



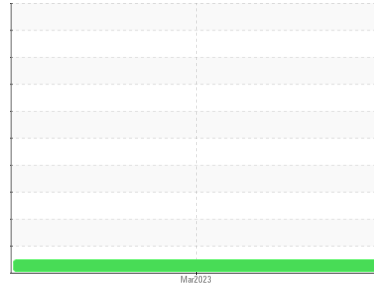
# OIL ANALYSIS REPORT

Sample Rating Trend

**NORMAL**



Machine Id  
**CATERPILLAR CUPEY CG1**  
 Component  
**Natural Gas Engine**  
 Fluid  
**CAT ADVANCE 40 381-2365 (--- 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		<b>WC0793740</b>	---	---
Sample Date	Client Info		<b>13 Mar 2023</b>	---	---
Machine Age	hrs	Client Info	<b>8962</b>	---	---
Oil Age	hrs	Client Info	<b>692</b>	---	---
Oil Changed	Client Info		<b>Changed</b>	---	---
Sample Status			<b>NORMAL</b>	---	---

## WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>50	<b>2</b>	---
Chromium	ppm	ASTM D5185m	>4	<b>&lt;1</b>	---
Nickel	ppm	ASTM D5185m	>2	<b>&lt;1</b>	---
Titanium	ppm	ASTM D5185m		<b>0</b>	---
Silver	ppm	ASTM D5185m	>3	<b>0</b>	---
Aluminum	ppm	ASTM D5185m	>9	<b>3</b>	---
Lead	ppm	ASTM D5185m	>30	<b>&lt;1</b>	---
Copper	ppm	ASTM D5185m	>35	<b>&lt;1</b>	---
Tin	ppm	ASTM D5185m	>4	<b>0</b>	---
Vanadium	ppm	ASTM D5185m		<b>0</b>	---
Cadmium	ppm	ASTM D5185m		<b>0</b>	---

## ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m		<b>0</b>	---
Barium	ppm	ASTM D5185m		<b>0</b>	---
Molybdenum	ppm	ASTM D5185m		<b>0</b>	---
Manganese	ppm	ASTM D5185m		<b>&lt;1</b>	---
Magnesium	ppm	ASTM D5185m		<b>4</b>	---
Calcium	ppm	ASTM D5185m		<b>1376</b>	---
Phosphorus	ppm	ASTM D5185m		<b>257</b>	---
Zinc	ppm	ASTM D5185m		<b>307</b>	---
Sulfur	ppm	ASTM D5185m		<b>2325</b>	---

## CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>+100	<b>3</b>	---
Sodium	ppm	ASTM D5185m		<b>0</b>	---
Potassium	ppm	ASTM D5185m	>20	<b>&lt;1</b>	---

## INFRA-RED

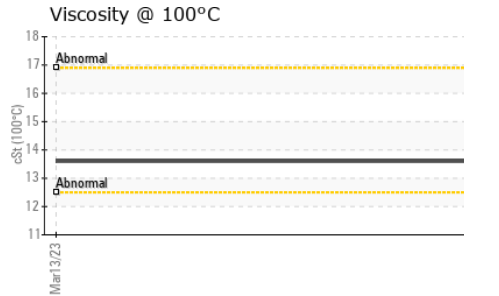
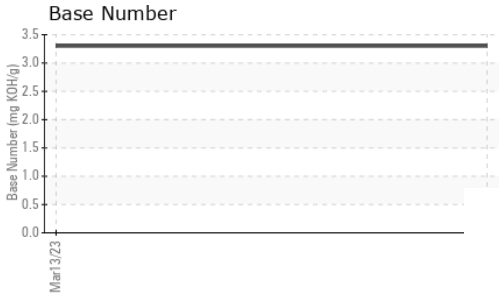
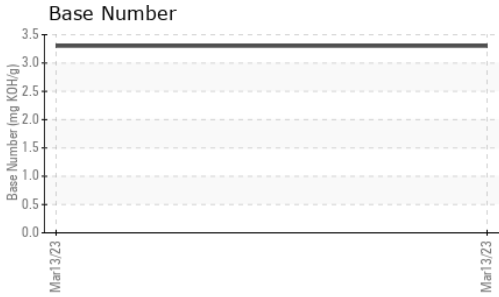
	method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844		<b>0.1</b>	---
Nitration	Abs/cm	*ASTM D7624	>20	<b>6.3</b>	---
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>16.4</b>	---

