CONST

WEAR CHECK

OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	SEVERE
FLUID CONDITION	ABNORMAL

Machine Id
032-R0002
Component
Diesel Engine
Fluid
SCHAEFFER SUPREME 7000 SAE 10W30 (--- GAL)

RECOMMENDATION

We advise that you check the fuel injection system. The oil change at the time of sampling has been noted. We recommend an early resample to monitor this condition. Please specify the component make and model with your next sample.

WEAR

Metal levels are typical for a new component breaking in.

CONTAMINATION

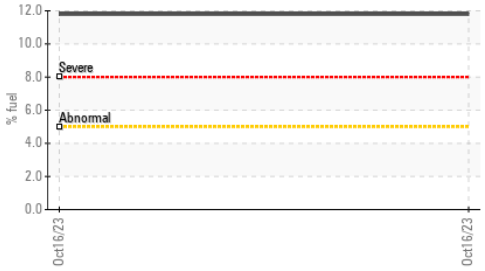
There is a high amount of fuel present in the oil. Tests confirm the presence of fuel in the oil.

FLUID CONDITION

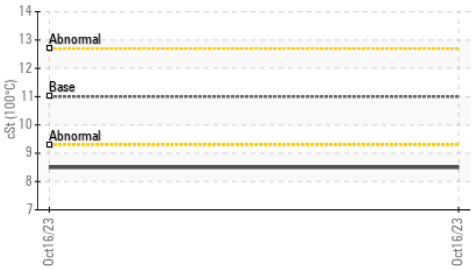
The BN result indicates that there is suitable alkalinity remaining in the oil. Fuel is present in the oil and is lowering the viscosity. The oil is no longer serviceable due to the presence of contaminants.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		WC0750610	---	---
Sample Date		Client Info		16 Oct 2023	---	---
Machine Age	hrs	Client Info		146	---	---
Oil Age	hrs	Client Info		0	---	---
Filter Age	hrs	Client Info		0	---	---
Oil Changed		Client Info		Changed	---	---
Filter Changed		Client Info		Changed	---	---
Sample Status				SEVERE	---	---
Iron	ppm	ASTM D5185m	>100	107	---	---
Chromium	ppm	ASTM D5185m	>20	5	---	---
Nickel	ppm	ASTM D5185m	>4	<1	---	---
Titanium	ppm	ASTM D5185m		<1	---	---
Silver	ppm	ASTM D5185m	>3	0	---	---
Aluminum	ppm	ASTM D5185m	>20	18	---	---
Lead	ppm	ASTM D5185m	>40	1	---	---
Copper	ppm	ASTM D5185m	>330	8	---	---
Tin	ppm	ASTM D5185m	>15	<1	---	---
Vanadium	ppm	ASTM D5185m		0	---	---
White Metal	scalar	*Visual	NONE	NONE	---	---
Yellow Metal	scalar	*Visual	NONE	NONE	---	---
Silicon	ppm	ASTM D5185m	>25	19	---	---
Potassium	ppm	ASTM D5185m	>20	<1	---	---
Fuel	%	ASTM D3524	>5	▲ 11.8	---	---
Water		WC Method	>0.2	NEG	---	---
Glycol		WC Method		NEG	---	---
Soot %	%	*ASTM D7844	>3	0.1	---	---
Nitration	Abs/cm	*ASTM D7624	>20	9.4	---	---
Sulfation	Abs/.1mm	*ASTM D7415	>30	16.1	---	---
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	---	---
Sodium	ppm	ASTM D5185m		5	---	---
Boron	ppm	ASTM D5185m	0	50	---	---
Barium	ppm	ASTM D5185m		22	---	---
Molybdenum	ppm	ASTM D5185m	300	34	---	---
Manganese	ppm	ASTM D5185m		5	---	---
Magnesium	ppm	ASTM D5185m	0	29	---	---
Calcium	ppm	ASTM D5185m	2025	2877	---	---
Phosphorus	ppm	ASTM D5185m	900	733	---	---
Zinc	ppm	ASTM D5185m	1000	990	---	---
Sulfur	ppm	ASTM D5185m	2800	2819	---	---
Oxidation	Abs/.1mm	*ASTM D7414	>25	11.0	---	---
Base Number (BN)	mg KOH/g	ASTM D2896	7.1	9.6	---	---
Visc @ 100°C	cSt	ASTM D445	11	▲ 8.5	---	---

