



LIEBHERR

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id
PETTIBONE T944X EX20093-17

Component
Front Differential

Fluid
GEAR OIL SAE 80W90 (--- GAL)

RECOMMENDATION

Resample at the next service interval to monitor. The fluid was not specified, however, a fluid match indicates that this fluid is (GENERIC) GEAR OIL SAE 80W90. Please confirm.

WEAR

All component wear rates are normal.

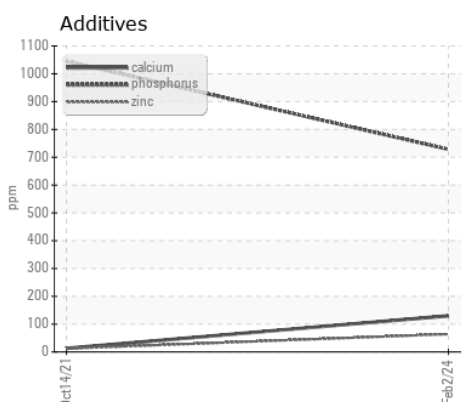
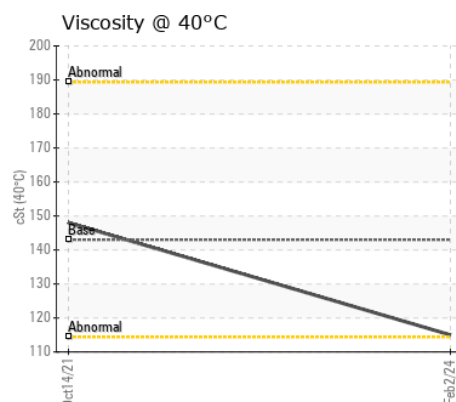
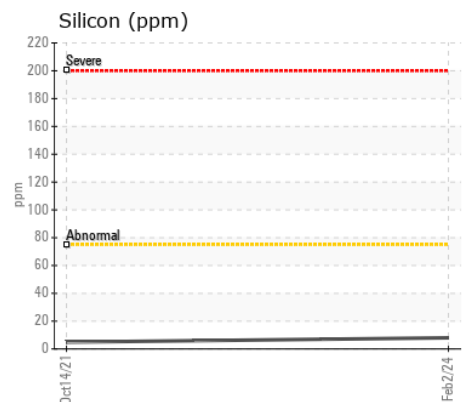
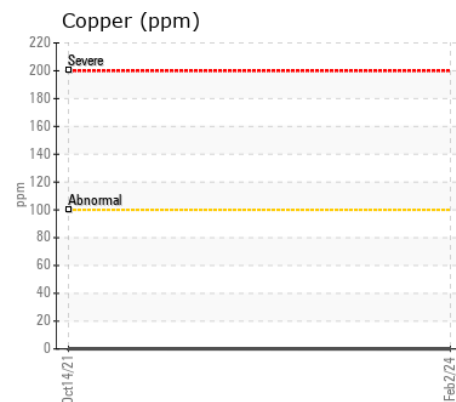
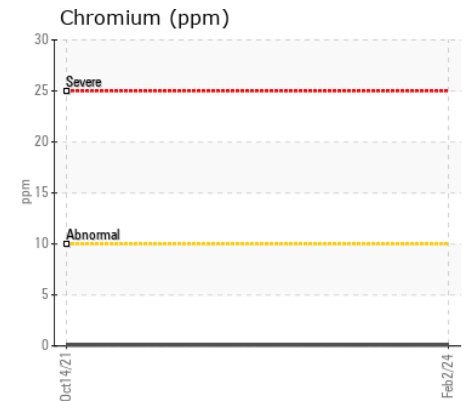
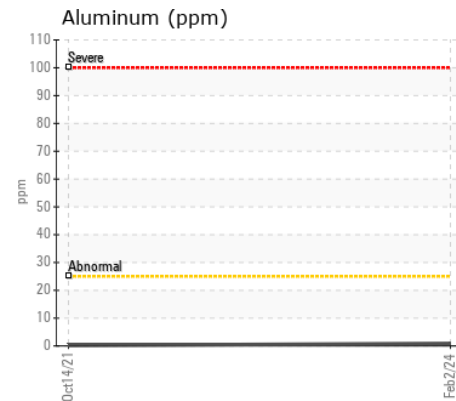
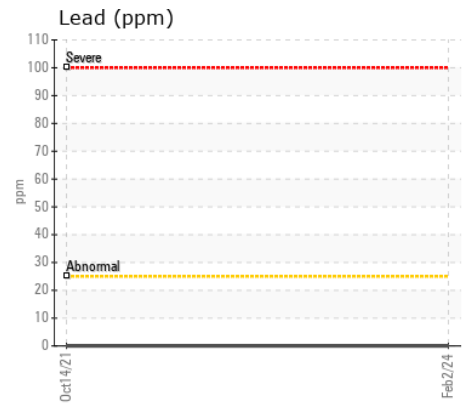
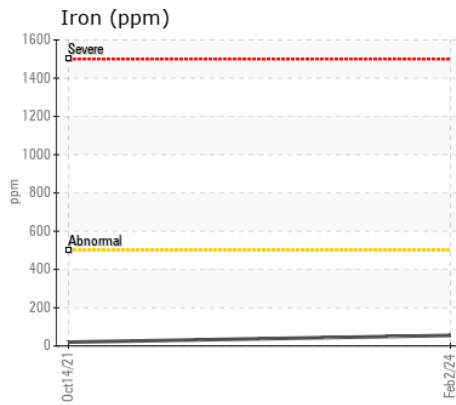
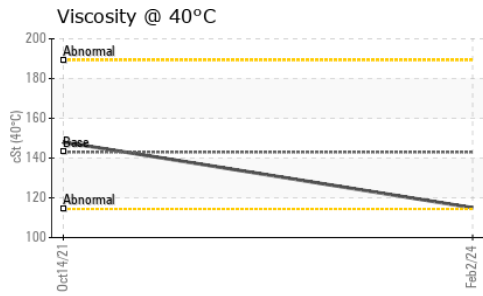
CONTAMINATION

There is no indication of any contamination in the oil.

FLUID CONDITION

The condition of the oil is acceptable for the time in service.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		LHMC155854	LH0185243	---
Sample Date		Client Info		02 Feb 2024	14 Oct 2021	---
Machine Age	hrs	Client Info		2653	1056	---
Oil Age	hrs	Client Info		0	0	---
Filter Age	hrs	Client Info		0	0	---
Oil Changed		Client Info		Not Chngd	N/A	---
Filter Changed		Client Info		N/A	N/A	---
Sample Status				NORMAL	NORMAL	---
Iron	ppm	ASTM D5185m	>500	55	20	---
Chromium	ppm	ASTM D5185m	>10	<1	<1	---
Nickel	ppm	ASTM D5185m	>10	0	<1	---
Titanium	ppm	ASTM D5185m		1	<1	---
Silver	ppm	ASTM D5185m		0	0	---
Aluminum	ppm	ASTM D5185m	>25	<1	<1	---
Lead	ppm	ASTM D5185m	>25	0	0	---
Copper	ppm	ASTM D5185m	>100	0	<1	---
Tin	ppm	ASTM D5185m	>10	0	0	---
Vanadium	ppm	ASTM D5185m		0	0	---
White Metal	scalar	*Visual	NONE	NONE	NONE	---
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	---
Silicon	ppm	ASTM D5185m	>75	8	5	---
Potassium	ppm	ASTM D5185m	>20	0	0	---
Water		WC Method	>.2	NEG	NEG	---
Silt	scalar	*Visual	NONE	NONE	NONE	---
Debris	scalar	*Visual	NONE	NONE	NONE	---
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	---
Appearance	scalar	*Visual	NORML	NORML	NORML	---
Odor	scalar	*Visual	NORML	NORML	NORML	---
Emulsified Water	scalar	*Visual	>.2	NEG	NEG	---
Sodium	ppm	ASTM D5185m	>170	0	2	---
Boron	ppm	ASTM D5185m	400	0	116	---
Barium	ppm	ASTM D5185m	200	0	<1	---
Molybdenum	ppm	ASTM D5185m	12	0	1	---
Manganese	ppm	ASTM D5185m		4	<1	---
Magnesium	ppm	ASTM D5185m	12	12	4	---
Calcium	ppm	ASTM D5185m	150	130	13	---
Phosphorus	ppm	ASTM D5185m	1650	728	1045	---
Zinc	ppm	ASTM D5185m	125	64	12	---
Sulfur	ppm	ASTM D5185m	22500	20857	36211	---
Visc @ 40°C	cSt	ASTM D445	143	115	148	---



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : LHMC155854
Lab Number : 06101184
Unique Number : 10899414
Test Package : MOB 1

Received : 26 Feb 2024
Tested : 28 Feb 2024
Diagnosed : 28 Feb 2024 - Wes Davis

AMERICAN STATE EQUIPMENT CO.
 2400 NORTH 14TH AVENUE
 WAUSAU, WI
 US 54401
 Contact: JASON HOLZNAGEL
 jholznagel@amstate.com

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)

T:
 F: (715)675-9748