



OIL ANALYSIS REPORT

WEAR	ABNORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id
A-402.4

Component
Gearbox

Fluid
HIGH PERFORMANCE LUBRICANTS Worm Gear Life 1500 (--- LTR)

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		HPL0004091	HPL0004432	HPL0003026
Sample Date		Client Info		05 Mar 2024	17 Jan 2024	13 Oct 2023
Machine Age	days	Client Info		0	0	0
Oil Age	days	Client Info		0	0	0
Filter Age	days	Client Info		0	0	0
Oil Changed		Client Info		Not Changed	Not Changed	Not Changed
Filter Changed		Client Info		Not Changed	Not Changed	Not Changed
Sample Status				ABNORMAL	ABNORMAL	SEVERE

WEAR

Bearing and/or bushing wear is indicated.

Iron	ppm	ASTM D5185m	>200	2	0	4
Chromium	ppm	ASTM D5185m	>10	0	0	0
Nickel	ppm	ASTM D5185m	>10	<1	0	<1
Titanium	ppm	ASTM D5185m		0	0	0
Silver	ppm	ASTM D5185m		0	0	0
Aluminum	ppm	ASTM D5185m	>25	0	0	0
Lead	ppm	ASTM D5185m	>50	<1	0	12
Copper	ppm	ASTM D5185m	>200	▲ 243	▲ 219	▲ 1034
Tin	ppm	ASTM D5185m	>10	▲ 22	▲ 21	▲ 104
Vanadium	ppm	ASTM D5185m		0	0	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

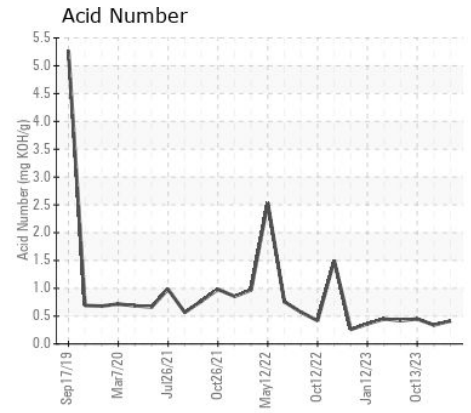
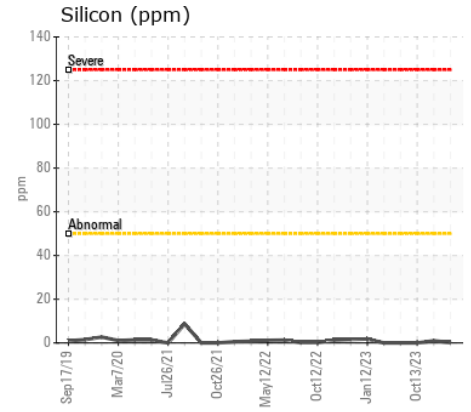
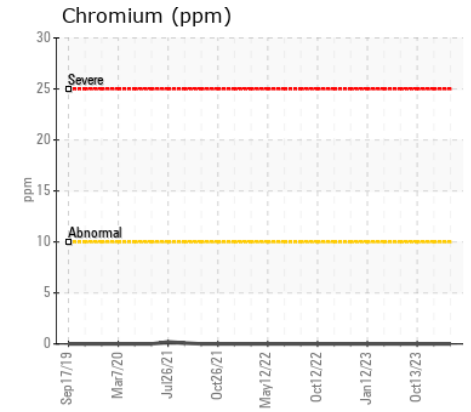
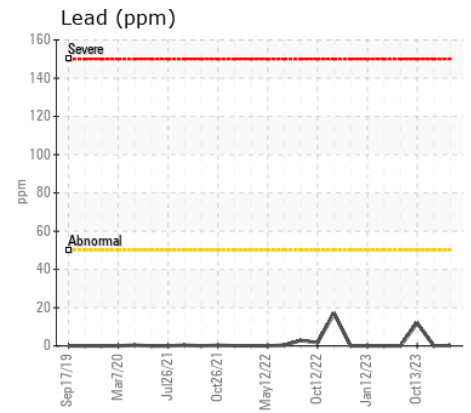
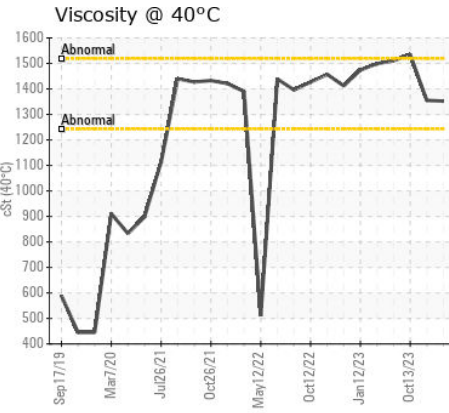
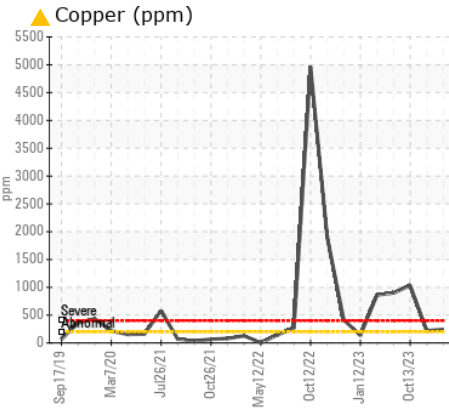
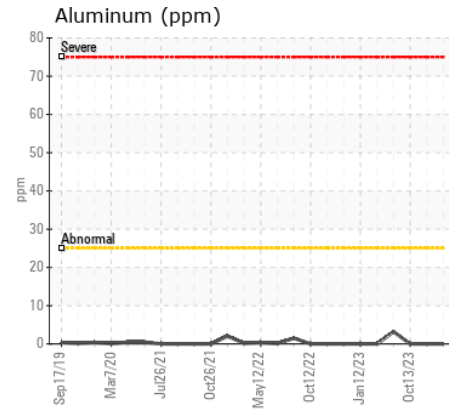
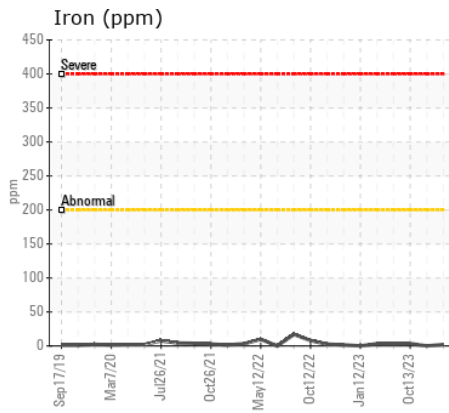
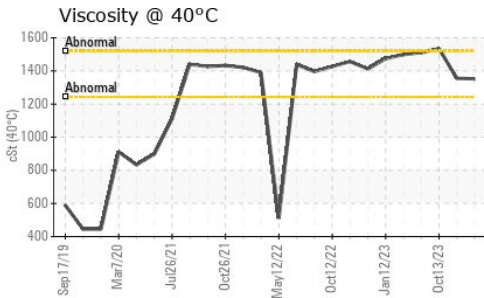
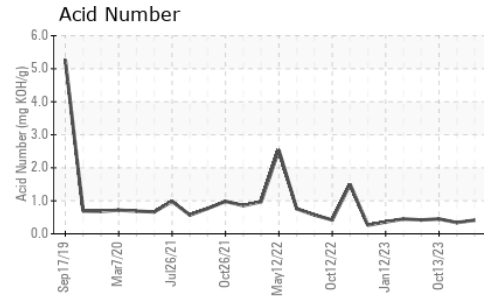
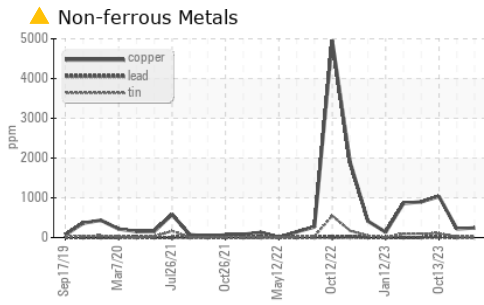
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>50	<1	1	0
Potassium	ppm	ASTM D5185m	>20	<1	<1	0
Water		WC Method	>0.2	NEG	NEG	NEG
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 AN level is acceptable for this fluid. The condition of the oil is acceptable for the time in service.

Sodium	ppm	ASTM D5185m		<1	0	0
Boron	ppm	ASTM D5185m		3	0	0
Barium	ppm	ASTM D5185m		0	0	0
Molybdenum	ppm	ASTM D5185m		0	0	0
Manganese	ppm	ASTM D5185m		<1	<1	0
Magnesium	ppm	ASTM D5185m		2	0	0
Calcium	ppm	ASTM D5185m		78	52	47
Phosphorus	ppm	ASTM D5185m		655	634	678
Zinc	ppm	ASTM D5185m		2	0	0
Sulfur	ppm	ASTM D5185m		3744	2717	2088
Acid Number (AN)	mg KOH/g	ASTM D8045		0.413	0.34	0.45
Visc @ 40°C	cSt	ASTM D445		1352	1355	1535



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : HPL0004091
Lab Number : 06121691
Unique Number : 10930524
Test Package : MOB 2

Received : 18 Mar 2024
Tested : 19 Mar 2024
Diagnosed : 21 Mar 2024 - Jonathan Hester

STEPAN - MILLSDALE PLANT
 22500W. Millsdale Rd.
 Elwood, IL
 US 60421

Contact: Gregory Brooker
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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)