



# OIL ANALYSIS REPORT

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

Machine Id  
**A-807.1**  
 Component  
**Gearbox**  
 Fluid  
**HPL FG 220 (--- LTR)**

## RECOMMENDATION

Resample at the next service interval to monitor. Please specify the component make and model with your next sample.

## WEAR

All component wear rates are normal.

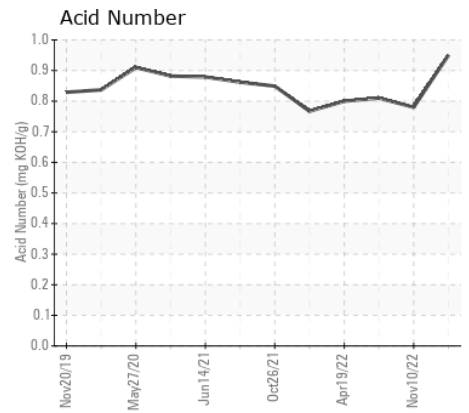
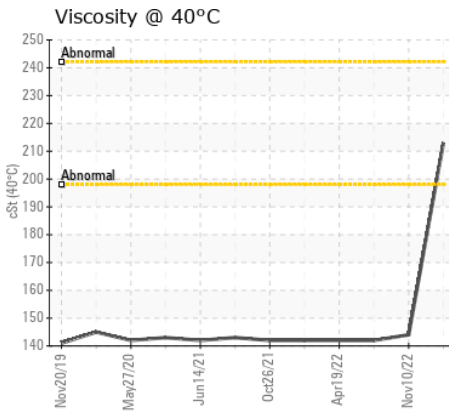
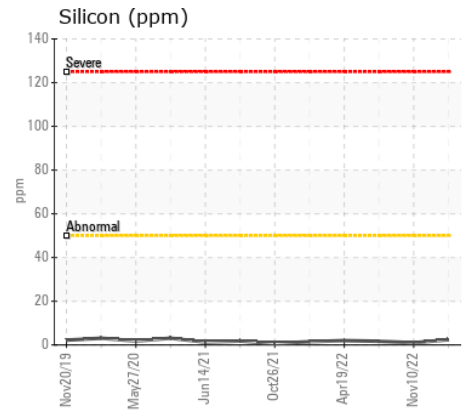
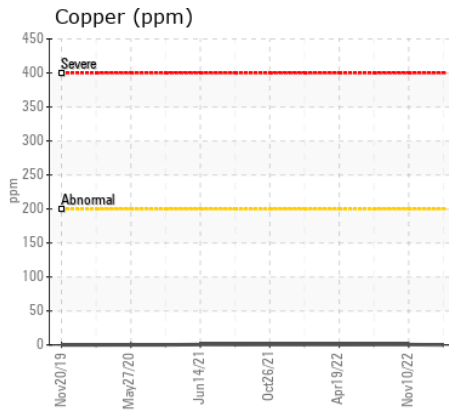
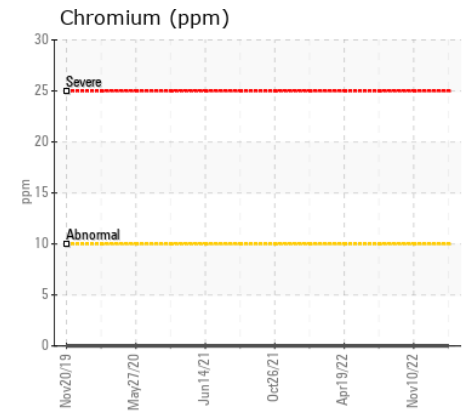
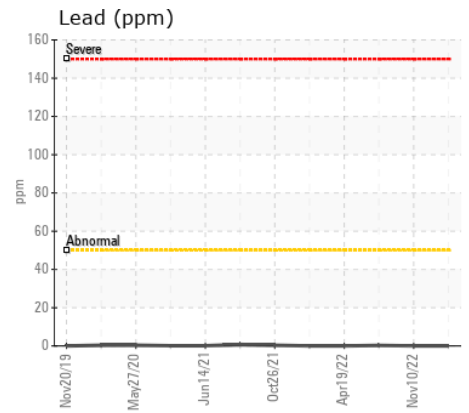
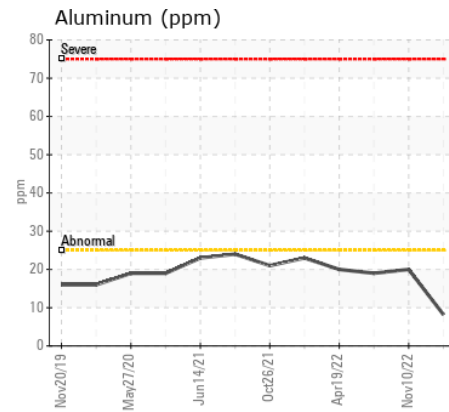
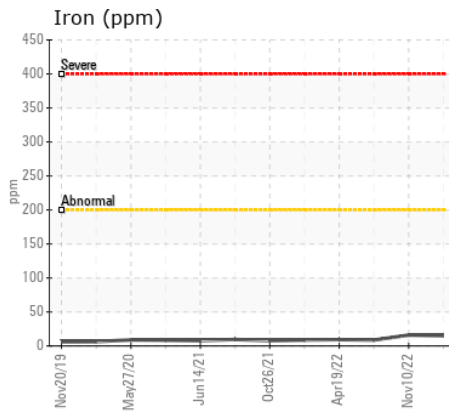
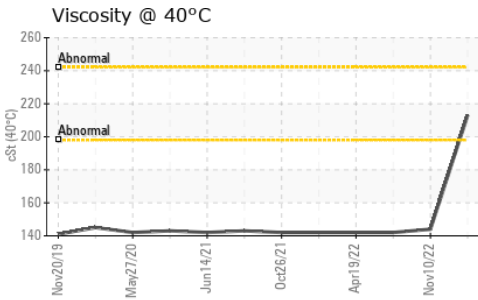
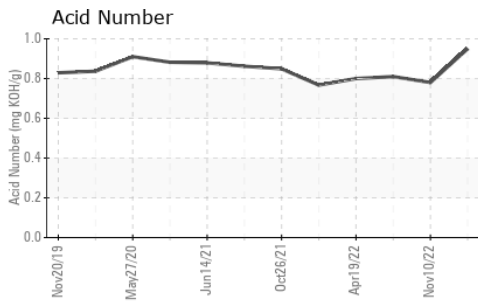
## CONTAMINATION

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 suitable for further service.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>HPL0003579</b>	HPL0001535	HPL0001158
Sample Date		Client Info		<b>02 Jun 2023</b>	10 Nov 2022	13 Jul 2022
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>NORMAL</b>	NORMAL	NORMAL
Iron	ppm	ASTM D5185m	>200	<b>15</b>	16	9
Chromium	ppm	ASTM D5185m	>10	<b>0</b>	0	0
Nickel	ppm	ASTM D5185m	>10	<b>0</b>	0	0
Titanium	ppm	ASTM D5185m		<b>4</b>	6	5
Silver	ppm	ASTM D5185m		<b>0</b>	0	<1
Aluminum	ppm	ASTM D5185m	>25	<b>8</b>	20	19
Lead	ppm	ASTM D5185m	>50	<b>0</b>	0	<1
Copper	ppm	ASTM D5185m	>200	<b>0</b>	<1	<1
Tin	ppm	ASTM D5185m	>10	<b>0</b>	0	<1
Vanadium	ppm	ASTM D5185m		<b>0</b>	0	0
White Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Silicon	ppm	ASTM D5185m	>50	<b>2</b>	1	2
Potassium	ppm	ASTM D5185m	>20	<b>&lt;1</b>	0	2
Water		WC Method	>0.2	<b>NEG</b>	NEG	NEG
Silt	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Debris	scalar	*Visual	NONE	<b>LIGHT</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>	10	6
Boron	ppm	ASTM D5185m		<b>0</b>	2	<1
Barium	ppm	ASTM D5185m		<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m		<b>0</b>	0	0
Manganese	ppm	ASTM D5185m		<b>0</b>	<1	0
Magnesium	ppm	ASTM D5185m		<b>5</b>	1	1
Calcium	ppm	ASTM D5185m		<b>50</b>	147	127
Phosphorus	ppm	ASTM D5185m		<b>377</b>	438	372
Zinc	ppm	ASTM D5185m		<b>121</b>	550	456
Sulfur	ppm	ASTM D5185m		<b>3192</b>	11192	9914
Acid Number (AN)	mg KOH/g	ASTM D8045		<b>0.95</b>	0.78	0.81
Visc @ 40°C	cSt	ASTM D445		<b>213</b>	144	142



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : HPL0003579  
**Lab Number** : 05870419  
**Unique Number** : 10510203  
**Test Package** : MOB 2

**Received** : 09 Jun 2023  
**Tested** : 12 Jun 2023  
**Diagnosed** : 12 Jun 2023 - Wes Davis

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

Contact: Gregory Brooker  
 gbrooker@stepan.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: (815)774-5265  
 F: (815)774-5427