



|                   |                                     |
|-------------------|-------------------------------------|
| Company:          | Flavour Art North America Inc.      |
| Sample Condition: | Samples received in good condition. |
| Notes:            | Chain of custody verified.          |

|                    |   |
|--------------------|---|
| Method / Parameter | Analyte(s)                                  |
| GC/MS Analysis     | Diacetyl                                    |
|                    | 2,3-Pentanedione<br>(aka: Acetyl propionyl) |

**Summary of Method:**

A measured volume of sample is combined with a volume of acetonitrile. A known amount of internal standard (Butanedione-d6) is added and the vial is capped and mixed thoroughly to combine. An aliquot is then analyzed quantitatively against a linear calibration curve using a GC/MS equipped with a mass selective detector. In this analysis, the limit of detection is 1.13 ug/mL for 'Diacetyl' and 1.22 ug/mL for '2,3-Pentanedione'.

|            |                                |                    |                   |
|------------|--------------------------------|--------------------|-------------------|
| Company    | Flavour Art North America Inc. | # Samples          | 1                 |
| Analyst    | JM                             | Sample(s) Received | 7/1/15            |
| Parameters | GC/MS Analysis                 | Client Project:    | FANA Batch 1 2015 |
| Job #      | 0715-502                       |                    |                   |

| Enthalpy Code | Sample Name | Notes | Diacetyl (ug/mL) | 2,3-Pentanedione (ug/mL) |
|---------------|-------------|-------|------------------|--------------------------|
| 0715-502-117  | Royal       | -     | Not Detected     | Not Detected             |

**QC Notes:**

'Diacetyl' and '2,3-Pentanedione' were not detected above the minimum detection limit.

I certify that to the best of my knowledge all analytical data presented in this report:

- Have been checked for completeness
- Are accurate, error-free, and legible
- Have been conducted in accordance with approved protocol, and that all deviations and analytical problems are summarized.

This analytical report was prepared in Portable Document Format (.PDF) and contains 1 page.

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**Enthalpy Analytical, Inc.**

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