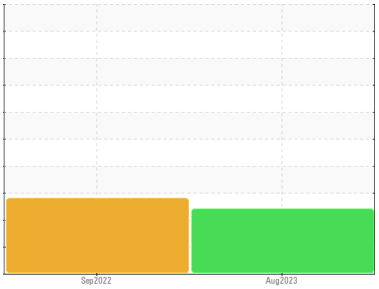
ASCENDUM

PROBLEM SUMMARY

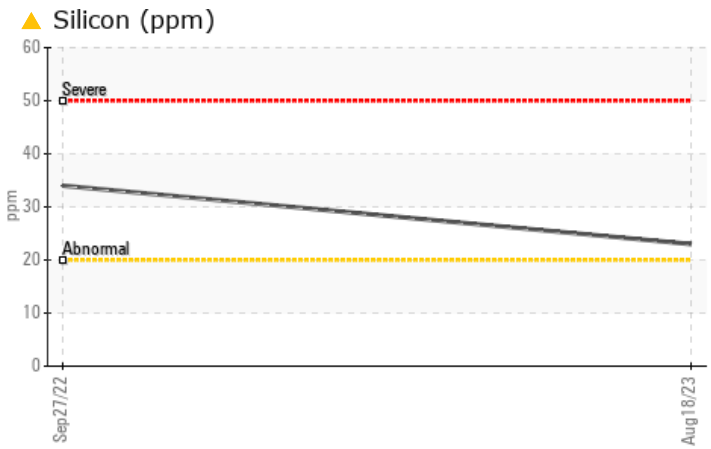
Area
Ascendum Machinery/250 Hour CSA
Machine Id
CATERPILLAR D6E 474 (S/N 2MJ01941)
Component
Hydraulic System
Fluid
VOLVO SUPER HYDRAULIC OIL 46 (--- GAL)

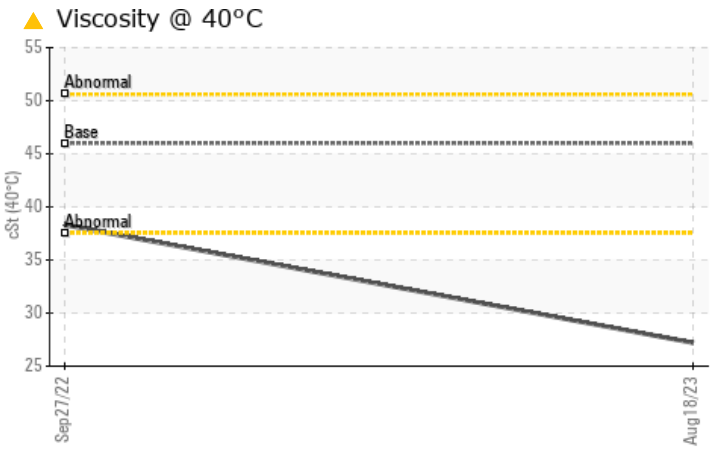
Sample Rating Trend



DIRT

COMPONENT CONDITION SUMMARY





RECOMMENDATION

We recommend you service the filters on this component. Resample at the next service interval to monitor. We were unable to perform a particle count due to a high concentration of particles present in this sample.

PROBLEMATIC TEST RESULTS

Sample Status				**ABNORMAL**	ABNORMAL	---
Silicon	ppm	ASTM D5185m	>20	▲ **23**	▲ 34	---
Debris	scalar	*Visual	NONE	▲ **MODER**	NONE	---
Visc @ 40°C	cSt	ASTM D445	46	▲ **27.2**	▲ 38.3	---

Customer Id: TRIBUR
Sample No.: ASC0001168
Lab Number: 05930819
Test Package: MOBCE

To manage this report scan the QR code

To discuss the diagnosis or test data:
Don Baldridge +1
don.b505@comcast.net

To change component or sample information:
Customer Service +1 1-800-237-1369
customerservice@wearcheck.com

RECOMMENDED ACTIONS

Action	Status	Date	Done By	Description
Change Filter	---	---	?	We recommend you service the filters on this component.
Alert	---	---	?	We were unable to perform a particle count due to a high concentration of particles present in this sample.

HISTORICAL DIAGNOSIS

27 Sep 2022 Diag: Jonathan Hester

DIRT

No corrective action is recommended at this time. Resample at the next service interval to monitor.All component wear rates are normal. There is a moderate amount of silt (particulates < 6 microns in size) present in the oil. Elemental level of silicon (Si) above normal indicating ingress of seal material. The oil viscosity is lower than normal. The AN level is acceptable for this fluid.

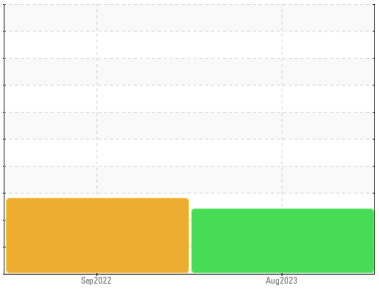
view report

ASCENDUM

OIL ANALYSIS REPORT

Area
Ascendum Machinery/250 Hour CSA
Machine Id
CATERPILLAR D6E 474 (S/N 2MJ01941)
Component
Hydraulic System
Fluid
VOLVO SUPER HYDRAULIC OIL 46 (--- GAL)

Sample Rating Trend



DIRT

DIAGNOSIS

▲ Recommendation
We recommend you service the filters on this component. Resample at the next service interval to monitor. We were unable to perform a particle count due to a high concentration of particles present in this sample.

Wear
All component wear rates are normal.

▲ Contamination
Moderate concentration of visible dirt/debris present in the oil. Elemental level of silicon (Si) above normal indicating ingress of seal material.

▲ Fluid Condition
The oil viscosity is lower than normal. Confirm oil type. The AN level is acceptable for this fluid.

SAMPLE INFORMATION		method	limit/base	current	history1	history2
Sample Number		Client Info		**ASC0001168**	VCP0004574	---
Sample Date		Client Info		**18 Aug 2023**	27 Sep 2022	---
Machine Age	hrs	Client Info		**5671**	5528	---
Oil Age	hrs	Client Info		**5671**	5528	---
Oil Changed		Client Info		**Not Changd**	Not Changd	---
Sample Status				**ABNORMAL**	ABNORMAL	---

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>20	**4**	4	---
Chromium	ppm	ASTM D5185m	>10	**<1**	<1	---
Nickel	ppm	ASTM D5185m	>10	**0**	0	---
Titanium	ppm	ASTM D5185m		**<1**	0	---
Silver	ppm	ASTM D5185m		**0**	0	---
Aluminum	ppm	ASTM D5185m	>10	**2**	0	---
Lead	ppm	ASTM D5185m	>10	**0**	<1	---
Copper	ppm	ASTM D5185m	>75	**2**	2	---
Tin	ppm	ASTM D5185m	>10	**0**	0	---
Vanadium	ppm	ASTM D5185m		**<1**	0	---
Cadmium	ppm	ASTM D5185m		**0**	0	---

ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	14	**1**	4	---
Barium	ppm	ASTM D5185m	0.0	**0**	0	---
Molybdenum	ppm	ASTM D5185m	0.0	**2**	3	---
Manganese	ppm	ASTM D5185m	0.0	**<1**	0	---
Magnesium	ppm	ASTM D5185m	2.6	**195**	324	---
Calcium	ppm	ASTM D5185m	49	**1669**	656	---
Phosphorus	ppm	ASTM D5185m	354	**671**	645	---
Zinc	ppm	ASTM D5185m	419	**796**	724	---
Sulfur	ppm	ASTM D5185m	3719	**2783**	2486	---

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>20	▲ **23**	▲ 34	---
Sodium	ppm	ASTM D5185m		**<1**	<1	---
Potassium	ppm	ASTM D5185m	>20	**0**	0	---

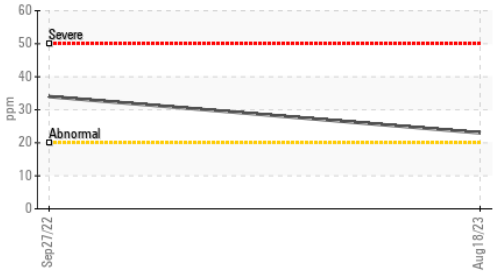
FLUID CLEANLINESS		method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647	>5000	**---**	▲ 9614	---
Particles >6µm		ASTM D7647	>1300	**---**	573	---
Particles >14µm		ASTM D7647	>160	**---**	28	---
Particles >21µm		ASTM D7647	>40	**---**	6	---
Particles >38µm		ASTM D7647	>10	**---**	0	---
Particles >71µm		ASTM D7647	>3	**---**	0	---
Oil Cleanliness		ISO 4406 (c)	>19/17/14	**---**	▲ 20/16/12	---

FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045		**1.09**	1.11	---

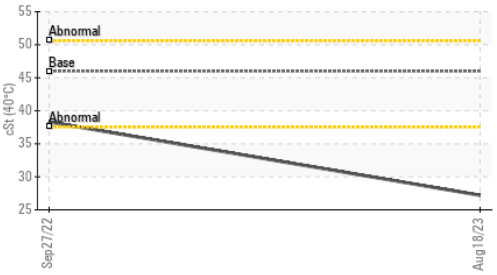
ASCENDUM

OIL ANALYSIS REPORT

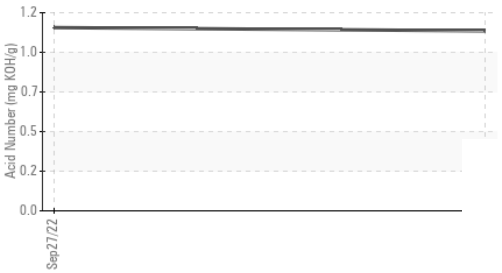
▲ Silicon (ppm)



▲ Viscosity @ 40°C

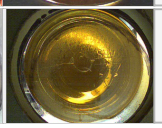


Acid Number



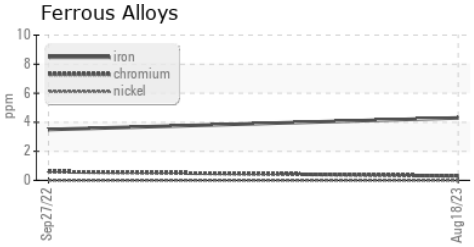
VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	**NONE**	LIGHT	---
Yellow Metal	scalar	*Visual	NONE	**NONE**	NONE	---
Precipitate	scalar	*Visual	NONE	**NONE**	NONE	---
Silt	scalar	*Visual	NONE	**NONE**	NONE	---
Debris	scalar	*Visual	NONE	▲ **MODER**	NONE	---
Sand/Dirt	scalar	*Visual	NONE	**NONE**	NONE	---
Appearance	scalar	*Visual	NORML	**NORML**	NORML	---
Odor	scalar	*Visual	NORML	**NORML**	NORML	---
Emulsified Water	scalar	*Visual	>0.1	**NEG**	NEG	---
Free Water	scalar	*Visual		**NEG**	NEG	---

FLUID PROPERTIES		method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	46	▲ **27.2**	▲ 38.3	---

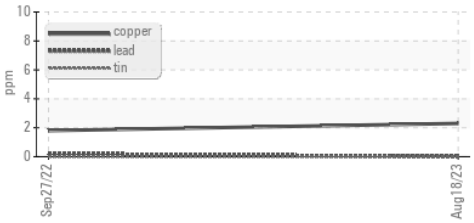
SAMPLE IMAGES	method	limit/base	current	history1	history2
Color					*no image*
Bottom					*no image*

GRAPHS

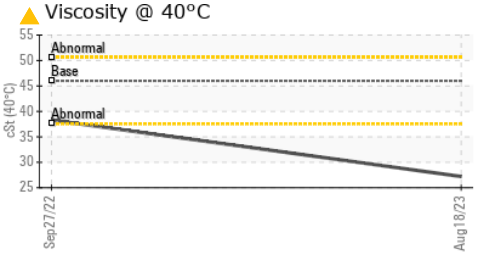
Ferrous Alloys



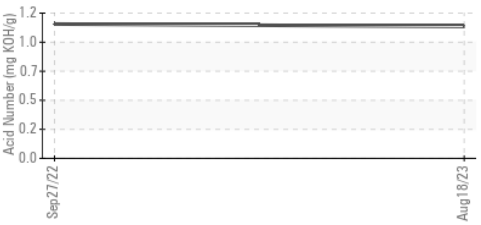
Non-ferrous Metals



▲ Viscosity @ 40°C



Acid Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : ASC0001168
Lab Number : 05930819
Unique Number : 10616090
Test Package : MOBCE

Received : 22 Aug 2023
Diagnosed : 23 Aug 2023
Diagnostician : Don Baldridge

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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Report Id: TRIBUR [WUSCAR] 05930819 (Generated: 08/24/2023 06:31:01) Rev: 1

Submitted By: SONNY POPE