WEAR CONTAMINATION FLUID CONDITION

NORMAL
ABNORMAL
ATTENTION

Machine Id

31262

Hydraulic System

PECOMMENDATION Oil and filter change at the time of sampling has been noted. No corrective action is recommended at this time. Resample at the next service interval to monitor. We were unable to perform a particle count due to a high concentration of particles present in this sample.	Test	UOM	Method	Limit/Abn	Current	History1	History2
	Sample Number		Client Info		WC0924569	WC0856751	WC080997
	Sample Date		Client Info		13 Apr 2024	11 Oct 2023	16 Aug 202
	Machine Age	hrs	Client Info		827	349	103
	Oil Age	hrs	Client Info		250	349	103
	Filter Age	hrs	Client Info		250	349	103
	Oil Changed		Client Info		Changed	Changed	Not Chang
	Filter Changed		Client Info		Changed	Changed	Not Chang
	Sample Status				ABNORMAL	ABNORMAL	ABNORMA
WEAR	Iron	ppm	ASTM D5185m	>20	2	5	<u>^</u> 23
All component wear rates are normal.	Chromium	ppm	ASTM D5185m		0	0	<1
	Nickel	ppm	ASTM D5185m		<1	0	0
	Titanium	ppm	ASTM D5185m		<1	0	<1
	Silver	ppm	ASTM D5185m		<1	0	0
	Aluminum	ppm	ASTM D5185m	>10	2	0	0
	Lead	ppm	ASTM D5185m	>10	0	0	0
	Copper	ppm	ASTM D5185m	>75	3	3	<1
	Tin	ppm	ASTM D5185m	>10	<1	0	0
	Vanadium	ppm	ASTM D5185m		0	0	<1
	White Metal	scalar	*Visual	NONE	LIGHT	▲ MODER	NONE
	Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
CONTAMINATION	Silicon	ppm	ASTM D5185m		3	4	2
Moderate concentration of visible dirt/debris present in the oil. There is a light concentration of water present in the oil.	Potassium	ppm	ASTM D5185m		3	<1	0
	Water	%	ASTM D6304		<u> </u>		
	ppm Water	ppm	ASTM D6304		<u> </u>		
	Silt	scalar	*Visual	NONE	NONE	NONE	NONE
	Debris Sand/Dirt	scalar	*Visual	NONE	▲ MODER	NONE	▲ MODE
		scalar	*Visual	NONE	NONE NORML	NONE NORML	NONE
	Appearance Odor	scalar scalar	*Visual *Visual	NORML	NORML	NORML	NORM
	Emulsified Water	scalar	*Visual	>0.1	0.2%	NEG	NEG
							4
FLUID CONDITION	Sodium	ppm	ASTM D5185m		3	2	- 1
	Sodium Boron	ppm	ASTM D5185m ASTM D5185m	5	3 0 132	0	0
The oil viscosity is higher than normal. This plus the additive levels indicates the addition of a different brand, or type of oil. Confirm oil	Boron Barium	ppm	ASTM D5185m ASTM D5185m	5	132 0	0	0
The oil viscosity is higher than normal. This plus the additive levels indicates the addition of a different brand, or type of oil. Confirm oil	Boron Barium Molybdenum	ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m	5	0 11	0 0 0	0 <1
The oil viscosity is higher than normal. This plus the additive levels indicates the addition of a different brand, or type of oil. Confirm oil	Boron Barium Molybdenum Manganese	ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	5	0 11 11 1	0 0 0 0	0 <1 <1
The oil viscosity is higher than normal. This plus the additive levels ndicates the addition of a different brand, or type of oil. Confirm oil	Boron Barium Molybdenum Manganese Magnesium	ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	5 5 25	132 0 11 1 53	0 0 0 0 0 4	0 <1 <1 7
The oil viscosity is higher than normal. This plus the additive levels ndicates the addition of a different brand, or type of oil. Confirm oil	Boron Barium Molybdenum Manganese Magnesium Calcium	ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	5 5 25 200	132 0 11 1 53 473	0 0 0 0 0 4 1375	0 <1 <1 7 79
The oil viscosity is higher than normal. This plus the additive levels ndicates the addition of a different brand, or type of oil. Confirm oil	Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus	ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	5 5 25 200 300	132 0 11 1 53 473 1883	0 0 0 0 4 1375 595	0 <1 <1 7 79 672
The oil viscosity is higher than normal. This plus the additive levels indicates the addition of a different brand, or type of oil. Confirm oil	Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus Zinc	ppm ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	5 5 25 200 300 370	132 0 11 1 53 473 1883 309	0 0 0 0 4 1375 595 709	0 <1 <1 <1 7 79 672 321
FLUID CONDITION The oil viscosity is higher than normal. This plus the additive levels indicates the addition of a different brand, or type of oil. Confirm oil type.	Boron Barium Molybdenum Manganese Magnesium Calcium Phosphorus	ppm ppm ppm ppm ppm ppm	ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m ASTM D5185m	5 5 25 200 300 370 2500	132 0 11 1 53 473 1883	0 0 0 0 4 1375 595	0 <1 <1 7 79 672

