

### Prairie Tide Analytical Service Listing – Olive Oil

Prairie Tide Diversified (PTD) offers testing as pertains to the identity, quality and contaminant content of olive oil.

#### Individual Tests

Test	Method
Free Fatty Acid <sup>1</sup>	AOCS Ca 5a-40
p-Anisidine Value <sup>1</sup>	AOCS Cd 18-90
Peroxide Value <sup>1</sup>	AOCS C d 8b-90
TOTOX Calculation	USP <401>
Fatty Acid Profile (%) <sup>1</sup>	AOCS Ce 1i-07, Ce 1j-07
Fatty Acid Profile and Composition (mg/g) <sup>1</sup>	AOCS Ce 1i-07, Ce 1j-07
Trans Fatty Acids (mg/g)	AOCS Ce 1i-07, Ce 1j-07 (modified)
Iodine Value <sup>1</sup>	AOCS Cd 1d-92
Moisture <sup>1</sup>	AOCS Ca 2e-84
Moisture and Volatile matter	AOCS Ba 2a-38
Residual Solvents (Class 1/2)	USP <467>
Sterols	HPLC
Stigmastadienes	HPLC
Tocopherol Content	HPLC
Total Biophenols	UV/Vis Spectroscopy
Biophenol Profile (Tyrosol, Hydroxytyrosol, Oleuropein, Hydroxyoleuropein)	HPLC
Squalene	HPLC
Diacylglycerols	AOCS Cd 11b-91
Insoluble Impurities <sup>1</sup>	AOCS Ca 3a-46
Pheophytins (Chlorophylls)	AOCS Cc 13k-13
Pyropheophytins	HPLC
Trace Metal Analysis	AOCS Ca 17a-18
Unsaponifiable Matter	AOCS Ca 6a-40
UV Absorbance	AOCS Ch 5-91

### Identification Tests (cont'd)

Test	Method
Fatty Acid Profile (%) <sup>1</sup>	AOCS Ce 1i-07, Ce 1j-07
Sterol	HPLC
Stigmastadienes	HPLC
Diacylglycerols	AOCS Cd 11b-91
Unsaponifiable Matter	AOCS Ca 6a-40

### Quality Tests

Test	Method
<b>Quality Tests I</b>	
Free Fatty Acid <sup>1</sup>	AOCS Ca 5a-40
p-Anisidine Value <sup>1</sup>	AOCS Cd 18-90
Peroxide Value <sup>1</sup>	AOCS C d 8b-90
TOTOX Calculation	USP <401>

Test	Method
<b>Quality Tests II</b>	
Free Fatty Acid <sup>1</sup>	AOCS Ca 5a-40
p-Anisidine Value <sup>1</sup>	AOCS Cd 18-90
Peroxide Value <sup>1</sup>	AOCS C d 8b-90
TOTOX Calculation	USP <401>
Hydroxytyrosol	HPLC
Diacylglycerols	AOCS Cd 11b-91
Pheophytins (Chlorophylls)	AOCS Cc 13k-13
Pyropheophytins	HPLC

Test	Method
<b>Quality Tests CDFA<sup>2</sup> Standard (EVOO<sup>3</sup>)</b>	
Free Fatty Acid <sup>1</sup>	AOCS Ca 5a-40
Peroxide Value <sup>1</sup>	AOCS C d 8b-90
Absorbency in UV K <sub>232</sub>	AOCS Ch 5-91
Absorbency in UV K <sub>270</sub>	AOCS Ch 5-91
Absorbency in UV ΔK	AOCS Ch 5-91
Diacylglycerols	AOCS Cd 11b-91
Moisture and Volatile matter	AOCS Ba 2a-38
Insoluble Impurities <sup>1</sup>	AOCS Ca 3a-46
Pyropheophytins	HPLC

<sup>2</sup>CDFA – California States Department of Food and Agriculture

<sup>3</sup>EVOO – Extra Virgin Olive Oil

Test	Method
<b>Quality Tests III</b>	
Free Fatty Acid <sup>1</sup>	AOCS Ca 5a-40
p-Anisidine Value <sup>1</sup>	AOCS Cd 18-90
Peroxide Value <sup>1</sup>	AOCS C d 8b-90
TOTOX Calculation	USP <401>
Moisture and Volatile matter	AOCS Ba 2a-38
Stigmastadienes	HPLC
Total Biophenols	UV/Vis Spectroscopy
Biophenol Profile (Tyrosol, Oleuropein, Hydroxyoleuropein)	Hydroxytyrosol, HPLC
Squalene	HPLC
Tocopherols	HPLC
Diacylglycerols	AOCS Cd 11b-91
Trace Metal Analysis	AOCS Ca 17a-18
Pheophytins (Chlorophylls)	AOCS Cc 13k-13
Pyropheophytins	HPLC
UV Absorbance	AOCS Ch 5-91