



# OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id  
**619**  
Component  
**Diesel Engine**  
Fluid  
**DIESEL ENGINE OIL SAE 15W40 (--- GAL)**

## 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		<b>WC0745780</b>	WC0745776	WC0745773
Sample Date		Client Info		<b>18 Jan 2024</b>	30 Sep 2023	24 Jun 2023
Machine Age	hrs	Client Info		<b>4706</b>	4086	3561
Oil Age	hrs	Client Info		<b>0</b>	0	0
Filter Age	hrs	Client Info		<b>0</b>	0	0
Oil Changed		Client Info		<b>Changed</b>	Changed	Changed
Filter Changed		Client Info		<b>Changed</b>	Changed	Changed
Sample Status				<b>NORMAL</b>	NORMAL	NORMAL

## WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>100	<b>27</b>	32	56
Chromium	ppm	ASTM D5185m	>20	<b>2</b>	2	2
Nickel	ppm	ASTM D5185m	>4	<b>2</b>	<1	<1
Titanium	ppm	ASTM D5185m		<b>&lt;1</b>	<1	<1
Silver	ppm	ASTM D5185m	>3	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m	>20	<b>15</b>	11	12
Lead	ppm	ASTM D5185m	>40	<b>1</b>	<1	<1
Copper	ppm	ASTM D5185m	>330	<b>3</b>	2	3
Tin	ppm	ASTM D5185m	>15	<b>2</b>	1	2
Vanadium	ppm	ASTM D5185m		<b>0</b>	<1	<1
White Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE

## CONTAMINATION

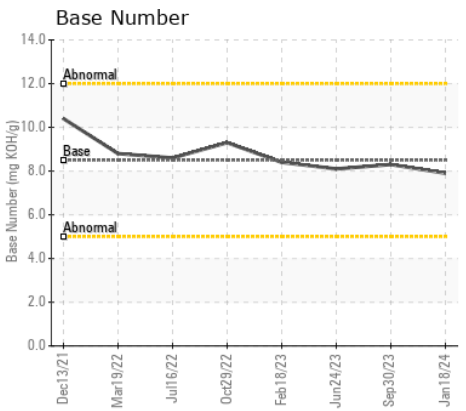
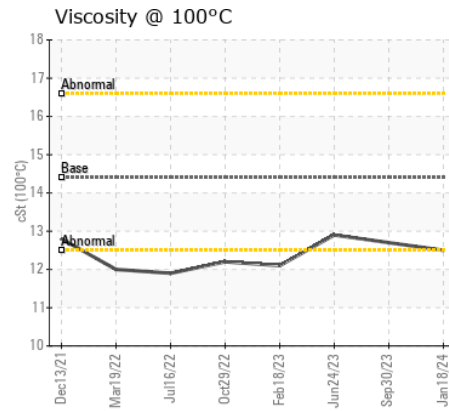
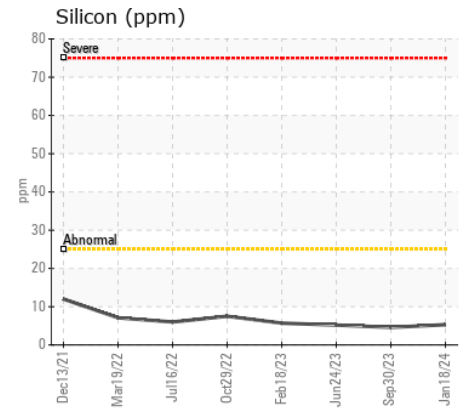
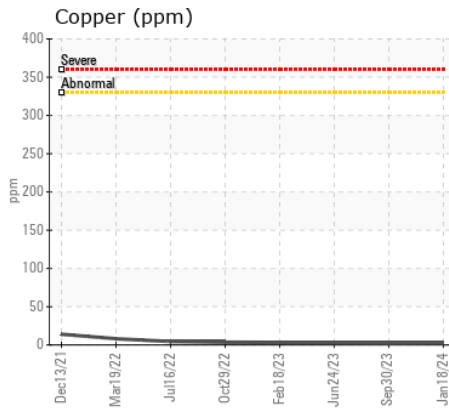
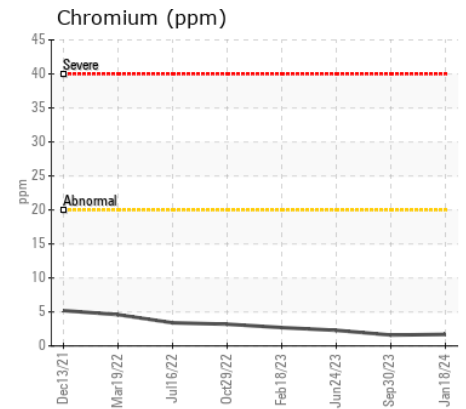
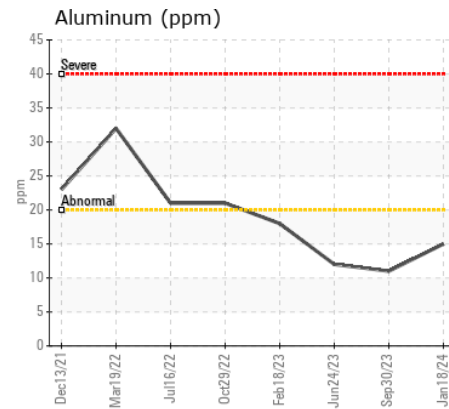
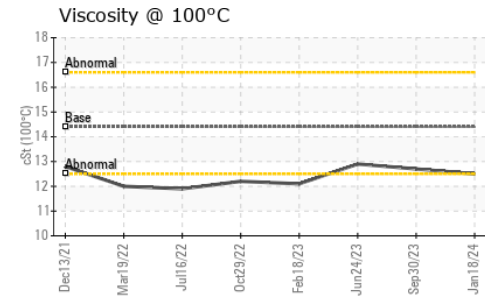
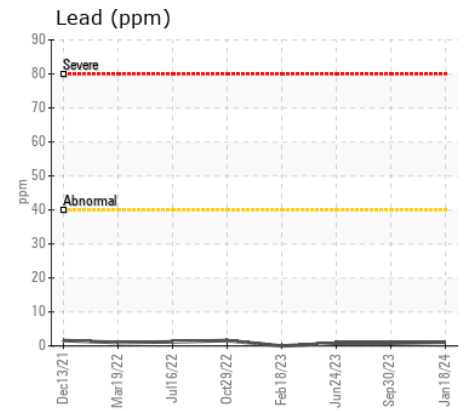
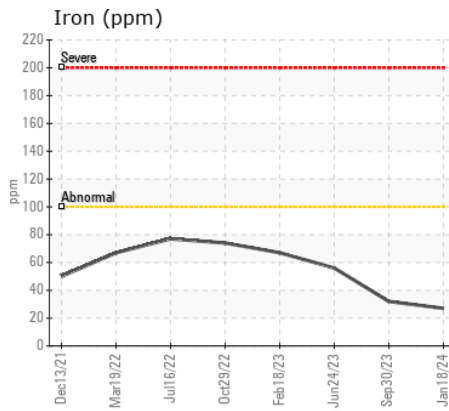
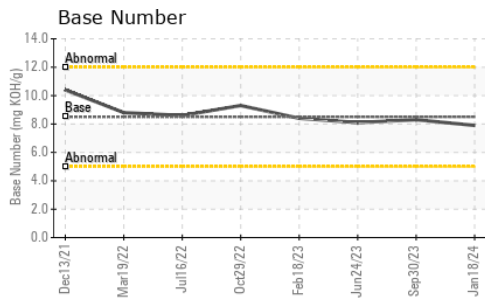
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>25	<b>5</b>	5	5
Potassium	ppm	ASTM D5185m	>20	<b>10</b>	10	11
Fuel		WC Method	>5	<b>&lt;1.0</b>	<1.0	<1.0
Water		WC Method	>0.2	<b>NEG</b>	NEG	NEG
Glycol		WC Method		<b>NEG</b>	NEG	NEG
Soot %	%	*ASTM D7844	>3	<b>0.5</b>	0.5	0.5
Nitration	Abs/cm	*ASTM D7624	>20	<b>9.7</b>	9.6	11.4
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>19.5</b>	19.7	21.5
Silt	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Debris	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Appearance	scalar	*Visual	NORML	<b>NORML</b>	NORML	NORML
Odor	scalar	*Visual	NORML	<b>NORML</b>	NORML	NORML
Emulsified Water	scalar	*Visual	>0.2	<b>NEG</b>	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	<b>0</b>	2	2
Boron	ppm	ASTM D5185m	250	<b>10</b>	5	4
Barium	ppm	ASTM D5185m	10	<b>14</b>	0	0
Molybdenum	ppm	ASTM D5185m	100	<b>72</b>	69	71
Manganese	ppm	ASTM D5185m		<b>&lt;1</b>	<1	1
Magnesium	ppm	ASTM D5185m	450	<b>815</b>	950	994
Calcium	ppm	ASTM D5185m	3000	<b>1205</b>	1216	1242
Phosphorus	ppm	ASTM D5185m	1150	<b>999</b>	1047	1072
Zinc	ppm	ASTM D5185m	1350	<b>1180</b>	1291	1339
Sulfur	ppm	ASTM D5185m	4250	<b>3316</b>	2918	2908
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>15.6</b>	16.0	18.0
Base Number (BN)	mg KOH/g	ASTM D2896	8.5	<b>7.9</b>	8.3	8.1
Visc @ 100°C	cSt	ASTM D445	14.4	<b>12.5</b>	12.7	12.9



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : WC0745780 **Received** : 12 Feb 2024  
**Lab Number** : 06086613 **Tested** : 13 Feb 2024  
**Unique Number** : 10874058 **Diagnosed** : 13 Feb 2024 - Wes Davis  
**Test Package** : MOBCE ( Additional Tests: TBN )

**HENRY FLIGELTAUB CO**  
 1719 W LOUISIANA ST  
 EVANSVILLE, IN  
 US 47710  
 Contact: DON MACLEOD  
 dmacleod@fligeltaub.com  
 T: (812)423-6219  
 F: (812)425-5140

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)