



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id
1606
Component
Diesel Engine
Fluid
DIESEL ENGINE OIL SAE 15W40 (--- QTS)

RECOMMENDATION

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

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		WC0870736	WC0426618	---
Sample Date		Client Info		16 Nov 2023	12 Feb 2020	---
Machine Age	mls	Client Info		214001	165538	---
Oil Age	mls	Client Info		0	0	---
Filter Age	mls	Client Info		0	0	---
Oil Changed		Client Info		Not Changd	Not Changd	---
Filter Changed		Client Info		Not Changd	Not Changd	---
Sample Status				NORMAL	ABNORMAL	---

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>100	9	▲ 117	---
Chromium	ppm	ASTM D5185m	>20	<1	2	---
Nickel	ppm	ASTM D5185m	>4	0	<1	---
Titanium	ppm	ASTM D5185m		0	<1	---
Silver	ppm	ASTM D5185m	>3	0	0	---
Aluminum	ppm	ASTM D5185m	>20	5	▲ 32	---
Lead	ppm	ASTM D5185m	>40	0	0	---
Copper	ppm	ASTM D5185m	>330	<1	46	---
Tin	ppm	ASTM D5185m	>15	0	0	---
Vanadium	ppm	ASTM D5185m		<1	0	---
White Metal	scalar	*Visual	NONE	NONE	NONE	---
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	---

CONTAMINATION

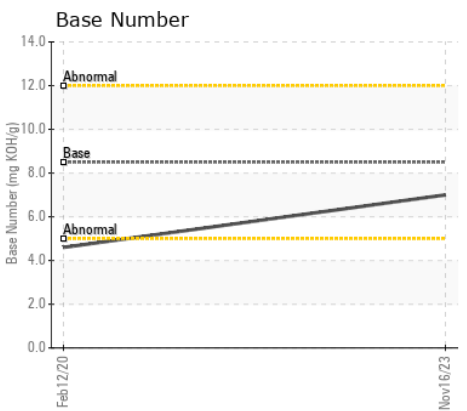
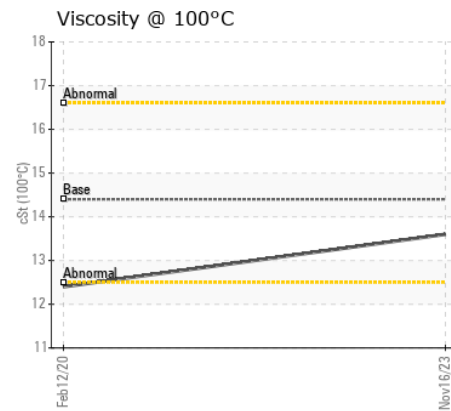
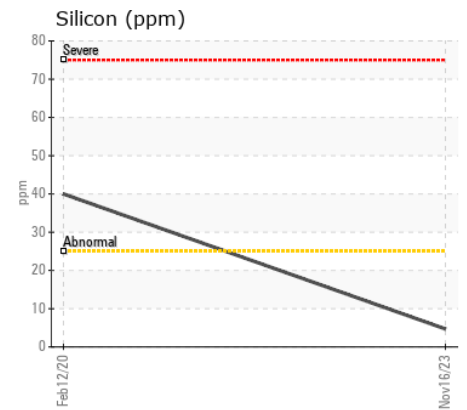
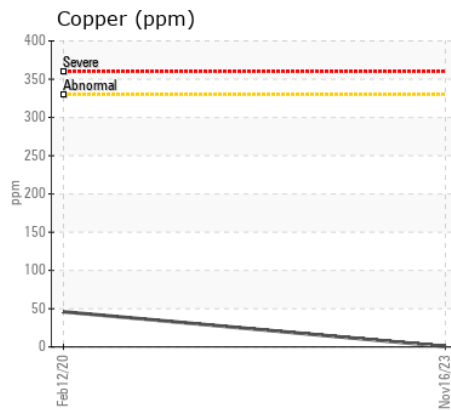
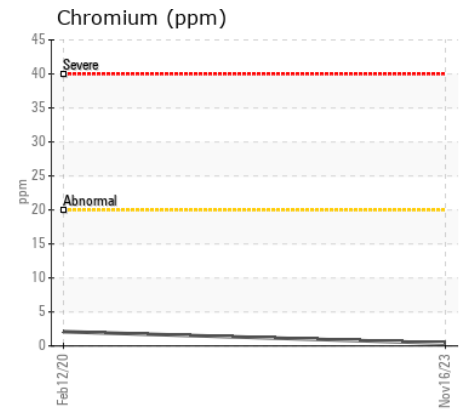
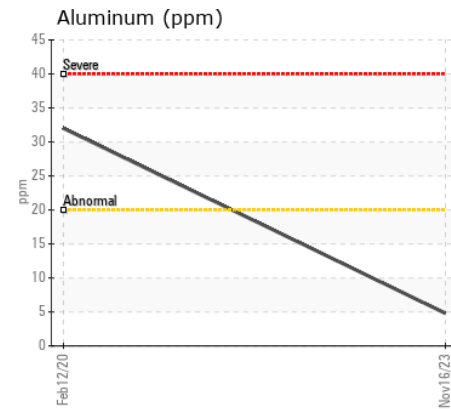
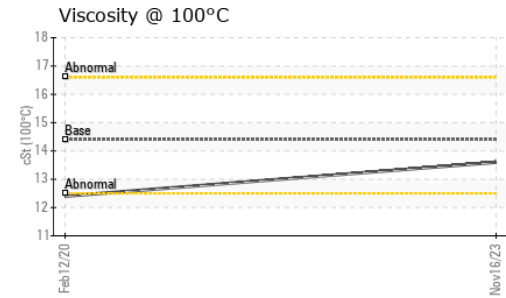
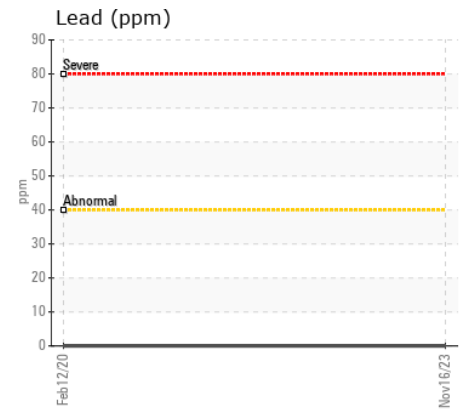
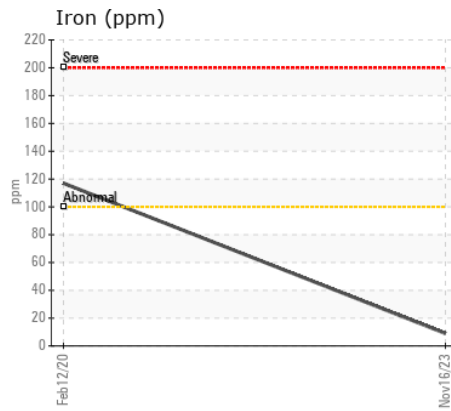
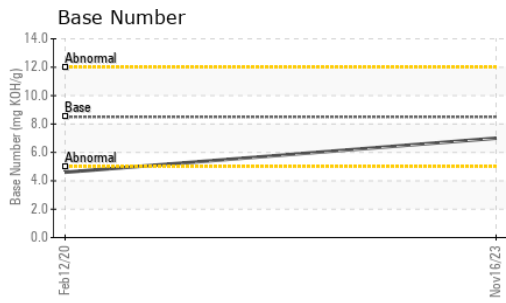
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>25	5	▲ 40	---
Potassium	ppm	ASTM D5185m	>20	3	▲ 102	---
Fuel		WC Method	>5	<1.0	<1.0	---
Water		WC Method	>0.2	NEG	NEG	---
Glycol		WC Method		NEG	NEG	---
Soot %	%	*ASTM D7844	>3	0.4	0.7	---
Nitration	Abs/cm	*ASTM D7624	>20	9.1	14	---
Sulfation	Abs/.1mm	*ASTM D7415	>30	18.9	29.6	---
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	---

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	>158	2	10	---
Boron	ppm	ASTM D5185m	250	33	16	---
Barium	ppm	ASTM D5185m	10	0	10	---
Molybdenum	ppm	ASTM D5185m	100	80	44	---
Manganese	ppm	ASTM D5185m		0	10	---
Magnesium	ppm	ASTM D5185m	450	140	612	---
Calcium	ppm	ASTM D5185m	3000	2005	1524	---
Phosphorus	ppm	ASTM D5185m	1150	1000	957	---
Zinc	ppm	ASTM D5185m	1350	1174	1113	---
Sulfur	ppm	ASTM D5185m	4250	3482	2199	---
Oxidation	Abs/.1mm	*ASTM D7414	>25	14.8	31.8	---
Base Number (BN)	mg KOH/g	ASTM D2896	8.5	7.0	4.6	---
Visc @ 100°C	cSt	ASTM D445	14.4	13.6	12.4	---



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0870736 **Received** : 16 Jan 2024
Lab Number : 06061713 **Diagnosed** : 17 Jan 2024
Unique Number : 10833095 **Diagnostician** : Wes Davis
Test Package : MOB 1 (Additional Tests: TBN)

WAKE COUNTY PUBLIC SCHOOL SYSTEM
 1551 ROCK QUARRY ROAD
 RALEIGH, NC
 US 27610
 Contact: DEVIN WEBER
 dweber@wcpss.net
 T: (919)856-8076
 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)