



# ASCENDUM

## OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Area

**Ascendum Machinery/250 Hour CSA**

Machine Id

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

Component

**Diesel Engine**

Fluid

**VOLVO VDS-4.5 Premium Motor Oil 15W40 (--- GAL)**

### RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		ASC0001610	VCP0000937	---
Sample Date		Client Info		30 Jan 2024	11 Mar 2022	---
Machine Age	hrs	Client Info		500	56	---
Oil Age	hrs	Client Info		444	56	---
Filter Age	hrs	Client Info		0	56	---
Oil Changed		Client Info		Changed	Changed	---
Filter Changed		Client Info		Changed	Changed	---
Sample Status				NORMAL	ABNORMAL	---

### WEAR

Metal levels are typical for a new component breaking in.

Iron	ppm	ASTM D5185m	>100	54	163	---
Chromium	ppm	ASTM D5185m	>20	2	6	---
Nickel	ppm	ASTM D5185m	>4	2	2	---
Titanium	ppm	ASTM D5185m		<1	<1	---
Silver	ppm	ASTM D5185m	>3	0	0	---
Aluminum	ppm	ASTM D5185m	>20	7	16	---
Lead	ppm	ASTM D5185m	>40	1	<1	---
Copper	ppm	ASTM D5185m	>330	2	18	---
Tin	ppm	ASTM D5185m	>15	<1	1	---
Vanadium	ppm	ASTM D5185m		<1	0	---
White Metal	scalar	*Visual	NONE	NONE	NONE	---
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	---

