



# OIL ANALYSIS REPORT

WEAR	<b>NORMAL</b>
CONTAMINATION	<b>NORMAL</b>
FLUID CONDITION	<b>NORMAL</b>

Machine Id  
**KOBELCO SK350 3830064**  
Component  
**Diesel Engine**  
Fluid  
**DIESEL ENGINE OIL SAE 15W40 (--- GAL)**

## RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>WC0688043</b>	WC0585392	WC0485526
Sample Date		Client Info		<b>06 Apr 2023</b>	21 Jan 2022	20 Oct 2020
Machine Age	hrs	Client Info		<b>10218</b>	9777	8209
Oil Age	hrs	Client Info		<b>92</b>	728	84
Filter Age	hrs	Client Info		<b>92</b>	728	84
Oil Changed		Client Info		<b>Not Changd</b>	Changed	Not Changd
Filter Changed		Client Info		<b>Not Changd</b>	Changed	Not Changd
Sample Status				<b>NORMAL</b>	NORMAL	ATTENTION

## WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>100	<b>2</b>	8	4
Chromium	ppm	ASTM D5185m	>20	<b>&lt;1</b>	<1	<1
Nickel	ppm	ASTM D5185m	>4	<b>0</b>	<1	0
Titanium	ppm	ASTM D5185m		<b>0</b>	<1	2
Silver	ppm	ASTM D5185m	>3	<b>0</b>	2	<b>▲ 4</b>
Aluminum	ppm	ASTM D5185m	>20	<b>4</b>	16	9
Lead	ppm	ASTM D5185m	>40	<b>0</b>	<1	<1
Copper	ppm	ASTM D5185m	>330	<b>&lt;1</b>	1	<1
Tin	ppm	ASTM D5185m	>15	<b>0</b>	0	<1
Vanadium	ppm	ASTM D5185m		<b>0</b>	0	<1
White Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE

## CONTAMINATION

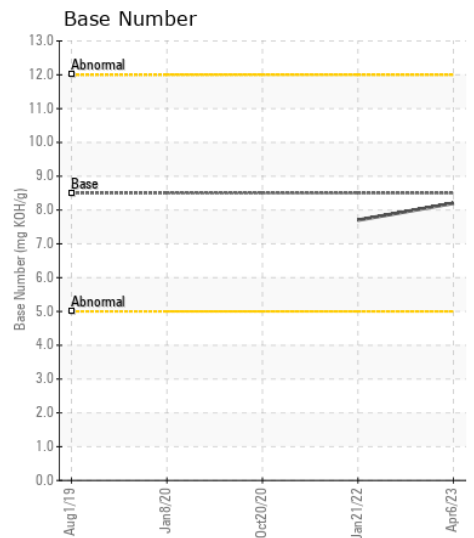
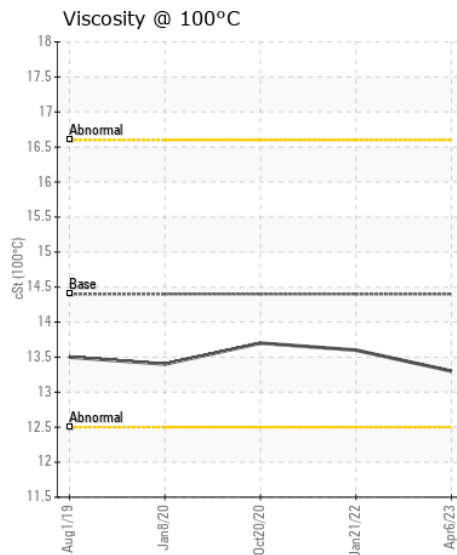
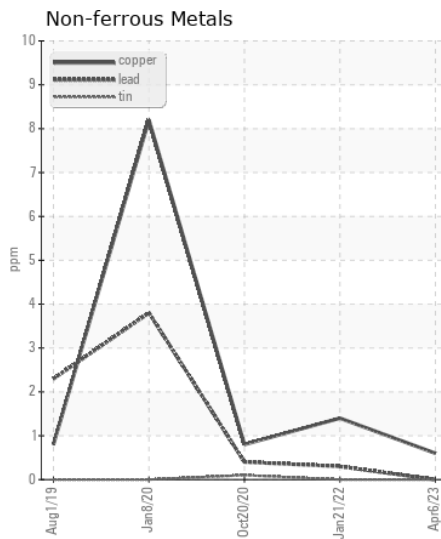
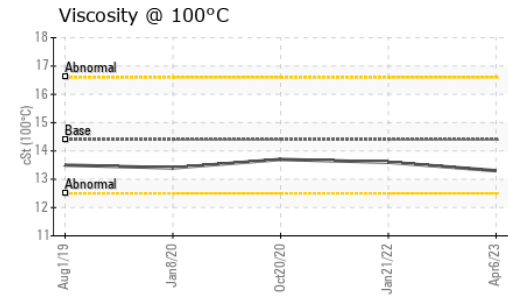
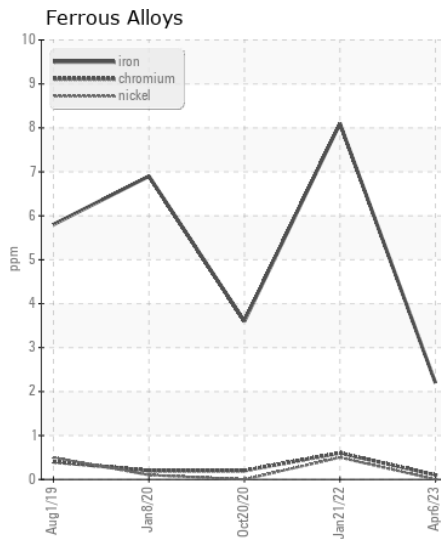
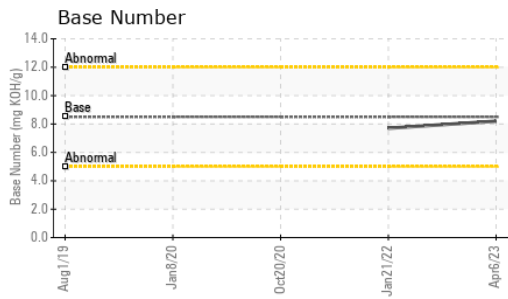
Fuel content negligible. There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>25	<b>4</b>	6	5
Potassium	ppm	ASTM D5185m	>20	<b>&lt;1</b>	3	2
Fuel	%	ASTM D3524	>5	<b>0.4</b>	<1.0	<1.0
Water		WC Method	>0.2	<b>NEG</b>	NEG	NEG
Glycol		WC Method		<b>NEG</b>	NEG	NEG
Soot %	%	*ASTM D7844	>3	<b>0.1</b>	0.3	0.1
Nitration	Abs/cm	*ASTM D7624	>20	<b>4.6</b>	7.2	5.2
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>20.5</b>	20.8	22.2
Silt	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Debris	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Appearance	scalar	*Visual	NORML	<b>NORML</b>	NORML	NORML
Odor	scalar	*Visual	NORML	<b>NORML</b>	NORML	NORML
Emulsified Water	scalar	*Visual	>0.2	<b>NEG</b>	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	>158	<b>1</b>	<1	<1
Boron	ppm	ASTM D5185m	250	<b>379</b>	275	400
Barium	ppm	ASTM D5185m	10	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m	100	<b>79</b>	101	104
Manganese	ppm	ASTM D5185m		<b>&lt;1</b>	<1	<1
Magnesium	ppm	ASTM D5185m	450	<b>445</b>	513	506
Calcium	ppm	ASTM D5185m	3000	<b>1538</b>	1649	1608
Phosphorus	ppm	ASTM D5185m	1150	<b>931</b>	779	797
Zinc	ppm	ASTM D5185m	1350	<b>1105</b>	909	873
Sulfur	ppm	ASTM D5185m	4250	<b>3765</b>	2512	2426
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>14.9</b>	16.0	15.6
Base Number (BN)	mg KOH/g	ASTM D2896	8.5	<b>8.2</b>	7.7	---
Visc @ 100°C	cSt	ASTM D445	14.4	<b>13.3</b>	13.6	13.7



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : WC0688043 **Received** : 21 Apr 2023  
**Lab Number** : 05826877 **Diagnosed** : 01 May 2023  
**Unique Number** : 10440370 **Diagnostician** : Doug Bogart  
**Test Package** : CONST ( Additional Tests: PERCENTFUEL, TBN )

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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)