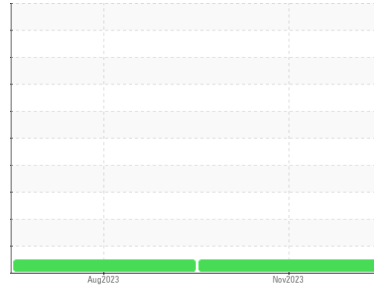


OIL ANALYSIS REPORT

Sample Rating Trend

NORMAL



Machine Id
8621
 Component
Diesel Engine
 Fluid
CHEVRON DELO 400 SAE 10W30 (--- GAL)

DIAGNOSIS

Recommendation

Resample at the next service interval to monitor. Please specify the component make and model with your next sample.

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		PCA0088540	PCA0088519	---
Sample Date	Client Info		20 Nov 2023	17 Aug 2023	---
Machine Age	mls	Client Info	64822	33259	---
Oil Age	mls	Client Info	31563	33259	---
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	29	37	---
Chromium	ppm	ASTM D5185m >20	<1	<1	---
Nickel	ppm	ASTM D5185m >4	0	<1	---
Titanium	ppm	ASTM D5185m	0	0	---
Silver	ppm	ASTM D5185m >3	0	0	---
Aluminum	ppm	ASTM D5185m >20	4	8	---
Lead	ppm	ASTM D5185m >40	2	0	---
Copper	ppm	ASTM D5185m >330	54	164	---
Tin	ppm	ASTM D5185m >15	<1	<1	---
Vanadium	ppm	ASTM D5185m	0	0	---
Cadmium	ppm	ASTM D5185m	0	0	---

ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	<1	34	---
Barium	ppm	ASTM D5185m	0	0	---
Molybdenum	ppm	ASTM D5185m	59	63	---
Manganese	ppm	ASTM D5185m	<1	3	---
Magnesium	ppm	ASTM D5185m	902	481	---
Calcium	ppm	ASTM D5185m	1059	1881	---
Phosphorus	ppm	ASTM D5185m 1260	916	1023	---
Zinc	ppm	ASTM D5185m 1400	1191	1312	---
Sulfur	ppm	ASTM D5185m	2307	3091	---

CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >25	8	13	---
Sodium	ppm	ASTM D5185m	3	5	---
Potassium	ppm	ASTM D5185m >20	5	22	---

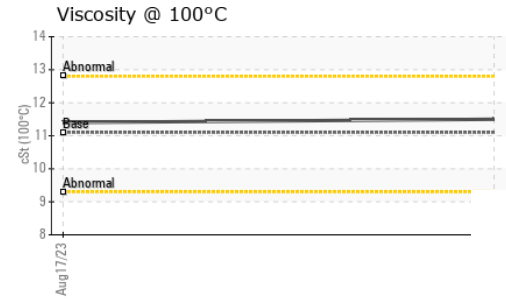
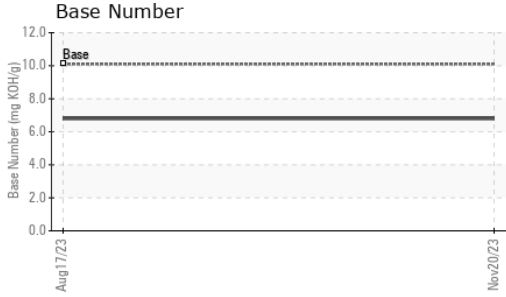
INFRA-RED

	method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844 >3	1.2	0.7	---
Nitration	Abs/cm	*ASTM D7624 >20	9.5	8.9	---
Sulfation	Abs/.1mm	*ASTM D7415 >30	22.8	21.6	---

FLUID DEGRADATION

	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414 >25	19.6	18.9	---
Base Number (BN)	mg KOH/g	ASTM D2896 10.1	6.8	6.8	---

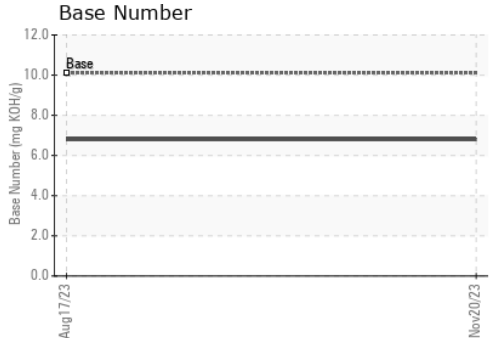
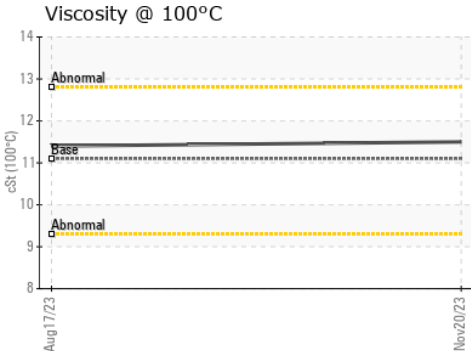
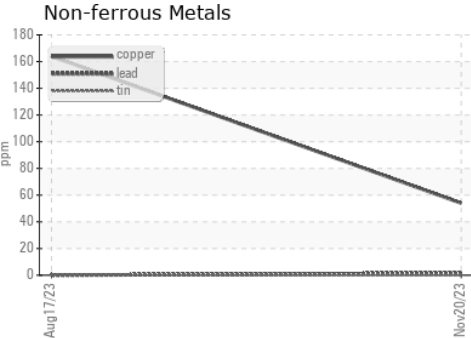
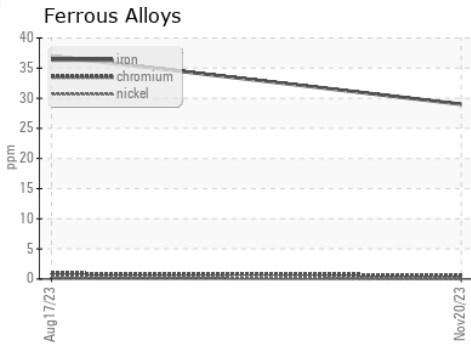
OIL ANALYSIS REPORT



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	11.1	11.5	11.4	---

GRAPHS



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : PCA0088540 **Recieved** : 16 Jan 2024
Lab Number : **06060595** **Diagnosed** : 16 Jan 2024
Unique Number : 10831977 **Diagnostician** : Wes Davis
Test Package : FLEET

MIDWEST MOTOR EXPRESS
 2169 MUSTANG DR
 MOUNDS VIEW, MN
 US 55112
 Contact: FRANK DIETZ
 frank.dietz@mmeinc.com
 T: (763)225-6382
 F: x:

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)