



## Application Protocol: Milk Powder:

Full cream milk powders.

**Instrument Model:** NIT-38 Dairy Analyser

**No.:** 721    **Date:** 25 February 2009    **Rev.:** 2.1

### Description:

This protocol is to be used for the analysis of full cream milk powders.

### Instrumental Parameters:

Cell Type	NIT-38 10mm Squeeze Cell
Pathlength	5mm
Integration Time	40000
No. Scans to Average	10

Constituents:	Range: MIN	Range: Max
Protein	15	40
Moisture	0.5	2
Fat	8	24

### Sample Preparation:

Place ample powdered milk into the clean sample cell. Use a large flat object to level the powder in the cell. A sharp straight edged knife should be used to remove any excess powder. The powder should be level with the top of the cell. Close the cell and make sure that the milk powder is evenly distributed in the cell window.

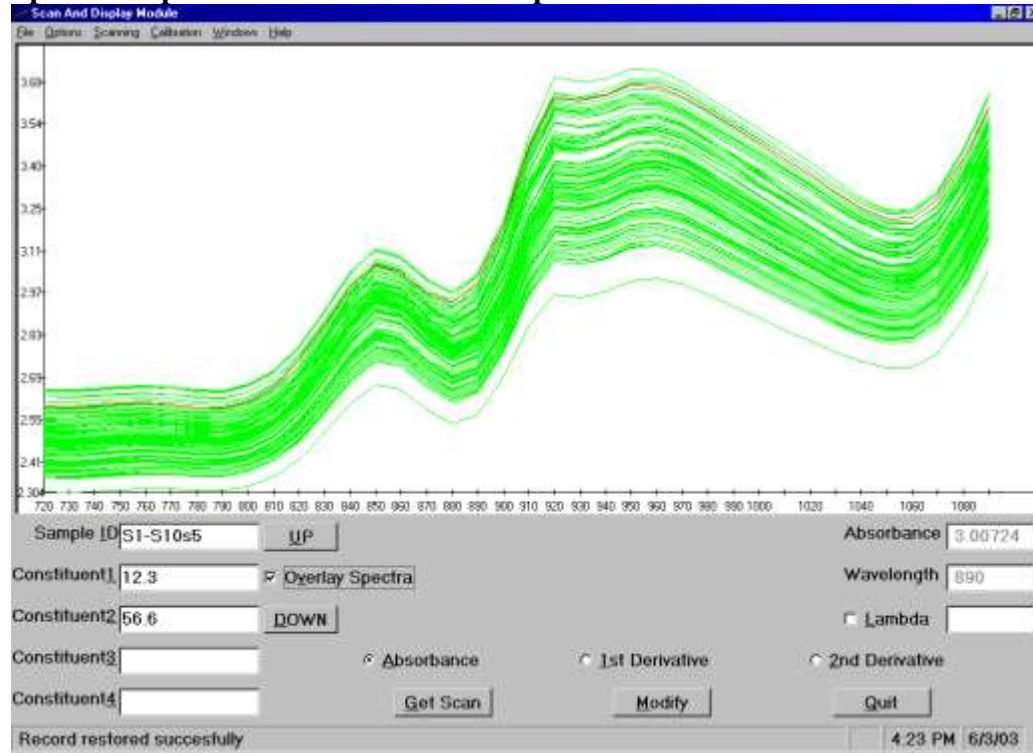
**Sample Weight:** 60 grams

**Sample Temp:** 20° C (Room Temperature)

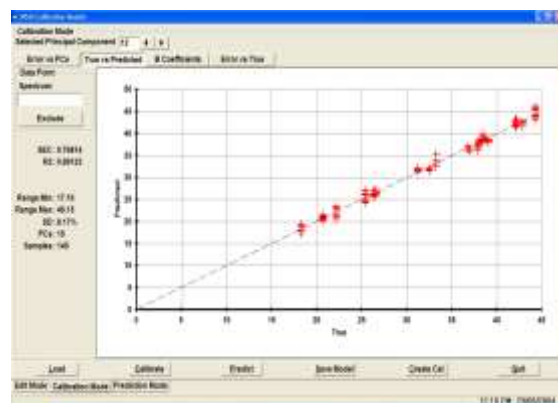
### Comments:

Care must be taken to remove all gaps in the powder and that the powder is spread evenly throughout the cell.

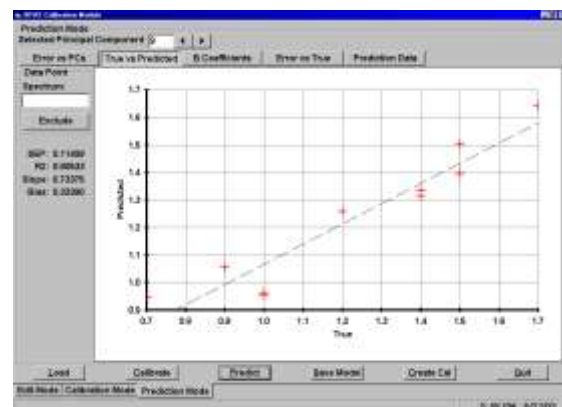
## Spectral representation of whole milk powders:



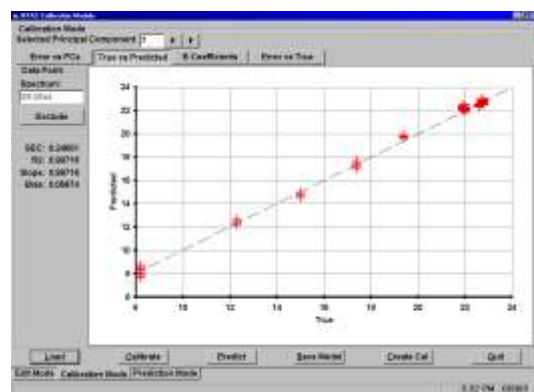
**Calibration Statistics:** Plots of True vs. Predicted values for each constituent.



Constituent 1: Protein



Constituent 2: Moisture



Constituent 3: Fat