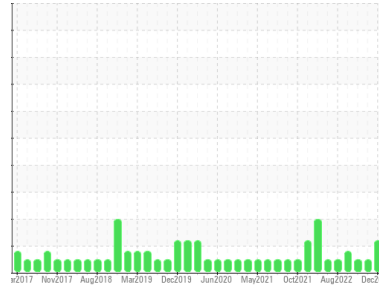




OIL ANALYSIS REPORT

Sample Rating Trend



GLYCOL



Machine Id

3729

Component

Diesel Engine

Fluid

PETRO CANADA DURON SHP 15W40 (11 GAL)

DIAGNOSIS

Recommendation

No corrective action is recommended at this time. Resample at the next service interval to monitor.

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	GFL0100255	GFL0066901	GFL0074587	
Sample Date	Client Info	25 Dec 2023	12 Aug 2023	25 Apr 2023	
Machine Age	hrs	Client Info	18041	17891	17647
Oil Age	hrs	Client Info	150	244	17091
Oil Changed	Client Info	Not Chngd	Changed	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 >75	10	7	21
Chromium	ppm ASTM D5185m >5	<1	<1	2
Nickel	ppm ASTM D5185m >4	0	0	<1
Titanium	ppm ASTM D5185m >2	0	<1	0
Silver	ppm ASTM D5185m >2	0	0	<1
Aluminum	ppm ASTM D5185m >15	4	1	7
Lead	ppm ASTM D5185m >25	0	<1	0
Copper	ppm ASTM D5185m >100	<1	3	<1
Tin	ppm ASTM D5185m >4	0	<1	0
Vanadium	ppm ASTM D5185m	0	<1	0
Cadmium	ppm ASTM D5185m	0	0	0

ADDITIVES

method	limit/base	current	history1	history2
Boron	ppm ASTM D5185m 0	5	8	8
Barium	ppm ASTM D5185m 0	0	0	0
Molybdenum	ppm ASTM D5185m 60	58	61	67
Manganese	ppm ASTM D5185m 0	0	<1	<1
Magnesium	ppm ASTM D5185m 1010	889	931	935
Calcium	ppm ASTM D5185m 1070	1018	1070	1085
Phosphorus	ppm ASTM D5185m 1150	930	997	1021
Zinc	ppm ASTM D5185m 1270	1151	1201	1265
Sulfur	ppm ASTM D5185m 2060	2940	3587	3655

CONTAMINANTS

method	limit/base	current	history1	history2
Silicon	ppm ASTM D5185m >25	5	5	10
Sodium	ppm ASTM D5185m	▲ 92	22	39
Potassium	ppm ASTM D5185m >20	3	5	6
Glycol	% *ASTM D2982	NEG	NEG	NEG

INFRA-RED

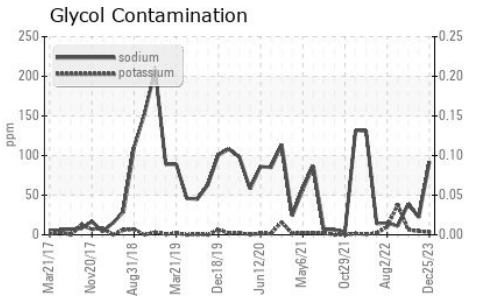
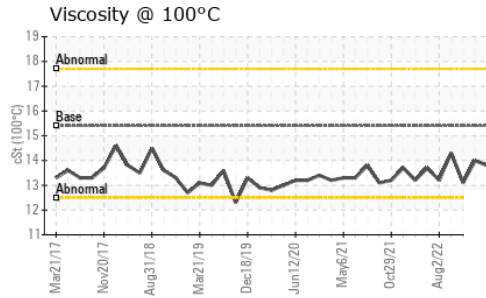
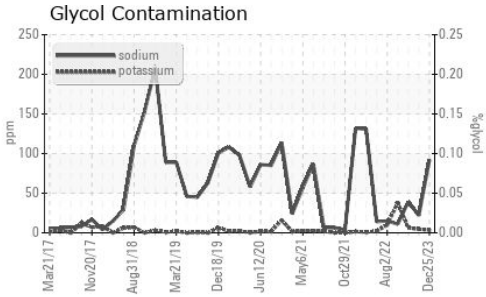
method	limit/base	current	history1	history2
Soot %	% *ASTM D7844 >6	0.2	0.1	0.4
Nitration	Abs/cm *ASTM D7624 >20	6.0	4.5	7.1
Sulfation	Abs/.1mm *ASTM D7415 >30	17.5	16.3	17.2

FLUID DEGRADATION

method	limit/base	current	history1	history2
Oxidation	Abs/.1mm *ASTM D7414 >25	13.4	12.0	13.4
Base Number (BN)	mg KOH/g ASTM D2896 9.8	9.2	9.2	7.1



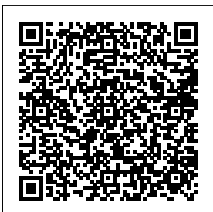
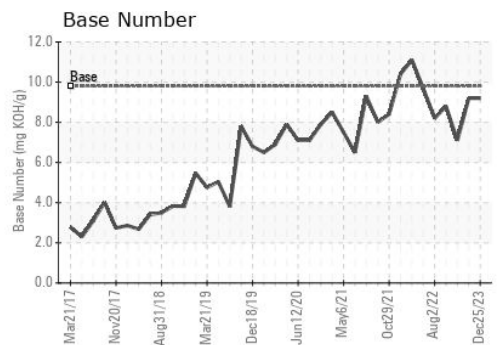
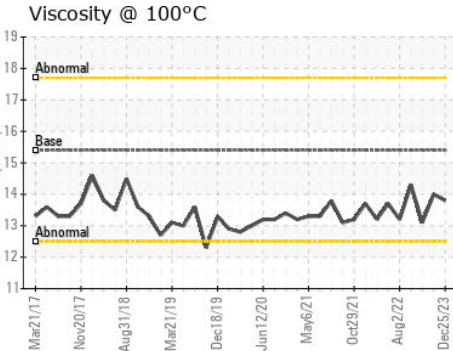
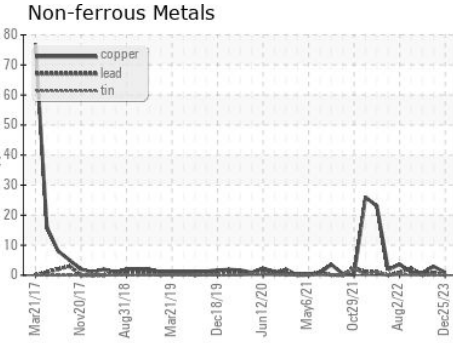
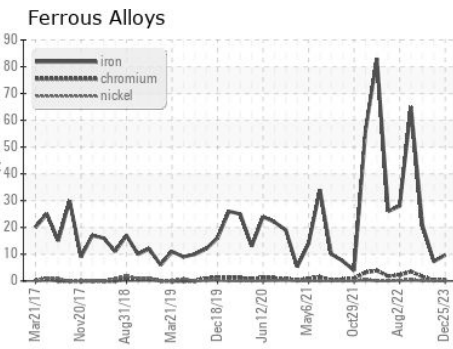
OIL ANALYSIS REPORT



PARAMETER	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	13.8	14.0

GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : GFL0100255 **Received** : 26 Dec 2023
Lab Number : 06044461 **Diagnosed** : 27 Dec 2023
Unique Number : 10805069 **Diagnostician** : Jonathan Hester
Test Package : FLEET (Additional Tests: Glycol)

GFL Environmental - 166 - Phenix City
 18 Old Brickyard Rd
 Phenix City, AL
 US 36869
 Contact: DEAN PEACE JR
 dean.peace@gflenv.com

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)

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