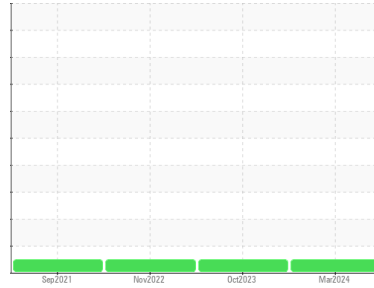




OIL ANALYSIS REPORT

Sample Rating Trend

NORMAL



Area
[21957]
 Machine Id
10-476L

Component
Diesel Engine
 Fluid
CONOCO PHILLIPS GUARDOL ECT 10W30 (--- GAL)

DIAGNOSIS

Recommendation

Resample at the next service interval to monitor.

Wear

All component wear rates are normal.

Contamination

There is no indication of any contamination in the oil.

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.

SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		WC0836168	WC0818741	WC0754793
Sample Date	Client Info		19 Mar 2024	09 Oct 2023	04 Nov 2022
Machine Age	mls	Client Info	301679	278171	220569
Oil Age	mls	Client Info	23508	57602	25000
Oil Changed	Client Info		Changed	Changed	Changed
Sample Status			NORMAL	NORMAL	NORMAL

CONTAMINATION

	method	limit/base	current	history1	history2
Fuel	WC Method	>5	<1.0	<1.0	<1.0
Water	WC Method	>0.2	NEG	NEG	NEG
Glycol	WC Method		NEG	NEG	NEG

WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m >100	19	21	15
Chromium	ppm	ASTM D5185m >20	1	<1	<1
Nickel	ppm	ASTM D5185m >4	<1	<1	<1
Titanium	ppm	ASTM D5185m	106	103	89
Silver	ppm	ASTM D5185m >3	0	0	0
Aluminum	ppm	ASTM D5185m >20	5	4	6
Lead	ppm	ASTM D5185m >40	<1	<1	<1
Copper	ppm	ASTM D5185m >330	5	7	6
Tin	ppm	ASTM D5185m >15	1	<1	1
Antimony	ppm	ASTM D5185m	---	---	---
Vanadium	ppm	ASTM D5185m	1	<1	<1
Cadmium	ppm	ASTM D5185m	0	<1	0

ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	36	15	20
Barium	ppm	ASTM D5185m	0	3	0
Molybdenum	ppm	ASTM D5185m	2	2	<1
Manganese	ppm	ASTM D5185m	<1	<1	<1
Magnesium	ppm	ASTM D5185m	427	426	399
Calcium	ppm	ASTM D5185m	1893	1884	1774
Phosphorus	ppm	ASTM D5185m 1100	929	1105	954
Zinc	ppm	ASTM D5185m 1220	1243	1295	1196
Sulfur	ppm	ASTM D5185m	3813	4273	4104

CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >25	9	7	6
Sodium	ppm	ASTM D5185m	1	<1	3
Potassium	ppm	ASTM D5185m >20	9	10	11

INFRA-RED

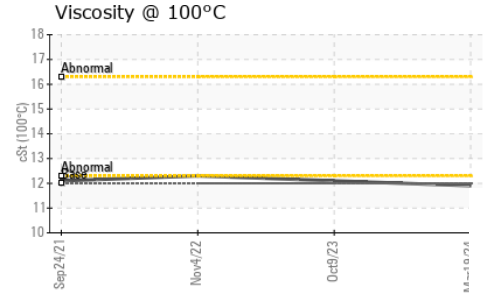
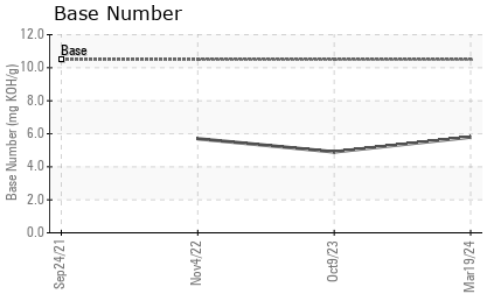
	method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844 >3	0.4	0.4	0.4
Nitration	Abs/cm	*ASTM D7624 >20	10.4	10.9	10.6
Sulfation	Abs/.1mm	*ASTM D7415 >30	24.7	28.0	25.3

FLUID DEGRADATION

	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414 >25	21.0	23.9	21.1
Base Number (BN)	mg KOH/g	ASTM D2896 10.5	5.8	4.9	5.7



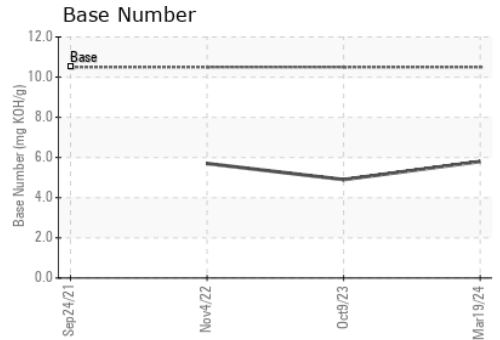
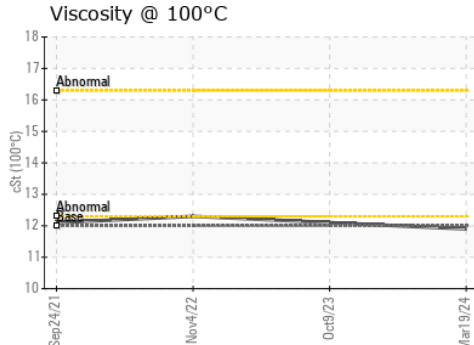
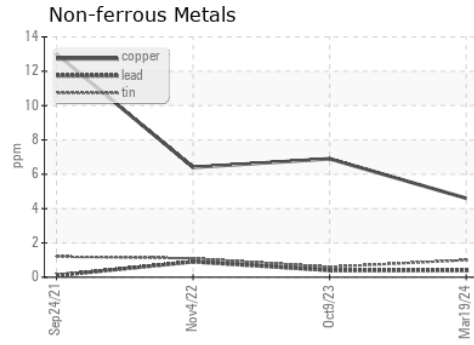
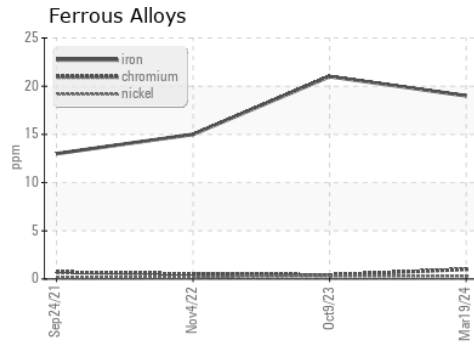
OIL ANALYSIS REPORT



VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
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
Free Water	scalar	*Visual		NEG	NEG

FLUID PROPERTIES	method	limit/base	current	history1	history2	
Visc @ 100°C	cSt	ASTM D445	12.0	11.9	12.1	12.3

GRAPHS



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0836168 **Received** : 01 Apr 2024
Lab Number : **06134744** **Tested** : 02 Apr 2024
Unique Number : 10954209 **Diagnosed** : 02 Apr 2024 - Wes Davis
Test Package : CONST (Additional Tests: TBN)

MANHATTAN ROAD AND BRIDGE
 5601 S 122ND E AVE
 TULSA, OK
 US 74146
 Contact: BEN CALDWELL
 kevin.marson@wearcheck.com
 T: (918)728-5749
 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)