



# OIL ANALYSIS REPORT

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

Machine Id  
**TIMBCO 41**  
 Component  
**Diesel Engine**  
 Fluid  
**AMSOIL (PCO) SYN HD DIESEL15W40 (22 LTR)**

## RECOMMENDATION

Confirm the source of the lubricant being utilized for top-up/fill.  
 Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>WC0851306</b>	WC0753434	WC0753433
Sample Date		Client Info		<b>30 May 2024</b>	18 Aug 2023	13 Jul 2023
Machine Age	hrs	Client Info		<b>37535</b>	36821	36640
Oil Age	hrs	Client Info		<b>800</b>	181	400
Filter Age	hrs	Client Info		<b>800</b>	181	400
Oil Changed		Client Info		<b>Changed</b>	Not Changd	Changed
Filter Changed		Client Info		<b>Changed</b>	Not Changd	Changed
Sample Status				<b>NORMAL</b>	NORMAL	NORMAL

## WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185(m)	>90	<b>43</b>	21	55
Chromium	ppm	ASTM D5185(m)	>20	<b>3</b>	2	3
Nickel	ppm	ASTM D5185(m)	>2	<b>&lt;1</b>	<1	<1
Titanium	ppm	ASTM D5185(m)	>2	<b>&lt;1</b>	<1	<1
Silver	ppm	ASTM D5185(m)	>2	<b>0</b>	<1	0
Aluminum	ppm	ASTM D5185(m)	>20	<b>3</b>	2	3
Lead	ppm	ASTM D5185(m)	>40	<b>2</b>	<1	2
Copper	ppm	ASTM D5185(m)	>330	<b>2</b>	<1	3
Tin	ppm	ASTM D5185(m)	>15	<b>0</b>	0	<1
Vanadium	ppm	ASTM D5185(m)		<b>0</b>	0	0

## CONTAMINATION

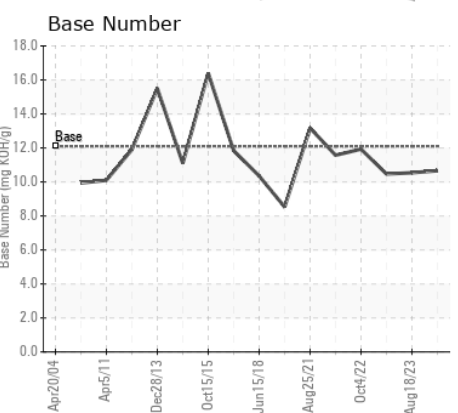
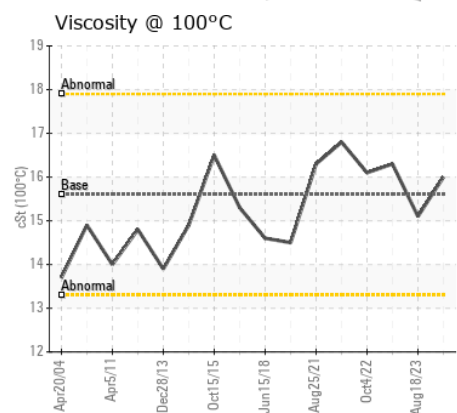
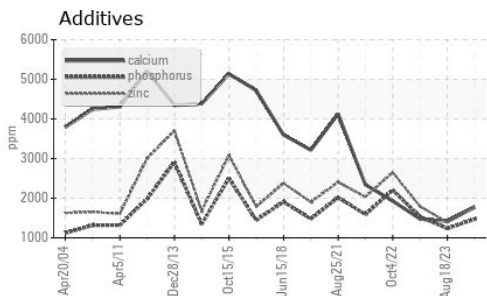
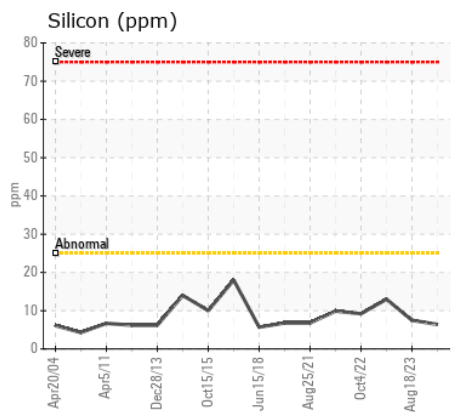
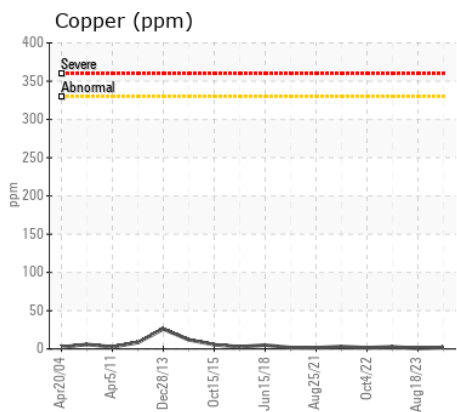
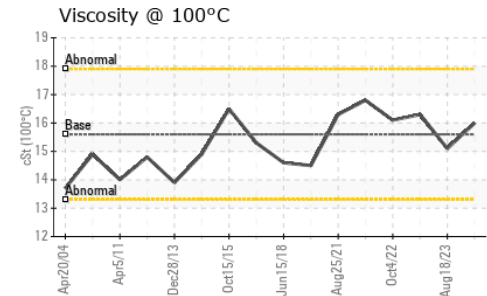
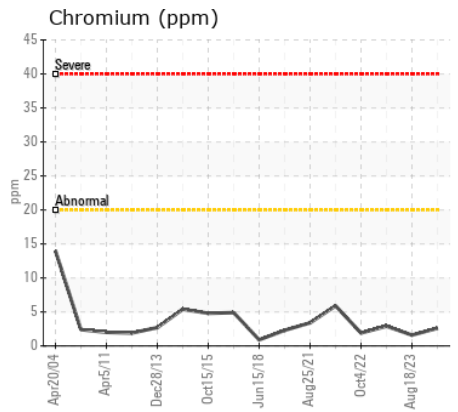
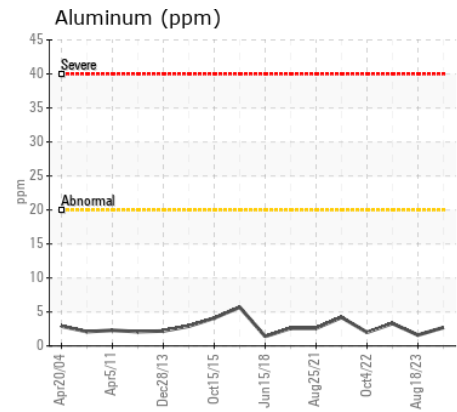
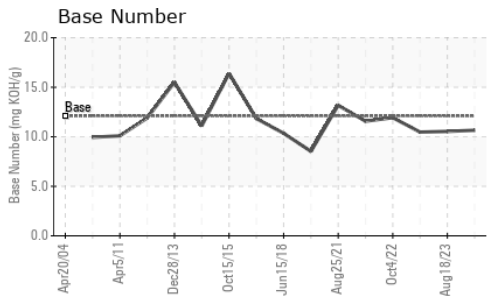
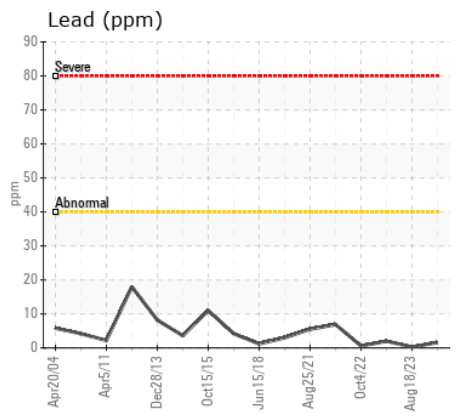
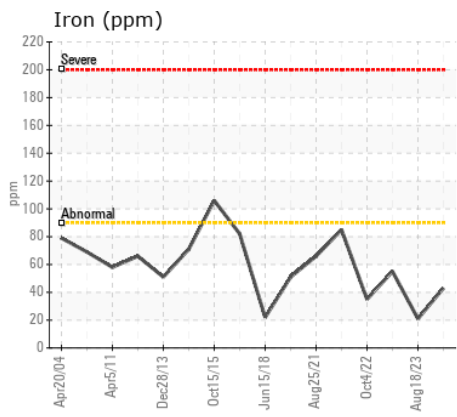
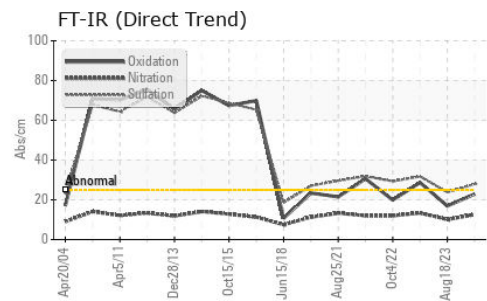
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185(m)	>25	<b>6</b>	8	13
Potassium	ppm	ASTM D5185(m)	>20	<b>4</b>	3	1
Fuel		WC Method	>3.0	<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*	>6	<b>0.9</b>	0.5	1.5
Nitration	Abs/cm	ASTM D7624*	>20	<b>12.6</b>	10.1	13.4
Sulfation	Abs/.1mm	ASTM D7415*	>30	<b>27.9</b>	23.8	31.8
Emulsified Water	scalar	Visual*	>0.2	<b>NEG</b>	NEG	NEG

## FLUID CONDITION

Additive levels indicate the addition of a different brand, or type of oil.  
 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 D5185(m)		<b>9</b>	3	6
Boron	ppm	ASTM D5185(m)	7.2	<b>53</b>	64	65
Barium	ppm	ASTM D5185(m)	0.0	<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185(m)	0.0	<b>1</b>	9	58
Manganese	ppm	ASTM D5185(m)		<b>&lt;1</b>	<1	<1
Magnesium	ppm	ASTM D5185(m)	460	<b>925</b>	823	1164
Calcium	ppm	ASTM D5185(m)	2996	<b>1770</b>	1417	1472
Phosphorus	ppm	ASTM D5185(m)	1076	<b>1473</b>	1235	1532
Zinc	ppm	ASTM D5185(m)	1208	<b>1772</b>	1387	1791
Sulfur	ppm	ASTM D5185(m)	4236	<b>3413</b>	3225	3208
Oxidation	Abs/.1mm	ASTM D7414*	>25	<b>22.9</b>	16.9	28.7
Base Number (BN)	mg KOH/g	ASTM D2896*	12.1	<b>10.66</b>	10.54	10.47
Visc @ 100°C	cSt	ASTM D7279(m)	15.6	<b>16.0</b>	15.1	16.3



**Laboratory** : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9  
**Sample No.** : WC0851306 **Received** : 05 Jun 2024  
**Lab Number** : 02639752 **Tested** : 05 Jun 2024  
**Unique Number** : 5788914 **Diagnosed** : 06 Jun 2024 - Kevin Marson  
**Test Package** : MOB 2

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To discuss this sample report, contact Customer Service at 1-800-268-2131.  
 Test denoted (\*) outside scope of accreditation, (m) method modified, (e) tested at external lab.  
 Validity of results and interpretation are based on the sample and information as supplied.