



OIL ANALYSIS REPORT

Sample Rating Trend



PH



Machine Id
920023
 Component
Natural Gas Engine
 Fluid
RDL-3647 (--- GAL)

DIAGNOSIS

▲ Recommendation

The oil change at the time of sampling has been noted. Resample at the next service interval to monitor.

Wear

All component wear rates are normal.

Contamination

There is no indication of any contamination in the oil.

▲ Fluid Condition

The i-pH level is abnormally low. The BN result indicates that there is suitable alkalinity remaining in the oil. The AN level is acceptable for this fluid. The oil is no longer serviceable.

SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		GFL0099532	---	---
Sample Date	Client Info		13 Dec 2023	---	---
Machine Age	hrs	Client Info	104000	---	---
Oil Age	hrs	Client Info	0	---	---
Oil Changed	Client Info		Changed	---	---
Sample Status			ABNORMAL	---	---

CONTAMINATION

	method	limit/base	current	history1	history2
Water	WC Method	>0.1	NEG	---	---

WEAR METALS

	method	limit/base	current	history1	history2	
Iron	ppm	ASTM D5185(m)	>50	15	---	---
Chromium	ppm	ASTM D5185(m)	>4	1	---	---
Nickel	ppm	ASTM D5185(m)	>2	1	---	---
Titanium	ppm	ASTM D5185(m)		0	---	---
Silver	ppm	ASTM D5185(m)	>3	0	---	---
Aluminum	ppm	ASTM D5185(m)	>9	3	---	---
Lead	ppm	ASTM D5185(m)	>30	3	---	---
Copper	ppm	ASTM D5185(m)	>35	1	---	---
Tin	ppm	ASTM D5185(m)	>4	<1	---	---
Antimony	ppm	ASTM D5185(m)		0	---	---
Vanadium	ppm	ASTM D5185(m)		0	---	---
Beryllium	ppm	ASTM D5185(m)		0	---	---
Cadmium	ppm	ASTM D5185(m)		0	---	---

ADDITIVES

	method	limit/base	current	history1	history2	
Boron	ppm	ASTM D5185(m)	50	7	---	---
Barium	ppm	ASTM D5185(m)	5	0	---	---
Molybdenum	ppm	ASTM D5185(m)	50	56	---	---
Manganese	ppm	ASTM D5185(m)	0	<1	---	---
Magnesium	ppm	ASTM D5185(m)	560	588	---	---
Calcium	ppm	ASTM D5185(m)	1510	1687	---	---
Phosphorus	ppm	ASTM D5185(m)	780	733	---	---
Zinc	ppm	ASTM D5185(m)	870	939	---	---
Sulfur	ppm	ASTM D5185(m)	2040	2128	---	---
Lithium	ppm	ASTM D5185(m)		<1	---	---

CONTAMINANTS

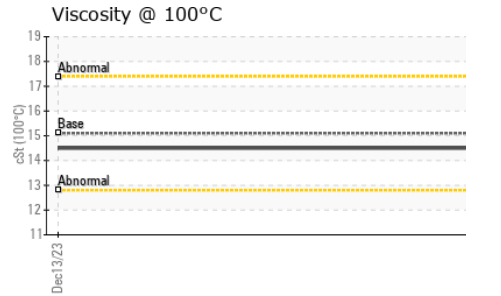
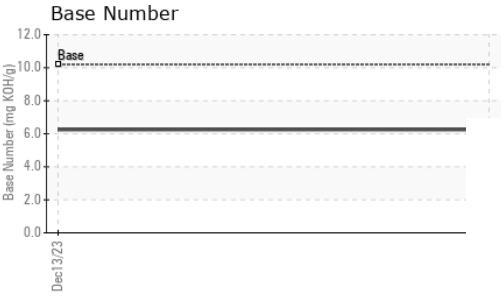
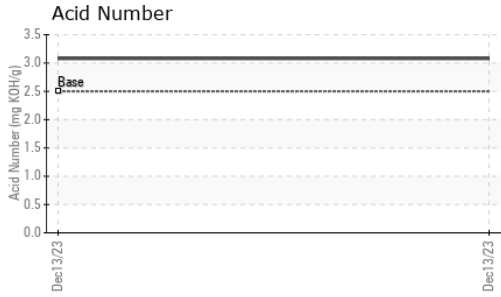
	method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185(m)	>+100	4	---	---
Sodium	ppm	ASTM D5185(m)		9	---	---
Potassium	ppm	ASTM D5185(m)	>20	<1	---	---

INFRA-RED

	method	limit/base	current	history1	history2	
Soot %	%	ASTM D7844*		0	---	---
Nitration	Abs/cm	ASTM D7624*	>20	12.7	---	---
Sulfation	Abs/.1mm	ASTM D7415*	>30	26.5	---	---



