



WEAR	NORMAL
CONTAMINATION	ABNORMAL
FLUID CONDITION	NORMAL



Area
(NB5293) {UNASSIGNED}
Machine Id
722052
Component
Diesel Engine
Fluid
PETRO CANADA DURON SHP 15W40 (8 GAL)

RECOMMENDATION

Check for low coolant level. We advise that you check for the source of the coolant leak. We recommend an early resample to monitor this condition.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		GFL0120377	GFL0066311	GFL0055747
Sample Date		Client Info		21 May 2024	25 Mar 2024	12 Jul 2023
Machine Age	mls	Client Info		0	0	42915
Oil Age	mls	Client Info		0	0	0
Filter Age	mls	Client Info		0	0	0
Oil Changed		Client Info		N/A	N/A	N/A
Filter Changed		Client Info		N/A	N/A	N/A
Sample Status				ABNORMAL	NORMAL	NORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>200	28	12	8
Chromium	ppm	ASTM D5185m	>20	2	<1	<1
Nickel	ppm	ASTM D5185m	>2	<1	0	0
Titanium	ppm	ASTM D5185m	>2	<1	0	0
Silver	ppm	ASTM D5185m	>2	0	0	0
Aluminum	ppm	ASTM D5185m	>30	6	4	2
Lead	ppm	ASTM D5185m	>30	<1	<1	0
Copper	ppm	ASTM D5185m	>30	3	1	1
Tin	ppm	ASTM D5185m	>15	<1	0	0
Vanadium	ppm	ASTM D5185m		0	<1	<1
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

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

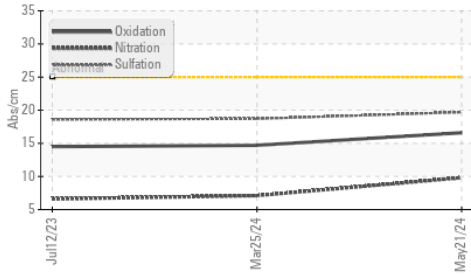
Silicon	ppm	ASTM D5185m	>30	4	3	2
Potassium	ppm	ASTM D5185m	>20	83	21	2
Fuel		WC Method	>3.0	<1.0	<1.0	<1.0
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol	%	*ASTM D2982		NEG	NEG	NEG
Soot %	%	*ASTM D7844	>3	0.6	0.3	0.2
Nitration	Abs/cm	*ASTM D7624	>20	9.8	7.1	6.6
Sulfation	Abs/.1mm	*ASTM D7415	>30	19.7	18.7	18.6
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

FLUID CONDITION

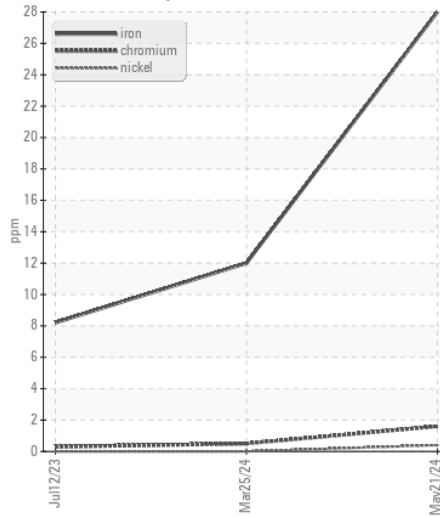
The BN result indicates that there is suitable alkalinity remaining in the oil.

Sodium	ppm	ASTM D5185m		5	2	1
Boron	ppm	ASTM D5185m	0	6	4	7
Barium	ppm	ASTM D5185m	0	0	0	0
Molybdenum	ppm	ASTM D5185m	60	62	58	64
Manganese	ppm	ASTM D5185m	0	<1	<1	<1
Magnesium	ppm	ASTM D5185m	1010	974	992	944
Calcium	ppm	ASTM D5185m	1070	1151	1188	1220
Phosphorus	ppm	ASTM D5185m	1150	1131	1033	1022
Zinc	ppm	ASTM D5185m	1270	1310	1232	1263
Sulfur	ppm	ASTM D5185m	2060	3534	3764	3779
Oxidation	Abs/.1mm	*ASTM D7414	>25	16.6	14.7	14.5
Base Number (BN)	mg KOH/g	ASTM D2896	9.8	8.1	9.0	8.9
Visc @ 100°C	cSt	ASTM D445	15.4	13.5	13.5	14.0

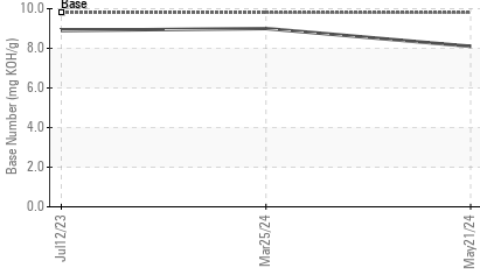
FT-IR (Direct Trend)



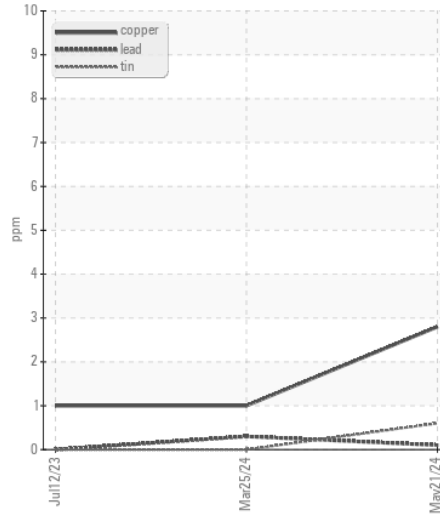
Ferrous Alloys



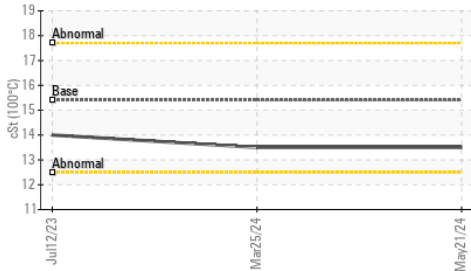
Base Number



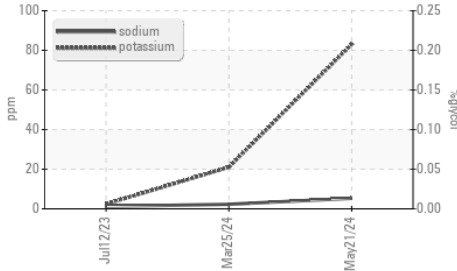
Non-ferrous Metals



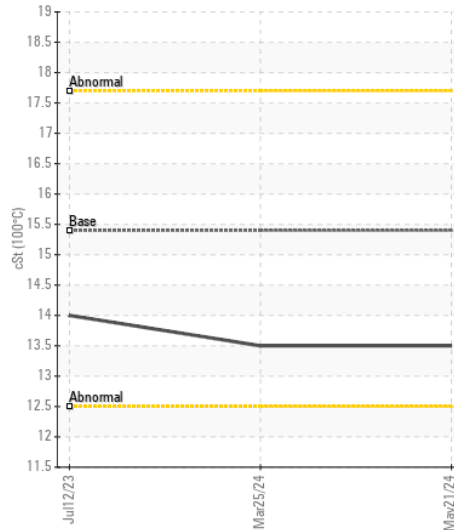
Viscosity @ 100°C



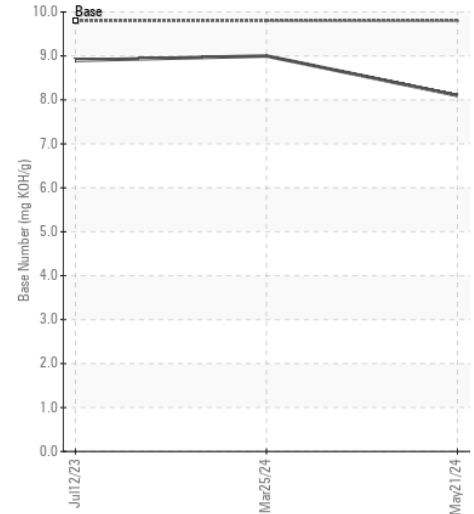
Glycol Contamination



Viscosity @ 100°C



Base Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : GFL0120377 **Received** : 03 Jun 2024
Lab Number : 06197433 **Tested** : 05 Jun 2024
Unique Number : 11059556 **Diagnosed** : 05 Jun 2024 - Sean Felton
Test Package : FLEET (Additional Tests: Glycol)

GFL Environmental - 938 - Hager City
 W9724 WIS-35
 HAGER CITY, WI
 US 54014
 Contact: ANDY KANE

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)

T: (715)202-3420

F: