



LUBE PLUS+

OIL ANALYSIS REPORT

WEAR
CONTAMINATION
FLUID CONDITION

ATTENTION
ABNORMAL
MARGINAL

Area
WQ
Machine Id
SML 00316
Component
Gearbox
Fluid
GEAR OIL (PAO) ISO 220 (1 GAL)

RECOMMENDATION

We advise that you check all areas where dirt can enter the system. Resample at the next service interval to monitor.

WEAR

All component wear rates are normal.

CONTAMINATION

Elemental levels of silicon (Si) and aluminum (Al) indicate alumina-silicate (coarse dirt) ingress.

FLUID CONDITION

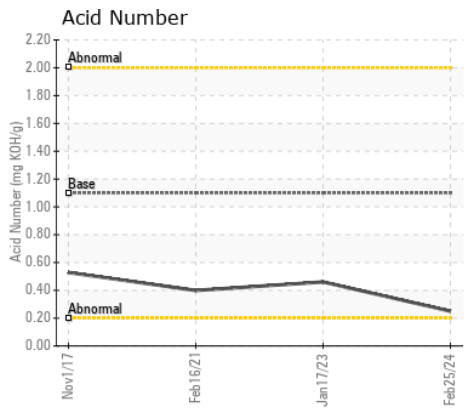
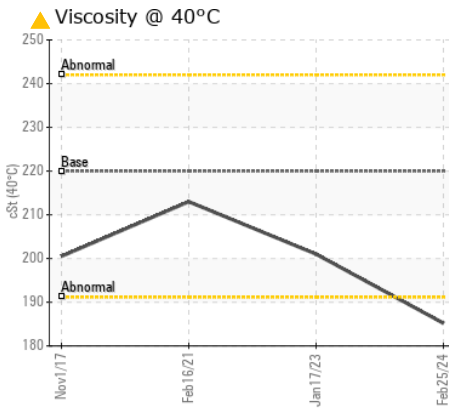
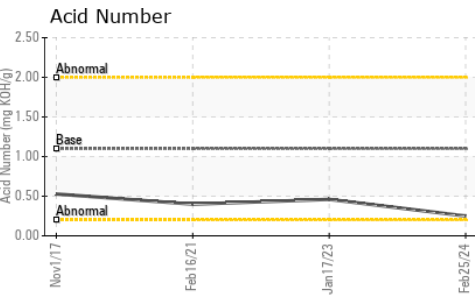
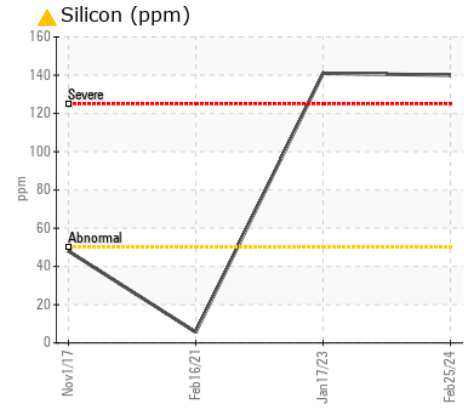
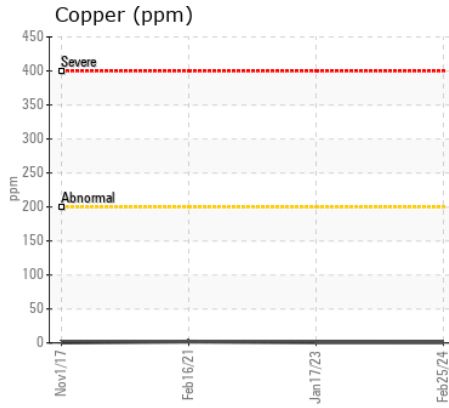
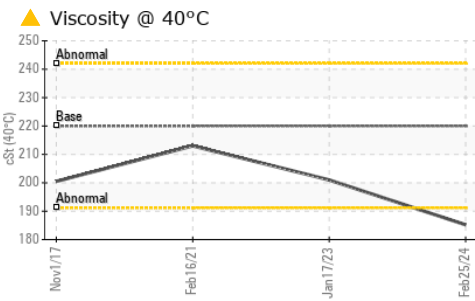
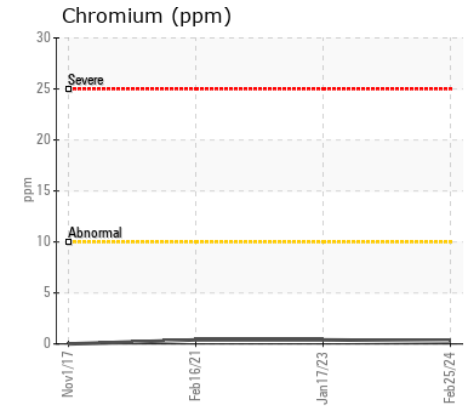
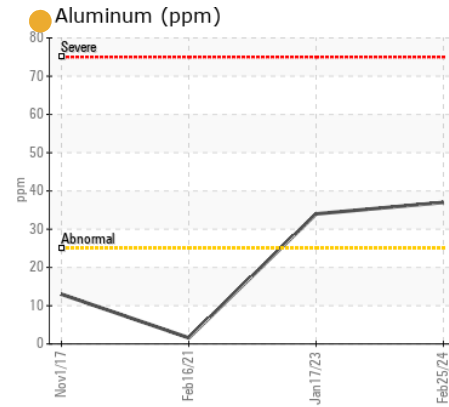
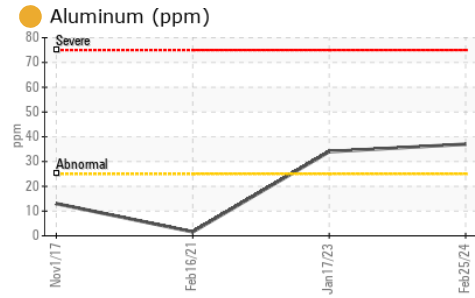
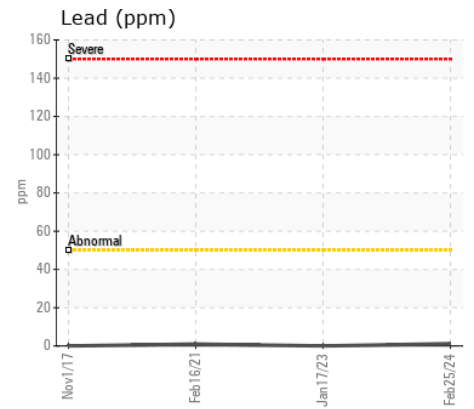
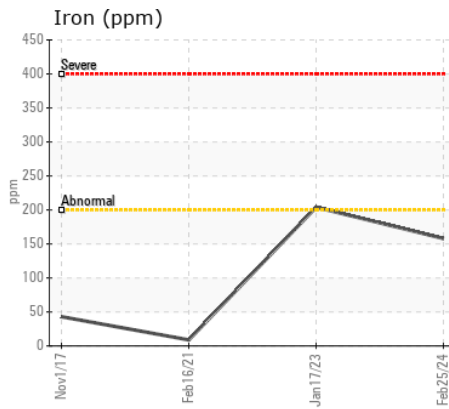
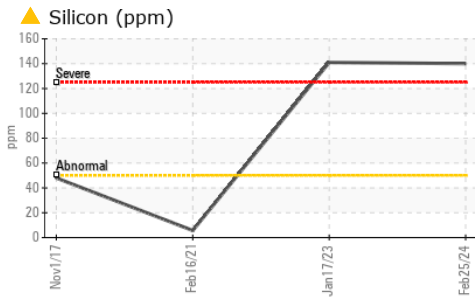
The oil viscosity is lower than normal. The AN level is acceptable for this fluid.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		LP0000964	WC0570627	WC0524389
Sample Date		Client Info		25 Feb 2024	17 Jan 2023	16 Feb 2021
Machine Age	hrs	Client Info		0	0	0
Oil Age	hrs	Client Info		0	0	0
Filter Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		N/A	N/A	N/A
Filter Changed		Client Info		N/A	N/A	N/A
Sample Status				ABNORMAL	ABNORMAL	NORMAL

Iron	ppm	ASTM D5185m	>200	158	▲ 204	9
Chromium	ppm	ASTM D5185m	>10	<1	<1	<1
Nickel	ppm	ASTM D5185m	>10	<1	0	2
Titanium	ppm	ASTM D5185m		2	2	<1
Silver	ppm	ASTM D5185m		0	0	<1
Aluminum	ppm	ASTM D5185m	>25	● 37	● 34	2
Lead	ppm	ASTM D5185m	>50	1	0	1
Copper	ppm	ASTM D5185m	>200	<1	<1	2
Tin	ppm	ASTM D5185m	>10	<1	0	<1
Vanadium	ppm	ASTM D5185m		0	0	<1
White Metal	scalar	*Visual	NONE	NONE	LIGHT	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

Silicon	ppm	ASTM D5185m	>50	▲ 140	▲ 141	6
Potassium	ppm	ASTM D5185m	>20	17	14	2
Water		WC Method	>0.2	NEG	NEG	NEG
Silt	scalar	*Visual	NONE	NONE	MODER	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

Sodium	ppm	ASTM D5185m		13	8	3
Boron	ppm	ASTM D5185m	25	25	6	9
Barium	ppm	ASTM D5185m	12	0	0	0
Molybdenum	ppm	ASTM D5185m	5	<1	<1	<1
Manganese	ppm	ASTM D5185m		3	3	<1
Magnesium	ppm	ASTM D5185m	25	8	4	6
Calcium	ppm	ASTM D5185m	25	41	25	10
Phosphorus	ppm	ASTM D5185m	375	247	160	164
Zinc	ppm	ASTM D5185m	25	6	2	1
Sulfur	ppm	ASTM D5185m	4900	7624	13661	5247
Acid Number (AN)	mg KOH/g	ASTM D8045	1.10	0.25	0.46	0.399
Visc @ 40°C	cSt	ASTM D445	220	▲ 185.2	201	213



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : LP0000964
Lab Number : 06100250
Unique Number : 10898480
Test Package : MOB 2

Received : 26 Feb 2024
Tested : 29 Feb 2024
Diagnosed : 01 Mar 2024 - Jonathan Hester

S.M. LORUSSO & SONS
 221 NORFOLK ST.
 WALPOLE, MA
 US 02081

Contact: PAUL BECKMAN
 pbeckman@smlorusso.com
 T: (508)668-2603
 F: (508)660-0232

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)