| Laboratory | | Chemical Examiners Thiruvananthapuram | Laboratory, Red Cross Ro n, Kerala | ad, Vanchiyoor PO, | | | |
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| Acc | reditation Standard | ISO/IEC 17025: 2005 | ISO/IEC 17025: 2005 | | | | |
| Cert | tificate Number | TC-7458 | Page 1 of 2 | 2 | | | |
| Vali | dity | 22.06.2018 to 21.06.2 | 020 Last Amen | ded on | | | |
| SI. | Product / Material of Test | Specific Test Performed | Test Method Specification against which tests are performed | Range of Testing / Limits of Detection | | | |
| | | FORENS | IC TESTING | | | | |
| I. | TOXICOLOGY | | | | | | |
| 1 | Visceral material (stomach and intestine with contents, liver, spleen, kidney, | Detection of Carbamate Pesticides | CEL-TVM/LP/TOX Issue No.01 Date: 13.06.2017 Clause 6.9.3.1 (Thin Layer Chromatography) | 50 μg/mL | | | |
| | blood, brain, heart) | | CEL-TVM/LP/TOX Issue No.01 Date:13.06.2017 Clause 6.9.3.3 (Gas Chromatography) | 10 μg/mL to 1 mg/mL | | | |
| | | Detection of Organophosphorous pesticides | CEL-TVM/LP/TOX Issue No.01 Date:13.06.2017 Clause 6.10.1 (Thin Layer Chromatography) | 50 μg/mL | | | |
| | | | CEL-TVM/LP/TOX Issue No.01 Date:13.06.2017 Clause 6.10.5 (Gas Chromatography) | 10 μg/mL to 1 mg/mL | | | |
| | | Detection of Organochloro pesticides | CEL-TVM/LP/TOX Issue No.01 Date:13.06.2017 Clause 6.10.1 (Thin Layer Chromatography) | 50 μg/mL | | | |
| | | | CEL-TVM/LP/TOX Issue No.01 Date:13.06.2017 Clause 6.10.5 (Gas Chromatography) | 10 μg/mL to 1 mg/mL | | | |

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| Accreditation Standard | ISO/IEC 17025: 2005 | |
|------------------------|--------------------------|-----------------|
| Certificate Number | TC-7458 | Page 2 of 22 |
| Validity | 22.06.2018 to 21.06.2020 | Last Amended on |

| SI. | Product / Material of Test | Specific Test Performed | Test Method Specification against which tests are performed | Range of Testing / Limits of Detection |
|-----|-------------------------------|---------------------------------------|---|---|
| | | Detection of Pyrethroid pesticides | CEL-TVM/LP/TOX Issue No.01 Date:13.06.2017 Clause 6.13.1.3 (Thin Layer Chromatography) | 50 μg/mL |
| | | | CEL-TVM/LP/TOX Issue No.01 Date:13.06.2017 Clause 6.10.5 (Gas Chromatography) | 10 μg/mL to 1 mg/mL |
| | | Detection of Acidic Drugs | CEL-TVM/LP/TOX Issue No.01 Date:13.06.2017 Clause 8.5.1.1 (Thin Layer Chromatography) | 50 μg/mL |
| | | | CEL-TVM/LP/TOX Issue No.01 Date:13.06.2017 Clause 8.6 (Gas Chromatography) | 10 μg/mL to 1 mg/mL |
| | | | CEL-TVM/LP/TOX Issue No.01 Date:13.06.2017 Clause 8.5.3.1 (UV-visible Spectrophotometry) | 400 nm to 230 nm |
| | | Detection of Basic Drugs | CEL-TVM/LP/TOX Issue No.01 Date:13.06.2017 Clause 7.7.5.1 (Thin Layer Chromatography) | 50 μg/mL |

| Accreditation Standard | | ISO/IEC 17025: 2005 | | | |
|------------------------|-------------------------------|----------------------------|---|---|--|
| Certificate Number | | TC-7458 | Page 3 of 2 | Page 3 of 22 | |
| Validity | | 22.06.2018 to 21.06.2 | 020 Last Amer | ided on | |
| | Product / Material of Test | Specific Test Performed | Test Method Specification against which tests are | Range of Testing / Limits of Detection | |

| of Test | Performed | against which tests are performed | Limits of Detection |
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| | | CEL-TVM/LP/TOX Issue No.01 Date:13.06.2017 Clause 8.6 (Gas Chromatography) | 10 μg/mL to 1 mg/mL |
| | | CEL-TVM/LP/TOX Issue No.01 Date:13.06.2017 Clause 7.7.6.1 (UV Visible spectrophotometry) | 400 nm to 230 nm |
| | Detection of Ethyl alcohol: i. lodoform test ii. Sulphomolybdic acid test | CEL-TVM/LP/TOX Issue No.01 Date:13.06.2017 | 0.5 mg/mL 0.5 mg/mL |
| | iii. Ethyl acetate test Detection of Methyl alcohol: Chromotropic acid test | Clause 4.6.2.4 CEL-TVM/LP/TOX Issue No.01 Date:13.06.2017 Clause 4.6.2.6 | 0.5 mg/mL 0.5 mg/mL |
| | Detection of Formic acid I. Tollens Test II. Mercuric chloride test III. Chromotropic acid test | CEL-TVM/LP/TOX Issue No.01 Date:13.06.2017 Clause 4.6.2.24 | 0.5 mg/mL 0.5 mg/mL 0.5 mg/mL |
| | Detection of Cyanide: I. Prussian blue test | CEL-TVM/LP/TOX Issue No.01 Date:13.06.2017 Clause 4.6.2.14 | 0.5 mg/mL |

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| Accreditation Standard | ISO/IEC 17025: 2005 | |
|------------------------|--------------------------|-----------------|
| Certificate Number | TC-7458 | Page 4 of 22 |
| Validity | 22.06.2018 to 21.06.2020 | Last Amended on |

| SI. | Product / Material of Test | Specific Test Performed | Test Method Specification against which tests are performed | Range of Testing / Limits of Detection |
|-----|--------------------------------------|--|--|---|
| | | II. Nitroprusside test | CEL-TVM/LP/TOX Issue No.01 Date:13.06.2017 Clause 4.6.2.14 | 0.5 mg/mL |
| | | Detection of Aluminium/Zinc Phosphide | | |
| | | I. Ammonium Molybdate test | CEL-TVM/LP/TOX Issue No.01 Date:13.06.2017 Clause 4.7.2 | 0.5 mg/mL |
| | | II. Group analysis | CEL-TVM/LP/TOX Issue No.01 Date:13.06.2017 Clause 5.5.1 | 0.5 mg/mL |
| | | Detection of Carbon monoxide in blood: Kunkel's test | CEL-TVM/LP/TOX Issue No.01 Date:13.06.2017 Clause 4.7.4 (UV-VIS Spectrophotometry) | 400 nm to 230 nm |
| | | | CEL-TVM/LP/TOX Issue No.01 Date:13.06.2017 Clause 4.7.5. | 0.5 mg/mL |
| 2 | Blood, Urine and Stomach Aspirate | Detection of Carbamates pesticides | CEL-TVM/LP/TOX Issue No.01 Date:13.06.2017 Clause 6.9.3.1 (Thin Layer Chromatography) | 50 μg/mL |
| | | | CEL-TVM/LP/TOX Issue No.01 Date:13.06.2017 | 10 μg/mL to 1 mg/mL |

| ŀ | Acci | reditation Standard | ISO/IEC 17025: 2005 | | |
|----------|------|---------------------|------------------------|---------------------------|--------------------|
| C | Cert | ificate Number | TC-7458 | Page 5 of | 22 |
| Validity | | dity | 22.06.2018 to 21.06.20 | D20 Last Amer | nded on |
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| 5 | SI. | Product / Material | Specific Test | Test Method Specification | Range of Testing / |

| SI. | Product / Material of Test | Specific Test Performed | Test Method Specification against which tests are performed | Range of Testing / Limits of Detection |
|-----|-------------------------------|---|--|---|
| | | | Clause 6.9.3.3 (Gas Chromatography) | |
| | | Detection of Organophosphorous pesticides | CEL-TVM/LP/TOX Issue No.01 Date:13.06.2017 Clause 6.10.1 (Thin Layer Chromatography) | 50 μg/mL |
| | | | CEL-TVM/LP/TOX Issue No.01 Date:13.06.2017 Clause 6.10.5 (Gas Chromatography) | 10 μg/mL to 1 mg/mL |
| | | Detection of Organochloro pesticides | CEL-TVM/LP/TOX Issue No.01 Date:13.06.2017 Clause 6.10.1 (Thin Layer Chromatography) | 50 μg/mL |
| | | | CEL-TVM/LP/TOX Issue No.01 Date:13.06.2017 Clause 6.10.5 (Gas Chromatography) | 10 μg/mL to 1 mg/mL |
| | | Detection of Pyrethroid pesticides | CEL-TVM/LP/TOX Issue No.01 Date:13.06.2017 Clause 6.13.1.3 (Thin Layer Chromatography) | 50 μg/mL |
| | | | CEL-TVM/LP/TOX Issue No.01 Date:13.06.2017 Clause 6.10.5 (Gas Chromatography) | 10 μg/mL to 1 mg/mL |
| | | Detection of Acidic Drugs | CEL-TVM/LP/TOX Issue No.01 Date:13.06.2017 | 50 μg/mL |

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|------------|---|
| Laboratory | |

| Accreditation Standard | ISO/IEC 17025: 2005 | |
|------------------------|--------------------------|---|
| Certificate Number | TC-7458 | Page 6 of 22 |
| Validity | 22.06.2018 to 21.06.2020 | Last Amended on |
| SI. Product / Material | Specific Test Test M | lethod Specification Range of Testing / |

| SI. | Product / Material of Test | Specific Test Performed | Test Method Specification against which tests are performed | Range of Testing / Limits of Detection |
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| | | | Clause 8.5.1.1 (Thin Layer Chromatography) | |
| | | | CEL-TVM/LP/TOX Issue No.01 Date:13.06.2017 Clause 8.6 (Gas Chromatography) | 10 μg/mL to 1 mg/mL |
| | | | CEL-TVM/LP/TOX Issue No.01 Date:13.06.2017 Clause 8.5.3.1 (UV-VIS Spectrophotometry) | 400 nm to 230 nm |
| | | Detection of Basic Drugs | CEL-TVM/LP/TOX Issue No.01 Date:13.06.2017 Clause 7.7.5.1 (Thin Layer Chromatography) | 50 μg/mL |
| | | | CEL-TVM/LP/TOX Issue No.01 Date:13.06.2017 Clause 8.6 (Gas Chromatography) | 10 μg/mL to 1 mg/mL |
| | | | CEL-TVM/LP/TOX Issue No.01 Date:13.06.2017 Clause 7.7.6.1 (UV-VIS Spectrophotometry) | 400 nm to 230 nm |
| | | Detection of Ethyl alcohol: | | |
| | | I. Iodoform test II. Sulphomolybdic acid test | CEL-TVM/LP/TOX Issue No.01 Date:13.06.2017 | 0.5 mg/mL 0.5 mg/mL |
| Í | | III. Ethyl acetate test | Clause 4.6.2.4 | 0.5 mg/mL |

