



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Area

RIOCAN [154336]

Machine Id

37253537 TOWER A

Component

Diesel Engine

Fluid

VALVOLINE PREMIUM BLUE 9200 15W40 (--- GAL)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		CU0023221	CU0021399	CU0020007
Sample Date		Client Info		27 Apr 2024	18 Aug 2023	17 Oct 2022
Machine Age	hrs	Client Info		238	216	193
Oil Age	hrs	Client Info		1	1	0
Filter Age	hrs	Client Info		1	1	0
Oil Changed		Client Info		Changed	Changed	Changed
Filter Changed		Client Info		Changed	Changed	Changed
Sample Status				NORMAL	NORMAL	NORMAL

WEAR

Metal levels are typical for a new component breaking in.

Iron	ppm	ASTM D5185(m)	>100	2	2	2
Chromium	ppm	ASTM D5185(m)	>20	0	0	0
Nickel	ppm	ASTM D5185(m)	>4	0	0	0
Titanium	ppm	ASTM D5185(m)		0	0	1
Silver	ppm	ASTM D5185(m)	>3	0	<1	0
Aluminum	ppm	ASTM D5185(m)	>20	<1	<1	1
Lead	ppm	ASTM D5185(m)	>40	0	<1	<1
Copper	ppm	ASTM D5185(m)	>330	<1	<1	<1
Tin	ppm	ASTM D5185(m)	>15	0	0	0
Vanadium	ppm	ASTM D5185(m)		0	0	0
White Metal	scalar	Visual*	NONE	NONE	---	---
Yellow Metal	scalar	Visual*	NONE	NONE	---	---

