



# OIL ANALYSIS REPORT

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

Machine Id

**021-0113**

Component

**Diesel Engine**

Fluid

**SCHAEFFER SUPREME 7000 (--- GAL)**

## RECOMMENDATION

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

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		<b>WC0903956</b>	WC0868430	WC0750672
Sample Date		Client Info		<b>18 Mar 2024</b>	03 Nov 2023	04 Apr 2023
Machine Age	hrs	Client Info		<b>2961</b>	2669	2407
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>Changed</b>	Changed	Changed
Filter Changed		Client Info		<b>Changed</b>	Changed	Changed
Sample Status				<b>NORMAL</b>	NORMAL	NORMAL

## WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>100	<b>3</b>	10	5
Chromium	ppm	ASTM D5185m	>20	<b>&lt;1</b>	<1	<1
Nickel	ppm	ASTM D5185m	>4	<b>&lt;1</b>	0	0
Titanium	ppm	ASTM D5185m		<b>0</b>	<1	0
Silver	ppm	ASTM D5185m	>3	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m	>20	<b>4</b>	4	2
Lead	ppm	ASTM D5185m	>40	<b>0</b>	<1	0
Copper	ppm	ASTM D5185m	>330	<b>&lt;1</b>	<1	0
Tin	ppm	ASTM D5185m	>15	<b>&lt;1</b>	0	0
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

## CONTAMINATION

There is no indication of any contamination in the oil.

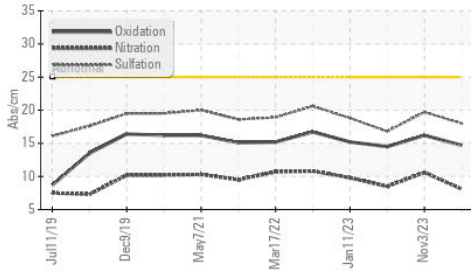
Silicon	ppm	ASTM D5185m	>25	<b>14</b>	15	11
Potassium	ppm	ASTM D5185m	>20	<b>1</b>	<1	0
Fuel		WC Method	>5	<b>&lt;1.0</b>	<1.0	<1.0
Water		WC Method	>0.2	<b>NEG</b>	NEG	NEG
Glycol		WC Method		<b>NEG</b>	NEG	NEG
Soot %	%	*ASTM D7844	>3	<b>0.1</b>	0.4	0.2
Nitration	Abs/cm	*ASTM D7624	>20	<b>8.1</b>	10.6	8.5
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>18.0</b>	19.7	16.8
Silt	scalar	*Visual	NONE	<b>NONE</b>	NONE	NONE
Debris	scalar	*Visual	NONE	<b>NONE</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

## FLUID CONDITION

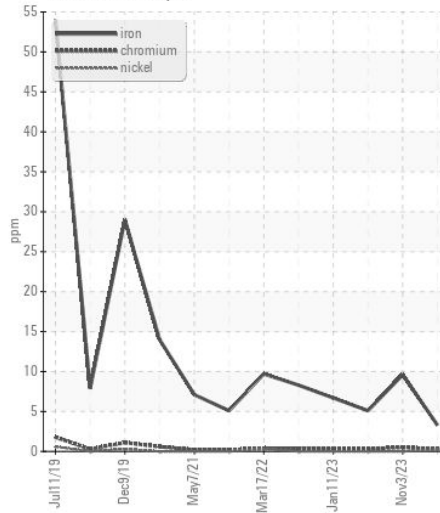
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

Sodium	ppm	ASTM D5185m		<b>3</b>	3	0
Boron	ppm	ASTM D5185m		<b>101</b>	69	92
Barium	ppm	ASTM D5185m		<b>2</b>	0	0
Molybdenum	ppm	ASTM D5185m	50	<b>76</b>	78	74
Manganese	ppm	ASTM D5185m		<b>0</b>	<1	<1
Magnesium	ppm	ASTM D5185m	1000	<b>21</b>	34	19
Calcium	ppm	ASTM D5185m	1400	<b>2204</b>	2193	2245
Phosphorus	ppm	ASTM D5185m	985	<b>1097</b>	981	1028
Zinc	ppm	ASTM D5185m	1060	<b>1190</b>	1304	1237
Sulfur	ppm	ASTM D5185m	4000	<b>5345</b>	5001	6107
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>14.7</b>	16.2	14.5
Base Number (BN)	mg KOH/g	ASTM D2896	10	<b>6.5</b>	6.4	5.6
Visc @ 100°C	cSt	ASTM D445	15	<b>14.3</b>	14.7	14.3

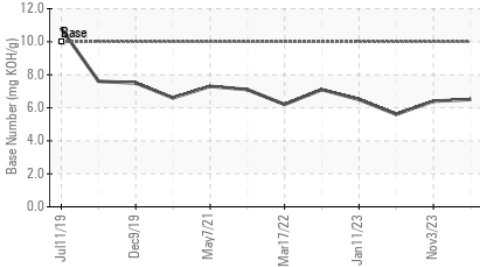
**FT-IR (Direct Trend)**



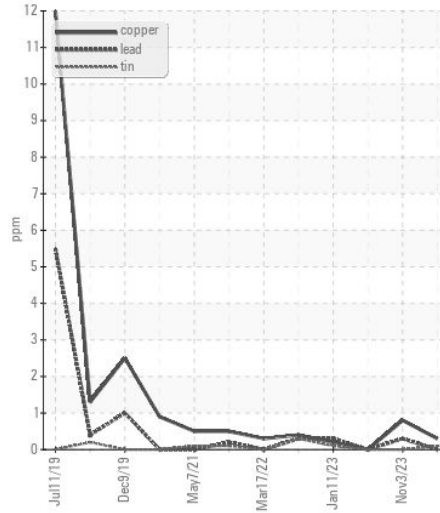
**Ferrous Alloys**



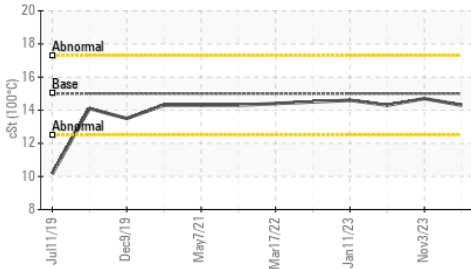
**Base Number**



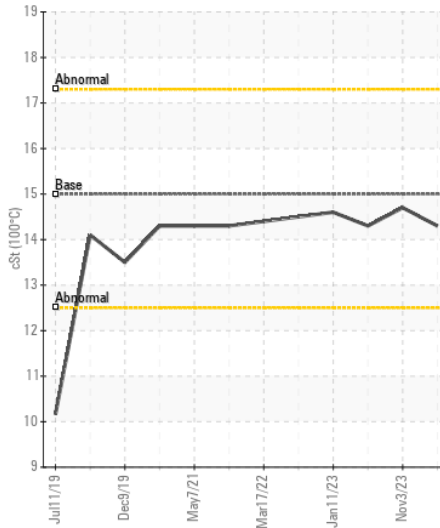
**Non-ferrous Metals**



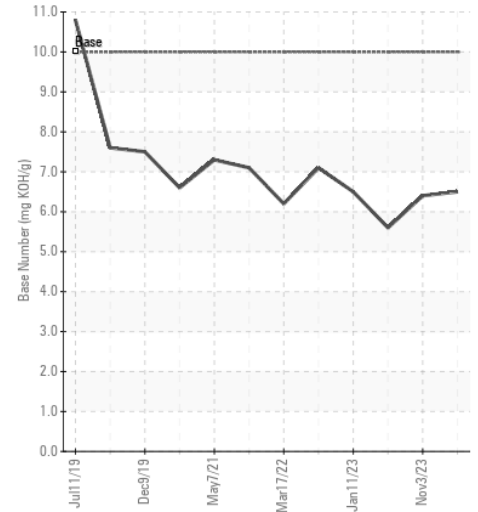
**Viscosity @ 100°C**



**Viscosity @ 100°C**



**Base Number**



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : WC0903956 **Received** : 15 Apr 2024  
**Lab Number** : 06148513 **Tested** : 16 Apr 2024  
**Unique Number** : 10978591 **Diagnosed** : 16 Apr 2024 - Wes Davis  
**Test Package** : CONST ( Additional Tests: TBN )

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

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F: