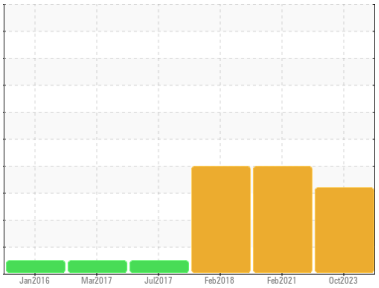
PROBLEM SUMMARY

Area
AMR-Cheyenne
Machine Id
VOLVO EC480DL 210241
Component
Right Final Drive
Fluid
VOLVO PREMIUM GEAR OIL 80W-90 GL-5 (1 GAL)

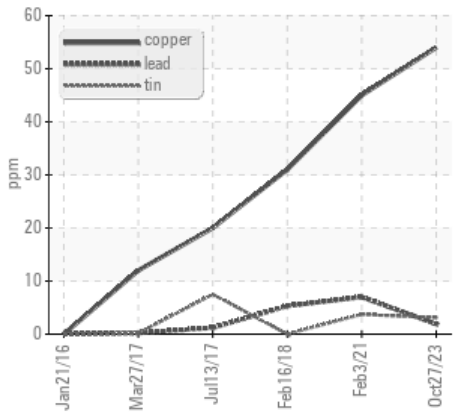
Sample Rating Trend



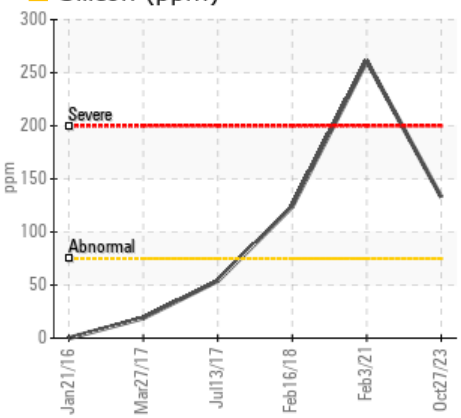
DIRT

COMPONENT CONDITION SUMMARY

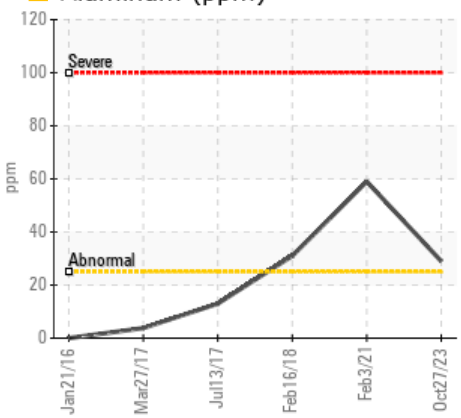
Non-ferrous Metals



Silicon (ppm)



Aluminum (ppm)



RECOMMENDATION

We advise that you check all areas where dirt can enter the system. Resample at the next service interval to monitor.

PROBLEMATIC TEST RESULTS

Sample Status				**ABNORMAL**	ABNORMAL	ABNORMAL
Aluminum	ppm	ASTM D5185m	>25	▲ **29**	▲ 59	▲ 31
Copper	ppm	ASTM D5185m	>50	▲ **54**	45	31
Silicon	ppm	ASTM D5185m	>75	▲ **133**	▲ 261	▲ 124

Customer Id: ADVKANKS
Sample No.: DJJ0020583
Lab Number: 06011752
Test Package: CONST

To manage this report scan the QR code

To discuss the diagnosis or test data:
Don Baldridge +1
don.b505@comcast.net

To change component or sample information:
Customer Service +1 1-800-237-1369
customerservice@wearcheck.com

RECOMMENDED ACTIONS

Action	Status	Date	Done By	Description
Check Dirt Access	---	---	?	We advise that you check all areas where dirt can enter the system.

HISTORICAL DIAGNOSIS

03 Feb 2021 Diag: Jonathan Hester

DIRT

We advise that you check all areas where dirt can enter the system. We recommend an early resample to monitor this condition.Gear wear is indicated. Elemental levels of silicon (Si) and aluminum (Al) indicate alumina-silicate (coarse dirt) ingress. There is a high amount of visible silt present in the sample. The condition of the oil is acceptable for the time in service.

view report

16 Feb 2018 Diag: Don Baldridge

DIRT

We advise that you check all areas where dirt can enter the system. We recommend an early resample to monitor this condition.Gear wear is indicated. Elemental levels of silicon (Si) and aluminum (Al) indicate alumina-silicate (coarse dirt) ingress. The condition of the oil is acceptable for the time in service.

view report

13 Jul 2017 Diag: Don Baldridge

NORMAL

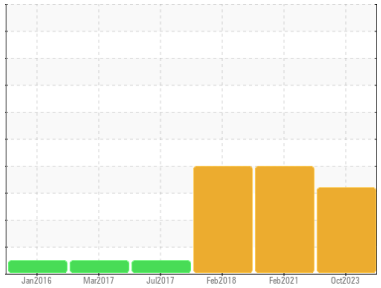
Resample at the next service interval to monitor.All component wear rates are normal. There is no indication of any contamination in the component. The condition of the oil is acceptable for the time in service.

view report

OIL ANALYSIS REPORT

Area
AMR-Cheyenne
Machine Id
VOLVO EC480DL 210241
Component
Right Final Drive
Fluid
VOLVO PREMIUM GEAR OIL 80W-90 GL-5 (1 GAL)

Sample Rating Trend



DIRT

DIAGNOSIS

▲ Recommendation
We advise that you check all areas where dirt can enter the system. Resample at the next service interval to monitor.

▲ Wear
The copper level is abnormal. All other component wear rates are normal.

▲ Contamination
Elemental levels of silicon (Si) and aluminum (Al) indicate alumina-silicate (coarse dirt) ingress.

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		**DJJ0020583**	DJJ0005631	DJJ017731
Sample Date		Client Info		**27 Oct 2023**	03 Feb 2021	16 Feb 2018
Machine Age	hrs	Client Info		**8694**	2714	3617
Oil Age	hrs	Client Info		**0**	214	1731
Oil Changed		Client Info		**Not Changd**	Not Changd	Not Changd
Sample Status				**ABNORMAL**	ABNORMAL	ABNORMAL

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>500	**486**	▲ 692	▲ 811
Chromium	ppm	ASTM D5185m	>10	**4**	6	▲ 10
Nickel	ppm	ASTM D5185m	>10	**2**	3	2
Titanium	ppm	ASTM D5185m		**2**	4	2
Silver	ppm	ASTM D5185m		**0**	<1	0
Aluminum	ppm	ASTM D5185m	>25	▲ **29**	▲ 59	▲ 31
Lead	ppm	ASTM D5185m	>25	**2**	7	5
Copper	ppm	ASTM D5185m	>50	▲ **54**	45	31
Tin	ppm	ASTM D5185m	>10	**3**	4	0
Antimony	ppm	ASTM D5185m	>5	**---**	0	0
Vanadium	ppm	ASTM D5185m		**0**	<1	0
Cadmium	ppm	ASTM D5185m		**0**	0	0

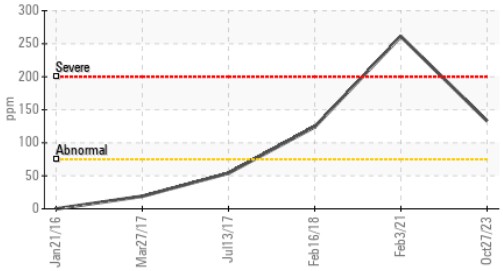
ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	379	**123**	160	76
Barium	ppm	ASTM D5185m	0.0	**0**	<1	0
Molybdenum	ppm	ASTM D5185m	0.8	**0**	<1	0
Manganese	ppm	ASTM D5185m	0.0	**5**	6	9
Magnesium	ppm	ASTM D5185m	31	**15**	18	19
Calcium	ppm	ASTM D5185m	38	**163**	302	170
Phosphorus	ppm	ASTM D5185m	1077	**1067**	1100	1880
Zinc	ppm	ASTM D5185m	46	**30**	34	43
Sulfur	ppm	ASTM D5185m	23526	**19204**	23104	20985

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>75	▲ **133**	▲ 261	▲ 124
Sodium	ppm	ASTM D5185m		**9**	10	18
Potassium	ppm	ASTM D5185m	>20	**11**	17	14
Water	%	ASTM D6304	>0.2	**0.053**	NEG	NEG
ppm Water	ppm	ASTM D6304	>2000	**530**	---	---

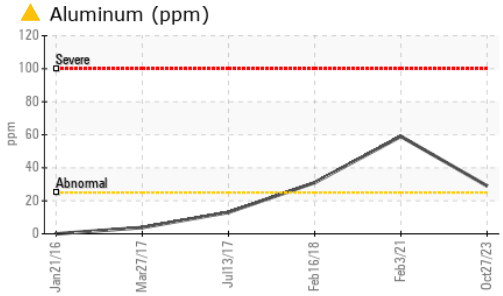
VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	**NONE**	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	**NONE**	NONE	NONE
Precipitate	scalar	*Visual	NONE	**NONE**	NONE	NONE
Silt	scalar	*Visual	NONE	**NONE**	▲ VHEVY	NONE
Debris	scalar	*Visual	NONE	**NONE**	NONE	LIGHT
Sand/Dirt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

OIL ANALYSIS REPORT

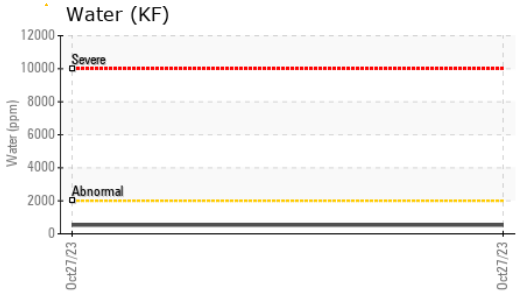
Silicon (ppm)



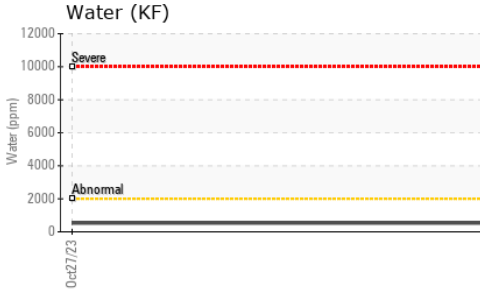
Aluminum (ppm)



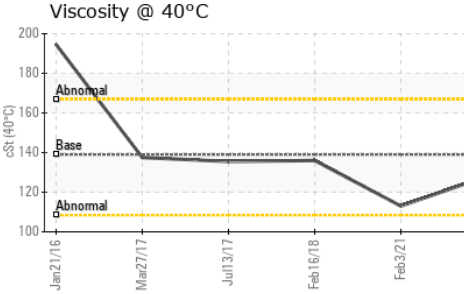
Water (KF)



Water (KF)



Viscosity @ 40°C

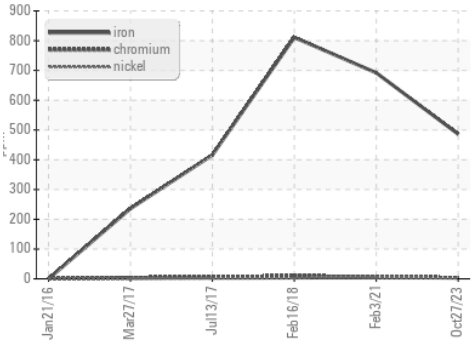


FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	139	**128**	113	136.0

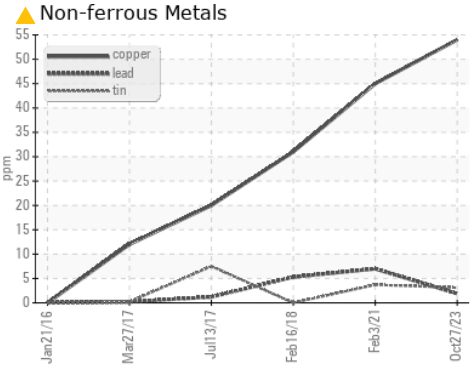
SAMPLE IMAGES	method	limit/base	current	history1	history2
Color			*no image*	*no image*	*no image*
Bottom			*no image*	*no image*	*no image*

GRAPHS

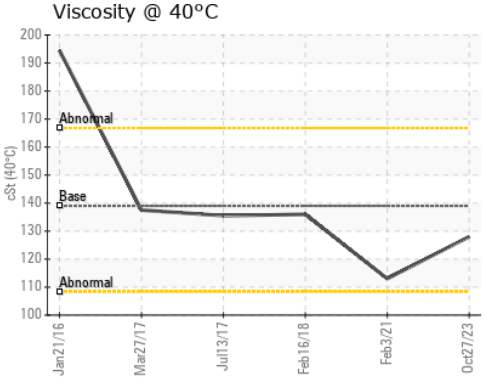
Ferrous Alloys



Non-ferrous Metals



Viscosity @ 40°C



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : DJJ0020583
Lab Number : 06011752
Unique Number : 10750896
Test Package : CONST (Additional Tests: KF)
Received : 17 Nov 2023
Diagnosed : 21 Nov 2023
Diagnostician : Don Baldridge

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)

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