fuel oil consumption of the various furnaces.
9. I am tentatively planning to leave for Peru about the middle of March if the above information can be ready at that time.
10. I will need all drawings of the Anode Residue Plant, its furnaces and all other information available.
11. I have been trying to find out whether in the long range future it would be better to make a clean antimony-lead alloy for blending to antimonial lead, or, to continue to make the crude antimony. The opinion seems to favor the clean antimony-lead alloy.

W.C. Smith

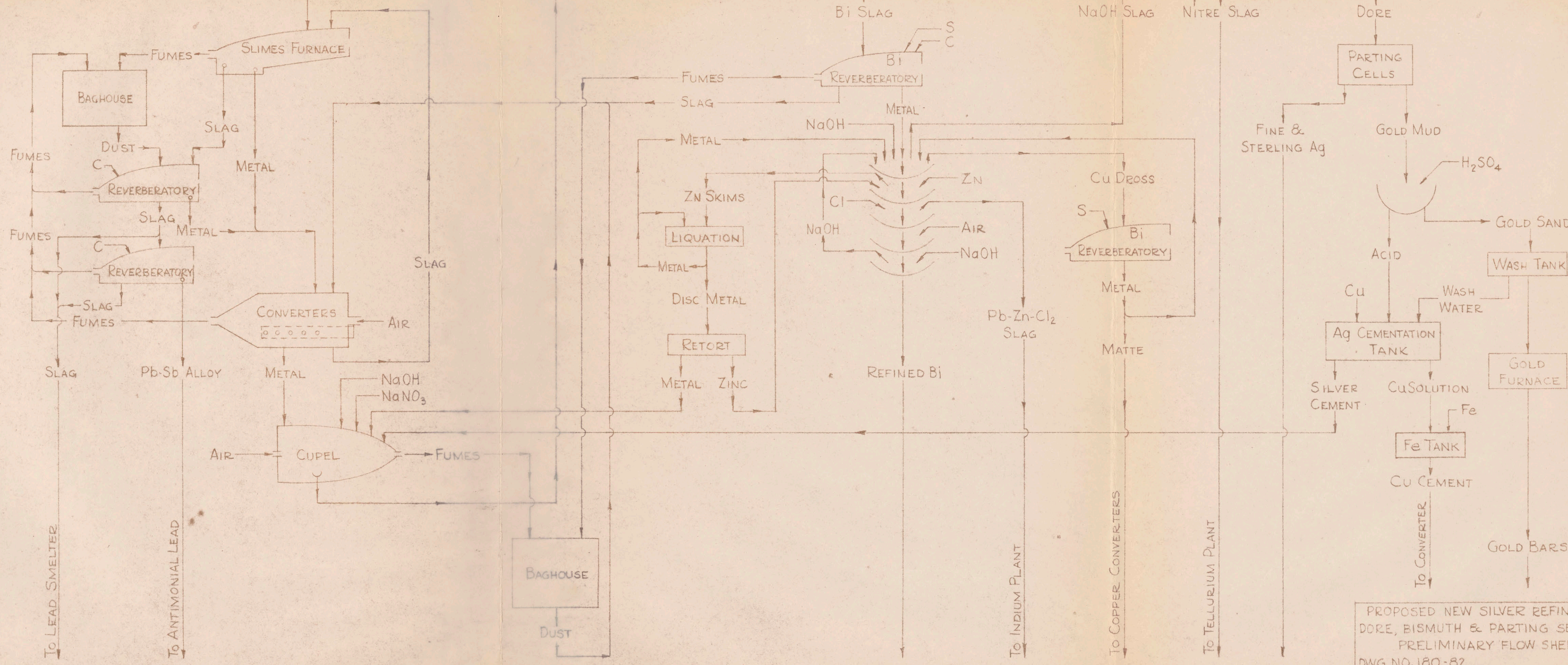
WCS:asm



MIXER 16.88 DST

PROPOSED NEW SILVER REFINERY
 SLIMES DRYING & SAMPLING SECTION
 PRELIMINARY FLOW SHEET
 DWG. NO. 180-82 SEC. A

15.11 TONS SLIMES + 10% H₂O
 Au 100 Oz. Ag 26,990 Oz. Bi 1.23 T. Cu 0.10 T. Pb 2.20 T. Sb 5.35 T. As 0.5 T.



PROPOSED NEW SILVER REFINERY
 DORE, BISMUTH & PARTING SECTIONS
 PRELIMINARY FLOW SHEET
 DWG. NO. 180-82 SEC. B

CERRO DE PASCO COPPER CORPORATION
 LA OROYA, PERU NEW YORK, N. Y.
 DRAWN BY G.B.W. DATE 2-15-51
 CHECKED BY DATE
 APPROVED DATE

PROPOSED NEW SILVER REFINERY
 SLIMES DRYING & SAMPLING
 DORE, BISMUTH & PARTING
 PRELIMINARY FLOW SHEET

DWG. NO.
 180-82
 ACCT. NO.