



ASCENDUM

OIL ANALYSIS REPORT



Area

Ascendum Machinery/250 Hour CSA

Machine Id

CATERPILLAR D5M 1657 (S/N 3DR00800)

Component

Rear Left Final Drive

Fluid

VOLVO PREMIUM GEAR OIL 85W-140 GL-5 (2 GAL)

WEAR

NORMAL

CONTAMINATION

NORMAL

FLUID CONDITION

ATTENTION

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		ASC0007339	VCP0007221	VCP0002294
Sample Date		Client Info		23 Apr 2024	06 Feb 2023	24 Jun 2022
Machine Age	hrs	Client Info		1000	750	0
Oil Age	hrs	Client Info		250	750	0
Filter Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		Not Changed	Changed	Not Changed
Filter Changed		Client Info		None	N/A	N/A
Sample Status				ATTENTION	NORMAL	NORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>800	187	110	131
Chromium	ppm	ASTM D5185m	>10	1	1	2
Nickel	ppm	ASTM D5185m	>5	0	<1	<1
Titanium	ppm	ASTM D5185m	>15	1	<1	<1
Silver	ppm	ASTM D5185m	>2	0	0	<1
Aluminum	ppm	ASTM D5185m	>75	15	6	12
Lead	ppm	ASTM D5185m	>10	0	0	<1
Copper	ppm	ASTM D5185m	>75	<1	<1	2
Tin	ppm	ASTM D5185m	>8	<1	<1	<1
Vanadium	ppm	ASTM D5185m		0	0	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

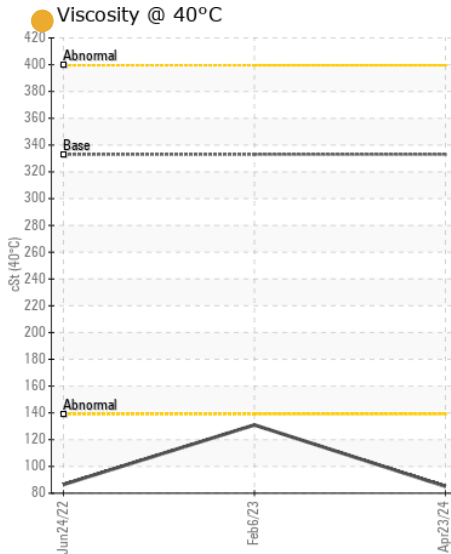
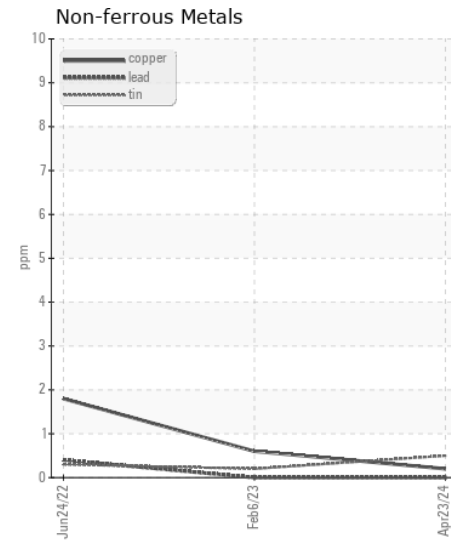
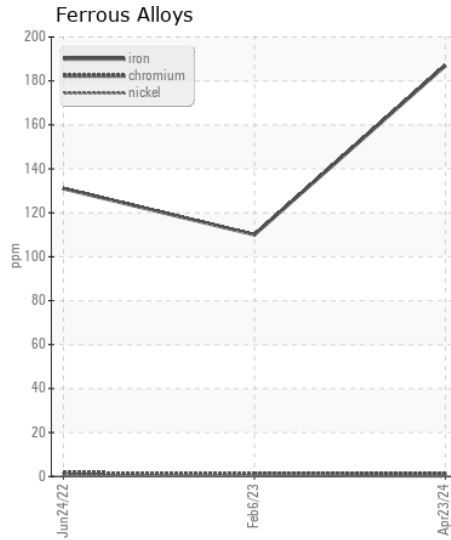
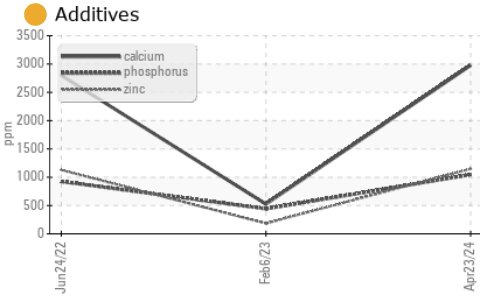
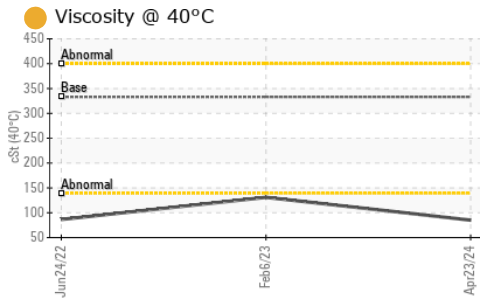
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>400	51	19	44
Potassium	ppm	ASTM D5185m	>20	<1	0	0
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 oil viscosity is lower than normal. This plus the additive levels indicates the addition of a different brand, or type of oil. Confirm oil type.

Sodium	ppm	ASTM D5185m		2	1	2
Boron	ppm	ASTM D5185m	111	14	16	19
Barium	ppm	ASTM D5185m	0.0	0	0	0
Molybdenum	ppm	ASTM D5185m	0.9	5	1	7
Manganese	ppm	ASTM D5185m	0.0	1	1	1
Magnesium	ppm	ASTM D5185m	39	108	15	104
Calcium	ppm	ASTM D5185m	93	2977	525	2798
Phosphorus	ppm	ASTM D5185m	920	1047	441	924
Zinc	ppm	ASTM D5185m	104	1147	183	1127
Sulfur	ppm	ASTM D5185m	20179	9348	22937	8183
Visc @ 40°C	cSt	ASTM D445	333	85.1	131	86.5



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : ASC0007339
Lab Number : 06160767
Unique Number : 10996190
Test Package : CONST

Received : 25 Apr 2024
Tested : 26 Apr 2024
Diagnosed : 29 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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