



WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Area

[W67965]

Machine Id

SAKAI SV510T VSV21-10328

Component

Diesel Engine

Fluid

DIESEL ENGINE OIL SAE 15W40 (3 GAL)

RECOMMENDATION

Resample at the next service interval to monitor. (Customer Sample Comment: W67965)

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		JR0205733	JR0162486	JR0113924
Sample Date		Client Info		20 Jun 2024	13 Apr 2023	27 Mar 2022
Machine Age	hrs	Client Info		5826	5513	5408
Oil Age	hrs	Client Info		313	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

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>100	2	8	25
Chromium	ppm	ASTM D5185m	>20	0	<1	<1
Nickel	ppm	ASTM D5185m	>4	0	<1	0
Titanium	ppm	ASTM D5185m		0	0	0
Silver	ppm	ASTM D5185m	>3	<1	0	<1
Aluminum	ppm	ASTM D5185m	>20	2	<1	4
Lead	ppm	ASTM D5185m	>40	0	<1	4
Copper	ppm	ASTM D5185m	>330	<1	2	13
Tin	ppm	ASTM D5185m	>15	0	<1	1
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.

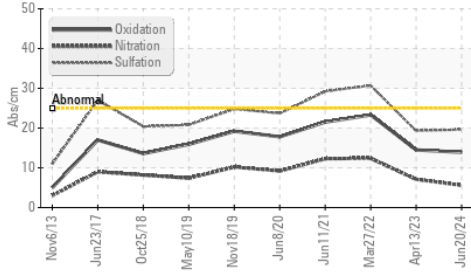
Silicon	ppm	ASTM D5185m	>25	6	7	9
Potassium	ppm	ASTM D5185m	>20	<1	1	1
Fuel		WC Method	>5	<1.0	<1.0	<1.0
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	*ASTM D7844	>3	0.1	0.6	2.4
Nitration	Abs/cm	*ASTM D7624	>20	5.6	7.1	12.4
Sulfation	Abs/.1mm	*ASTM D7415	>30	19.6	19.3	30.7
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

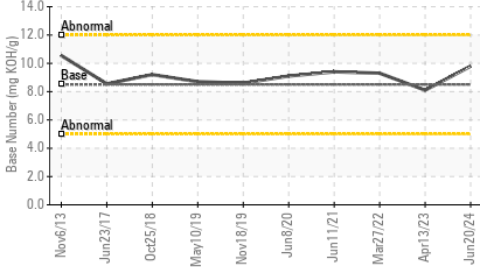
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is acceptable for the time in service.

Sodium	ppm	ASTM D5185m	>158	0	2	5
Boron	ppm	ASTM D5185m	250	245	283	151
Barium	ppm	ASTM D5185m	10	0	2	0
Molybdenum	ppm	ASTM D5185m	100	227	244	254
Manganese	ppm	ASTM D5185m		0	<1	<1
Magnesium	ppm	ASTM D5185m	450	795	727	905
Calcium	ppm	ASTM D5185m	3000	1414	1313	1615
Phosphorus	ppm	ASTM D5185m	1150	919	829	928
Zinc	ppm	ASTM D5185m	1350	1104	973	1114
Sulfur	ppm	ASTM D5185m	4250	3596	2975	2445
Oxidation	Abs/.1mm	*ASTM D7414	>25	13.9	14.5	23.3
Base Number (BN)	mg KOH/g	ASTM D2896	8.5	9.8	8.1	9.3
Visc @ 100°C	cSt	ASTM D445	14.4	14.1	14.0	16.1

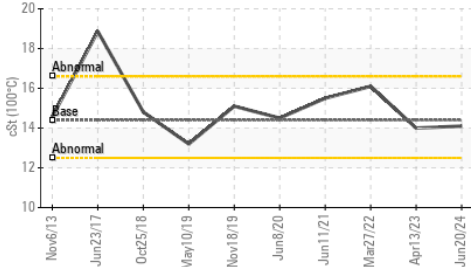
FT-IR (Direct Trend)



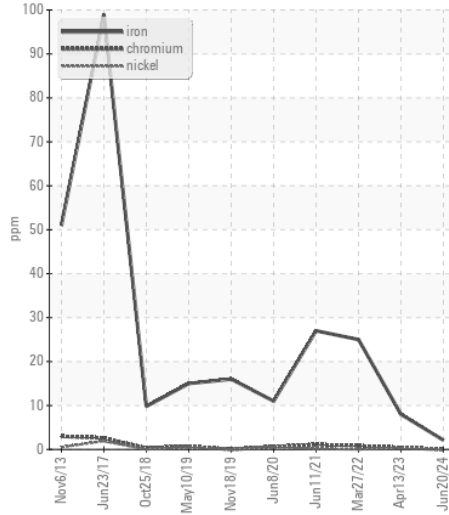
Base Number



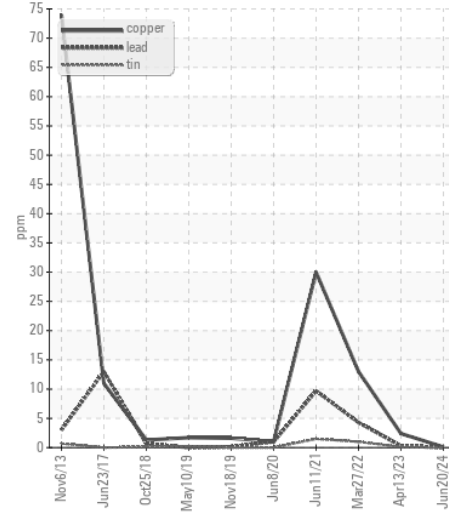
Viscosity @ 100°C



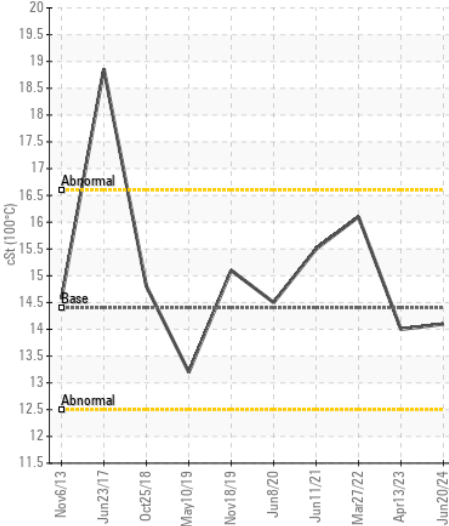
Ferrous Alloys



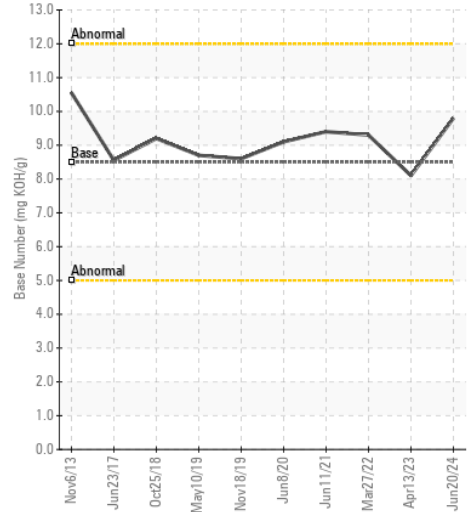
Non-ferrous Metals



Viscosity @ 100°C



Base Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : JR0205733
Lab Number : 06218002
Unique Number : 11096199
Test Package : CONST (Additional Tests: TBN)

Received : 24 Jun 2024
Tested : 25 Jun 2024
Diagnosed : 25 Jun 2024 - Don Baldrige

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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)