

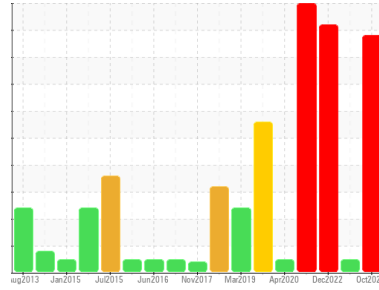


PROBLEM SUMMARY

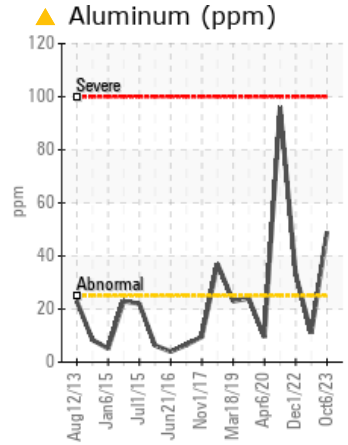
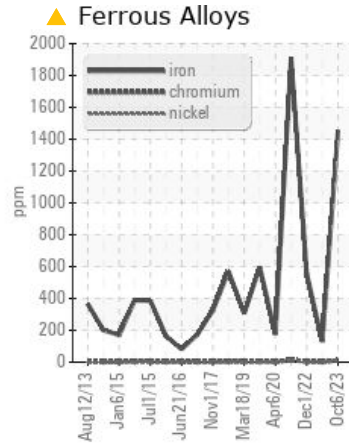
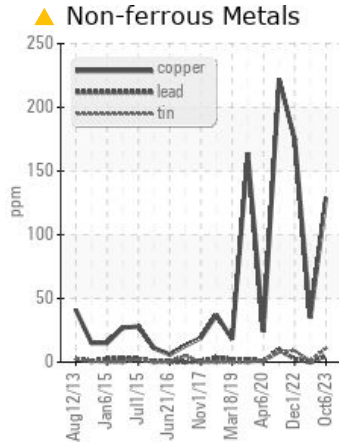
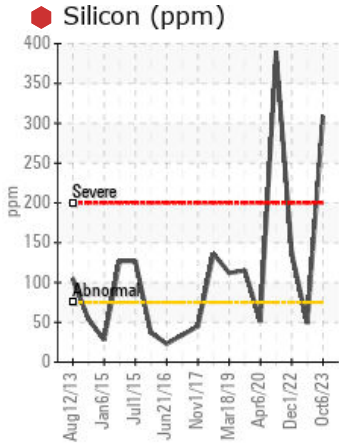


Area
AMR-Cheyenne
 Machine Id
VOLVO EC460CL 110459
 Component
Right Final Drive
 Fluid
VOLVO PREMIUM GEAR OIL 80W-90 GL-5 (2 GAL)

Sample Rating Trend



COMPONENT CONDITION SUMMARY



RECOMMENDATION

We advise that you check all areas where dirt can enter the system. We recommend that you drain the oil from the component if this has not already been done. We recommend an early resample to monitor this condition.

PROBLEMATIC TEST RESULTS

Sample Status				SEVERE	NORMAL	SEVERE
Iron	ppm	ASTM D5185m	>500	▲ 1452	131	▲ 554
Chromium	ppm	ASTM D5185m	>10	▲ 12	1	4
Aluminum	ppm	ASTM D5185m	>25	▲ 49	11	▲ 33
Copper	ppm	ASTM D5185m	>50	▲ 129	35	● 175
Tin	ppm	ASTM D5185m	>10	▲ 11	<1	9
Silicon	ppm	ASTM D5185m	>75	● 309	49	▲ 137

Customer Id: ADVKANKS
 Sample No.: DJJ0005352
 Lab Number: 05982133
 Test Package: MOBCE



To manage this report scan the QR code

To discuss the diagnosis or test data:
 Don Baldrige +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
Change Fluid	---	---	?	We recommend that you drain the oil from the component if this has not already been done.
Resample	---	---	?	We recommend an early resample to monitor this condition.
Check Dirt Access	---	---	?	We advise that you check all areas where dirt can enter the system.

HISTORICAL DIAGNOSIS

18 May 2023 Diag: Sean Felton

NORMAL



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

view report



01 Dec 2022 Diag: Don Baldrige

WEAR



We advise that you check all areas where dirt can enter the system. We recommend an early resample to monitor this condition. The iron level has decreased, but is still abnormal. The copper level has decreased, but is still abnormal. 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



04 Feb 2021 Diag: Jonathan Hester

WEAR



We advise that you check all areas where dirt can enter the system. We recommend that you drain the oil from the component if this has not already been done. We advise that you inspect for the source(s) of wear. We recommend an early resample to monitor this condition. Bearing and/or gear wear is indicated. Elemental levels of silicon (Si) and aluminum (Al) indicate alumina-silicate (coarse dirt) ingress. Moderate concentration of visible dirt/debris present in the oil. The oil is no longer serviceable due to the presence of contaminants.

view report



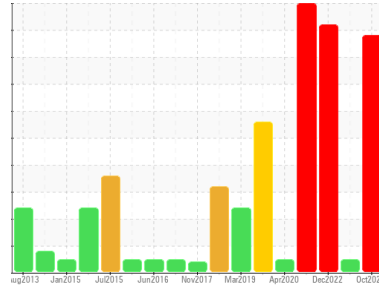


OIL ANALYSIS REPORT



Area
AMR-Cheyenne
Machine Id
VOLVO EC460CL 110459
Component
Right Final Drive
Fluid
VOLVO PREMIUM GEAR OIL 80W-90 GL-5 (2 GAL)

Sample Rating Trend



DIAGNOSIS

Recommendation

We advise that you check all areas where dirt can enter the system. We recommend that you drain the oil from the component if this has not already been done. We recommend an early resample to monitor this condition.

