

## **OIL ANALYSIS REPORT**

Sample Rating Trend

### NORMAL

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SAMPLE INFORM	<b>IATION</b>	method	limit/base	current	history1	history2
Sample Number		Client Info		WC0868313	WC0815247	WC0815220
Sample Date		Client Info		18 Jun 2024	14 Nov 2023	19 Jul 2023
Machine Age	hrs	Client Info		7393	6706	5953
Oil Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		Changed	Changed	Changed
Sample Status				NORMAL	NORMAL	NORMAL
CONTAMINATIO	N	method	limit/base	current	history1	history2
Fuel		WC Method	>5	<1.0	<1.0	<1.0
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>100	4	6	7
Chromium	ppm	ASTM D5185m	>20	0	<1	<1
Nickel	ppm	ASTM D5185m		0	0	<1
Titanium	ppm	ASTM D5185m		0	<1	<1
Silver	ppm	ASTM D5185m	>3	0	0	0
Aluminum	ppm	ASTM D5185m		3	3	3
Lead	ppm	ASTM D5185m		0	<1	0
Copper	ppm	ASTM D5185m		0	<1	<1
Tin		ASTM D5185m		۰ <1	0	0
Vanadium	ppm	ASTM D5185m	>15	0	0	0
Cadmium	ppm ppm	ASTM D5185m		0	0	0
ADDITIVES	ppm	method	limit/base	current	history1	history2
			IIIIII/Dase			
Boron	ppm	ASTM D5185m		52 0	48	65
Barium	ppm	ASTM D5185m	50	-	0	1
Molybdenum	ppm	ASTM D5185m	50	71	71	74
Manganese	ppm	ASTM D5185m	1000	<1	0	0
Magnesium	ppm	ASTM D5185m	1000	29	26	84
Calcium	ppm	ASTM D5185m	1400	2213	2102	2043
Phosphorus	ppm	ASTM D5185m	985	1070	919	913
Zinc	ppm	ASTM D5185m	1060	1247	1245	1149
Sulfur	ppm	ASTM D5185m	4000	5567	4628	4496
CONTAMINANTS	5	method	limit/base	current	history1	
Silicon	ppm	ASTM D5185m		3	3	3
Silicon Sodium				3 3	3	
Silicon	ppm	ASTM D5185m	>25	3	3	3
Silicon Sodium	ppm ppm	ASTM D5185m ASTM D5185m	>25	3 3	3	3 2 1
Silicon Sodium Potassium	ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m	>25 >20	3 3 3	3 2 <1	3 2 1
Silicon Sodium Potassium INFRA-RED	ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m method	>25 >20 limit/base	3 3 3 current	3 2 <1 history1	3 2 1 history2
Silicon Sodium Potassium INFRA-RED Soot %	ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m <b>method</b> *ASTM D7844	>25 >20 limit/base >3	3 3 3 current 0.1	3 2 <1 history1 0.1	3 2 1 history2 0.1
Silicon Sodium Potassium INFRA-RED Soot % Nitration	ppm ppm ppm % Abs/cm Abs/.1mm	ASTM D5185m ASTM D5185m ASTM D5185m <b>method</b> *ASTM D7844 *ASTM D7624	>25 >20 limit/base >3 >20	3 3 3 current 0.1 10.0	3 2 <1 history1 0.1 10.0	3 2 1 history2 0.1 10.0 20.1
Silicon Sodium Potassium INFRA-RED Soot % Nitration Sulfation	ppm ppm ppm % Abs/cm Abs/.1mm	ASTM D5185m ASTM D5185m ASTM D5185m <b>method</b> *ASTM D7844 *ASTM D7624 *ASTM D7415	>25 >20 limit/base >3 >20 >30	3 3 3 current 0.1 10.0 20.0	3 2 <1 history1 0.1 10.0 20.3	2 1 history2 0.1 10.0

#### Machine Id 015-R0014 Component Diesel Engine

Fluid SCHAEFFER SUPREME 7000 (--- GAL)

#### DIAGNOSIS

#### Recommendation

Resample at the next service interval to monitor. Please specify the component make and model with your next sample. ( Customer Sample Comment: Engine oil sample )

#### Wear

All component wear rates are normal.

### Contamination

There is no indication of any contamination 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.

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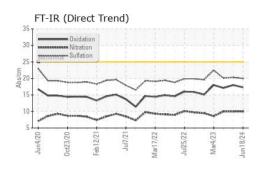


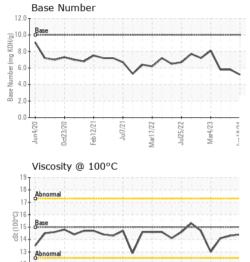
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Jun4/20

Feb12/21

# **OIL ANALYSIS REPORT**





Mar4/23

Mar17/22

VISUAL		method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE	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
Free Water	scalar	*Visual		NEG	NEG	NEG
FLUID PROPERT	IES	method	limit/base	current	history1	history2
Visc @ 100°C	cSt	ASTM D445	15	14.4	14.3	14.1
GRAPHS						

Ferrous Alloys

lead

0

19

18

17

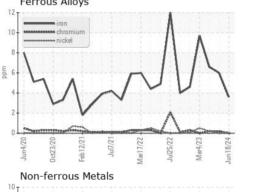
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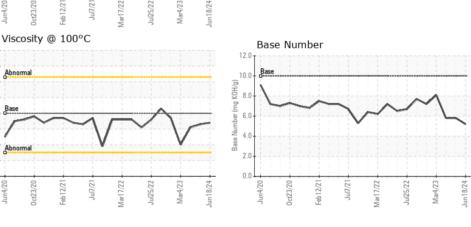
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Jun4/20





Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513 SHIMMICK CONSTRUCTION Sample No. : WC0868313 Received : 21 Jun 2024 5535 TRAILHEAD DRIVE Lab Number : 06216683 Tested : 24 Jun 2024 CHATTANOOGA, TN Unique Number : 11089547 Diagnosed : 24 Jun 2024 - Sean Felton US 37415 Test Package : CONST (Additional Tests: TBN) Contact: DANIEL LISELLA Certificate 12367 To discuss this sample report, contact Customer Service at 1-800-237-1369. daniel.lisella@shimmick.com \* - Denotes test methods that are outside of the ISO 17025 scope of accreditation. T: F:

Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012)

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