



# OIL ANALYSIS REPORT

WEAR	<b>ABNORMAL</b>
CONTAMINATION	<b>NORMAL</b>
FLUID CONDITION	<b>NORMAL</b>

Machine Id  
**LIGHTNIN A-809.1**  
 Component  
**Gearbox**  
 Fluid  
**MOBIL SHC 632 (--- LTR)**

## RECOMMENDATION

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

## WEAR

Gear wear is indicated. All other component wear rates are normal.

## 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.

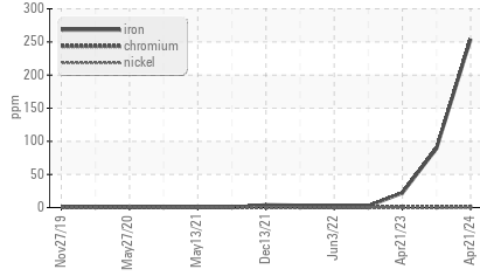
Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>HPL0004475</b>	HPL0003221	HPL0003251
Sample Date		Client Info		<b>21 Apr 2024</b>	19 Oct 2023	21 Apr 2023
Machine Age	hrs	Client Info		<b>0</b>	0	0
Oil Age	hrs	Client Info		<b>0</b>	0	0
Filter Age	hrs	Client Info		<b>0</b>	0	0
Oil Changed		Client Info		<b>Not Changd</b>	Not Changd	Not Changd
Filter Changed		Client Info		<b>Not Changd</b>	Not Changd	Not Changd
Sample Status				<b>ABNORMAL</b>	NORMAL	NORMAL

Iron	ppm	ASTM D5185m	>200	<b>▲ 254</b>	89	22
Chromium	ppm	ASTM D5185m	>10	<b>2</b>	<1	<1
Nickel	ppm	ASTM D5185m	>10	<b>0</b>	0	0
Titanium	ppm	ASTM D5185m		<b>&lt;1</b>	<1	<1
Silver	ppm	ASTM D5185m		<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m	>25	<b>&lt;1</b>	0	1
Lead	ppm	ASTM D5185m	>50	<b>0</b>	0	0
Copper	ppm	ASTM D5185m	>200	<b>4</b>	<1	0
Tin	ppm	ASTM D5185m	>10	<b>0</b>	0	0
Vanadium	ppm	ASTM D5185m		<b>0</b>	0	0
White Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	LIGHT
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE

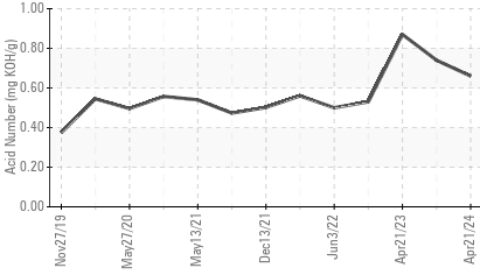
Silicon	ppm	ASTM D5185m	>50	<b>&lt;1</b>	<1	3
Potassium	ppm	ASTM D5185m	>20	<b>&lt;1</b>	1	<1
Water		WC Method	>0.2	<b>NEG</b>	NEG	NEG
Silt	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Debris	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Appearance	scalar	*Visual	NORML	<b>NORML</b>	NORML	NORML
Odor	scalar	*Visual	NORML	<b>NORML</b>	NORML	NORML
Emulsified Water	scalar	*Visual	>0.2	<b>NEG</b>	NEG	NEG

Sodium	ppm	ASTM D5185m		<b>2</b>	2	1
Boron	ppm	ASTM D5185m		<b>0</b>	0	0
Barium	ppm	ASTM D5185m		<b>&lt;1</b>	0	0
Molybdenum	ppm	ASTM D5185m		<b>0</b>	0	<1
Manganese	ppm	ASTM D5185m		<b>4</b>	1	2
Magnesium	ppm	ASTM D5185m		<b>0</b>	0	9
Calcium	ppm	ASTM D5185m		<b>2</b>	0	16
Phosphorus	ppm	ASTM D5185m		<b>209</b>	150	245
Zinc	ppm	ASTM D5185m		<b>32</b>	23	36
Sulfur	ppm	ASTM D5185m		<b>23111</b>	19026	23268
Acid Number (AN)	mg KOH/g	ASTM D8045		<b>0.66</b>	0.74	0.87
Visc @ 40°C	cSt	ASTM D445	325.8	<b>316</b>	344	309

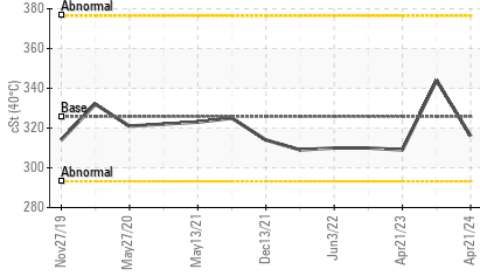
▲ Ferrous Alloys



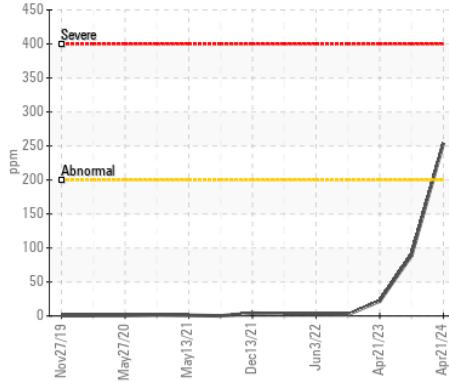
Acid Number



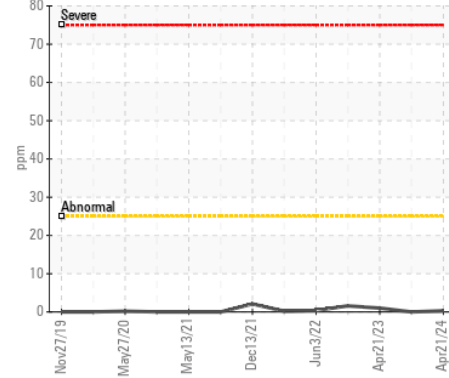
Viscosity @ 40°C



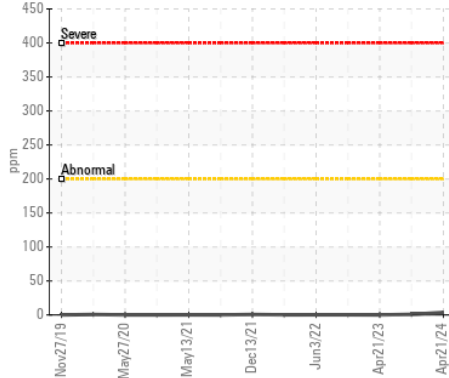
▲ Iron (ppm)



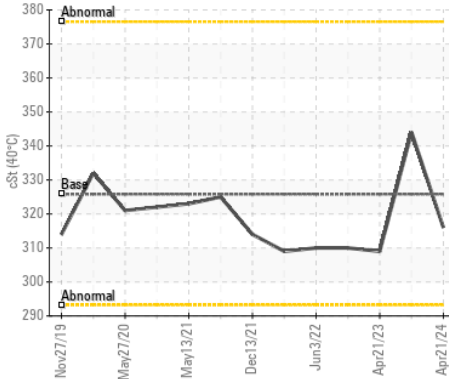
Aluminum (ppm)



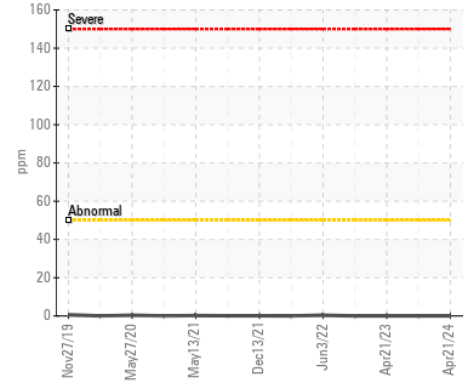
Copper (ppm)



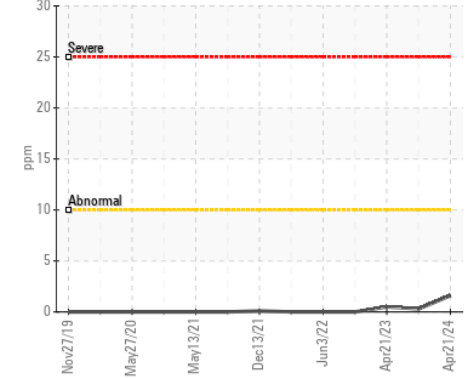
Viscosity @ 40°C



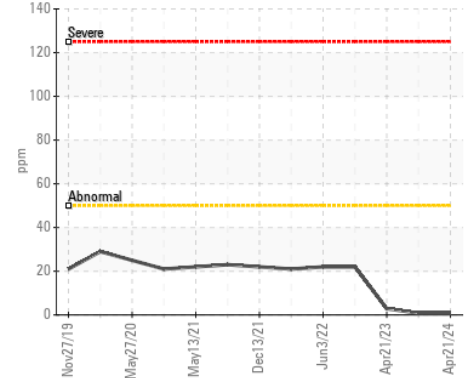
Lead (ppm)



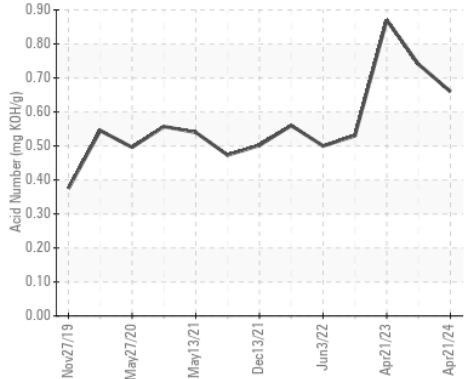
Chromium (ppm)



Silicon (ppm)



Acid Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513

Sample No. : HPL0004475

Lab Number : 06161648

Unique Number : 10997071

Test Package : MOB 2

Received : 26 Apr 2024

Tested : 29 Apr 2024

Diagnosed : 30 Apr 2024 - Don Baldrige

STEPAN - MILLSDALE PLANT

22500W. Millsdale Rd.

Elwood, IL

US 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)