



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Area
OI CANADA CORP [152746]
Machine Id
K19 (S/N 37129146)
Component
Diesel Engine
Fluid
VALVOLINE 15W40 (--- LTR)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		CU0022464	CU0020849	CU0018000
Sample Date		Client Info		04 Mar 2024	13 Mar 2023	15 Jun 2021
Machine Age	hrs	Client Info		667	629	573
Oil Age	hrs	Client Info		38	0	0
Filter Age	hrs	Client Info		38	0	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)	>90	5	4	4
Chromium	ppm	ASTM D5185(m)	>20	0	0	<1
Nickel	ppm	ASTM D5185(m)	>2	0	0	<1
Titanium	ppm	ASTM D5185(m)	>2	0	<1	<1
Silver	ppm	ASTM D5185(m)	>2	0	0	<1
Aluminum	ppm	ASTM D5185(m)	>20	<1	1	<1
Lead	ppm	ASTM D5185(m)	>40	<1	2	2
Copper	ppm	ASTM D5185(m)	>330	2	2	2
Tin	ppm	ASTM D5185(m)	>15	0	<1	<1
Vanadium	ppm	ASTM D5185(m)		0	0	0

CONTAMINATION

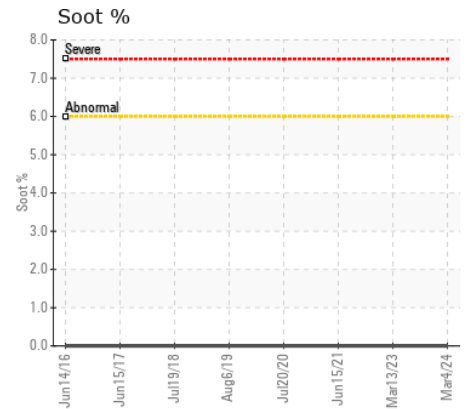
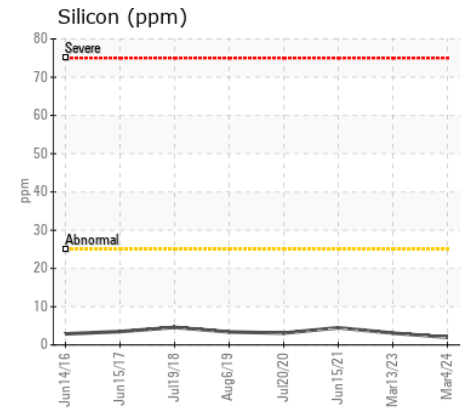
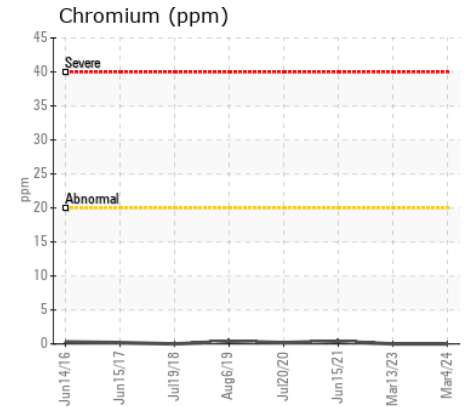
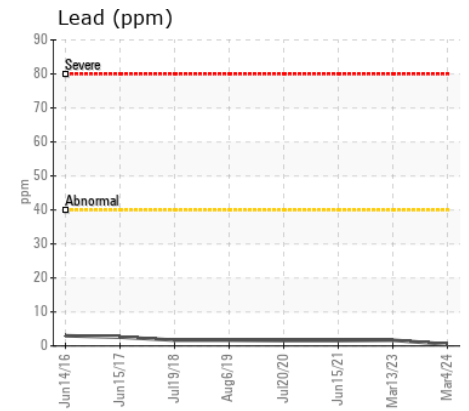
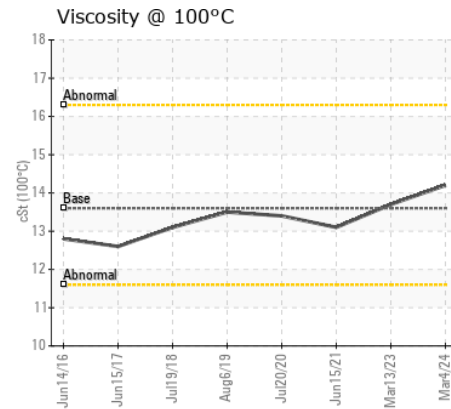
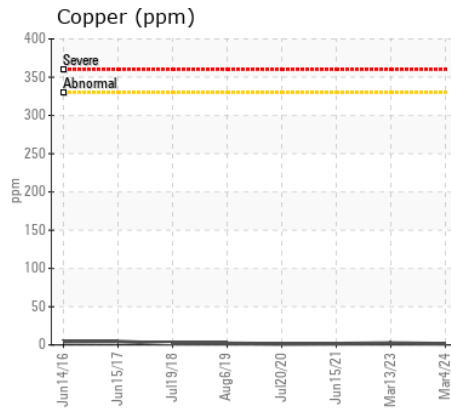
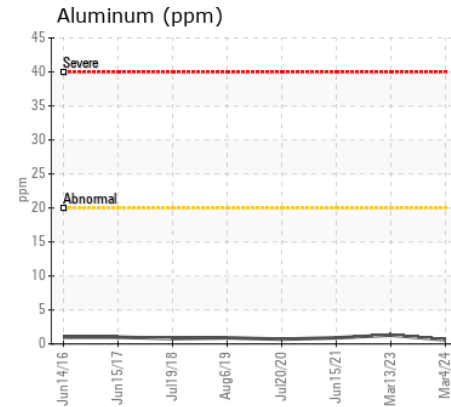
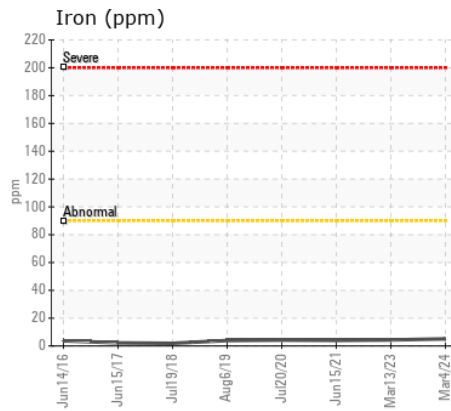
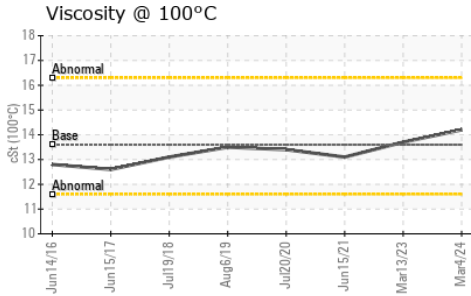