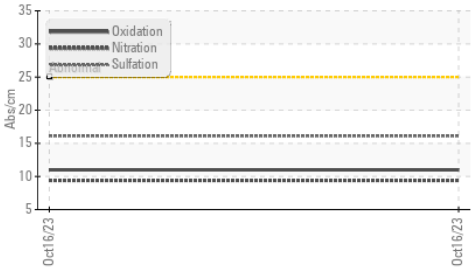
Fuel Dilution



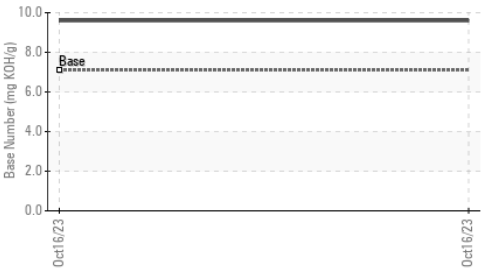
Viscosity @ 100°C



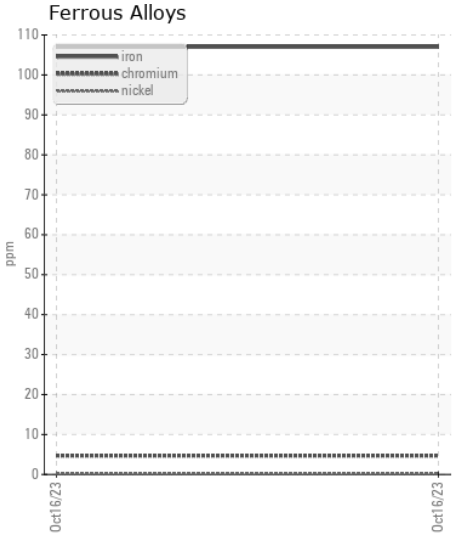
FT-IR (Direct Trend)



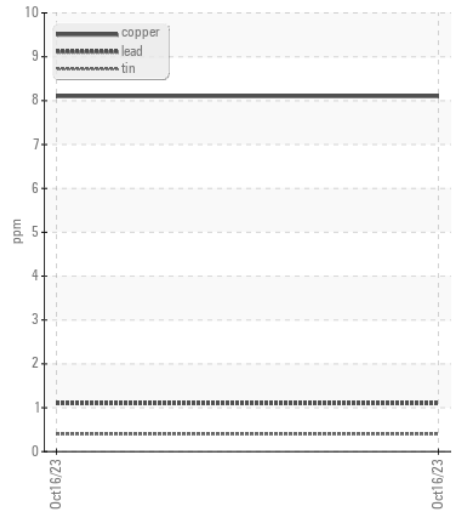
Base Number



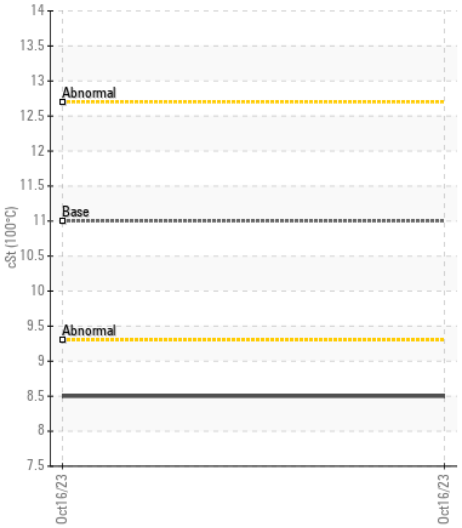
Ferrous Alloys



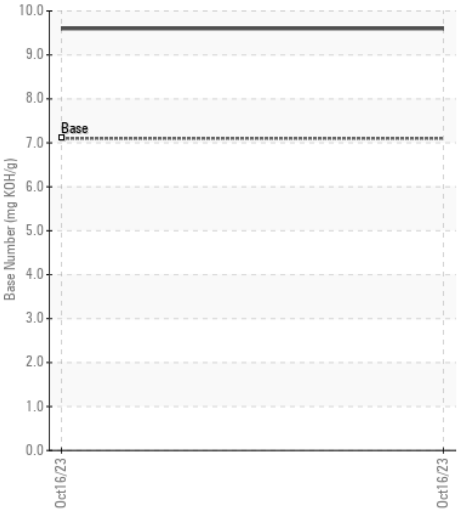
Non-ferrous Metals



Viscosity @ 100°C



Base Number



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC0750610
Lab Number : 05991958
Unique Number : 10714620
Test Package : CONST (Additional Tests: FuelDilution, PercentFuel, TBN)

Received : 27 Oct 2023
Tested : 31 Oct 2023
Diagnosed : 31 Oct 2023 - Wes Davis

SHIMMICK CONSTRUCTION
5535 TRAILHEAD DRIVE
CHATTANOOGA, TN
US 37415
Contact: DANIEL LISELLA
daniel.lisella@shimmick.com
T:
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)