



16020 Linden Ave North  
Shoreline, WA 98133  
www.usbiotek.com

## MYCOTOXIN PANEL REPORT FORM 12/15/2023

### PATIENT INFORMATION

**Patient:** Lindsey Carver  
**Patient Date of Birth:** 03/26/1989  
**Patient Sex:** F  
**MRN/Patient ID:** NA  
**Patient Email:** NA

### ORDER INFORMATION

**Accession No:** 379985  
**External Order No:** 2023079517  
**Reported On:** 12/15/2023  
**Physician:** Seng Foong  
**Practice:** US BioTek  
**Address:** 16020 Linden Ave N, Shoreline, WA 98133

### SAMPLE INFORMATION

**Date of Receipt:** 12/12/2023  
**Time of Receipt:** 12:54 CDT  
**Date of Collection:** 12/8/2023  
**Time of Collection:** 00:00 CDT  
**Specimen Type:** Urine

### LAB INFORMATION

**Phone:** 1-972-492-0419  
**Fax:** 1-972-243-7759  
**Email:** info@realtimelab.com  
**CLIA #:** 45D1051736  
**CAP #:** 7210193  
**Tax ID #:** 0669342

**Procedure Type:** Semi-quantitative procedure by ELISA

### List of Mycotoxins tested in the Panel

Ochratoxin A - Procedure by ELISA  
Aflatoxin Group: (B1, B2, G1, G2) - Procedure by ELISA  
Trichothecene Group (Macrocyclic): Roridin A, Roridin E, Roridin H, Roridin L-2, Verrucaridin A, Verrucaridin J, Satratoxin G, Satratoxin H, Isosatratoxin F - Procedure by ELISA  
Gliotoxin Derivative - Procedure by ELISA  
Zearalenone - Procedure by ELISA

### Results:

Code	Test	Specimen	Value	Result	Not Present if less than	Equivocal if between	Present if greater or equal
E8501	Ochratoxin A	Urine	3.60200 ppb	Present	1.8 ppb	1.8-2 ppb	2 ppb
E8502	Aflatoxin Group: (B1, B2, G1, G2)	Urine	1.89600 ppb	Present	0.8 ppb	0.8-1 ppb	1 ppb
E8503	Trichothecene Group (Macrocyclic): Roridin A, Roridin E, Roridin H, Roridin L-2, Verrucaridin A, Verrucaridin J, Satratoxin G, Satratoxin H, Isosatratoxin F	Urine	0.39200 ppb	Present	0.07 ppb	0.07-0.09 ppb	0.09 ppb
E8510	Gliotoxin Derivative	Urine	4.89600 ppb	Present	0.5 ppb	0.5-1.0 ppb	1.0 ppb
E8512	Zearalenone	Urine	2.14700 ppb	Present	0.5 ppb	0.5-0.7 ppb	0.7 ppb

