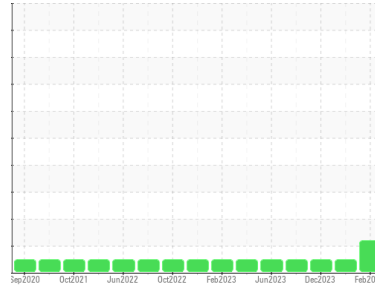




OIL ANALYSIS REPORT

Sample Rating Trend



GLYCOL



Machine Id
921056-205333

Component
Diesel Engine

Fluid
PETRO CANADA DURON SHP 15W40 (42 GAL)

DIAGNOSIS

▲ Recommendation

No corrective action is recommended at this time. We recommend an early resample to monitor this condition.

Wear

All component wear rates are normal.

Contamination

Sodium and/or potassium levels are high. Test for glycol is negative.

▲ Fluid Condition

The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		GFL0101984	GFL0101977	GFL0101964
Sample Date	Client Info		21 Feb 2024	26 Jan 2024	18 Dec 2023
Machine Age	hrs	Client Info	1355	1164	866
Oil Age	hrs	Client Info	0	1164	0
Oil Changed	Client Info		Not Chngd	Not Chngd	Changed
Sample Status			ATTENTION	NORMAL	NORMAL

CONTAMINATION

	method	limit/base	current	history1	history2
Fuel	WC Method	>3.0	<1.0	<1.0	<1.0
Water	WC Method	>0.2	NEG	NEG	NEG

WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m >90	11	5	8
Chromium	ppm	ASTM D5185m >20	<1	<1	1
Nickel	ppm	ASTM D5185m >2	0	<1	<1
Titanium	ppm	ASTM D5185m >2	<1	<1	<1
Silver	ppm	ASTM D5185m >2	0	0	0
Aluminum	ppm	ASTM D5185m >20	<1	2	<1
Lead	ppm	ASTM D5185m >40	0	1	<1
Copper	ppm	ASTM D5185m >330	<1	0	<1
Tin	ppm	ASTM D5185m >15	<1	<1	0
Vanadium	ppm	ASTM D5185m	<1	<1	<1
Cadmium	ppm	ASTM D5185m	0	0	0

ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m 0	4	6	3
Barium	ppm	ASTM D5185m 0	0	0	0
Molybdenum	ppm	ASTM D5185m 60	59	59	58
Manganese	ppm	ASTM D5185m 0	<1	<1	0
Magnesium	ppm	ASTM D5185m 1010	827	891	897
Calcium	ppm	ASTM D5185m 1070	983	990	1028
Phosphorus	ppm	ASTM D5185m 1150	925	1023	932
Zinc	ppm	ASTM D5185m 1270	1077	1224	1150
Sulfur	ppm	ASTM D5185m 2060	2650	3118	2937

CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >25	3	3	3
Sodium	ppm	ASTM D5185m	▲ 95	47	23
Potassium	ppm	ASTM D5185m >20	29	15	5
Glycol	%	*ASTM D2982	NEG	NEG	NEG

INFRA-RED

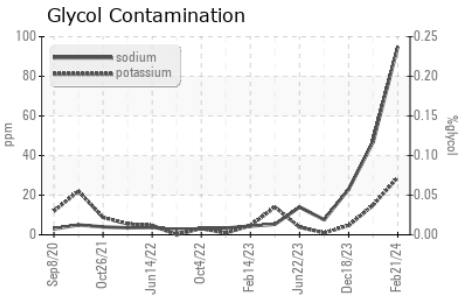
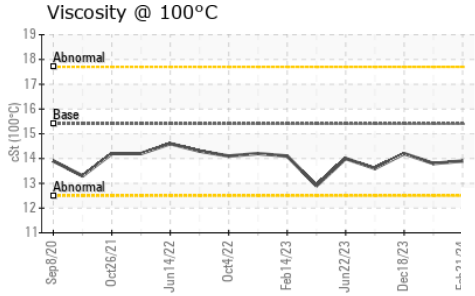
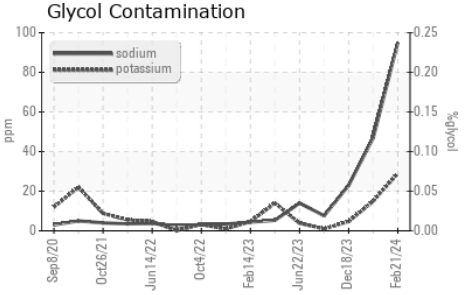
	method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844 >6	0.9	0.6	0.6
Nitration	Abs/cm	*ASTM D7624 >20	7.9	6.6	6.6
Sulfation	Abs/.1mm	*ASTM D7415 >30	20.5	19.5	19.2

