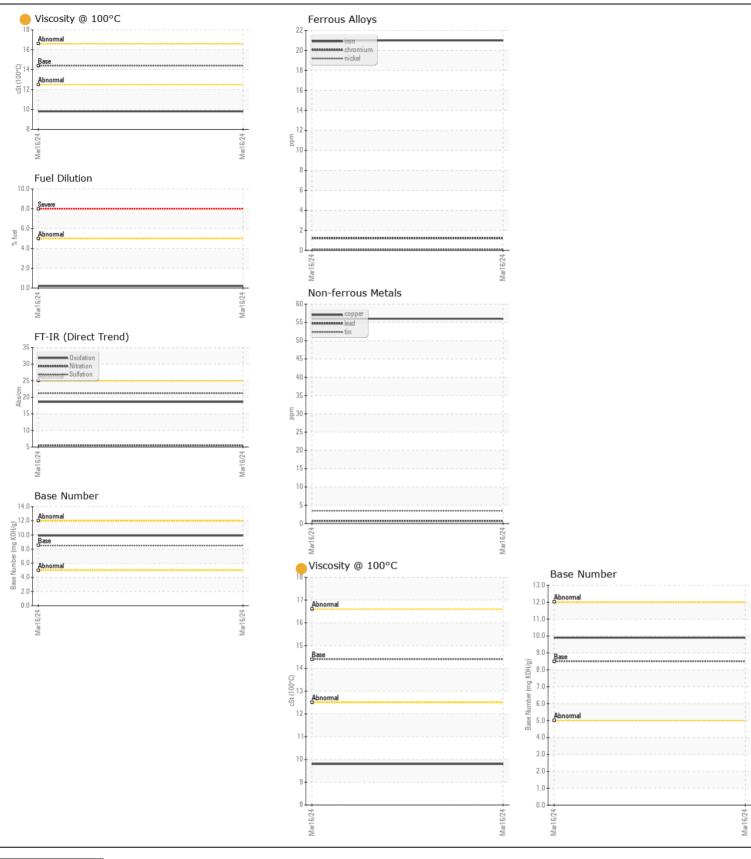
WEAR CONTAMINATION **FLUID CONDITION**

NORMAL NORMAL ATTENTION

Machine Id

23578 Component

Diesel Engine DIESEL ENGINE OIL SAE 15W40 (GAL)							
RECOMMENDATION	Test	UOM	Method	Limit/Abn	Current	History1	History2
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.	Sample Number		Client Info		WC0912543		
	Sample Date		Client Info		16 Mar 2024		
	Machine Age	mls	Client Info		3800		
	Oil Age	mls	Client Info		0		
	Filter Age	mls	Client Info		0		
	Oil Changed		Client Info		Changed		
	Filter Changed		Client Info		Changed		
	Sample Status				ATTENTION		
WEAR	Iron	ppm	ASTM D5185m	>100	21		
All	Chromium	ppm	ASTM D5185m	>20	1		
All component wear rates are normal.	Nickel	ppm	ASTM D5185m	>4	<1		
	Titanium	ppm	ASTM D5185m		<1		
	Silver	ppm	ASTM D5185m	>3	<1		
	Aluminum	ppm	ASTM D5185m	>20	13		
	Lead	ppm	ASTM D5185m	>40	<1		
	Copper	ppm	ASTM D5185m	>330	56		
	Tin	ppm	ASTM D5185m	>15	4		
	Vanadium	ppm	ASTM D5185m		<1		
	White Metal	scalar	*Visual	NONE	LIGHT		
	Yellow Metal	scalar	*Visual	NONE	NONE		
CONTAMINATION	Silicon	ppm	ASTM D5185m	>25	5		
	Potassium	ppm	ASTM D5185m		46		
Tests indicate that there is no fuel present in the oil. There is no indication of any contamination in the oil.	Fuel	%	ASTM D3524		0.2		
	Water		WC Method	>0.2	NEG		
	Glycol		WC Method		NEG		
	Soot %	%	*ASTM D7844	>3	0.1		
	Nitration	Abs/cm	*ASTM D7624	>20	5.5		
	Sulfation	Abs/.1mm	*ASTM D7415	>30	21.2		
	Silt	scalar	*Visual	NONE	NONE		
	Debris	scalar	*Visual	NONE	NONE		
	Sand/Dirt	scalar	*Visual	NONE	NONE		
	Appearance	scalar	*Visual	NORML	NORML		
	Odor	scalar	*Visual	NORML	NORML		
	Emulsified Water	scalar	*Visual	>0.2	NEG		
FLUID CONDITION	Sodium	ppm	ASTM D5185m	>158	4		
	Boron	ppm	ASTM D5185m	250	82		
The oil viscosity is lower than normal. The BN result indicates that there is suitable alkalinity remaining in the oil. Confirm oil type.	Barium	ppm	ASTM D5185m	10	0		
	Molybdenum	ppm	ASTM D5185m	100	48		
	Manganese	ppm	ASTM D5185m		3		
	Magnesium	ppm	ASTM D5185m	450	541		
	Calcium	ppm	ASTM D5185m	3000	1732		
	Phosphorus	ppm	ASTM D5185m	1150	804		
	Zinc	ppm	ASTM D5185m	1350	914		
	Sulfur	ppm	ASTM D5185m	4250	2960		
	Oxidation	Abs/.1mm	*ASTM D7414	>25	18.6		
	Base Number (BN)	mg KOH/g	ASTM D2896	8.5	9.9		
		cSt	ASTM D445				







Report Id: SALWIN [WUSCAR] 06191515 (Generated: 05/30/2024 09:25:54) Rev: 1

Laboratory Sample No.

: WearCheck USA - 501 Madison Ave., Cary, NC 27513 : WC0912543 Lab Number : 06191515 Unique Number : 11048267

Received **Tested**

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

: 24 May 2024 : 30 May 2024 Diagnosed : 30 May 2024 - Sean Felton

198 PARK PLAZA DRIVE WINSTON SALEM, NC US 27105

Test Package: FLEET (Additional Tests: FuelDilution, PercentFuel) 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.

Contact: Audrey Hopkins Audrey.Hopkins@salemcorp.com T: (336)767-9642

SALEM NATIONALEASE CORPORATION

F: x: