



WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id
9029129
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		IL0036855	IL05770203	IL05367613
Sample Date		Client Info		07 Jun 2024	16 Feb 2023	27 Sep 2021
Machine Age	mls	Client Info		513318	394766	273446
Oil Age	mls	Client Info		0	0	0
Filter Age	mls	Client Info		0	0	0
Oil Changed		Client Info		N/A	N/A	N/A
Filter Changed		Client Info		N/A	N/A	N/A
Sample Status				NORMAL	NORMAL	NORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>100	34	39	30
Chromium	ppm	ASTM D5185m	>20	1	2	2
Nickel	ppm	ASTM D5185m	>4	0	0	<1
Titanium	ppm	ASTM D5185m		0	0	<1
Silver	ppm	ASTM D5185m	>3	0	0	<1
Aluminum	ppm	ASTM D5185m	>20	9	3	5
Lead	ppm	ASTM D5185m	>40	2	6	8
Copper	ppm	ASTM D5185m	>330	2	1	3
Tin	ppm	ASTM D5185m	>15	<1	<1	0
Vanadium	ppm	ASTM D5185m		0	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.

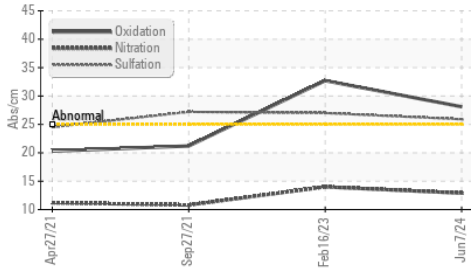
Silicon	ppm	ASTM D5185m	>25	8	8	7
Potassium	ppm	ASTM D5185m	>20	4	3	21
Fuel	%	ASTM D3524	>5	<1.0	<1.0	<1.0
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	*ASTM D7844	>3	0.8	0.4	0.4
Nitration	Abs/cm	*ASTM D7624	>20	12.9	14.0	10.8
Sulfation	Abs/.1mm	*ASTM D7415	>30	25.9	27.0	27.2
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

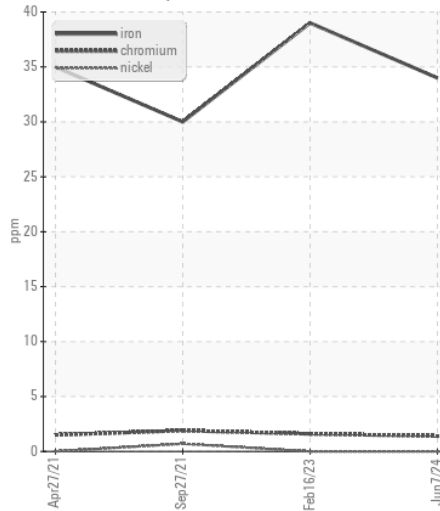
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is acceptable for the time in service.

Sodium	ppm	ASTM D5185m		3	1	3
Boron	ppm	ASTM D5185m		19	16	11
Barium	ppm	ASTM D5185m		0	0	0
Molybdenum	ppm	ASTM D5185m		46	49	11
Manganese	ppm	ASTM D5185m		<1	<1	<1
Magnesium	ppm	ASTM D5185m		499	494	750
Calcium	ppm	ASTM D5185m		1662	1678	1439
Phosphorus	ppm	ASTM D5185m		757	750	718
Zinc	ppm	ASTM D5185m		897	925	796
Sulfur	ppm	ASTM D5185m		2513	2128	4113
Oxidation	Abs/.1mm	*ASTM D7414	>25	28.1	32.7	21.2
Base Number (BN)	mg KOH/g	ASTM D2896		5.6	3.8	4.8
Visc @ 100°C	cSt	ASTM D445		11.4	11.7	11.2

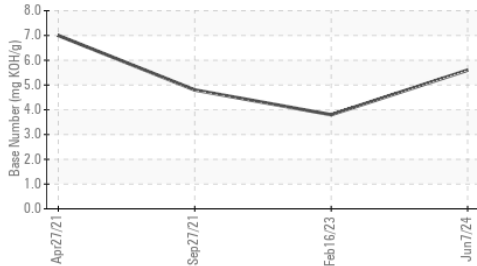
FT-IR (Direct Trend)



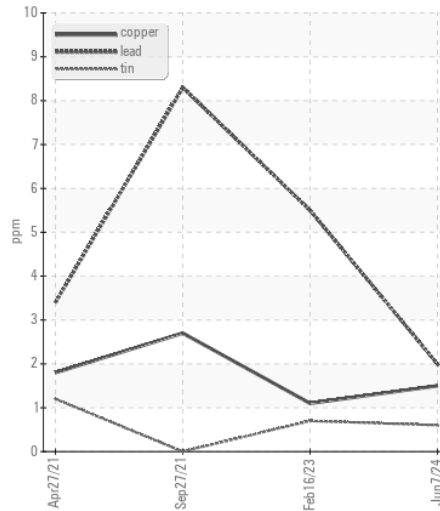
Ferrous Alloys



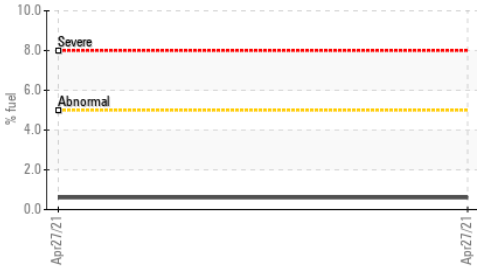
Base Number



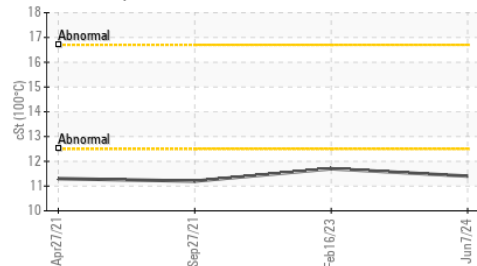
Non-ferrous Metals



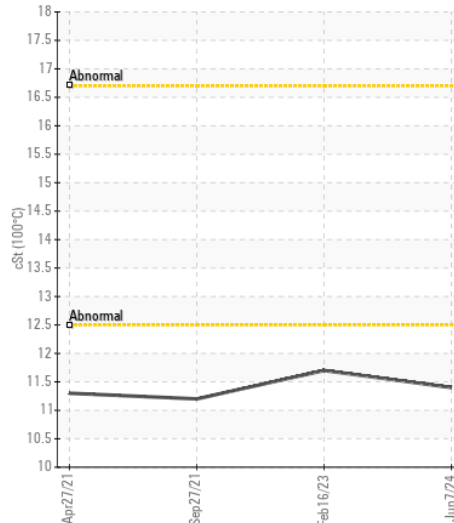
Fuel Dilution



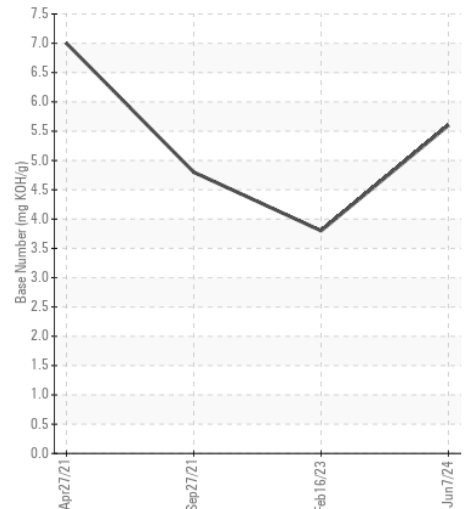
Viscosity @ 100°C



Viscosity @ 100°C



Base Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : IL0036855 **Received** : 17 Jul 2024
Lab Number : 06239702 **Tested** : 19 Jul 2024
Unique Number : 11128536 **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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