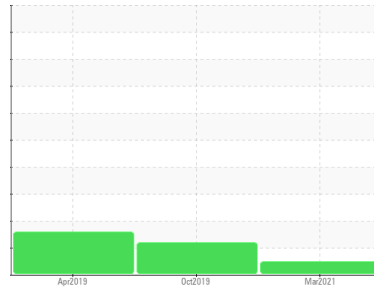




OIL ANALYSIS REPORT

Sample Rating Trend



NORMAL



Machine Id
VOLVO 2675

Component
Diesel Engine

Fluid
CHEVRON DELO 400 XLE 15W40 (--- QTS)

DIAGNOSIS

Recommendation

Resample at the next service interval to monitor.

Wear

Metal levels are typical for a new component breaking in.

Contamination

There is no indication of any contamination in the oil.

Fluid Condition

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

SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		WC0535022	WC0394144	WC0336018
Sample Date	Client Info		01 Mar 2021	14 Oct 2019	10 Apr 2019
Machine Age	mls	Client Info	17483	15292	11176
Oil Age	mls	Client Info	2191	4918	802
Oil Changed	Client Info		Changed	Changed	Changed
Sample Status			NORMAL	ABNORMAL	MARGINAL

CONTAMINATION

	method	limit/base	current	history1	history2
Fuel	WC Method	>4.0	<1.0	<1.0	<1.0
Glycol	WC Method		NEG	NEG	NEG

WEAR METALS

	method	limit/base	current	history1	history2	
Iron	ppm	ASTM D5185m	>80	63	55	24
Chromium	ppm	ASTM D5185m	>6	<1	<1	<1
Nickel	ppm	ASTM D5185m	>2	8	5	2
Titanium	ppm	ASTM D5185m	>2	14	14	10
Silver	ppm	ASTM D5185m	>2	0	0	0
Aluminum	ppm	ASTM D5185m	>20	9	15	5
Lead	ppm	ASTM D5185m	>95	<1	1	0
Copper	ppm	ASTM D5185m	>85	12	48	33
Tin	ppm	ASTM D5185m	>9	0	2	0
Antimony	ppm	ASTM D5185m		0	7	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		48	29	50
Barium	ppm	ASTM D5185m		0	0	0
Molybdenum	ppm	ASTM D5185m		38	39	27
Manganese	ppm	ASTM D5185m		1	2	2
Magnesium	ppm	ASTM D5185m		743	765	577
Calcium	ppm	ASTM D5185m		1478	1531	1088
Phosphorus	ppm	ASTM D5185m	760	698	728	580
Zinc	ppm	ASTM D5185m	830	815	814	658
Sulfur	ppm	ASTM D5185m	2770	2439	1656	2272

CONTAMINANTS

	method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185m	>25	8	11	4
Sodium	ppm	ASTM D5185m		5	7	6
Potassium	ppm	ASTM D5185m	>20	13	▲ 56	16

INFRA-RED

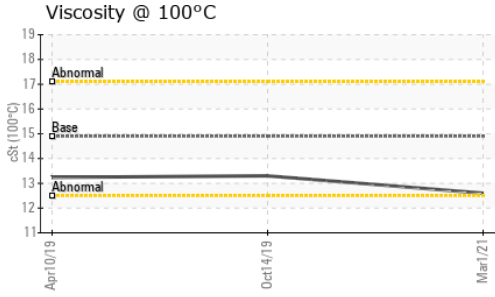
	method	limit/base	current	history1	history2	
Soot %	%	*ASTM D7844		0.4	0.6	0.1
Nitration	Abs/cm	*ASTM D7624	>20	12	10.1	9.3
Sulfation	Abs.1mm	*ASTM D7415	>30	22.3	22.8	18.7

FLUID DEGRADATION

	method	limit/base	current	history1	history2	
Oxidation	Abs.1mm	*ASTM D7414	>25	18.1	16.6	14.4



