



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	ABNORMAL
FLUID CONDITION	NORMAL

Machine Id
LIGHTNIN A-805.2
Component
Gearbox
Fluid
HPL GL 220 (--- LTR)

RECOMMENDATION

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

WEAR

All component wear rates are normal.

CONTAMINATION

Moderate concentration of visible dirt/debris present in the oil.

FLUID CONDITION

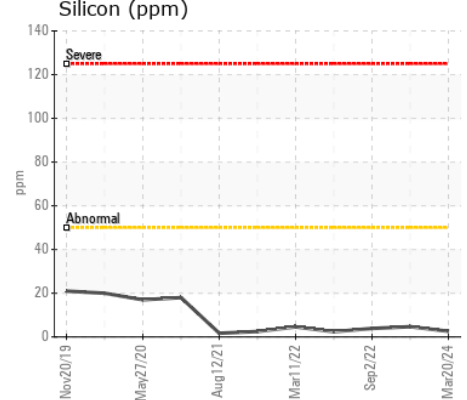
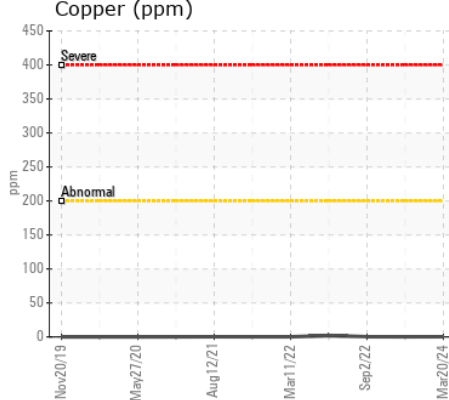
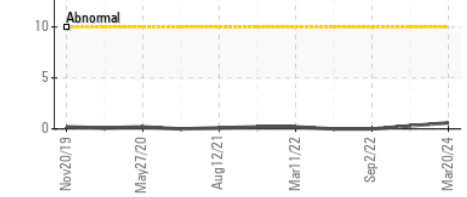
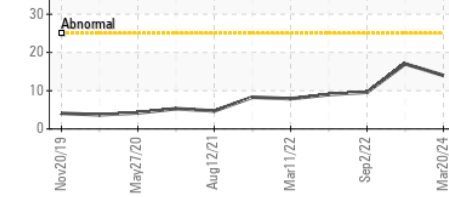
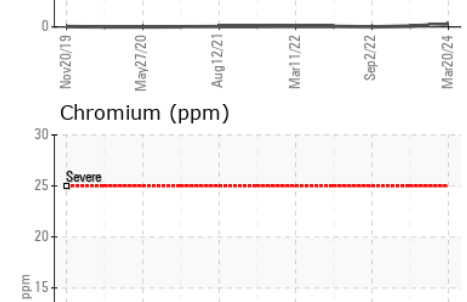
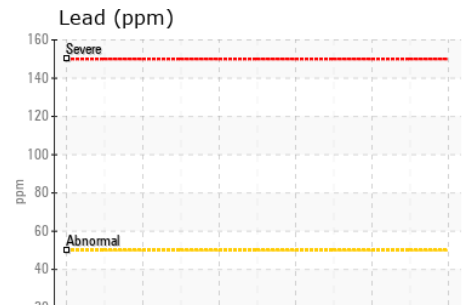
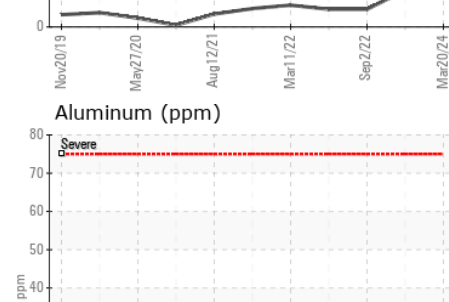
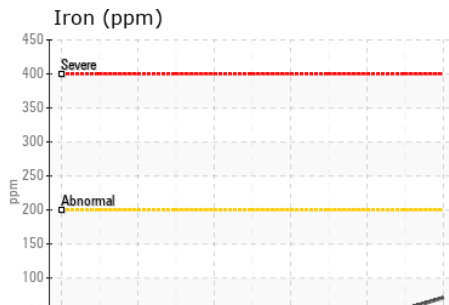
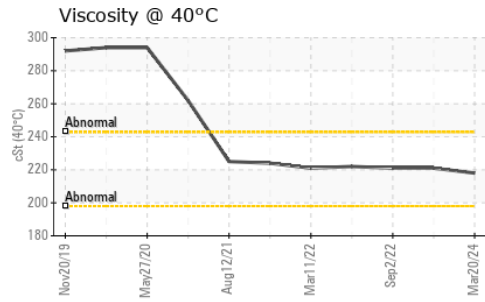
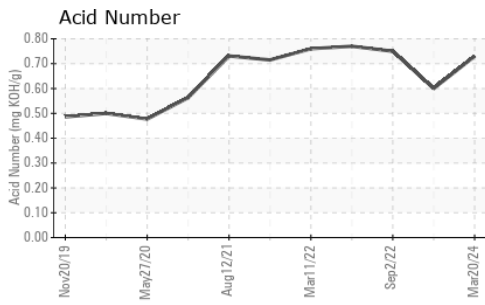
The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		HPL0004473	HPL0003011	HPL0001924
Sample Date		Client Info		20 Mar 2024	21 Sep 2023	02 Sep 2022
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 Changd	Not Changd	Not Changd
Filter Changed		Client Info		Not Changd	Not Changd	Not Changd
Sample Status				ABNORMAL	NORMAL	NORMAL

Iron	ppm	ASTM D5185m	>200	71	54	26
Chromium	ppm	ASTM D5185m	>10	<1	<1	0
Nickel	ppm	ASTM D5185m	>10	<1	0	0
Titanium	ppm	ASTM D5185m		8	3	1
Silver	ppm	ASTM D5185m		0	0	1
Aluminum	ppm	ASTM D5185m	>25	14	17	10
Lead	ppm	ASTM D5185m	>50	2	<1	0
Copper	ppm	ASTM D5185m	>200	<1	<1	<1
Tin	ppm	ASTM D5185m	>10	<1	0	<1
Vanadium	ppm	ASTM D5185m		<1	0	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

Silicon	ppm	ASTM D5185m	>50	3	5	4
Potassium	ppm	ASTM D5185m	>20	3	<1	0
Water		WC Method	>0.2	NEG	NEG	NEG
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	▲ MODER	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

Sodium	ppm	ASTM D5185m		7	4	2
Boron	ppm	ASTM D5185m		<1	1	3
Barium	ppm	ASTM D5185m		0	2	0
Molybdenum	ppm	ASTM D5185m		<1	<1	<1
Manganese	ppm	ASTM D5185m		<1	<1	<1
Magnesium	ppm	ASTM D5185m		0	2	<1
Calcium	ppm	ASTM D5185m		78	28	12
Phosphorus	ppm	ASTM D5185m		248	242	209
Zinc	ppm	ASTM D5185m		13	17	12
Sulfur	ppm	ASTM D5185m		22945	24546	15855
Acid Number (AN)	mg KOH/g	ASTM D8045		0.73	0.60	0.75
Visc @ 40°C	cSt	ASTM D445		218	221	221



Certificate L2367

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

Sample No. : HPL0004473

Lab Number : 06147515

Unique Number : 10977593

Test Package : MOB 2

Received : 12 Apr 2024

Tested : 15 Apr 2024

Diagnosed : 16 Apr 2024 - Don Baldrige

STEPAN - MILLSDALE PLANT

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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)