

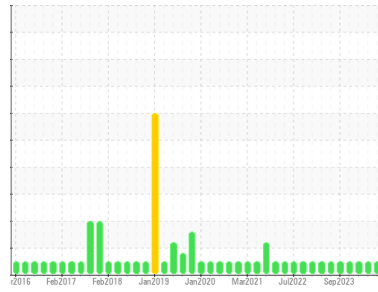


OIL ANALYSIS REPORT



Area
(43337HA)
Machine Id
3697
Component
Diesel Engine
Fluid
PETRO CANADA DURON SHP 15W40 (8 GAL)

Sample Rating Trend



NORMAL

DIAGNOSIS

Recommendation
Resample at the next service interval to monitor.

Wear
All component wear rates are normal.

Contamination
There is no indication of any contamination in the oil.

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.

SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		GFL0120835	GFL0077762	GFL0077788
Sample Date	Client Info		02 Jul 2024	25 Mar 2024	05 Feb 2024
Machine Age	hrs Client Info		32946	22207	21855
Oil Age	hrs Client Info		0	0	0
Oil Changed	Client Info		Not Changed	Changed	Changed
Sample Status			NORMAL	NORMAL	NORMAL

CONTAMINATION

	method	limit/base	current	history1	history2
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

WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm ASTM D5185m	>120	7	5	3
Chromium	ppm ASTM D5185m	>20	0	0	0
Nickel	ppm ASTM D5185m	>5	<1	0	0
Titanium	ppm ASTM D5185m	>2	0	0	<1
Silver	ppm ASTM D5185m	>2	0	0	0
Aluminum	ppm ASTM D5185m	>20	2	2	2
Lead	ppm ASTM D5185m	>40	0	0	0
Copper	ppm ASTM D5185m	>330	3	<1	2
Tin	ppm ASTM D5185m	>15	0	0	<1
Vanadium	ppm ASTM D5185m		0	0	<1
Cadmium	ppm ASTM D5185m		0	0	0

ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm ASTM D5185m	0	2	<1	2
Barium	ppm ASTM D5185m	0	<1	0	0
Molybdenum	ppm ASTM D5185m	60	47	59	59
Manganese	ppm ASTM D5185m	0	<1	0	<1
Magnesium	ppm ASTM D5185m	1010	822	1035	963
Calcium	ppm ASTM D5185m	1070	900	1144	1038
Phosphorus	ppm ASTM D5185m	1150	850	1054	1031
Zinc	ppm ASTM D5185m	1270	1078	1264	1246
Sulfur	ppm ASTM D5185m	2060	2490	3538	3136

CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm ASTM D5185m	>25	7	6	17
Sodium	ppm ASTM D5185m		3	2	4
Potassium	ppm ASTM D5185m	>20	5	4	9

INFRA-RED

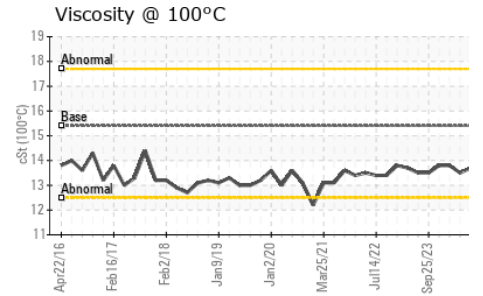
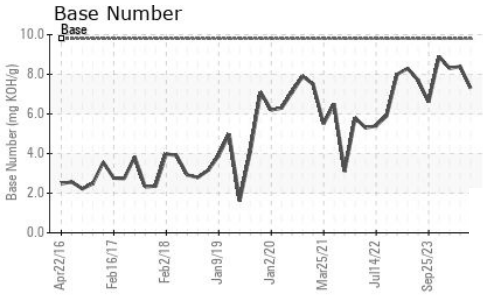
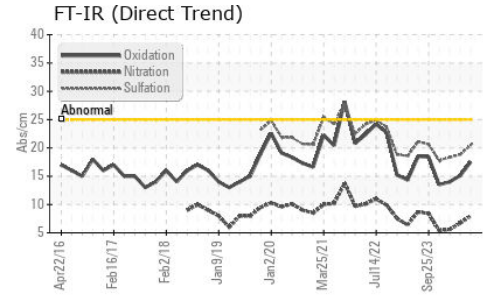
	method	limit/base	current	history1	history2
Soot %	% *ASTM D7844	>4	0.2	0.1	0.1
Nitration	Abs/cm *ASTM D7624	>20	8.0	6.7	5.6
Sulfation	Abs/.1mm *ASTM D7415	>30	20.5	18.8	18.3

