



ASCENDUM

OIL ANALYSIS REPORT

WEAR

ATTENTION

CONTAMINATION

ABNORMAL

FLUID CONDITION

NORMAL



Area

Ascendum Machinery/250 Hour CSA

Machine Id

CATERPILLAR 320C L UTIL 1155 (S/N PAC01284)

Component

Rear Right Final Drive

Fluid

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

RECOMMENDATION

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

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		ASC0007466	VCP0005791	VCP0002018
Sample Date		Client Info		17 Apr 2024	25 May 2023	15 Aug 2022
Machine Age	hrs	Client Info		12907	11977	11977
Oil Age	hrs	Client Info		12907	11977	11977
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				ABNORMAL	NORMAL	SEVERE

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>800	215	136	▲ 535
Chromium	ppm	ASTM D5185m	>10	3	1	9
Nickel	ppm	ASTM D5185m	>5	<1	0	0
Titanium	ppm	ASTM D5185m	>15	4	<1	12
Silver	ppm	ASTM D5185m	>2	0	0	0
Aluminum	ppm	ASTM D5185m	>75	● 63	26	● 153
Lead	ppm	ASTM D5185m	>10	<1	0	<1
Copper	ppm	ASTM D5185m	>75	<1	0	1
Tin	ppm	ASTM D5185m	>8	<1	0	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

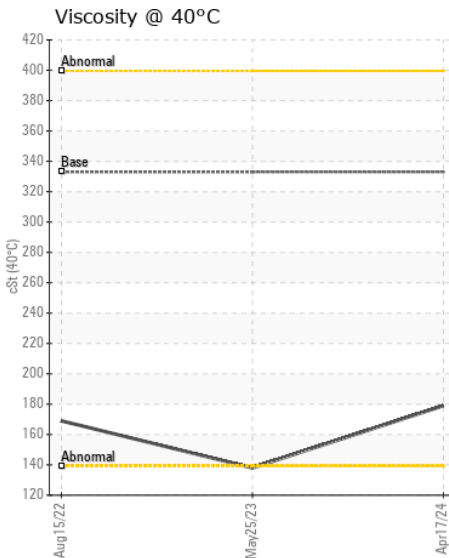
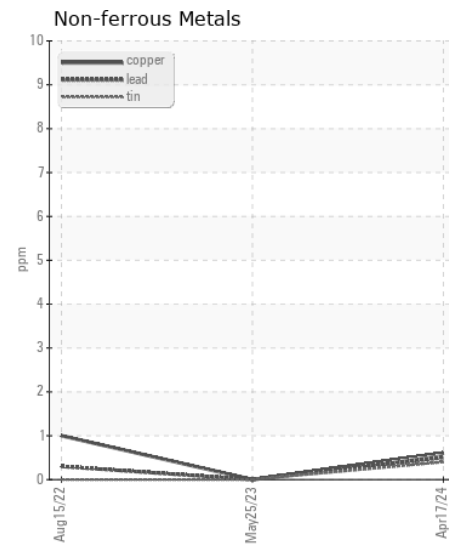
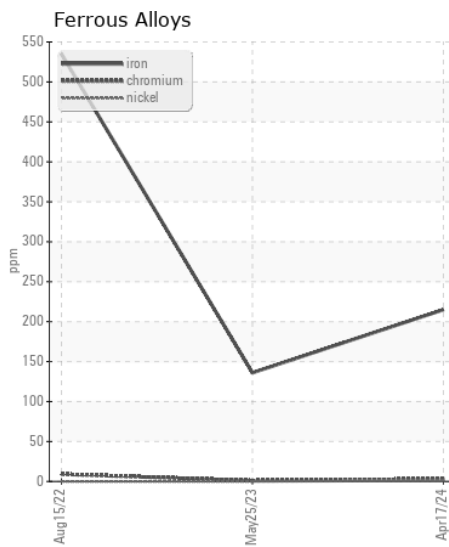
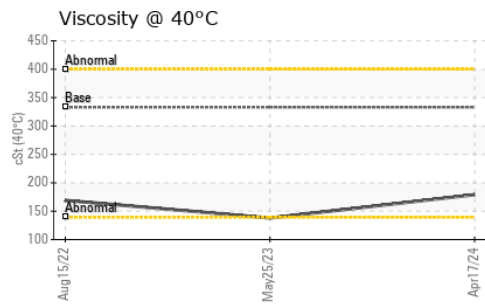
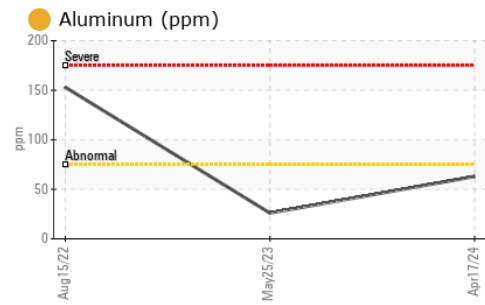
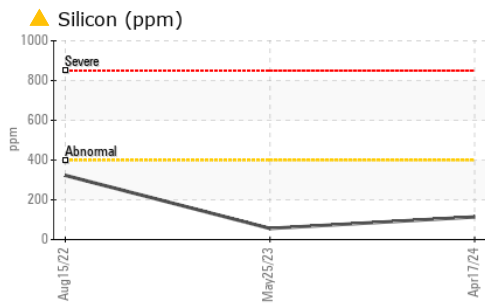
Elemental levels of silicon (Si) and aluminum (Al) indicate alumina-silicate (coarse dirt) ingress.

Silicon	ppm	ASTM D5185m	>400	▲ 114	56	▲ 323
Potassium	ppm	ASTM D5185m	>20	3	3	8
Water		WC Method	>0.2	NEG	NEG	NEG
Silt	scalar	*Visual	NONE	LIGHT	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

FLUID CONDITION

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

Sodium	ppm	ASTM D5185m		2	2	18
Boron	ppm	ASTM D5185m	111	35	12	14
Barium	ppm	ASTM D5185m	0.0	<1	0	6
Molybdenum	ppm	ASTM D5185m	0.9	<1	0	2
Manganese	ppm	ASTM D5185m	0.0	2	<1	5
Magnesium	ppm	ASTM D5185m	39	8	7	28
Calcium	ppm	ASTM D5185m	93	118	177	1555
Phosphorus	ppm	ASTM D5185m	920	663	436	789
Zinc	ppm	ASTM D5185m	104	59	74	779
Sulfur	ppm	ASTM D5185m	20179	28494	25056	14193
Visc @ 40°C	cSt	ASTM D445	333	179	138	169



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : ASC0007466
Lab Number : 06158050
Unique Number : 10993473
Test Package : CONST

Received : 23 Apr 2024
Tested : 24 Apr 2024
Diagnosed : 25 Apr 2024 - Don Baldrige

TRIANGLE GRADING AND PAVING INC
 1521 Huffman Mill Rd
 BURLINGTON, NC
 US 27216
 Contact: ADAM CORBETT
 wacorbett@trianglegradingpaving.com

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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