



ASCENDUM

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL



Area
Ascendum Machinery/250 Hour CSA
Machine Id
CATERPILLAR D5M 1145 (S/N 5ES00650)
Component
Rear Right Final Drive
Fluid
VOLVO PREMIUM GEAR OIL 85W-140 GL-5 (--- GAL)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		ASC0007030	VCP0007313	VCP0002846
Sample Date		Client Info		17 Apr 2024	27 Feb 2023	02 Jan 2023
Machine Age	hrs	Client Info		4070	270	4070
Oil Age	hrs	Client Info		4070	0	4070
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	NORMAL	NORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>800	534	516	599
Chromium	ppm	ASTM D5185m	>10	4	4	5
Nickel	ppm	ASTM D5185m	>5	<1	<1	<1
Titanium	ppm	ASTM D5185m	>15	2	2	2
Silver	ppm	ASTM D5185m	>2	0	<1	0
Aluminum	ppm	ASTM D5185m	>75	26	27	30
Lead	ppm	ASTM D5185m	>10	3	2	3
Copper	ppm	ASTM D5185m	>75	2	1	1
Tin	ppm	ASTM D5185m	>8	<1	0	<1
Vanadium	ppm	ASTM D5185m		<1	<1	0
White Metal	scalar	*Visual	NONE	NONE	MODER	MODER
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

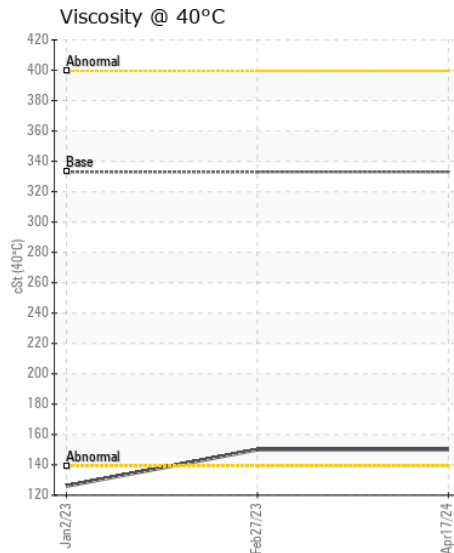
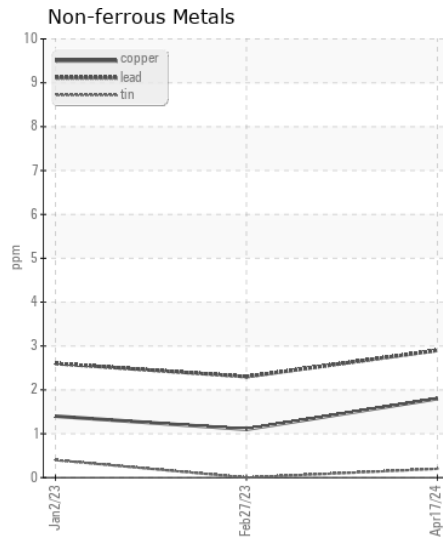
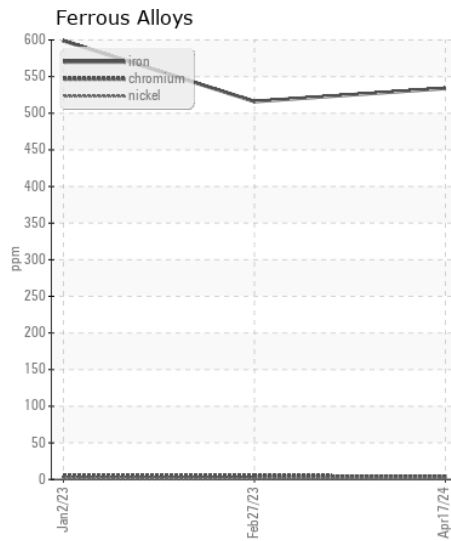
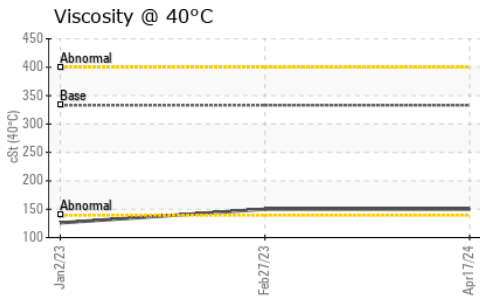
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>400	76	66	72
Potassium	ppm	ASTM D5185m	>20	4	2	2
Water		WC Method	>0.2	NEG	NEG	NEG
Silt	scalar	*Visual	NONE	NONE	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		5	6	6
Boron	ppm	ASTM D5185m	111	71	90	54
Barium	ppm	ASTM D5185m	0.0	<1	0	0
Molybdenum	ppm	ASTM D5185m	0.9	1	<1	<1
Manganese	ppm	ASTM D5185m	0.0	5	4	5
Magnesium	ppm	ASTM D5185m	39	13	12	15
Calcium	ppm	ASTM D5185m	93	135	85	77
Phosphorus	ppm	ASTM D5185m	920	1031	911	803
Zinc	ppm	ASTM D5185m	104	94	66	73
Sulfur	ppm	ASTM D5185m	20179	21646	18751	20392
Visc @ 40°C	cSt	ASTM D445	333	150	150	126



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : ASC0007030
Lab Number : 06158053
Unique Number : 10993476
Test Package : CONST

Received : 23 Apr 2024
Tested : 24 Apr 2024
Diagnosed : 24 Apr 2024 - Wes Davis

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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