| Accreditation Standard Certificate Number | | ISO/IEC 17025: 2 | 2005 | | | |
|--|-------------------------------|----------------------------|------|--------------------------------------|---|--|
| | | TC-7458 Pa | | Page 7 of 2 | Page 7 of 22 | |
| Validity | | 22.06.2018 to 21.06.2020 | | Last Amen | Last Amended on | |
| SI. | Product / Material of Test | Specific Test Performed | | hod Specification which tests are | Range of Testing / Limits of Detection | |

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| | | Quantitative Analysis of Ethyl alcohol | | |
| | | I. Kozelka & Hines | CEL-TVM/LP/TOX | 0.1 mg/mL to 500 mg/mL |
| | | method | Issue No.01 | |
| | | | Date:13.06.2017 | |
| | | | Clause 4.6.3.1 | |
| | | | CEL-TVM/LP/TOX | |
| | | II. Gas | Issue No.01 | 0.1 mg/mL to 500 mg/mL |
| | | Chromatography | Date:13.06.2017 | |
| | | | Clause 4.6.3.2 | |
| | | Detection of Methyl | CEL-TVM/LP/TOX | |
| | | alcohol: | Issue No.01 | |
| | | | Date:13.06.2017 | 0.5 mg/mL |
| | | Chromotropic acid test | Clause 4.6.2.6 | |
| | | Quantitative Analysis of | CEL-TVM/LP/TOX | |
| | | Methyl alcohol: | Issue No.01 | |
| | | Gas Chromatography | Date:13.06.2017 | 0.1 mg/mL to 500 mg/mL |
| <u>-</u> | | | Clause 4.6.3.2 | |
| 3 | Nail, hair and Bone | Detection of Mercury | CEL-TVM/LP/TOX | |
| | вопе | Reinsch Test | Issue No.01 | |
| | | Reinschliest | Date:13.06.2017 | 0.5 mg/mL |
| | | Detection of Arsenic | Clause 5.5.1.11 CEL-TVM/LP/TOX | |
| | | Detection of Arsenic | Issue No.01 | |
| | | Reinsch Test | Date:13.06.2017 | 0.5 mg/mL |
| | | | Clause 5.5.1.2 | 0.5 mg/me |
| | | Detection of Copper | CEL-TVM/LP/TOX | |
| | | Reinsch Test | Issue No.01 | 0.5 mg/mL |
| | | | Date:13.06.2017 | |
| | | | Clause 5.5.1.9 | |
| 4 | TIssue and Blood | Detection of Snake | CEL-TVM/LP/TOX | |
| | | Venom: | Issue No.01 | |
| | | | Date:13.06.2017 | |
| | | Micro diffusion method | Clause 10.5.1.2 | Qualitative |
| | | [| | <u> </u> |

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|------------------------|---|--|--|
| Accreditation Standard | ISO/IEC 17025: 2005 | | |

Page 8 of 22

Last Amended on --

| Certificate Number | TC-7458 |
|--------------------|---------|

Validity 22.06.2018 to 21.06.2020

| SI. | Product / Material of Test | Specific Test Performed | Test Method Specification against which tests are performed | Range of Testing / Limits of Detection |
|--|--|---|--|---|
| 5 Bone marrow, lungs, sternum and water samp | | Detection of Diatoms Diatom Comparison | CEL-TVM/LP/TOX Issue No.01 Date:13.06.2017 Clause 11. | Qualitative |
| II. | CHEMISTRY | | | |
| 1. | Petroleum Products: Detection of Petrol | Density | CEL-TVM/LP/GCM Issue No.01 Date:13.06.2017 Clause 8.2.1 | 0.1 g/mL to 0.99 g/mL |
| | | Distillation | CEL-TVM/LP/GCM Issue No.01 Date:13.06.2017 Clause 8.2.2 | 30°C to 250 °C |
| | | Colour | CEL-TVM/LP/GCM Issue No.01 Date:13.06.2017 Clause 8.2.3 | 400 nm to 700 nm |
| | | Filter paper test | CEL-TVM/LP/GCM Issue No.01 Date:13.06.2017 Clause 8.2.4 & 8.3 | Qualitative |
| | Detection of Diesel | Detection of Diesel Density | CEL-TVM/LP/GCM Issue No.01 Date:13.06.2017 Clause 11.2.1 | 0.1 g/mL to 0.99 g/mL |
| | | Distillation | CEL-TVM/LP/GCM Issue No.01 Date:13.06.2017 Clause 11.2.2 | 30 °C to 380 °C |
| | | Flash point | CEL-TVM/LP/GCM Issue No.01 Date:13.06.2017 Clause 11.2.3 | 25 °C to 70 °C |

| Laboratory | Chemical Examiners Laboratory, Red Cross Road, Vanchiyoor PO, Thiruvananthapuram, Kerala |
|------------|---|
| Laboratory | |

| Accreditation Standard | ISO/IEC 17025: 2005 | |
|------------------------|--------------------------|-----------------|
| Certificate Number | TC-7458 | Page 9 of 22 |
| Validity | 22.06.2018 to 21.06.2020 | Last Amended on |

| SI. | Product / Material of Test | Specific Test Test Method Specification Performed against which tests are performed performed | | Range of Testing / Limits of Detection |
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| | | Kinematic Viscosity | CEL-TVM/LP/GCM Issue No.01 Date:13.06.2017 Clause 11.2.4 | 1.8 cSt to 7 cSt |
| | Detection of Kerosene | Density | CEL-TVM/LP/GCM Issue No.01 Date:13.06.2017 Clause 10.2.1 | 0.78 g/mL to 0.84 g/mL |
| | | Distillation | CEL-TVM/LP/GCM Issue No.01 Date:13.06.2017 Clause 10.2.2 | 30 °C to 350 °C |
| | | Flash point | CEL-TVM/LP/GCM Issue No.01 Date:13.06.2017 Clause 10.2.3 | 33 °C to 70 °C |
| | | Smoke point | CEL-TVM/LP/GCM Issue No.01 Date:13.06.2017 Clause 10.2.6 | 18 cm to 25 cm |
| 2. | Metals and Alloys | Detection of Copper I. Ammonium hydroxide test II. Alizarin blue test III. Flame test Detection of Silver: | CEL-TVM/LP/GCM Issue No.01 Date:13.06.2017 Clause 4.7.2.6 | 0.5 mg/mL 0.5 mg/mL 0.5 mg/mL |
| | | I. Sodium hydroxide test II. Potassium iodide test III. Potassium chromate test IV. Disodium | CEL-TVM/LP/GCM Issue No.01 Date:13.06.2017 Clause 4.7.2.8 | 0.5 mg/mL 0.5 mg/mL 0.3 mg/mL 0.5 mg/mL |

| Accreditation Standard Certificate Number | | reditation Standard | ISO/IEC 17025: 20 | 05 | | |
|--|-----|-------------------------------|----------------------------|----|-----------------------------------|---|
| | | ificate Number | TC-7458 Pag | | Page 10 of | Page 10 of 22 |
| Validity | | dity | 22.06.2018 to 21.06.2020 | | Last Amended on | |
| | SI. | Product / Material of Test | Specific Test Performed | | od Specification ich tests are | Range of Testing / Limits of Detection |

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| | | Detection of Gold I. Rhodamine B test II. Oxalic acid test III. TLC IV. Aquaregia test | CEL-TVM/LP/GCM Issue No.01 Date:13.06.2017 Clause 4.7.3 | 0.5 mg/mL 0.5 mg/mL 0.5 mg/mL 0.5 mg/mL |
| 3. | Acids and Alkalis | Detection of Acids &Alkalis: I. pH test II. Litmus paper test | CEL-TVM/LP/GCM Issue No.01 Date:13.06.2017 Clause 5.5.1.1 | 1 to 14 1 to 14 |
| 4 | Toddy | Detection of Ethyl alcohol: I. Iodoform test II. Potassium dichromate test III. Ethyl acetate test Quantitative Analysis of Ethyl alcohol: i. Specific gravity ii. Gas Chromatography | CEL-TVM/LP/EXC Issue No.01 Date:13.06.2017 Clause 2.6.1.1 CEL-TVM/LP/EXC Issue No.01 Date:13.06.2017 Clause 2.6.2.1 CEL-TVM/LP/EXC Issue No.01 Date:13.06.2017 Clause 2.6.2.2 | 0.5 mg/mL 0.5 mg/mL 0.5 mg/mL <u>1 % to 100 % (v/v)</u> 0.1 mg/mL to 500 mg/mL |
| | | Detection of Methyl alcohol: I. Chromotropic acid test II. Gas chromatography | CEL-TVM/LP/EXC Issue No.01 Date:13.06.2017 Clause 2.6.1.2 CEL-TVM/LP/EXC Issue No.01 Date:13.06.2017 Clause 2.6.2.3 | 0.5 mg/mL 0.1 mg/mL to 500 mg/mL |

| Laboratory | Chemical Examiners Laboratory, Red Cross Road, Vanchiyoor PO, Thiruvananthapuram, Kerala |
|------------|---|
| | |

| | Accreditation Standard Certificate Number | | ISO/IEC 17025: 20 |)05 | | |
|--|--|-------------------------------|----------------------------|-----|-----------------------------------|---|
| | | | TC-7458 | | Page 11 of 22 | |
| | Validity | | 22.06.2018 to 21.06.2020 | | Last Amen | ded on |
| | SI. | Product / Material of Test | Specific Test Performed | | hod Specification which tests are | Range of Testing / Limits of Detection |

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| | | Detection of Starch: Iodine Test | CEL-TVM/LP/EXC Issue No.01 Date:13.06.2017 Clause 2.6.3 | 0.5 mg/mL |
| | | Detection of Chloral Hydrate: I. Fujiwara Test II. Resorcinol Test Detection of Drugs: | CEL-TVM/LP/EXC Issue No.01 Date:13.06.2017 Clause 2.6.4 CEL-TVM/LP/EXC Issue No.01 Date:13.06.2017 Clause 2.6.5 (Thin layer chromatography, UV Visible spectrophotometry, Gas chromatography mass spectrophotometry, infrared spectroscopy) | 0.5 mg/mL 0.5 mg/mL 50 μg/mL 400 nm to 230 nm 10 μg/mL to 1 mg/mL 4000 cm ⁻¹ to 900 cm ⁻¹ |
| | | Detection of Benzoic acid: I. Ferric chloride test II. Silver nitrate test | CEL-TVM/LP/EXC Issue No.01 Date:13.06.2017 Clause 2.6.6 | 0.5 mg/mL 0.5 mg/mL |
| 5. | Liquor | Detection of Ethyl alcohol: I. lodoform test II. Potassium dichromate test III. Ethyl acetate test | CEL-TVM/LP/EXC Issue No.01 Date:13.06.2017 Clause 1.6.1.1 | 0.5 mg/mL 0.5 mg/mL 0.5 mg/mL |

| | Accreditation Standard Certificate Number Validity | | ISO/IEC 17025: 2 | 005 | | |
|--|--|-------------------------------|-------------------------------------|-----|--|---|
| | | | TC-7458 22.06.2018 to 21.06.2020 | | Page 12 of | 22 |
| | | | | | Last Amen | Last Amended on |
| | SI. | Product / Material of Test | Specific Test Performed | | ethod Specification t which tests are | Range of Testing / Limits of Detection |

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| | | Quantitative Analysis of Ethyl alcohol: I. Specific gravity | CEL-TVM/LP/EXC Issue No.01 Date:13.06.2017 Clause 1.6.2.1 | 1 % to 100 % (V/V) |
| | | II. Gas Chromatography | CEL-TVM/LP/EXC Issue No.01 Date:13.06.2017 Clause 1.6.2.1 | 0.1 mg/mL to 500 mg/mL |
| 6. | Spirit | Detection of Ethyl alcohol: | CEL-TVM/LP/EXC Issue No.01 Date:13.06.2017 | |
| | | I. Iodoform test II. Potassium dichromate test III. Ethyl acetate test | Clause 1.6.1.1 | 0.5 mg/mL 0.5 mg/mL 0.5 mg/mL |
| | | Quantitative Analysis of Ethyl alcohol: | CEL-TVM/LP/EXC Issue No.01 Date:13.06.2017 | |
| | | I. Specific gravity II. Gas Chromatography | Clause 1.6.2.1 CEL-TVM/LP/EXC Issue No.01 Date:13.06.2017 Clause 1.6.2.1 | 1 % to 100 %(V/V) 0.1 mg/mL to 500 mg/mL |
| | | Detection of Methyl alcohol: | CEL-TVM/LP/EXC Issue No.01 Date:13.06.2017 | |
| | | I. Chromotropic acid test | Clause 2.6.1.2 | 0.5 mg/mL |
| | | II. Gas chromatography | CEL-TVM/LP/EXC Issue No.01 Date:13.06.2017 Clause 2.6.2.3 | 0.1 mg/mL to 500 mg/mL |

| Α | ccreditation Standard | ISO/IEC 17025: 2 | 2005 | | |
|---|----------------------------------|----------------------------|--|---|--|
| C | ertificate Number | TC-7458 | Page 13 o | Page 13 of 22 Last Amended on | |
| V | alidity | 22.06.2018 to 21 | .06.2020 Last Ame | | |
| S | I. Product / Material of Test | Specific Test Performed | Test Method Specification against which tests are | Range of Testing / Limits of Detection | |

| | of Test | Performed | against which tests are performed | Limits of Detection |
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| | | Detection of Fusel oil: Dilution Test | CEL-TVM/LP/EXC Issue No.01 Date:13.06.2017 Clause 3.5.3 | 0.5 mg/mL |
| | | Detection of Aldehyde: Borsches Test | CEL-TVM/LP/EXC Issue No.01 Date:13.06.2017 Clause 3.5.4 | 0.5 mg/mL |
| 111. | EXPLOSIVES | | | |
| 1. | Explosive Ingredient, Pyrotechnic compositions and Fire works | Detection of Chloride Silver nitrate test Sulphuric acid test | CEL-TVM/LP/GCM Issue No.01 Date:13.06.2017 Clause 4.7.1.2 & 18.9.2.1 | 0.5 mg/mL 0.5 mg/mL |
| | | Detection of Sulphide Sodium nitroprusside test | CEL-TVM/LP/GCM Issue No.01 Date:13.06.2017 Clause 18.9.2.12 | 0.5 mg/mL |
| | | Detection of Nitrate I. Ring test II. Diphenyl amine test III. Ferrous sulphate test | CEL-TVM/LP/GCM Issue No.01 Date:13.06.2017 | 0.5 mg/mL 0.5 mg/mL 0.5 mg/mL |
| | | IV. Brucine test Detection of Nitrite Spot test | Clause 4.7.3.2 CEL-TVM/LP/GCM Issue No.01 Date:13.06.2017 Clause 18.9.2.3 | 0.5 mg/mL 0.5 mg/mL |
| | | Detection of Chlorate I. Aniline sulphate test | CEL-TVM/LP/GCM Issue No.01 Date:13.06.2017 | 0.5 mg/mL |
| | | II. Diphenylcarbazid e test | Clause 18.9.2.6 | 0.5 mg/mL |

| Accreditation Standard | | ISO/IEC 17025: 2 | 2005 | | |
|------------------------|-------------------------------|----------------------------|------|---------------------------------|---|
| Cei | tificate Number | TC-7458 | | Page 14 of 22 | |
| Val | idity | 22.06.2018 to 21.06.2020 | | Last Amen | ded on |
| SI. | Product / Material of Test | Specific Test Performed | | od Specification hich tests are | Range of Testing / Limits of Detection |

| of Test | Performed | against which tests are performed | Limits of Detection |
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| | Detection of Perchlorate Spot test | CEL-TVM/LP/GCM Issue No.01 Date:13.06.2017 Clause 18.9.2.8 | 0.5 mg/mL |
| | Detection of Phosphate I. Ammonium molybdate test II. Sodium hydroxide test | CEL-TVM/LP/GCM Issue No.01 Date:13.06.2017 Clause 18.9.2.10 | 0.5 mg/mL 0.5 mg/mL |
| | Detection of Ammonium I. Nesslers reagent test II. Sodium hydroxide test | CEL-TVM/LP/GCM Issue No.01 Date:13.06.2017 Clause 4.7.2.1 | 0.5 mg/mL 0.5 mg/mL |
| | Detection of Arsenic I. Gutzeit method II. Reinsch's test | CEL-TVM/LP/GCM Issue No.01 Date:13.06.2017 Clause 18.9.7.1 | 0.5 mg/mL 0.5 mg/mL |
| | Detection of Antimony I. Rhodamine B test II. Sodium nitrite test | CEL-TVM/LP/GCM Issue No.01 Date:13.06.2017 Clause 18.9.7.2 | 0.5 mg/mL 0.5 mg/mL |
| | Detection of Aluminium I. Alizarin S test II. Diphenylcarbazid e test | CEL-TVM/LP/GCM Issue No.01 Date:13.06.2017 Clause 18.9.6.9 | 0.5 mg/mL 0.5 mg/mL |
| | Detection of Sulphur: Sodium hydroxide test | CEL-TVM/LP/GCM Issue No.01 Date:13.06.2017 Clause 18.9.8.1 | 0.5 mg/mL |

| Accreditation Standard | | ISO/IEC 17025: 20 |)05 | | |
|------------------------|-------------------------------|----------------------------|--|---------------------------|---|
| Certificate Number | | TC-7458 Pag | | Page 15 of | 22 |
| Validity | | 22.06.2018 to 21.06.2020 | | Last Amen | ded on |
| SI. | Product / Material of Test | Specific Test Performed | Test Method against whic performed | Specification h tests are | Range of Testing / Limits of Detection |

| <u> </u> | | performed | |
|----------|---|---|------------------------|
| | Detection of Sodium: I. Uranyl zinc acetate test | CEL-TVM/LP/GCM Issue No.01 Date:13.06.2017 | 0.5 mg/mL |
| | II. Flame test | Clause 4.7.2.4 & 18.9.6.6 | 0.5 mg/mL |
| | Detection of Potassium I. Dipicryl Amine Reagent test II. Flame test | CEL-TVM/LP/GCM Issue No.01 Date:13.06.2017 Clause 4.7.2.5 & 18.9.6.6 | 0.5 mg/mL 0.5 mg/mL |
| | | | |
| | Detection of Barium: I. Sodium Rhodizonate test | CEL-TVM/LP/GCM Issue No.01 Date:13.06.2017 | 0.5 mg/mL |
| | II. Flame test | Clause 18.9.6.3 & 18.9.6.6 | 0.5 mg/mL |
| | Detection of Calcium I. Sodium rhodizonate test | CEL-TVM/LP/GCM Issue No.01 Date:13.06.2017 | 0.5 mg/mL |
| | II. Flame test | Clause 6.7.5 & 18.9.6.6 | 0.5 mg/mL |
| | Detection of Strontium I. Sodium rhodizonate test | CEL-TVM/LP/GCM Issue No.01 | 0.5 mg/mL |
| | II. Flame test | Date:13.06.2017 Clause 18.9.6.5 & 18.9.6.6 | 0.5 mg/mL |
| | Detection of Magnesium I. Magneson reagent test | CEL-TVM/LP/GCM | 0.5 mg/mL |
| | II. Quinalizarin test | Issue No.01 Date:13.06.2017 Clause 18.9.6.8 | 0.5 mg/mL |
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|------------------------|---|
| Accreditation Standard | ISO/IEC 17025: 2005 |

| Certificate Number | TC-7458 | Page 16 of 22 |
|--------------------|--------------------------|-----------------|
| Validity | 22.06.2018 to 21.06.2020 | Last Amended on |

