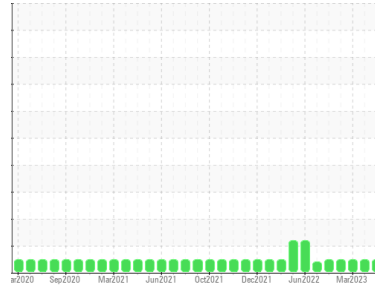


OIL ANALYSIS REPORT

Sample Rating Trend



NORMAL



Machine Id
12022
Component
Diesel Engine
Fluid
PETRO CANADA DURON SHP 15W40 (10 GAL)

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	PCA0101740	PCA0077267	PCA0077339
Sample Date	Client Info	07 Aug 2023	24 May 2023	13 Mar 2023
Machine Age	hrs	9442	8883	8548
Oil Age	hrs	559	335	486
Oil Changed	Client Info	Changed	Changed	Changed
Sample Status		NORMAL	NORMAL	NORMAL

CONTAMINATION

method	limit/base	current	history1	history2
Fuel	WC Method >5	<1.0	<1.0	<1.0
Glycol	WC Method	NEG	NEG	NEG

WEAR METALS

method	limit/base	current	history1	history2
Iron	ppm ASTM D5185m >100	11	20	24
Chromium	ppm ASTM D5185m >20	<1	1	1
Nickel	ppm ASTM D5185m >4	0	<1	<1
Titanium	ppm ASTM D5185m	0	<1	0
Silver	ppm ASTM D5185m >3	0	<1	0
Aluminum	ppm ASTM D5185m >20	8	8	5
Lead	ppm ASTM D5185m >40	0	1	0
Copper	ppm ASTM D5185m >330	<1	<1	2
Tin	ppm ASTM D5185m >15	<1	<1	0
Vanadium	ppm ASTM D5185m	0	0	0
Cadmium	ppm ASTM D5185m	0	0	0

ADDITIVES

method	limit/base	current	history1	history2
Boron	ppm ASTM D5185m 0	20	23	7
Barium	ppm ASTM D5185m 0	0	0	<1
Molybdenum	ppm ASTM D5185m 60	76	74	59
Manganese	ppm ASTM D5185m 0	<1	<1	<1
Magnesium	ppm ASTM D5185m 1010	885	974	841
Calcium	ppm ASTM D5185m 1070	1208	1300	1103
Phosphorus	ppm ASTM D5185m 1150	1016	1115	919
Zinc	ppm ASTM D5185m 1270	1259	1364	1202
Sulfur	ppm ASTM D5185m 2060	3674	3787	3411

CONTAMINANTS

method	limit/base	current	history1	history2
Silicon	ppm ASTM D5185m >25	4	8	6
Sodium	ppm ASTM D5185m	2	5	3
Potassium	ppm ASTM D5185m >20	18	13	4

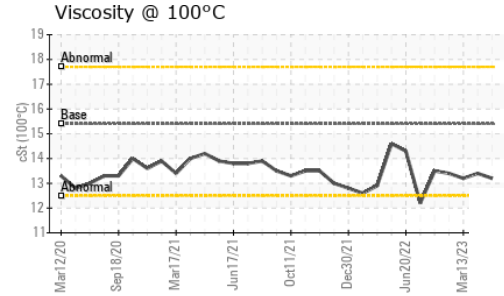
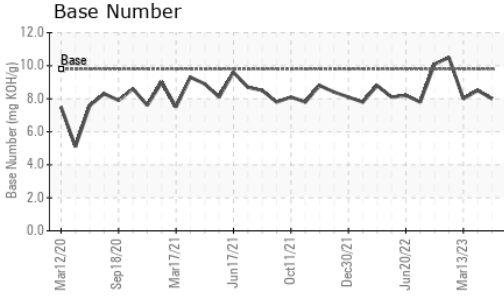
INFRA-RED

method	limit/base	current	history1	history2
Soot %	% *ASTM D7844 >3	0.3	0.5	0.7
Nitration	Abs/cm *ASTM D7624 >20	6.2	7.5	8.8
Sulfation	Abs/.1mm *ASTM D7415 >30	17.3	19.4	19.7

FLUID DEGRADATION

method	limit/base	current	history1	history2
Oxidation	Abs/.1mm *ASTM D7414 >25	12.6	14.6	15.5
Base Number (BN)	mg KOH/g ASTM D2896 9.8	8.0	8.5	8.0

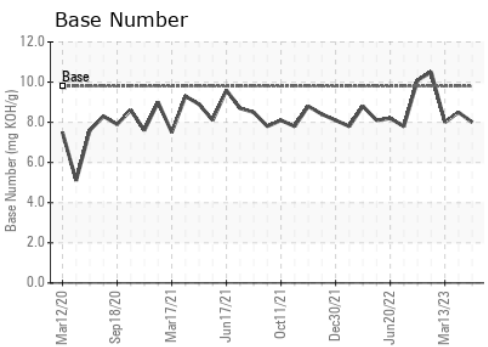
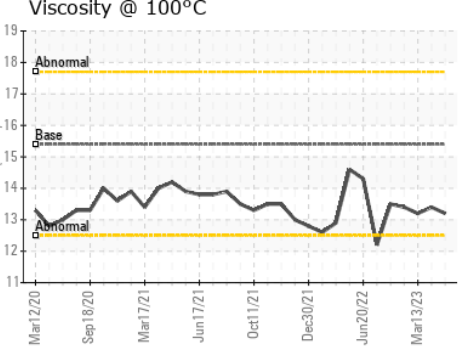
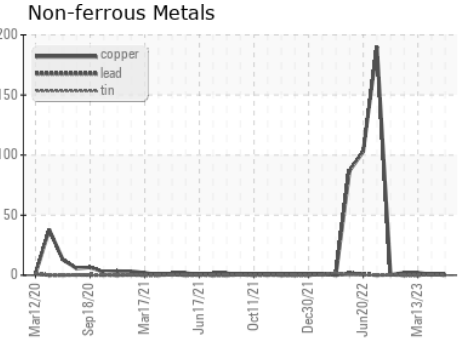
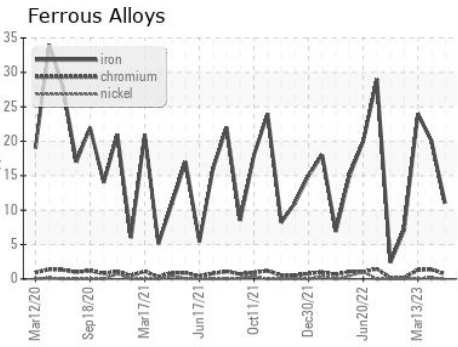
OIL ANALYSIS REPORT



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	13.2	13.4	13.2

GRAPHS



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : PCA0101740
Lab Number : 05919654
Unique Number : 10591568
Test Package : FLEET

GFL Environmental - 002 - Vance-Granville
 241 Vanco Mill Rd
 Henderson, NC
 US 27537
 Contact: Cameron King
 cameron.king@gflenv.com
 T: (252)438-5333
 F: (252)431-1635

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)