



OIL ANALYSIS REPORT

WEAR	ATTENTION
CONTAMINATION	ABNORMAL
FLUID CONDITION	NORMAL

Area
SOUTH HOLLAND
Machine Id
JLG 1850SJ PL8154

Component
Diesel Engine
Fluid
DIESEL ENGINE OIL 10W40 (--- QTS)

RECOMMENDATION

We advise that you check the air filter, air induction system, and any areas where dirt may enter the component. Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		HPL0002524	---	---
Sample Date		Client Info		26 Feb 2024	---	---
Machine Age	hrs	Client Info		2724	---	---
Oil Age	hrs	Client Info		0	---	---
Filter Age	hrs	Client Info		0	---	---
Oil Changed		Client Info		N/A	---	---
Filter Changed		Client Info		N/A	---	---
Sample Status				ABNORMAL	---	---

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>100	48	---	---
Chromium	ppm	ASTM D5185m	>20	1	---	---
Nickel	ppm	ASTM D5185m	>4	0	---	---
Titanium	ppm	ASTM D5185m		0	---	---
Silver	ppm	ASTM D5185m	>3	0	---	---
Aluminum	ppm	ASTM D5185m	>20	26	---	---
Lead	ppm	ASTM D5185m	>40	2	---	---
Copper	ppm	ASTM D5185m	>330	1	---	---
Tin	ppm	ASTM D5185m	>15	<1	---	---
Vanadium	ppm	ASTM D5185m		0	---	---
White Metal	scalar	*Visual	NONE	NONE	---	---
Yellow Metal	scalar	*Visual	NONE	NONE	---	---

CONTAMINATION

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

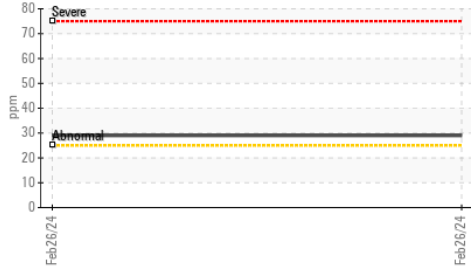
Silicon	ppm	ASTM D5185m	>25	29	---	---
Potassium	ppm	ASTM D5185m	>20	12	---	---
Fuel		WC Method	>5	<1.0	---	---
Water		WC Method	>0.2	NEG	---	---
Glycol		WC Method		NEG	---	---
Soot %	%	*ASTM D7844	>3	0.1	---	---
Nitration	Abs/cm	*ASTM D7624	>20	8.9	---	---
Sulfation	Abs/.1mm	*ASTM D7415	>30	26.9	---	---
Silt	scalar	*Visual	NONE	NONE	---	---
Debris	scalar	*Visual	NONE	NONE	---	---
Sand/Dirt	scalar	*Visual	NONE	NONE	---	---
Appearance	scalar	*Visual	NORML	NORML	---	---
Odor	scalar	*Visual	NORML	NORML	---	---
Emulsified Water	scalar	*Visual	>0.2	NEG	---	---

FLUID CONDITION

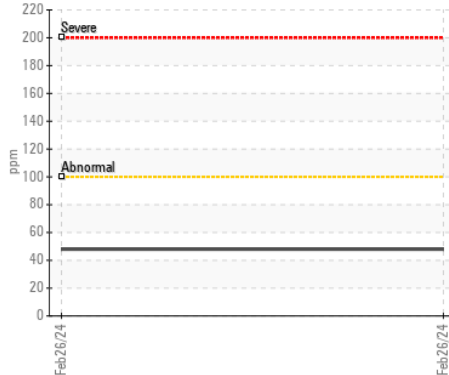
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is acceptable for the time in service.

Sodium	ppm	ASTM D5185m		14	---	---
Boron	ppm	ASTM D5185m	250	179	---	---
Barium	ppm	ASTM D5185m	10	1	---	---
Molybdenum	ppm	ASTM D5185m	100	622	---	---
Manganese	ppm	ASTM D5185m		1	---	---
Magnesium	ppm	ASTM D5185m	450	485	---	---
Calcium	ppm	ASTM D5185m	3000	3881	---	---
Phosphorus	ppm	ASTM D5185m	1150	903	---	---
Zinc	ppm	ASTM D5185m	1350	1095	---	---
Sulfur	ppm	ASTM D5185m	4250	18932	---	---
Oxidation	Abs/.1mm	*ASTM D7414	>25	18.0	---	---
Base Number (BN)	mg KOH/g	ASTM D2896	8.5	15.97	---	---
Visc @ 100°C	cSt	ASTM D445	14.4	14.0	---	---

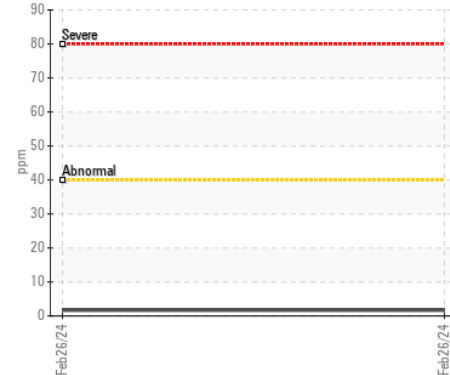
▲ Silicon (ppm)



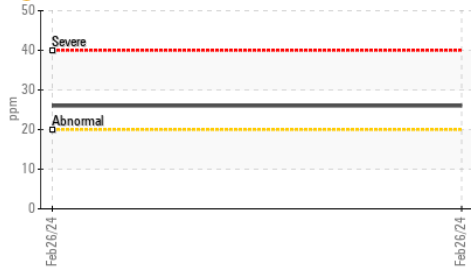
Iron (ppm)



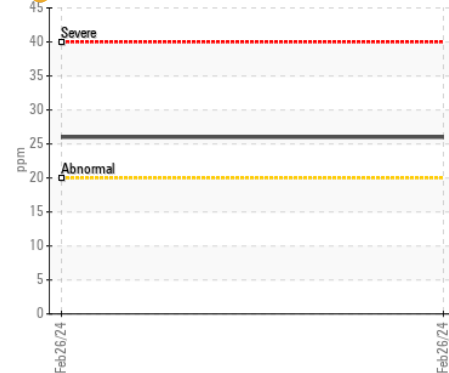
Lead (ppm)



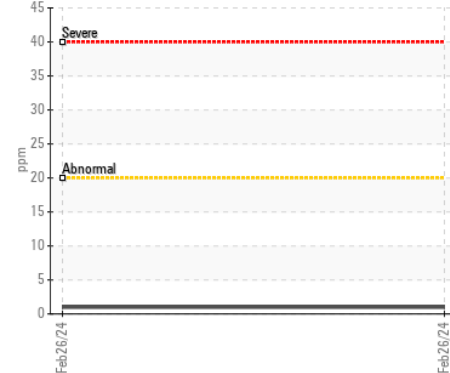
● Aluminum (ppm)



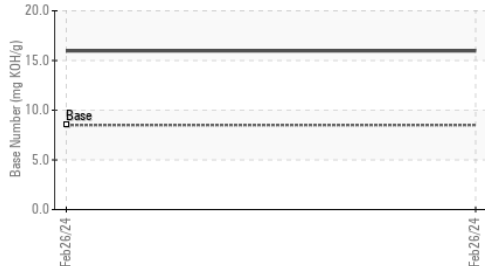
● Aluminum (ppm)



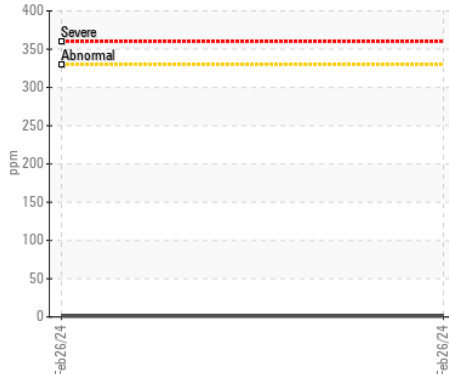
Chromium (ppm)



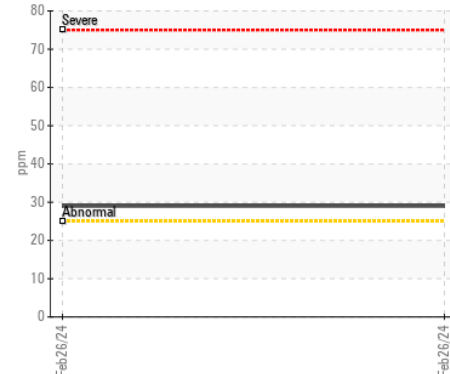
Base Number



Copper (ppm)



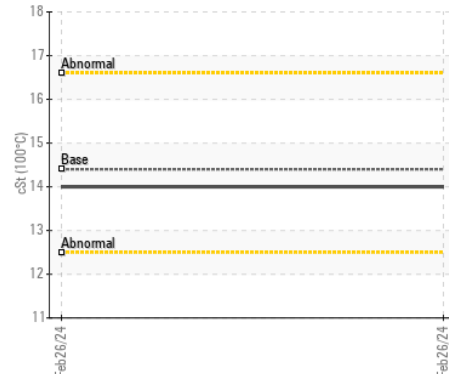
▲ Silicon (ppm)



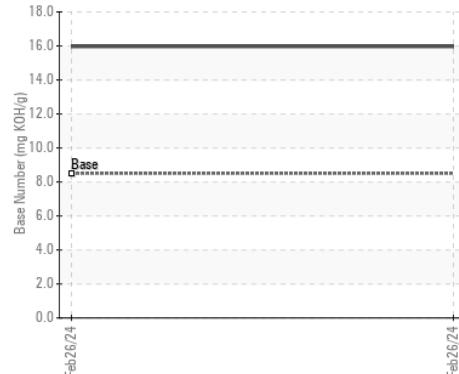
Viscosity @ 100°C



Viscosity @ 100°C



Base Number



Certificate L2367

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

Sample No. : HPL0002524

Lab Number : 06103182

Unique Number : 10901412

Test Package : MOB 2

Received : 28 Feb 2024

Tested : 29 Feb 2024

Diagnosed : 01 Mar 2024 - Sean Felton

STEVENS ON CRANE

410 STEVENSON DR

BOLINGBROOK, IL

US 60440

Contact: DAVE KOEHNE

davidk@stevensoncrane.com

T: (630)972-9199

F:

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)