Report on samples of ore sent to the Mint by Townshend for testing: it is rich in silver, but Newton does not know where it comes from.

Author: Isaac Newton

Source: MINT 19/3/268, National Archives, Kew, Richmond, Surrey, UK

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To the Right Honourable my Lord Viscount Townshend Principal Secretary of State.

My Lord

The silver which your Lordship gave me to be assayed, was produced out of a pound weight Averdupois of Ore & weighed not fifteen pence but fifteen penny weight & some grains when it first came out of the Ore. It had some dirt sticking to the bottom of it & a piece cutt off & flatted with the dirt & sent by my Lord Mayor to the Mint to be assayed, proved only x^{dw^t} obolus better then standard, because the Assay was spoiled by the dirt which stuck fast to the assay piece. By two assays which I caused to be made of clean pieces cut off from the silver, it proved $xvii^{dwt}$ better then standard. Now fifteen penny weight of such fine silver is work four shillings & two pence. And therefore the Ore is exceedingly rich, a pound weight averdupois holding $4^s 2^d$ in silver. This silver holds no gold

Two ounces Troy of the Ore which your Lordship gave me to be assayed yeilded upon the first melting three penny weight of silver which upon the Assay proved two penny weight worse then standard, & therefore was worth $9^{d}\frac{1}{4}$, & after this rate a pound weight averdupois of the Ore produces 22 penny weight of silver which is worth about 5^{s} 7^{d} .

An ounce Troy of the same Ore yeilded upon the first melting 1^{dw^t} 12^{gr} & this being melted again with a convenient flux pounder left 1^{dwt} & 100^{gr} of fine silver, & after a third melting there remained 1^{dw^t} wanting 4^{gr} , some of the silver being lost among the scorias. This last silver upon the Assay proved xiij $^{dw^t}$ better then standard.

The Ore holds little or no copper. It is silver Ore, but where it grows doth not yet appear to me.

All which is submitted to your Lordships consideration

An account of the ore taken out of Sir Iohn Erskin's mine