



WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	ATTENTION

Machine Id
913007
 Component
Diesel Engine
 Fluid
PETRO CANADA DURON SHP 15W40 (--- GAL)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		GFL0121132	GFL0103113	GFL0103140
Sample Date		Client Info		09 Jul 2024	09 Apr 2024	26 Jan 2024
Machine Age	hrs	Client Info		5342	4957	4388
Oil Age	hrs	Client Info		385	569	640
Filter Age	hrs	Client Info		385	569	640
Oil Changed		Client Info		N/A	Changed	Changed
Filter Changed		Client Info		N/A	Changed	Changed
Sample Status				ATTENTION	NORMAL	NORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>120	16	10	9
Chromium	ppm	ASTM D5185m	>20	<1	<1	<1
Nickel	ppm	ASTM D5185m	>5	1	2	2
Titanium	ppm	ASTM D5185m	>2	<1	<1	0
Silver	ppm	ASTM D5185m	>2	<1	0	0
Aluminum	ppm	ASTM D5185m	>20	3	2	2
Lead	ppm	ASTM D5185m	>40	<1	<1	<1
Copper	ppm	ASTM D5185m	>330	18	2	2
Tin	ppm	ASTM D5185m	>15	1	<1	<1
Vanadium	ppm	ASTM D5185m		<1	<1	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

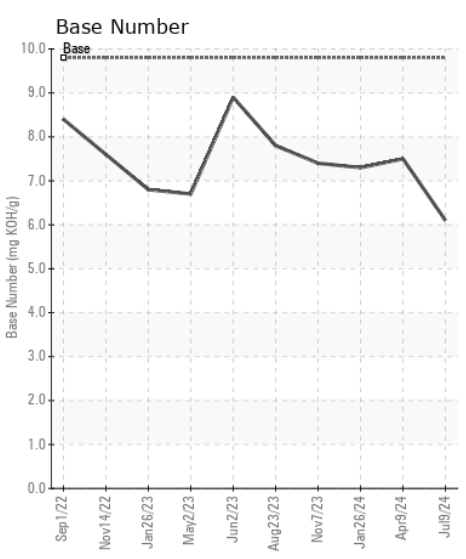
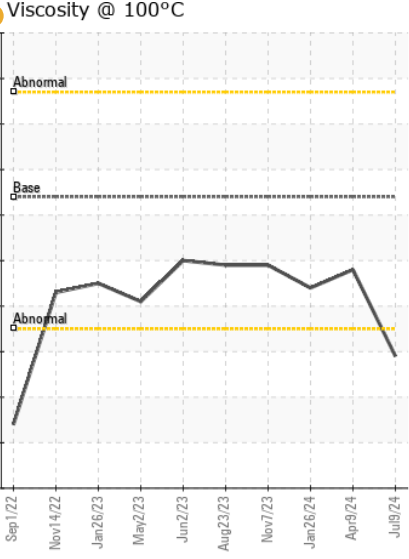
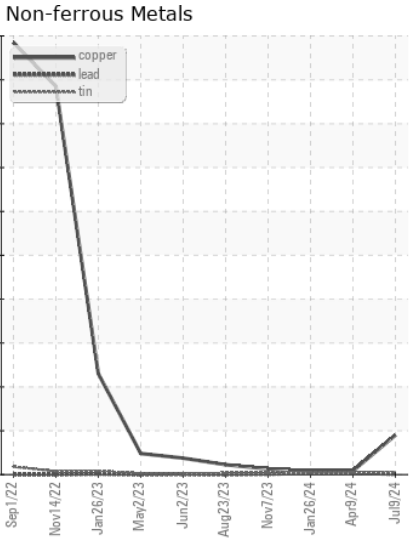
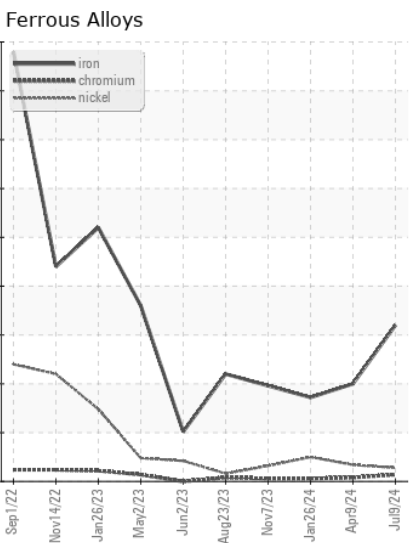
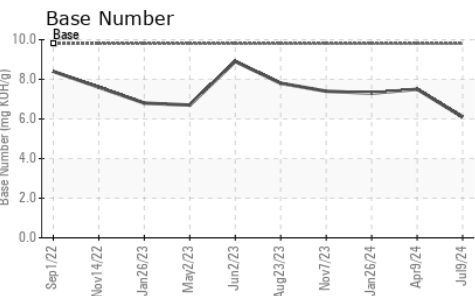
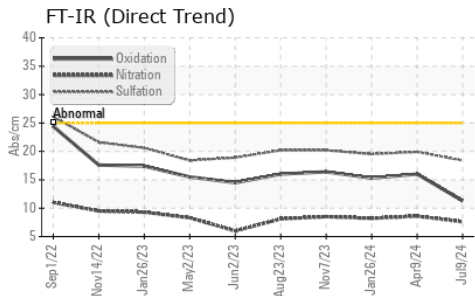
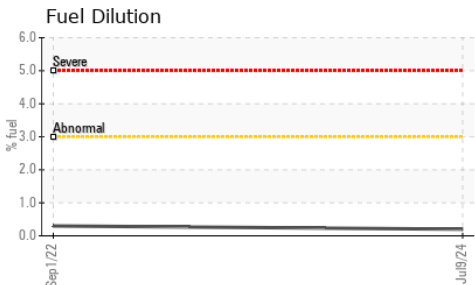
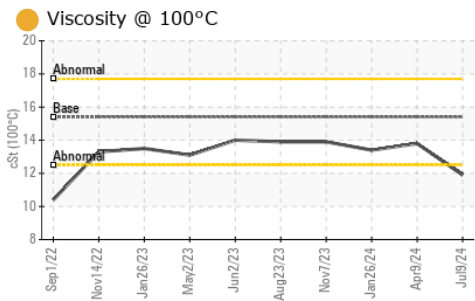
Fuel content negligible. There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>25	12	5	5
Potassium	ppm	ASTM D5185m	>20	12	2	2
Fuel	%	ASTM D3524	>3.0	0.2	<1.0	<1.0
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	*ASTM D7844	>4	0.4	0.5	0.5
Nitration	Abs/cm	*ASTM D7624	>20	7.6	8.6	8.2
Sulfation	Abs/.1mm	*ASTM D7415	>30	18.4	19.9	19.5
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 oil viscosity is lower than normal. The BN result indicates that there is suitable alkalinity remaining in the oil. Confirm oil type.

