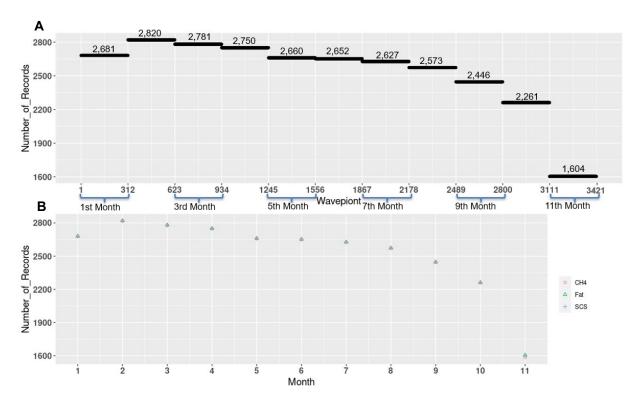
**Table S1.** The number of records of milk mid-infrared (MIR) spectra, fat percentage (Fat), methane (CH4), and somatic cell score (SCS) within the first parity (number of total animals is 3,302)

Month	1	2	3	4	5	6	7	8	9	10	11
MIR	2,681	2,820	2,781	2,750	2,660	2,652	2,627	2,573	2,446	2,261	1,604
Fat	2,681	2,820	2,781	2,750	2,660	2,652	2,627	2,573	2,446	2,261	1,604
CH4	2,679	2,820	2,781	2,750	2,660	2,652	2,627	2,573	2,446	2,261	1,585
SCS	2,680	2,817	2,778	2,750	2,660	2,652	2,627	2,573	2,446	2,261	1,603



**Figure S1.** A: number of records of milk mid-infrared (MIR) wavepoints (3,421; 11 months, each month has the same 311 wavepoints); B: number of records of fat percentage (Fat), methane (CH4), and somatic cell score (SCS) within the first parity (number of total animals is 3,302)