



**OIL ANALYSIS REPORT**

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

Machine Id  
**THOMAS 23**  
Component  
**Diesel Engine**  
Fluid  
**TRC MOLY XL PRO-SPEC IV XP 15W40 (18 QTS)**

**RECOMMENDATION**

No corrective action is recommended at this time. Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>TR06160598</b>	TR06102554	TR06046348
Sample Date		Client Info		<b>28 Mar 2024</b>	26 Jan 2024	08 Dec 2023
Machine Age	hrs	Client Info		<b>6056</b>	5851	5700
Oil Age	hrs	Client Info		<b>1021</b>	816	666
Filter Age	hrs	Client Info		<b>205</b>	151	183
Oil Changed		Client Info		<b>Not Chngd</b>	Not Chngd	Not Chngd
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	>130	<b>128</b>	109	92
Chromium	ppm	ASTM D5185m	>10	<b>2</b>	1	1
Nickel	ppm	ASTM D5185m	>4	<b>2</b>	<1	0
Titanium	ppm	ASTM D5185m	>2	<b>&lt;1</b>	0	<1
Silver	ppm	ASTM D5185m	>2	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m	>20	<b>25</b>	21	20
Lead	ppm	ASTM D5185m	>20	<b>&lt;1</b>	1	0
Copper	ppm	ASTM D5185m	>125	<b>5</b>	3	2
Tin	ppm	ASTM D5185m	>4	<b>1</b>	1	1
Vanadium	ppm	ASTM D5185m		<b>&lt;1</b>	<1	0
White Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE

**CONTAMINATION**

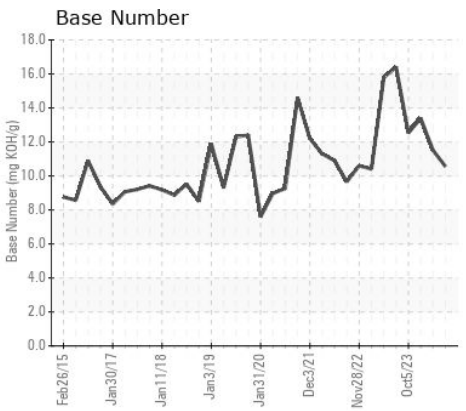
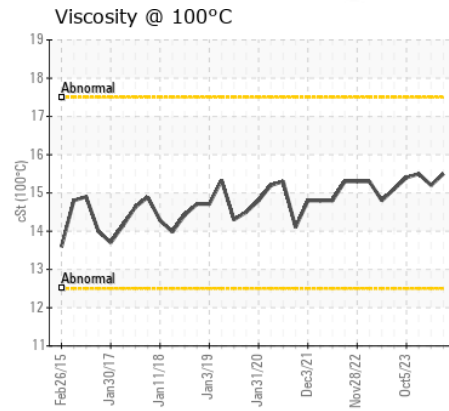
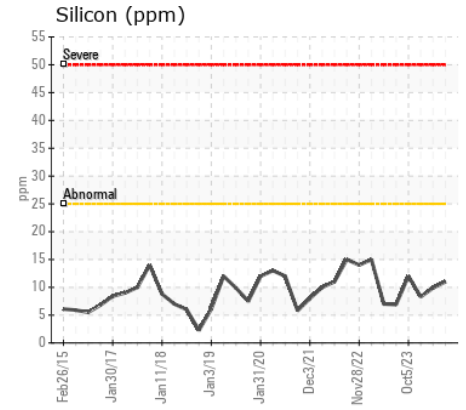
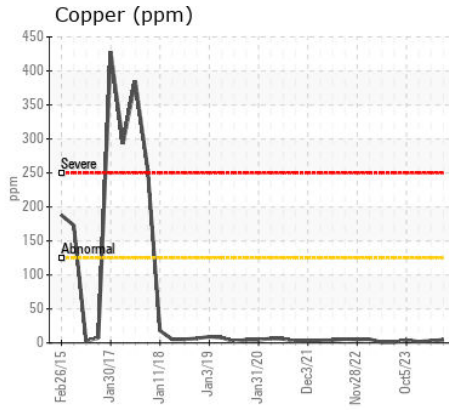
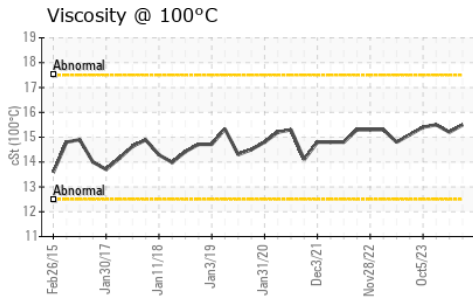
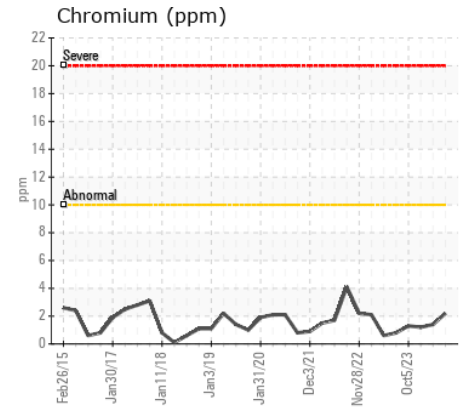
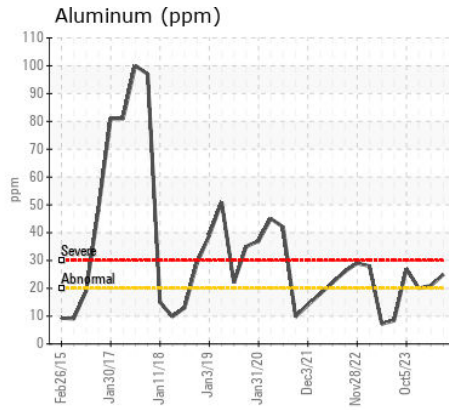
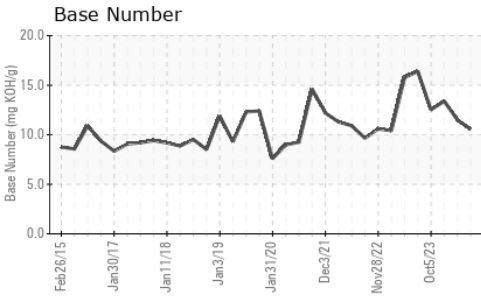
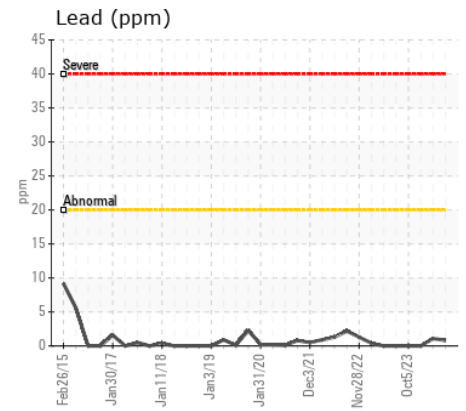
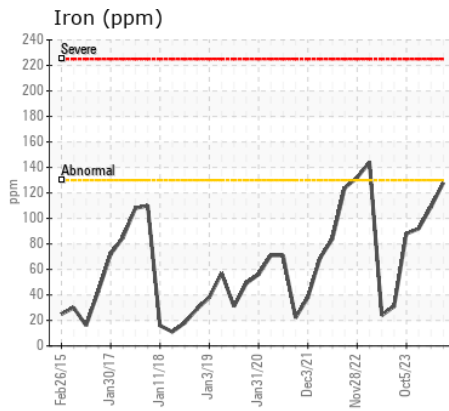
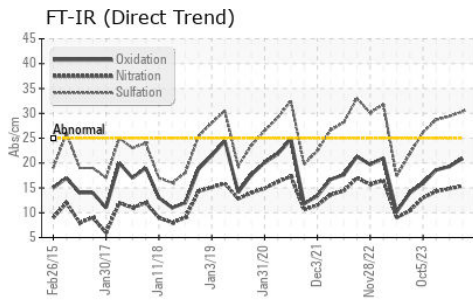
Elevated aluminum (Al) and/or lead (Pb) and potassium (K) levels in your metals analysis are likely a result of solder flux release into the lubricant and is common on new equipment/components. There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>25	<b>11</b>	10	8
Potassium	ppm	ASTM D5185m	>20	<b>28</b>	24	22
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>2.4</b>	2.3	2.2
Nitration	Abs/cm	*ASTM D7624	>20	<b>15.4</b>	14.8	14.3
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>30.4</b>	29.4	28.7
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		<b>5</b>	4	2
Boron	ppm	ASTM D5185m		<b>0</b>	2	2
Barium	ppm	ASTM D5185m		<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m		<b>132</b>	123	124
Manganese	ppm	ASTM D5185m		<b>2</b>	<1	<1
Magnesium	ppm	ASTM D5185m		<b>21</b>	23	23
Calcium	ppm	ASTM D5185m		<b>4585</b>	4712	4302
Phosphorus	ppm	ASTM D5185m		<b>1071</b>	954	886
Zinc	ppm	ASTM D5185m		<b>1174</b>	1215	1091
Sulfur	ppm	ASTM D5185m		<b>5427</b>	4591	3955
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>20.9</b>	19.3	18.6
Base Number (BN)	mg KOH/g	ASTM D2896		<b>10.56</b>	11.50	13.39
Visc @ 100°C	cSt	ASTM D445		<b>15.5</b>	15.2	15.5



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : TR06160598  
**Lab Number** : 06160598  
**Unique Number** : 10996021  
**Test Package** : MOB 2  
**Received** : 25 Apr 2024  
**Tested** : 26 Apr 2024  
**Diagnosed** : 26 Apr 2024 - Sean Felton

**BOW SCHOOL DIST BUS GARAGE**  
 12 RODINSON RD  
 BOW, NH  
 US 03304  
 Contact: DON PERCY

To discuss this sample report, contact Customer Service at 1-800-827-0711.  
 \* - 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)

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F: