CONST

WEAR CHECK

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	ATTENTION

Machine Id
CASE 15499 CR1202 (S/N 98205)
Component
Diesel Engine
Fluid
DIESEL ENGINE OIL SAE 5W40 (--- GAL)

RECOMMENDATION

No corrective action is recommended at this time. Resample at the next service interval to monitor.

WEAR

All component wear rates are normal.

CONTAMINATION

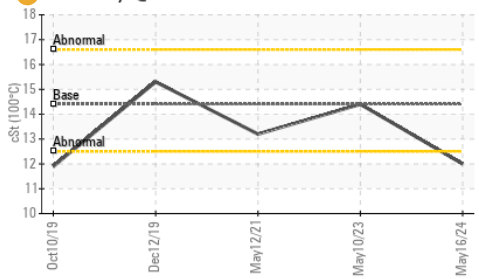
Fuel content negligible. There is no indication of any contamination in the oil.

FLUID CONDITION

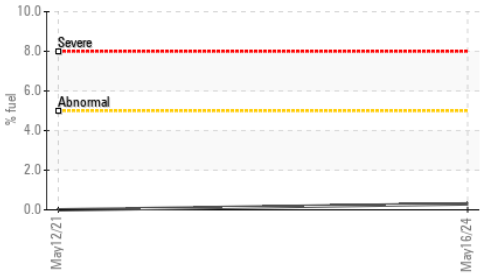
The oil viscosity is lower than normal. The BN result indicates that there is suitable alkalinity remaining in the oil. Confirm oil type.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		WC0936088	WC0809391	WC0567941
Sample Date		Client Info		16 May 2024	10 May 2023	12 May 2021
Machine Age	hrs	Client Info		11866	11257	9847
Oil Age	hrs	Client Info		1000	449	250
Filter Age	hrs	Client Info		0	449	250
Oil Changed		Client Info		N/A	Changed	Changed
Filter Changed		Client Info		N/A	Changed	Changed
Sample Status				ATTENTION	NORMAL	ABNORMAL
Iron	ppm	ASTM D5185m	>100	6	4	6
Chromium	ppm	ASTM D5185m	>20	0	<1	0
Nickel	ppm	ASTM D5185m	>4	0	0	0
Titanium	ppm	ASTM D5185m		0	0	0
Silver	ppm	ASTM D5185m	>3	<1	0	<1
Aluminum	ppm	ASTM D5185m	>20	1	<1	1
Lead	ppm	ASTM D5185m	>40	<1	0	<1
Copper	ppm	ASTM D5185m	>330	<1	<1	1
Tin	ppm	ASTM D5185m	>15	0	0	<1
Vanadium	ppm	ASTM D5185m		0	0	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Silicon	ppm	ASTM D5185m	>25	6	4	2
Potassium	ppm	ASTM D5185m	>20	2	<1	6
Fuel	%	ASTM D3524	>5	0.3	<1.0	<1.0
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	*ASTM D7844	>3	0.1	0.1	0.1
Nitration	Abs/cm	*ASTM D7624	>20	6.7	6.0	8.3
Sulfation	Abs/.1mm	*ASTM D7415	>30	16.1	18.4	25.8
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	0.2%
Sodium	ppm	ASTM D5185m	>44	0	<1	3
Boron	ppm	ASTM D5185m	250	16	41	158
Barium	ppm	ASTM D5185m	10	0	0	0
Molybdenum	ppm	ASTM D5185m	100	6	63	1
Manganese	ppm	ASTM D5185m		<1	<1	0
Magnesium	ppm	ASTM D5185m	450	105	962	33
Calcium	ppm	ASTM D5185m	3000	2586	1193	2043
Phosphorus	ppm	ASTM D5185m	1150	1080	1034	903
Zinc	ppm	ASTM D5185m	1350	1348	1277	1086
Sulfur	ppm	ASTM D5185m	4250	4928	3781	2885
Oxidation	Abs/.1mm	*ASTM D7414	>25	9.9	13.9	22.6
Base Number (BN)	mg KOH/g	ASTM D2896	8.5	6.3	9.5	6.9
Visc @ 100°C	cSt	ASTM D445	14.4	12.0	14.4	13.2

