



WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id
8110633
 Component
Diesel Engine
 Fluid
VALVOLINE 15W40 (--- GAL)

RECOMMENDATION

Resample at the next service interval to monitor. Please specify the component make and model with your next sample.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		IL0035919	IL0034297	IL05601340
Sample Date		Client Info		17 May 2024	30 Sep 2023	18 Jul 2022
Machine Age	mls	Client Info		398156	324378	182994
Oil Age	mls	Client Info		0	0	0
Filter Age	mls	Client Info		0	0	0
Oil Changed		Client Info		Changed	Changed	N/A
Filter Changed		Client Info		Changed	Changed	N/A
Sample Status				NORMAL	NORMAL	NORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>100	11	11	14
Chromium	ppm	ASTM D5185m	>20	<1	<1	1
Nickel	ppm	ASTM D5185m	>4	0	<1	<1
Titanium	ppm	ASTM D5185m		<1	0	<1
Silver	ppm	ASTM D5185m	>3	0	0	<1
Aluminum	ppm	ASTM D5185m	>20	2	2	3
Lead	ppm	ASTM D5185m	>40	4	7	4
Copper	ppm	ASTM D5185m	>330	<1	1	1
Tin	ppm	ASTM D5185m	>15	0	<1	1
Vanadium	ppm	ASTM D5185m		<1	0	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.

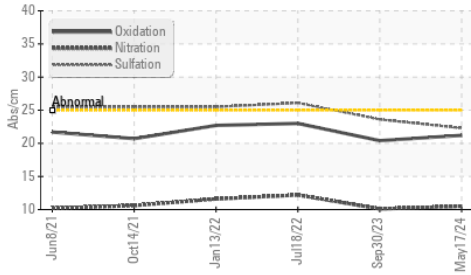
Silicon	ppm	ASTM D5185m	>25	4	6	6
Potassium	ppm	ASTM D5185m	>20	2	10	7
Fuel		WC Method	>5	<1.0	<1.0	<1.0
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	*ASTM D7844	>3	0.2	0.4	0.5
Nitration	Abs/cm	*ASTM D7624	>20	10.5	10.1	12.2
Sulfation	Abs/.1mm	*ASTM D7415	>30	22.3	23.6	26.1
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

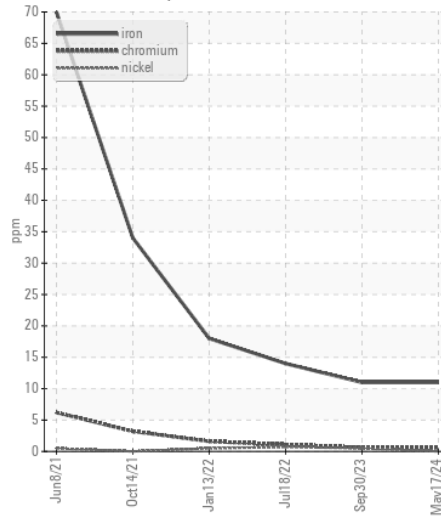
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

Sodium	ppm	ASTM D5185m		3	0	2
Boron	ppm	ASTM D5185m	39	15	44	29
Barium	ppm	ASTM D5185m	1	0	0	0
Molybdenum	ppm	ASTM D5185m	49	53	73	68
Manganese	ppm	ASTM D5185m	1	<1	0	<1
Magnesium	ppm	ASTM D5185m	616	767	583	687
Calcium	ppm	ASTM D5185m	1554	1383	1266	1316
Phosphorus	ppm	ASTM D5185m	899	755	776	645
Zinc	ppm	ASTM D5185m	1069	938	979	854
Sulfur	ppm	ASTM D5185m	2624	2908	2741	2750
Oxidation	Abs/.1mm	*ASTM D7414	>25	21.2	20.4	23.0
Base Number (BN)	mg KOH/g	ASTM D2896	6.9	5.9	5.7	6.3
Visc @ 100°C	cSt	ASTM D445	13.6	13.1	12.9	13.1

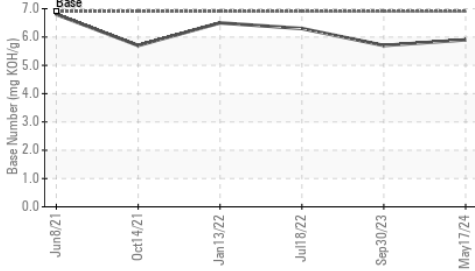
FT-IR (Direct Trend)



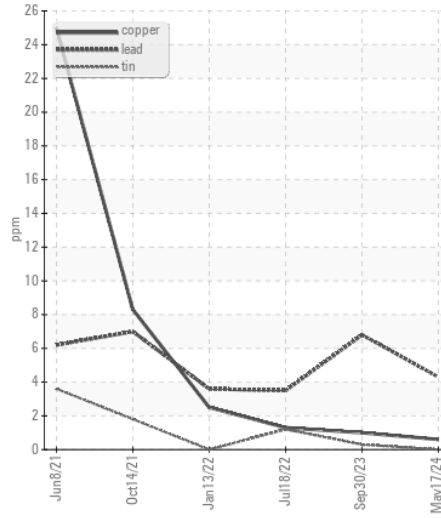
Ferrous Alloys



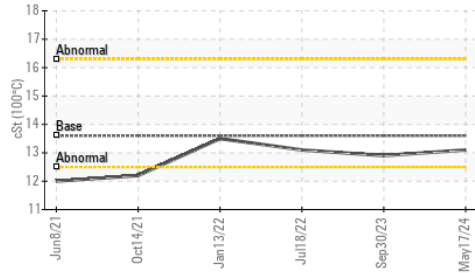
Base Number



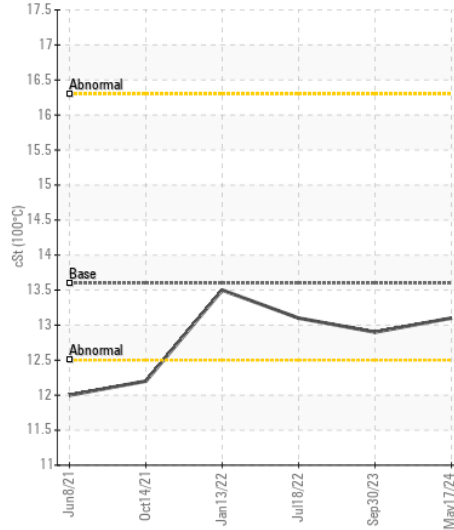
Non-ferrous Metals



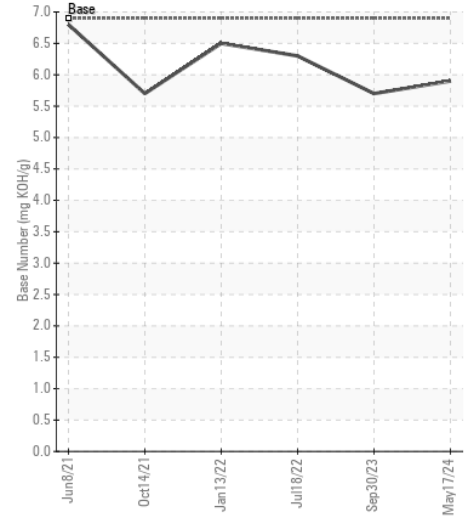
Viscosity @ 100°C



Viscosity @ 100°C



Base Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513

Sample No. : IL0035919

Lab Number : 06193583

Unique Number : 11050335

Test Package : FLEET

Received : 29 May 2024

Tested : 30 May 2024

Diagnosed : 30 May 2024 - Wes Davis

TAMPA IDEALEASE

5951 ORIENT ROAD

TAMPA, FL

US 33610-9565

Contact: Russ Cook

russcook@idealease.com

T: (813)626-9285

F: (844)270-1356

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)