

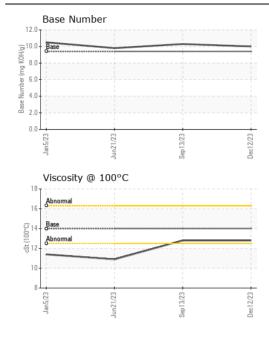
WEAR CONTAMINATION FLUID CONDITION

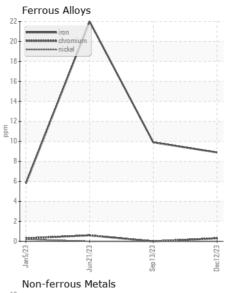
NORMAL NORMAL

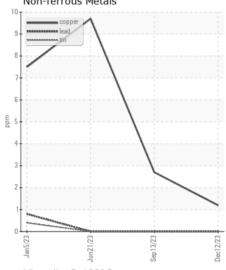


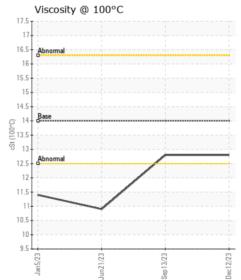
Machine Id 45.64L [] Component Diesel Engine

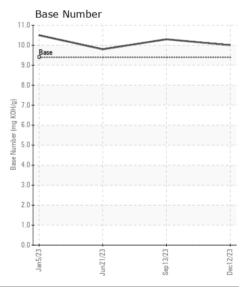
Resample at the next service interval to monitor. Sample Date Client Info Sample State Sample Stat	Fluid MOBIL DELVAC 1300 SUPER1	5W40 (GA	AL)			.,		
Resample at the next service interval to monitor. Sample Date Client Info Worksoin Workso	RECOMMENDATION	Test	UOM	Method	Limit/Abn	Current	Historv1	History2
Sample Date Machine Age Inc Client Info 2 Dec 2023 2 Laya 2 Machine Age Inc Client Info 2 Dec 2023 2 Laya 2 Machine Age Inc Client Info 2 Dec 2023 2 Laya 2 Machine Age Inc Client Info 2 Dec 2023 2 Laya 2 Machine Age Inc Client Info 2 Dec 2023 2 Laya 2 Machine Age Inc Client Info 2 Dec 2023 2 Laya 2 Machine Age Inc Client Info 2 Dec 2023 2 Laya 2 Machine Age Inc Client Info 2 Dec 2023 2 Machine Age Inc Changed Chang				Client Info			,	WC0807988
Machine Age Prise Client Info 287 550 368 768 Client Info 287 Changed Changed	Resample at the next service interval to monitor.	Sample Date		Client Info		12 Dec 2023	13 Sep 2023	21 Jun 2023
Filter Age		Machine Age	hrs	Client Info		837		366
Oil Changed Client Info Changed Changed Changed Sample Status Changed Sample Status Changed Sample Status Changed NORMAL ATTENTION		Oil Age	hrs	Client Info		287	550	366
Filter Changed Sample Status		Filter Age	hrs	Client Info		287	550	366
Nome		Oil Changed		Client Info		Changed	Changed	Changed
Iron		Filter Changed		Client Info		Changed	Changed	Changed
Metal levels are typical for a new component breaking in. Nickel ppm ASTM 05185m >2 0 0 0 0 0 0 0 0 0		Sample Status				NORMAL	NORMAL	ATTENTION
Metal levels are typical for a new component breaking in. Nickel	WEAR	Iron	ppm	ASTM D5185m	>100	9	10	22
Metal levels are typical for a new component breaking in. Nickel ppm ASTM 05185m >2 < 1 0 0 0 Titanium ppm ASTM 05185m >2 < 1 0 0 0 ASTM 05185m >2 0 0 0 0 ASTM 05185m >2 0 0 0 0 AUminum ppm ASTM 05185m >2 0 0 0 0 AUminum ppm ASTM 05185m >4 0 0 0 0 Copper ppm ASTM 05185m >40 0 0 0 0 Copper ppm ASTM 05185m >40 0 0 0 0 AVERAGE ppm ASTM 05185m >40 0 0 0 0 AVERAGE ppm ASTM 05185m >40 0 0 0 0 AVERAGE ppm ASTM 05185m >15 0 0 0 0 AVERAGE ppm ASTM 05185m >15 0 0 0 0 AVERAGE ppm ASTM 05185m >15 0 0 0 0 AVERAGE ppm ASTM 05185m >15 0 0 0 0 AVERAGE ppm ASTM 05185m >15 0 0 0 0 AVERAGE ppm ASTM 05185m >15 0 0 0 0 AVERAGE ppm ASTM 05185m >15 0 0 0 0 AVERAGE ppm ASTM 05185m >15 0 0 0 0 AVERAGE ppm ASTM 05185m >15 0 0 0 0 AVERAGE ppm ASTM 05185m >15 0 0 0 0 AVERAGE ppm ASTM 05185m >15 0 0 0 0 AVERAGE ppm ASTM 05185m >15 0 0 0 0 AVERAGE ppm ASTM 05185m >25 4 4 5 Fuel PVC Method >2 NEG N		Chromium		ASTM D5185m	>20	<1	0	<1
Titanium ppm ASTM 05185m >2 0 0 0 0	Metal levels are typical for a new component breaking in.	Nickel		ASTM D5185m	>2	0	0	0
Silver ppm ASTM DS 85m >22 0 0 0 0 0 0 0 0 0						<1	0	<1
Aluminum ppm ASTM D5185m >25 3 1 4		Silver					0	0
Lead							1	
Copper		Lead					0	
Tin		Copper		ASTM D5185m	>330	1	3	10
White Metal Scalar *Visual NONE NO				ASTM D5185m	>15	0	0	0
White Metal Scalar Visual NONE NON		Vanadium		ASTM D5185m		0	0	0
Yellow Metal Scalar Visual NONE NO		White Metal			NONE	NONE	NONE	NONE
Potassium ppm ASTM D5185m >20 1 15 <1		Yellow Metal						NONE
Potassium ppm ASTM D5185m >20 1 15 <1	CONTAMINATION	Silicon	nnm	ASTM D5185m	>25	4	4	5
Fuel WC Method S S S S S S S S S	CONTAMINATION		• •					
Water WC Method So.2 NEG NEG NEG	There is no indication of any contamination in the oil.		ррпп					
Glycol								
Soot % % *ASTM D7844 >3					7 O.L			
Nitration Abs/cm *ASTM D7624 >20 6.4 5.8 6.5		-	%		>3			
Sulfation								
Silt scalar *Visual NONE NORML								
Debris Scalar *Visual NONE NONE NONE Sand/Dirt Scalar *Visual NONE NORML								NONE
Sand/Dirt scalar *Visual NONE NONE NONE NONE Appearance scalar *Visual NORML NORML						NONE		NONE
Appearance								NONE
Oddr								NORML
Emulsified Water scalar *Visual >0.2 NEG NEG NEG				*Visual				NORML
Boron ppm ASTM D5185m 0 58 62 56		Emulsified Water	scalar	*Visual	>0.2		NEG	NEG
Boron ppm ASTM D5185m 0 58 62 56	FLUID CONDITION	Sodium	nnm	ASTM D5185m		n	5	3
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service. Barium ppm ASTM D5185m 0 41 41 36	TEOR CONDITION		• • •		0			
Molybdenum ppm ASTM D5185m 0 41 41 36 Manganese ppm ASTM D5185m 0 503 505 448 Calcium ppm ASTM D5185m 0 503 505 448 Calcium ppm ASTM D5185m 1648 1711 156 Phosphorus ppm ASTM D5185m 733 772 845 Zinc ppm ASTM D5185m 904 917 1020 Sulfur ppm ASTM D5185m 904 917 1020 Sulfur ppm ASTM D5185m 2746 2841 3170 Oxidation Abs/.1mm *ASTM D7414 >25 20.4 19.9 20.4 Base Number (BN) mg KOH/g ASTM D2896 9.4 10.0 10.3 9.8	,							
Manganese ppm ASTM D5185m <1			• •					
Magnesium ppm ASTM D5185m 0 503 505 448 Calcium ppm ASTM D5185m 1648 1711 156° Phosphorus ppm ASTM D5185m 733 772 845 Zinc ppm ASTM D5185m 904 917 1020 Sulfur ppm ASTM D5185m 2746 2841 3170 Oxidation Abs/.1mm *ASTM D7414 >25 20.4 19.9 20.4 Base Number (BN) mg KOH/g ASTM D2896 9.4 10.0 10.3 9.8		•						
Calcium ppm ASTM D5185m 1648 1711 156 Phosphorus ppm ASTM D5185m 733 772 845 Zinc ppm ASTM D5185m 904 917 1020 Sulfur ppm ASTM D5185m 2746 2841 3170 Oxidation Abs/.1mm *ASTM D7414 >25 20.4 19.9 20.4 Base Number (BN) mg KOH/g ASTM D2896 9.4 10.0 10.3 9.8					0			
Phosphorus ppm ASTM D5185m 733 772 845 Zinc ppm ASTM D5185m 904 917 1020 Sulfur ppm ASTM D5185m 2746 2841 3170 Oxidation Abs/.1mm *ASTM D7414 >25 20.4 19.9 20.4 Base Number (BN) mg KOH/g ASTM D2896 9.4 10.0 10.3 9.8		-						1561
Zinc ppm ASTM D5185m 904 917 1020 Sulfur ppm ASTM D5185m 2746 2841 3170 Oxidation Abs/.1mm *ASTM D7414 >25 20.4 19.9 20.4 Base Number (BN) mg KOH/g ASTM D2896 9.4 10.0 10.3 9.8								
Sulfur ppm ASTM D5185m 2746 2841 3170 Oxidation Abs/.1mm *ASTM D7414 >25 20.4 19.9 20.4 Base Number (BN) mg KOH/g ASTM D2896 9.4 10.0 10.3 9.8								1020
Oxidation Abs/.1mm *ASTM D7414 >25 20.4 19.9 20.4 Base Number (BN) mg KOH/g ASTM D2896 9.4 10.0 10.3 9.8								3176
Base Number (BN) mg KOH/g ASTM D2896 9.4 10.0 10.3 9.8					>25			
VISC @ 100 C CSL ASTM D443 14 (12.0) 12.0 A 10.3		Visc @ 100°C	cSt	ASTM D445		12.8	12.8	▲ 10.9













Laboratory Sample No.

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 : WC0778301 Lab Number : 06043009 Unique Number: 10803617

Test Package : CONST (Additional Tests: TBN)

To discuss this sample report, contact Customer Service at 1-800-237-1369.

Received **Tested** Diagnosed

: 22 Dec 2023 : 25 Dec 2023

: 25 Dec 2023 - Wes Davis

SHERWOOD CONSTRUCTION CO INC 3219 WEST MAY ST

WICHITA, KS US 67213 Contact: SHAWN SOUTH

shawn.south@sherwood.net

T: x: F: x:

* - 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)