

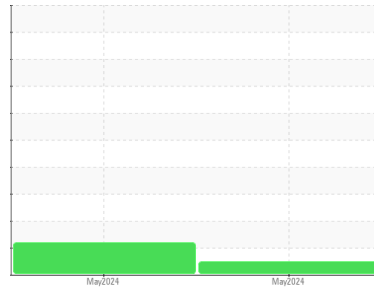


OIL ANALYSIS REPORT



Area
TULSA [23724]
 Machine Id
30-101
 Component
Diesel Engine
 Fluid
CONOCO PHILLIPS GUARDOL ECT 15W40 (--- GAL)

Sample Rating Trend



NORMAL



DIAGNOSIS

Recommendation

Resample at the next service interval to monitor. (Customer Sample Comment: Resample)

Wear

All component wear rates are normal.

Contamination

Fuel content negligible. 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		WC0940640	WC0923380	---
Sample Date	Client Info		30 May 2024	08 May 2024	---
Machine Age	hrs	Client Info	304	291	---
Oil Age	hrs	Client Info	13	291	---
Oil Changed	Client Info		Not Chngd	Changed	---
Sample Status			NORMAL	ABNORMAL	---

CONTAMINATION

	method	limit/base	current	history1	history2
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	6	33	---
Chromium	ppm	ASTM D5185m >20	<1	1	---
Nickel	ppm	ASTM D5185m >2	<1	0	---
Titanium	ppm	ASTM D5185m >2	1	0	---
Silver	ppm	ASTM D5185m >2	<1	0	---
Aluminum	ppm	ASTM D5185m >25	3	2	---
Lead	ppm	ASTM D5185m >40	<1	0	---
Copper	ppm	ASTM D5185m >330	2	9	---
Tin	ppm	ASTM D5185m >15	<1	<1	---
Vanadium	ppm	ASTM D5185m	<1	0	---
Cadmium	ppm	ASTM D5185m	<1	0	---

ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m 85	96	52	---
Barium	ppm	ASTM D5185m	2	3	---
Molybdenum	ppm	ASTM D5185m	5	36	---
Manganese	ppm	ASTM D5185m	2	11	---
Magnesium	ppm	ASTM D5185m 350	638	454	---
Calcium	ppm	ASTM D5185m 1800	1250	1697	---
Phosphorus	ppm	ASTM D5185m 1000	878	938	---
Zinc	ppm	ASTM D5185m 1100	1101	1112	---
Sulfur	ppm	ASTM D5185m 3500	3246	3309	---

CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >25	8	15	---
Sodium	ppm	ASTM D5185m	1	4	---
Potassium	ppm	ASTM D5185m >20	4	0	---
Fuel	%	ASTM D3524 >5	0.7	▲ 5.9	---

INFRA-RED

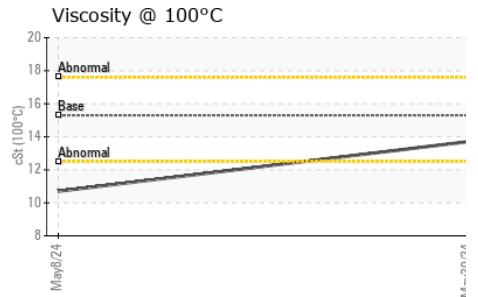
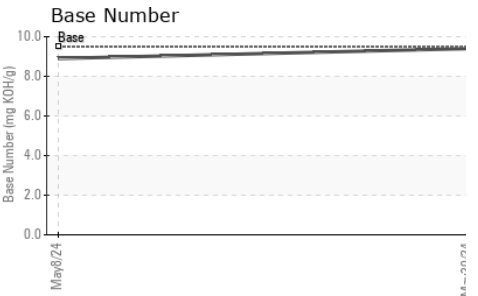
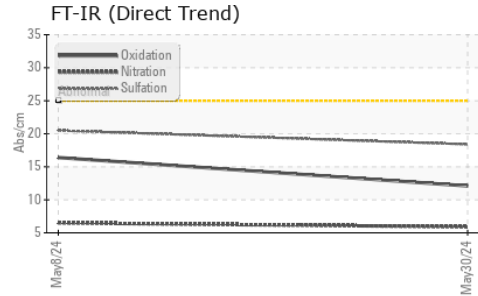
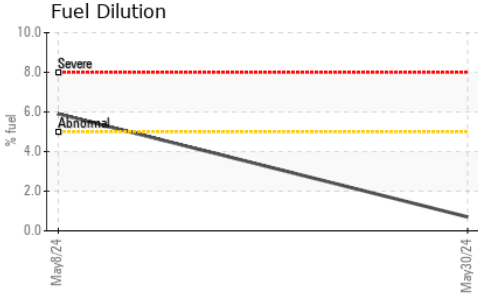
	method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844 >3	0.1	0.2	---
Nitration	Abs/cm	*ASTM D7624 >20	5.9	6.5	---
Sulfation	Abs/.1mm	*ASTM D7415 >30	18.4	20.5	---

FLUID DEGRADATION

	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414 >25	12.1	16.4	---
Base Number (BN)	mg KOH/g	ASTM D2896 9.5	9.4	8.9	---



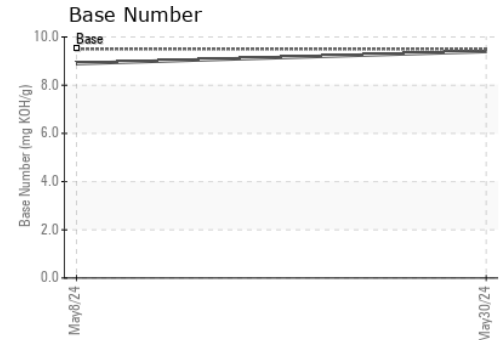
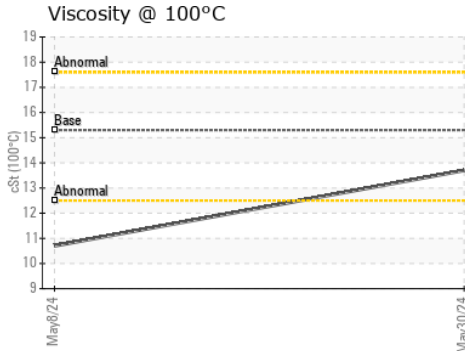
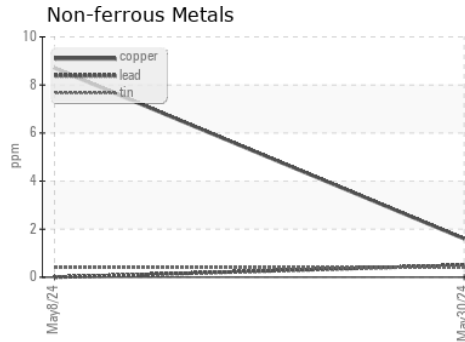
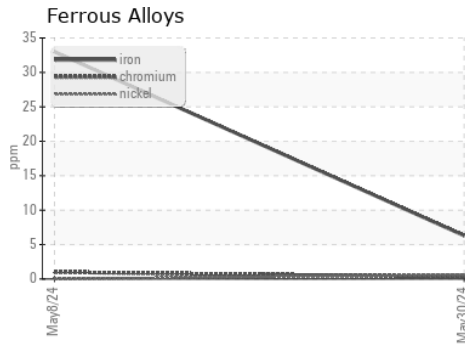
OIL ANALYSIS REPORT



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	13.7	▲ 10.7

GRAPHS



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0940640 **Received** : 25 Jun 2024
Lab Number : 06219458 **Tested** : 27 Jun 2024
Unique Number : 11097655 **Diagnosed** : 27 Jun 2024 - Jonathan Hester
Test Package : CONST (Additional Tests: PercentFuel, TBN)

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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)