



# ASCENDUM

## OIL ANALYSIS REPORT



Area  
**Ascendum Machinery/250 Hour CSA**  
Machine Id  
**CATERPILLAR D5G 1028 (S/N WGB01909)**  
Component  
**Hydraulic System**  
Fluid  
**VOLVO SUPER HYDRAULIC OIL 46 (--- GAL)**

WEAR	<b>NORMAL</b>
CONTAMINATION	<b>NORMAL</b>
FLUID CONDITION	<b>NORMAL</b>

### RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>ASC0007317</b>	VCP0005775	VCP0001774
Sample Date		Client Info		<b>06 May 2024</b>	22 May 2023	15 Jun 2022
Machine Age	hrs	Client Info		<b>1800</b>	1750	25
Oil Age	hrs	Client Info		<b>75</b>	1725	25
Filter Age	hrs	Client Info		<b>0</b>	0	0
Oil Changed		Client Info		<b>Not Changed</b>	Not Changed	Changed
Filter Changed		Client Info		<b>Changed</b>	Not Changed	Changed
Sample Status				<b>NORMAL</b>	NORMAL	ABNORMAL

### WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>20	<b>&lt;1</b>	2	4
Chromium	ppm	ASTM D5185m	>10	<b>0</b>	<1	0
Nickel	ppm	ASTM D5185m	>10	<b>0</b>	<1	0
Titanium	ppm	ASTM D5185m		<b>0</b>	<1	<1
Silver	ppm	ASTM D5185m		<b>0</b>	<1	<1
Aluminum	ppm	ASTM D5185m	>10	<b>&lt;1</b>	0	2
Lead	ppm	ASTM D5185m	>10	<b>0</b>	1	<1
Copper	ppm	ASTM D5185m	>75	<b>5</b>	2	5
Tin	ppm	ASTM D5185m	>10	<b>&lt;1</b>	<1	0
Vanadium	ppm	ASTM D5185m		<b>0</b>	0	0
White Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE

### CONTAMINATION

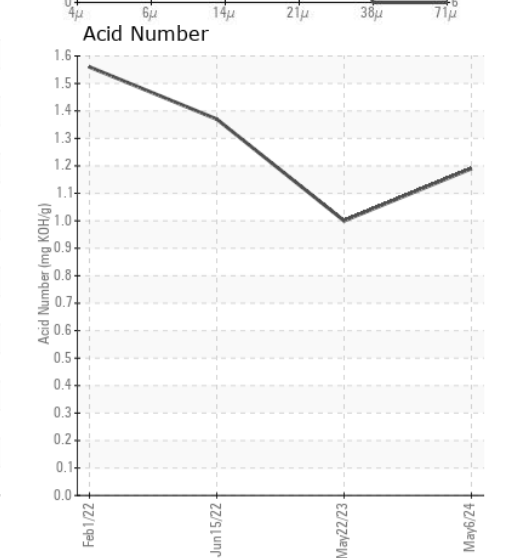
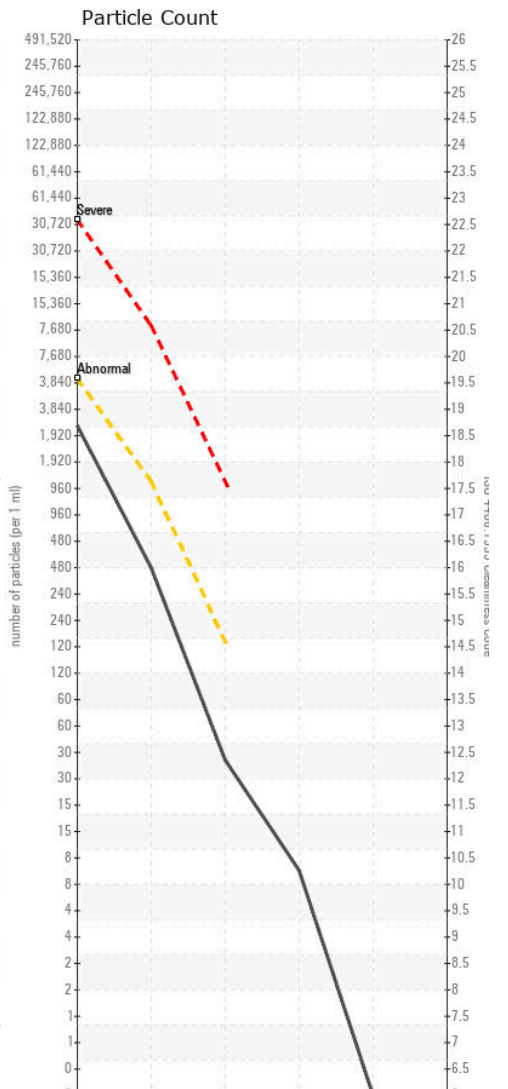
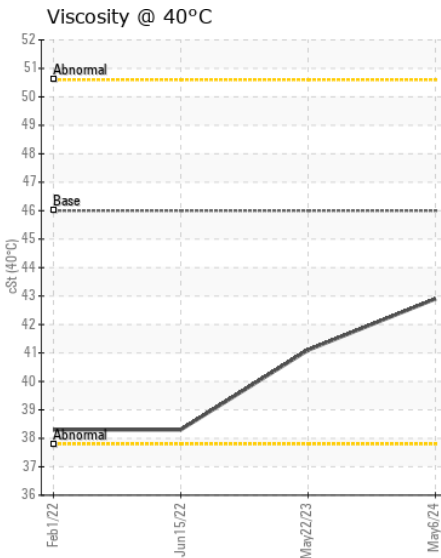
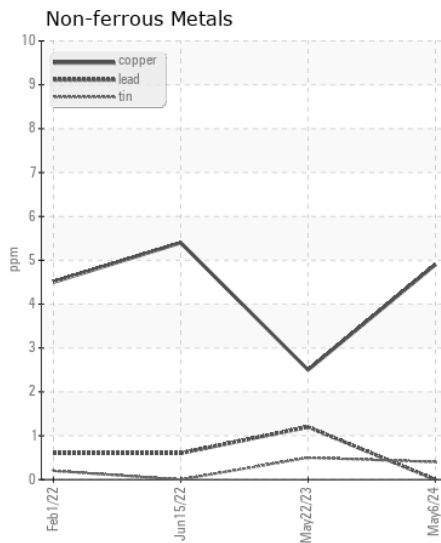
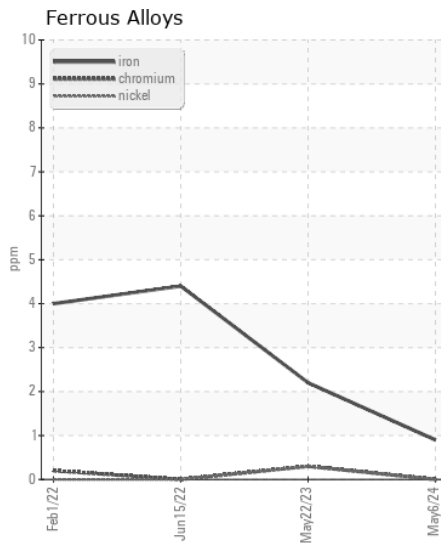
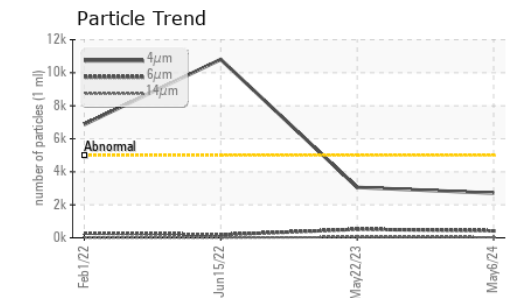
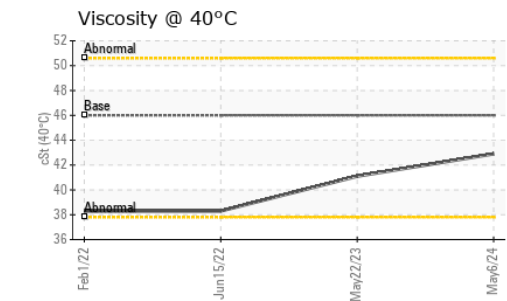
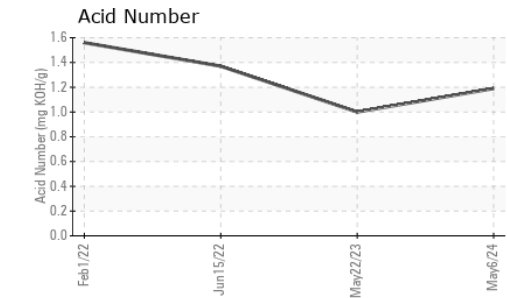
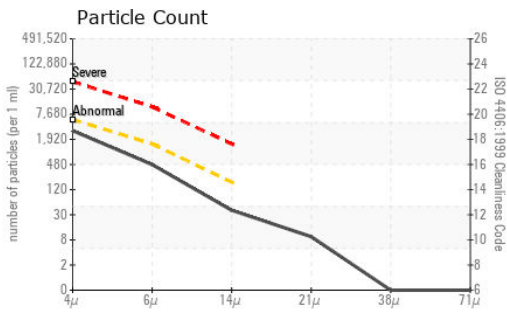
The amount and size of particulates present in the system are acceptable. There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>20	<b>12</b>	8	6
Potassium	ppm	ASTM D5185m	>20	<b>0</b>	2	0
Water		WC Method	>0.1	<b>NEG</b>	NEG	NEG
Particles >4µm		ASTM D7647	>5000	<b>2705</b>	3055	▲ 10805
Particles >6µm		ASTM D7647	>1300	<b>420</b>	515	186
Particles >14µm		ASTM D7647	>160	<b>34</b>	43	14
Particles >21µm		ASTM D7647	>40	<b>8</b>	11	5
Particles >38µm		ASTM D7647	>10	<b>0</b>	1	0
Particles >71µm		ASTM D7647	>3	<b>0</b>	0	0
Oil Cleanliness		ISO 4406 (c)	>19/17/14	<b>19/16/12</b>	19/16/13	▲ 21/15/11
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>	NORML	NORML
Odor	scalar	*Visual	NORML	<b>NORML</b>	NORML	NORML
Emulsified Water	scalar	*Visual	>0.1	<b>NEG</b>	NEG	NEG