OIL ANALYSIS REPORT

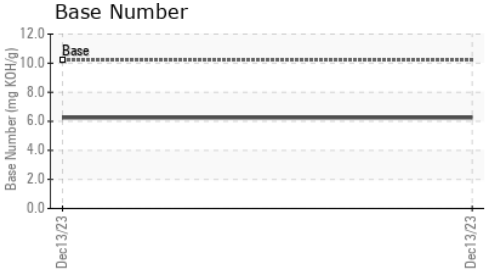
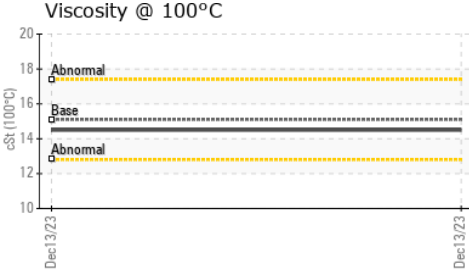
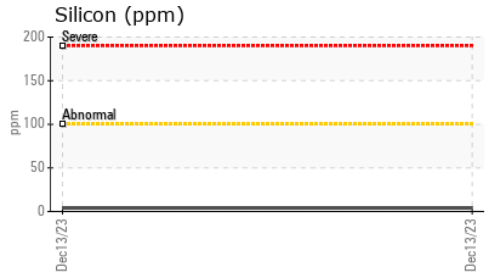
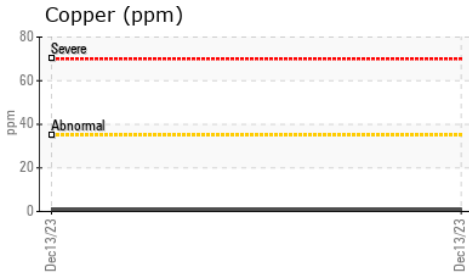
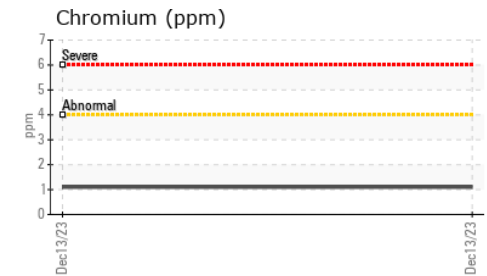
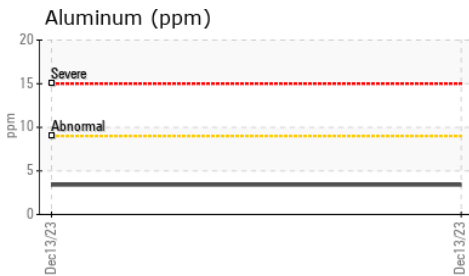
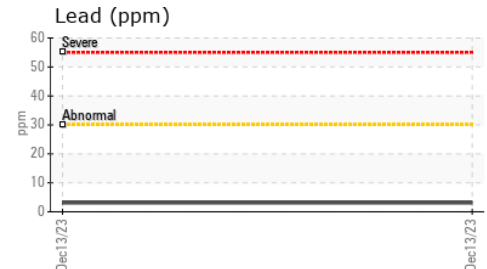
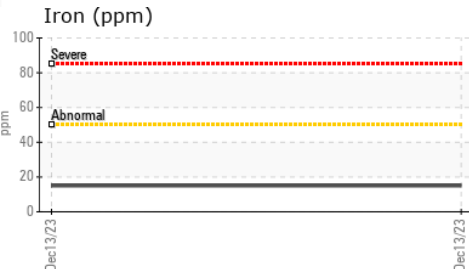


FLUID DEGRADATION		method	limit/base	current	history1	history2
Oxidation	Abs./1mm	ASTM D7414*	>25	21.7	---	---
Acid Number (AN)	mg KOH/g	ASTM D974*	2.5	3.08	---	---
Base Number (BN)	mg KOH/g	ASTM D2896*	10.2	6.25	---	---
i-pH	Scale 0-14	ASTM D7946*	<4.5	▲ 4.49	---	---

VISUAL		method	limit/base	current	history1	history2
Emulsified Water	scalar	Visual*	>0.1	NEG	---	---
Free Water	scalar	Visual*		NEG	---	---

FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D7279(m)	15.1	14.5	---	---

GRAPHS



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 GFL Environmental - 550 - Rocky View County
Sample No. : GFL0099532 **Received** : 20 Dec 2023 220 Carmek Blvd
Lab Number : 02604402 **Diagnosed** : 22 Dec 2023 Rocky View County, AB
Unique Number : 5697487 **Diagnostician** : Kevin Marson CA T1X 1X1
Test Package : MOB 2 (Additional Tests: i-pH, TAN Auto, TAN Man) Contact: Jack Levesque
 jlevesque@gflenv.com

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.

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