



WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id
9429182
Component
Diesel Engine
Fluid
S1300 10W30 (--- QTS)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		IL0036867	IL05967534	---
Sample Date		Client Info		17 Jul 2024	10 Aug 2023	---
Machine Age	mls	Client Info		105065	38062	---
Oil Age	mls	Client Info		0	0	---
Filter Age	mls	Client Info		0	0	---
Oil Changed		Client Info		N/A	N/A	---
Filter Changed		Client Info		N/A	N/A	---
Sample Status				NORMAL	NORMAL	---

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>100	22	42	---
Chromium	ppm	ASTM D5185m	>20	<1	1	---
Nickel	ppm	ASTM D5185m	>4	<1	<1	---
Titanium	ppm	ASTM D5185m		0	0	---
Silver	ppm	ASTM D5185m	>3	<1	<1	---
Aluminum	ppm	ASTM D5185m	>20	5	28	---
Lead	ppm	ASTM D5185m	>40	1	6	---
Copper	ppm	ASTM D5185m	>330	2	25	---
Tin	ppm	ASTM D5185m	>15	1	4	---
Vanadium	ppm	ASTM D5185m		0	<1	---
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.

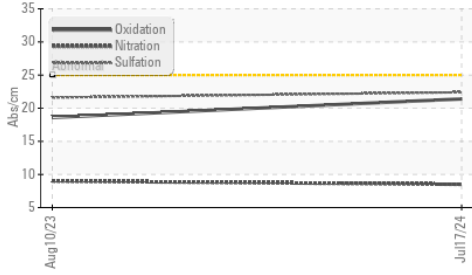
Silicon	ppm	ASTM D5185m	>25	9	44	---
Potassium	ppm	ASTM D5185m	>20	10	80	---
Fuel	%	ASTM D3524	>5	<1.0	<1.0	---
Water		WC Method	>0.2	NEG	NEG	---
Glycol		WC Method		NEG	NEG	---
Soot %	%	*ASTM D7844	>3	0.2	0.3	---
Nitration	Abs/cm	*ASTM D7624	>20	8.5	9.0	---
Sulfation	Abs/.1mm	*ASTM D7415	>30	22.4	21.6	---
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

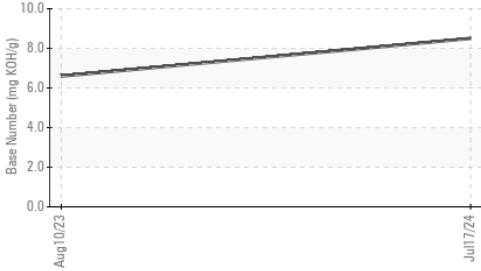
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is acceptable for the time in service.

Sodium	ppm	ASTM D5185m		3	4	---
Boron	ppm	ASTM D5185m		29	33	---
Barium	ppm	ASTM D5185m		0	0	---
Molybdenum	ppm	ASTM D5185m		46	65	---
Manganese	ppm	ASTM D5185m		<1	4	---
Magnesium	ppm	ASTM D5185m		506	475	---
Calcium	ppm	ASTM D5185m		1701	1769	---
Phosphorus	ppm	ASTM D5185m		788	950	---
Zinc	ppm	ASTM D5185m		938	1248	---
Sulfur	ppm	ASTM D5185m		2851	2825	---
Oxidation	Abs/.1mm	*ASTM D7414	>25	21.4	18.6	---
Base Number (BN)	mg KOH/g	ASTM D2896		8.5	6.6	---
Visc @ 100°C	cSt	ASTM D445		11.2	11.7	---

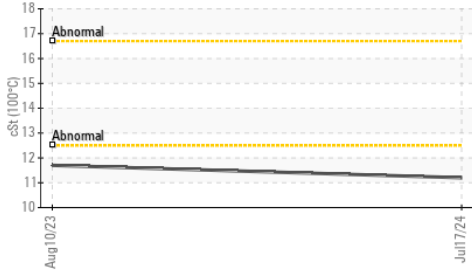
FT-IR (Direct Trend)



