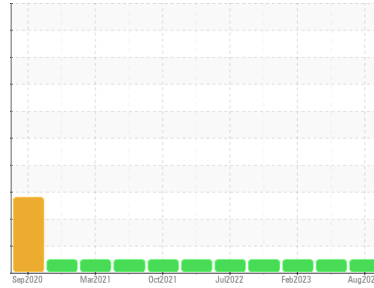


OIL ANALYSIS REPORT

Sample Rating Trend



NORMAL



Machine Id
220614 []

Component
Diesel Engine

Fluid
DIESEL ENGINE OIL SAE 10W30 (--- QTS)

DIAGNOSIS

Recommendation

Resample at the next service interval to monitor. Please specify the component make and model with your next sample. Please specify the brand, type, and viscosity of the oil on your next sample.

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		PCA0101252	PCA0073131	PCA0073091
Sample Date	Client Info		24 Aug 2023	27 Apr 2023	13 Feb 2023
Machine Age	mls	Client Info	400195	363171	330983
Oil Age	mls	Client Info	30000	41000	36000
Oil Changed	Client Info		Changed	N/A	N/A
Sample Status			NORMAL	NORMAL	NORMAL

CONTAMINATION

	method	limit/base	current	history1	history2
Fuel	WC Method	>5	<1.0	<1.0	<1.0
Glycol	WC Method		NEG	NEG	NEG

WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m >100	15	14	15
Chromium	ppm	ASTM D5185m >20	1	1	1
Nickel	ppm	ASTM D5185m >4	0	0	<1
Titanium	ppm	ASTM D5185m	0	<1	0
Silver	ppm	ASTM D5185m >3	0	0	0
Aluminum	ppm	ASTM D5185m >20	4	<1	4
Lead	ppm	ASTM D5185m >40	3	2	4
Copper	ppm	ASTM D5185m >330	<1	<1	<1
Tin	ppm	ASTM D5185m >15	0	<1	<1
Vanadium	ppm	ASTM D5185m	0	0	0
Cadmium	ppm	ASTM D5185m	0	0	0

ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m 250	0	<1	2
Barium	ppm	ASTM D5185m 10	0	0	2
Molybdenum	ppm	ASTM D5185m 100	67	61	64
Manganese	ppm	ASTM D5185m	<1	<1	<1
Magnesium	ppm	ASTM D5185m 450	1180	1038	956
Calcium	ppm	ASTM D5185m 3000	1299	1202	1188
Phosphorus	ppm	ASTM D5185m 1150	1134	1060	1066
Zinc	ppm	ASTM D5185m 1350	1449	1387	1289
Sulfur	ppm	ASTM D5185m 4250	3794	3790	2672

CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >25	5	4	2
Sodium	ppm	ASTM D5185m	2	1	0
Potassium	ppm	ASTM D5185m >20	7	4	11

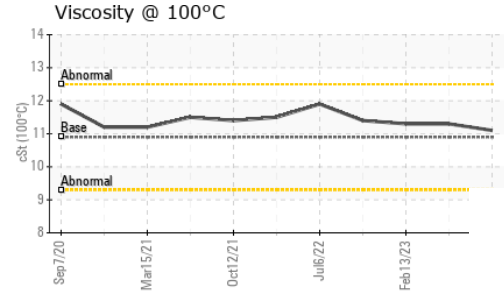
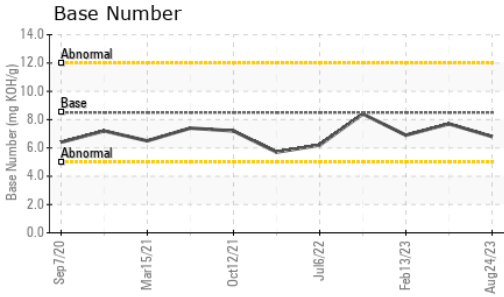
INFRA-RED

	method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844 >3	0.3	0.3	0.3
Nitration	Abs/cm	*ASTM D7624 >20	8.8	8.9	9.2
Sulfation	Abs/.1mm	*ASTM D7415 >30	20.2	20.4	20.8

FLUID DEGRADATION

	method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414 >25	17.0	17.0	17.4
Base Number (BN)	mg KOH/g	ASTM D2896 8.5	6.8	7.7	6.9

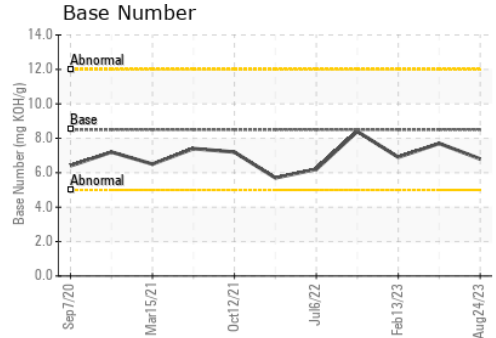
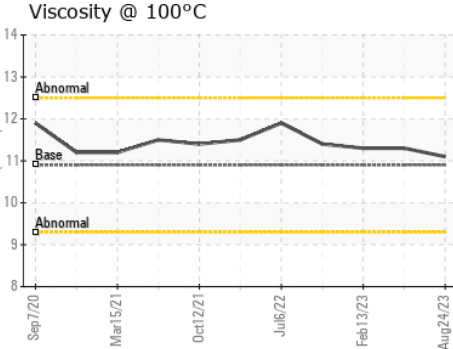
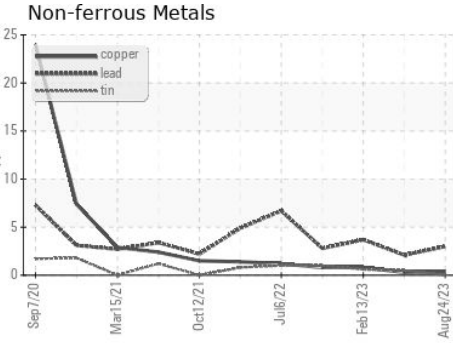
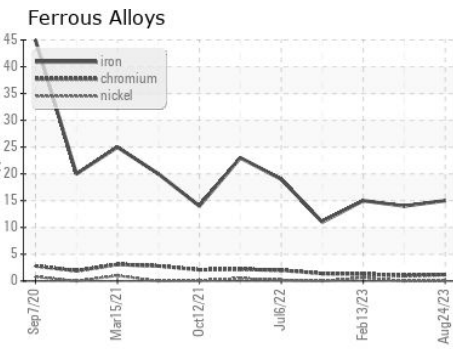
OIL ANALYSIS REPORT



VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.2	NEG	NEG
Free Water	scalar	*Visual		NEG	NEG

FLUID PROPERTIES	method	limit/base	current	history1	history2	
Visc @ 100°C	cSt	ASTM D445	10.9	11.1	11.3	11.3

GRAPHS



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : PCA0101252 **Received** : 08 Sep 2023
Lab Number : **05946314** **Diagnosed** : 11 Sep 2023
Unique Number : 10642273 **Diagnostician** : Wes Davis
Test Package : FLEET

McLane Company - High Plains - 600HP
 1717 East Loop 289
 LUBBOCK, TX
 US 79403
 Contact: RITA GARCIA
 rita.garcia@mlcane.com
 T: (806)766-2902
 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)