| SI. | Product / Material of Test | ial Specific Test Test Method Specification Performed against which tests are performed | | Range of Testing / Limits of Detection | |
|-----|---|---|--|---|--|
| IV. | NARCOTICS | | | | |
| 1. | Opium Morphine and Poppy straw | Detection of Opium alkaloids Marquis Test | CEL-TVM/LP/NAR Issue No.01 Date:13.06.2017 Clause 3.5.1a | 0.5 mg/mL | |
| | | | CEL-TVM/LP/NAR Issue No.01 Date:13.06.2017 Clause 3.5.2 (Thin Layer Chromatography) | 50 μg/mL | |
| | | | CEL-TVM/LP/NAR Issue No.01 Date:13.06.2017 Clause 3.5.5.2 (UV-VIS Spectrophotometry) | 400 nm to 230 nm | |
| | | | CEL-TVM/LP/NAR Issue No.01 Date:13.06.2017 Clause 3.5.5.3 (Gas chromatograph Mass spectrometry) | 10 μg/mL to 1 mg/mL | |
| | | | CEL-TVM/LP/NAR Issue No.01 Date:13.06.2017 Clause 3.5.5.1 (Infrared Spectroscopy) | 4000 cm ⁻¹ to 900 cm ⁻¹ | |
| 2. | Cannabis products- Charas, Ganja, Bhang | Detection of Cannabinoids | | | |
| | Canja, Dhang | I. Fast blue B salt test II. Duquenois- | CEL-TVM/LP/NAR Issue No.01 Date:13.06.2017 | 0.5 mg/mL | |
| | | Levine test | Clause 5.5.2 | 0.5 mg/mL | |

| Accreditation Standard | ISO/IEC 17025: 2005 | |
|------------------------|------------------------|--|
| Certificate Number | TC-7458 | Page 17 of 22 |
| Validity | 22.06.2018 to 21.06.20 | 20 Last Amended on |
| SI. Product / Material | Specific Test | Test Method Specification Range of Testing / |

| SI. | Product / Material of Test | Specific Test Performed | Test Method Specification against which tests are performed | Range of Testing / Limits of Detection |
|-----|-------------------------------|---|---|---|
| | | | CEL-TVM/LP/NAR Issue No.01 Date:13.06.2017 Clause 5.5.3 (Thin Layer Chromatography) | 50 μg/mL |
| | | | CEL-TVM/LP/NAR Issue No.01 Date:13.06.2017 Clause 5.5.6.2 (UV-VIS Spectrophotometry | 400 nm to 230 nm |
| | | | CEL-TVM/LP/NAR Issue No.01 Date:13.06.2017 Clause 5.5.6.1 (Gas chromatograph Mass spectrometry) | 10 μg/mL to 1 mg/mL |
| 3. | Heroin | Detection of Diacetyl Morphine | | |
| | | I. Marquis Test II. Mecke's Test III. Frohde Test | CEL-TVM/LP/NAR Issue No.01 Date:13.06.2017 Clause 4.5.1 CEL-TVM/LP/NAR Issue No.01 | 0.5 mg/mL 0.5 mg/mL 0.5 mg/mL 50 μg/mL |
| | | | Date:13.06.2017 Clause 4.5.2 (Thin Layer Chromatography) CEL-TVM/LP/NAR Issue No.01 Date:13.06.2017 Clause 4.5.5.1 (UV-VIS Spectrophotometry | 400 nm to 230 nm |

| Accreditation Standard | ISO/IEC 17025: 2005 | |
|------------------------|--------------------------|--|
| Certificate Number | TC-7458 | Page 18 of 22 |
| Validity | 22.06.2018 to 21.06.2020 | Last Amended on |
| SI. Product / Material | Specific Test M | ethod Specification Range of Testing / |

| SI. | Product / Material of Test | Specific Test Performed | Test Method Specification against which tests are performed | Range of Testing / Limits of Detection |
|-----|-------------------------------|-------------------------------------|--|---|
| | | | CEL-TVM/LP/NAR Issue No.01 Date:13.06.2017 Clause 4.5.5.3 (Gas chromatograph Mass spectrometry) | 10 μg/mL to 1 mg/mL |
| | | | CEL-TVM/LP/NAR Issue No.01 Date:13.06.2017 Clause 4.5.5.2 (Infrared Spectroscopy) | 4000 cm ⁻¹ to 900 cm ⁻¹ |
| 4. | Cocaine | Detection of Cocaine Scotts test | CEL-TVM/LP/NAR Issue No.01 Date:13.06.2017 Clause 6.5.1.1 | 0.5 mg/mL |
| | | | CEL-TVM/LP/NAR Issue No.01 Date:13.06.2017 Clause 6.5.2 (Thin Layer Chromatography) | 50 μg/mL |
| | | | CEL-TVM/LP/NAR Issue No.01 Date:13.06.2017 Clause 6.5.5.1 (UV-VIS Spectrophotometry | 400 nm to 230 nm |
| | | | CEL-TVM/LP/NAR Issue No.01 Date:13.06.2017 Clause 6.5.5.3 (Gas chromatograph Mass spectrometry) | 10 μg/mL to 1 mg/mL |

| Ac | creditation Standard | ISO/IEC 17025: 2005 | | | | |
|--------------------|-------------------------------|----------------------------|--|---------------------------------------|---|--|
| Certificate Number | | TC-7458 Page 19 | | Page 19 of | of 22 | |
| Va | lidity | 22.06.2018 to 21.06.2020 | | Last Amen | Last Amended on | |
| SI. | Product / Material of Test | Specific Test Performed | | thod Specification which tests are | Range of Testing / Limits of Detection | |

| | | | performed | |
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| | | | CEL-TVM/LP/NAR Issue No.01 Date:13.06.2017 Clause 6.5.5.2 (Infrared Spectroscopy) | 4000 cm ⁻¹ to 900 cm ⁻¹ |
| 5. | Barbiturates | Detection of Barbiturates Dille-Koppanyi test | CEL-TVM/LP/NAR Issue No.01 Date:13.06.2017 Clause 9.5.1.1 | 0.5 mg/mL |
| | | | CEL-TVM/LP/NAR Issue No.01 Date:13.06.2017 Clause 9.5.2 (Thin Layer Chromatography) | 50 μg/mL |
| | | | CEL-TVM/LP/NAR Issue No.01 Date:13.06.2017 Clause 9.5.5.1 (UV-VIS Spectrophotometry | 400 nm to 230 nm |
| | | | CEL-TVM/LP/NAR Issue No.01 Date:13.06.2017 Clause 9.5.5.2 (Gas chromatograph Mass spectrometry) | 10 μg/mL to 1 mg/mL |
| | | | CEL-TVM/LP/NAR Issue No.01 Date:13.06.2017 Clause 9.5.5.3 (Infrared Spectroscopy) | 4000 cm ⁻¹ to 900 cm ⁻¹ |

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| Accreditation Standard | ISO/IEC 17025: 2005 | |
|------------------------|--------------------------|-----------------|
| Certificate Number | TC-7458 | Page 20 of 22 |
| Validity | 22.06.2018 to 21.06.2020 | Last Amended on |
| | | |

| SI. | Product / Material of Test | Specific Test Performed | Test Method Specification against which tests are performed | Range of Testing / Limits of Detection |
|-----|-------------------------------|---------------------------------|---|---|
| 6. | Benzodiazepines | Detection of Benzodiazepines | CEL-TVM/LP/NAR Issue No.01 Date:13.06.2017 Clause 10.5.1 (Thin Layer Chromatography) | 50 μg/mL |
| | | | CEL-TVM/LP/NAR Issue No.01 Date:13.06.2017 Clause 10.5.4.1 (UV-VIS Spectrophotometry | 400 nm to 230 nm |
| | | | CEL-TVM/LP/NAR Issue No.01 Date:13.06.2017 Clause 10.5.4.2 (Gas chromatograph Mass spectrometry) | 10 μg/mL to 1 mg/mL |
| | | | CEL-TVM/LP/NAR Issue No.01 Date:13.06.2017 Clause 10.5.4.3 (Infrared Spectroscopy) | 4000 cm ⁻¹ to 900 cm ⁻¹ |
| 7. | Lysergide (LSD) | Detection of Lysergide | | |
| | | Ehrlich test | CEL-TVM/LP/NAR Issue No.01 Date:13.06.2017 Clause 13.5.1.1 | 0.5 mg/mL |
| | | Marquis test | CEL-TVM/LP/NAR Issue No.01 Date:13.06.2017 Clause 13.5.1.2 | 0.5 mg/mL |
| | | Frohde test | CEL-TVM/LP/NAR Issue No.01 Date:13.06.2017 Clause 13.5.1.3 | 0.5 mg/mL |

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| Validity | 22.06.2018 to 21.06.2020 | Last Amended on |
| Certificate Number | TC-7458 | Page 21 of 22 |
| Accreditation Standard | ISO/IEC 17025: 2005 | |

| SI. | Product / Material of Test | Specific Test Performed | Test Method Specification against which tests are performed | Range of Testing / Limits of Detection | |
|-----|---|----------------------------|---|---|--|
| | | | CEL-TVM/LP/NAR 50 µg/mL Issue No.01 Date:13.06.2017 Clause 13.5.2 (Thin Layer Chromatography) | | |
| | | | CEL-TVM/LP/NAR Issue No.01 Date:13.06.2017 Clause 13.5.5 (UV-VIS Spectrophotometry) | 400 nm to 230 nm | |
| | | | CEL-TVM/LP/NAR Issue No.01 Date:13.06.2017 Clause 13.5.5.3 (Gas chromatograph Mass spectrometry) | 10 μg/mL to 1 mg/mL | |
| 8. | Ketamine Detection of Ketamine CEL- Issue Date: Claus (Thin | | CEL-TVM/LP/TOX Issue No.01 Date:13.06.2017 Clause 15.5.1 (Thin Layer Chromatography) | 50 μg/mL | |
| | | | CEL-TVM/LP/TOX Issue No.01 Date:13.06.2017 Clause 15.5.2.1 (UV-VIS Spectrophotometry) | 400 nm to 230 nm | |
| | | | CEL-TVM/LP/TOX Issue No.01 Date:13.06.2017 Clause 15.5.2.3 (Gas chromatograph Mass spectrometry) | 10 μg/mL to 1 mg/mL | |

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|------------------------|-------------------------------|---|--|---------------------------|---|--|
| Accreditation Standard | | ISO/IEC 17025: 2005 | | | | |
| Certificate Number | | TC-7458 | C-7458 Page 22 of 22 | | | |
| Validity | | 22.06.2018 to 21.06.2020 | | Last Amen | Amended on | |
| SI. | Product / Material of Test | Specific Test Performed | Test Method against whic performed | Specification h tests are | Range of Testing / Limits of Detection | |
| | | | CEL-TVM/LP/ Issue No.01 Date:13.06.20 Clause 15.5.2 (Infrared Spec |)17 2 | 4000 cm ⁻¹ to 900 cm ⁻¹ | |