FLUID DEGRADATION

	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414 >25	15.4	14.3	14.2
Base Number (BN)	mg KOH/g	ASTM D2896 9.8	8.2	8.5	8.7



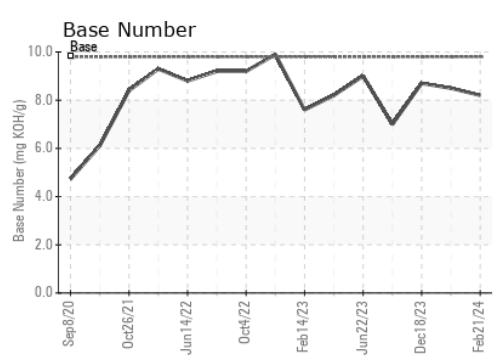
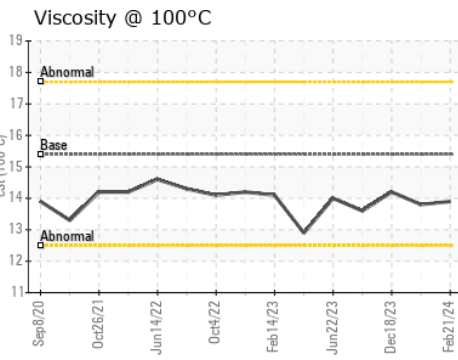
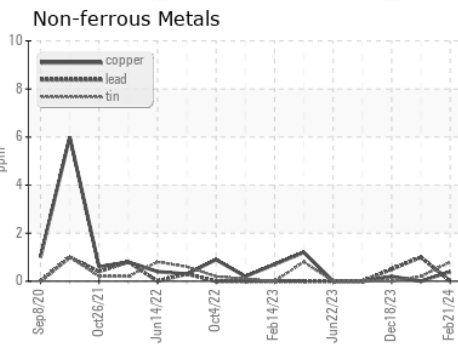
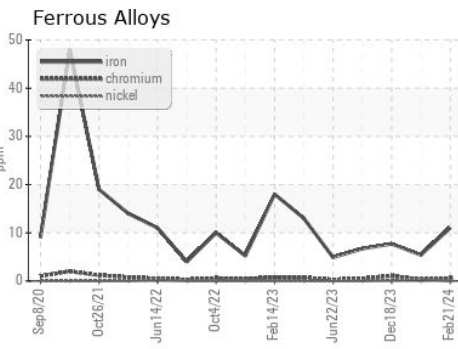
OIL ANALYSIS REPORT



VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.2	NEG	NEG
Free Water	scalar	*Visual		NEG	NEG

FLUID PROPERTIES	method	limit/base	current	history1	history2	
Visc @ 100°C	cSt	ASTM D445	15.4	13.9	13.8	14.2

GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : GFL0101984 **Received** : 22 Feb 2024
Lab Number : 06096832 **Tested** : 26 Feb 2024
Unique Number : 10889685 **Diagnosed** : 26 Feb 2024 - Jonathan Hester
Test Package : FLEET (Additional Tests: Glycol)

GFL Environmental - 894 - Ada Hauling
 1904 North Broadway, Suite D
 Ada, OK
 US 74820
 Contact: Johnny Spurlock
 jspurlock@gflenv.com
 T: (405)664-4476
 F:

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)