



OIL ANALYSIS REPORT

Sample Rating Trend



SOOT



Machine Id
EX0358
 Component
Rear Diesel Engine
 Fluid
PETRO CANADA DURON SHP 15W40 (24 LTR)

DIAGNOSIS

Recommendation

The oil change at the time of sampling has been noted. Confirm the source of the lubricant being utilized for top-up/fill.

Wear

All component wear rates are normal.

Contamination

Fuel content negligible. Light concentration of carbon/soot present in the oil.

Fluid Condition

Additive levels indicate the addition of a different brand, or type of oil. The oil is no longer serviceable due to the presence of contaminants.

SAMPLE INFORMATION

method	limit/base	current	history1	history2
Sample Number	Client Info	GFL0087357	---	---
Sample Date	Client Info	28 Jul 2023	---	---
Machine Age	hrs	Client Info	22000	---
Oil Age	hrs	Client Info	500	---
Oil Changed	Client Info	Changed	---	---
Sample Status		ABNORMAL	---	---

CONTAMINATION

method	limit/base	current	history1	history2
Glycol	WC Method	NEG	---	---

WEAR METALS

method	limit/base	current	history1	history2		
Iron	ppm	ASTM D5185(m)	>100	14	---	---
Chromium	ppm	ASTM D5185(m)	>20	<1	---	---
Nickel	ppm	ASTM D5185(m)	>4	<1	---	---
Titanium	ppm	ASTM D5185(m)		0	---	---
Silver	ppm	ASTM D5185(m)	>3	0	---	---
Aluminum	ppm	ASTM D5185(m)	>20	4	---	---
Lead	ppm	ASTM D5185(m)	>40	4	---	---
Copper	ppm	ASTM D5185(m)	>330	2	---	---
Tin	ppm	ASTM D5185(m)	>15	<1	---	---
Antimony	ppm	ASTM D5185(m)		0	---	---
Vanadium	ppm	ASTM D5185(m)		0	---	---
Beryllium	ppm	ASTM D5185(m)		0	---	---
Cadmium	ppm	ASTM D5185(m)		0	---	---

ADDITIVES

method	limit/base	current	history1	history2		
Boron	ppm	ASTM D5185(m)	0	41	---	---
Barium	ppm	ASTM D5185(m)	0	0	---	---
Molybdenum	ppm	ASTM D5185(m)	60	55	---	---
Manganese	ppm	ASTM D5185(m)	0	<1	---	---
Magnesium	ppm	ASTM D5185(m)	1010	41	---	---
Calcium	ppm	ASTM D5185(m)	1070	2658	---	---
Phosphorus	ppm	ASTM D5185(m)	1150	1104	---	---
Zinc	ppm	ASTM D5185(m)	1270	1261	---	---
Sulfur	ppm	ASTM D5185(m)	2060	2983	---	---
Lithium	ppm	ASTM D5185(m)		<1	---	---

CONTAMINANTS

method	limit/base	current	history1	history2		
Silicon	ppm	ASTM D5185(m)	>25	4	---	---
Sodium	ppm	ASTM D5185(m)		2	---	---
Potassium	ppm	ASTM D5185(m)	>20	<1	---	---
Fuel	%	ASTM D7593*	>5	0.7	---	---

INFRA-RED

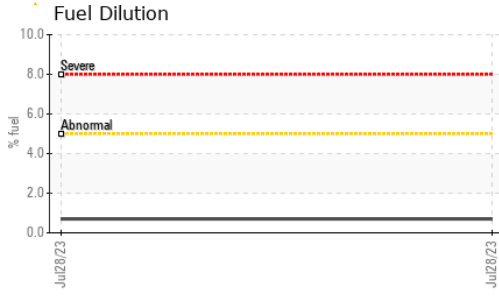
method	limit/base	current	history1	history2		
Soot %	%	ASTM D7844*	>3	▲ 3.4	---	---
Nitration	Abs/cm	ASTM D7624*	>20	12.9	---	---
Sulfation	Abs/.1mm	ASTM D7415*	>30	28.4	---	---

FLUID DEGRADATION

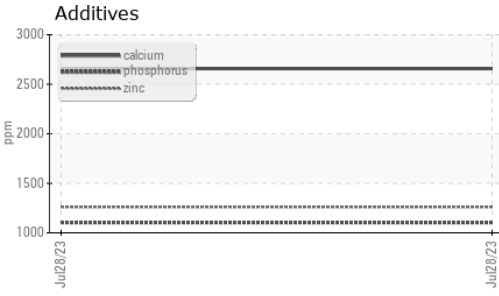
method	limit/base	current	history1	history2		
Oxidation	Abs/.1mm	ASTM D7414*	>25	17.4	---	---



OIL ANALYSIS REPORT

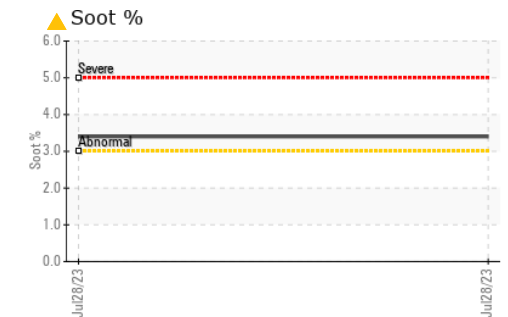
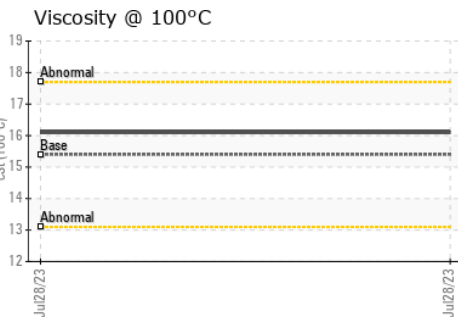
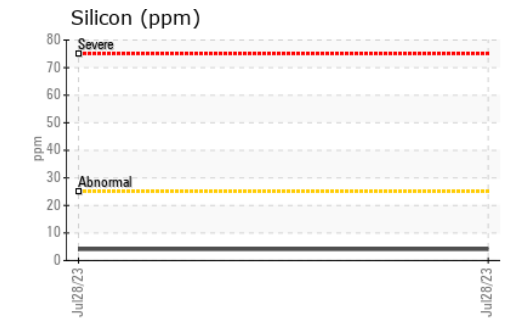
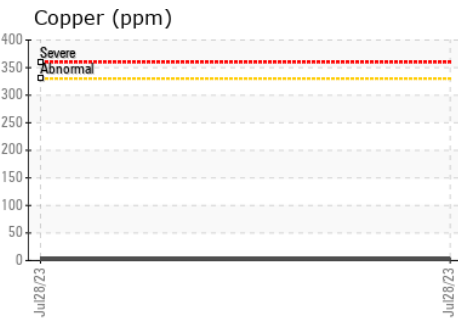
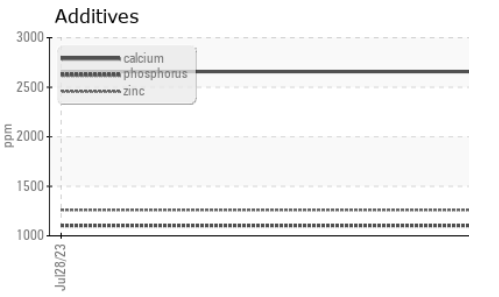
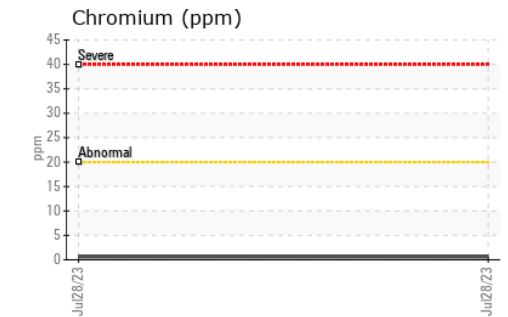
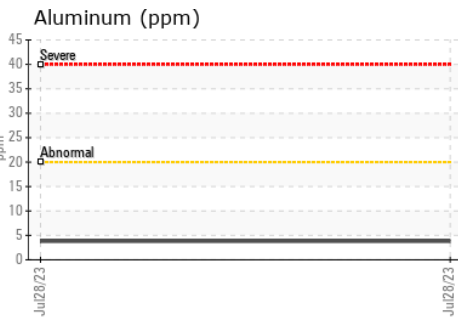
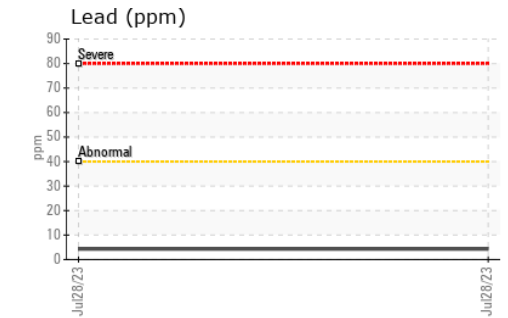
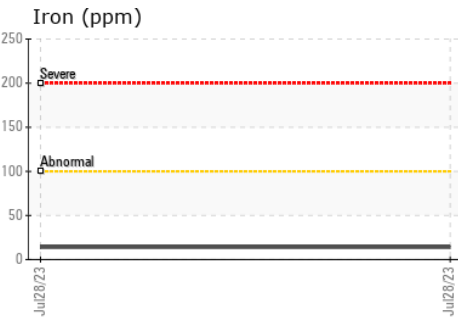
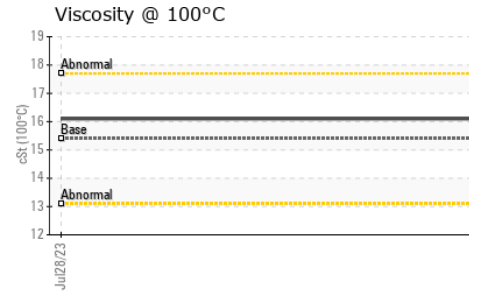


VISUAL	method	limit/base	current	history1	history2
Emulsified Water	scalar	Visual*	>0.2	NEG	---
Free Water	scalar	Visual*		NEG	---



FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D7279(m)	15.4	16.1	---

GRAPHS



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9 GFL Environmental - 720 - Lafleche - Landfill
Sample No. : GFL0087357 **Received** : 11 Aug 2023
Lab Number : 02575339 **Diagnosed** : 14 Aug 2023
Unique Number : 5620390 **Diagnostician** : Wes Davis
Test Package : MOB 1 (Additional Tests: FuelDilution, PercentFuel)
 To discuss this sample report, contact Customer Service at 1-800-268-2131.
 Test denoted (*) outside scope of accreditation, (m) method modified, (e) tested at external lab.
 Validity of results and interpretation are based on the sample and information as supplied.

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