Visc @ 40°C cSt

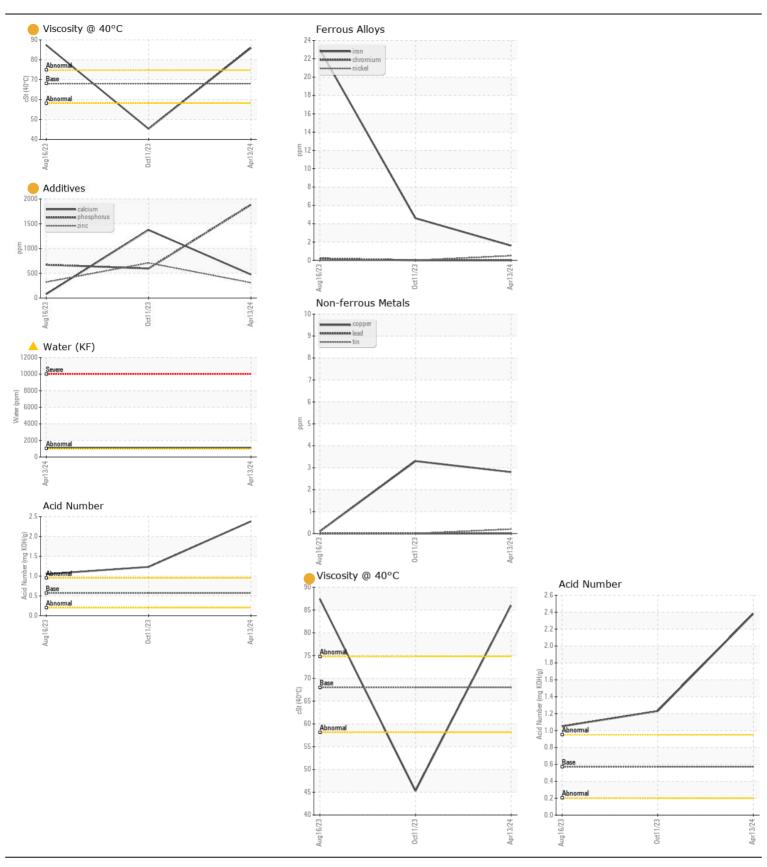
Report Id: MSCDUR [WUSCAR] 06151045 (Generated: 04/20/2024 07:28:01) Rev: 1

Contact/Location: SCOTT SULLIVAN - MSCDUR

45.3

86.0

87.4







Laboratory Sample No. Unique Number: 10981123

Lab Number : 06151045

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 : WC0924569

Received **Tested**

Diagnosed

: 16 Apr 2024 : 19 Apr 2024

: 19 Apr 2024 - Don Baldridge

MORRISVILLE, NC US 27560 Contact: SCOTT SULLIVAN ssullivan@sullivaneastern.com

T: (919)484-8993 F: (919)484-2136

SULLIVAN EASTERN INC

2860 C SLATER RD

Test Package : CONST (Additional Tests: KF) Certificate L2367 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)