

**SAMPLE NAME: Blue Dolphin Live Rosin**

Concentrate, Product Inhalable

**CULTIVATOR / MANUFACTURER**

**Business Name:** Royal Key, LLC  
**License Number:** CDPH-10002468  
**Address:** 4701 W END RD  
 ARCATA, CA 95521-9241

**DISTRIBUTOR**

**Business Name:** ROYAL KEY, LLC  
**License Number:** C12-0000170-LIC  
**Address:** 4701 West End RD  
 ARCATA, CA 95521

**SAMPLE DETAIL**

**Batch Number:** 121420LNG-ROS  
**Sample ID:** 210120P017  
**Source Metric UID:**  
 1A40603000061B5000003262

**Date Collected:** 01/20/2021  
**Date Received:** 01/21/2021  
**Batch Size:** 728.0 units  
**Sample Size:** 10.0 units  
**Unit Mass:** 1 grams per Unit  
**Serving Size:**

**Sampling Method:** QSP 1265 - Sampling of Cannabis and Product Batches



Scan QR code to verify authenticity of results.

**CANNABINOID ANALYSIS - SUMMARY** ✔ PASS

**Sum of Cannabinoids:** 83.841%

**Total Cannabinoids:** 73.757%

**Total THC:** 70.078%

**Total CBD:** 0.161%

Sum of Cannabinoids =  $\Delta 9\text{THC} + \text{THCa} + \text{CBD} + \text{CBDa} + \text{CBG} + \text{CBGa} + \text{THCV} + \text{THCVa} + \text{CBC} + \text{CBCa} + \text{CBDV} + \text{CBDVa} + \Delta 8\text{THC} + \text{CBL} + \text{CBN}$   
 Total Cannabinoids =  $(\Delta 9\text{THC} + 0.877 * \text{THCa}) + (\text{CBD} + 0.877 * \text{CBDa}) + (\text{CBG} + 0.877 * \text{CBGa}) + (\text{THCV} + 0.877 * \text{THCVa}) + (\text{CBC} + 0.877 * \text{CBCa}) + (\text{CBDV} + 0.877 * \text{CBDVa}) + \Delta 8\text{THC} + \text{CBL} + \text{CBN}$   
 Total THC/CBD is calculated using the following formulas to take into account the loss of a carboxyl group during the decarboxylation step:  
 Total THC =  $\Delta 9\text{THC} + (\text{THCa} * 0.877)$   
 Total CBD =  $\text{CBD} + (\text{CBDa} * 0.877)$

**Moisture:** NT

**Density:** NT

**Viscosity:** NT

**SAFETY ANALYSIS - SUMMARY**

**$\Delta 9\text{THC}$  per Unit:** ✔ PASS

**Foreign Material:** ✔ PASS

**Residual Solvents:** ✔ PASS

**Pesticides:** ✔ PASS

**Mycotoxins:** ✔ PASS

**Heavy Metals:** ✔ PASS

**Microbial Impurities:** ✔ PASS

These results relate only to the sample included on this report. This report shall not be reproduced, except in full, without written approval of the laboratory.

**Sample Certification:** California Code of Regulations Title 16 Effect Date January 16, 2019. Authority: Section 26013, Business and Professions Code. Reference: Sections 26100, 26104 and 26110, Business and Professions Code.

**Decision Rule:** Statements of conformity (e.g. Pass/Fail) to specifications are made in this report without taking measurement uncertainty into account. Where statements of conformity are made in this report, the following decision rules are applied: PASS - Results within limits/specifications, FAIL - Results exceed limits/specifications.

**References:** limit of detection (LOD), limit of quantification (LOQ), not detected (ND), not tested (NT)

*Reza Naemeh*  
 LQC verified by: Reza Naemeh  
 Date: 01/22/2021

*Josh Wurzer*  
 Approved by: Josh Wurzer, President  
 Date: 01/22/2021



**CANNABINOID TEST RESULTS** - 01/21/2021 ✔ PASS

Tested by high-performance liquid chromatography with diode-array detection (HPLC-DAD). **Method:** QSP 1157 - Analysis of Cannabinoids by HPLC-DAD

**TOTAL CANNABINOIDS: 73.757%**

Total Cannabinoids (Total THC) + (Total CBD) + (Total CBG) + (Total THCV) + (Total CBC) + (Total CBDV) + Δ8THC + CBL + CBN

**TOTAL THC: 70.078%**

Total THC (Δ9THC+0.877\*THCa)

**TOTAL CBD: 0.161%**

Total CBD (CBD+0.877\*CBDA)

**TOTAL CBG: 2.63%**

Total CBG (CBG+0.877\*CBGa)

**TOTAL THCV: 0.33%**

Total THCV (THCV+0.877\*THCVa)

**TOTAL CBC: 0.558%**

Total CBC (CBC+0.877\*CBCa)

**TOTAL CBDV: ND**

Total CBDV (CBDV+0.877\*CBDVa)

COMPOUND	LOD/LOQ (mg/g)	MEASUREMENT UNCERTAINTY (mg/g)	RESULT (mg/g)	RESULT (%)
THCa	0.05 / 0.14	±20.115	782.68	78.268
CBGa	0.1 / 0.2	±1.33	25.5	2.55
Δ9THC	0.06 / 0.26	±0.494	14.37	1.437
CBCa	0.07 / 0.28	±0.311	6.36	0.636
CBG	0.06 / 0.19	±0.154	3.90	0.390
THCVa	0.07 / 0.20	±0.179	3.76	0.376
CBDA	0.02 / 0.19	±0.054	1.84	0.184
Δ8THC	0.1 / 0.4	N/A	ND	ND
THCV	0.1 / 0.2	N/A	ND	ND
CBD	0.07 / 0.29	N/A	ND	ND
CBDV	0.04 / 0.15	N/A	ND	ND
CBDVa	0.03 / 0.53	N/A	ND	ND
CBL	0.06 / 0.24	N/A	ND	ND
CBN	0.1 / 0.3	N/A	ND	ND
CBC	0.2 / 0.5	N/A	ND	ND
<b>SUM OF CANNABINOIDS</b>			838.41 mg/g	83.841%

**UNIT MASS: 1 grams per Unit**

Δ9THC per Unit	1120 per-package limit	14.37 mg/unit	PASS
Total THC per Unit		700.78 mg/unit	
CBD per Unit		ND	
Total CBD per Unit		1.61 mg/unit	
Sum of Cannabinoids per Unit		838.41 mg/unit	
Total Cannabinoids per Unit		737.57 mg/unit	

MOISTURE TEST RESULT	DENSITY TEST RESULT	VISCOSITY TEST RESULT
Not Tested	Not Tested	Not Tested

**CATEGORY 1 PESTICIDE TEST RESULTS** - 01/22/2021 ✔ PASS

Pesticide and plant growth regulator analysis utilizing high-performance liquid chromatography-mass spectrometry (HPLC-MS) or gas chromatography-mass spectrometry (GC-MS). \*GC-MS utilized where indicated. **Method:** QSP 1212 - Analysis of Pesticides and Mycotoxins by LC-MS or QSP 1213 - Analysis of Pesticides by GC-MS

COMPOUND	LOD/LOQ (µg/g)	ACTION LIMIT (µg/g)	MEASUREMENT UNCERTAINTY (µg/g)	RESULT (µg/g)	RESULT
Aldicarb	0.03 / 0.08	≥ LOD	N/A	ND	PASS
Carbofuran	0.02 / 0.05	≥ LOD	N/A	ND	PASS
Chlordane*	0.03 / 0.08	≥ LOD	N/A	ND	PASS
Chlorfenapyr*	0.03 / 0.10	≥ LOD	N/A	ND	PASS
Chlorpyrifos	0.02 / 0.06	≥ LOD	N/A	ND	PASS
Coumaphos	0.02 / 0.07	≥ LOD	N/A	ND	PASS
Daminozide	0.02 / 0.07	≥ LOD	N/A	ND	PASS
DDVP (Dichlorvos)	0.03 / 0.09	≥ LOD	N/A	ND	PASS
Dimethoate	0.03 / 0.08	≥ LOD	N/A	ND	PASS
Ethoprop(hos)	0.03 / 0.10	≥ LOD	N/A	ND	PASS
Etofenprox	0.02 / 0.06	≥ LOD	N/A	ND	PASS
Fenoxycarb	0.03 / 0.08	≥ LOD	N/A	ND	PASS
Fipronil	0.03 / 0.08	≥ LOD	N/A	ND	PASS
Imazalil	0.02 / 0.06	≥ LOD	N/A	ND	PASS
Methiocarb	0.02 / 0.07	≥ LOD	N/A	ND	PASS
Methyl parathion	0.03 / 0.10	≥ LOD	N/A	ND	PASS
Mevinphos	0.03 / 0.09	≥ LOD	N/A	ND	PASS
Paclbutrazol	0.02 / 0.05	≥ LOD	N/A	ND	PASS
Propoxur	0.03 / 0.09	≥ LOD	N/A	ND	PASS
Spiroxamine	0.03 / 0.08	≥ LOD	N/A	ND	PASS
Thiacloprid	0.03 / 0.10	≥ LOD	N/A	ND	PASS

**CATEGORY 2 PESTICIDE TEST RESULTS** - 01/22/2021 ✔ PASS

COMPOUND	LOD/LOQ (µg/g)	ACTION LIMIT (µg/g)	MEASUREMENT UNCERTAINTY (µg/g)	RESULT (µg/g)	RESULT
Abamectin	0.03 / 0.10	0.1	N/A	ND	PASS
Acephate	0.02 / 0.07	0.1	N/A	ND	PASS
Acequinocyl	0.02 / 0.07	0.1	N/A	ND	PASS
Acetamiprid	0.02 / 0.05	0.1	N/A	ND	PASS
Azoxystrobin	0.02 / 0.07	0.1	N/A	ND	PASS
Bifenazate	0.01 / 0.04	0.1	N/A	ND	PASS
Bifenthrin	0.02 / 0.05	3	N/A	ND	PASS
Boscalid	0.03 / 0.09	0.1	N/A	ND	PASS

Continued on next page



**CATEGORY 2 PESTICIDE TEST RESULTS** - 01/22/2021 *continued*

COMPOUND	LOD/LOQ (µg/g)	ACTION LIMIT (µg/g)	MEASUREMENT UNCERTAINTY (µg/g)	RESULT (µg/g)	RESULT
Captan	0.19 / 0.57	0.7	N/A	ND	PASS
Carbaryl	0.02 / 0.06	0.5	N/A	ND	PASS
Chlorantranilip- role	0.04 / 0.12	10	N/A	ND	PASS
Clofentezine	0.03 / 0.09	0.1	N/A	ND	PASS
Cyfluthrin	0.12 / 0.38	2	N/A	ND	PASS
Cypermethrin	0.11 / 0.32	1	N/A	ND	PASS
Diazinon	0.02 / 0.05	0.1	N/A	ND	PASS
Dimethomorph	0.03 / 0.09	2	N/A	ND	PASS
Etoxazole	0.02 / 0.06	0.1	N/A	ND	PASS
Fenhexamid	0.03 / 0.09	0.1	N/A	ND	PASS
Fenpyroximate	0.02 / 0.06	0.1	N/A	ND	PASS
Flonicamid	0.03 / 0.10	0.1	N/A	ND	PASS
Fludioxonil	0.03 / 0.10	0.1	N/A	ND	PASS
Hexythiazox	0.02 / 0.07	0.1	N/A	ND	PASS
Imidacloprid	0.04 / 0.11	5	N/A	ND	PASS
Kresoxim-methyl	0.02 / 0.07	0.1	N/A	ND	PASS
Malathion	0.03 / 0.09	0.5	N/A	ND	PASS
Metalaxyl	0.02 / 0.07	2	N/A	ND	PASS
Methomyl	0.03 / 0.10	1	N/A	ND	PASS
Myclobutanil	0.03 / 0.09	0.1	N/A	ND	PASS
Naled	0.02 / 0.07	0.1	N/A	ND	PASS
Oxamyl	0.04 / 0.11	0.5	N/A	ND	PASS
Pentachloronitro- benzene*	0.03 / 0.09	0.1	N/A	ND	PASS
Permethrin	0.04 / 0.12	0.5	N/A	ND	PASS
Phosmet	0.03 / 0.10	0.1	N/A	ND	PASS
Piperonylbu- toxide	0.02 / 0.07	3	N/A	ND	PASS
Prallethrin	0.03 / 0.08	0.1	N/A	ND	PASS
Propiconazole	0.02 / 0.07	0.1	N/A	ND	PASS
Pyrethrins	0.04 / 0.12	0.5	N/A	ND	PASS
Pyridaben	0.02 / 0.07	0.1	N/A	ND	PASS
Spinetoram	0.02 / 0.07	0.1	N/A	ND	PASS
Spinosad	0.02 / 0.07	0.1	N/A	ND	PASS
Spiromesifen	0.02 / 0.05	0.1	N/A	ND	PASS
Spirotetramat	0.02 / 0.06	0.1	N/A	ND	PASS
Tebuconazole	0.02 / 0.07	0.1	N/A	ND	PASS
Thiamethoxam	0.03 / 0.10	5	N/A	ND	PASS
Trifloxystrobin	0.03 / 0.08	0.1	N/A	ND	PASS

**MYCOTOXIN TEST RESULTS** - 01/22/2021 ✔ PASS

Mycotoxin analysis utilizing high-performance liquid chromatography-mass spectrometry (HPLC-MS). **Method:** QSP 1212 - Analysis of Pesticides and Mycotoxins by LC-MS

COMPOUND	LOD/LOQ (µg/kg)	ACTION LIMIT (µg/kg)	MEASUREMENT UNCERTAINTY (µg/kg)	RESULT (µg/kg)	RESULT
Aflatoxin B1	2.0 / 6.0		N/A	ND	
Aflatoxin B2	1.8 / 5.6		N/A	ND	
Aflatoxin G1	1.0 / 3.1		N/A	ND	
Aflatoxin G2	1.2 / 3.5		N/A	ND	
Total Aflatoxin		20		ND	PASS
Ochratoxin A	6.3 / 19.2	20	N/A	ND	PASS

**CATEGORY 1 RESIDUAL SOLVENTS TEST RESULTS** - 01/22/2021 ✔ PASS

Residual Solvent analysis utilizing gas chromatography-mass spectrometry (GC-MS). **Method:** QSP 1204 - Analysis of Residual Solvents by GC-MS

COMPOUND	LOD/LOQ (µg/g)	ACTION LIMIT (µg/g)	MEASUREMENT UNCERTAINTY (µg/g)	RESULT (µg/g)	RESULT
1,2-Dichloroethane	0.05 / 0.1	1	N/A	ND	PASS
Benzene	0.03 / 0.09	1	N/A	ND	PASS
Chloroform	0.1 / 0.2	1	N/A	ND	PASS
Ethylene Oxide	0.3 / 0.8	1	N/A	ND	PASS
Methylene chloride	0.3 / 0.9	1	N/A	ND	PASS
Trichloroethylene	0.1 / 0.3	1	N/A	ND	PASS

**CATEGORY 2 RESIDUAL SOLVENTS TEST RESULTS** - 01/22/2021 ✔ PASS

COMPOUND	LOD/LOQ (µg/g)	ACTION LIMIT (µg/g)	MEASUREMENT UNCERTAINTY (µg/g)	RESULT (µg/g)	RESULT
Acetone	20 / 50	5000	N/A	ND	PASS
Acetonitrile	2 / 7	410	N/A	ND	PASS
Butane	10 / 50	5000	N/A	ND	PASS
Ethanol	20 / 50	5000	N/A	ND	PASS
Ethyl acetate	20 / 60	5000	N/A	ND	PASS
Ethyl ether	20 / 50	5000	N/A	ND	PASS
Heptane	20 / 60	5000	N/A	ND	PASS
Hexane	2 / 5	290	N/A	ND	PASS
Isopropyl Alcohol	10 / 40	5000	±4.9	170	PASS
Methanol	50 / 200	3000	N/A	ND	PASS
Pentane	20 / 50	5000	N/A	ND	PASS
Propane	10 / 20	5000	N/A	ND	PASS
Toluene	7 / 21	890	N/A	ND	PASS
Total Xylenes	50 / 160	2170	N/A	ND	PASS



**HEAVY METALS TEST RESULTS** - 01/21/2021 ✔ PASS

Heavy metal analysis utilizing inductively coupled plasma-mass spectrometry (ICP-MS). **Method:** QSP 1160 - Analysis of Heavy Metals by ICP-MS

COMPOUND	LOD/LOQ (µg/g)	ACTION LIMIT (µg/g)	MEASUREMENT UNCERTAINTY (µg/g)	RESULT (µg/g)	RESULT
Cadmium	0.02 / 0.05	0.2	N/A	ND	PASS
Lead	0.04 / 0.1	0.5	N/A	ND	PASS
Arsenic	0.02 / 0.1	0.2	N/A	ND	PASS
Mercury	0.002 / 0.01	0.1	N/A	ND	PASS

**MICROBIAL IMPURITIES TEST RESULTS** - 01/22/2021 ✔ PASS

Analysis conducted by polymerase chain reaction (PCR) and fluorescence detection of microbial impurities. **Method:** QSP 1221 - Analysis of Microbial Impurities

COMPOUND	ACTION LIMIT	RESULT	RESULT
Shiga toxin-producing <i>Escherichia coli</i>	Detect	ND	PASS
<i>Salmonella</i> spp.	Detect	ND	PASS
<i>Aspergillus fumigatus</i>	Detect	ND	PASS
<i>Aspergillus flavus</i>	Detect	ND	PASS
<i>Aspergillus niger</i>	Detect	ND	PASS
<i>Aspergillus terreus</i>	Detect	ND	PASS

**FOREIGN MATERIAL TEST RESULTS** - 01/21/2021 ✔ PASS

Visual analysis includes, but is not limited to, sand, soil, cinders, dirt, mold, hair, insect fragments, and mammalian excreta. **Method:** QSP 1226 - Analysis of Foreign Material in Cannabis and Cannabis Products

COMPOUND	ACTION LIMIT	RESULT
Total Sample Area Covered by Sand, Soil, Cinders, or Dirt	>25%	PASS
Total Sample Area Covered by Mold	>25%	PASS
Total Sample Area Covered by an Imbedded Foreign Material	>25%	PASS
Insect Fragment Count	> 1 per 3 grams	PASS
Hair Count	> 1 per 3 grams	PASS
Mammalian Excreta Count	> 1 per 3 grams	PASS