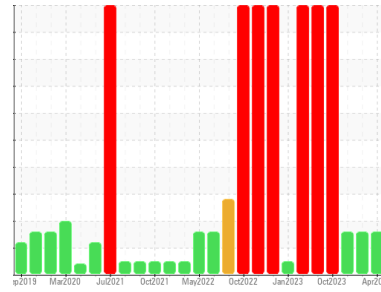




OIL ANALYSIS REPORT

Sample Rating Trend



Machine Id
A-402.4
 Component
Gearbox

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

DIAGNOSIS

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

Wear
 Bearing and/or bushing wear is indicated.

Contamination
 There is no indication of any contamination in the oil.

Fluid Condition
 The AN level is acceptable for this fluid. The condition of the oil is acceptable for the time in service.

SAMPLE INFORMATION

	method	limit/base	current	history1	history2
Sample Number	Client Info		HPL0004477	HPL0004091	HPL0004432
Sample Date	Client Info		23 Apr 2024	05 Mar 2024	17 Jan 2024
Machine Age	days	Client Info	0	0	0
Oil Age	days	Client Info	0	0	0
Oil Changed	Client Info		Not Changed	Not Changed	Not Changed
Sample Status			ABNORMAL	ABNORMAL	ABNORMAL

CONTAMINATION

	method	limit/base	current	history1	history2
Water	WC Method	>0.2	NEG	NEG	NEG

WEAR METALS

	method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m >200	2	2	0
Chromium	ppm	ASTM D5185m >10	0	0	0
Nickel	ppm	ASTM D5185m >10	0	<1	0
Titanium	ppm	ASTM D5185m	<1	0	0
Silver	ppm	ASTM D5185m	0	0	0
Aluminum	ppm	ASTM D5185m >25	0	0	0
Lead	ppm	ASTM D5185m >50	2	<1	0
Copper	ppm	ASTM D5185m >200	▲ 325	▲ 243	▲ 219
Tin	ppm	ASTM D5185m >10	▲ 25	▲ 22	▲ 21
Vanadium	ppm	ASTM D5185m	0	0	0
Cadmium	ppm	ASTM D5185m	0	0	0

ADDITIVES

	method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m	0	3	0
Barium	ppm	ASTM D5185m	0	0	0
Molybdenum	ppm	ASTM D5185m	0	0	0
Manganese	ppm	ASTM D5185m	<1	<1	<1
Magnesium	ppm	ASTM D5185m	0	2	0
Calcium	ppm	ASTM D5185m	48	78	52
Phosphorus	ppm	ASTM D5185m	678	655	634
Zinc	ppm	ASTM D5185m	0	2	0
Sulfur	ppm	ASTM D5185m	3069	3744	2717

CONTAMINANTS

	method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m >50	0	<1	1
Sodium	ppm	ASTM D5185m	<1	<1	0
Potassium	ppm	ASTM D5185m >20	0	<1	<1

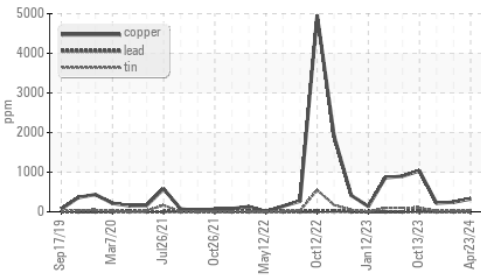
FLUID DEGRADATION

	method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045	0.40	0.413	0.34

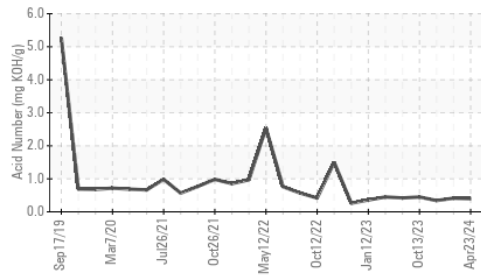


OIL ANALYSIS REPORT

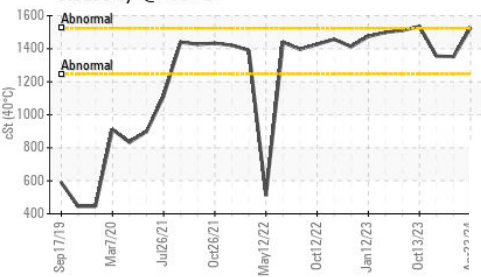
▲ Non-ferrous Metals



Acid Number



Viscosity @ 40°C



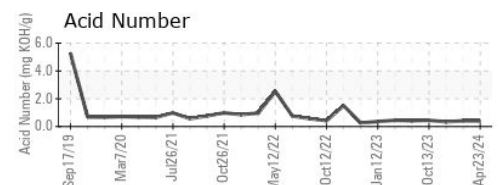
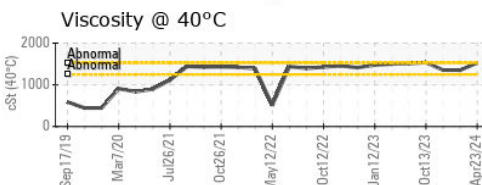
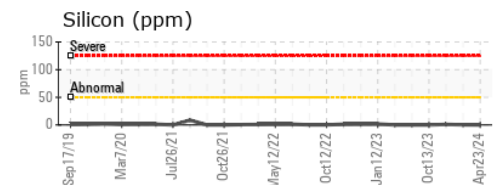
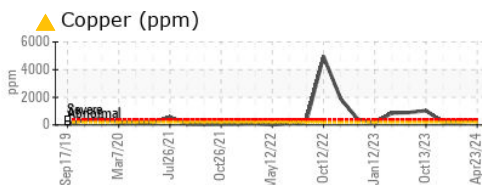
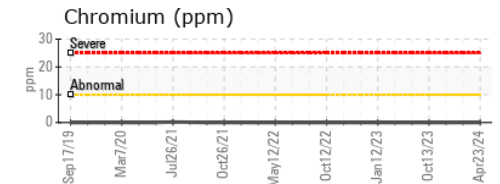
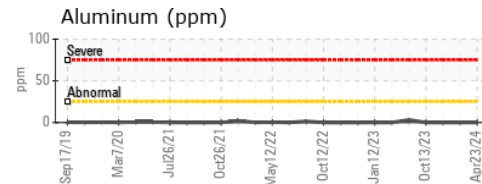
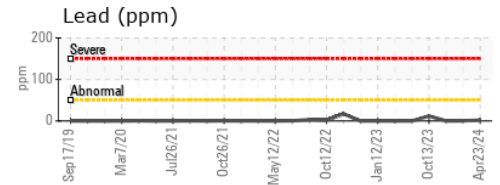
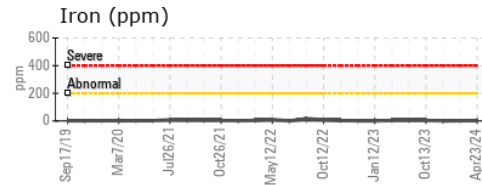
VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.2	NEG	NEG
Free Water	scalar	*Visual		NEG	NEG

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	1527	1352	1355

SAMPLE IMAGES	method	limit/base	current	history1	history2
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Color			no image	no image	no image
Bottom			no image	no image	no image

GRAPHS



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : HPL0004477
Lab Number : 06161647
Unique Number : 10997070
Test Package : MOB 2
Received : 26 Apr 2024
Tested : 30 Apr 2024
Diagnosed : 30 Apr 2024 - Don Baldrige

STEPAN - MILLSDALE PLANT
 22500W. Millsdale Rd.
 Elwood, IL 60421
 Contact: Gregory Brooker
 gbrooker@stepan.com
 T: (815)774-5265
 F: (815)774-5427

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)