



ASCENDUM

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	ATTENTION



Area
Ascendum Machinery/250 Hour CSA
Machine Id
KOMATSU WA250PZ-6 1312 (S/N 75540)
Component
Rear Differential
Fluid
VOLVO PREMIUM GEAR OIL 85W-140 GL-5 (5 GAL)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		ASC0000894	VCP0007317	VCP0001965
Sample Date		Client Info		22 Jan 2024	27 Feb 2023	20 Apr 2022
Machine Age	hrs	Client Info		11412	11192	10914
Oil Age	hrs	Client Info		11412	11192	10914
Filter Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		Not Changed	Not Changed	Not Changed
Filter Changed		Client Info		Not Changed	N/A	None
Sample Status				ATTENTION	ABNORMAL	NORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>500	4	73	32
Chromium	ppm	ASTM D5185m	>10	<1	1	<1
Nickel	ppm	ASTM D5185m	>10	0	<1	0
Titanium	ppm	ASTM D5185m		0	<1	<1
Silver	ppm	ASTM D5185m		0	<1	0
Aluminum	ppm	ASTM D5185m	>25	2	2	2
Lead	ppm	ASTM D5185m	>25	0	<1	<1
Copper	ppm	ASTM D5185m	>100	<1	2	<1
Tin	ppm	ASTM D5185m	>10	0	0	0
Vanadium	ppm	ASTM D5185m		0	<1	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

There is no indication of any contamination in the oil.

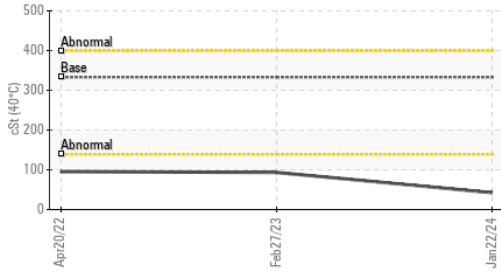
Silicon	ppm	ASTM D5185m	>75	14	10	7
Potassium	ppm	ASTM D5185m	>20	2	<1	2
Water		WC Method	>.2	NEG	NEG	NEG
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	▲ MODER	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>.2	NEG	NEG	NEG

FLUID CONDITION

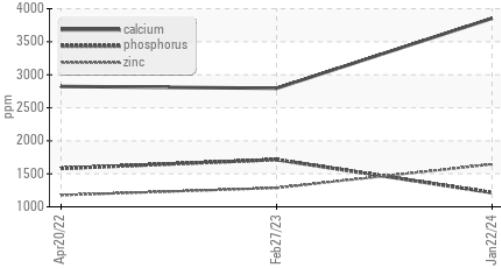
The oil viscosity is lower than normal. This plus the additive levels indicates the addition of a different brand, or type of oil. Confirm oil type.

Sodium	ppm	ASTM D5185m		0	2	0
Boron	ppm	ASTM D5185m	111	143	7	2
Barium	ppm	ASTM D5185m	0.0	0	23	0
Molybdenum	ppm	ASTM D5185m	0.9	0	<1	<1
Manganese	ppm	ASTM D5185m	0.0	0	1	<1
Magnesium	ppm	ASTM D5185m	39	16	15	10
Calcium	ppm	ASTM D5185m	93	▲ 3855	2795	2823
Phosphorus	ppm	ASTM D5185m	920	▲ 1214	1715	1581
Zinc	ppm	ASTM D5185m	104	▲ 1644	1286	1176
Sulfur	ppm	ASTM D5185m	20179	▲ 4857	6332	5149
Visc @ 40°C	cSt	ASTM D445	333	▲ 42.5	▲ 93.4	95.5

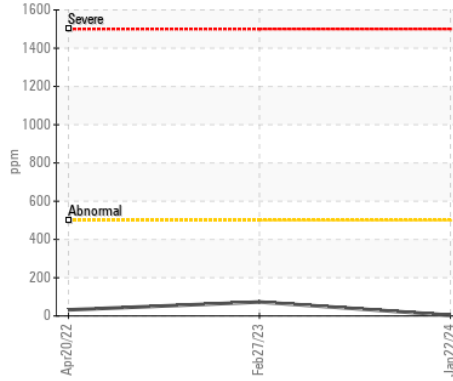
▲ Viscosity @ 40°C



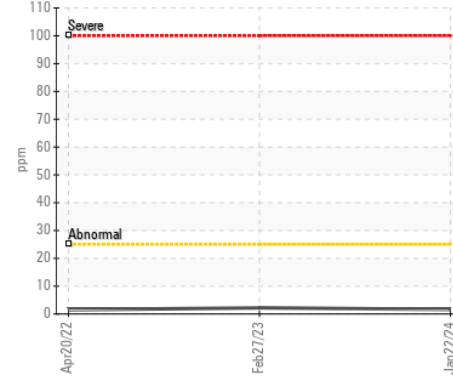
▲ Additives



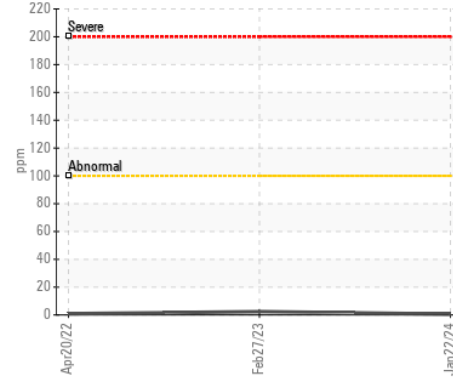
Iron (ppm)



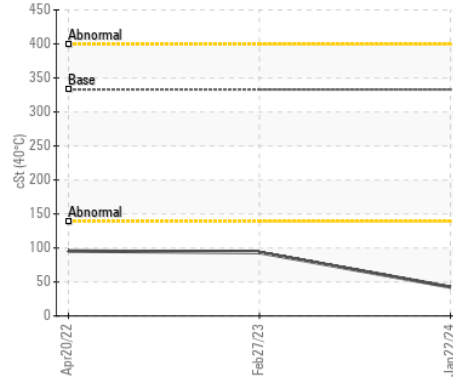
Aluminum (ppm)



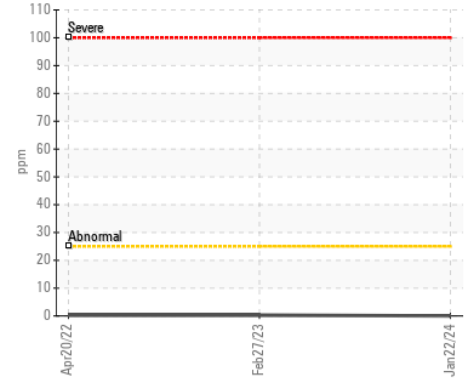
Copper (ppm)



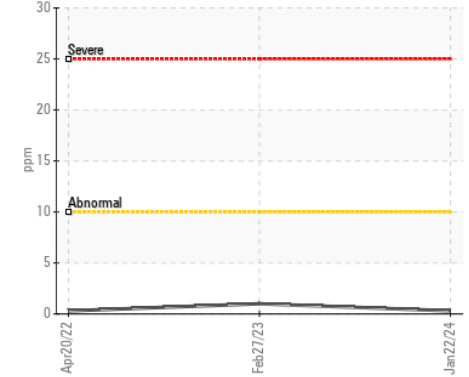
▲ Viscosity @ 40°C



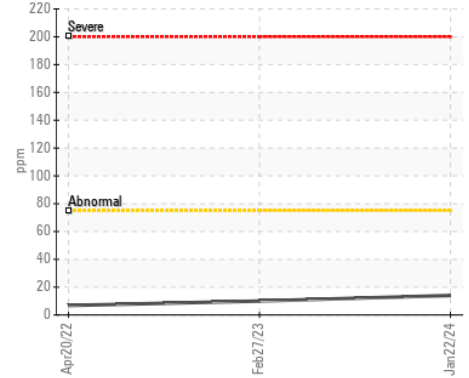
Lead (ppm)



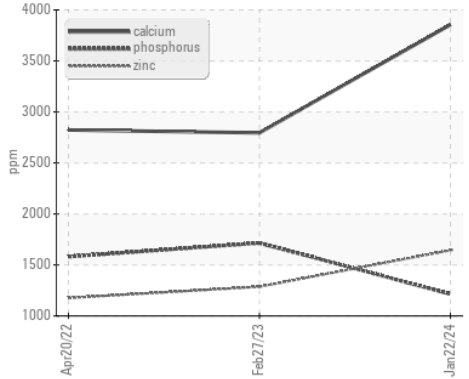
Chromium (ppm)



Silicon (ppm)



▲ Additives



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : ASC0000894 **Received** : 29 Jan 2024
Lab Number : 06073331 **Diagnosed** : 31 Jan 2024
Unique Number : 10850008 **Diagnostician** : Sean Felton
Test Package : MOBCE

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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)