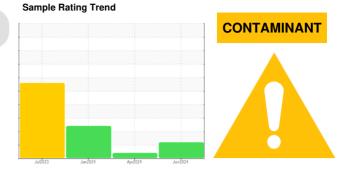


OIL ANALYSIS REPORT

[170788] **OVEN 1 MAIN**

Main Gearbox

NEVASTANE 680 (3 LTR)



DIAGNOSIS

Recommendation

We advise that you check all areas where contaminants can enter the system. We recommend that you drain the oil from the component if this has not already been done. We recommend an early resample to monitor this condition.

Wear

All component wear rates are normal.

Contamination

The water content is negligible. The sample contained a visible layer of foreign fluid contaminant, the origin and/or type of fluid is unknown.

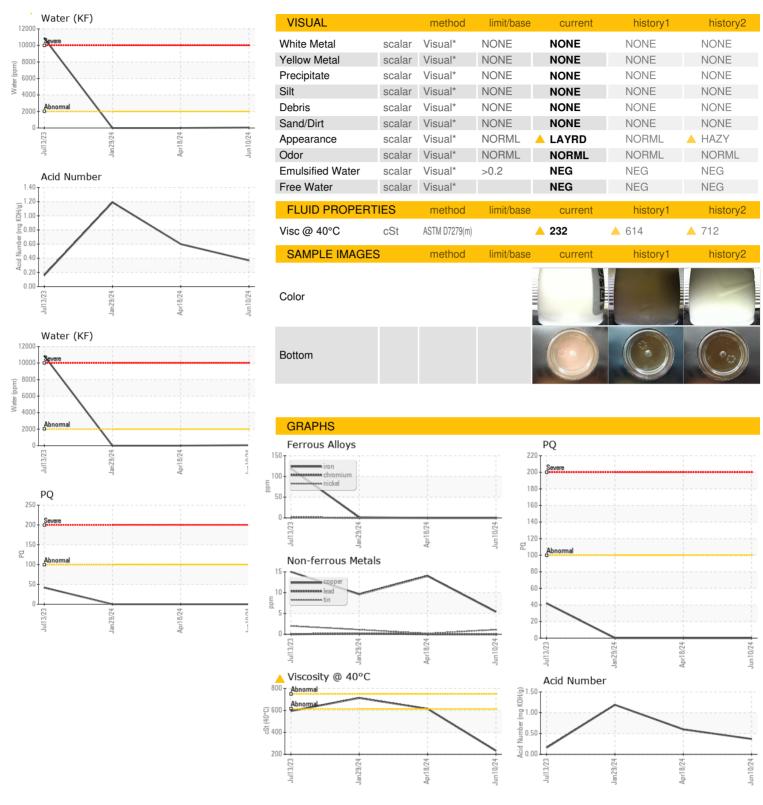
Fluid Condition

Viscosity of sample indicates oil is within ISO 220 range, advise investigate. The AN level is acceptable for this fluid. The oil is no longer serviceable due to the presence of contaminants.

