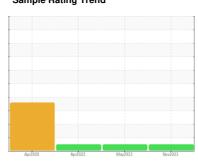


OIL ANALYSIS REPORT

Sample Rating Trend



NORMAL



Machine Id **015-0068**

Component 4 Swing Drive

SCHAEFFER 267 80W90 (--- GAL)

DIAGNOSIS

Recommendation

Resample at the next service interval to monitor.

Wear

All component wear rates are normal.

Contamination

There is no indication of any contamination in the oil

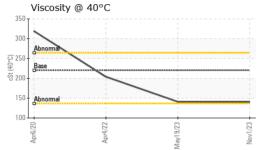
Fluid Condition

The condition of the oil is acceptable for the time in service.

SAMPLE INFORMATION method limit/base current history1 history2 Sample Number Client Info WC0868427 WC0815158 WC0548337 Sample Date Client Info 0 1 Nov 2023 19 May 2023 04 Apr 2022 04 Apr 2022 06 Apr 2022 06 Apr 2022 07 08 09 0 0 0 0 0 0 0 0			Apr202)) Apr2022	May2023 N	w2023	
Sample Number Client Info WC0868427 WC0815158 WC0548337 Sample Date Client Info O1 Nov 2023 19 May 2023 04 Apr 2022 O1 Nov 2023 19 May 2023 04 Apr 2022 O1 Nov 2023 O1 N	SAMPLE INFORM	/ATION				history1	history2
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Machine Age							
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Oil Changed Client Info Not Changd Not Changd NORMAL NORMAL					-		
NORMAL NORMAL NORMAL NORMAL NORMAL	•	1111115			-		
WEAR METALS method limit/base current history1 history2 Iron ppm ASTM DS185m >400 57 46 89 Chromium ppm ASTM DS185m >10 <1 <1 <1 Nickel ppm ASTM DS185m >10 0 <1 0 Titanium ppm ASTM DS185m >0 0 <1 <1 Silver ppm ASTM DS185m >20 0 1 0 <1 Aluminum ppm ASTM DS185m >50 0 1 0 <1 0 Lead ppm ASTM DS185m >50 0 1 0 0 <1 0			Ciletit IIIIO				_
Irron	·		us sale s el	lineit/lenene		-	
Chromium ppm ASTM D5185m >10 <1							
Nickel							
Titanium							
Silver				>10	-		
Aluminum							
Lead				0.7			
Copper					-		
Tin					-		
Antimony ppm ASTM D5185m >5 OD 0 <							
Vanadium ppm ASTM D5185m 0 <1 0 Cadmium ppm ASTM D5185m 0 0 0 ADDITIVES method limit/base current history1 history2 Boron ppm ASTM D5185m 9 21 85 Barium ppm ASTM D5185m 0 0 0 Molybdenum ppm ASTM D5185m 377 393 398 Manganese ppm ASTM D5185m <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <th></th> <td>ppm</td> <td></td> <td></td> <th>-</th> <td></td> <td>-</td>		ppm			-		-
Cadmium ppm ASTM D5185m 0 0 0 ADDITIVES method limit/base current history1 history2 Boron ppm ASTM D5185m 9 21 85 Barium ppm ASTM D5185m 0 0 0 Molyddenum ppm ASTM D5185m 377 393 398 Manganese ppm ASTM D5185m <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <td< th=""><th>•</th><th>ppm</th><th>ASTM D5185m</th><th>>5</th><th></th><th></th><th></th></td<>	•	ppm	ASTM D5185m	>5			
ADDITIVES method limit/base current history1 history2 Boron ppm ASTM D5185m 9 21 85 Barium ppm ASTM D5185m 0 0 0 Molybdenum ppm ASTM D5185m 377 393 398 Manganese ppm ASTM D5185m <1	Vanadium	ppm	ASTM D5185m				
Boron	Cadmium	ppm	ASTM D5185m		0	0	0
Barium	ADDITIVES		method	limit/base	current	history1	history2
Molybdenum ppm ASTM D5185m 377 393 398 Manganese ppm ASTM D5185m <1	Boron	ppm	ASTM D5185m		9	21	85
Manganese ppm ASTM D5185m <1 <1 <1 <1 <1 <1 <1 <1 <1 <2 2 <2 Calcium ppm ASTM D5185m <13 16 22 Phosphorus ppm ASTM D5185m 806 950 1187 Zinc ppm ASTM D5185m 36 20 16 Sulfur ppm ASTM D5185m 17479 23171 18822 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >50 12 15 17 Sodium ppm ASTM D5185m >20 <1		ppm	ASTM D5185m		0	0	0
Magnesium ppm ASTM D5185m <1 2 2 Calcium ppm ASTM D5185m 13 16 22 Phosphorus ppm ASTM D5185m 806 950 1187 Zinc ppm ASTM D5185m 36 20 16 Sulfur ppm ASTM D5185m 17479 23171 18822 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >50 12 15 17 Sodium ppm ASTM D5185m >20 <1	Molybdenum	ppm	ASTM D5185m		377	393	398
Calcium ppm ASTM D5185m 13 16 22 Phosphorus ppm ASTM D5185m 806 950 1187 Zinc ppm ASTM D5185m 36 20 16 Sulfur ppm ASTM D5185m 17479 23171 18822 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >50 12 15 17 Sodium ppm ASTM D5185m >50 1 21 15 17 Sodium ppm ASTM D5185m >50 12 15 17 Sodium ppm ASTM D5185m >20 <1	Manganese	ppm	ASTM D5185m		<1	<1	<1
Phosphorus ppm ASTM D5185m 806 950 1187 Zinc ppm ASTM D5185m 36 20 16 Sulfur ppm ASTM D5185m 17479 23171 18822 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >50 12 15 17 Sodium ppm ASTM D5185m >20 <1	Magnesium	ppm	ASTM D5185m		<1	2	2
Zinc ppm ASTM D5185m 36 20 16 Sulfur ppm ASTM D5185m 17479 23171 18822 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >50 12 15 17 Sodium ppm ASTM D5185m >50 1 21 1 1 Potassium ppm ASTM D5185m >20 <1	Calcium	ppm	ASTM D5185m		13	16	22
Sulfur ppm ASTM D5185m 17479 23171 18822 CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >50 12 15 17 Sodium ppm ASTM D5185m >50 1 <1	Phosphorus	ppm	ASTM D5185m		806	950	1187
CONTAMINANTS method limit/base current history1 history2 Silicon ppm ASTM D5185m >50 12 15 17 Sodium ppm ASTM D5185m >20 <1	Zinc	ppm	ASTM D5185m		36	20	16
Silicon ppm ASTM D5185m >50 12 15 17 Sodium ppm ASTM D5185m 1 <1 <1 1 Potassium ppm ASTM D5185m >20 <1 2 0 VISUAL method limit/base current history1 history2 White Metal scalar *Visual NONE NONE NONE LIGHT 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 NORML	Sulfur	ppm	ASTM D5185m		17479	23171	18822
Sodium ppm ASTM D5185m 1 <1	CONTAMINANTS	;	method	limit/base	current	history1	history2
Potassium ppm ASTM D5185m >20 <1 2 0 VISUAL method limit/base current history1 history2 White Metal scalar *Visual NONE NONE NONE NONE NONE Yellow Metal scalar *Visual NONE NONE NONE NONE NONE Precipitate scalar *Visual NONE NONE NONE NONE NONE Silt scalar *Visual NONE NONE NONE NONE NONE Debris scalar *Visual NONE NONE NONE NONE LIGHT Sand/Dirt scalar *Visual NONE 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	Silicon	ppm	ASTM D5185m	>50	12	15	17
VISUAL method limit/base current history1 history2 White Metal scalar *Visual NONE NONE NONE LIGHT Yellow Metal scalar *Visual NONE NONE NONE NONE NONE Precipitate scalar *Visual NONE NONE NONE NONE NONE Silt scalar *Visual NONE NONE NONE NONE NONE Debris scalar *Visual NONE NONE NONE NONE LIGHT Sand/Dirt scalar *Visual NONE 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	Sodium	ppm	ASTM D5185m		1	<1	1
White Metal scalar *Visual NONE NONE NONE LIGHT Yellow Metal scalar *Visual NONE NONE NONE NONE Precipitate scalar *Visual NONE NONE NONE NONE Silt scalar *Visual NONE NONE NONE NONE NONE Debris scalar *Visual NONE NONE NONE NONE LIGHT Sand/Dirt scalar *Visual NONE 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	Potassium	ppm	ASTM D5185m	>20	<1	2	0
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Sand/Dirtscalar*VisualNONENONENONENONEAppearancescalar*VisualNORMLNORMLNORMLNORMLOdorscalar*VisualNORMLNORMLNORMLNORMLEmulsified Waterscalar*Visual>0.2NEGNEGNEG	Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Appearancescalar*VisualNORMLNORMLNORMLNORMLNORMLOdorscalar*VisualNORMLNORMLNORMLNORMLEmulsified Waterscalar*Visual>0.2NEGNEGNEG	Debris	scalar	*Visual	NONE	NONE	NONE	LIGHT
Odor scalar *Visual NORML NORML NORML NORML NORML NORML Emulsified Water scalar *Visual >0.2 NEG NEG NEG	Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	NONE
Emulsified Water scalar *Visual >0.2 NEG NEG NEG	Appearance	scalar	*Visual	NORML	NORML	NORML	NORML
	Odor	scalar	*Visual	NORML	NORML	NORML	NORML
Free Water scalar *Visual NEG NEG NEG	Emulsified Water	scalar	*Visual	>0.2	NEG	NEG	NEG
	Free Water	scalar	*Visual		NEG	NEG	NEG

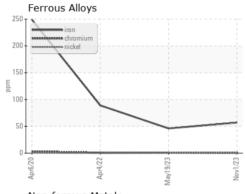


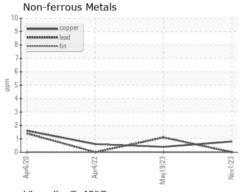
OIL ANALYSIS REPORT

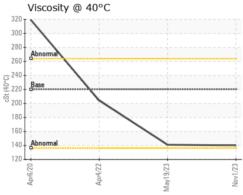




GRAPHS











Certificate L2367

Laboratory Sample No. Lab Number

: WC0868427 : 06000141 Unique Number : 10728501 Test Package : CONST

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 Received : 06 Nov 2023 Diagnosed : 15 Nov 2023 Diagnostician : Doug Bogart

SHIMMICK CONSTRUCTION 5535 TRAILHEAD DRIVE

CHATTANOOGA, TN US 37415

Contact: DANIEL LISELLA

daniel.lisella@shimmick.com T:

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)

Report Id: AECCHATN [WUSCAR] 06000141 (Generated: 11/15/2023 23:24:10) Rev: 1

Contact/Location: DANIEL LISELLA - AECCHATN

F: