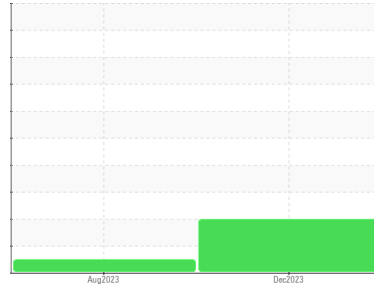




OIL ANALYSIS REPORT

Sample Rating Trend



GLYCOL



Machine Id
PETERBILT 433000

Component
Natural Gas Engine
Fluid
NOT GIVEN (--- GAL)

DIAGNOSIS

Recommendation

We advise that you check for the source of the coolant leak. Check for low coolant level. Oil and filter change at the time of sampling has been noted. We recommend an early resample to monitor this condition.

Wear

The aluminum level is abnormal.

Contamination

Sodium and/or potassium levels are high.

Fluid Condition

The BN result indicates that there is suitable alkalinity remaining in the oil.

SAMPLE INFORMATION		method	limit/base	current	history1	history2
Sample Number	Client Info			GFL0087499	GFL0087532	---
Sample Date	Client Info			18 Dec 2023	07 Aug 2023	---
Machine Age	hrs	Client Info		220	55	---
Oil Age	hrs	Client Info		220	55	---
Oil Changed	Client Info			Changed	N/A	---
Sample Status				ABNORMAL	NORMAL	---

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

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>50	51	25	---
Chromium	ppm	ASTM D5185m	>4	2	<1	---
Nickel	ppm	ASTM D5185m	>2	<1	<1	---
Titanium	ppm	ASTM D5185m		<1	<1	---
Silver	ppm	ASTM D5185m	>3	0	<1	---
Aluminum	ppm	ASTM D5185m	>9	▲ 21	8	---
Lead	ppm	ASTM D5185m	>30	2	1	---
Copper	ppm	ASTM D5185m	>35	9	7	---
Tin	ppm	ASTM D5185m	>4	<1	<1	---
Vanadium	ppm	ASTM D5185m		0	<1	---
Cadmium	ppm	ASTM D5185m		0	0	---

ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m		30	43	---
Barium	ppm	ASTM D5185m		0	0	---
Molybdenum	ppm	ASTM D5185m		51	49	---
Manganese	ppm	ASTM D5185m		4	4	---
Magnesium	ppm	ASTM D5185m		731	773	---
Calcium	ppm	ASTM D5185m		1099	1164	---
Phosphorus	ppm	ASTM D5185m		715	700	---
Zinc	ppm	ASTM D5185m		836	854	---
Sulfur	ppm	ASTM D5185m		2536	2640	---

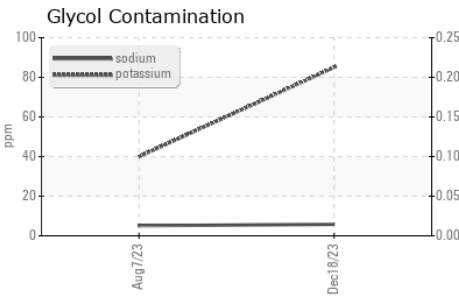
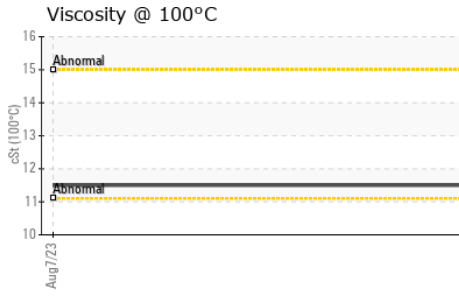
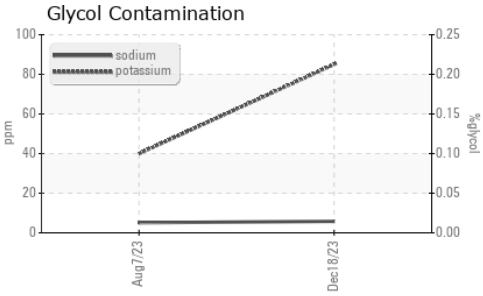
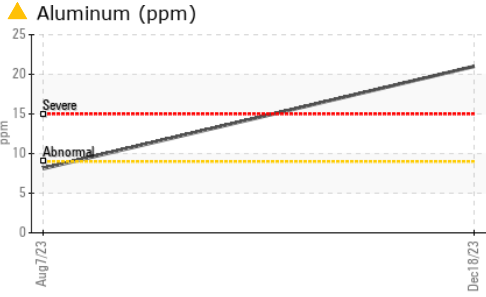
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>+100	96	92	---
Sodium	ppm	ASTM D5185m		6	5	---
Potassium	ppm	ASTM D5185m	>20	▲ 85	40	---

