



CHALMERS
Lubrication Service
(704) 660-LUBE(5823)

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id
KUBOTA SVL97-2 MTL-11
Component
Diesel Engine
Fluid
DIESEL ENGINE OIL SAE 40 (4 GAL)

RECOMMENDATION

Resample at the next service interval to monitor. The fluid was not specified, however, a fluid match indicates that this fluid is (GENERIC) DIESEL ENGINE OIL SAE 40. Please confirm.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		CL0005367	CL0004706	CL0004256
Sample Date		Client Info		18 Apr 2024	12 Sep 2023	07 May 2023
Machine Age	hrs	Client Info		1212	965	695
Oil Age	hrs	Client Info		247	0	0
Filter Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		Changed	Changed	Changed
Filter Changed		Client Info		Changed	Changed	Changed
Sample Status				NORMAL	NORMAL	NORMAL

WEAR

Metal levels are typical for a new component breaking in.

Iron	ppm	ASTM D5185m	>100	19	8	14
Chromium	ppm	ASTM D5185m	>20	<1	<1	<1
Nickel	ppm	ASTM D5185m	>4	0	<1	<1
Titanium	ppm	ASTM D5185m		<1	0	0
Silver	ppm	ASTM D5185m	>3	0	0	0
Aluminum	ppm	ASTM D5185m	>20	11	2	2
Lead	ppm	ASTM D5185m	>40	<1	<1	0
Copper	ppm	ASTM D5185m	>330	1	2	27
Tin	ppm	ASTM D5185m	>15	0	<1	<1
Vanadium	ppm	ASTM D5185m		0	0	<1
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.

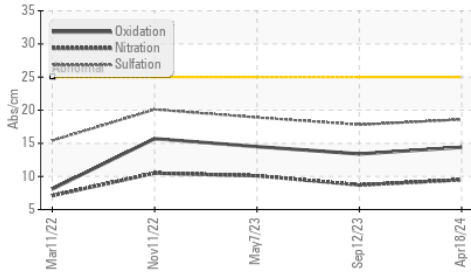
Silicon	ppm	ASTM D5185m	>25	15	5	5
Potassium	ppm	ASTM D5185m	>20	<1	2	3
Fuel		WC Method	>5	<1.0	<1.0	<1.0
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	*ASTM D7844	>3	0.3	0.2	0.3
Nitration	Abs/cm	*ASTM D7624	>20	9.5	8.7	10.1
Sulfation	Abs/.1mm	*ASTM D7415	>30	18.6	17.8	18.9
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE	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	>0.2	NEG	NEG	NEG

FLUID CONDITION

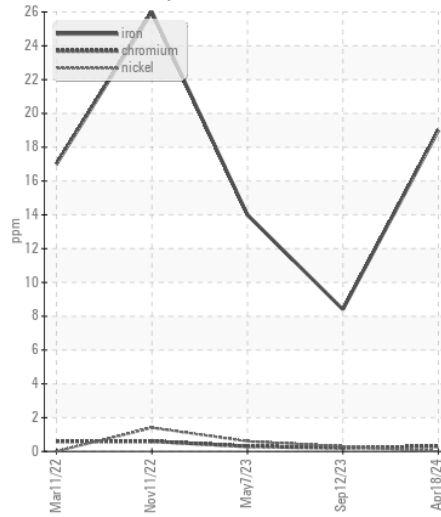
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

Sodium	ppm	ASTM D5185m	>216	2	4	2
Boron	ppm	ASTM D5185m	250	54	58	48
Barium	ppm	ASTM D5185m	10	0	1	2
Molybdenum	ppm	ASTM D5185m	100	91	90	93
Manganese	ppm	ASTM D5185m		<1	<1	<1
Magnesium	ppm	ASTM D5185m	450	35	24	20
Calcium	ppm	ASTM D5185m	3000	2372	2328	2224
Phosphorus	ppm	ASTM D5185m	1150	1011	1072	1001
Zinc	ppm	ASTM D5185m	1350	1322	1279	1239
Sulfur	ppm	ASTM D5185m	4250	4736	4589	4058
Oxidation	Abs/.1mm	*ASTM D7414	>25	14.4	13.4	14.5
Base Number (BN)	mg KOH/g	ASTM D2896	8.5	7.0	7.2	7.4
Visc @ 100°C	cSt	ASTM D445	14.4	13.7	13.9	13.4

