



WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id
912056
 Component
Diesel Engine
 Fluid
PETRO CANADA DURON SHP 15W40 (10 GAL)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		GFL0100415	GFL0100426	GFL0100422
Sample Date		Client Info		10 Jun 2024	29 Mar 2024	15 Dec 2023
Machine Age	hrs	Client Info		4494	4092	69435
Oil Age	hrs	Client Info		978	576	497
Filter Age	hrs	Client Info		978	576	497
Oil Changed		Client Info		Changed	Changed	Changed
Filter Changed		Client Info		Changed	Changed	Changed
Sample Status				NORMAL	NORMAL	NORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>110	10	10	7
Chromium	ppm	ASTM D5185m	>4	<1	<1	0
Nickel	ppm	ASTM D5185m	>2	<1	0	0
Titanium	ppm	ASTM D5185m		<1	<1	0
Silver	ppm	ASTM D5185m	>2	0	0	0
Aluminum	ppm	ASTM D5185m	>25	8	7	3
Lead	ppm	ASTM D5185m	>45	0	0	0
Copper	ppm	ASTM D5185m	>85	6	<1	1
Tin	ppm	ASTM D5185m	>4	<1	<1	0
Vanadium	ppm	ASTM D5185m		<1	0	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

There is no indication of any contamination in the oil.

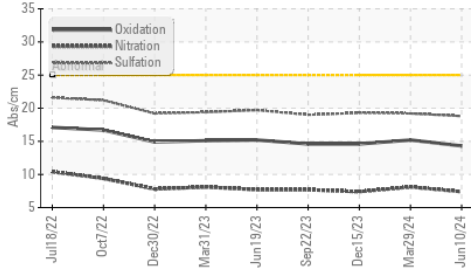
Silicon	ppm	ASTM D5185m	>30	5	2	3
Potassium	ppm	ASTM D5185m	>20	15	10	2
Fuel		WC Method	>5	<1.0	<1.0	<1.0
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	*ASTM D7844	>3	0.4	0.5	0.4
Nitration	Abs/cm	*ASTM D7624	>20	7.4	8.1	7.4
Sulfation	Abs/.1mm	*ASTM D7415	>30	18.8	19.2	19.3
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

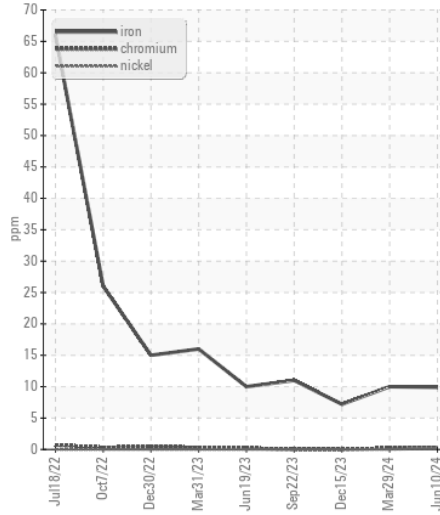
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

Sodium	ppm	ASTM D5185m		<1	<1	3
Boron	ppm	ASTM D5185m	0	13	18	12
Barium	ppm	ASTM D5185m	0	<1	0	<1
Molybdenum	ppm	ASTM D5185m	60	65	66	64
Manganese	ppm	ASTM D5185m	0	<1	0	<1
Magnesium	ppm	ASTM D5185m	1010	933	938	915
Calcium	ppm	ASTM D5185m	1070	1096	1117	1078
Phosphorus	ppm	ASTM D5185m	1150	1075	891	1067
Zinc	ppm	ASTM D5185m	1270	1197	1177	1224
Sulfur	ppm	ASTM D5185m	2060	2841	3225	2940
Oxidation	Abs/.1mm	*ASTM D7414	>25	14.3	15.2	14.6
Base Number (BN)	mg KOH/g	ASTM D2896	9.8	8.5	8.2	8.4
Visc @ 100°C	cSt	ASTM D445	15.4	13.5	13.5	13.5

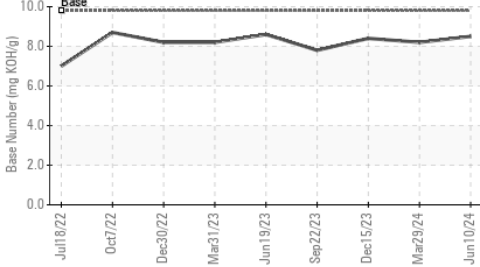
FT-IR (Direct Trend)



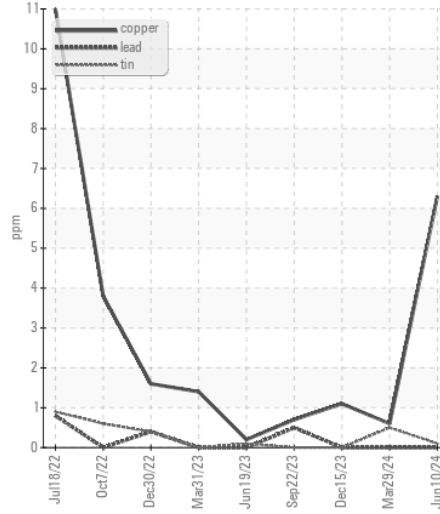
Ferrous Alloys



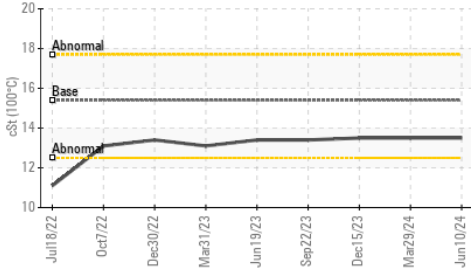
Base Number



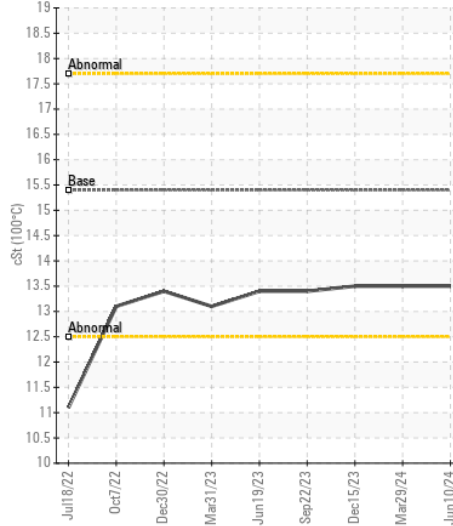
Non-ferrous Metals



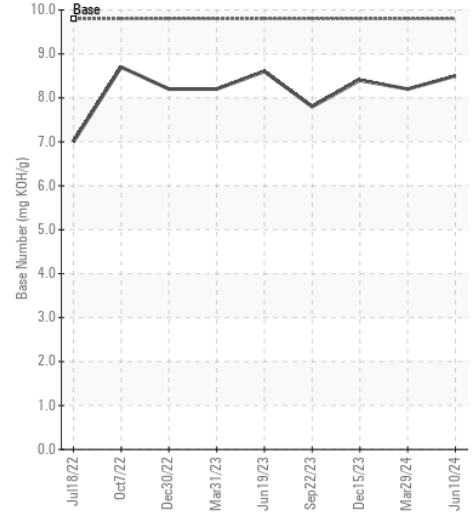
Viscosity @ 100°C



Viscosity @ 100°C



Base Number



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : GFL0100415 **Received** : 17 Jun 2024
Lab Number : 06212915 **Tested** : 19 Jun 2024
Unique Number : 11085779 **Diagnosed** : 19 Jun 2024 - Wes Davis
Test Package : FLEET

GFL Environmental - 900 - Antigo HC
 1715 Deleglise St.
 Antigo, WI
 US 54409
 Contact: Kirk Koss
 kirk.koss@gflenv.com
 T: (715)571-2784
 F:

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)