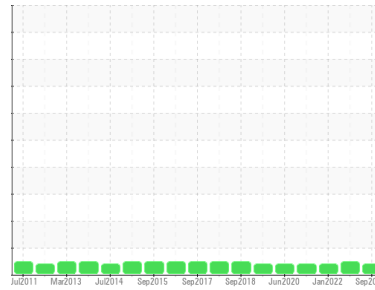




OIL ANALYSIS REPORT

Sample Rating Trend



VISCOSITY



Machine Id
STERLING 124

Component
Front Diesel Engine

Fluid
PETRO CANADA DURON HP 15W40 (25 QTS)

DIAGNOSIS

▲ Recommendation

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

Wear

All component wear rates are normal.

Contamination

There is no indication of any contamination in the oil.

▲ 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.

SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		RW0004671	RW0004235	RW0002698
Sample Date	Client Info		08 Sep 2023	23 Jan 2023	10 Jan 2022
Machine Age	hrs	Client Info	15051	14812	14319
Oil Age	hrs	Client Info	213	242	300
Oil Changed	Client Info		Changed	Changed	Changed
Sample Status			ATTENTION	NORMAL	ATTENTION

CONTAMINATION

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

WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m >100	6	5	4
Chromium	ppm	ASTM D5185m >20	<1	0	<1
Nickel	ppm	ASTM D5185m >2	0	0	0
Titanium	ppm	ASTM D5185m >2	0	0	<1
Silver	ppm	ASTM D5185m >2	0	0	<1
Aluminum	ppm	ASTM D5185m >25	<1	<1	2
Lead	ppm	ASTM D5185m >40	<1	0	<1
Copper	ppm	ASTM D5185m >330	<1	<1	<1
Tin	ppm	ASTM D5185m >15	0	0	<1
Antimony	ppm	ASTM D5185m	---	---	0
Vanadium	ppm	ASTM D5185m	0	0	0
Cadmium	ppm	ASTM D5185m	0	0	0

ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	64	465	26
Barium	ppm	ASTM D5185m	2	0	<1
Molybdenum	ppm	ASTM D5185m	67	88	58
Manganese	ppm	ASTM D5185m	<1	<1	<1
Magnesium	ppm	ASTM D5185m	866	416	919
Calcium	ppm	ASTM D5185m	1110	1456	1154
Phosphorus	ppm	ASTM D5185m	1062	1051	1058
Zinc	ppm	ASTM D5185m	1214	1213	1170
Sulfur	ppm	ASTM D5185m	3239	3262	3029

CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >25	11	14	3
Sodium	ppm	ASTM D5185m	0	0	3
Potassium	ppm	ASTM D5185m >20	<1	2	<1
Fuel	%	ASTM D3524 >5	<1.0	<1.0	0.4

INFRA-RED

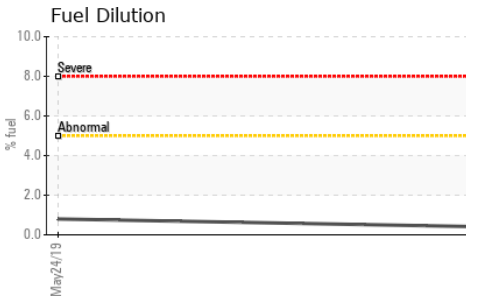
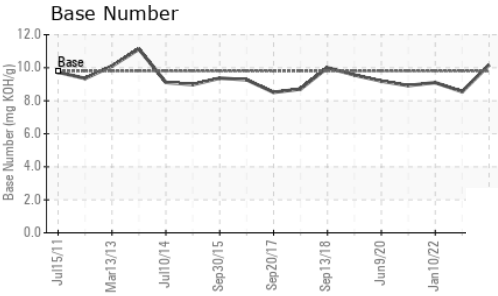
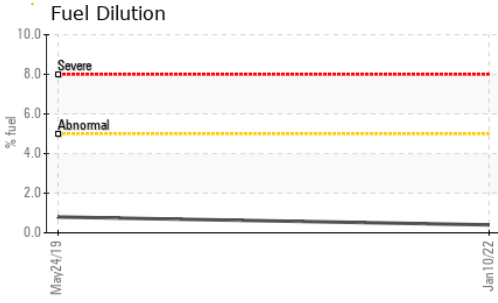
	method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844 >3	0.1	0.1	0.1
Nitration	Abs/cm	*ASTM D7624 >20	5.6	5.3	5.6
Sulfation	Abs/.1mm	*ASTM D7415 >30	17.4	19.0	18.7