## FLUID DEGRADATION

	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>12.7</b>	---
Acid Number (AN)	mg KOH/g	ASTM D8045		<b>0.48</b>	---
Base Number (BN)	mg KOH/g	ASTM D2896		<b>3.3</b>	---



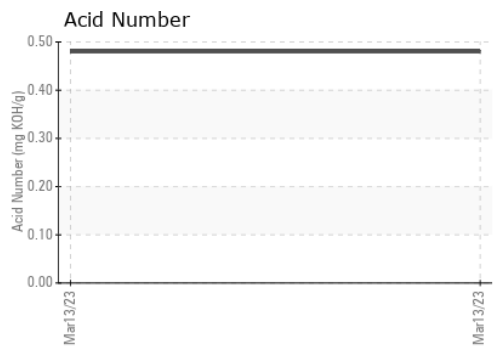
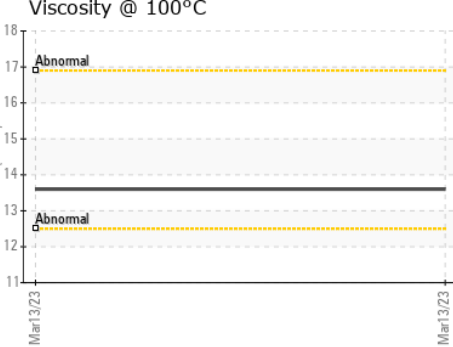
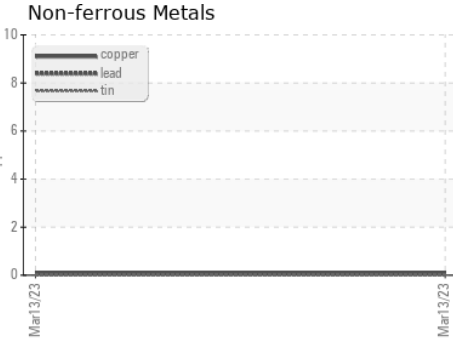
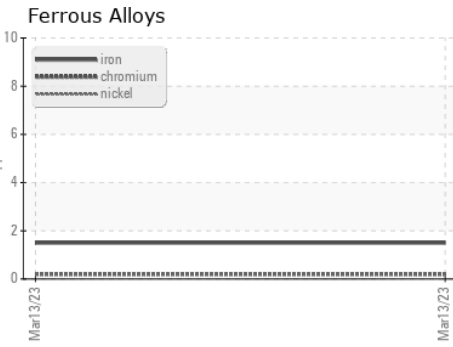
# OIL ANALYSIS REPORT



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	LIGHT	---	---
Sand/Dirt	scalar	*Visual	NONE	NONE	---	---
Appearance	scalar	*Visual	NORML	NORML	---	---
Odor	scalar	*Visual	NORML	NORML	---	---
Emulsified Water	scalar	*Visual	>0.1	NEG	---	---
Free Water	scalar	*Visual		NEG	---	---

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

### GRAPHS



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : WC0793740 **Received** : 17 Mar 2023  
**Lab Number** : 05795002 **Diagnosed** : 21 Mar 2023  
**Unique Number** : 10384686 **Diagnostician** : Angela Borella  
**Test Package** : FLEET ( Additional Tests: TAN Man )

**ACCURATE SOLUTIONS**

PO BOX 6014  
 MAYAGUEZ, ZZ  
 PR 00681  
 Contact: ROBERTO ACOSTA  
 racosta@asdpr.com  
 T: (787)833-2658  
 F: (787)832-4486

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)