



WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id
2515
 Component
Diesel Engine
 Fluid
PETRO CANADA DURON SHP 15W40 (11 GAL)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		GFL0071992	GFL0072135	GFL0072033
Sample Date		Client Info		27 May 2024	12 Mar 2024	12 Dec 2023
Machine Age	hrs	Client Info		28742	28181	624096
Oil Age	hrs	Client Info		592	600	0
Filter Age	hrs	Client Info		592	600	0
Oil Changed		Client Info		Changed	Changed	Changed
Filter Changed		Client Info		Changed	Changed	Changed
Sample Status				NORMAL	ABNORMAL	ABNORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>165	19	23	12
Chromium	ppm	ASTM D5185m	>5	<1	<1	<1
Nickel	ppm	ASTM D5185m	>4	0	<1	0
Titanium	ppm	ASTM D5185m	>2	0	<1	0
Silver	ppm	ASTM D5185m	>2	0	0	0
Aluminum	ppm	ASTM D5185m	>20	3	2	2
Lead	ppm	ASTM D5185m	>150	4	4	8
Copper	ppm	ASTM D5185m	>90	31	▲ 144	▲ 80
Tin	ppm	ASTM D5185m	>5	<1	<1	<1
Vanadium	ppm	ASTM D5185m		0	0	<1
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.

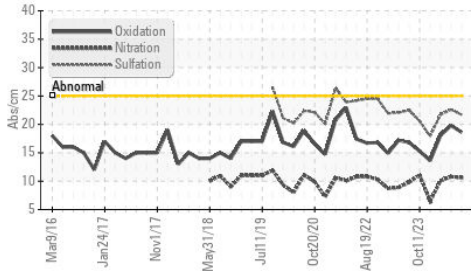
Silicon	ppm	ASTM D5185m	>35	6	8	12
Potassium	ppm	ASTM D5185m	>20	0	3	2
Fuel		WC Method	>3.0	<1.0	<1.0	<1.0
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	*ASTM D7844	>7.5	0.6	0.7	0.4
Nitration	Abs/cm	*ASTM D7624	>20	10.6	10.8	10.1
Sulfation	Abs/.1mm	*ASTM D7415	>30	21.7	22.6	21.7
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

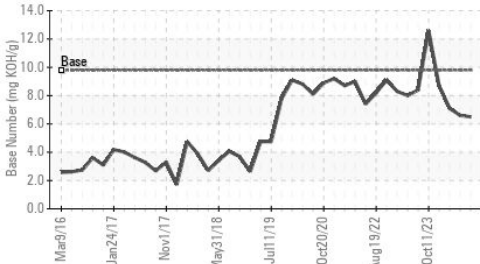
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

Sodium	ppm	ASTM D5185m		22	64	▲ 264
Boron	ppm	ASTM D5185m	0	3	3	7
Barium	ppm	ASTM D5185m	0	0	0	0
Molybdenum	ppm	ASTM D5185m	60	65	67	70
Manganese	ppm	ASTM D5185m	0	0	<1	0
Magnesium	ppm	ASTM D5185m	1010	951	989	956
Calcium	ppm	ASTM D5185m	1070	1099	1138	1055
Phosphorus	ppm	ASTM D5185m	1150	967	1063	894
Zinc	ppm	ASTM D5185m	1270	1247	1323	1254
Sulfur	ppm	ASTM D5185m	2060	2720	2814	2770
Oxidation	Abs/.1mm	*ASTM D7414	>25	18.6	19.8	18.1
Base Number (BN)	mg KOH/g	ASTM D2896	9.8	6.5	6.6	7.1
Visc @ 100°C	cSt	ASTM D445	15.4	13.5	13.7	13.4

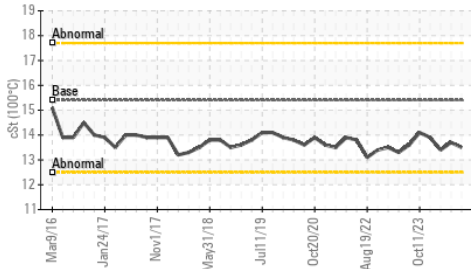
FT-IR (Direct Trend)



