



OIL ANALYSIS REPORT

Sample Rating Trend

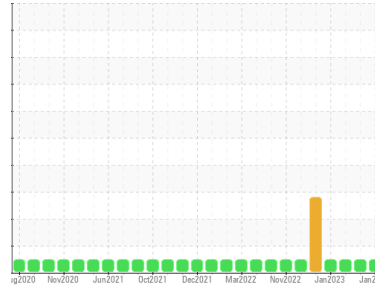
NORMAL



Area
(YA156313)
Machine Id
830009

Component
Natural Gas Engine
Fluid

PETRO CANADA DURON SHP 15W40 (--- 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	GFL0098512	GFL0082229	GFL0073823
Sample Date	Client Info	15 Jan 2024	06 Jul 2023	03 Apr 2023
Machine Age	hrs	9585	8239	7680
Oil Age	hrs	1346	1107	548
Oil Changed	Client Info	Changed	Changed	Not Changed
Sample Status		NORMAL	NORMAL	NORMAL

CONTAMINATION

method	limit/base	current	history1	history2
Water	WC Method >0.1	NEG	NEG	NEG

WEAR METALS

method	limit/base	current	history1	history2	
Iron	ppm	ASTM D5185m >50	22	25	19
Chromium	ppm	ASTM D5185m >4	3	5	3
Nickel	ppm	ASTM D5185m >2	<1	<1	<1
Titanium	ppm	ASTM D5185m	0	0	0
Silver	ppm	ASTM D5185m >3	0	0	0
Aluminum	ppm	ASTM D5185m >9	2	3	2
Lead	ppm	ASTM D5185m >30	2	6	2
Copper	ppm	ASTM D5185m >35	<1	2	1
Tin	ppm	ASTM D5185m >4	<1	<1	<1
Vanadium	ppm	ASTM D5185m	<1	0	0
Cadmium	ppm	ASTM D5185m	0	0	0

ADDITIVES

method	limit/base	current	history1	history2	
Boron	ppm	ASTM D5185m 0	22	20	8
Barium	ppm	ASTM D5185m 0	0	0	0
Molybdenum	ppm	ASTM D5185m 60	56	59	58
Manganese	ppm	ASTM D5185m 0	<1	2	1
Magnesium	ppm	ASTM D5185m 1010	597	639	590
Calcium	ppm	ASTM D5185m 1070	1665	1740	1737
Phosphorus	ppm	ASTM D5185m 1150	843	847	715
Zinc	ppm	ASTM D5185m 1270	990	1070	1018
Sulfur	ppm	ASTM D5185m 2060	2517	3130	3009

CONTAMINANTS

method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185m >+100	5	6	5
Sodium	ppm	ASTM D5185m	4	7	8
Potassium	ppm	ASTM D5185m >20	<1	2	<1

INFRA-RED

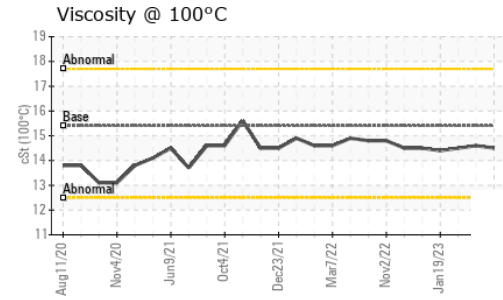
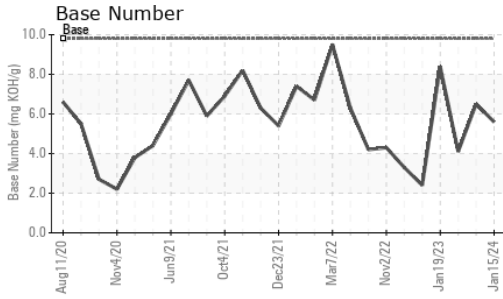
method	limit/base	current	history1	history2	
Soot %	%	*ASTM D7844	0	0.1	0.1
Nitration	Abs/cm	*ASTM D7624 >20	9.1	10.8	11.4
Sulfation	Abs/.1mm	*ASTM D7415 >30	20.8	23.5	22.5

FLUID DEGRADATION

method	limit/base	current	history1	history2	
Oxidation	Abs/.1mm	*ASTM D7414 >25	16.9	18.7	18.3
Base Number (BN)	mg KOH/g	ASTM D2896 9.8	5.6	6.5	4.1



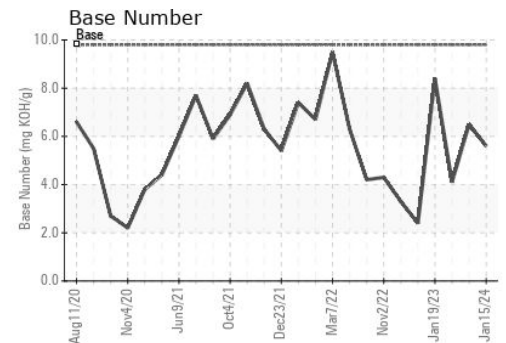
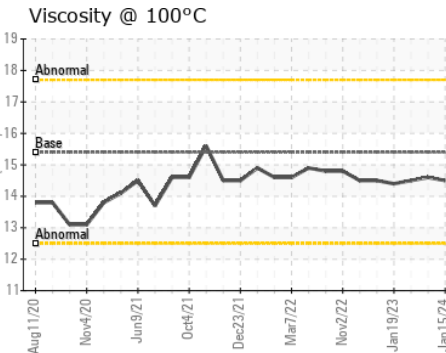
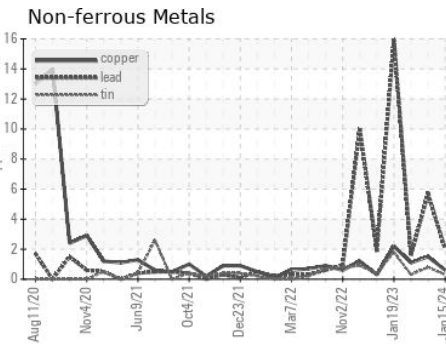
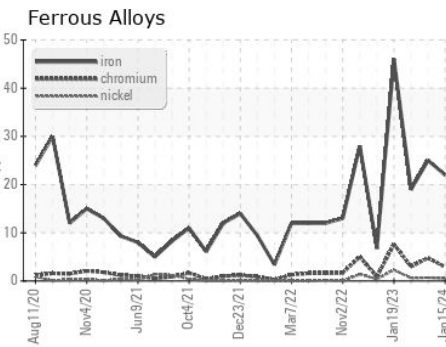
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VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.1	NEG	NEG
Free Water	scalar	*Visual		NEG	NEG

FLUID PROPERTIES	method	limit/base	current	history1	history2	
Visc @ 100°C	cSt	ASTM D445	15.4	14.5	14.6	14.5

GRAPHS



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : GFL0098512 **Received** : 17 Jan 2024
Lab Number : **06062343** **Diagnosed** : 18 Jan 2024
Unique Number : 10833725 **Diagnostician** : Sean Felton
Test Package : FLEET

GFL Environmental - 006 - Wilmington
 3618 US Highway 421 N
 Wilmington, NC
 US 28401
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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)