



# OIL ANALYSIS REPORT

WEAR	<b>NORMAL</b>
CONTAMINATION	<b>NORMAL</b>
FLUID CONDITION	<b>NORMAL</b>

Machine Id  
**LINKBELT 613**  
Component  
**Diesel Engine**  
Fluid  
**DIESEL ENGINE OIL SAE 15W40 (--- QTS)**

## RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>WC0745781</b>	WC0745774	WC0609076
Sample Date		Client Info		<b>02 Feb 2024</b>	26 Sep 2023	07 Apr 2023
Machine Age	hrs	Client Info		<b>12587</b>	11946	11093
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>	ABNORMAL	SEVERE

## WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>100	<b>15</b>	23	47
Chromium	ppm	ASTM D5185m	>20	<b>&lt;1</b>	<1	2
Nickel	ppm	ASTM D5185m	>4	<b>&lt;1</b>	<1	<1
Titanium	ppm	ASTM D5185m		<b>&lt;1</b>	<1	0
Silver	ppm	ASTM D5185m	>3	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m	>20	<b>5</b>	7	▲ 40
Lead	ppm	ASTM D5185m	>40	<b>3</b>	6	28
Copper	ppm	ASTM D5185m	>330	<b>3</b>	3	6
Tin	ppm	ASTM D5185m	>15	<b>1</b>	<1	2
Vanadium	ppm	ASTM D5185m		<b>0</b>	<1	0
White Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE

## CONTAMINATION

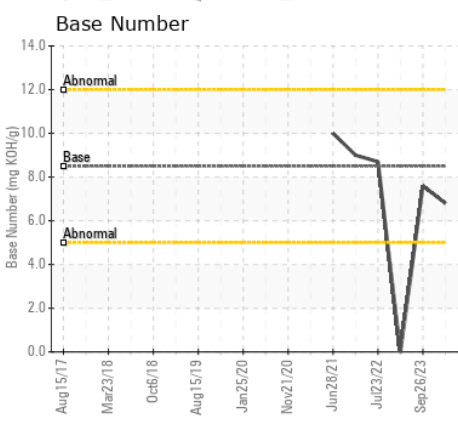
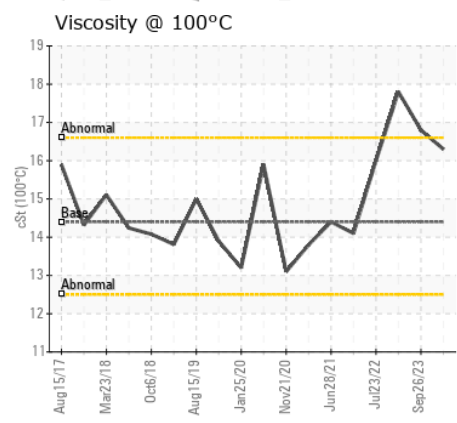
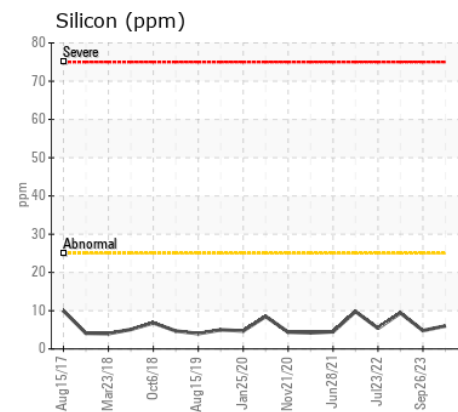
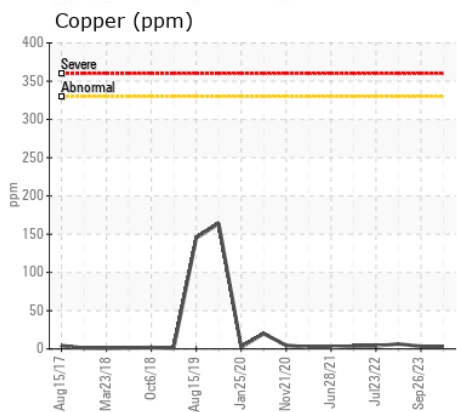
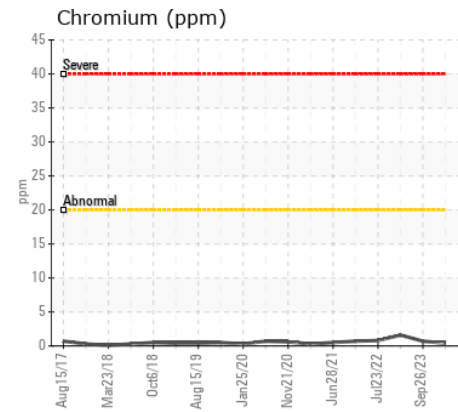
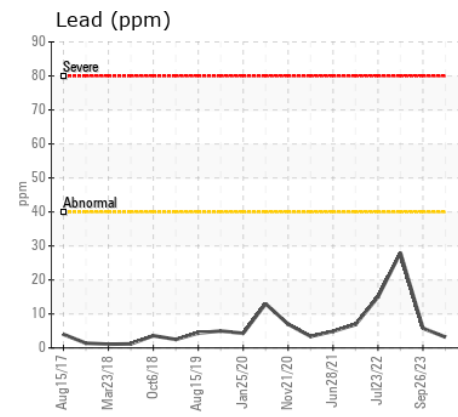
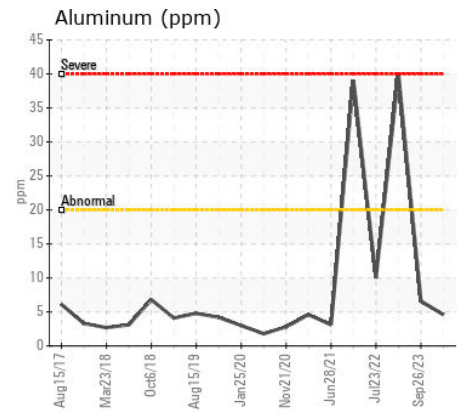
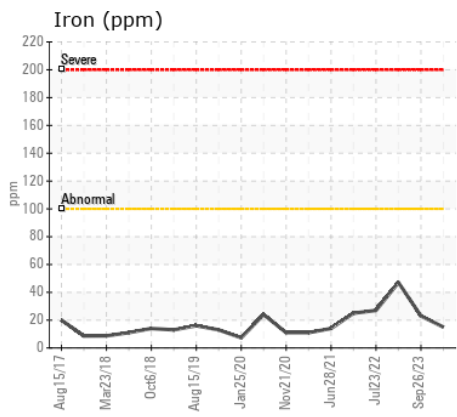
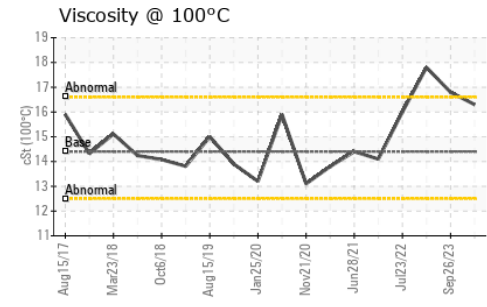
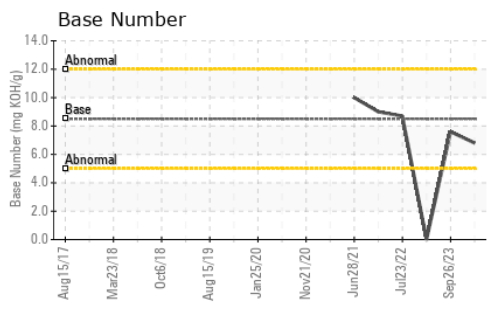
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>25	<b>6</b>	5	9
Potassium	ppm	ASTM D5185m	>20	<b>2</b>	1	2
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>2.9</b>	▲ 3.5	● 5.2
Nitration	Abs/cm	*ASTM D7624	>20	<b>10.5</b>	11.7	19.3
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>25.5</b>	27.1	35.8
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	4
Boron	ppm	ASTM D5185m	250	<b>8</b>	4	4
Barium	ppm	ASTM D5185m	10	<b>13</b>	0	0
Molybdenum	ppm	ASTM D5185m	100	<b>71</b>	66	72
Manganese	ppm	ASTM D5185m		<b>&lt;1</b>	<1	2
Magnesium	ppm	ASTM D5185m	450	<b>1032</b>	1070	1128
Calcium	ppm	ASTM D5185m	3000	<b>1262</b>	1234	1317
Phosphorus	ppm	ASTM D5185m	1150	<b>1081</b>	1070	1121
Zinc	ppm	ASTM D5185m	1350	<b>1397</b>	1401	1476
Sulfur	ppm	ASTM D5185m	4250	<b>3539</b>	2887	3375
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>18.2</b>	19.1	39.4
Base Number (BN)	mg KOH/g	ASTM D2896	8.5	<b>6.8</b>	7.6	▲ 0.0
Visc @ 100°C	cSt	ASTM D445	14.4	<b>16.3</b>	▲ 16.8	▲ 17.8



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : WC0745781 **Received** : 12 Feb 2024  
**Lab Number** : 06086612 **Tested** : 13 Feb 2024  
**Unique Number** : 10874057 **Diagnosed** : 13 Feb 2024 - Wes Davis  
**Test Package** : MOBCE ( Additional Tests: TBN )

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Certificate L2367  
 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)