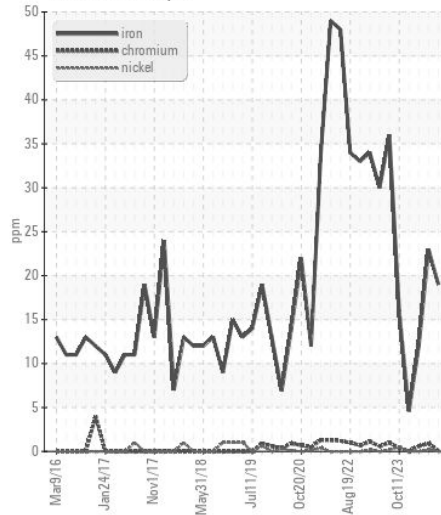
Base Number



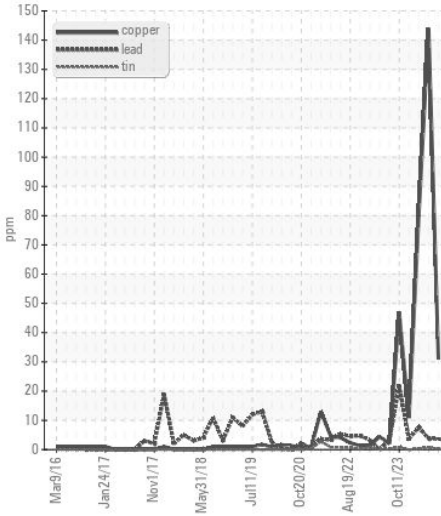
Viscosity @ 100°C



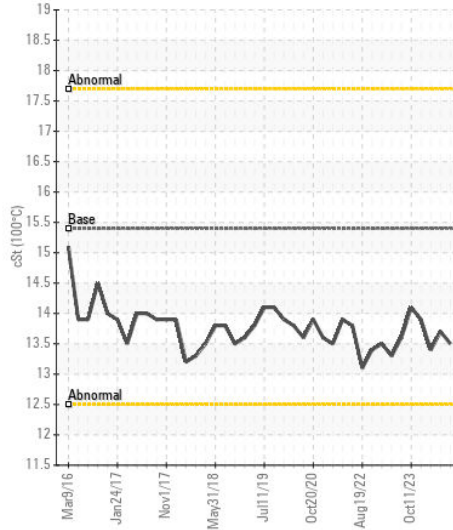
Ferrous Alloys



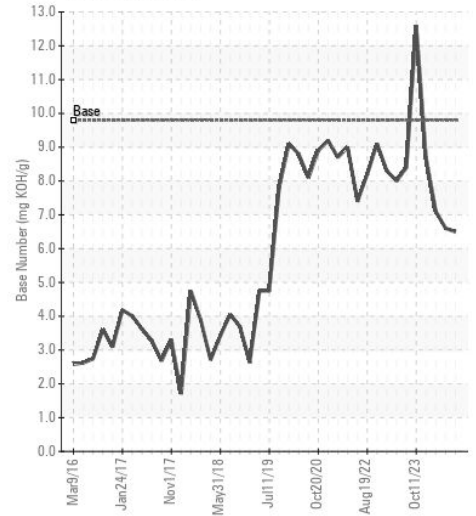
Non-ferrous Metals



Viscosity @ 100°C



Base Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : GFL0071992
Lab Number : 06195182
Unique Number : 11057305
Test Package : FLEET

Received : 30 May 2024
Tested : 31 May 2024
Diagnosed : 31 May 2024 - Wes Davis

GFL Environmental - 094 - Cedartown
 2097 Buchanan Highway
 Cedartown, GA
 US 30125

Contact: WILLIAM FOSTER
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T: (800)207-6618

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)