

OIL ANALYSIS REPORT

Sample Rating Trend

NORMAL



			ct2019 Apr2020 Nov2020 Apr2021 Sep2021 Jan2022 Jun2022 Mm2023 Dec2023					
	SAMPLE INFORM	ATION	method	limit/base	current	history1	history2	
	Sample Number		Client Info		GFL0094764	GFL0094648	GFL0056739	
rvice interval to monitor.	Sample Date		Client Info		11 Mar 2024	12 Dec 2023	20 Sep 2023	
	Machine Age	hrs	Client Info		11727	11130	10605	
are normal.	Oil Age	hrs	Client Info		597	525	647	
	Oil Changed		Client Info		Changed	Changed	Changed	
ny contamination in the	Sample Status				NORMAL	NORMAL	NORMAL	
	CONTAMINATIO	NC	method	limit/base	current	history1	history2	
at there is suitable	Fuel		WC Method	>5	<1.0	<1.0	<1.0	
hat there is suitable e oil. The condition of the ervice.	Water		WC Method	>0.2	NEG	NEG	NEG	
	Glycol		WC Method		NEG	NEG	NEG	
	WEAR METALS		method	limit/base	current	history1	history2	
		ppm	ASTM D5185m	>100	10	12	19	
		ppm	ASTM D5185m		<1	0	<1	
		ppm	ASTM D5185m		0	0	0	
		ppm	ASTM D5185m		0	0	0	
		ppm	ASTM D5185m	>3	0	0	<1	
		ppm	ASTM D5185m		3	1	2	
		ppm	ASTM D5185m		0	0	<1	
		ppm	ASTM D5185m		<1	2	12	
		ppm	ASTM D5185m		<1	0	<1	
		ppm	ASTM D5185m	210	0	0	0	
		ppm	ASTM D5185m		0	0	0	
	ADDITIVES	1- 1-	method	limit/base	current	history1	history2	
		ppm	ASTM D5185m	0	2	2	3	
		ppm	ASTM D5185m		0	0	0	
					•			
		nnm	ASTM D5185m		60	61	60	
		ppm	ASTM D5185m	60	60 0	61 0	60 1	
	Manganese	ppm	ASTM D5185m	60 0	0	0	1	
	Manganese Magnesium	ppm ppm	ASTM D5185m ASTM D5185m	60 0 1010	0 931	0 931	1 981	
	Manganese Magnesium Calcium	ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m	60 0 1010 1070	0 931 1061	0 931 1042	1 981 1101	
	Manganese Magnesium Calcium Phosphorus	ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	60 0 1010 1070 1150	0 931 1061 1001	0 931 1042 1033	1 981 1101 1042	
	Manganese Magnesium Calcium Phosphorus Zinc	ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	60 0 1010 1070 1150 1270	0 931 1061 1001 1223	0 931 1042 1033 1226	1 981 1101 1042 1290	
	Manganese Magnesium Calcium Phosphorus Zinc Sulfur	ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	60 0 1010 1070 1150 1270 2060	0 931 1061 1001 1223 3089	0 931 1042 1033 1226 3150	1 981 1101 1042 1290 3476	
	Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANT	ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	60 0 1010 1070 1150 1270 2060 limit/base	0 931 1061 1001 1223 3089 current	0 931 1042 1033 1226 3150 history1	1 981 1101 1042 1290 3476 history2	
	Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANT Silicon	ppm ppm ppm ppm ppm ppm S	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m method ASTM D5185m	60 0 1010 1070 1150 1270 2060 limit/base	0 931 1061 1001 1223 3089 current 7	0 931 1042 1033 1226 3150 history1 5	1 981 1101 1042 1290 3476 history2 9	
	Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANT Silicon Sodium	ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	60 0 1010 1070 1150 1270 2060 limit/base >25	0 931 1061 1001 1223 3089 current	0 931 1042 1033 1226 3150 history1	1 981 1101 1042 1290 3476 history2	
	Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANT Silicon Sodium Potassium	ppm ppm ppm ppm ppm ppm S ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	60 0 1010 1070 1150 1270 2060 limit/base >25 >20	0 931 1061 1001 1223 3089 current 7 2 2 2	0 931 1042 1033 1226 3150 history1 5 <1 2	1 981 1101 1042 1290 3476 history2 9 8 2	
	Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANT Silicon Sodium Potassium INFRA-RED	ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	60 0 1010 1070 1150 1270 2060 imit/base >25	0 931 1061 1001 1223 3089 current 7 2 2 2 2	0 931 1042 1033 1226 3150 history1 5 <1 2 history1	1 981 1101 1042 1290 3476 history2 9 8 2 2 history2	
	Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANT Silicon Sodium Potassium INFRA-RED Soot %	ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	60 0 1010 1070 1150 1270 2060 imit/base >25 20 imit/base >3	0 931 1061 1001 1223 3089 current 7 2 2 2 2 2 current 0.5	0 931 1042 1033 1226 3150 history1 5 <1 2 history1 0.4	1 981 1101 1042 1290 3476 history2 9 8 2 2 history2 0	
	Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANT Silicon Sodium Potassium INFRA-RED Soot % Nitration	ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	60 0 1010 1070 1150 1270 2060 imit/base >25 >20 imit/base >3 >20	0 931 1061 1001 1223 3089 current 7 2 2 2 2	0 931 1042 1033 1226 3150 history1 5 <1 2 history1	1 981 1101 1042 1290 3476 history2 9 8 2 2 history2	
	Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANT Silicon Sodium Potassium INFRA-RED Soot % Nitration	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D7844 *ASTM D7844	60 0 1010 1070 1150 1270 2060 imit/base >25 >20 imit/base >3 >20	0 931 1061 1001 1223 3089 <u>current</u> 7 2 2 2 2 <u>current</u> 0.5 8.4 19.0	0 931 1042 1033 1226 3150 history1 5 <1 2 history1 0.4 8.1	1 981 1101 1042 1290 3476 history2 9 8 2 9 8 2 2 history2 0 10.0	
	Manganese Magnesium Calcium Phosphorus Zinc Sulfur CONTAMINANT Silicon Sodium Potassium INFRA-RED Soot % Nitration Sulfation FLUID DEGRAD	ppm ppm ppm ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D7844 *ASTM D7844	60 0 1010 1070 1150 2060 2060 225 20 220 20 20 20 20 20 20 20 20 20 20 20	0 931 1061 1001 1223 3089 <u>current</u> 7 2 2 2 2 <u>current</u> 0.5 8.4 19.0	0 931 1042 1033 1226 3150 history1 5 <1 2 history1 0.4 8.1 18.9	1 981 1101 1042 1290 3476 history2 9 8 2 history2 0 10.0 23.2	

12033 AUTOCAR ACX Component

Diesel Engine Fluic

PETRO CANADA DURON SHP 15W40 (42 QTS)

DIAGNOSIS

Recommendation

Resample at the next se

Wear

All component wear rate

Contamination

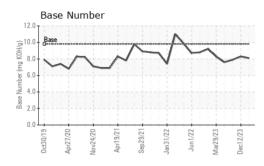
There is no indication of oil.

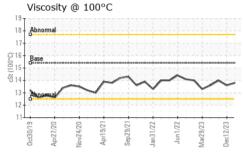
Fluid Condition

The BN result indicates alkalinity remaining in the oil is suitable for further

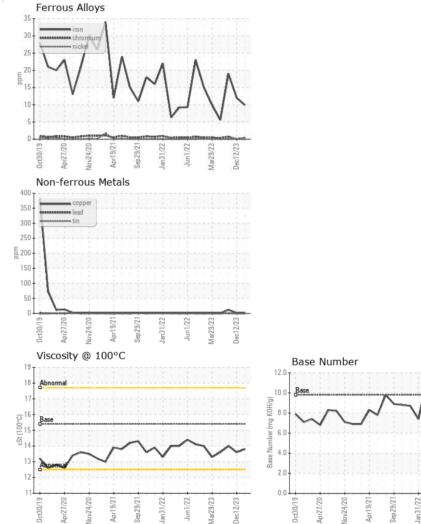


OIL ANALYSIS REPORT





VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.2	NEG	NEG	NEG
Free Water	scalar	*Visual		NEG	NEG	NEG
FLUID PROPE	RTIES	method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D445	15.4	13.8	13.6	14.0
GRAPHS						



Unique Number : 10925760 Diagnosed : 14 Mar 2024 - Wes Davis Test Package : FLEET Contact: Craig Johnson Certificate L2367 To discuss this sample report, contact Customer Service at 1-800-237-1369. craig.johnson@gflenv.com * - Denotes test methods that are outside of the ISO 17025 scope of accreditation. T: (919)662-7100 Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012) F: (919)662-7130

: WearCheck USA - 501 Madison Ave., Cary, NC 27513

Received

Tested

: 13 Mar 2024

: 14 Mar 2024

Laboratory

Sample No.

Lab Number : 06116927

: GFL0094764

Jun1/22

GFL Environmental - 001 - Raleigh(CNG)

Mar29/23

Garner, NC

US 27529

3741 Conquest Drive

Dec12/23