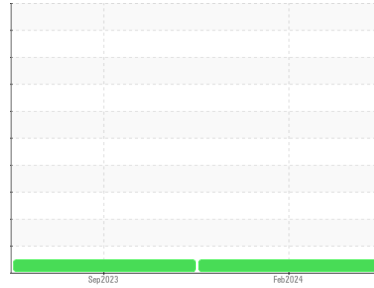




OIL ANALYSIS REPORT

Sample Rating Trend

NORMAL



Area
TULSA [22110]
 Machine Id
80-260
 Component
Diesel Engine
 Fluid
CONOCO PHILLIPS GUARDOL ECT 15W40 (--- 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		WC0836061	WC0818742	---
Sample Date	Client Info		28 Feb 2024	26 Sep 2023	---
Machine Age	hrs	Client Info	1825	1568	---
Oil Age	hrs	Client Info	257	500	---
Oil Changed	Client Info		Changed	Changed	---
Sample Status			NORMAL	NORMAL	---

CONTAMINATION

	method	limit/base	current	history1	history2
Fuel	WC Method	>3.0	<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	>90	15	39	---
Chromium	ppm	ASTM D5185m	>20	<1	<1	---
Nickel	ppm	ASTM D5185m	>2	<1	<1	---
Titanium	ppm	ASTM D5185m	>2	3	21	---
Silver	ppm	ASTM D5185m	>2	0	0	---
Aluminum	ppm	ASTM D5185m	>20	7	21	---
Lead	ppm	ASTM D5185m	>40	0	0	---
Copper	ppm	ASTM D5185m	>330	<1	2	---
Tin	ppm	ASTM D5185m	>15	<1	<1	---
Vanadium	ppm	ASTM D5185m		0	<1	---
Cadmium	ppm	ASTM D5185m		<1	<1	---

ADDITIVES

	method	limit/base	current	history1	history2	
Boron	ppm	ASTM D5185m	85	116	155	---
Barium	ppm	ASTM D5185m		0	0	---
Molybdenum	ppm	ASTM D5185m		9	5	---
Manganese	ppm	ASTM D5185m		<1	<1	---
Magnesium	ppm	ASTM D5185m	350	666	247	---
Calcium	ppm	ASTM D5185m	1800	1295	1745	---
Phosphorus	ppm	ASTM D5185m	1000	867	1087	---
Zinc	ppm	ASTM D5185m	1100	1122	1151	---
Sulfur	ppm	ASTM D5185m	3500	3574	3997	---

CONTAMINANTS

	method	limit/base	current	history1	history2	
Silicon	ppm	ASTM D5185m	>25	6	8	---
Sodium	ppm	ASTM D5185m		0	6	---
Potassium	ppm	ASTM D5185m	>20	4	6	---

INFRA-RED

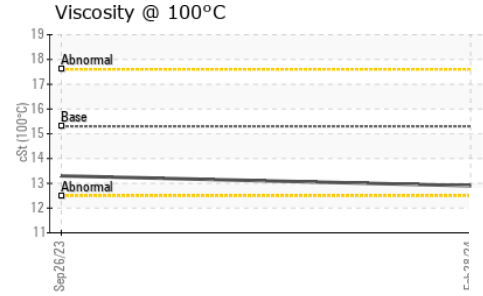
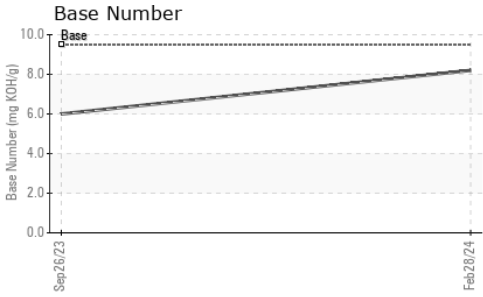
	method	limit/base	current	history1	history2	
Soot %	%	*ASTM D7844	>6	0.1	0.1	---
Nitration	Abs/cm	*ASTM D7624	>20	6.9	8.5	---
Sulfation	Abs/.1mm	*ASTM D7415	>30	17.9	22.1	---

FLUID DEGRADATION

	method	limit/base	current	history1	history2	
Oxidation	Abs/.1mm	*ASTM D7414	>25	11.8	19.3	---
Base Number (BN)	mg KOH/g	ASTM D2896	9.5	8.2	6.0	---



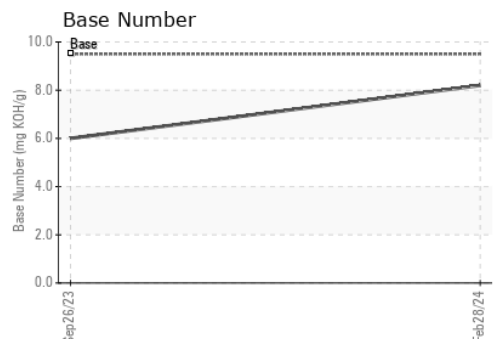
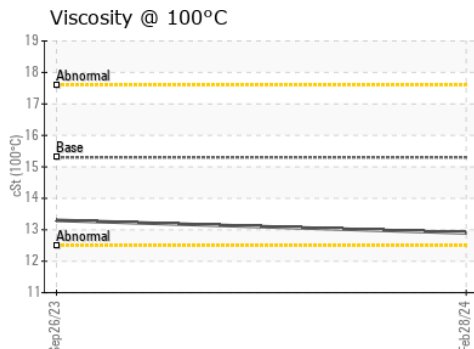
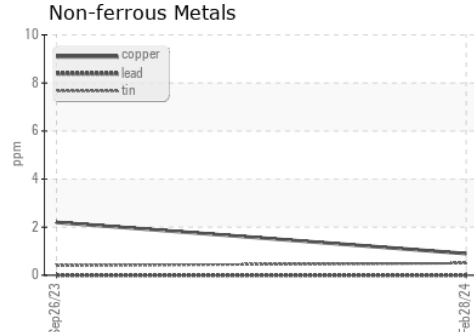
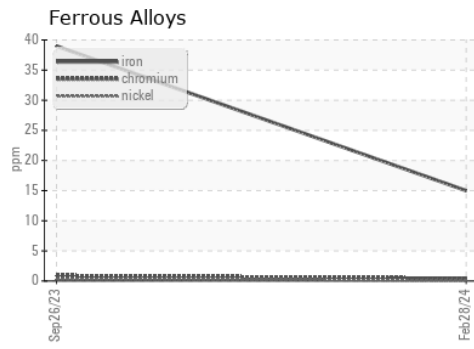
OIL ANALYSIS REPORT



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	12.9	13.3	---

GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0836061 **Received** : 01 Apr 2024
Lab Number : **06134749** **Tested** : 02 Apr 2024
Unique Number : 10954214 **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:

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)