



# ASCENDUM

## OIL ANALYSIS REPORT



Area

**Ascendum Machinery/250 Hour CSA**

Machine Id

**CATERPILLAR 12H 416 (S/N 61M12409)**

Component

**Left Final Drive**

Fluid

**VOLVO PREMIUM GEAR OIL 85W-140 GL-5 (--- 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		<b>ASC0009685</b>	ASC0001024	VCP0004767
Sample Date		Client Info		<b>12 Jul 2024</b>	21 Aug 2023	29 Sep 2022
Machine Age	hrs	Client Info		<b>13493</b>	13493	13345
Oil Age	hrs	Client Info		<b>13493</b>	13493	0
Filter Age	hrs	Client Info		<b>0</b>	0	0
Oil Changed		Client Info		<b>Not Changed</b>	Not Changed	Not Changed
Filter Changed		Client Info		<b>Not Changed</b>	N/A	Not Changed
Sample Status				<b>NORMAL</b>	SEVERE	SEVERE

### WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>800	<b>350</b>	566	423
Chromium	ppm	ASTM D5185m	>10	<b>0</b>	<1	<1
Nickel	ppm	ASTM D5185m	>5	<b>0</b>	<1	0
Titanium	ppm	ASTM D5185m	>15	<b>&lt;1</b>	<1	<1
Silver	ppm	ASTM D5185m	>2	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m	>75	<b>2</b>	6	4
Lead	ppm	ASTM D5185m	>10	<b>0</b>	0	<1
Copper	ppm	ASTM D5185m	>75	<b>8</b>	1	4
Tin	ppm	ASTM D5185m	>8	<b>0</b>	1	0
Vanadium	ppm	ASTM D5185m		<b>0</b>	<1	<1
White Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE

### CONTAMINATION

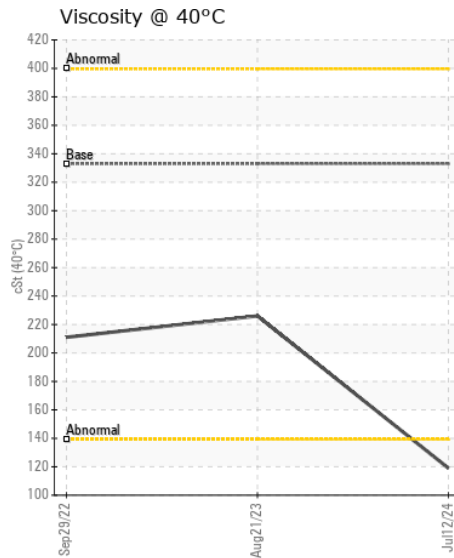
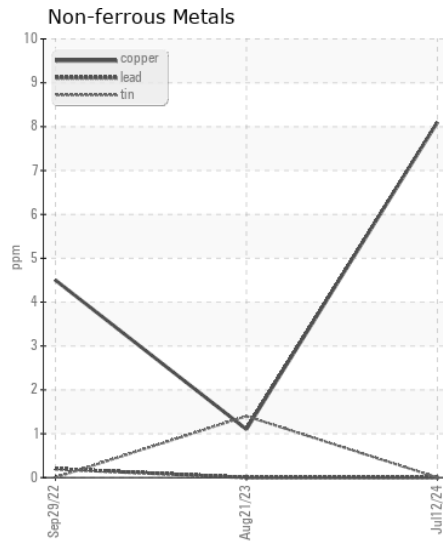
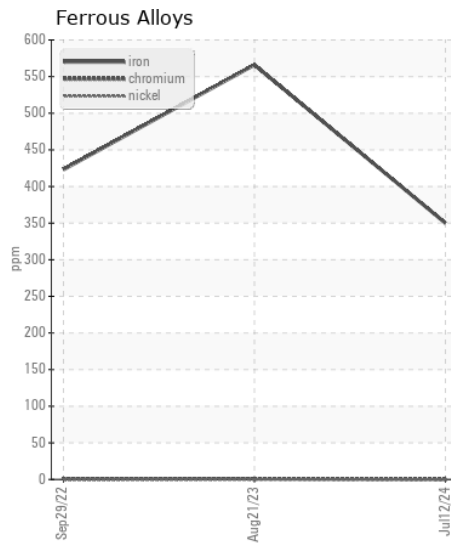
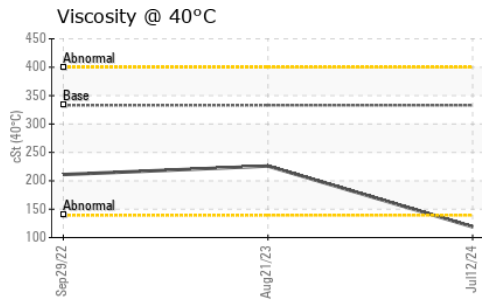
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>400	<b>7</b>	25	19
Potassium	ppm	ASTM D5185m	>20	<b>&lt;1</b>	8	7
Water		WC Method	>0.2	<b>NEG</b>	NEG	NEG
Silt	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Debris	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Appearance	scalar	*Visual	NORML	<b>NORML</b>	● MILKY	● MILKY
Odor	scalar	*Visual	NORML	<b>NORML</b>	NORML	NORML
Emulsified Water	scalar	*Visual	>0.2	<b>NEG</b>	▲ 0.2%	▲ 0.2%

### FLUID CONDITION

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

Sodium	ppm	ASTM D5185m		<b>3</b>	3	2
Boron	ppm	ASTM D5185m	111	<b>8</b>	13	11
Barium	ppm	ASTM D5185m	0.0	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m	0.9	<b>0</b>	<1	<1
Manganese	ppm	ASTM D5185m	0.0	<b>2</b>	5	4
Magnesium	ppm	ASTM D5185m	39	<b>&lt;1</b>	22	14
Calcium	ppm	ASTM D5185m	93	<b>2806</b>	2910	3106
Phosphorus	ppm	ASTM D5185m	920	<b>962</b>	1056	1109
Zinc	ppm	ASTM D5185m	104	<b>1101</b>	1342	1397
Sulfur	ppm	ASTM D5185m	20179	<b>11657</b>	16855	17482
Visc @ 40°C	cSt	ASTM D445	333	<b>119</b>	226	211



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : ASC0009685  
**Lab Number** : 06236595  
**Unique Number** : 11125429  
**Test Package** : CONST

**Received** : 15 Jul 2024  
**Tested** : 16 Jul 2024  
**Diagnosed** : 17 Jul 2024 - Sean Felton

**TRIANGLE GRADING AND PAVING INC**  
 1521 Huffman Mill Rd  
 BURLINGTON, NC  
 US 27216

Contact: KAREN HILLIARD  
 khilliard@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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