



WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL



Area
(P4019D)
Machine Id
429043-402480
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		GFL0120943	GFL0081087	GFL0081073
Sample Date		Client Info		05 Jul 2024	30 Jan 2024	12 May 2023
Machine Age	hrs	Client Info		22548	22223	21588
Oil Age	hrs	Client Info		600	635	1200
Filter Age	hrs	Client Info		600	635	1200
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	>120	12	22	8
Chromium	ppm	ASTM D5185m	>20	0	<1	0
Nickel	ppm	ASTM D5185m	>5	0	<1	0
Titanium	ppm	ASTM D5185m	>2	0	<1	0
Silver	ppm	ASTM D5185m	>2	0	0	0
Aluminum	ppm	ASTM D5185m	>20	4	5	<1
Lead	ppm	ASTM D5185m	>40	<1	2	0
Copper	ppm	ASTM D5185m	>330	2	2	2
Tin	ppm	ASTM D5185m	>15	0	1	<1
Vanadium	ppm	ASTM D5185m		0	<1	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

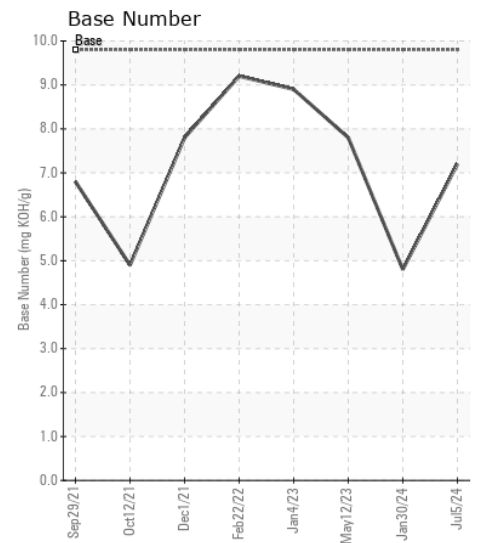
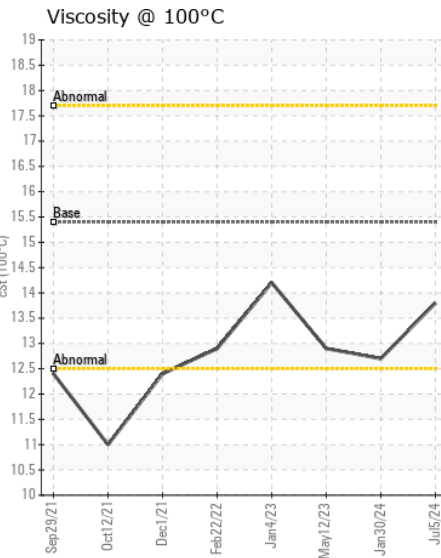
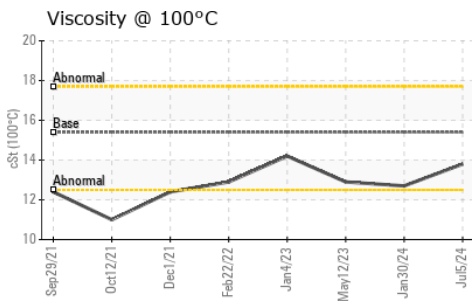
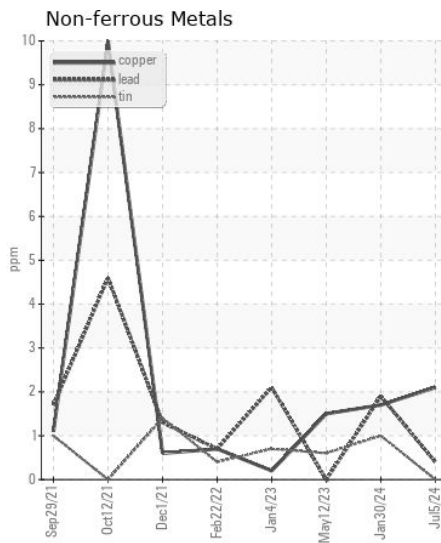
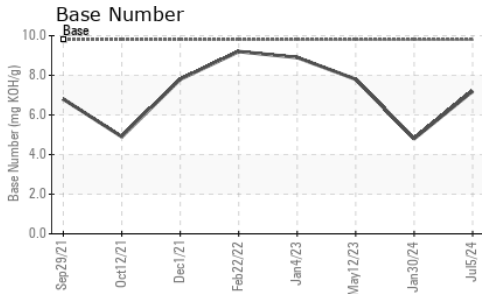
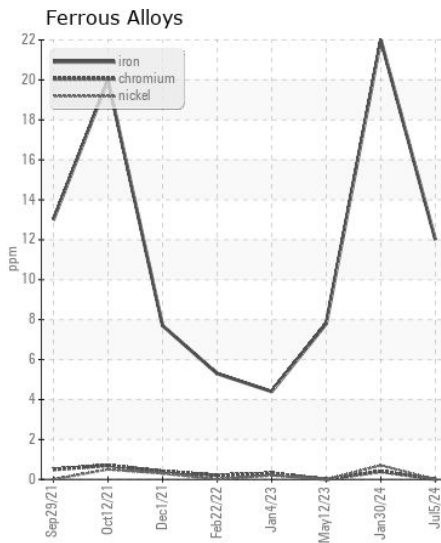
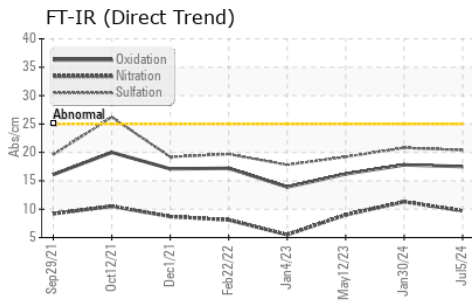
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>25	5	5	3
Potassium	ppm	ASTM D5185m	>20	2	3	<1
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	>4	0.8	0.5	0.4
Nitration	Abs/cm	*ASTM D7624	>20	9.7	11.3	9.0
Sulfation	Abs/.1mm	*ASTM D7415	>30	20.4	20.8	19.2
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		4	4	3
Boron	ppm	ASTM D5185m	0	20	7	<1
Barium	ppm	ASTM D5185m	0	0	0	0
Molybdenum	ppm	ASTM D5185m	60	48	48	59
Manganese	ppm	ASTM D5185m	0	<1	<1	0
Magnesium	ppm	ASTM D5185m	1010	529	540	940
Calcium	ppm	ASTM D5185m	1070	1680	1278	1094
Phosphorus	ppm	ASTM D5185m	1150	814	720	1012
Zinc	ppm	ASTM D5185m	1270	967	926	1244
Sulfur	ppm	ASTM D5185m	2060	2939	2504	3483
Oxidation	Abs/.1mm	*ASTM D7414	>25	17.5	17.8	16.2
Base Number (BN)	mg KOH/g	ASTM D2896	9.8	7.2	4.8	7.8
Visc @ 100°C	cSt	ASTM D445	15.4	13.8	12.7	12.9



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513

Sample No. : GFL0120943

Lab Number : 06231139

Unique Number : 11114632

Test Package : FLEET

Received : 08 Jul 2024

Tested : 10 Jul 2024

Diagnosed : 10 Jul 2024 - Don Baldrige

GFL Environmental - 885 - Orlando

1263 W Landstreet Rd

Orlando, FL

US 32824

Contact: Brian Bou Diaz

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T:

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)