## **VALIDATION SUMMARY**

### CHEMISTRY UNIT // FBI Laboratory

Procedure Name: TOX 304 Pesticides Analysis in Foodstuffs and/or Stomach Contents - Analysis of Tissue

Samples (Liver)

Date: 07/30/2019 - 08/06/2019

Validation Summary:

See Attached summary and table.

Approval:

Redacted

Acting Technical Leader:

Date: 8/9/2019

Date: 8/12/19

Chemistry Unit Chief:

# Summary of the Validation Results - Qualitative Detection of Pesticides in Tissues

The following information is based upon validation experiments conducted in tissues from 07/30/2019 - 08/06/2019.

#### **Limit of Detection for Tissues:**

The limit of detection was tested in three different lots of tissues extracted 3 times.

	GC/ECD	GC/MS
<b>Organochlorines</b>		
Lindane (g-BHC):	5 ug/g	5 ug/g
Aldrin	5 ug/g	5 ug/g
Endrin	5 ug/g	10 ug/g
Endrin Aldehyde	5 ug/g	10 ug/g
4,4'-DDT	5 ug/g	5 ug/g.
<b>Carbamates</b>		
Carbaryl	na	5 ug/g
Carbofuran	na	5 ug/g
Propoxur	na	5 ug/g
<b>Organophosphates</b>		
Chlorpyrifos	10 ug/g	5 ug/g
Diazinon	na	5 <b>ug/g</b>
Fenchlorphos	na	5 ug/g
Parathion ,	na	5 ug/g
Prophos	na	10 ug/g

### Selectivity (Interferences) for Tissues:

Selectivity was evaluated by analyzing 10 tissue samples. No interferences were noted.

Tissue samples were homogenized 1:1 with deionized water and centrifuged to remove liquid layer. Liquid layer was extracted via SLE cartridges, eluted with methylene chloride, and reconstituted with acetone. Samples were analyzed by GC/ECD and GC/MS (EI). Selectivity was evaluate by analyzing 10 tissue samples. No interferences were noted. The LOD's for the organochlorines, carbamates, and organophosphates (see table above).

