WEAR CONTAMINATION FLUID CONDITION

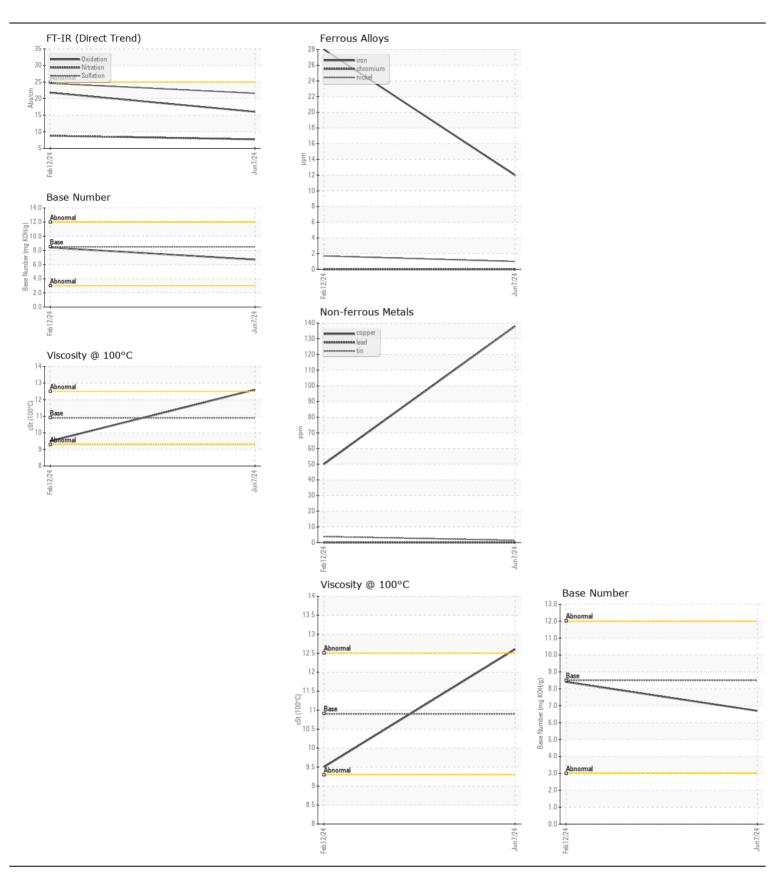
NORMAL NORMAL NORMAL

Machine Id **15425**

Component Diesel Engine

DIESEL ENGINE OIL SAE 5W30 (--- QTS)

RECOMMENDATION	Test	UOM	Method	Limit/Abn	Current	History1	History2
Resample at the next service interval to monitor. WEAR	Sample Number		Client Info		WC0913526	WC0882707	
	Sample Date		Client Info		07 Jun 2024	12 Feb 2024	
	Machine Age	mls	Client Info		14607	8112	
	Oil Age	mls	Client Info		0	0	
	Filter Age	mls	Client Info		0	0	
	Oil Changed		Client Info		Changed	Changed	
	Filter Changed		Client Info		Changed	Changed	
	Sample Status				NORMAL	NORMAL	
	Iron	ppm	ASTM D5185m	>100	12	28	
	Chromium	ppm	ASTM D5185m		0	0	
All component wear rates are normal.	Nickel	ppm	ASTM D5185m		1	2	
	Titanium	ppm	ASTM D5185m		<1	<1	
	Silver	ppm	ASTM D5185m	>3	2	<1	
	Aluminum	ppm	ASTM D5185m		3	10	
	Lead	ppm	ASTM D5185m		0	0	
	Copper	ppm	ASTM D5185m	>330	138	50	
	Tin	ppm	ASTM D5185m	>15	1	4	
	Vanadium	ppm	ASTM D5185m		0	<1	
	White Metal	scalar	*Visual	NONE	NONE	NONE	
	Yellow Metal	scalar	*Visual	NONE	NONE	NONE	
CONTAMINATION	Silicon	nnm	ASTM D5185m	> 25	11	53	
CONTAININATION	Potassium	ppm	ASTM D5185m		5	18	
There is no indication of any contamination in the oil.	Fuel	ppm	WC Method		<1.0	<1.0	
	Water		WC Method		NEG	NEG	
	Glycol		WC Method	70.L	NEG	NEG	
	Soot %	%	*ASTM D7844	>3	0.2	0.2	
	Nitration	Abs/cm	*ASTM D7624	>20	7.7	8.8	
	Sulfation	Abs/.1mm	*ASTM D7415		21.6	24.6	
	Silt	scalar	*Visual	NONE	NONE	NONE	
	Debris	scalar	*Visual	NONE	NONE	NONE	
	Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	
	Appearance	scalar	*Visual	NORML	NORML	NORML	
	Odor	scalar	*Visual	NORML	NORML	NORML	
	Emulsified Water	scalar	*Visual	>0.2	NEG	NEG	
ELUID CONDITION	Codium	nnm	ASTM D5185m		2	4	
FLUID CONDITION	Sodium Boron	ppm	ASTM D5185m	250	272	304	
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	0	
	Molybdenum	ppm	ASTM D5185m		84	119	
	Manganese	ppm	ASTM D5185m	.00	1	4	
	Magnesium	ppm	ASTM D5185m	450	387	674	
	Calcium	ppm	ASTM D5185m		1421	1416	
	Phosphorus	ppm	ASTM D5185m		1013	701	
	Zinc	ppm			1180	822	
	Sulfur	ppm	ASTM D5185m		3673	2427	
	Oxidation	Abs/.1mm	*ASTM D7414		16.0	21.8	
	Base Number (BN)		ASTM D2896		6.7	8.4	
	Visc @ 100°C	cSt	ASTM D445		12.6	9.5	







Laboratory Sample No.

Lab Number : 06214487 Unique Number : 11087351

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 : WC0913526

Tested

Diagnosed Test Package : CONST (Additional Tests: TBN)

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.

SULLIVAN EASTERN INC

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

Received

: 19 Jun 2024

: 20 Jun 2024

: 21 Jun 2024 - Don Baldridge

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