



ASCENDUM

OIL ANALYSIS REPORT



Area

Ascendum Machinery/250 Hour CSA

Machine Id

CATERPILLAR IT38G II 1352 (S/N CSX00319)

Component

Front Differential

Fluid

VOLVO PREMIUM GEAR OIL 85W-140 GL-5 (8 GAL)

WEAR

NORMAL

CONTAMINATION

NORMAL

FLUID CONDITION

NORMAL

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		ASC0007465	ASC0001222	VCP0007307
Sample Date		Client Info		16 Apr 2024	08 Sep 2023	24 Feb 2023
Machine Age	hrs	Client Info		16370	16133	16070
Oil Age	hrs	Client Info		16370	16133	16070
Filter Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		Not Changd	Not Changd	Not Changd
Filter Changed		Client Info		None	N/A	N/A
Sample Status				NORMAL	SEVERE	SEVERE

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>500	253	407	▲ 523
Chromium	ppm	ASTM D5185m	>3	2	1	2
Nickel	ppm	ASTM D5185m	>3	1	1	1
Titanium	ppm	ASTM D5185m	>2	<1	<1	<1
Silver	ppm	ASTM D5185m	>2	0	2	<1
Aluminum	ppm	ASTM D5185m	>30	10	3	6
Lead	ppm	ASTM D5185m	>13	<1	0	0
Copper	ppm	ASTM D5185m	>103	51	12	12
Tin	ppm	ASTM D5185m	>5	<1	1	0
Vanadium	ppm	ASTM D5185m		<1	0	<1
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

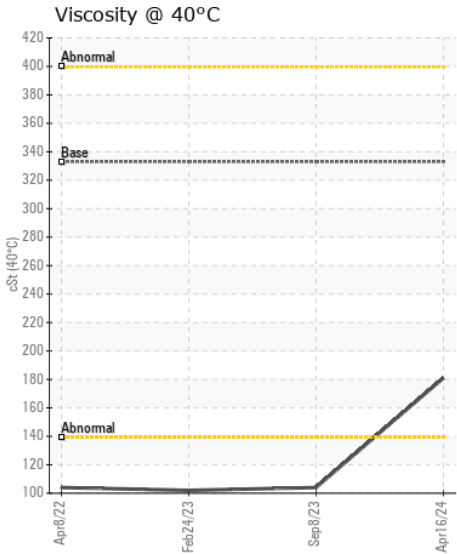
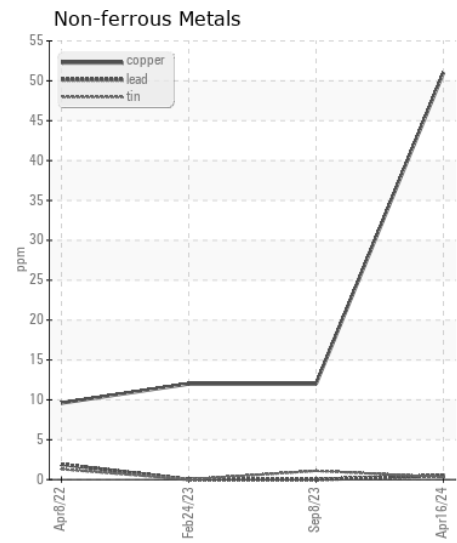
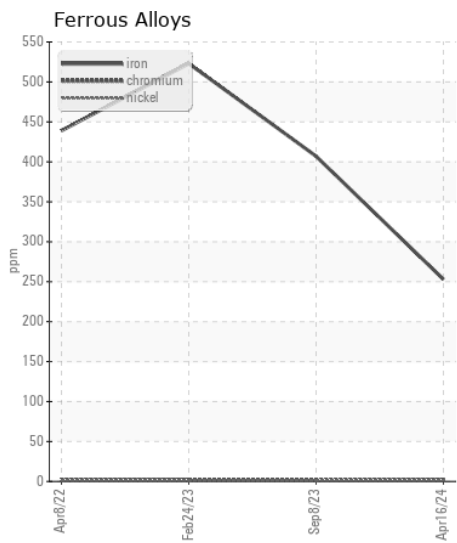
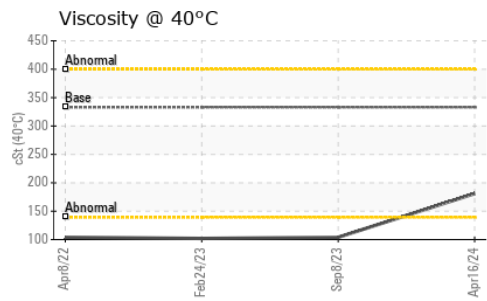
The water content is negligible. There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>100	21	15	24
Potassium	ppm	ASTM D5185m	>20	3	0	<1
Water		WC Method	>.2	NEG	NEG	NEG
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE	▲ MODER
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML	● MILKY
Odor	scalar	*Visual	NORML	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>.2	NEG	▲ 0.2%	▲ 0.2%

FLUID CONDITION

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

Sodium	ppm	ASTM D5185m		<1	1	3
Boron	ppm	ASTM D5185m	111	18	11	18
Barium	ppm	ASTM D5185m	0.0	0	0	0
Molybdenum	ppm	ASTM D5185m	0.9	<1	0	1
Manganese	ppm	ASTM D5185m	0.0	3	2	3
Magnesium	ppm	ASTM D5185m	39	11	58	70
Calcium	ppm	ASTM D5185m	93	2589	234	373
Phosphorus	ppm	ASTM D5185m	920	1162	391	387
Zinc	ppm	ASTM D5185m	104	1076	171	197
Sulfur	ppm	ASTM D5185m	20179	16705	12259	9545
Visc @ 40°C	cSt	ASTM D445	333	181	104	102



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : ASC0007465
Lab Number : 06158055
Unique Number : 10993478
Test Package : CONST
Received : 23 Apr 2024
Tested : 24 Apr 2024
Diagnosed : 25 Apr 2024 - Don Baldrige

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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)