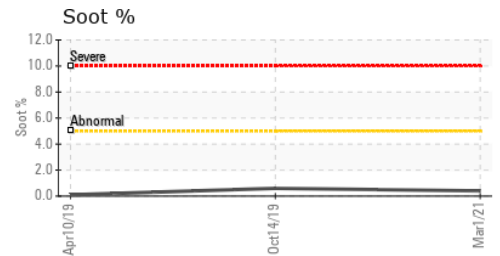
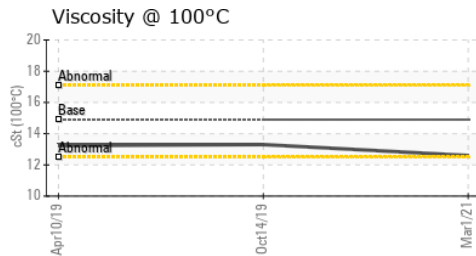
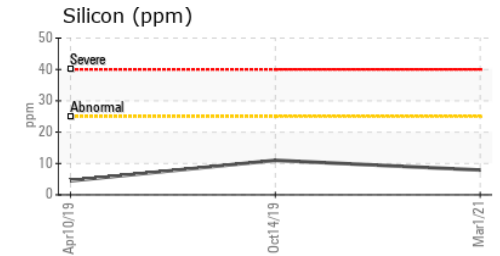
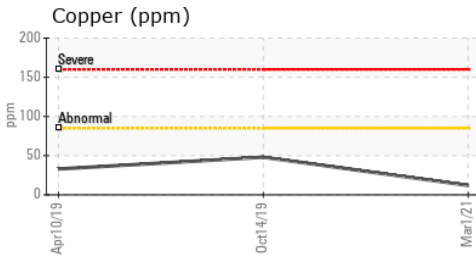
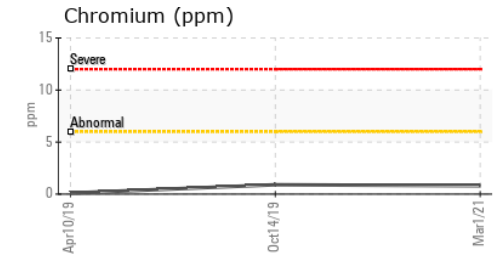
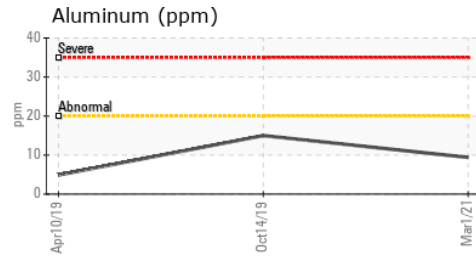
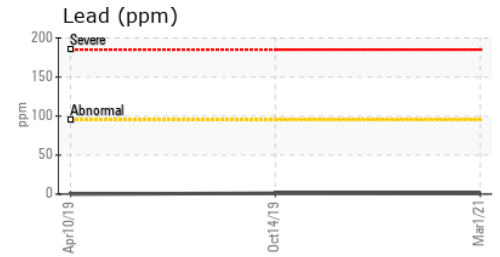
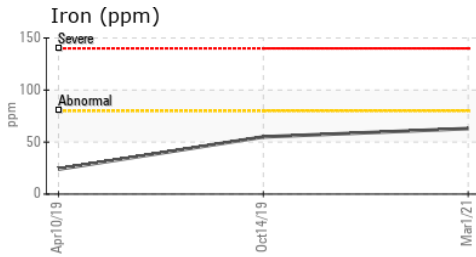
OIL ANALYSIS REPORT



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	>0.1	NEG	NEG
Free Water	scalar	*Visual		NEG	NEG

FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D445	14.9	12.6	13.3	13.24

GRAPHS



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0535022 **Received** : 02 Mar 2021
Lab Number : **05194366** **Diagnosed** : 03 Mar 2021
Unique Number : 9389677 **Diagnostician** : Wes Davis
Test Package : MOBCE

TOWN OF CARY
 420 JAMES JACKSON AVENUE
 CARY, NC
 US 27513
 Contact: BRANDON PASINSKI
 brandon.pasinski@townofcary.org
 T: (919)469-4098
 F: (919)380-6420

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)