

Roar Vapor LLC

367 Vann Drive
Jackson, TN 38305

Carbonyl Assay
Samples Received 3/13/15

Product Name
Pinky Promise

Analysis Report
(0315-535)

HPLC/UV Analysis For:
Diacetyl
2,3-Pentanedione (aka: Acetyl Propionyl)



Enthalpy Analytical, Inc.

Phone: (919) 850 - 4392 / Fax: (919) 850 - 9012 / www.enthalpy.com
800-1 Capitola Drive Durham, NC 27713-4385



Company:	Roar Vapor LLC
Sample Condition:	Samples received in good condition.
Notes:	Chain of custody verified.

Method / SOP	Analyte(s)
ENT301	Diacetyl
	2,3-Pentanedione (aka: Acetyl Propionyl)

Summary of Method:

An aliquot of e-liquid and/or e-liquid flavors is derivatized with 2,4-dinitrophenylhydrazine (DNPH). After the derivitization reaction is complete, samples are neutralized with pyridine and analyzed via HPLC with a UV detector.

In this analysis, the limit of detection is 0.279 ug/mL for 'Diacetyl' and 0.281 ug/mL for '2,3-Pentanedione'.

Company	Roar Vapor LLC	# Samples	1
Analyst	BJB	Sample(s) Received	3/13/15
Instrument Type	HPLC/UV	Client Project:	2
Job #	0315-535		

Enthalpy Code	Sample Name	Batch	Diacetyl (ug/mL)	2,3-Pentanedione (ug/mL)
0315-535-05	Pinky Promise	N/A	Not Detected	Not Detected

QC Notes:

The compounds of interest 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 2 pages.

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