



ASCENDUM

OIL ANALYSIS REPORT

WEAR **NORMAL**

CONTAMINATION **ABNORMAL**

FLUID CONDITION **NORMAL**



Area

Ascendum Machinery/250 Hour CSA

Machine Id

CATERPILLAR D6E 512 (S/N 2MJ01933)

Component

Hydraulic System

Fluid

VOLVO SUPER HYDRAULIC OIL 46 (--- GAL)

RECOMMENDATION

No corrective action is recommended at this time. Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		ASC0007823	ASC0001244	VCP0002195
Sample Date		Client Info		03 Jul 2024	22 Aug 2023	05 Oct 2022
Machine Age	hrs	Client Info		15323	15323	15323
Oil Age	hrs	Client Info		15323	15323	15323
Filter Age	hrs	Client Info		0	0	15323
Oil Changed		Client Info		Not Chngd	Not Chngd	Not Chngd
Filter Changed		Client Info		Not Chngd	N/A	Not Chngd
Sample Status				ABNORMAL	ABNORMAL	ABNORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>20	3	5	4
Chromium	ppm	ASTM D5185m	>10	0	0	<1
Nickel	ppm	ASTM D5185m	>10	0	0	0
Titanium	ppm	ASTM D5185m		<1	<1	<1
Silver	ppm	ASTM D5185m		<1	0	<1
Aluminum	ppm	ASTM D5185m	>10	2	0	3
Lead	ppm	ASTM D5185m	>10	0	<1	1
Copper	ppm	ASTM D5185m	>75	1	4	4
Tin	ppm	ASTM D5185m	>10	0	0	<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

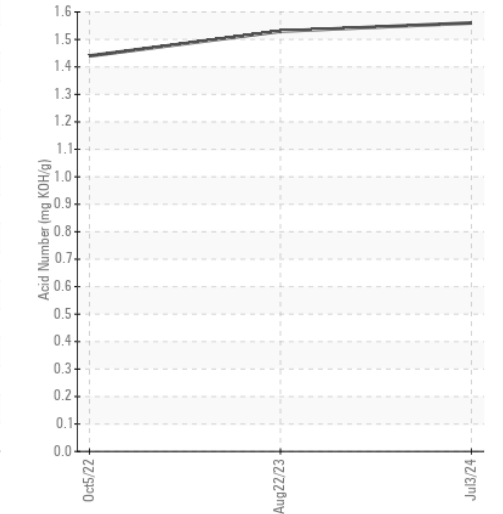
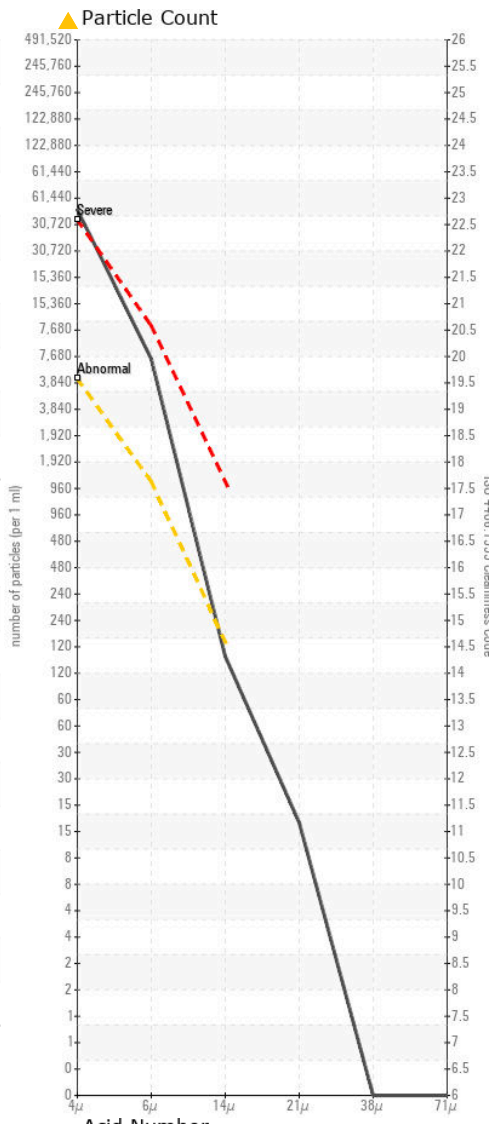
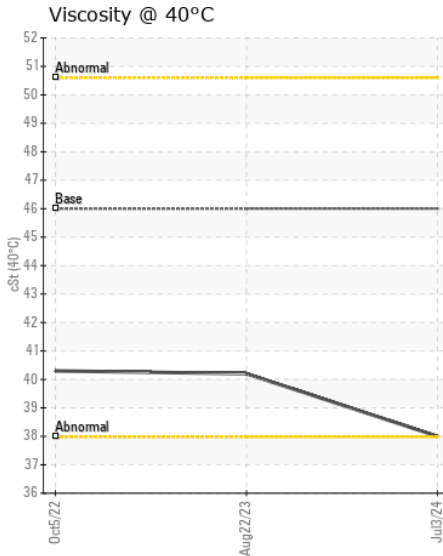
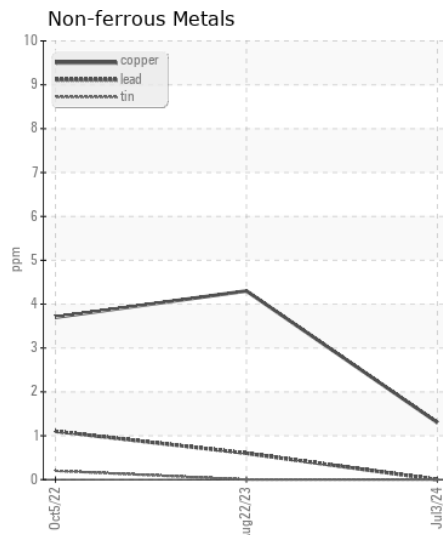
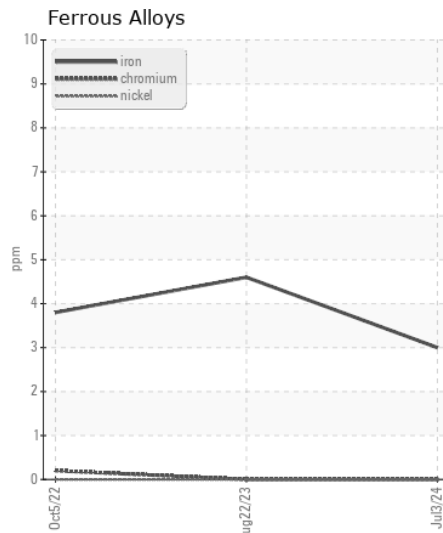
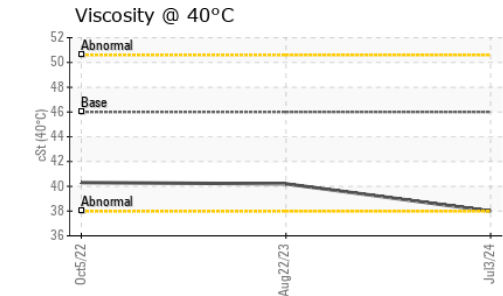
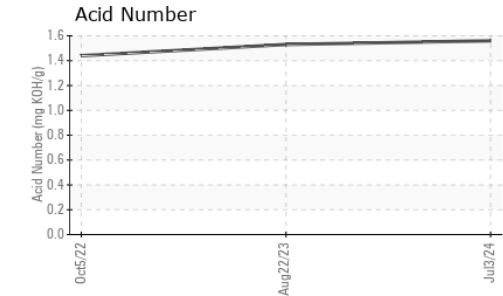
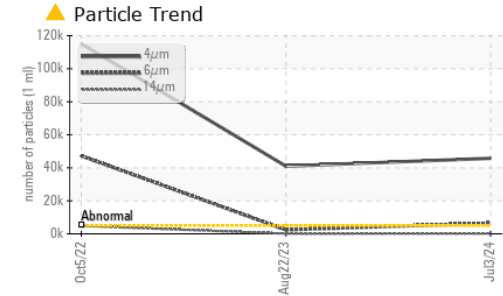
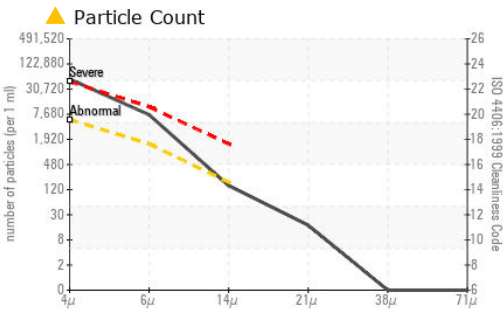
There is a high amount of silt (particulates < 14 microns in size) present in the oil.

Silicon	ppm	ASTM D5185m	>20	10	8	8
Potassium	ppm	ASTM D5185m	>20	4	2	0
Water		WC Method	>0.1	NEG	NEG	NEG
Particles >4µm		ASTM D7647	>5000	▲ 45760	▲ 40972	▲ 115154
Particles >6µm		ASTM D7647	>1300	▲ 6478	● 2368	▲ 47254
Particles >14µm		ASTM D7647	>160	132	71	▲ 4794
Particles >21µm		ASTM D7647	>40	15	18	▲ 585
Particles >38µm		ASTM D7647	>10	0	1	▲ 17
Particles >71µm		ASTM D7647	>3	0	0	0
Oil Cleanliness		ISO 4406 (c)	>19/17/14	▲ 23/20/14	▲ 23/18/13	▲ 24/23/19
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE	LIGHT
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	>0.1	NEG	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		2	0	0
Boron	ppm	ASTM D5185m	14	6	3	6
Barium	ppm	ASTM D5185m	0.0	0	2	0
Molybdenum	ppm	ASTM D5185m	0.0	<1	5	5
Manganese	ppm	ASTM D5185m	0.0	0	0	<1
Magnesium	ppm	ASTM D5185m	2.6	339	336	377
Calcium	ppm	ASTM D5185m	49	1787	1692	1715
Phosphorus	ppm	ASTM D5185m	354	986	936	919
Zinc	ppm	ASTM D5185m	419	1142	1081	1119
Sulfur	ppm	ASTM D5185m	3719	4075	3487	4122
Acid Number (AN)	mg KOH/g	ASTM D8045		1.56	1.53	1.44
Visc @ 40°C	cSt	ASTM D445	46	38.0	40.2	40.3



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : ASC0007823
Lab Number : 06233224
Unique Number : 11116717
Test Package : CONST

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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