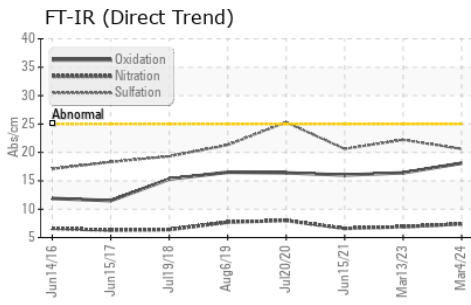
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185(m)	>25	2	3	4
Potassium	ppm	ASTM D5185(m)	>20	<1	0	2
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	7.4	6.9	6.6
Sulfation	Abs/.1mm	ASTM D7415*	>30	20.6	22.2	20.6
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	4	5
Boron	ppm	ASTM D5185(m)	39	50	45	53
Barium	ppm	ASTM D5185(m)	1	0	0	<1
Molybdenum	ppm	ASTM D5185(m)	49	45	49	40
Manganese	ppm	ASTM D5185(m)	1	<1	<1	<1
Magnesium	ppm	ASTM D5185(m)	616	780	821	615
Calcium	ppm	ASTM D5185(m)	1554	1258	1284	1429
Phosphorus	ppm	ASTM D5185(m)	899	736	801	979
Zinc	ppm	ASTM D5185(m)	1069	844	850	1157
Sulfur	ppm	ASTM D5185(m)	2624	1985	2085	2611
Oxidation	Abs/.1mm	ASTM D7414*	>25	18.1	16.4	16.0
Visc @ 100°C	cSt	ASTM D7279(m)	13.6	14.2	13.7	13.1



Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : CU0022464
Lab Number : 02640716
Unique Number : 5789878
Test Package : MOB 1
Received : 10 Jun 2024
Tested : 10 Jun 2024
Diagnosed : 10 Jun 2024 - Wes Davis

CUMMINS CANADA ULC - GENERATOR DIVISION
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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.