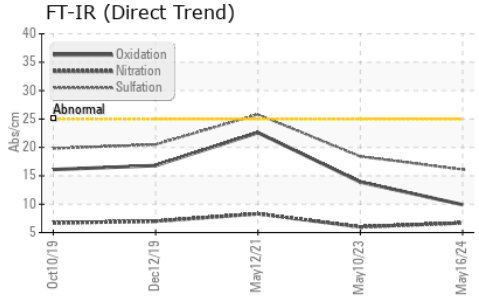
Viscosity @ 100°C



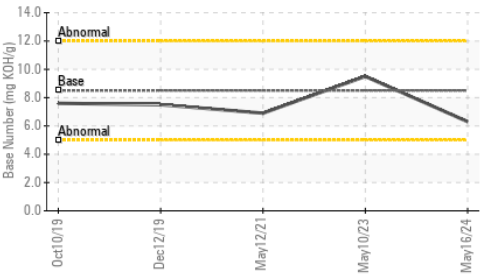
Fuel Dilution



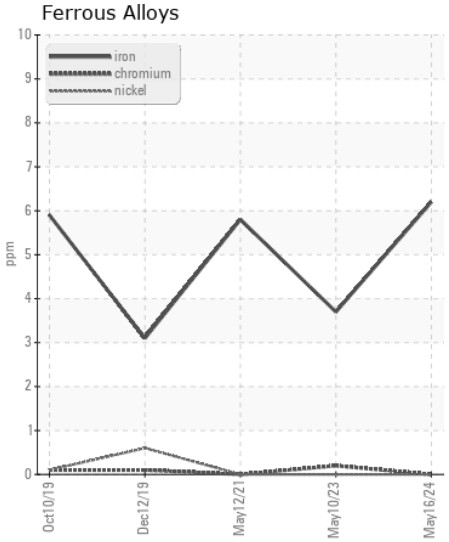
FT-IR (Direct Trend)



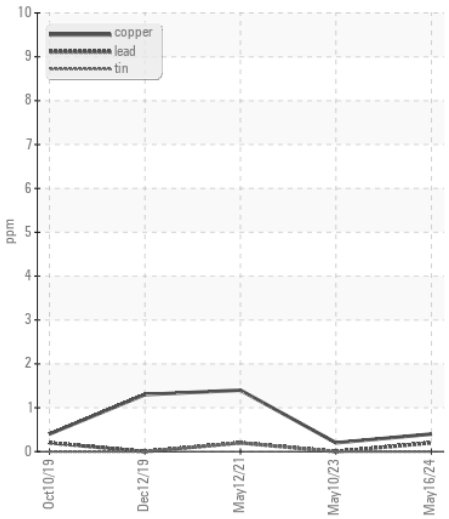
Base Number



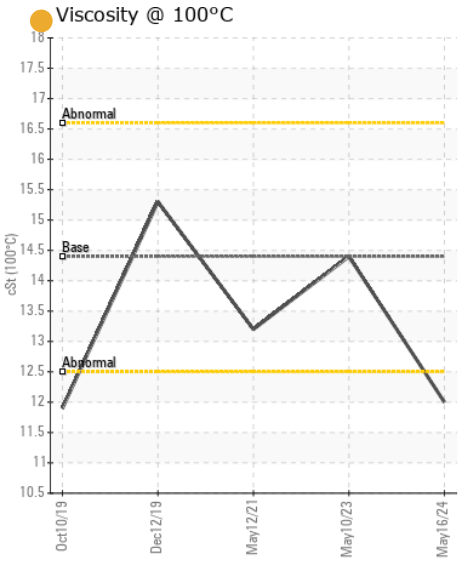
Ferrous Alloys



Non-ferrous Metals



Viscosity @ 100°C



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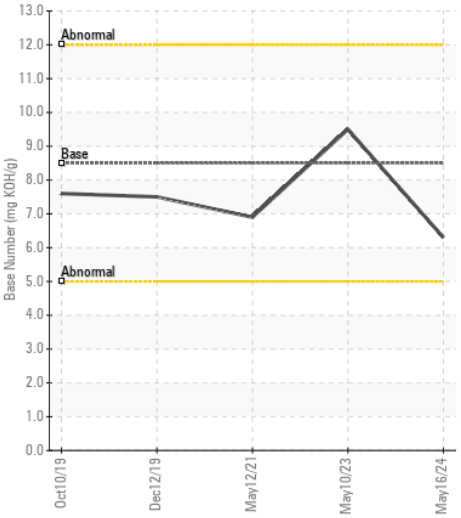

Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0936088
Lab Number : 06193289
Unique Number : 11050041
Test Package : CONST (Additional Tests: FuelDilution, PercentFuel, TBN)

Received : 28 May 2024
Tested : 31 May 2024
Diagnosed : 31 May 2024 - Jonathan Hester

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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