Wear

Gear wear is indicated. Bearing and/or bushing wear is indicated.

Contamination

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

Fluid Condition

The oil is no longer serviceable due to the presence of contaminants.

SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		DJJ0005352	DJJ0019217	DJJ0002737
Sample Date	Client Info		06 Oct 2023	18 May 2023	01 Dec 2022
Machine Age	hrs	Client Info	14810	14362	13861
Oil Age	hrs	Client Info	0	0	1000
Oil Changed	Client Info		Not Chngd	Not Chngd	Not Chngd
Sample Status			SEVERE	NORMAL	SEVERE

WEAR METALS

	method	limit/base	current	history1	history2	
Iron	ppm	ASTM D5185m	>500	▲ 1452	131	▲ 554
Chromium	ppm	ASTM D5185m	>10	▲ 12	1	4
Nickel	ppm	ASTM D5185m	>10	7	<1	2
Titanium	ppm	ASTM D5185m		5	<1	3
Silver	ppm	ASTM D5185m		<1	0	0
Aluminum	ppm	ASTM D5185m	>25	▲ 49	11	▲ 33
Lead	ppm	ASTM D5185m	>25	5	0	2
Copper	ppm	ASTM D5185m	>50	▲ 129	35	● 175
Tin	ppm	ASTM D5185m	>10	▲ 11	<1	9
Antimony	ppm	ASTM D5185m	>5	---	---	---
Vanadium	ppm	ASTM D5185m		<1	0	0
Cadmium	ppm	ASTM D5185m		<1	0	0

ADDITIVES

	method	limit/base	current	history1	history2	
Boron	ppm	ASTM D5185m	379	164	111	104
Barium	ppm	ASTM D5185m	0.0	2	0	<1
Molybdenum	ppm	ASTM D5185m	0.8	7	15	<1
Manganese	ppm	ASTM D5185m	0.0	12	1	4
Magnesium	ppm	ASTM D5185m	31	56	63	12
Calcium	ppm	ASTM D5185m	38	424	162	150
Phosphorus	ppm	ASTM D5185m	1077	1979	1376	960
Zinc	ppm	ASTM D5185m	46	224	191	50
Sulfur	ppm	ASTM D5185m	23526	17965	15072	19982

CONTAMINANTS

	method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185m	>75	● 309	49	▲ 137
Sodium	ppm	ASTM D5185m		15	3	10
Potassium	ppm	ASTM D5185m	>20	21	5	11

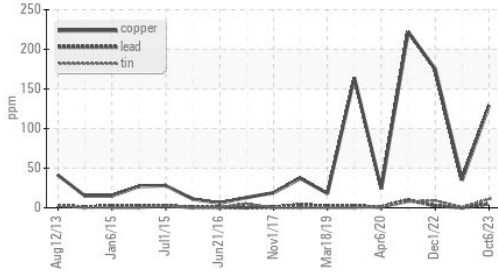
VISUAL

	method	limit/base	current	history1	history2	
White Metal	scalar	*Visual	NONE	NONE	NONE	MODER
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	MODER	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE	NONE
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	NEG	NEG	NEG
Free Water	scalar	*Visual		NEG	NEG	NEG

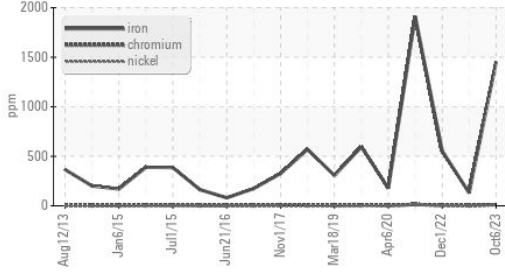


OIL ANALYSIS REPORT

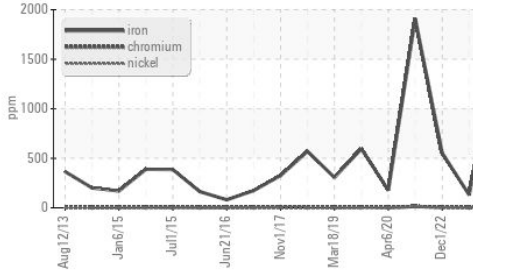
Non-ferrous Metals



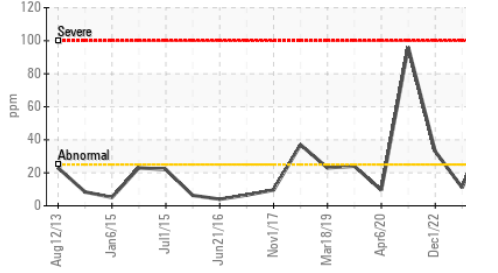
Ferrous Alloys



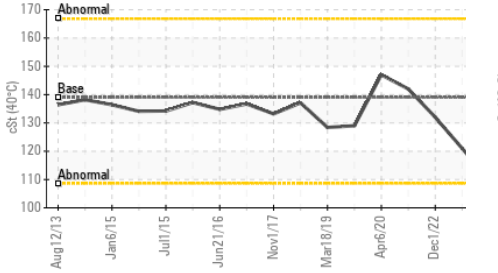
Ferrous Alloys



Aluminum (ppm)



Viscosity @ 40°C



FLUID PROPERTIES

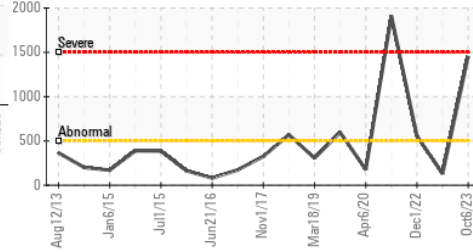
method	limit/base	current	history1	history2
Visc @ 40°C	cSt	110	121	132

SAMPLE IMAGES

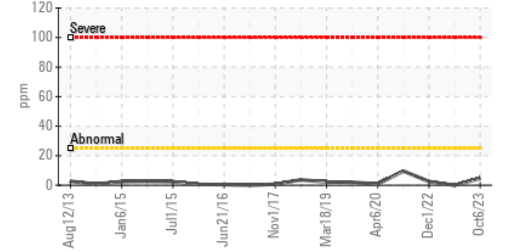
method	limit/base	current	history1	history2
Color			no image	no image
Bottom			no image	no image

GRAPHS

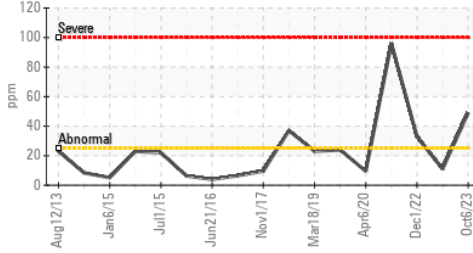
Iron (ppm)



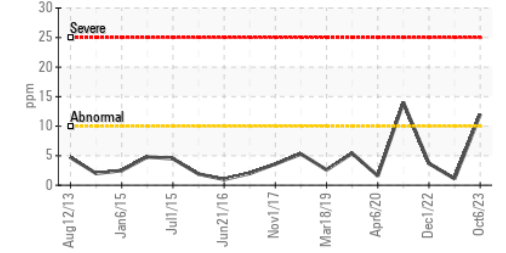
Lead (ppm)



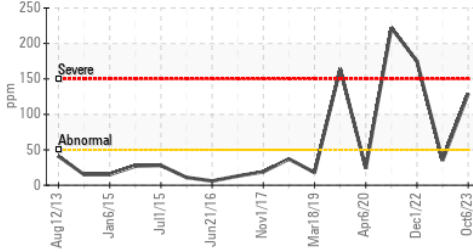
Aluminum (ppm)



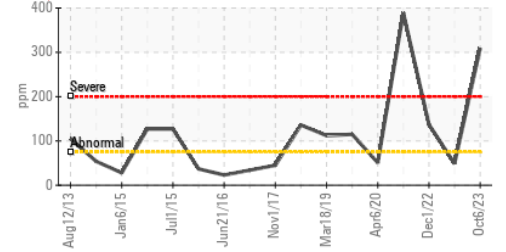
Chromium (ppm)



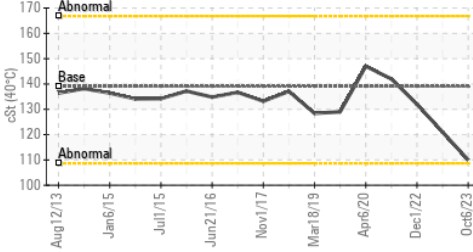
Copper (ppm)



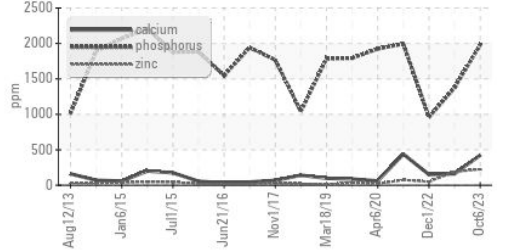
Silicon (ppm)



Viscosity @ 40°C



Additives



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
 Sample No. : DJJ0005352
 Lab Number : 05982133
 Unique Number : 10699428
 Test Package : MOBCE

ADVANTAGE METALS RECYCLING - CHEYENNE
 1015 S. PACKARD ST
 KANSAS CITY, KS
 US 66105
 Contact: BRIAN JACOBS
 BRIAN.JACOBS@ADVANTAGERECYCLING.COM
 T: (816)808-4711
 F:

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)