



WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id
2658
 Component
Diesel Engine
 Fluid
PETRO CANADA DURON SHP 15W40 (7 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		GFL0109042	GFL0109096	GFL0086268
Sample Date		Client Info		22 Feb 2024	18 Jan 2024	06 Sep 2023
Machine Age	hrs	Client Info		33773	33661	33119
Oil Age	hrs	Client Info		1261	33661	33272
Filter Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		N/A	N/A	N/A
Filter Changed		Client Info		N/A	N/A	N/A
Sample Status				NORMAL	SEVERE	NORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>120	14	38	8
Chromium	ppm	ASTM D5185m	>20	1	1	<1
Nickel	ppm	ASTM D5185m	>5	<1	0	0
Titanium	ppm	ASTM D5185m	>2	<1	0	0
Silver	ppm	ASTM D5185m	>2	0	0	<1
Aluminum	ppm	ASTM D5185m	>20	2	2	4
Lead	ppm	ASTM D5185m	>40	<1	<1	<1
Copper	ppm	ASTM D5185m	>330	2	9	1
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

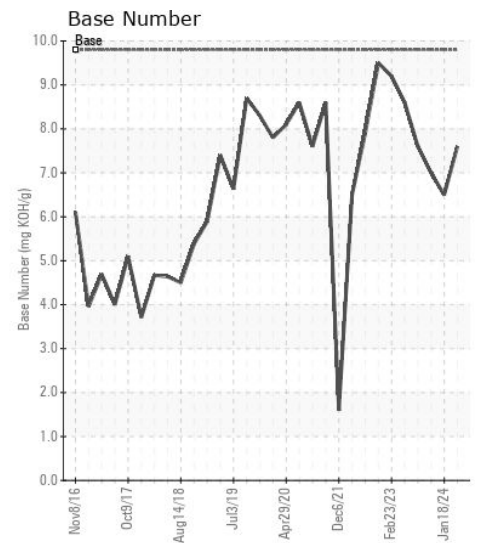
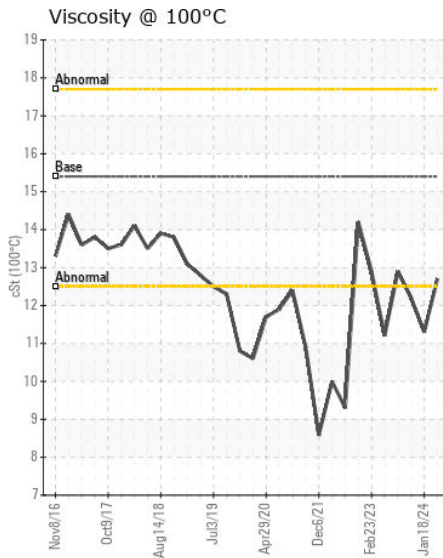
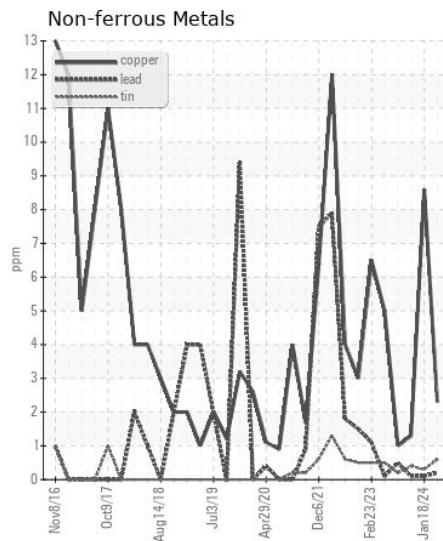
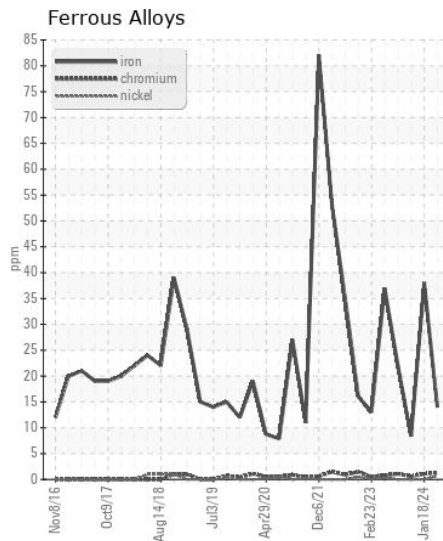
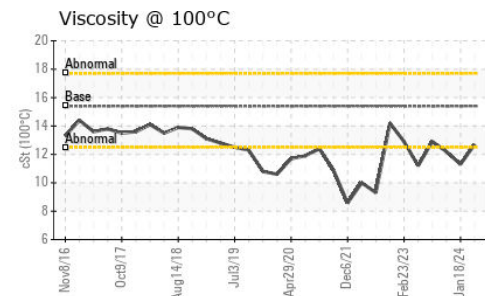
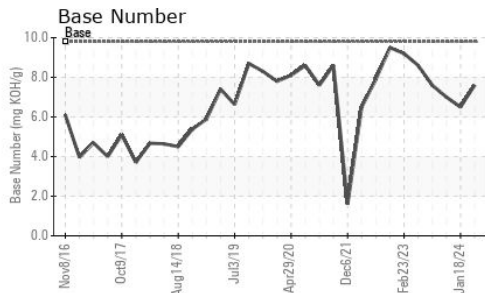
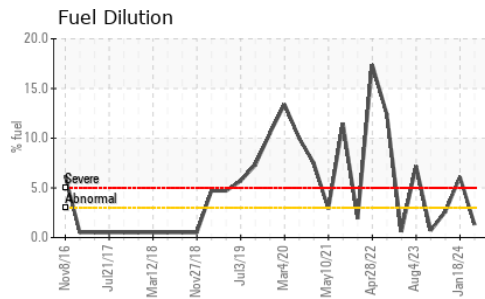
Light fuel dilution occurring. No other contaminants were detected in the oil.

Silicon	ppm	ASTM D5185m	>25	4	2	4
Potassium	ppm	ASTM D5185m	>20	3	3	6
Fuel	%	ASTM D3524	>3.0	1.3	▲ 6.1	2.6
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	*ASTM D7844	>4	0.5	1.1	0.4
Nitration	Abs/cm	*ASTM D7624	>20	6.8	6.4	7.7
Sulfation	Abs/.1mm	*ASTM D7415	>30	17.6	17.7	18.0
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		5	<1	1
Boron	ppm	ASTM D5185m	0	12	17	16
Barium	ppm	ASTM D5185m	0	1	0	0
Molybdenum	ppm	ASTM D5185m	60	56	53	59
Manganese	ppm	ASTM D5185m	0	<1	0	1
Magnesium	ppm	ASTM D5185m	1010	673	730	829
Calcium	ppm	ASTM D5185m	1070	1005	971	1089
Phosphorus	ppm	ASTM D5185m	1150	866	889	939
Zinc	ppm	ASTM D5185m	1270	1049	1063	1210
Sulfur	ppm	ASTM D5185m	2060	2986	2763	3571
Oxidation	Abs/.1mm	*ASTM D7414	>25	12.2	11.4	13.8
Base Number (BN)	mg KOH/g	ASTM D2896	9.8	7.6	6.5	7.0
Visc @ 100°C	cSt	ASTM D445	15.4	12.7	▲ 11.3	12.2



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : GFL0109042 **Received** : 27 Feb 2024
Lab Number : 06101465 **Tested** : 29 Feb 2024
Unique Number : 10899695 **Diagnosed** : 29 Feb 2024 - Wes Davis
Test Package : FLEET (Additional Tests: PercentFuel)

GFL Environmental - 009 - Fairburn
 6905 Roosevelt Hwy
 Fairburn, GA
 US 30213
 Contact: Eric Jones
 erjones@gflenv.com
 T: (678)630-9927
 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)