CONTAMINATION

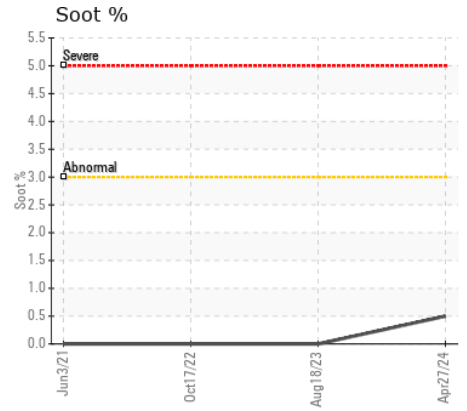
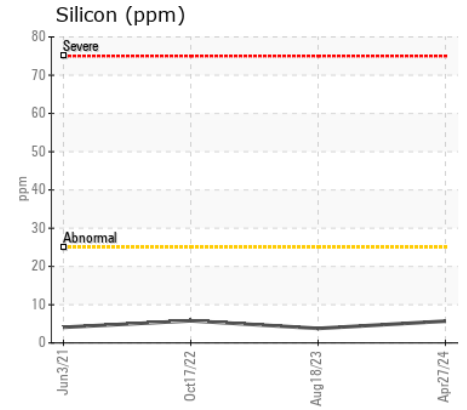
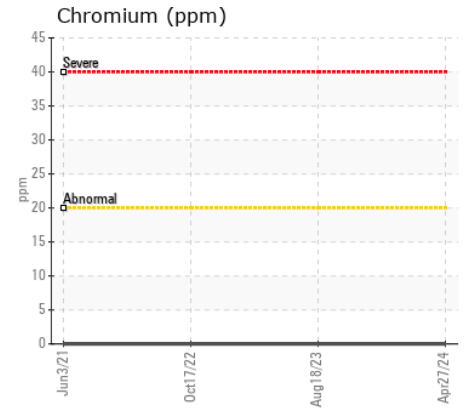
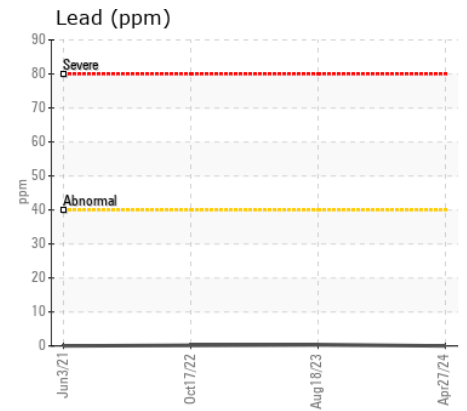
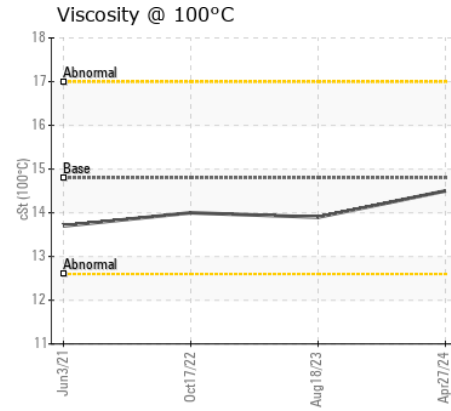
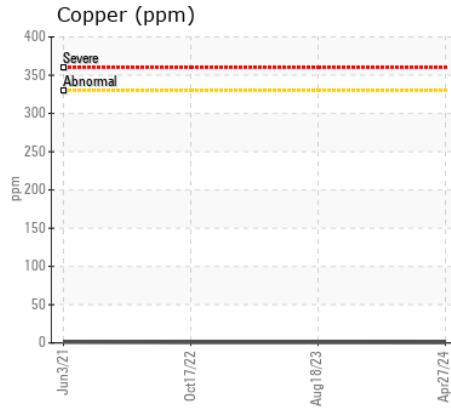
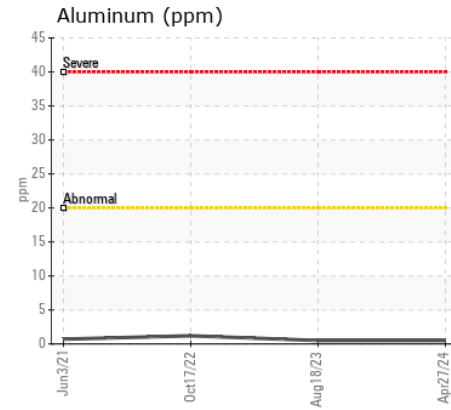
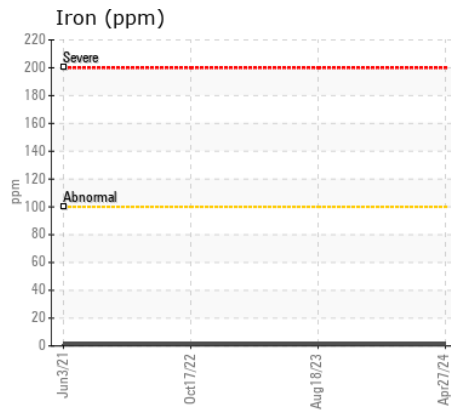
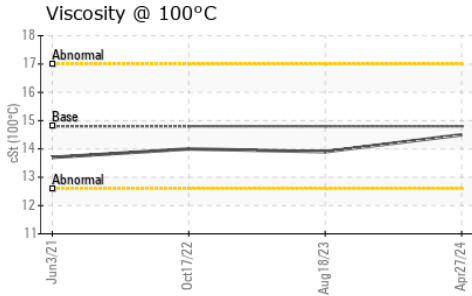
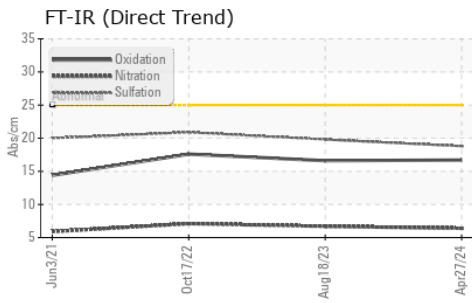
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185(m)	>25	6	4	6
Potassium	ppm	ASTM D5185(m)	>20	<1	0	<1
Fuel		WC Method	>5	<1.0	<1.0	<1.0
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	ASTM D7844*	>3	0.5	0	0
Nitration	Abs/cm	ASTM D7624*	>20	6.4	6.7	7.1
Sulfation	Abs/.1mm	ASTM D7415*	>30	18.8	19.8	20.9
Silt	scalar	Visual*	NONE	NONE	---	---
Debris	scalar	Visual*	NONE	LIGHT	---	---
Sand/Dirt	scalar	Visual*	NONE	NONE	---	---
Appearance	scalar	Visual*	NORML	NORML	---	---
Odor	scalar	Visual*	NORML	NORML	NORML	NORML
Emulsified Water	scalar	Visual*	>0.2	NEG	NEG	NEG

FLUID CONDITION

The condition of the oil is acceptable for the time in service.

Sodium	ppm	ASTM D5185(m)		3	3	4
Boron	ppm	ASTM D5185(m)		43	45	54
Barium	ppm	ASTM D5185(m)		0	<1	0
Molybdenum	ppm	ASTM D5185(m)		47	47	44
Manganese	ppm	ASTM D5185(m)		0	0	<1
Magnesium	ppm	ASTM D5185(m)		795	798	776
Calcium	ppm	ASTM D5185(m)		1152	1200	1239
Phosphorus	ppm	ASTM D5185(m)		710	737	775
Zinc	ppm	ASTM D5185(m)		811	832	822
Sulfur	ppm	ASTM D5185(m)		1928	1969	2075
Oxidation	Abs/.1mm	ASTM D7414*	>25	16.7	16.6	17.6
Visc @ 100°C	cSt	ASTM D7279(m)	14.8	14.5	13.9	14.0



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : CU0023221
Lab Number : 02640729
Unique Number : 5789891
Test Package : MOB 1 (Additional Tests: Visual)

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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.