

**WESTERN NEW YORK ENERGY
MIKE LANGDON
PO BOX 191
MEDINA NY 14103-0191**

REPORT OF ANALYSIS

For: (22953) WESTERN NEW YORK ENERGY
CORN OIL
MRL031418
CORN OIL

Analysis	Level Found	Units	Reporting	Method	Analyst- Date	Verified- Date
	As Received		Limit			
Sample ID: CORN OIL Lab Number: 13000216						
Moisture (vacuum oven - 70°C)	0.53	%	0.01	AOAC 969.35	cmw4-2018/03/20	cde2-2018/03/21
Insolubles	0.04	%	0.01	AOCS Ca 3a-46	vrm7-2018/03/20	cde2-2018/03/21
Unsaponifiable matter	1.28	%	0.10	AOCS Ca 6a-40	llk6-2018/03/22	asl4-2018/03/22
Total Fatty Acid (Calc)	98.2	%	1.0	Calculation	Auto-2018/03/22	Auto-2018/03/22
Free fatty acid	10.65	%crude fat	0.01	AOCS Ca 5a-40	kfl0-2018/03/20	cde2-2018/03/21
Iodine value (number)	119		1	AOAC 920.158 (Hanus)	kfl0-2018/03/21	cde2-2018/03/21
Peroxide value	n.d.	meq/kg fat	2.0	AOAC 965.33	kap7-2018/03/20	cde2-2018/03/21

All results are reported on an AS RECEIVED basis., n.d. = not detected

For questions please contact:



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Account Manager
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The result(s) issued on this report only reflect the analysis of the sample(s) submitted.

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CORN OIL****Detailed Method Description(s)****Vacuum Moisture**

Analysis follows FO 02 or FD 018, both of which are based on AOAC 969.35. Samples are placed in pre-weighed tins and then placed in an oven that can attain a vacuum. The oven is set at 70°C under vacuum for 4 hours. Dried samples are re-weighed and the loss in weight is reported as moisture.

Insolubles

Analysis follows MWL FD 044 which is based on AOCS Ca 3a-46. Oils and greases are dissolved by heat and kerosene, filtered through a Gooch Crucible and dried. The increase in mass or filter paper is reported as insolubles.

AOCS Ca 6a-40

Sample analysis follows MWL WC 053 which is based on AOCS Ca 6a-40. The sample is treated with sodium or potassium hydroxide to saponify the triglycerides. Any fat remaining in the sample is extracted with petroleum ether and washed with alcohol to remove the polar materials. The ether is evaporated and the remaining material is reported as the unsaponifiable matter

Calculation

Analytical results are entered into applicable formulas to provide a calculated result which is reported.

Free Fatty Acids

Analysis follows MWL FD 041 which is based on AOCS 5a-40. Fat samples are weighed and placed in a container with 50 mL of neutralized alcohol and then titrated to pink end-point using standard (0.1N) sodium hydroxide. The mLs of titrant is entered into a calculation to determine free fatty acids as a percent of total fat.

Iodine Value

Analysis follows MWL FD 045 which is based on AOAC 920.158. Fat samples are digested in chloroform and treated with iodine bromine solution and titrated to clear with sodium thiosulfate. The m/s of titrant is put in a calculation and the iodine number is found.

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18-081-9463

REPORT DATE
Mar 22, 2018

RECEIVED DATE
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Mar 22, 2018

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Peroxide Value

Analysis follows MWL FD 071 which is based on AOAC 965.33. The sample, unless a fat or oil, is digested in an acetic acid and chloroform mixture. Starch is added to mixture and titrated with sodium thiosulfate to a clear end point.

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