



## BOVINE MILK MINERAL REPORT

Report No:	Date:	Farmer:
Distributor:	<b>Thomson &amp; Joseph Ltd.</b>	Herd:
Distributors Ref:		Postcode:

Sample	Manganese ppb	Zinc ppb	Copper ppb	Molybdenum ppb	Iodine ppb	Selenium ppb	Animal Details
Bulk	23	4104	28	49	171	24	Sampled: 22/09/2016 Sample: Yield: 0 Lactation: 0
Bulk	26	4031	30	52	222	18	Sampled: 26/09/2015 Sample: Yield: 0 Lactation: 0
Bulk	13	4273	41	45	120	15	Sampled: 25/05/2015 Sample: Yield: 0 Lactation: 0
Bulk	16	3986	49	44	189	14	Sampled: 11/04/2015 Sample: Yield: 0 Lactation: 0
Bulk	46	4224	27	87	294	17	Sampled: 10/11/2014 Sample: Yield: 0 Lactation: 0
Bulk	32	4419	19	86	82	15	Sampled: 19/10/2014 Sample: Yield: 0 Lactation: 0
Bulk	21	4081	36	91	202	18	Sampled: 11/07/2014 Sample: Yield: 0 Lactation: 0
Mean:	25	4160	33	65	183	17	
Guide Values:	20 - 25	3000 - 4000	50 - 60	40 - 50	60 - 100	15 - 20	
Status:	Moderate	Moderate	Very Low	High	High	Normal	

**Comment:**

Trace element levels are satisfactory for Manganese, Zinc and Selenium but are high Iodine and very low for Copper, which is associated with a moderate Molybdenum content. This pattern of Copper and Molybdenum suggests that insufficient rumen soluble Copper (Acetate and Sulphate) is included in the diet to precipitate Molybdenum effectively. A high level of circulating Molybdenum is a potent suppressor of oestrus activity in cattle, to the detriment of fertility. High Iodine may be partly due to contamination arising from the use of Iodine based parlour chemicals and teat dips. The current analysis is similar to that of Sept '15. The key features are the fluctuating Manganese and Copper/Molybdenum values, which may be associated with a changing supplementation policy for cows at grass compared to housed cattle. Based on this analysis the supplementation of copper and iodine should be reviewed by reference to a forage mineral report to ensure it is appropriate to maintaining cow health and productivity.