Table 2. Supplement calculation for hay and grass pasture from Central, Indiana using copper polysaccharide (poly Cu), zinc polysaccharide (poly Zn), manganese sulfate and sodium chloride. With the exception of sodium (grams), table values expressed in milligrams (mg).

Mineral	**Hay**	**Balance to Fe**	**Deficit**	**Add[1]**	**Pasture**	**Balance to Fe**	**Deficit**	**Add[2]**
Fe	760	760	None		1260	1260	None	
Zn	200	570	370	1681	310	945	635	2886
Cu	80	190	110	887	150	315	165	1330
Mn	620	570	None		440	945	235[3]	652
Na	2[4]		8	21	1		17	44

[1] Zn and Cu are supplemented as poly Zn (22% Zn) and poly Cu (12.4% Cu). Divide deficit by (% mineral/100) in compound to find amount of compound required. For hay analysis, 370 mg Zn/0.22 = 1681 mg and 110 mg Cu/0.12 = 887 mg.

[2] Mn supplemented as $MnSO_4$ (36% Mn).

[3] Target for Mn is 150% NRC, or at least 50% Zn. In this case, total Mn = 440 + 235 mg = 675 mg, which meets both targets. Final Fe:Cu:Zn:Mn ratio is 1260:315:945:675, or 4:1:3:2.

[4] Na supplemented as NaCl (39% Na) at NRC minimum requirement in form of loose white salt, or Redmond salt (1 tbsp ~ 14 g, as measured on gram scale). Pasture deficit based on NRC requirement for working horse at moderate workload.