



# ASCENDUM

## OIL ANALYSIS REPORT

WEAR	SEVERE
CONTAMINATION	SEVERE
FLUID CONDITION	NORMAL

Area

**Ascendum Machinery/250 Hour CSA**

Machine Id

**KUBOTA KX161-3S 1388 (S/N 30569)**

Component

**Rear Left Final Drive**

Fluid

**VOLVO PREMIUM GEAR OIL 85W-140 GL-5 (--- GAL)**

### RECOMMENDATION

We advise that you check all areas where dirt can enter the system. We recommend that you drain the oil from the component if this has not already been done. We advise that you inspect for the source(s) of wear. We recommend an early resample to monitor this condition.

### WEAR

The iron level is severe. Gear wear is indicated.

### CONTAMINATION

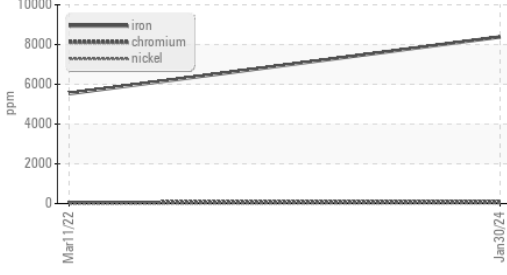
Elemental levels of silicon (Si) and aluminum (Al) indicate alumina-silicate (coarse dirt) ingress.

### FLUID CONDITION

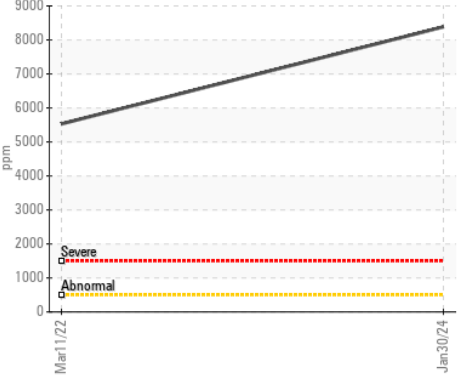
The oil is no longer serviceable as a result of the abnormal and/or severe wear.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		ASC0001612	VCP0000951	---
Sample Date		Client Info		30 Jan 2024	11 Mar 2022	---
Machine Age	hrs	Client Info		500	56	---
Oil Age	hrs	Client Info		500	56	---
Filter Age	hrs	Client Info		0	0	---
Oil Changed		Client Info		Not Changd	Not Changd	---
Filter Changed		Client Info		N/A	N/A	---
Sample Status				SEVERE	SEVERE	---
Iron	ppm	ASTM D5185m	>500	8385	5531	---
Chromium	ppm	ASTM D5185m	>10	84	52	---
Nickel	ppm	ASTM D5185m	>10	20	10	---
Titanium	ppm	ASTM D5185m		26	17	---
Silver	ppm	ASTM D5185m		0	0	---
Aluminum	ppm	ASTM D5185m	>25	362	224	---
Lead	ppm	ASTM D5185m	>25	1	1	---
Copper	ppm	ASTM D5185m	>50	19	12	---
Tin	ppm	ASTM D5185m	>10	0	2	---
Vanadium	ppm	ASTM D5185m		<1	<1	---
White Metal	scalar	*Visual	NONE	MODER	LIGHT	---
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	---
Silicon	ppm	ASTM D5185m	>75	1504	861	---
Potassium	ppm	ASTM D5185m	>20	94	71	---
Water		WC Method	>0.2	NEG	NEG	---
Silt	scalar	*Visual	NONE	NONE	NONE	---
Debris	scalar	*Visual	NONE	NONE	NONE	---
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	---
Appearance	scalar	*Visual	NORML	NORML	NORML	---
Odor	scalar	*Visual	NORML	NORML	NORML	---
Emulsified Water	scalar	*Visual	>0.2	NEG	NEG	---
Sodium	ppm	ASTM D5185m		64	42	---
Boron	ppm	ASTM D5185m	111	50	33	---
Barium	ppm	ASTM D5185m	0.0	3	0	---
Molybdenum	ppm	ASTM D5185m	0.9	10	8	---
Manganese	ppm	ASTM D5185m	0.0	58	35	---
Magnesium	ppm	ASTM D5185m	39	54	31	---
Calcium	ppm	ASTM D5185m	93	210	166	---
Phosphorus	ppm	ASTM D5185m	920	516	529	---
Zinc	ppm	ASTM D5185m	104	157	119	---
Sulfur	ppm	ASTM D5185m	20179	18086	13837	---
Visc @ 40°C	cSt	ASTM D445	333	189	158	---

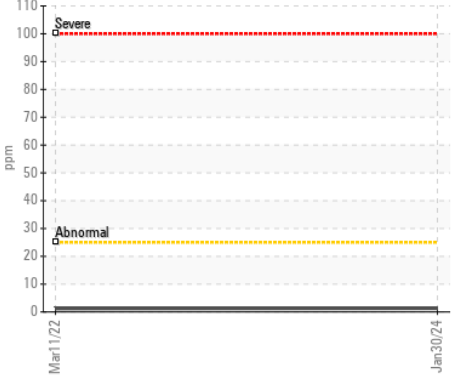
**Ferrous Alloys**



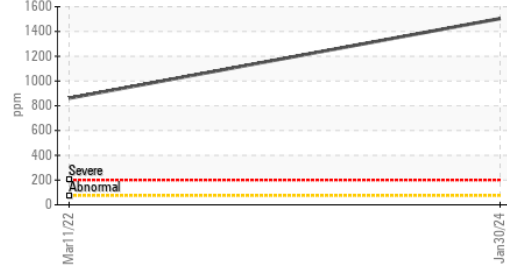
**Iron (ppm)**



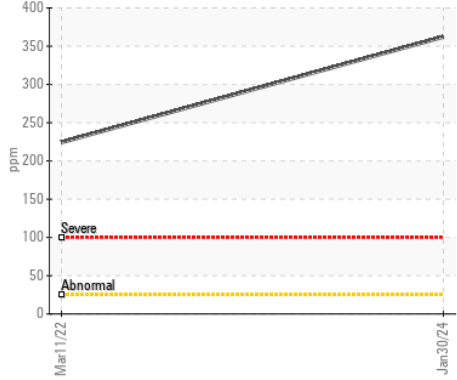
**Lead (ppm)**



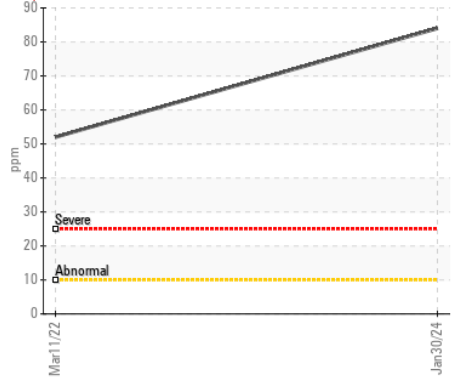
**Silicon (ppm)**



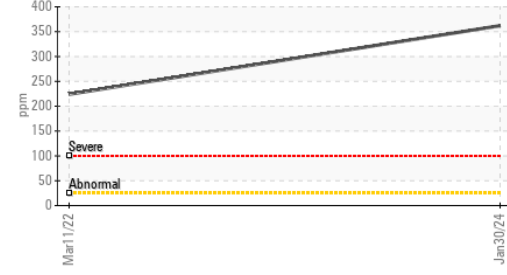
**Aluminum (ppm)**



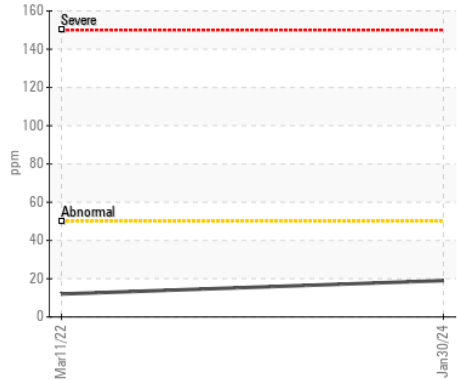
**Chromium (ppm)**



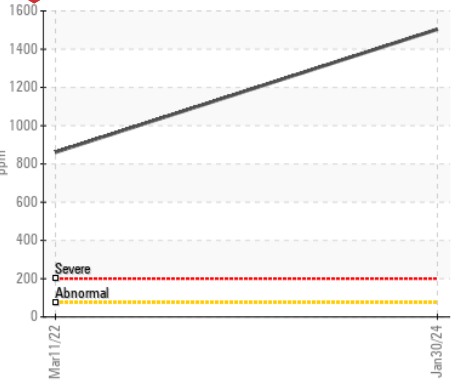
**Aluminum (ppm)**



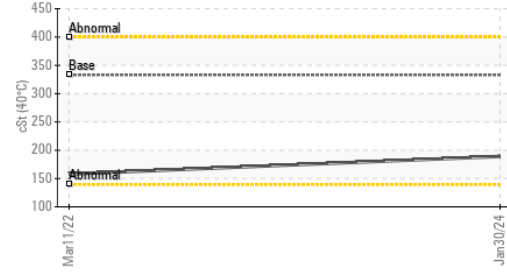
**Copper (ppm)**



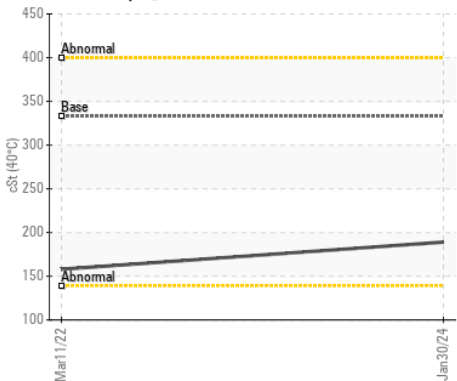
**Silicon (ppm)**



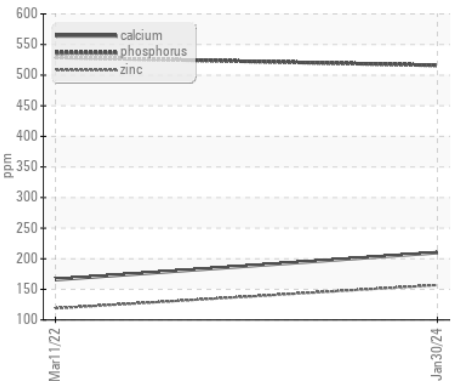
**Viscosity @ 40°C**



**Viscosity @ 40°C**



**Additives**



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : ASC0001612 **Received** : 31 Jan 2024  
**Lab Number** : 06076171 **Diagnosed** : 02 Feb 2024  
**Unique Number** : 10858262 **Diagnostician** : Sean Felton  
**Test Package** : MOBCE

**TRIANGLE GRADING AND PAVING INC**  
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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)