FLUID DEGRADATION

	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414 >25	13.2	13.2	13.9
Base Number (BN)	mg KOH/g	ASTM D2896 9.8	10.17	8.55	9.10



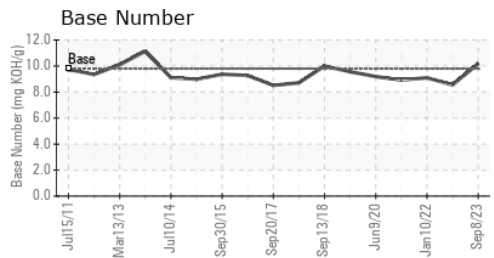
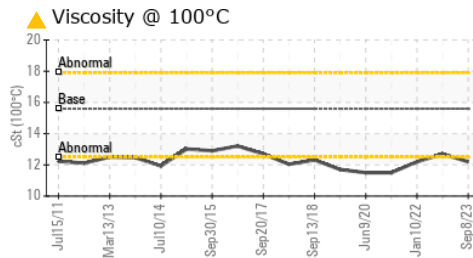
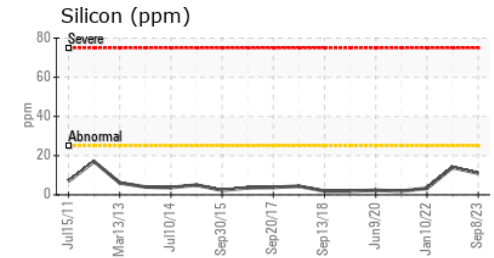
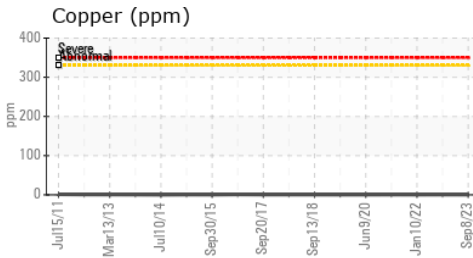
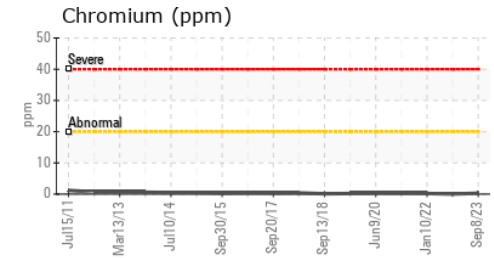
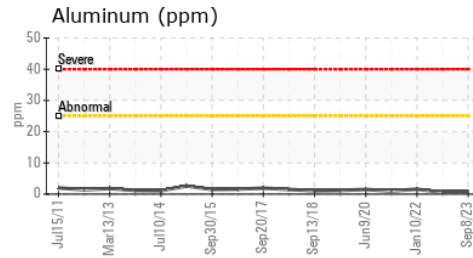
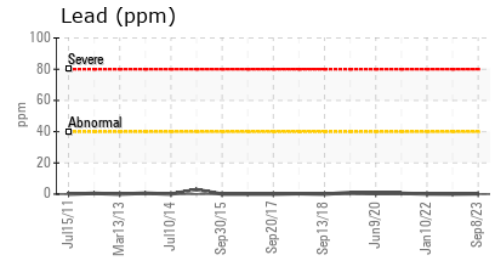
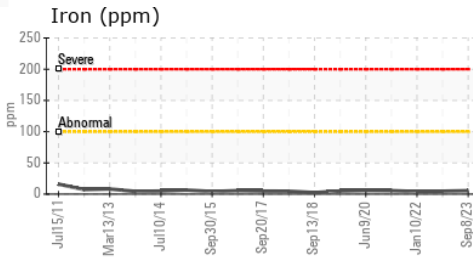
OIL ANALYSIS REPORT



VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.2	NEG	NEG
Free Water	scalar	*Visual		NEG	NEG

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D445	▲ 12.2	12.7	▲ 12.2

GRAPHS



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : RW0004671 **Received** : 28 Sep 2023
Lab Number : 05963688 **Diagnosed** : 29 Sep 2023
Unique Number : 10670239 **Diagnostician** : Sean Felton
Test Package : MOB 2 (Additional Tests: FuelDilution)

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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)