FLUID DEGRADATION

	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm *ASTM D7414	>25	17.5	15.1	14.0
Base Number (BN)	mg KOH/g ASTM D2896	9.8	7.3	8.4	8.3



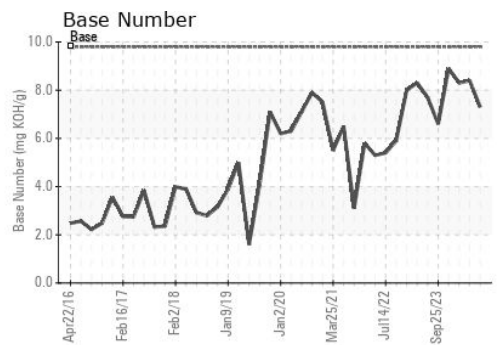
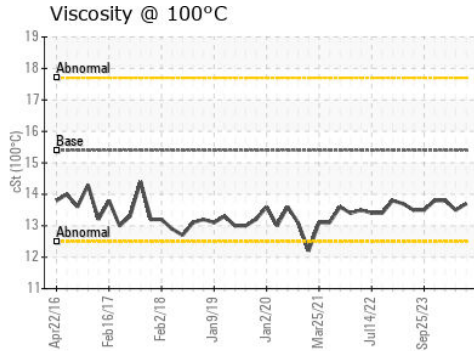
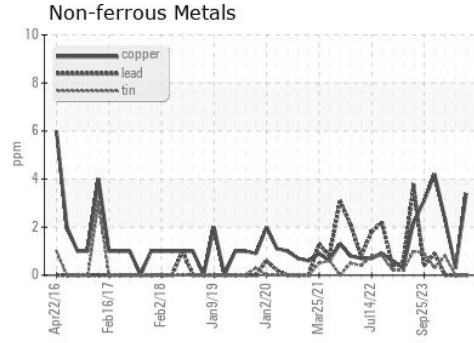
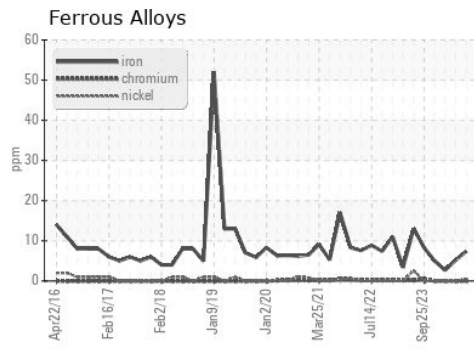
OIL ANALYSIS REPORT



VISUAL	method	limit/base	current	history1	history2
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	history1	history2	
Visc @ 100°C	cSt	ASTM D445	15.4	13.7	13.5	13.8

GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : GFL0120835 **Received** : 05 Jul 2024
Lab Number : **06229558** **Tested** : 08 Jul 2024
Unique Number : 11113051 **Diagnosed** : 08 Jul 2024 - Wes Davis
Test Package : FLEET

GFL Environmental - 650 - West Point Hauling
 7825 Parham Landing Road
 West Point, VA
 US 23181
 Contact: Jason Smith
 jasonsmith@gflenv.com
 T: (804)843-9288
 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)