INFRA-RED		method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844		0.1	0.1	---
Nitration	Abs/cm	*ASTM D7624	>20	9.6	7.2	---
Sulfation	Abs/.1mm	*ASTM D7415	>30	20.0	18.9	---

FLUID DEGRADATION		method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414	>25	17.4	16.1	---
Base Number (BN)	mg KOH/g	ASTM D2896		7.5	8.8	---



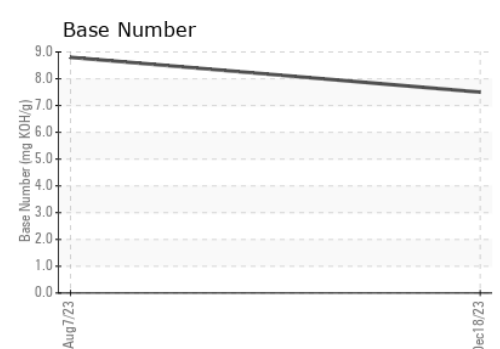
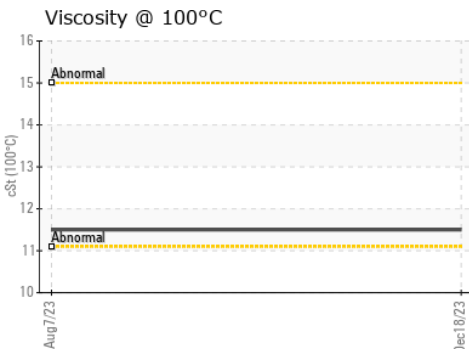
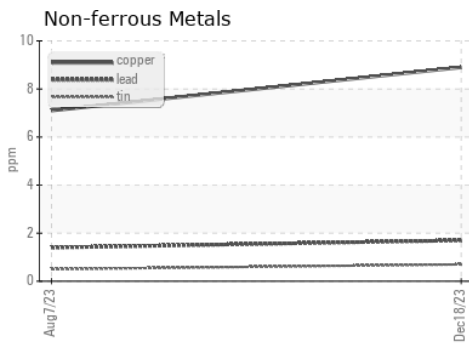
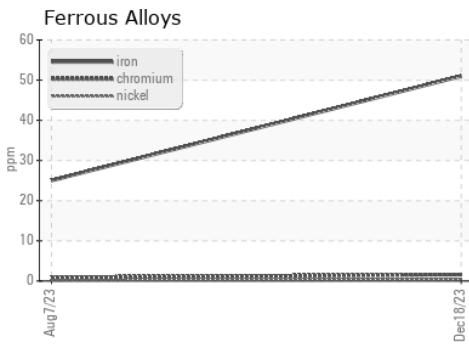
OIL ANALYSIS REPORT



VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	---
Yellow Metal	scalar	*Visual	NONE	NONE	---
Precipitate	scalar	*Visual	NONE	NONE	---
Silt	scalar	*Visual	NONE	NONE	---
Debris	scalar	*Visual	NONE	NONE	---
Sand/Dirt	scalar	*Visual	NONE	NONE	---
Appearance	scalar	*Visual	NORML	NORML	---
Odor	scalar	*Visual	NORML	NORML	---
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 D445	11.5	11.5	---

GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : GFL0087499 **Received** : 19 Dec 2023
Lab Number : 06039039 **Diagnosed** : 21 Dec 2023
Unique Number : 10794268 **Diagnostician** : Jonathan Hester
Test Package : FLEET (Additional Tests: Glycol)

GFL Environmental - 331 - Columbus
 180 Ada Moore Rd
 Columbus, NC
 US 28722
 Contact: Matt Segars
 matt.segars@gflenv.com
 T: (800)207-6618
 F: (252)617-2494

Certificate L2367
 To discuss this sample report, contact Customer Service at 1-800-237-1369.
 * - Denotes test methods that are outside of the ISO 17025 scope of accreditation.
 Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012)