### CONTAMINATION

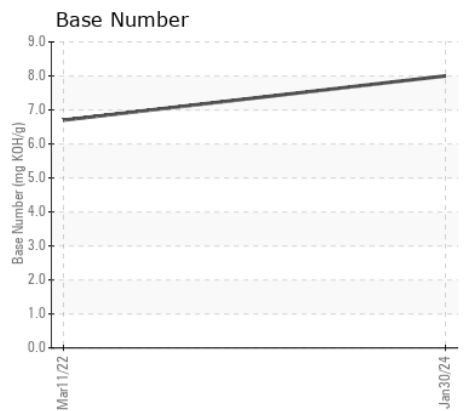
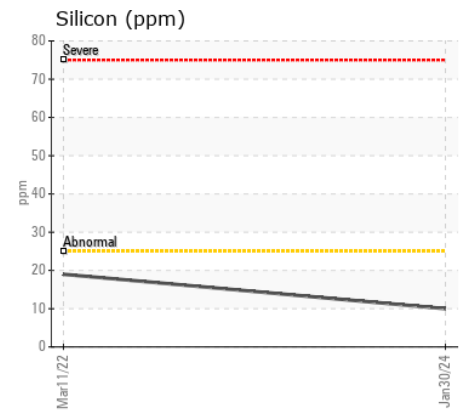
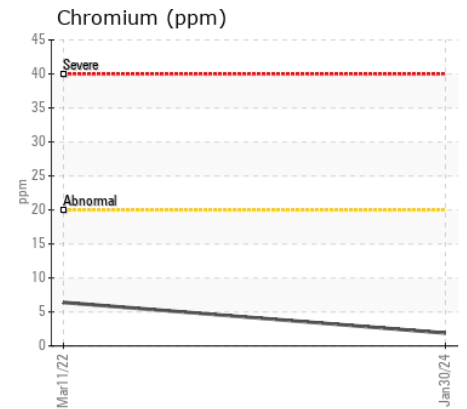
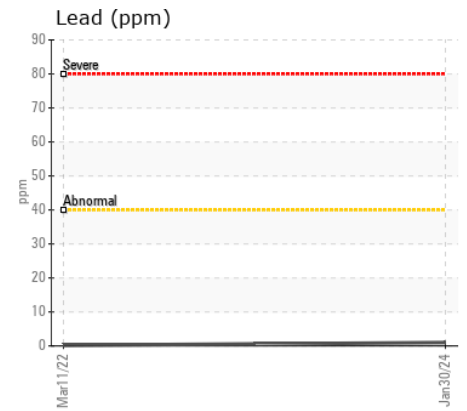
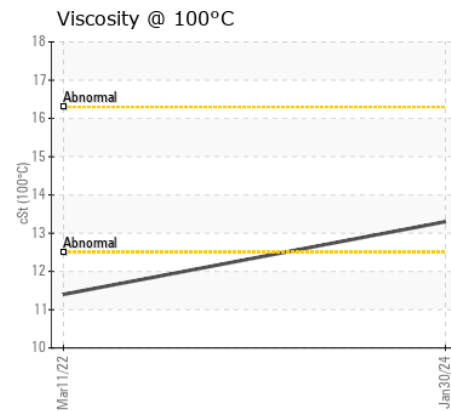
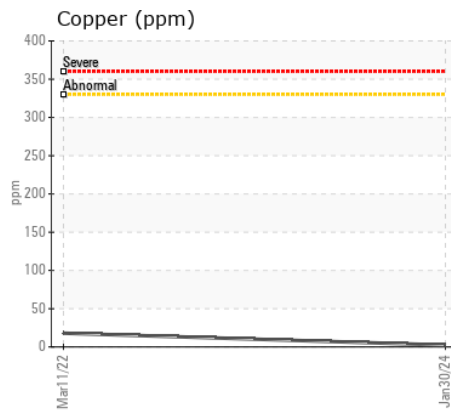
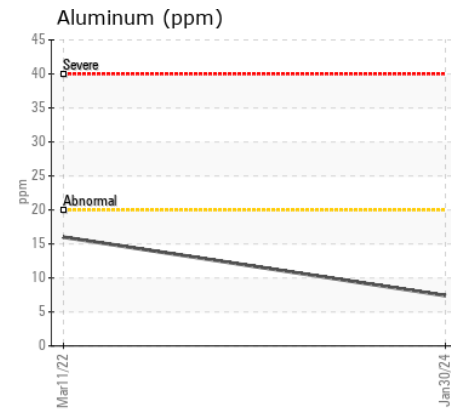
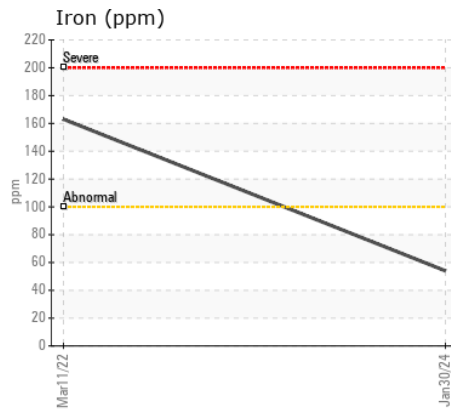
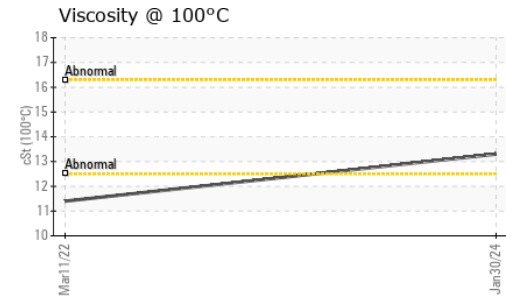
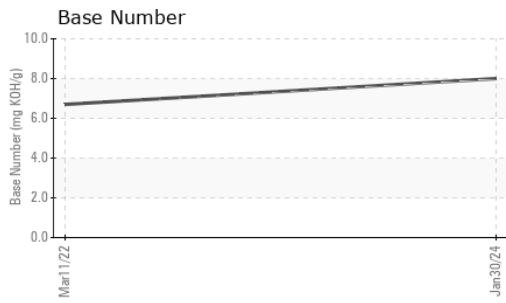
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>25	10	19	---
Potassium	ppm	ASTM D5185m	>20	4	4	---
Fuel		WC Method	>5	<1.0	0.9	---
Water		WC Method	>0.2	NEG	NEG	---
Glycol		WC Method		NEG	NEG	---
Soot %	%	*ASTM D7844	>3	0.4	0.8	---
Nitration	Abs/cm	*ASTM D7624	>20	10.0	12.4	---
Sulfation	Abs/.1mm	*ASTM D7415	>30	22.0	26.6	---
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	---

### FLUID CONDITION

The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

Sodium	ppm	ASTM D5185m		4	4	---
Boron	ppm	ASTM D5185m		33	17	---
Barium	ppm	ASTM D5185m		0	0	---
Molybdenum	ppm	ASTM D5185m		48	39	---
Manganese	ppm	ASTM D5185m		1	3	---
Magnesium	ppm	ASTM D5185m		747	899	---
Calcium	ppm	ASTM D5185m		1591	1817	---
Phosphorus	ppm	ASTM D5185m		1129	1146	---
Zinc	ppm	ASTM D5185m		1349	1521	---
Sulfur	ppm	ASTM D5185m		3115	3262	---
Oxidation	Abs/.1mm	*ASTM D7414	>25	19.2	20.8	---
Base Number (BN)	mg KOH/g	ASTM D2896		8.0	6.7	---
Visc @ 100°C	cSt	ASTM D445		13.3	▲ 11.4	---



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : ASC0001610 **Received** : 31 Jan 2024  
**Lab Number** : 06075527 **Diagnosed** : 01 Feb 2024  
**Unique Number** : 10857618 **Diagnostician** : Wes Davis  
**Test Package** : MOBCE ( Additional Tests: TBN )

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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