



TRAAP

Texas Refinery Advanced Analysis Program

# OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id  
**THOMAS SCHOOL BUS 1 - 74802916**

Component  
**Diesel Engine**

Fluid  
**TRC MOLY XL PRO-SPEC IV XP 15W40 (18 QTS)**

## RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		TR06229314	TR06160596	TR06102559
Sample Date		Client Info		19 Jun 2024	16 Apr 2024	26 Jan 2024
Machine Age	hrs	Client Info		1987	0	1697
Oil Age	hrs	Client Info		644	518	354
Filter Age	hrs	Client Info		126	164	185
Oil Changed		Client Info		Not Chngd	Not Chngd	Not Chngd
Filter Changed		Client Info		Changed	Changed	Changed
Sample Status				NORMAL	NORMAL	NORMAL

## WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>90	39	30	22
Chromium	ppm	ASTM D5185m	>20	2	2	1
Nickel	ppm	ASTM D5185m	>2	<1	<1	<1
Titanium	ppm	ASTM D5185m	>2	1	<1	0
Silver	ppm	ASTM D5185m	>2	<1	0	0
Aluminum	ppm	ASTM D5185m	>20	12	11	8
Lead	ppm	ASTM D5185m	>40	<1	<1	<1
Copper	ppm	ASTM D5185m	>330	12	4	7
Tin	ppm	ASTM D5185m	>15	<1	<1	<1
Vanadium	ppm	ASTM D5185m		<1	<1	<1
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

## CONTAMINATION

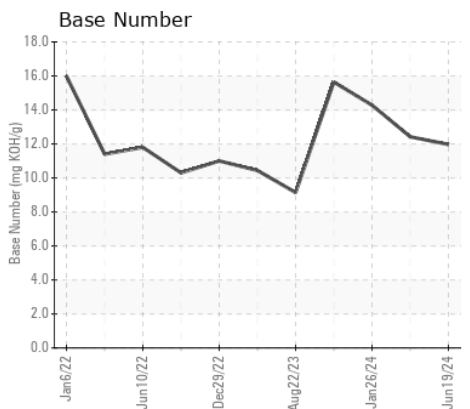
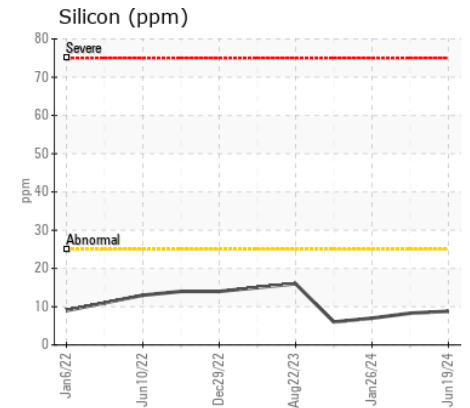
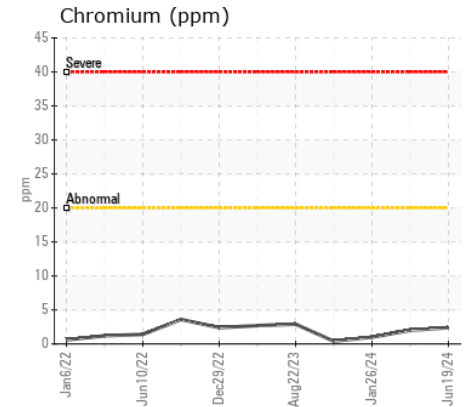
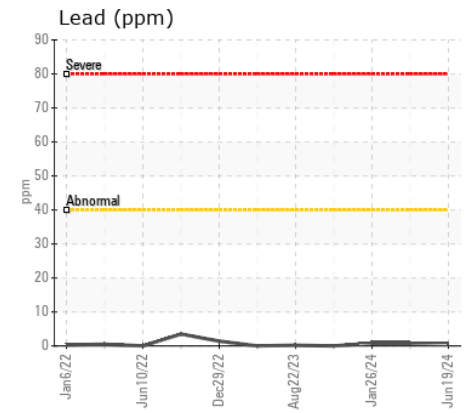
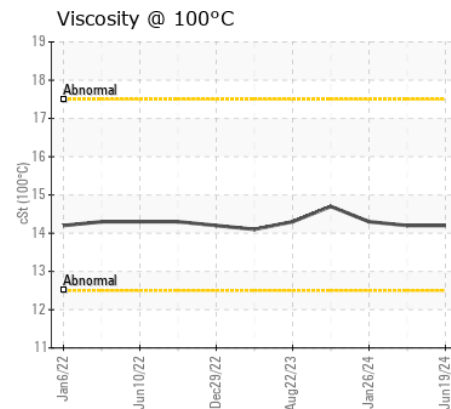
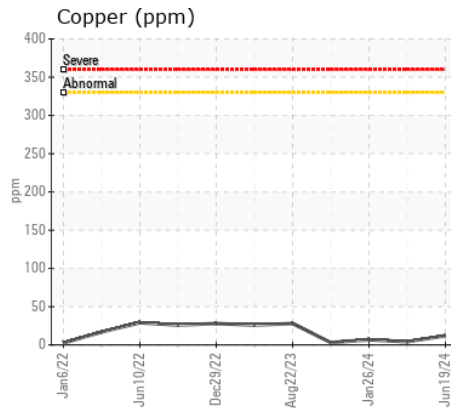
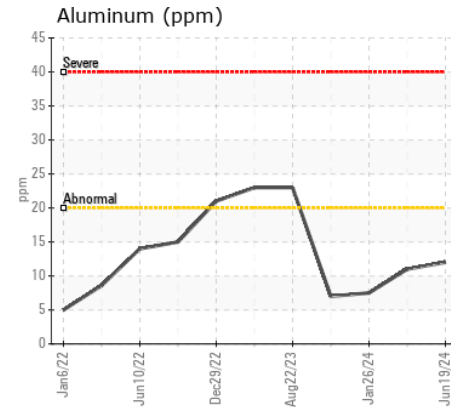
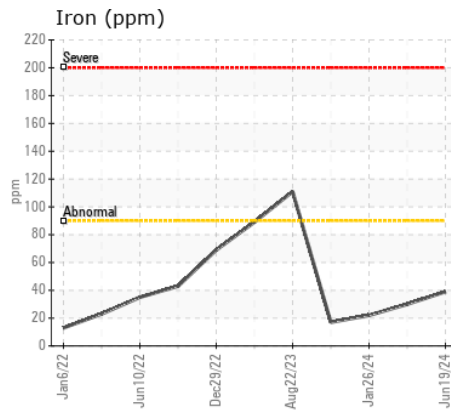
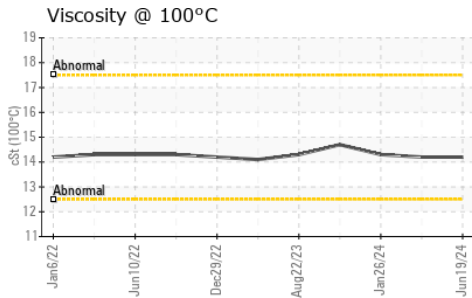
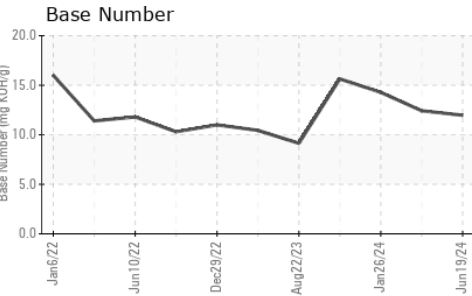
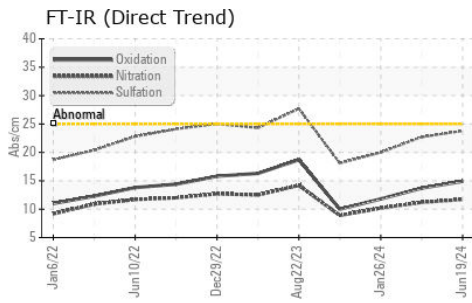
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>25	9	8	7
Potassium	ppm	ASTM D5185m	>20	28	25	19
Fuel		WC Method	>3.0	<1.0	<1.0	<1.0
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	*ASTM D7844	>6	0.6	0.5	0.4
Nitration	Abs/cm	*ASTM D7624	>20	11.7	11.2	10.2
Sulfation	Abs/.1mm	*ASTM D7415	>30	23.8	22.7	20.0
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.2	NEG	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		4	4	2
Boron	ppm	ASTM D5185m		2	0	1
Barium	ppm	ASTM D5185m		0	0	0
Molybdenum	ppm	ASTM D5185m		126	124	119
Manganese	ppm	ASTM D5185m		1	1	<1
Magnesium	ppm	ASTM D5185m		19	18	21
Calcium	ppm	ASTM D5185m		4380	4245	4642
Phosphorus	ppm	ASTM D5185m		945	979	939
Zinc	ppm	ASTM D5185m		1133	1083	1211
Sulfur	ppm	ASTM D5185m		4299	4971	4621
Oxidation	Abs/.1mm	*ASTM D7414	>25	14.9	13.7	11.8
Base Number (BN)	mg KOH/g	ASTM D2896		11.97	12.42	14.28
Visc @ 100°C	cSt	ASTM D445		14.2	14.2	14.3



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : TR06229314  
**Lab Number** : 06229314  
**Unique Number** : 11112807  
**Test Package** : MOB 2

**Received** : 05 Jul 2024  
**Tested** : 08 Jul 2024  
**Diagnosed** : 08 Jul 2024 - Wes Davis

**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: