



# OIL ANALYSIS REPORT

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

Machine Id  
**THOMAS 1515**  
 Component  
**Diesel Engine**  
 Fluid  
**DIESEL ENGINE OIL SAE 15W40 (--- QTS)**

## RECOMMENDATION

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

## WEAR

All component wear rates are normal.

## CONTAMINATION

Light fuel dilution occurring. No other contaminants were detected in the oil.

## FLUID CONDITION

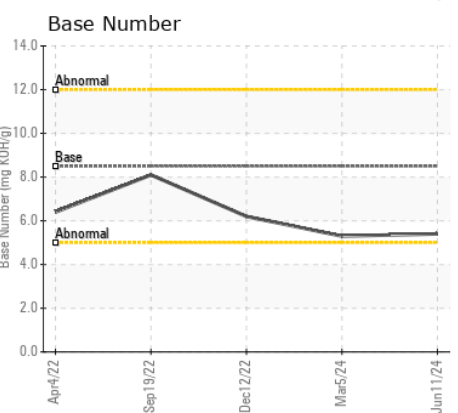
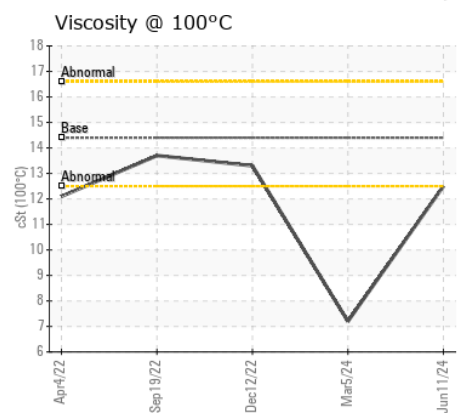
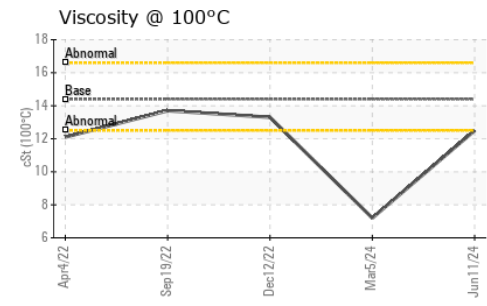
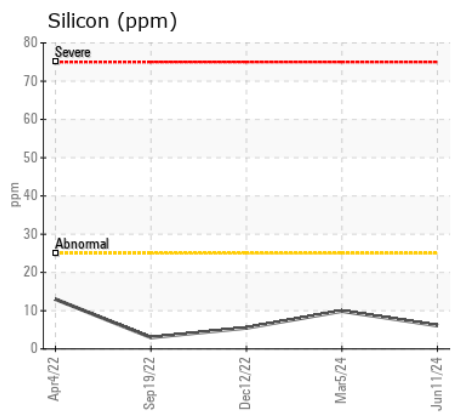
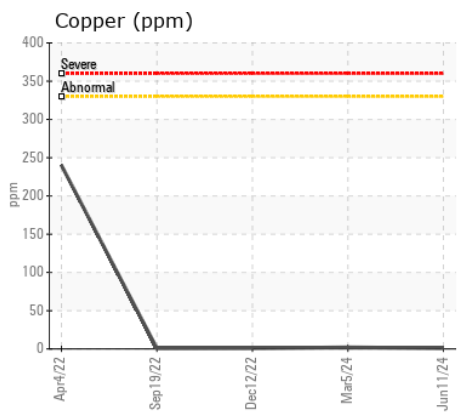
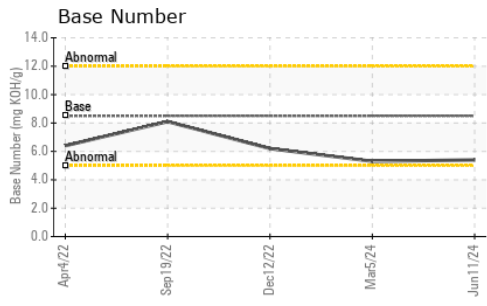
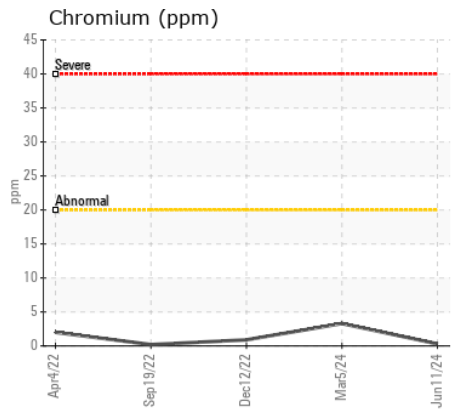
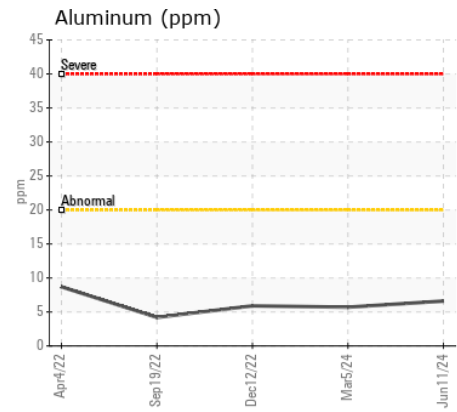
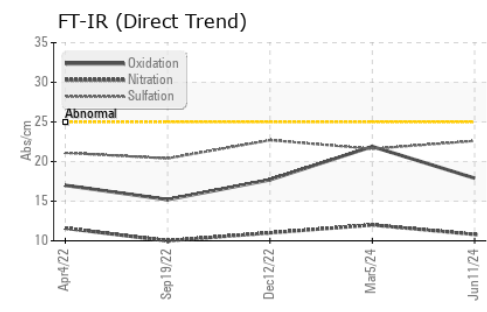
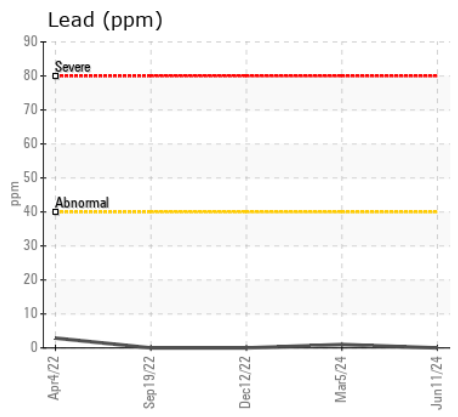
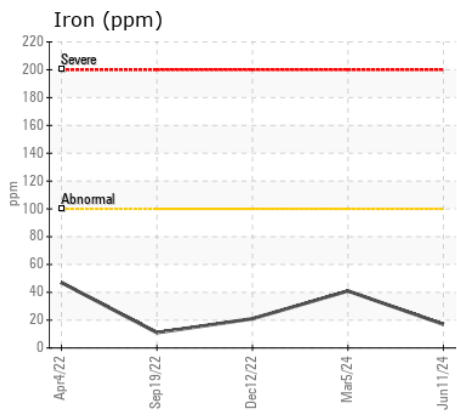
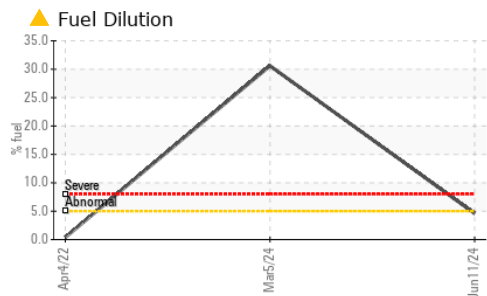
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>WC0948982</b>	WC0906161	WC0761296
Sample Date		Client Info		<b>11 Jun 2024</b>	05 Mar 2024	12 Dec 2022
Machine Age	mls	Client Info		<b>281515</b>	274202	250036
Oil Age	mls	Client Info		<b>0</b>	0	0
Filter Age	mls	Client Info		<b>0</b>	0	0
Oil Changed		Client Info		<b>Not Changd</b>	Not Changd	Not Changd
Filter Changed		Client Info		<b>Changed</b>	Not Changd	Not Changd
Sample Status				<b>MARGINAL</b>	SEVERE	NORMAL

Iron	ppm	ASTM D5185m	>100	<b>17</b>	41	21
Chromium	ppm	ASTM D5185m	>20	<b>&lt;1</b>	3	<1
Nickel	ppm	ASTM D5185m	>4	<b>0</b>	<1	<1
Titanium	ppm	ASTM D5185m		<b>0</b>	<1	0
Silver	ppm	ASTM D5185m	>3	<b>0</b>	<1	0
Aluminum	ppm	ASTM D5185m	>20	<b>7</b>	6	6
Lead	ppm	ASTM D5185m	>40	<b>0</b>	1	0
Copper	ppm	ASTM D5185m	>330	<b>1</b>	2	1
Tin	ppm	ASTM D5185m	>15	<b>0</b>	1	<1
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

Silicon	ppm	ASTM D5185m	>25	<b>6</b>	10	6
Potassium	ppm	ASTM D5185m	>20	<b>4</b>	29	4
Fuel	%	ASTM D3524	>5	<b>4.6</b>	30.6	<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>0.6</b>	1	0.7
Nitration	Abs/cm	*ASTM D7624	>20	<b>10.8</b>	12.0	11.0
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>22.6</b>	21.6	22.7
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

Sodium	ppm	ASTM D5185m	>158	<b>3</b>	15	3
Boron	ppm	ASTM D5185m	250	<b>18</b>	14	9
Barium	ppm	ASTM D5185m	10	<b>0</b>	0	1
Molybdenum	ppm	ASTM D5185m	100	<b>83</b>	57	54
Manganese	ppm	ASTM D5185m		<b>&lt;1</b>	<1	<1
Magnesium	ppm	ASTM D5185m	450	<b>114</b>	104	95
Calcium	ppm	ASTM D5185m	3000	<b>2094</b>	1396	2104
Phosphorus	ppm	ASTM D5185m	1150	<b>1032</b>	722	926
Zinc	ppm	ASTM D5185m	1350	<b>1217</b>	840	1129
Sulfur	ppm	ASTM D5185m	4250	<b>3957</b>	2512	3213
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>17.9</b>	21.9	17.7
Base Number (BN)	mg KOH/g	ASTM D2896	8.5	<b>5.4</b>	5.3	6.2
Visc @ 100°C	cSt	ASTM D445	14.4	<b>12.5</b>	7.2	13.3



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : WC0948982 **Received** : 26 Jun 2024  
**Lab Number** : 06220900 **Tested** : 01 Jul 2024  
**Unique Number** : 11099097 **Diagnosed** : 01 Jul 2024 - Wes Davis  
**Test Package** : MOB 1 ( Additional Tests: PercentFuel, 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:

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)