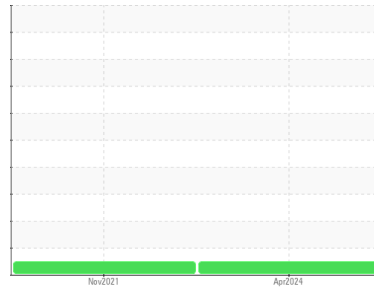




OIL ANALYSIS REPORT

Sample Rating Trend



NORMAL



Area
[22814]

Machine Id

55-13

Component

Diesel Engine

Fluid

CONOCO PHILLIPS GUARDOL ECT 15W40 (--- GAL)

DIAGNOSIS

Recommendation

Resample at the next service interval to monitor.

Wear

Metal levels are typical for a new component breaking in.

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		WC0923382	WC0601355	---
Sample Date	Client Info		24 Apr 2024	02 Nov 2021	---
Machine Age	hrs	Client Info	391	110	---
Oil Age	hrs	Client Info	281	250	---
Oil Changed	Client Info		Changed	Changed	---
Sample Status			NORMAL	NORMAL	---

CONTAMINATION

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

WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m >100	26	10	---
Chromium	ppm	ASTM D5185m >20	3	1	---
Nickel	ppm	ASTM D5185m >4	0	<1	---
Titanium	ppm	ASTM D5185m	<1	<1	---
Silver	ppm	ASTM D5185m >3	0	<1	---
Aluminum	ppm	ASTM D5185m >20	2	1	---
Lead	ppm	ASTM D5185m >40	0	1	---
Copper	ppm	ASTM D5185m >330	3	<1	---
Tin	ppm	ASTM D5185m >15	<1	<1	---
Antimony	ppm	ASTM D5185m	---	<1	---
Vanadium	ppm	ASTM D5185m	0	0	---
Cadmium	ppm	ASTM D5185m	0	0	---

ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m 85	81	106	---
Barium	ppm	ASTM D5185m	0	0	---
Molybdenum	ppm	ASTM D5185m	8	44	---
Manganese	ppm	ASTM D5185m	<1	<1	---
Magnesium	ppm	ASTM D5185m 350	732	455	---
Calcium	ppm	ASTM D5185m 1800	1787	1671	---
Phosphorus	ppm	ASTM D5185m 1000	1218	1044	---
Zinc	ppm	ASTM D5185m 1100	1440	1255	---
Sulfur	ppm	ASTM D5185m 3500	4684	3172	---

CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >25	9	4	---
Sodium	ppm	ASTM D5185m	4	1	---
Potassium	ppm	ASTM D5185m >20	2	2	---

INFRA-RED

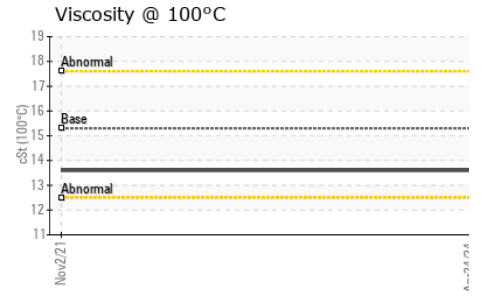
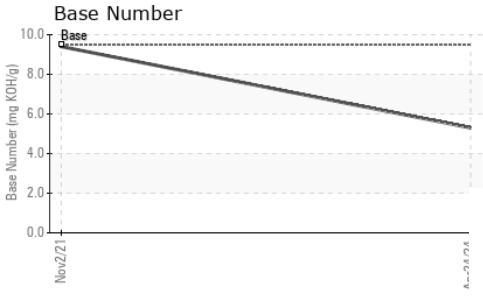
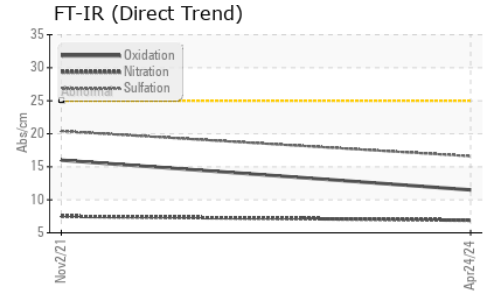
	method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844 >3	0.2	0.2	---
Nitration	Abs/cm	*ASTM D7624 >20	6.9	7.5	---
Sulfation	Abs/.1mm	*ASTM D7415 >30	16.6	20.4	---

FLUID DEGRADATION

	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414 >25	11.5	16	---
Base Number (BN)	mg KOH/g	ASTM D2896 9.5	5.3	9.4	---



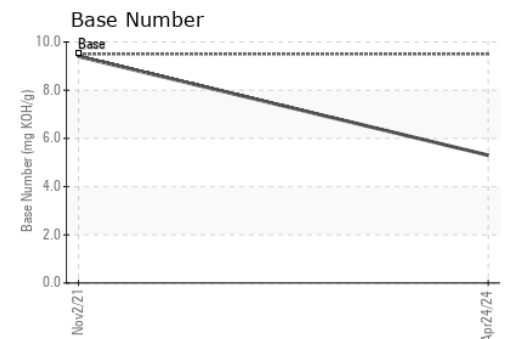
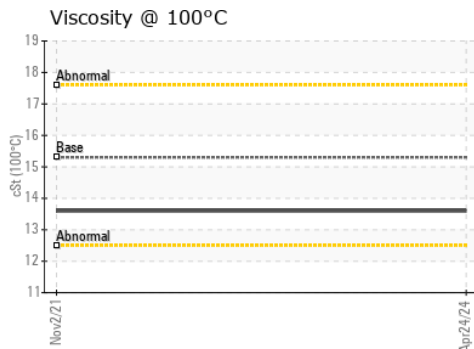
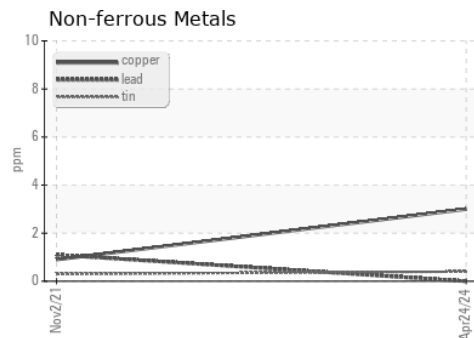
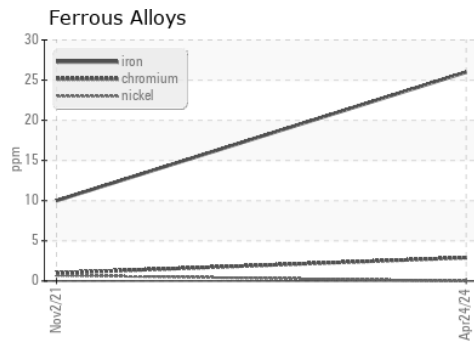
OIL ANALYSIS REPORT



VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	---
Yellow Metal	scalar	*Visual	NONE	NONE	---
Precipitate	scalar	*Visual	NONE	NONE	---
Silt	scalar	*Visual	NONE	NONE	---
Debris	scalar	*Visual	NONE	NONE	---
Sand/Dirt	scalar	*Visual	NONE	NONE	---
Appearance	scalar	*Visual	NORML	NORML	---
Odor	scalar	*Visual	NORML	NORML	---
Emulsified Water	scalar	*Visual	>0.2	NEG	---
Free Water	scalar	*Visual		NEG	---

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D445	15.3	13.6	13.6

GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0923382 **Received** : 17 May 2024
Lab Number : **06183610** **Tested** : 21 May 2024
Unique Number : 11034936 **Diagnosed** : 21 May 2024 - Wes Davis
Test Package : CONST (Additional Tests: TBN)

MANHATTAN ROAD AND BRIDGE
 5601 S 122ND E AVE
 TULSA, OK 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)