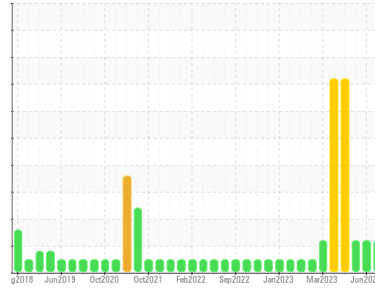




PROBLEM SUMMARY

Sample Rating Trend



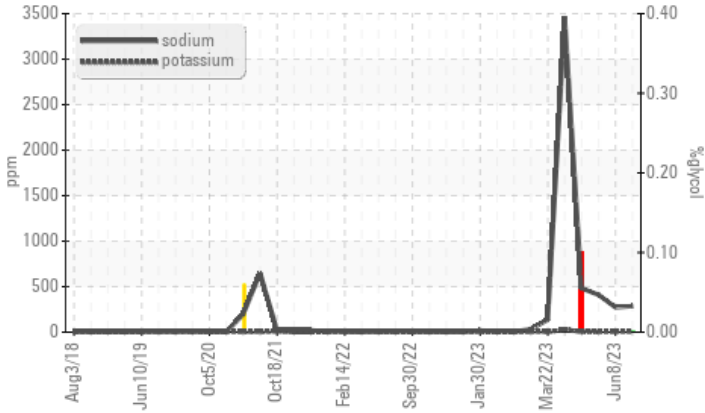
GLYCOL



Machine Id
10855
 Component
Diesel Engine
 Fluid
PETRO CANADA DURON SHP 15W40 (13 GAL)

COMPONENT CONDITION SUMMARY

▲ Glycol Contamination



RECOMMENDATION

No corrective action is recommended at this time. Oil and filter change at the time of sampling has been noted. Resample at the next service interval to monitor.

PROBLEMATIC TEST RESULTS

Sample Status	ATTENTION	ABNORMAL	ABNORMAL
Sodium	▲ 286	▲ 272	▲ 410

Customer Id: GFL010
 Sample No.: GFL0083221
 Lab Number: 05883037
 Test Package: FLEET



To manage this report scan the QR code

To discuss the diagnosis or test data:
 Doug Bogart +1 (800)237-1369 x4016
dougb@wearcheckusa.com

To change component or sample information:
 Customer Service +1 1-800-237-1369
customerservice@wearcheck.com

RECOMMENDED ACTIONS

Action	Status	Date	Done By	Description
Change Fluid	---	---	?	Oil and filter change at the time of sampling has been noted.
Change Filter	---	---	?	Oil and filter change at the time of sampling has been noted.

HISTORICAL DIAGNOSIS

08 Jun 2023 Diag: Jonathan Hester

GLYCOL



We advise that you check for possible coolant leak. Check for low coolant level. We recommend an early resample to monitor this condition. All component wear rates are normal. Sodium and/or potassium levels remain high. The BN result indicates that there is suitable alkalinity remaining in the oil.

[view report](#)



30 May 2023 Diag: Jonathan Hester

GLYCOL



We advise that you check for possible coolant leak. Check for low coolant level. We recommend an early resample to monitor this condition. All component wear rates are normal. Sodium and/or potassium levels are high. The BN result indicates that there is suitable alkalinity remaining in the oil.

[view report](#)



18 May 2023 Diag: Wes Davis

GLYCOL



We advise that you check for the source of the coolant leak. We recommend that you drain the oil from the component if this has not already been done. We advise that you flush the component thoroughly before re-filling with oil. We recommend an early resample to monitor this condition. All component wear rates are normal. Test for glycol is positive. There is a high concentration of glycol present in the oil. The BN result indicates that there is suitable alkalinity remaining in the oil. The oil is no longer serviceable due to the presence of contaminants.

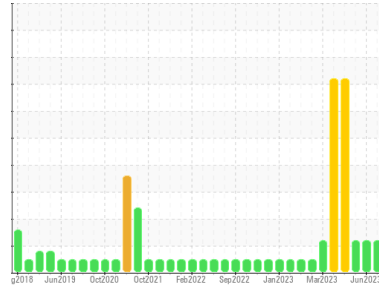
[view report](#)





OIL ANALYSIS REPORT

Sample Rating Trend



GLYCOL



Machine Id
10855
 Component
Diesel Engine
 Fluid
PETRO CANADA DURON SHP 15W40 (13 GAL)

DIAGNOSIS

Recommendation

No corrective action is recommended at this time. Oil and filter 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

Sodium and/or potassium levels are high. Test for glycol is negative. No other contaminants were detected in the oil.

Fluid Condition

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

SAMPLE INFORMATION

method	limit/base	current	history 1	history 2
Sample Number	Client Info	GFL0083221	GFL0083265	GFL0082875
Sample Date	Client Info	23 Jun 2023	08 Jun 2023	30 May 2023
Machine Age	hrs	15305	15195	15085
Oil Age	hrs	1041	931	352
Oil Changed	Client Info	Changed	Not Changd	Not Changd
Sample Status		ATTENTION	ABNORMAL	ABNORMAL

CONTAMINATION

method	limit/base	current	history 1	history 2
Fuel	WC Method >3.0	<1.0	<1.0	<1.0

WEAR METALS

method	limit/base	current	history 1	history 2
Iron	ppm ASTM D5185m >75	14	10	10
Chromium	ppm ASTM D5185m >5	<1	<1	1
Nickel	ppm ASTM D5185m >4	1	<1	<1
Titanium	ppm ASTM D5185m >2	<1	0	<1
Silver	ppm ASTM D5185m >2	0	0	0
Aluminum	ppm ASTM D5185m >15	2	<1	2
Lead	ppm ASTM D5185m >25	<1	<1	<1
Copper	ppm ASTM D5185m >100	10	12	17
Tin	ppm ASTM D5185m >4	0	0	0
Vanadium	ppm ASTM D5185m	0	<1	0
Cadmium	ppm ASTM D5185m	0	0	0

ADDITIVES

method	limit/base	current	history 1	history 2
Boron	ppm ASTM D5185m 0	23	25	30
Barium	ppm ASTM D5185m 0	0	0	0
Molybdenum	ppm ASTM D5185m 60	71	68	71
Manganese	ppm ASTM D5185m 0	<1	<1	<1
Magnesium	ppm ASTM D5185m 1010	725	808	776
Calcium	ppm ASTM D5185m 1070	1071	1111	1048
Phosphorus	ppm ASTM D5185m 1150	908	936	916
Zinc	ppm ASTM D5185m 1270	1072	1180	1140
Sulfur	ppm ASTM D5185m 2060	2871	3549	3509

CONTAMINANTS

method	limit/base	current	history 1	history 2
Silicon	ppm ASTM D5185m >25	13	11	13
Sodium	ppm ASTM D5185m	▲ 286	▲ 272	▲ 410
Potassium	ppm ASTM D5185m >20	4	4	4
Glycol	% *ASTM D2982	0.0	NEG	NEG

INFRA-RED

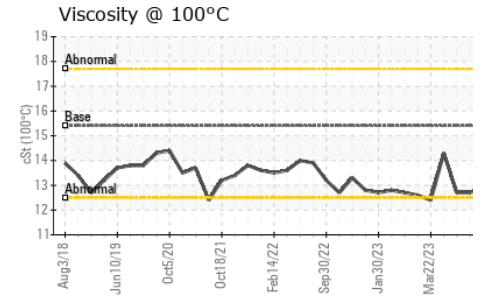
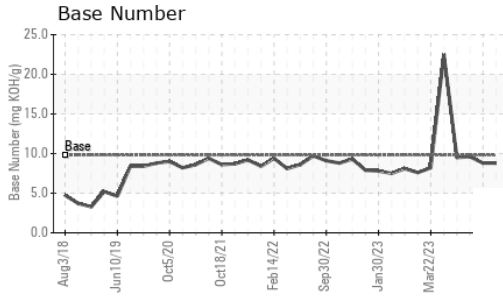
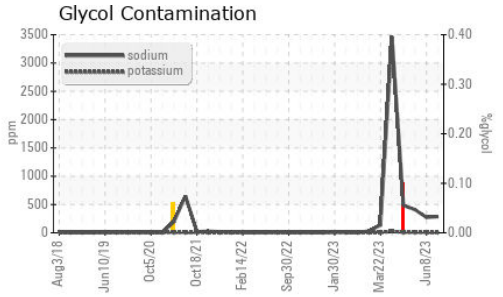
method	limit/base	current	history 1	history 2
Soot %	% *ASTM D7844 >6	0.5	0.4	0.5
Nitration	Abs/cm *ASTM D7624 >20	6.8	6.5	6.7
Sulfation	Abs/.1mm *ASTM D7415 >30	18.2	18.0	17.9

FLUID DEGRADATION

method	limit/base	current	history 1	history 2
Oxidation	Abs/.1mm *ASTM D7414 >25	12.2	11.9	11.8
Base Number (BN)	mg KOH/g ASTM D2896 9.8	8.8	8.8	9.6



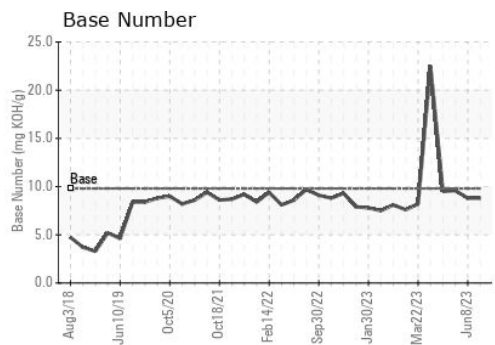
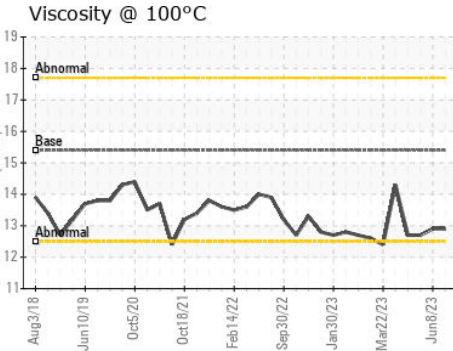
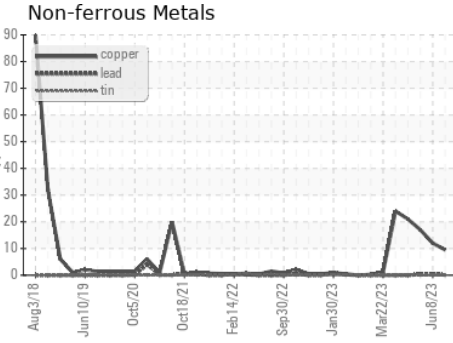
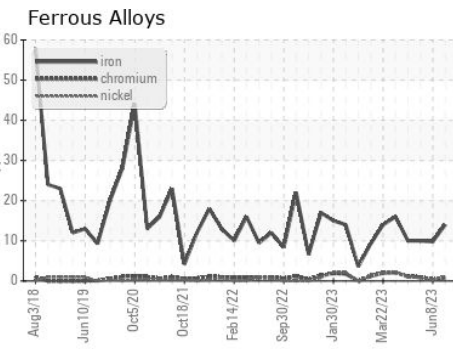
OIL ANALYSIS REPORT



VISUAL	method	limit/base	current	history 1	history 2
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	history 1	history 2
Visc @ 100°C	cSt	ASTM D445	15.4	12.9	12.7

GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : GFL0083221 **Received** : 26 Jun 2023
Lab Number : 05883037 **Diagnosed** : 05 Jul 2023
Unique Number : 10533520 **Diagnostician** : Doug Bogart
Test Package : FLEET (Additional Tests: Glycol)

1280 Rum Creek Parkway
 Stockbridge, GA
 US 30281
 Contact: JOSHUA TINKER
 joshuatinker@gflenv.com

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)