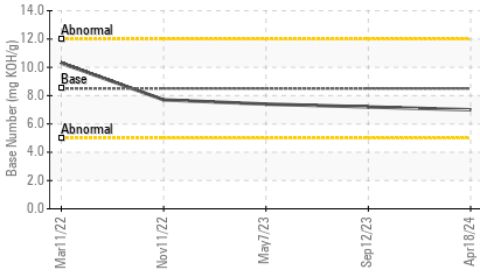
FT-IR (Direct Trend)



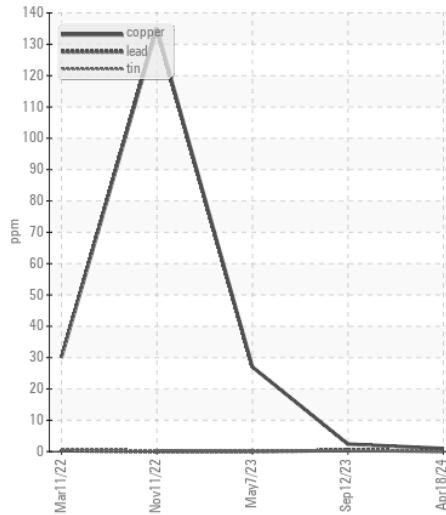
Ferrous Alloys



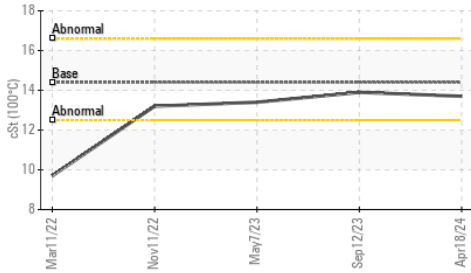
Base Number



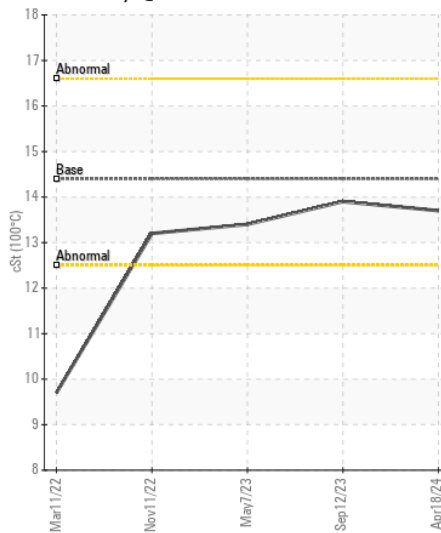
Non-ferrous Metals



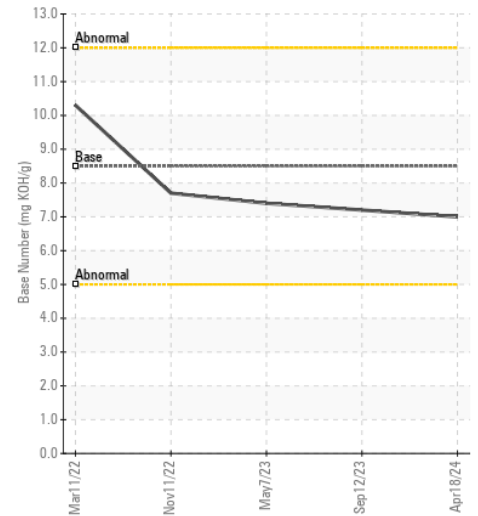
Viscosity @ 100°C



Viscosity @ 100°C



Base Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : CL0005367
Lab Number : 06159647
Unique Number : 10995070
Test Package : CONST (Additional Tests: TBN)

Received : 24 Apr 2024
Tested : 25 Apr 2024
Diagnosed : 25 Apr 2024 - Wes Davis

BULLSEYE CONSTRUCTION
 581 N POLK ST
 PINEVILLE, NC
 US 28134
 Contact: SERVICE MANAGER

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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