Sodium	ppm	ASTM D5185m		3	2	2
Boron	ppm	ASTM D5185m	0	3	9	17
Barium	ppm	ASTM D5185m	0	<1	0	0
Molybdenum	ppm	ASTM D5185m	60	13	64	61
Manganese	ppm	ASTM D5185m	0	<1	<1	<1
Magnesium	ppm	ASTM D5185m	1010	162	1089	877
Calcium	ppm	ASTM D5185m	1070	2496	1236	1088
Phosphorus	ppm	ASTM D5185m	1150	1111	1105	1018
Zinc	ppm	ASTM D5185m	1270	1267	1407	1220
Sulfur	ppm	ASTM D5185m	2060	3997	3739	2816
Oxidation	Abs/.1mm	*ASTM D7414	>25	11.3	16.0	15.3
Base Number (BN)	mg KOH/g	ASTM D2896	9.8	6.1	7.5	7.3
Visc @ 100°C	cSt	ASTM D445	15.4	11.9	13.8	13.4



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : GFL0121132 **Received** : 11 Jul 2024
Lab Number : 06232917 **Tested** : 15 Jul 2024
Unique Number : 11116410 **Diagnosed** : 15 Jul 2024 - Don Baldrige
Test Package : FLEET (Additional Tests: FuelDilution, PercentFuel)

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 261 INDUSTRIAL DR
 Ruckersville, VA
 US 22698
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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)