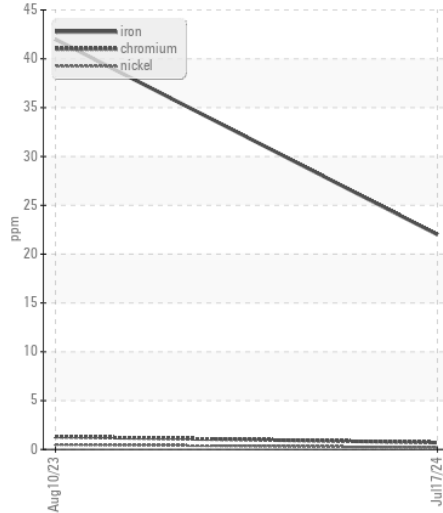
Base Number



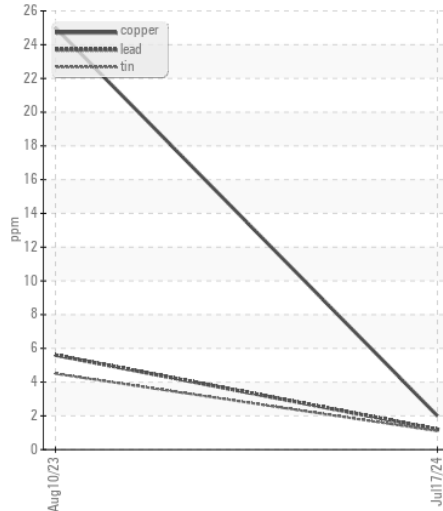
Viscosity @ 100°C



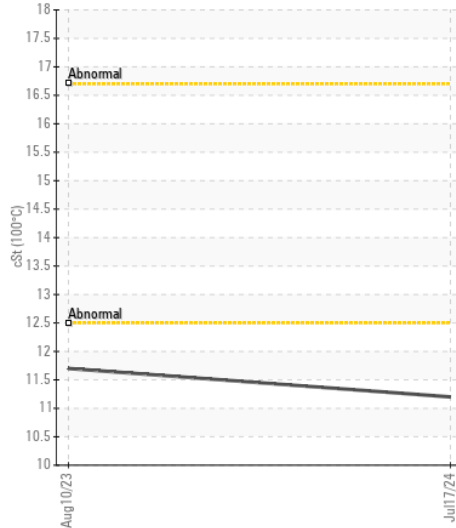
Ferrous Alloys



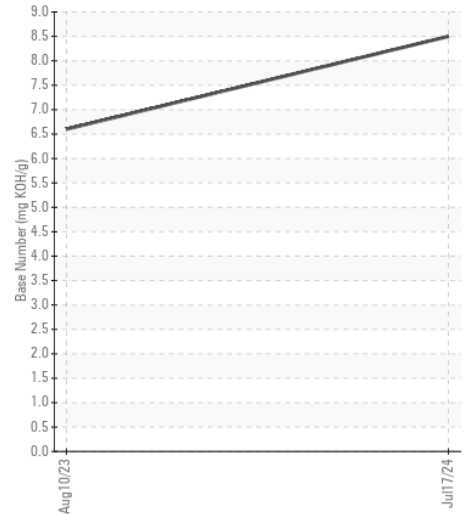
Non-ferrous Metals



Viscosity @ 100°C



Base Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
 Sample No. : IL0036867 Received : 17 Jul 2024
 Lab Number : 06239697 Tested : 19 Jul 2024
 Unique Number : 11128531 Diagnosed : 19 Jul 2024 - Sean Felton
 Test Package : FLEET (Additional Tests: FuelDilution, PercentFuel)

IDEALASE-NORCROSS
 4571 NORTH BUFORD HWY
 NORCROSS, GA
 US 30071-2808
 Contact: RICK MARKS

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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