### Report Comments:

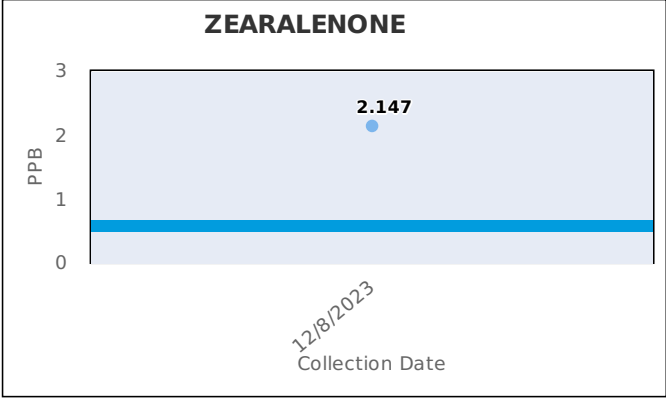
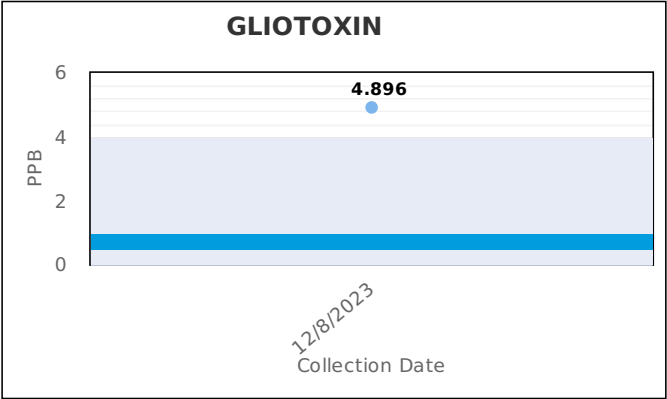
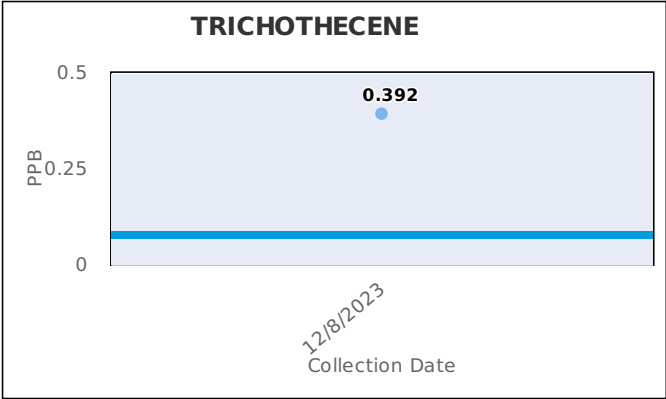
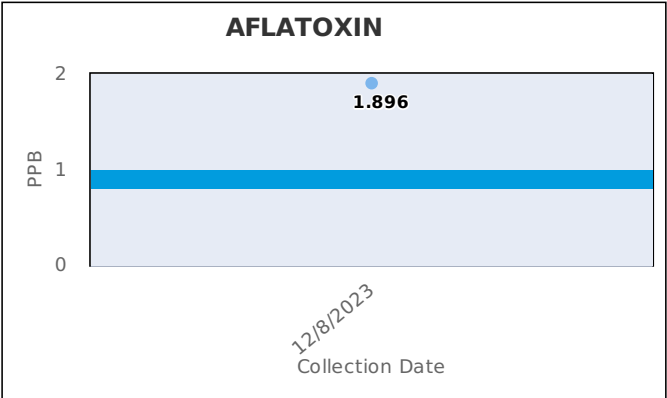
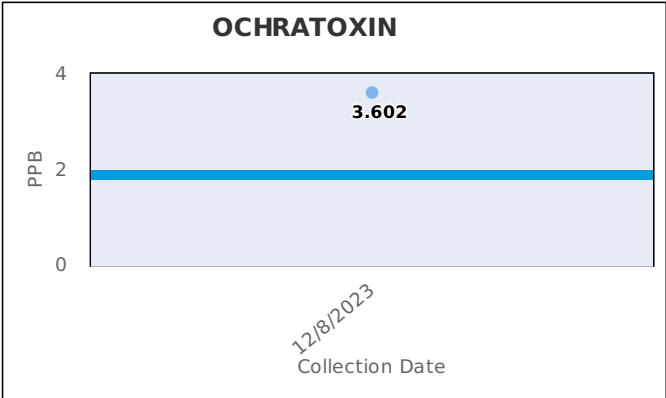
Practitioner - Carolina Total Wellness (Raleigh)

Director or Designee Signature

Tests such as this should be used only in conjunction with other medically established diagnostic elements (e.g., symptoms, history, clinical impressions, results from other tests, etc). Physicians should use all the information available to them to diagnose and determine appropriate treatment for their patients.

