



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Area

[103328]

Machine Id

PMO (S/N 44437257)

Component

Diesel Engine

Fluid

VALVOLINE 15W40 (--- GAL)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		CU0021085	CU0019806	CU0017541
Sample Date		Client Info		13 Apr 2024	01 Apr 2023	14 May 2022
Machine Age	hrs	Client Info		378	360	342
Oil Age	hrs	Client Info		0	0	0
Filter Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		Changed	N/A	N/A
Filter Changed		Client Info		Changed	N/A	N/A
Sample Status				NORMAL	NORMAL	NORMAL

WEAR

Metal levels are typical for a new component breaking in.

Iron	ppm	ASTM D5185(m)	>90	3	3	2
Chromium	ppm	ASTM D5185(m)	>20	0	0	0
Nickel	ppm	ASTM D5185(m)	>2	<1	0	<1
Titanium	ppm	ASTM D5185(m)	>2	0	<1	0
Silver	ppm	ASTM D5185(m)	>2	0	0	<1
Aluminum	ppm	ASTM D5185(m)	>20	1	<1	<1
Lead	ppm	ASTM D5185(m)	>40	0	0	0
Copper	ppm	ASTM D5185(m)	>330	2	<1	<1
Tin	ppm	ASTM D5185(m)	>15	0	0	<1
Vanadium	ppm	ASTM D5185(m)		0	0	0

CONTAMINATION

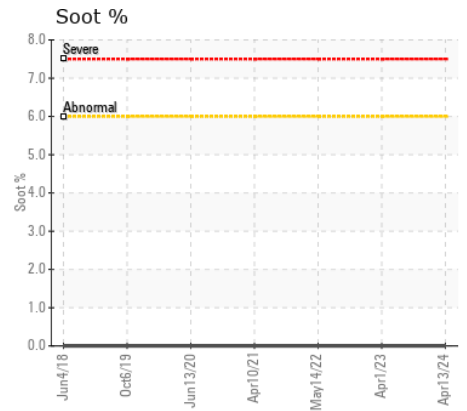
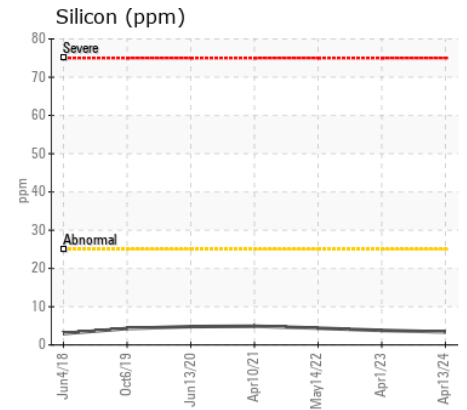
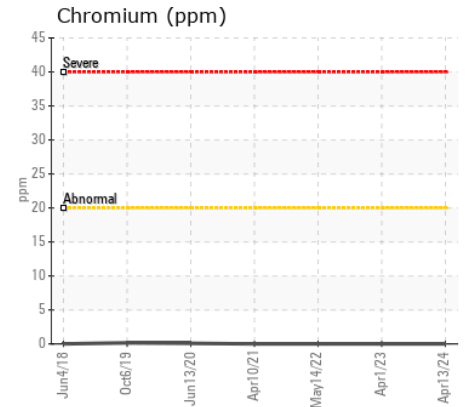
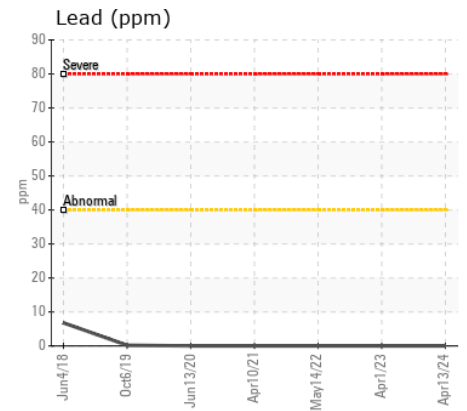
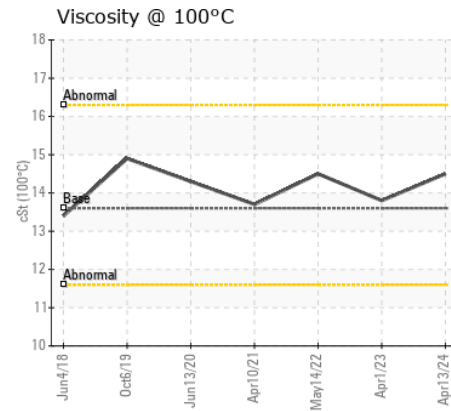
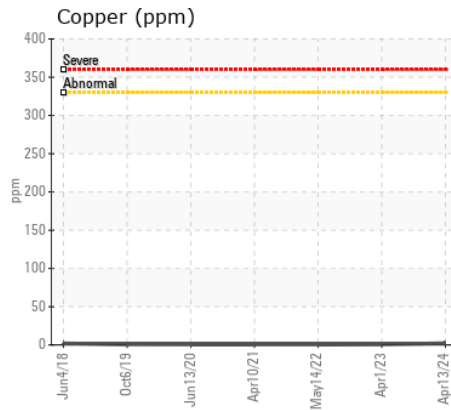
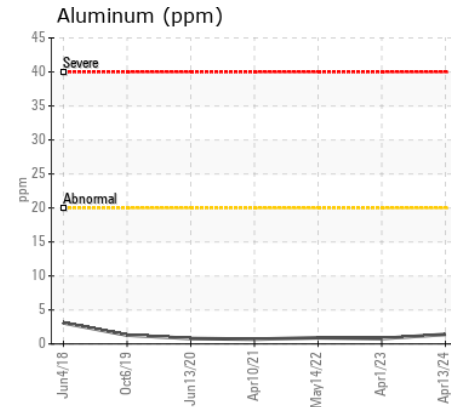
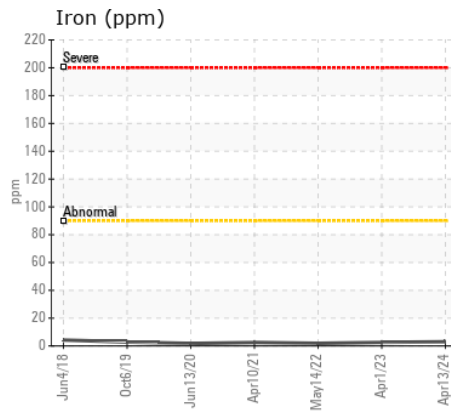
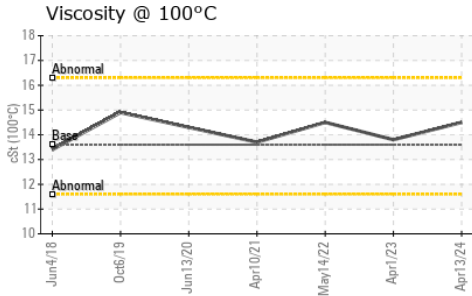
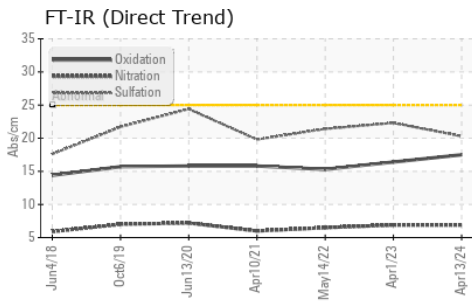
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185(m)	>25	3	4	4
Potassium	ppm	ASTM D5185(m)	>20	0	<1	0
Fuel		WC Method	>3.0	<1.0	<1.0	<1.0
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	ASTM D7844*	>6	0	0	0
Nitration	Abs/cm	ASTM D7624*	>20	6.9	6.9	6.5
Sulfation	Abs/.1mm	ASTM D7415*	>30	20.3	22.3	21.4
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	3
Boron	ppm	ASTM D5185(m)	39	39	42	38
Barium	ppm	ASTM D5185(m)	1	0	0	0
Molybdenum	ppm	ASTM D5185(m)	49	46	45	38
Manganese	ppm	ASTM D5185(m)	1	<1	<1	<1
Magnesium	ppm	ASTM D5185(m)	616	807	755	655
Calcium	ppm	ASTM D5185(m)	1554	1156	1275	1339
Phosphorus	ppm	ASTM D5185(m)	899	682	765	763
Zinc	ppm	ASTM D5185(m)	1069	801	809	840
Sulfur	ppm	ASTM D5185(m)	2624	1872	2045	2183
Oxidation	Abs/.1mm	ASTM D7414*	>25	17.5	16.4	15.3
Visc @ 100°C	cSt	ASTM D7279(m)	13.6	14.5	13.8	14.5



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : CU0021085
Lab Number : 02629110
Unique Number : 5762242
Test Package : MOB 1

Received : 16 Apr 2024
Tested : 16 Apr 2024
Diagnosed : 17 Apr 2024 - Kevin Marson

CUMMINS EASTERN CANADA LP
 3189 SWANSEA CRESCENT
 OTTAWA, ON
 CA K1G 3W5
 Contact: Cindy Harrison
 cindy.harrison@cummins.com

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.

T: (613)736-1146
 F: x: