



WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	ATTENTION

Machine Id
928098-205263
 Component
Diesel Engine
 Fluid
PETRO CANADA DURON SHP 15W40 (--- GAL)

RECOMMENDATION

No corrective action is recommended at this time. Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		GFL0118200	GFL0118230	GFL0118172
Sample Date		Client Info		25 Jun 2024	02 May 2024	10 Apr 2024
Machine Age	hrs	Client Info		18435	18221	18080
Oil Age	hrs	Client Info		150	150	700
Filter Age	hrs	Client Info		150	0	700
Oil Changed		Client Info		N/A	N/A	Changed
Filter Changed		Client Info		N/A	Not Changed	Changed
Sample Status				ATTENTION	NORMAL	NORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>100	18	6	20
Chromium	ppm	ASTM D5185m	>20	<1	<1	<1
Nickel	ppm	ASTM D5185m	>4	<1	0	0
Titanium	ppm	ASTM D5185m		<1	0	0
Silver	ppm	ASTM D5185m	>3	<1	0	0
Aluminum	ppm	ASTM D5185m	>20	3	2	3
Lead	ppm	ASTM D5185m	>40	0	0	0
Copper	ppm	ASTM D5185m	>330	5	1	1
Tin	ppm	ASTM D5185m	>15	<1	<1	0
Vanadium	ppm	ASTM D5185m		0	0	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

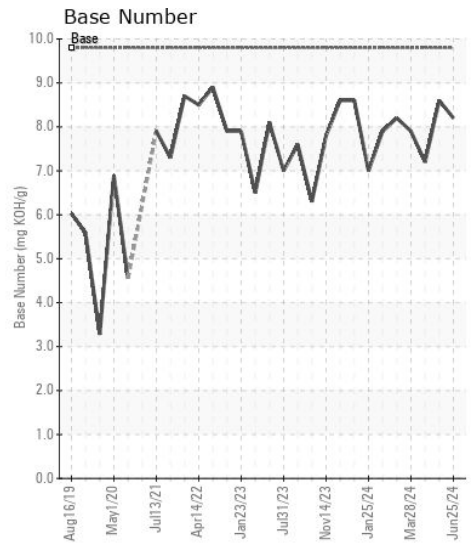
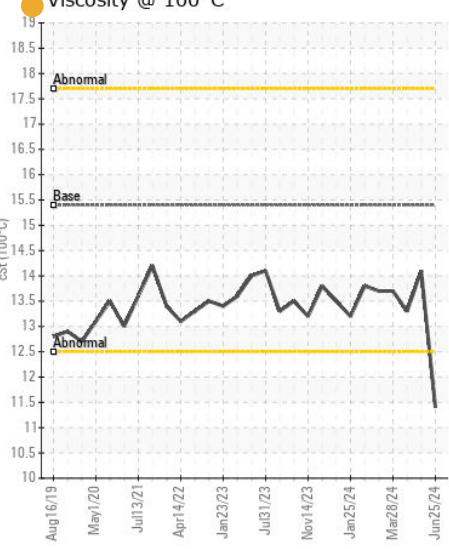
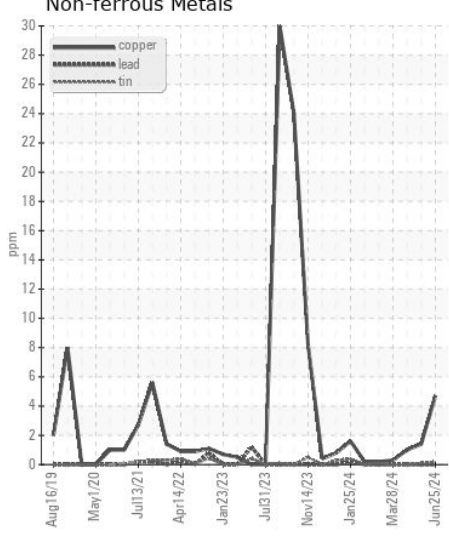
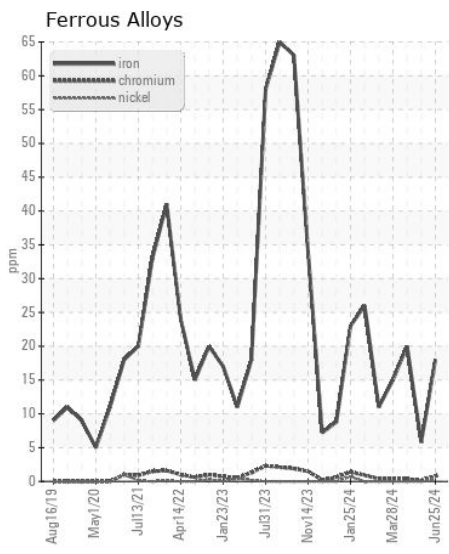
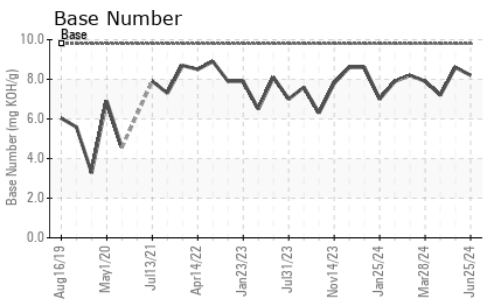
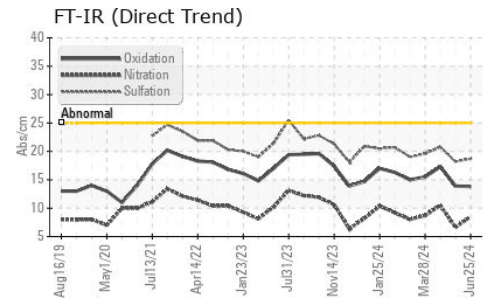
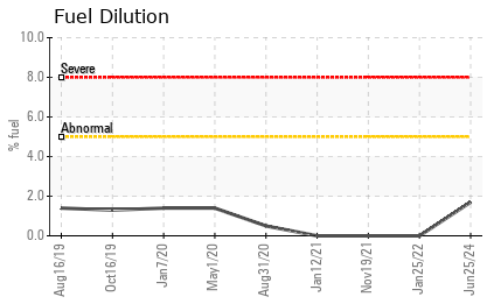
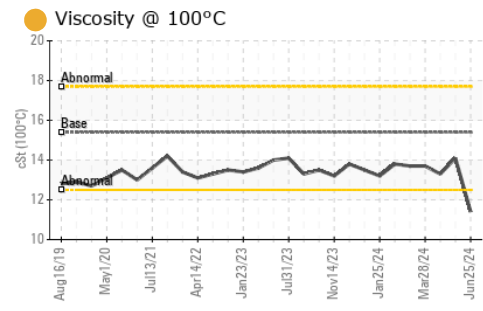
Fuel content negligible. There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>25	6	2	3
Potassium	ppm	ASTM D5185m	>20	<1	3	6
Fuel	%	ASTM D3524	>5	1.7	<1.0	<1.0
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	*ASTM D7844	>3	0.4	0.3	0.8
Nitration	Abs/cm	*ASTM D7624	>20	8.5	6.6	10.5
Sulfation	Abs/.1mm	*ASTM D7415	>30	18.7	18.2	20.8
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		4	6	8
Boron	ppm	ASTM D5185m	0	44	3	<1
Barium	ppm	ASTM D5185m	0	6	0	0
Molybdenum	ppm	ASTM D5185m	60	16	59	63
Manganese	ppm	ASTM D5185m	0	2	<1	<1
Magnesium	ppm	ASTM D5185m	1010	818	950	975
Calcium	ppm	ASTM D5185m	1070	1365	1108	1111
Phosphorus	ppm	ASTM D5185m	1150	869	1114	1064
Zinc	ppm	ASTM D5185m	1270	1001	1276	1293
Sulfur	ppm	ASTM D5185m	2060	3852	3576	3284
Oxidation	Abs/.1mm	*ASTM D7414	>25	13.8	13.9	17.3
Base Number (BN)	mg KOH/g	ASTM D2896	9.8	8.2	8.6	7.2
Visc @ 100°C	cSt	ASTM D445	15.4	11.4	14.1	13.3



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : GFL0118200 **Received** : 01 Jul 2024
Lab Number : 06224335 **Tested** : 03 Jul 2024
Unique Number : 11102532 **Diagnosed** : 03 Jul 2024 - Jonathan Hester
Test Package : FLEET (Additional Tests: FuelDilution, PercentFuel)

GFL Environmental - 822 - Springfield Hauling
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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)