



WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL



Machine Id
727109-36
Component
Diesel Engine
Fluid
PETRO CANADA DURON SHP 15W40 (--- LTR)

RECOMMENDATION

Oil and filter change at the time of sampling has been noted. Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		GFL0070935	GFL0070954	GFL0070962
Sample Date		Client Info		11 Jul 2024	19 Jun 2024	19 Mar 2024
Machine Age	hrs	Client Info		12071	12071	60
Oil Age	hrs	Client Info		11800	0	60
Filter Age	hrs	Client Info		0	0	60
Oil Changed		Client Info		Changed	Not Changd	Not Changd
Filter Changed		Client Info		Changed	Not Changd	Not Changd
Sample Status				NORMAL	SEVERE	NORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>80	39	28	17
Chromium	ppm	ASTM D5185m	>5	<1	1	<1
Nickel	ppm	ASTM D5185m	>2	<1	0	0
Titanium	ppm	ASTM D5185m		<1	<1	0
Silver	ppm	ASTM D5185m	>3	0	0	0
Aluminum	ppm	ASTM D5185m	>30	6	6	7
Lead	ppm	ASTM D5185m	>30	0	<1	0
Copper	ppm	ASTM D5185m	>150	2	1	<1
Tin	ppm	ASTM D5185m	>5	0	0	<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

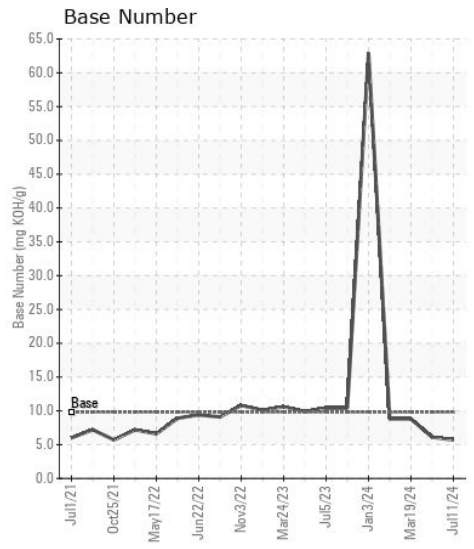
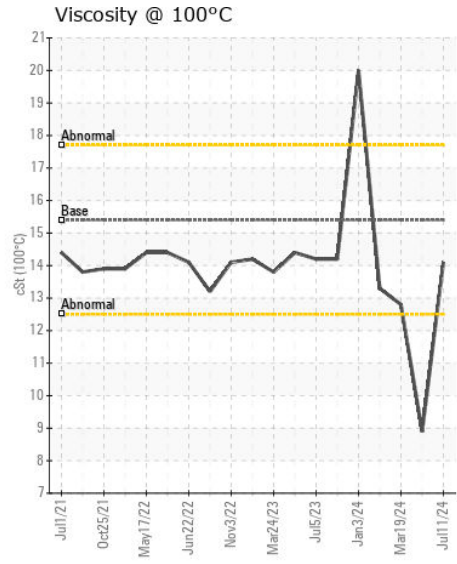
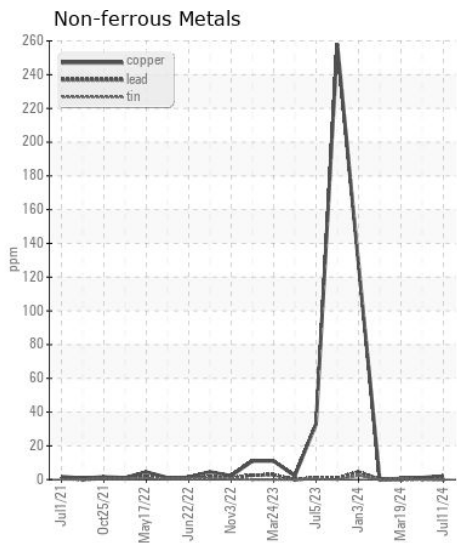
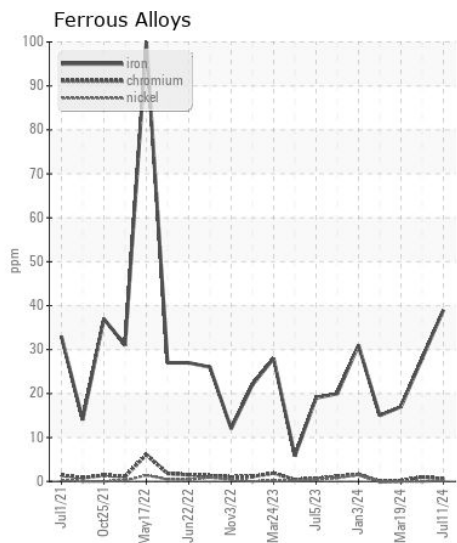
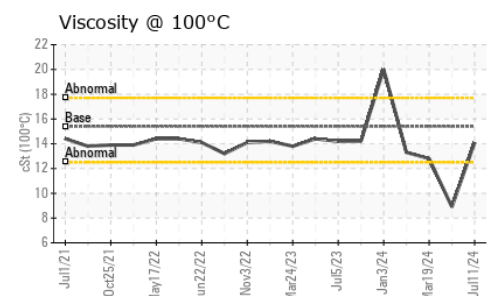
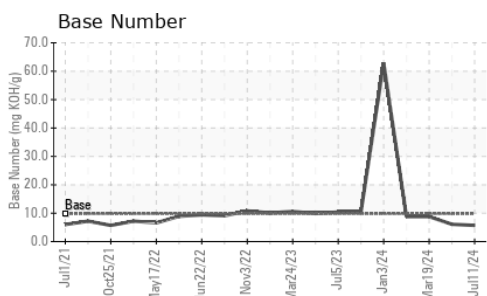
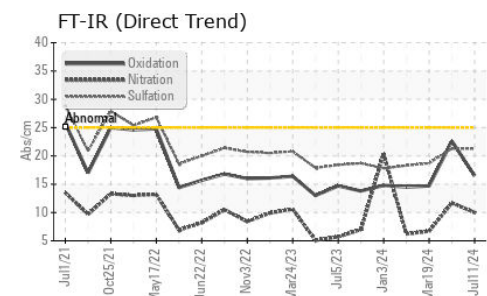
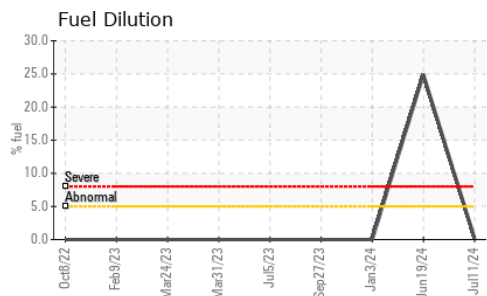
Fuel content negligible. There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>20	11	12	10
Potassium	ppm	ASTM D5185m	>20	4	8	7
Fuel	%	ASTM D3524	>5	0.2	▲ 24.9	<1.0
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	*ASTM D7844	>3	0.8	0.6	0.3
Nitration	Abs/cm	*ASTM D7624	>20	10.0	11.7	6.7
Sulfation	Abs/.1mm	*ASTM D7415	>30	21.3	21.3	18.7
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 acceptable for the time in service.

Sodium	ppm	ASTM D5185m		7	3	3
Boron	ppm	ASTM D5185m	0	27	10	20
Barium	ppm	ASTM D5185m	0	0	0	0
Molybdenum	ppm	ASTM D5185m	60	75	45	54
Manganese	ppm	ASTM D5185m	0	0	<1	<1
Magnesium	ppm	ASTM D5185m	1010	217	726	861
Calcium	ppm	ASTM D5185m	1070	2012	889	1000
Phosphorus	ppm	ASTM D5185m	1150	963	812	956
Zinc	ppm	ASTM D5185m	1270	1149	1009	1160
Sulfur	ppm	ASTM D5185m	2060	2972	2747	3396
Oxidation	Abs/.1mm	*ASTM D7414	>25	16.5	22.6	14.7
Base Number (BN)	mg KOH/g	ASTM D2896	9.8	5.7	6.1	8.8
Visc @ 100°C	cSt	ASTM D445	15.4	14.1	▲ 8.9	12.8



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : GFL0070935 **Received** : 12 Jul 2024
Lab Number : 06234661 **Tested** : 16 Jul 2024
Unique Number : 11123495 **Diagnosed** : 16 Jul 2024 - Sean Felton
Test Package : FLEET (Additional Tests: PercentFuel)

GFL Environmental - 657 - Charlottesville Hauling
 5498 Richmond Road
 Troy, VA
 US 22974
 Contact: Brian Ulickas
 bulickas@gflenv.com

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)

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F: