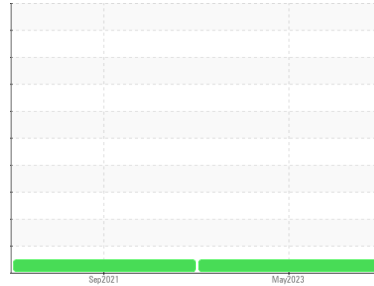




# OIL ANALYSIS REPORT

Sample Rating Trend

**NORMAL**



Area  
**[16299]**  
 Machine Id  
**92-126**

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		<b>WC0793303</b>	WC0601601	---
Sample Date	Client Info		<b>09 May 2023</b>	20 Sep 2021	---
Machine Age	hrs	Client Info	<b>253</b>	133	---
Oil Age	hrs	Client Info	<b>120</b>	133	---
Oil Changed	Client Info		<b>Changed</b>	Changed	---
Sample Status			<b>NORMAL</b>	NORMAL	---

## CONTAMINATION

	method	limit/base	current	history1	history2
Fuel	WC Method	>5	<b>&lt;1.0</b>	<1.0	---
Glycol	WC Method		<b>NEG</b>	NEG	---

## WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m >100	<b>8</b>	11	---
Chromium	ppm	ASTM D5185m >20	<b>0</b>	<1	---
Nickel	ppm	ASTM D5185m >4	<b>0</b>	0	---
Titanium	ppm	ASTM D5185m	<b>0</b>	<1	---
Silver	ppm	ASTM D5185m >3	<b>0</b>	<1	---
Aluminum	ppm	ASTM D5185m >20	<b>&lt;1</b>	3	---
Lead	ppm	ASTM D5185m >40	<b>&lt;1</b>	<1	---
Copper	ppm	ASTM D5185m >330	<b>1</b>	3	---
Tin	ppm	ASTM D5185m >15	<b>&lt;1</b>	<1	---
Antimony	ppm	ASTM D5185m	<b>---</b>	0	---
Vanadium	ppm	ASTM D5185m	<b>0</b>	0	---
Cadmium	ppm	ASTM D5185m	<b>0</b>	0	---

## ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m 85	<b>107</b>	99	---
Barium	ppm	ASTM D5185m	<b>0</b>	0	---
Molybdenum	ppm	ASTM D5185m	<b>1</b>	7	---
Manganese	ppm	ASTM D5185m	<b>&lt;1</b>	<1	---
Magnesium	ppm	ASTM D5185m 350	<b>757</b>	608	---
Calcium	ppm	ASTM D5185m 1800	<b>1482</b>	1311	---
Phosphorus	ppm	ASTM D5185m 1000	<b>1085</b>	989	---
Zinc	ppm	ASTM D5185m 1100	<b>1315</b>	1095	---
Sulfur	ppm	ASTM D5185m 3500	<b>4742</b>	3105	---

## CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >25	<b>4</b>	4	---
Sodium	ppm	ASTM D5185m	<b>4</b>	4	---
Potassium	ppm	ASTM D5185m >20	<b>4</b>	5	---

## INFRA-RED

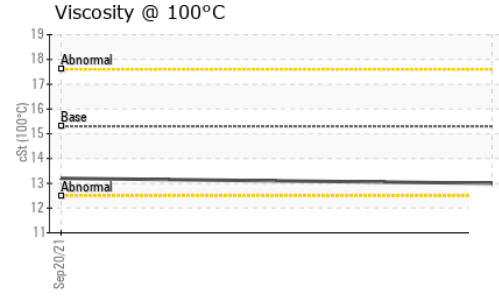
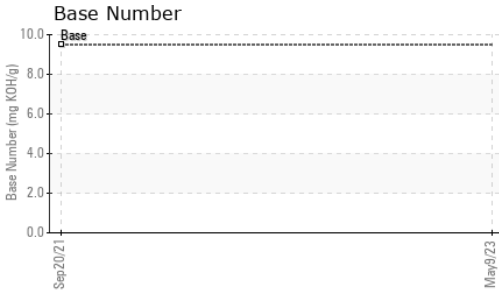
	method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844 >3	<b>0.1</b>	0.2	---
Nitration	Abs/cm	*ASTM D7624 >20	<b>7.3</b>	7.4	---
Sulfation	Abs/.1mm	*ASTM D7415 >30	<b>18.5</b>	19.7	---

## FLUID DEGRADATION

	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414 >25	<b>12.2</b>	13.4	---
Base Number (BN)	mg KOH/g	ASTM D2896 9.5	<b>8.8</b>	---	---



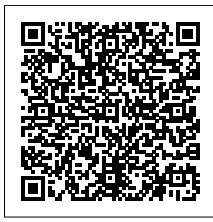
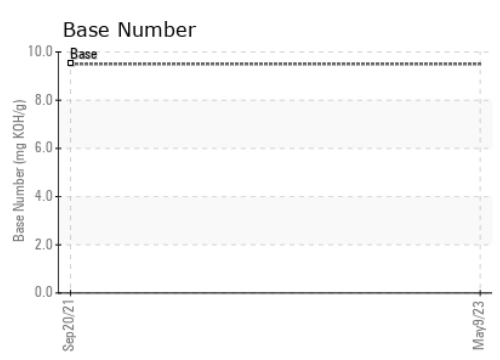
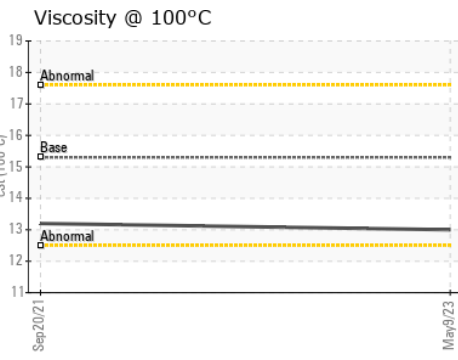
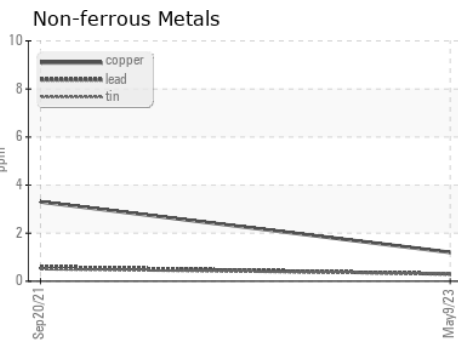
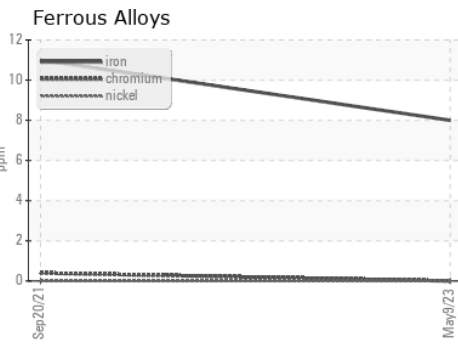
# OIL ANALYSIS REPORT



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	<b>13.0</b>	13.2	---

### GRAPHS



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : WC0793303 **Received** : 29 Aug 2023  
**Lab Number** : **05937805** **Diagnosed** : 30 Aug 2023  
**Unique Number** : 10628417 **Diagnostician** : 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:

Certificate L2367  
 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)