



TRAAP

Texas Refinery Advanced Analysis Program

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id
THOMAS SCHOOL BUS 6

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		TR06102556	TR05956580	TR05737989
Sample Date		Client Info		19 Feb 2024	07 Sep 2023	15 Dec 2022
Machine Age	hrs	Client Info		7854	7634	7418
Oil Age	hrs	Client Info		220	1952	1736
Filter Age	hrs	Client Info		220	216	164
Oil Changed		Client Info		Not Chngd	Changed	Not Chngd
Filter Changed		Client Info		Changed	Changed	Changed
Sample Status				NORMAL	ABNORMAL	NORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>130	26	73	49
Chromium	ppm	ASTM D5185m	>10	<1	1	1
Nickel	ppm	ASTM D5185m	>4	<1	<1	<1
Titanium	ppm	ASTM D5185m	>2	0	<1	<1
Silver	ppm	ASTM D5185m	>2	0	0	0
Aluminum	ppm	ASTM D5185m	>20	8	8	7
Lead	ppm	ASTM D5185m	>20	<1	0	1
Copper	ppm	ASTM D5185m	>125	<1	2	2
Tin	ppm	ASTM D5185m	>4	<1	<1	<1
Vanadium	ppm	ASTM D5185m		<1	<1	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

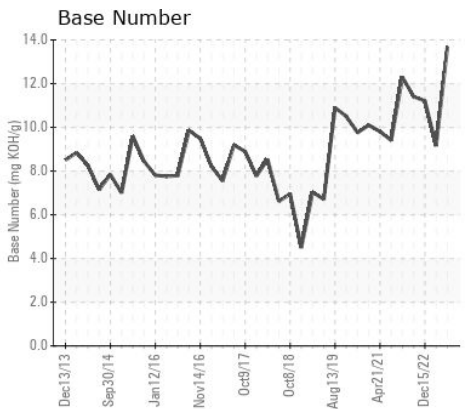
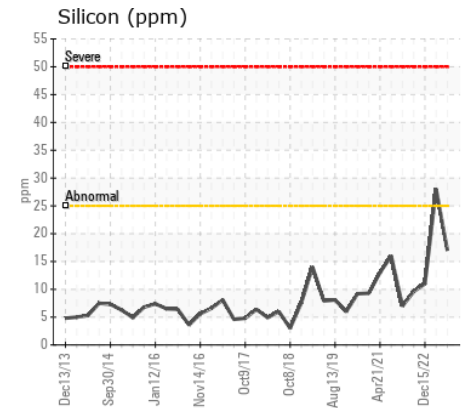
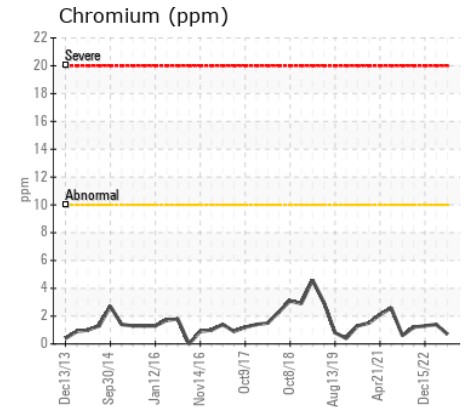
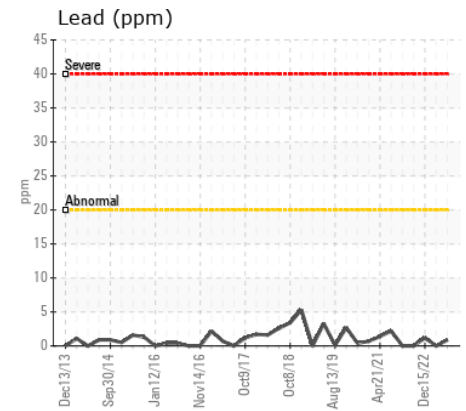
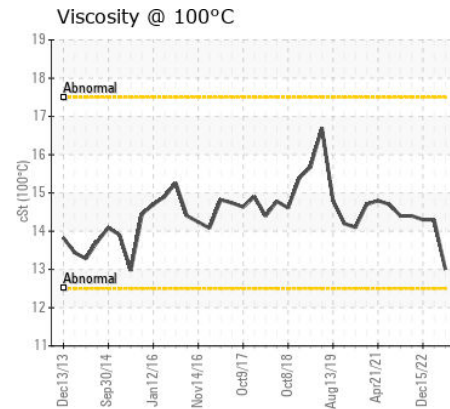
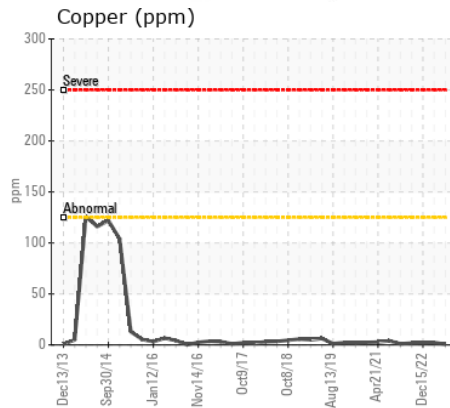
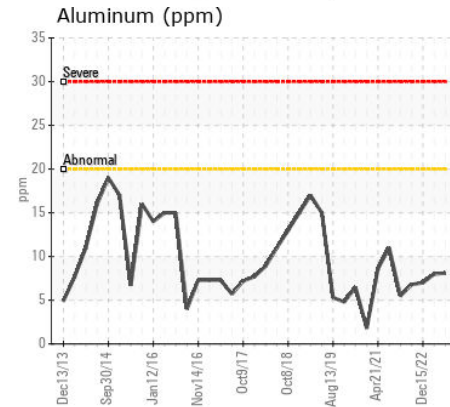
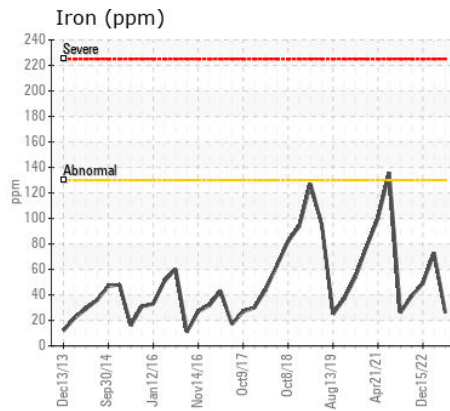
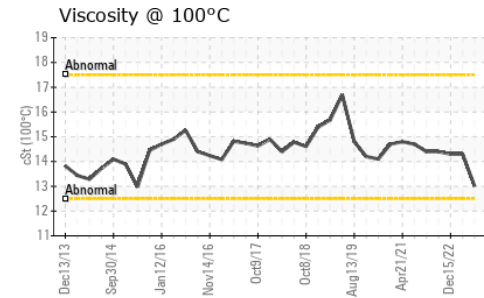
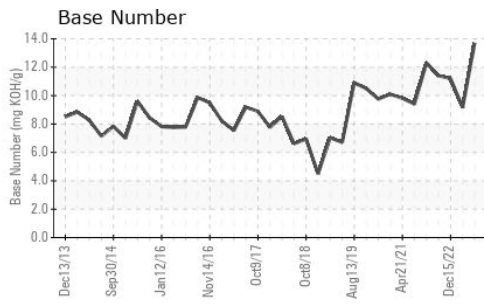
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>25	17	28	11
Potassium	ppm	ASTM D5185m	>20	5	7	8
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	0.6	1
Nitration	Abs/cm	*ASTM D7624	>20	10.6	14.7	12.4
Sulfation	Abs/.1mm	*ASTM D7415	>30	20.4	29.7	24.1
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		2	5	3
Boron	ppm	ASTM D5185m		1	0	0
Barium	ppm	ASTM D5185m		0	0	0
Molybdenum	ppm	ASTM D5185m		116	127	123
Manganese	ppm	ASTM D5185m		<1	<1	<1
Magnesium	ppm	ASTM D5185m		19	20	26
Calcium	ppm	ASTM D5185m		4477	4596	4745
Phosphorus	ppm	ASTM D5185m		926	921	890
Zinc	ppm	ASTM D5185m		1154	1096	1159
Sulfur	ppm	ASTM D5185m		4608	4829	4813
Oxidation	Abs/.1mm	*ASTM D7414	>25	12.9	18.7	15.6
Base Number (BN)	mg KOH/g	ASTM D2896		13.68	9.16	11.21
Visc @ 100°C	cSt	ASTM D445		13.0	14.3	14.3



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : TR06102556
Lab Number : 06102556
Unique Number : 10900786
Test Package : MOB 2

Received : 27 Feb 2024
Tested : 29 Feb 2024
Diagnosed : 29 Feb 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: