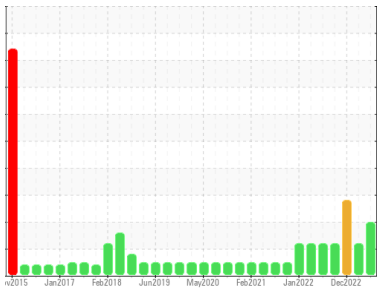
PROBLEM SUMMARY

Sample Rating Trend

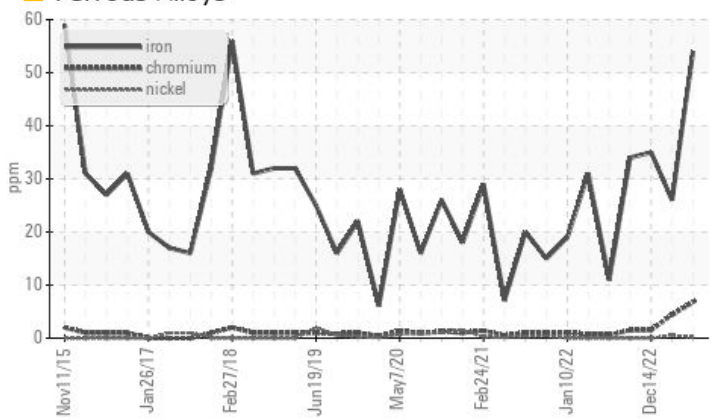


GLYCOL

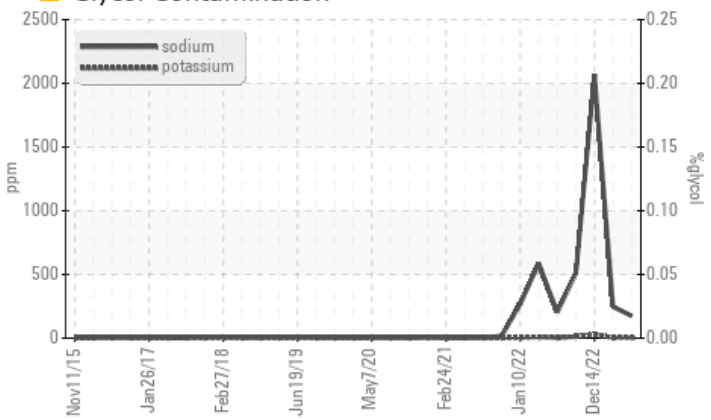
Machine Id
10577
Component
Diesel Engine
Fluid
PETRO CANADA DURON SHP 15W40 (56 QTS)

COMPONENT CONDITION SUMMARY

▲ Ferrous Alloys



▲ Glycol Contamination



RECOMMENDATION

PROBLEMATIC TEST RESULTS

Sample Status				**ABNORMAL**	ATTENTION	ABNORMAL
Chromium	ppm	ASTM D5185m	>5	▲ **7**	4	2
Sodium	ppm	ASTM D5185m		▲ **174**	▲ 247	▲ 2067

Customer Id: GFL029
Sample No.: GFL0079034
Lab Number: 05904791
Test Package: FLEET

To manage this report scan the QR code

To discuss the diagnosis or test data:
Don Baldridge +1
don.b505@comcast.net

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

RECOMMENDED ACTIONS

There are no recommended actions for this sample.

HISTORICAL DIAGNOSIS

10 Mar 2023 Diag: Sean Felton

GLYCOL

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.All component wear rates are normal. Sodium and/or potassium levels are high. Test for glycol is negative. The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

view report

14 Dec 2022 Diag: Jonathan Hester

DIRT

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. Elemental level of silicon (Si) above normal indicating ingress of seal material. The BN result indicates that there is suitable alkalinity remaining in the oil.

view report

12 Jul 2022 Diag: Jonathan Hester

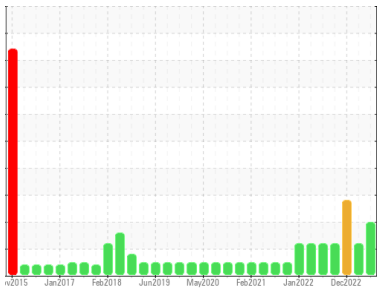
GLYCOL

We advise that you check for possible 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.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

OIL ANALYSIS REPORT

Sample Rating Trend



GLYCOL

Machine Id
10577
Component
Diesel Engine
Fluid
PETRO CANADA DURON SHP 15W40 (56 QTS)

DIAGNOSIS

SAMPLE INFORMATION		method	limit/base	current	history1	history2
Sample Number		Client Info		**GFL0079034**	GFL0049469	GFL0049448
Sample Date		Client Info		**18 Jul 2023**	10 Mar 2023	14 Dec 2022
Machine Age	hrs	Client Info		**12839**	108778	11915
Oil Age	hrs	Client Info		**0**	0	0
Oil Changed		Client Info		**Changed**	Changed	N/A
Sample Status				**ABNORMAL**	ATTENTION	ABNORMAL

CONTAMINATION		method	limit/base	current	history1	history2
Fuel		WC Method	>3.0	**<1.0**	<1.0	<1.0

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>75	**54**	26	35
Chromium	ppm	ASTM D5185m	>5	▲ **7**	4	2
Nickel	ppm	ASTM D5185m	>4	**<1**	<1	0
Titanium	ppm	ASTM D5185m	>2	**0**	<1	<1
Silver	ppm	ASTM D5185m	>2	**<1**	0	<1
Aluminum	ppm	ASTM D5185m	>15	**3**	2	5
Lead	ppm	ASTM D5185m	>25	**0**	<1	<1
Copper	ppm	ASTM D5185m	>100	**3**	2	1
Tin	ppm	ASTM D5185m	>4	**0**	<1	<1
Vanadium	ppm	ASTM D5185m		**0**	<1	<1
Cadmium	ppm	ASTM D5185m		**0**	0	0

ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	0	**4**	11	26
Barium	ppm	ASTM D5185m	0	**<1**	0	<1
Molybdenum	ppm	ASTM D5185m	60	**73**	67	279
Manganese	ppm	ASTM D5185m	0	**<1**	<1	<1
Magnesium	ppm	ASTM D5185m	1010	**1052**	821	926
Calcium	ppm	ASTM D5185m	1070	**1189**	1051	1207
Phosphorus	ppm	ASTM D5185m	1150	**1153**	945	1074
Zinc	ppm	ASTM D5185m	1270	**1413**	1134	1320
Sulfur	ppm	ASTM D5185m	2060	**3767**	2880	4071

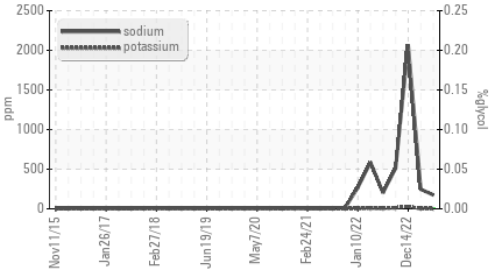
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>25	**13**	13	▲ 36
Sodium	ppm	ASTM D5185m		▲ **174**	▲ 247	▲ 2067
Potassium	ppm	ASTM D5185m	>20	**2**	3	29
Glycol	%	*ASTM D2982		**0.0**	NEG	NEG

INFRA-RED		method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844	>6	**0.7**	0.2	0.9
Nitration	Abs/cm	*ASTM D7624	>20	**11.0**	5.6	15.2
Sulfation	Abs/.1mm	*ASTM D7415	>30	**22.9**	17.3	26.2

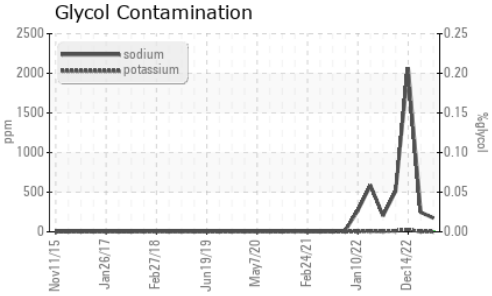
FLUID DEGRADATION		method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414	>25	**19.2**	12.2	19.6
Base Number (BN)	mg KOH/g	ASTM D2896	9.8	**7.3**	9.9	13.1

OIL ANALYSIS REPORT

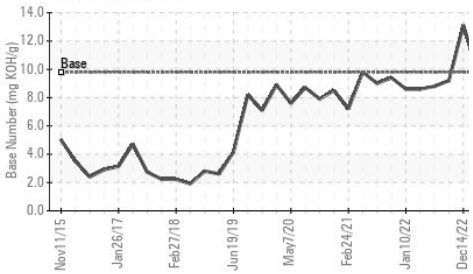
Glycol Contamination



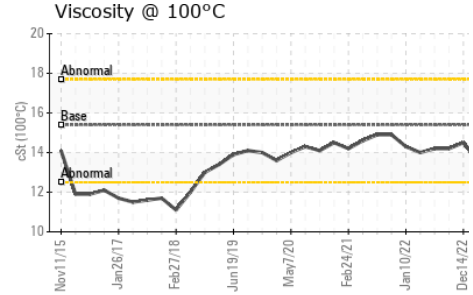
Glycol Contamination



Base Number



Viscosity @ 100°C

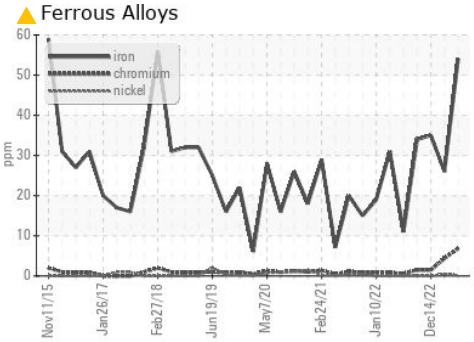


VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	**NONE**	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	**NONE**	NONE	NONE
Precipitate	scalar	*Visual	NONE	**NONE**	NONE	NONE
Silt	scalar	*Visual	NONE	**NONE**	NONE	NONE
Debris	scalar	*Visual	NONE	**NONE**	NONE	NONE
Sand/Dirt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

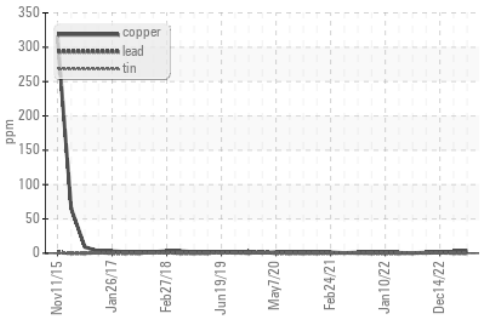
FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D445	15.4	**14.3**	13.6	14.5

GRAPHS

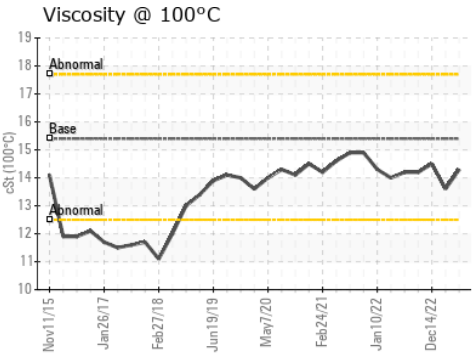
Ferrous Alloys



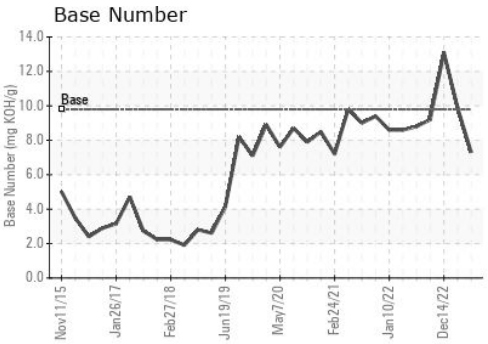
Non-ferrous Metals



Viscosity @ 100°C



Base Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : GFL0079034 **Received** : 21 Jul 2023
Lab Number : 05904791 **Diagnosed** : 25 Jul 2023
Unique Number : 10566147 **Diagnostician** : Don Baldridge
Test Package : FLEET (Additional Tests: Glycol)

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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