WEAR CONTAMINATION FLUID CONDITION

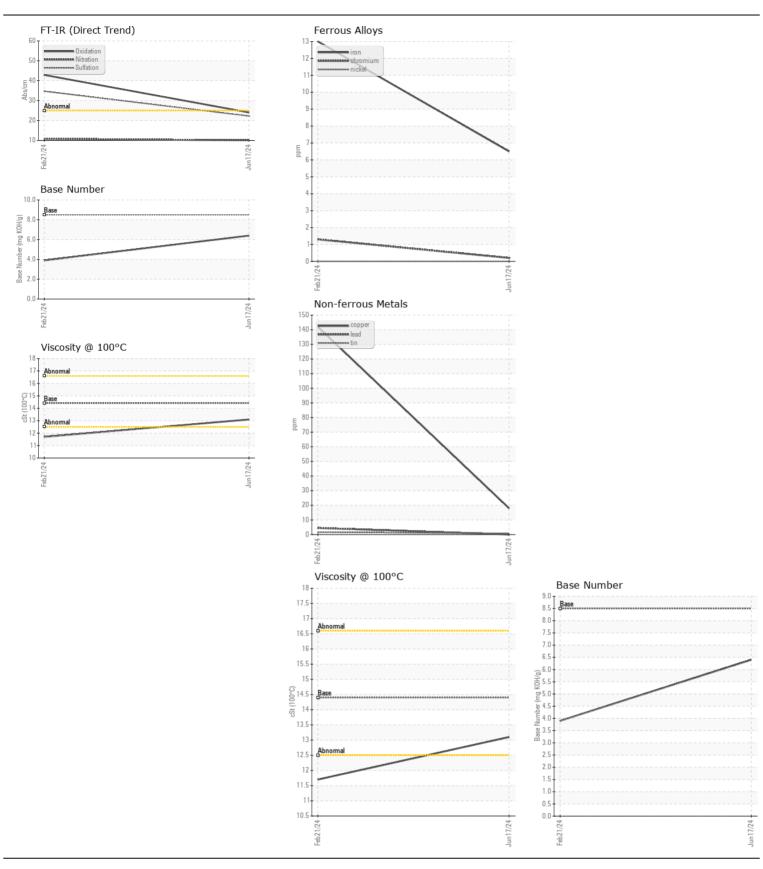
NORMAL NORMAL NORMAL

Machine Id **31264**

Diesel Engine

DIESEL ENGINE OIL 10W40 (--- QTS)

RECOMMENDATION	Test	UOM	Method	Limit/Abn	Current	History1	History2
Resample at the next service interval to monitor. WEAR	Sample Number		Client Info		WC0950770	WC0905387	
	Sample Date		Client Info		17 Jun 2024	21 Feb 2024	
	Machine Age	hrs	Client Info		1232	689	
	Oil Age	hrs	Client Info		1000	250	
	Filter Age	hrs	Client Info		1000	250	
	Oil Changed		Client Info		Changed	Changed	
	Filter Changed		Client Info		Changed	Changed	
	Sample Status				NORMAL	ABNORMAL	
	Iron	ppm	ASTM D5185m	>100	6	13	
	Chromium	ppm	ASTM D5185m		<1	1	
All component wear rates are normal.	Nickel	ppm	ASTM D5185m		0	0	
	Titanium	ppm	ASTM D5185m	7 1	0	<1	
	Silver	ppm	ASTM D5185m	>3	0	0	
	Aluminum	ppm	ASTM D5185m		2	3	
	Lead	ppm	ASTM D5185m		0	4	
	Copper	ppm	ASTM D5185m		18	142	
	Tin	ppm	ASTM D5185m		<1	2	
	Vanadium	ppm	ASTM D5185m		<1	0	
	White Metal	scalar	*Visual	NONE	NONE	NONE	
	Yellow Metal	scalar	*Visual	NONE	NONE	NONE	
CONTAMINATION	Silicon	ppm	ASTM D5185m		8	12	
There is no indication of any contamination in the oil.	Potassium	ppm	ASTM D5185m		5	3	
	Fuel		WC Method		<1.0	0.9	
	Water		WC Method	>0.2	NEG	NEG	
	Glycol	21	WC Method	0	NEG	NEG	
	Soot %	%	*ASTM D7844		0.1	0.1	
	Nitration	Abs/cm	*ASTM D7624	>20	10.0	10.8	
	Sulfation	Abs/.1mm	*ASTM D7415		22.2	34.7	
	Silt Debris	scalar	*Visual	NONE	NONE	NONE	
	Sand/Dirt	scalar	*Visual	NONE	NONE NONE	NONE NONE	
		scalar	*Visual	NORML	NORML	NORML	
	Appearance Odor	scalar scalar	*Visual	NORML	NORML	NORML	
	Emulsified Water		*Visual	>0.2	NEG	NEG	
			v 150aa1			1420	
FLUID CONDITION	Sodium	ppm	ASTM D5185m		2	3	
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.	Boron	ppm	ASTM D5185m	250	74	140	
	Barium	ppm	ASTM D5185m		<1	16	
	Molybdenum	ppm	ASTM D5185m	100	9	62	
	Manganese	ppm	ASTM D5185m		<1	<1	
	Magnesium	ppm	ASTM D5185m		848	730	
	Calcium	ppm	ASTM D5185m		1365	1346	
	Phosphorus	ppm	ASTM D5185m		806	706	
	Zinc	ppm	ASTM D5185m		969	851	
	Sulfur	ppm	ASTM D5185m		4422	2030	
	Oxidation	Abs/.1mm	*ASTM D7414		24.0	42.9	
	Base Number (BN)	0 0	ASTM D2896		6.4	△ 3.9	
	Visc @ 100°C	cSt	ASTM D445	14.4	13.1	11.7	







Certificate L2367

Laboratory Sample No.

Lab Number : 06214494 Unique Number : 11087358

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 : WC0950770

Received **Tested** Diagnosed Test Package : CONST (Additional Tests: TBN)

: 20 Jun 2024

: 19 Jun 2024

: 21 Jun 2024 - Don Baldridge

MORRISVILLE, NC US 27560 Contact: SCOTT SULLIVAN

ssullivan@sullivaneastern.com T: (919)484-8993

SULLIVAN EASTERN INC

2860 C SLATER RD

* - 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)

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

F: (919)484-2136