



WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id
220474 []
 Component
Diesel Engine
 Fluid
DIESEL ENGINE OIL SAE 10W30 (--- QTS)

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.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		PCA0101203	PCA0101274	PCA0073137
Sample Date		Client Info		15 Feb 2024	15 Oct 2023	06 Jun 2023
Machine Age	mls	Client Info		431761	401976	359247
Oil Age	mls	Client Info		0	30000	44000
Filter Age	mls	Client Info		0	30000	44000
Oil Changed		Client Info		Changed	Changed	N/A
Filter Changed		Client Info		Changed	Changed	N/A
Sample Status				NORMAL	NORMAL	NORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>100	26	28	20
Chromium	ppm	ASTM D5185m	>20	2	2	2
Nickel	ppm	ASTM D5185m	>4	<1	<1	0
Titanium	ppm	ASTM D5185m		<1	0	0
Silver	ppm	ASTM D5185m	>3	0	<1	0
Aluminum	ppm	ASTM D5185m	>20	6	4	4
Lead	ppm	ASTM D5185m	>40	1	4	<1
Copper	ppm	ASTM D5185m	>330	4	3	<1
Tin	ppm	ASTM D5185m	>15	<1	<1	<1
Vanadium	ppm	ASTM D5185m		<1	0	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

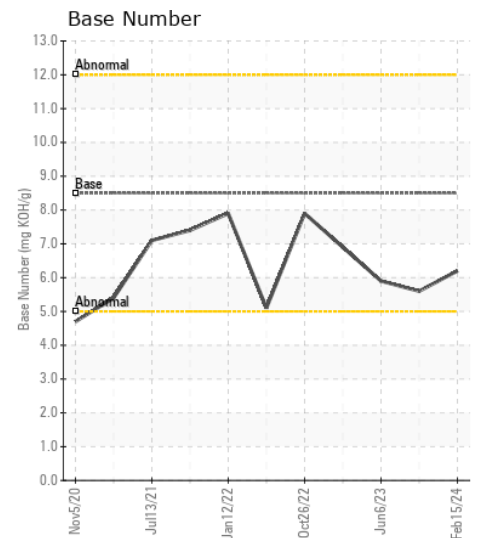
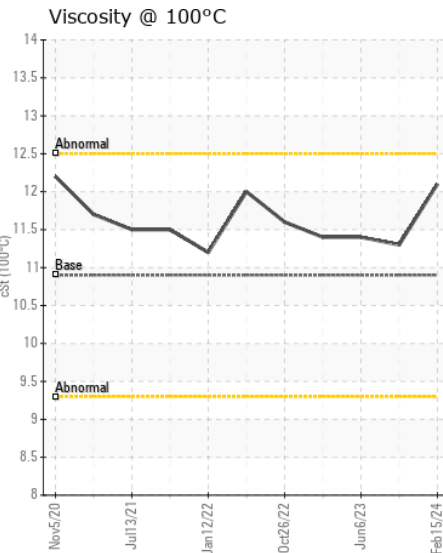
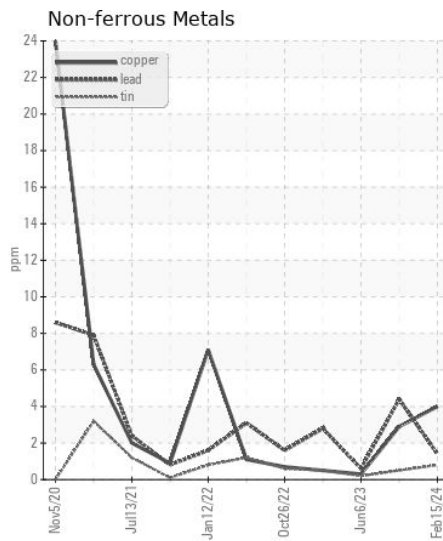
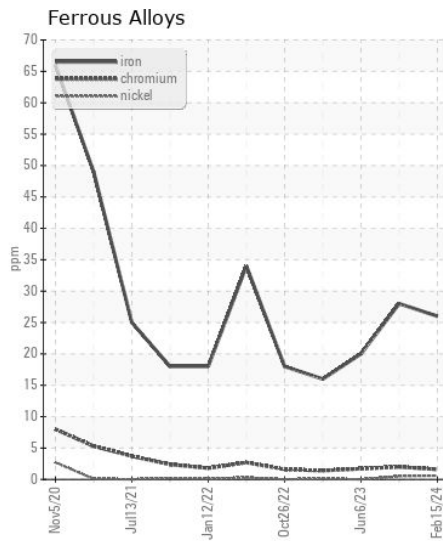
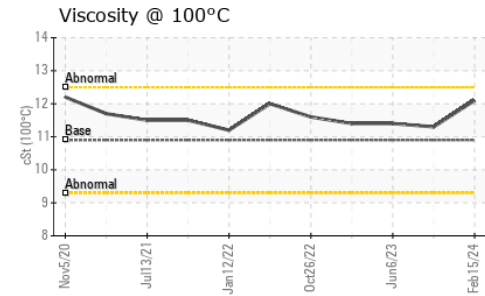
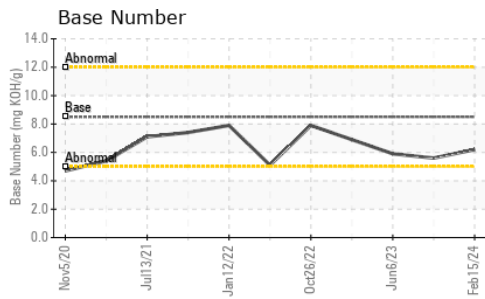
Elevated aluminum (Al) and/or lead (Pb) and potassium (K) levels in your metals analysis are likely a result of solder flux release into the lubricant and is common on new equipment/components. There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>25	7	6	4
Potassium	ppm	ASTM D5185m	>20	13	11	12
Fuel		WC Method	>5	<1.0	<1.0	<1.0
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	*ASTM D7844	>3	0.3	0.5	0.4
Nitration	Abs/cm	*ASTM D7624	>20	8.9	10.3	10.0
Sulfation	Abs/.1mm	*ASTM D7415	>30	20.9	22.7	22.4
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.2	NEG	NEG	NEG

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.

Sodium	ppm	ASTM D5185m		0	0	1
Boron	ppm	ASTM D5185m	250	20	0	0
Barium	ppm	ASTM D5185m	10	<1	4	0
Molybdenum	ppm	ASTM D5185m	100	68	68	63
Manganese	ppm	ASTM D5185m		<1	<1	<1
Magnesium	ppm	ASTM D5185m	450	874	982	1059
Calcium	ppm	ASTM D5185m	3000	1045	1120	1153
Phosphorus	ppm	ASTM D5185m	1150	1012	961	1053
Zinc	ppm	ASTM D5185m	1350	1224	1269	1315
Sulfur	ppm	ASTM D5185m	4250	2980	2948	3376
Oxidation	Abs/.1mm	*ASTM D7414	>25	17.7	20.0	19.3
Base Number (BN)	mg KOH/g	ASTM D2896	8.5	6.2	5.6	5.9
Visc @ 100°C	cSt	ASTM D445	10.9	12.1	11.3	11.4



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : PCA0101203
Lab Number : 06102345
Unique Number : 10900575
Test Package : FLEET

Received : 27 Feb 2024
Tested : 28 Feb 2024
Diagnosed : 28 Feb 2024 - Wes Davis

McLane Company - High Plains - 600HP
 1717 East Loop 289
 LUBBOCK, TX
 US 79403
 Contact: RITA GARCIA
 rita.garcia@mcclaneco.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)