### FLUID CONDITION

The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

Sodium	ppm	ASTM D5185m		<b>3</b>	<1	<1
Boron	ppm	ASTM D5185m	14	<b>6</b>	2	10
Barium	ppm	ASTM D5185m	0.0	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m	0.0	<b>3</b>	2	6
Manganese	ppm	ASTM D5185m	0.0	<b>1</b>	<1	<1
Magnesium	ppm	ASTM D5185m	2.6	<b>21</b>	126	436
Calcium	ppm	ASTM D5185m	49	<b>3076</b>	2277	1614
Phosphorus	ppm	ASTM D5185m	354	<b>958</b>	710	895
Zinc	ppm	ASTM D5185m	419	<b>1143</b>	908	1084
Sulfur	ppm	ASTM D5185m	3719	<b>4226</b>	2942	3075
Acid Number (AN)	mg KOH/g	ASTM D8045		<b>1.19</b>	1.00	1.37
Visc @ 40°C	cSt	ASTM D445	46	<b>42.9</b>	41.1	38.3



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : ASC0007317  
**Lab Number** : 06177058  
**Unique Number** : 11023111  
**Test Package** : CONST

**Received** : 13 May 2024  
**Tested** : 14 May 2024  
**Diagnosed** : 14 May 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)

F: (336)584-0145