SAMPLE INFORM	MATION	method	limit/base	current	history1	history2
Sample Number		Client Info		WC0929893	WC0929920	WC0898883
Sample Date		Client Info		10 Jun 2024	18 Apr 2024	29 Jan 2024
Machine Age	days	Client Info		0	0	0
Oil Age	days	Client Info		0	0	0
Oil Changed		Client Info		N/A	N/A	N/A
Sample Status				ABNORMAL	ABNORMAL	ABNORMAL
WEAR METALS		method	limit/base	current	history1	history2
PQ		ASTM D8184*		0	0	0
Iron	ppm	ASTM D5185(m)	>200	<1	0	2
Chromium	ppm	ASTM D5185(m)	>10	0	0	0
Nickel	ppm	ASTM D5185(m)	>10	<1	<1	<1
Titanium	ppm	ASTM D5185(m)		0	0	0
Silver	ppm	ASTM D5185(m)		0	0	0
Aluminum	ppm	ASTM D5185(m)	>25	0	0	<1
Lead	ppm	ASTM D5185(m)	>50	0	0	<1
Copper	ppm	ASTM D5185(m)	>200	5	14	10
Tin	ppm	ASTM D5185(m)	>10	1	<1	1
Antimony	ppm	ASTM D5185(m)	>5	0	0	0
Vanadium	ppm	ASTM D5185(m)		0	0	0
Beryllium	ppm	ASTM D5185(m)		0	0	0
Cadmium	ppm	ASTM D5185(m)		0	0	0
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185(m)		<1	1	<1
	PP					
Barium	ppm	ASTM D5185(m)		0	0	<1
Barium Molybdenum		. ,		0	0	<1
	ppm	ASTM D5185(m)		-		
Molybdenum	ppm ppm	ASTM D5185(m) ASTM D5185(m)		0	0	0
Molybdenum Manganese	ppm ppm	ASTM D5185(m) ASTM D5185(m) ASTM D5185(m)		0	0	0
Molybdenum Manganese Magnesium	ppm ppm ppm	ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m)		0 0 <1	0 0 0	0 0 0
Molybdenum Manganese Magnesium Calcium	ppm ppm ppm ppm ppm	ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m) ASTM D5185(m)		0 0 <1 <1	0 0 0 0	0 0 0 <1
Molybdenum Manganese Magnesium Calcium Phosphorus	ppm ppm ppm ppm ppm ppm	ASTM D5185(m)		0 0 <1 <1 148	0 0 0 0 0 96	0 0 0 <1 202
Molybdenum Manganese Magnesium Calcium Phosphorus Zinc	ppm ppm ppm ppm ppm ppm	ASTM D5185(m)		0 0 <1 <1 148	0 0 0 0 96 <1	0 0 0 <1 202
Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur	ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185(m)	limit/base	0 0 <1 <1 148 1 690	0 0 0 0 96 <1 1117	0 0 0 <1 202 <1 350
Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur Lithium	ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185(m)	limit/base >50	0 0 <1 <1 148 1 690 <1	0 0 0 0 96 <1 1117	0 0 0 <1 202 <1 350
Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur Lithium CONTAMINANTS	ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185(m)		0 0 	0 0 0 0 96 <1 1117 <1	0 0 0 <1 202 <1 350 <1 history2
Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur Lithium CONTAMINANTS Silicon	ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185(m)		0 0 0 <1 <1 148 1 690 <1 current	0 0 0 0 96 <1 1117 <1 history1	0 0 0 <1 202 <1 350 <1 history2
Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur Lithium CONTAMINANTS Silicon Sodium	ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185(m)	>50	0 0 0 <1 <1 148 1 690 <1 current 3	0 0 0 0 96 <1 1117 <1 history1 2 <1	0 0 0 <1 202 <1 350 <1 history2 4
Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur Lithium CONTAMINANTS Silicon Sodium Potassium	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185(m)	>50 >20	0 0 0 <1 <1 148 1 690 <1 current 3 0	0 0 0 0 96 <1 1117 <1 history1 2 <1 0	0 0 0 <1 202 <1 350 <1 history2 4
Molybdenum Manganese Magnesium Calcium Phosphorus Zinc Sulfur Lithium CONTAMINANTS Silicon Sodium Potassium Water	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185(m)	>50 >20 >0.2	0 0 0 <1 <1 148 1 690 <1 current 3 0 0	0 0 0 0 96 <1 1117 <1 history1 2 <1 0	0 0 0 <1 202 <1 350 <1 history2 4 <1 0



OIL ANALYSIS REPORT





CALA ISO 17025:2017 Accredited

Laboratory

Laboratory Sample No. Lab Number

: WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9

: WC0929893 : 02641536 Unique Number : 5799075

Received Tested Diagnosed

: 12 Jun 2024 : 17 Jun 2024

: 17 Jun 2024 - Kevin Marson

Test Package : IND 2 (Additional Tests: KF)

To discuss this sample report, contact Customer Service at 1-800-268-2131. Test denoted (*) outside scope of accreditation, (m) method modified, (e) tested at external lab. Validity of results and interpretation are based on the sample and information as supplied.

GRAND RIVER FOODS

190 VONDRAU DRIVE CAMBRIDGE, ON **CA N3E 1B8** Contact: Ryan Shea rshea@grandriverfoods.com T: (519)653-3577