Disclaimer: This test was developed and its performance characteristics determined by RealTime Lab. It has not been cleared or approved by the U.S. Food and Drug Administration. The FDA has determined that such clearance or approval is not necessary. This laboratory is certified under the Clinical Laboratory Improvement Amendments of 1988 (CLIA-88) as qualified to perform high complexity clinical laboratory testing.

Historical Results:



Results Summary:

Accession No	Collection Date	Ochra Result	Afla Result	Tricho Result	Gliotoxin Result	Zearalenone Result
379985	12/8/2023	3.60200 - Present	1.89600 - Present	0.39200 - Present	4.89600 - Present	2.14700 - Present

Mycotoxin		Cellular Activity of Mycotoxin	Symptoms/Other	Association with a "Disease State"
<b>A FLA TOXIN FAMILY</b> <b>Organisms: <i>Aspergillus flavus</i>, <i>Aspergillus oryzae</i>, <i>Aspergillus fumigatus</i>, <i>Aspergillus parasiticus</i></b> <b>Aflatoxins have been associated with liver cancer [2,3], cirrhosis [4,5], and other health issues</b>				
1	Aflatoxin B1	Binds DNA and proteins [6,7]	Shortness of breath [8], weight loss [10], most potent and highly carcinogenic.	Primarily attacks the liver, other organs include kidneys and lungs [11]
2	Aflatoxin B2	Inhibits DNA and RNA replication [12]	Impaired fetal growth [13,14]	Affects the liver and kidneys [11]
3	Aflatoxin G1	Cytotoxic, induces apoptosis in cells, DNA damage [1]	A flavus is a leading cause of invasive aspergillus in immunocompromised patients [15]	Cancer, neonatal jaundice [2,3,16]
4	Aflatoxin G2	Cancer, neonatal jaundice [2,3,16]	Aflatoxicosis in humans and animals [15]	Malnutrition, lung cancer [2,3,16]
<b>OCHRATOXIN A</b> <b>Organisms: <i>Aspergillus ochraceus</i>, <i>Aspergillus niger</i>, <i>Penicillium species</i></b>				
5	Ochratoxin A	Inhibits mitochondrial ATP, potent teratogen, and immune suppressor [17-19]	Fatigue, dermatitis, irritated bowel [20-22]	Kidney disease and cancer [23,24]
<b>MA CROCYCLIC TRICHTHOCENES (Group D)</b> <b>Organism: <i>Stachybotrys chartarum</i></b>				
6	Satratoxin G	DNA, RNA, and protein synthesis inhibition [25]	Fatigue [26]	Bleeding disorders, nervous system disorders [27,28]
7	Satratoxin H	Inhibits protein synthesis [25]	Fatigue [26]	Breathing issues [29]
8	Isosatratoxin F	Immunosuppression [30]	Weakened immune system [30]	
9	Roridin A	Immunosuppression [30]	Weakened immune system [30]	
10	Roridin E	DNA, RNA, and protein synthesis disruption [25,32]	Weakened immune system [30]	Lung and nasal olfactory problems [31]
11	Roridin H	Inhibits protein synthesis [25]	Weakened immune system [30]	
12	Roridin L-2	Immunosuppression [30]	Weakened immune system [30]	
13	Verrucaric acid	Immunosuppression [30]		
14	Verrucaric acid	Immunosuppression [30]		
<b>GLIOTOXIN DERIVATIVE</b> <b>Organisms: <i>Aspergillus fumigatus</i>, <i>Aspergillus terreus</i>, <i>Aspergillus niger</i>, <i>Aspergillus flavus</i></b>				
15	Gliotoxin	Attacks intracellular function in immune system [34]	Memory and breathing issues [35,36]	Immune dysfunction disorders [34]
<b>ZEARALENONE</b> <b>Organisms: <i>Fusarium species</i></b>				
16	Zearalenone	Estrogen mimic [37,38]	Early puberty, low sperm counts, cancer [39-42]	Cancer [39,40]

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