



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id
3549
 Component
Diesel Engine
 Fluid
DIESEL ENGINE OIL SAE 10W30 (--- QTS)

RECOMMENDATION

Resample at the next service interval to monitor. Please specify the component make and model with your next sample. Please specify the brand, type, and viscosity of the oil on your next sample.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		WC0916497	WC0916531	WC0916491
Sample Date		Client Info		08 Jun 2024	01 Jun 2024	05 Apr 2024
Machine Age	mls	Client Info		63288	61042	23373
Oil Age	mls	Client Info		2246	16920	23373
Filter Age	mls	Client Info		2246	16920	23373
Oil Changed		Client Info		Changed	N/A	Changed
Filter Changed		Client Info		Changed	N/A	Changed
Sample Status				NORMAL	NORMAL	NORMAL

WEAR

Metal levels are typical for a new component breaking in.

Iron	ppm	ASTM D5185m	>100	6	24	43
Chromium	ppm	ASTM D5185m	>20	<1	2	2
Nickel	ppm	ASTM D5185m	>4	0	0	<1
Titanium	ppm	ASTM D5185m		<1	<1	<1
Silver	ppm	ASTM D5185m	>3	0	0	0
Aluminum	ppm	ASTM D5185m	>20	2	9	6
Lead	ppm	ASTM D5185m	>40	0	0	<1
Copper	ppm	ASTM D5185m	>330	<1	1	6
Tin	ppm	ASTM D5185m	>15	0	0	<1
Vanadium	ppm	ASTM D5185m		<1	<1	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

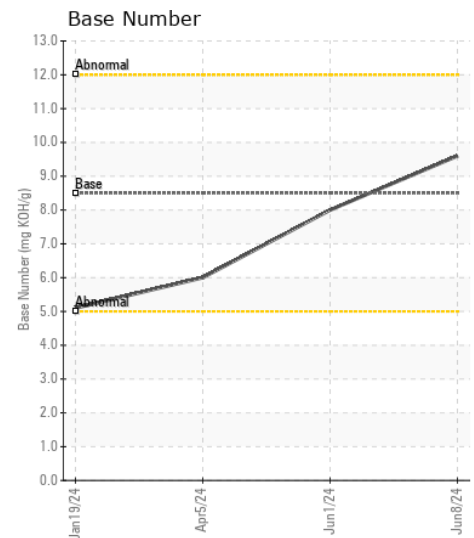
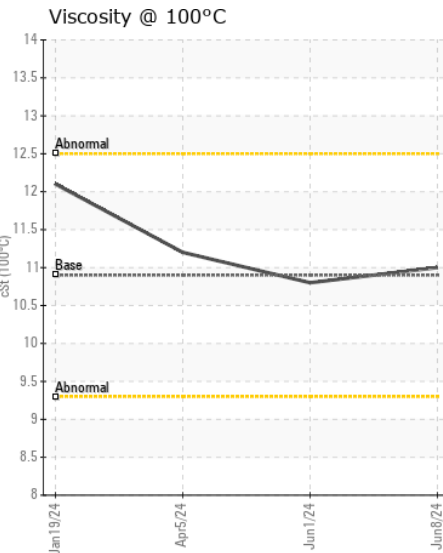
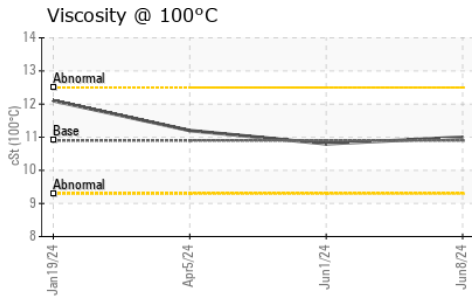
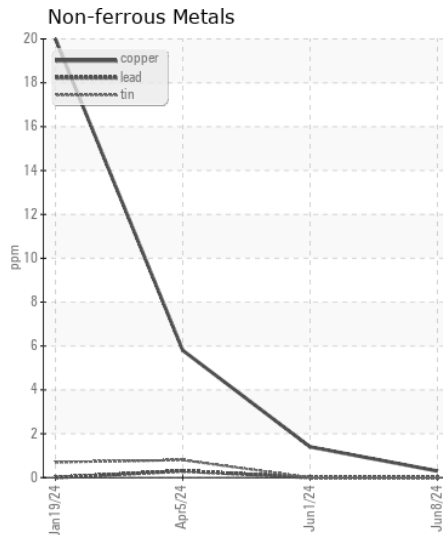
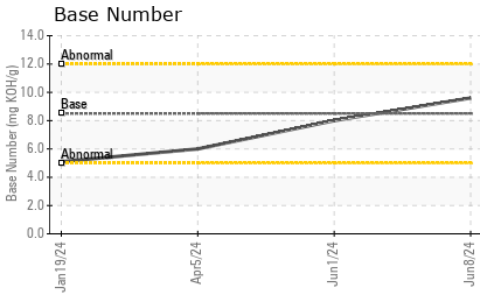
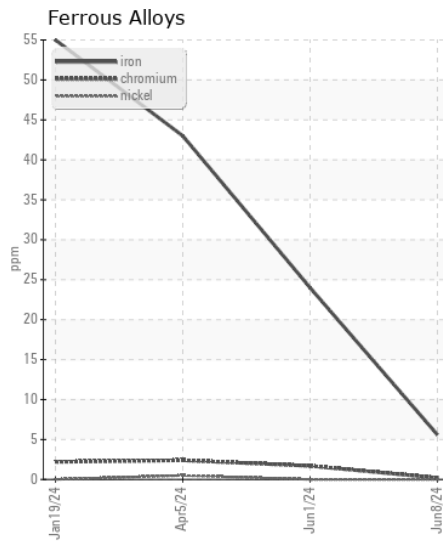
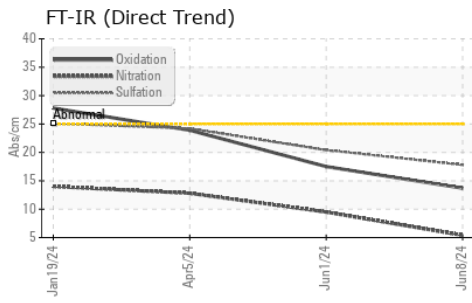
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>25	3	6	11
Potassium	ppm	ASTM D5185m	>20	2	21	15
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	0.2	0.3
Nitration	Abs/cm	*ASTM D7624	>20	5.4	9.5	12.8
Sulfation	Abs/.1mm	*ASTM D7415	>30	17.8	20.4	24.2
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 suitable for further service.

Sodium	ppm	ASTM D5185m		<1	2	2
Boron	ppm	ASTM D5185m	250	0	<1	2
Barium	ppm	ASTM D5185m	10	0	0	0
Molybdenum	ppm	ASTM D5185m	100	59	62	69
Manganese	ppm	ASTM D5185m		<1	<1	2
Magnesium	ppm	ASTM D5185m	450	1028	1038	1055
Calcium	ppm	ASTM D5185m	3000	1113	1158	1205
Phosphorus	ppm	ASTM D5185m	1150	1072	1055	1120
Zinc	ppm	ASTM D5185m	1350	1348	1333	1339
Sulfur	ppm	ASTM D5185m	4250	3884	3527	3246
Oxidation	Abs/.1mm	*ASTM D7414	>25	13.7	17.5	23.9
Base Number (BN)	mg KOH/g	ASTM D2896	8.5	9.6	8.0	6.0
Visc @ 100°C	cSt	ASTM D445	10.9	11.0	10.8	11.2



Certificate L2367

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

Sample No. : WC0916497

Lab Number : 06219187

Unique Number : 11097384

Test Package : FLEET

Received : 24 Jun 2024

Tested : 25 Jun 2024

Diagnosed : 25 Jun 2024 - Wes Davis

CARCO TRANSPORTATION

3403 EAST ROOSEVELT ROAD

LITTLE ROCK, AR

US 72206

Contact: DENNIS CATES

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F:

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)