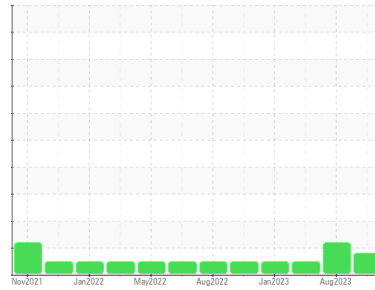




# PROBLEM SUMMARY

Sample Rating Trend



FUEL



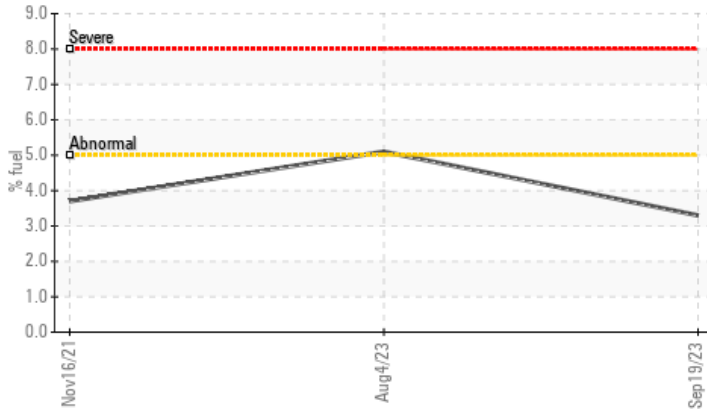
Machine Id  
**040-R006**

Component  
**Diesel Engine**

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

## COMPONENT CONDITION SUMMARY

### ▲ Fuel Dilution



## RECOMMENDATION

The oil change at the time of sampling has been noted. Resample at the next service interval to monitor. No other corrective action is recommended at this time. Please specify the component make and model with your next sample.

## PROBLEMATIC TEST RESULTS

Sample Status				MARGINAL	ABNORMAL	NORMAL
Fuel	%	ASTM D3524	>5	▲ 3.3	▲ 5.1	<1.0

Customer Id: AECCHATN  
Sample No.: WC0815199  
Lab Number: 05960468  
Test Package: CONST



To manage this report scan the QR code

To discuss the diagnosis or test data:  
Wes Davis +1 905-569-8600 x223  
[wesd@wearcheck.ca](mailto:wesd@wearcheck.ca)

To change component or sample information:  
Customer Service +1 1-800-237-1369  
[customerservice@wearcheck.com](mailto:customerservice@wearcheck.com)

## RECOMMENDED ACTIONS

Action	Status	Date	Done By	Description
Information Required	---	---	?	Please specify the component make and model with your next sample.

## HISTORICAL DIAGNOSIS

### 04 Aug 2023 Diag: Wes Davis

FUEL



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. All component wear rates are normal. There is a moderate amount of fuel present in the oil. Tests confirm the presence of fuel in the oil. 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.

view report



### 24 Feb 2023 Diag: Wes Davis

NORMAL



Resample at the next service interval to monitor. NOTE: Please provide information regarding reservoir capacity, filter type and micron rating with next sample. Please specify the component make and model with your next sample. All component wear rates are normal. There is no indication of any contamination in the oil. The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

view report



### 20 Jan 2023 Diag: Wes Davis

NORMAL



Resample at the next service interval to monitor. NOTE: Please provide information regarding reservoir capacity, filter type and micron rating with next sample. Please specify the component make and model with your next sample. All component wear rates are normal. There is no indication of any contamination in the oil. The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

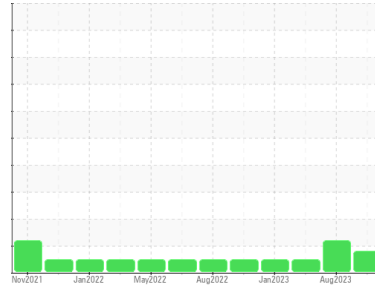
view report





# OIL ANALYSIS REPORT

Sample Rating Trend



FUEL



Machine Id  
**040-R006**

Component  
**Diesel Engine**

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

## DIAGNOSIS

### Recommendation

The oil change at the time of sampling has been noted. Resample at the next service interval to monitor. No other corrective action is recommended at this time. Please specify the component make and model with your next sample.

### Wear

All component wear rates are normal.

### Contamination

Light fuel dilution occurring. No other contaminants were detected in the oil.

### 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.

SAMPLE INFORMATION		method	limit/base	current	history1	history2
Sample Number	Client Info			<b>WC0815199</b>	WC0815218	WC0750631
Sample Date	Client Info			<b>19 Sep 2023</b>	04 Aug 2023	24 Feb 2023
Machine Age	hrs	Client Info		<b>5621</b>	5185	4068
Oil Age	hrs	Client Info		<b>0</b>	0	0
Oil Changed	Client Info			<b>Changed</b>	Changed	Not Changed
Sample Status				<b>MARGINAL</b>	ABNORMAL	NORMAL

CONTAMINATION		method	limit/base	current	history1	history2
Glycol	WC Method			<b>NEG</b>	NEG	NEG

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>100	<b>10</b>	15	5
Chromium	ppm	ASTM D5185m	>20	<b>0</b>	<1	0
Nickel	ppm	ASTM D5185m	>4	<b>0</b>	0	<1
Titanium	ppm	ASTM D5185m		<b>0</b>	0	0
Silver	ppm	ASTM D5185m	>3	<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m	>20	<b>&lt;1</b>	4	2
Lead	ppm	ASTM D5185m	>40	<b>0</b>	0	0
Copper	ppm	ASTM D5185m	>330	<b>6</b>	13	2
Tin	ppm	ASTM D5185m	>15	<b>0</b>	<1	0
Vanadium	ppm	ASTM D5185m		<b>&lt;1</b>	0	<1
Cadmium	ppm	ASTM D5185m		<b>0</b>	0	0

ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m		<b>39</b>	36	44
Barium	ppm	ASTM D5185m		<b>0</b>	2	2
Molybdenum	ppm	ASTM D5185m	50	<b>67</b>	47	71
Manganese	ppm	ASTM D5185m		<b>0</b>	2	<1
Magnesium	ppm	ASTM D5185m	1000	<b>46</b>	453	13
Calcium	ppm	ASTM D5185m	1400	<b>2297</b>	2002	2164
Phosphorus	ppm	ASTM D5185m	985	<b>1058</b>	961	970
Zinc	ppm	ASTM D5185m	1060	<b>1332</b>	1171	1149
Sulfur	ppm	ASTM D5185m	4000	<b>6025</b>	3848	4045

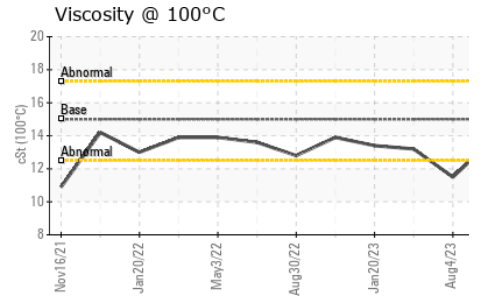
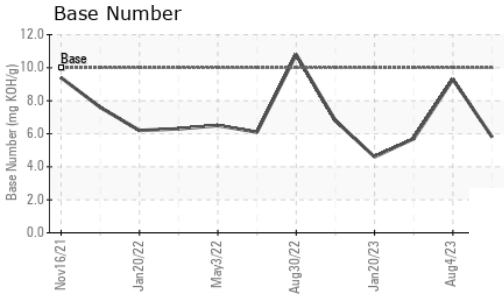
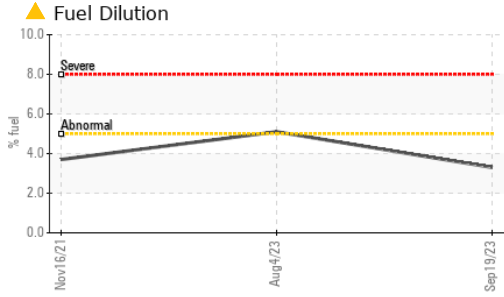
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>25	<b>6</b>	19	3
Sodium	ppm	ASTM D5185m		<b>4</b>	2	0
Potassium	ppm	ASTM D5185m	>20	<b>2</b>	0	3
Fuel	%	ASTM D3524	>5	<b>▲ 3.3</b>	▲ 5.1	<1.0

INFRA-RED		method	limit/base	current	history1	history2
Soot %	%	*ASTM D7844	>3	<b>0.2</b>	0.2	0.1
Nitration	Abs/cm	*ASTM D7624	>20	<b>10.1</b>	7.8	10.4
Sulfation	Abs/.1mm	*ASTM D7415	>30	<b>20.1</b>	21.6	20.6

FLUID DEGRADATION		method	limit/base	current	history1	history2
Oxidation	Abs/.1mm	*ASTM D7414	>25	<b>18.3</b>	19.9	18.1
Base Number (BN)	mg KOH/g	ASTM D2896	10	<b>5.8</b>	9.3	5.7



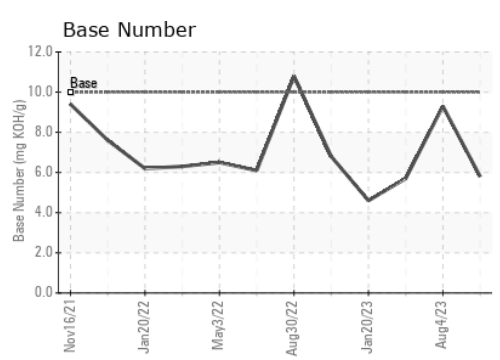
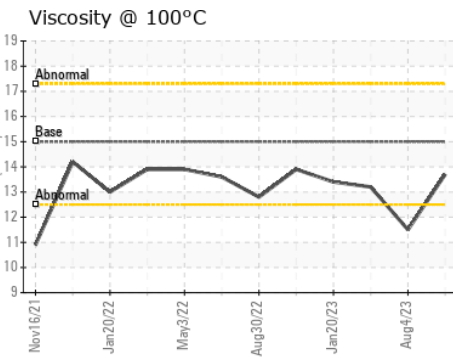
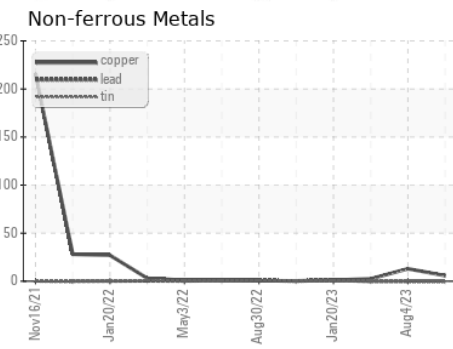
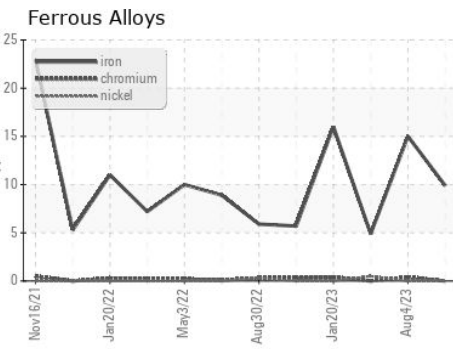
# OIL ANALYSIS REPORT



VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.2	NEG	NEG
Free Water	scalar	*Visual		NEG	NEG

FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D445	15	13.7	▲ 11.5 13.2

### GRAPHS



**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : WC0815199 **Received** : 25 Sep 2023  
**Lab Number** : 05960468 **Diagnosed** : 27 Sep 2023  
**Unique Number** : 10661681 **Diagnostician** : Wes Davis  
**Test Package** : CONST ( Additional Tests: PercentFuel, 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)