

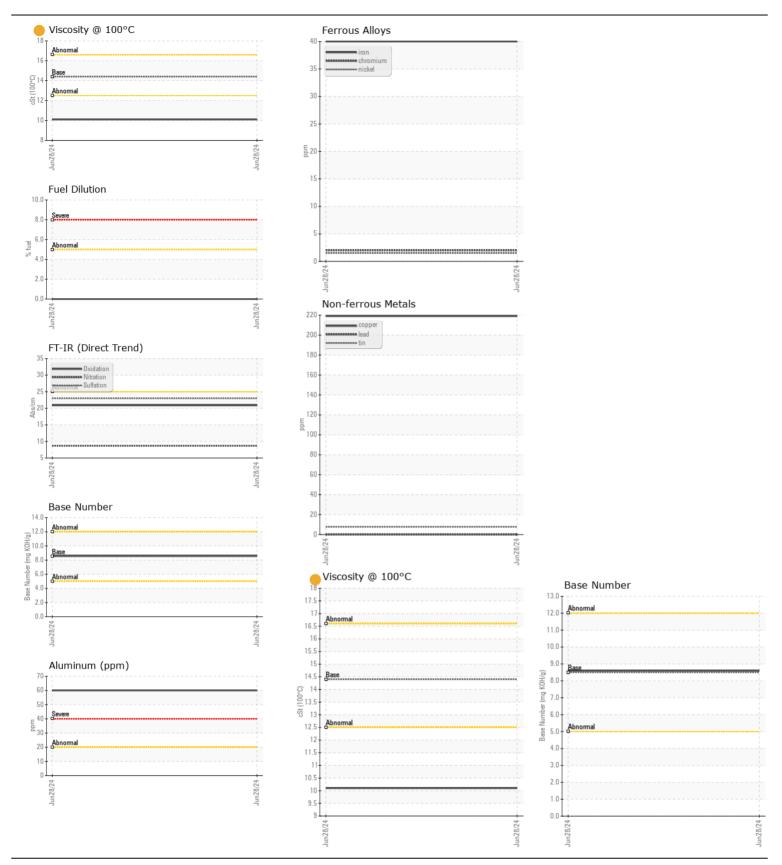
## Machine Id **49365** Component **Diesel Engine** Fluid **DIESEL ENGINE OIL SAE 15W40 (--- GAL)**

RECOMMENDATION	Test	UOM	Method	Limit/Abn		History1	History2
Oil and filter change at the time of sampling has been noted. Resample at the next service interval to monitor.	Sample Number		Client Info		WC0952700		
	Sample Date		Client Info		28 Jun 2024		
	Machine Age	mls	Client Info		21500		
	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 Metal levels are typical for a new component breaking in.	Iron	ppm	ASTM D5185m	>100	40		
	Chromium	ppm	ASTM D5185m	>20	2		
	Nickel	ppm	ASTM D5185m	>4	2		
	Titanium	ppm	ASTM D5185m		0		
	Silver	ppm	ASTM D5185m	>3	1		
	Aluminum	ppm	ASTM D5185m	>20	60		
	Lead	ppm	ASTM D5185m	>40	0		
	Copper	ppm	ASTM D5185m	>330	219		
	Tin	ppm	ASTM D5185m	>15	8		
	Vanadium	ppm	ASTM D5185m		0		
	White Metal	scalar	*Visual	NONE	NONE		
	Yellow Metal	scalar	*Visual	NONE	NONE		
CONTAMINATION	Silicon	ppm	ASTM D5185m		10		
Fuel content negligible. There is no indication of any contamination in the oil.	Potassium	ppm	ASTM D5185m		158		
	Fuel	%	ASTM D3524		0.0		
	Water		WC Method	>0.2	NEG		
	Glycol	0/	WC Method	0	NEG		
	Soot %	%	*ASTM D7844		0.5		
	Nitration	Abs/cm	*ASTM D7624	>20	8.7		
	Sulfation Silt	Abs/.1mm	*ASTM D7415		23.0 NONE		
	Debris	scalar	*Visual *Visual	NONE NONE	NONE		
	Sand/Dirt	scalar	*Visual	NONE	NONE		
	Appearance	scalar scalar	*Visual	NORML	NORML		
	Odor	scalar	*Visual	NORML	NORML		
	Emulsified Water		*Visual	>0.2	NEG		
			Violai	20.L			
FLUID CONDITION The oil viscosity is lower than normal. The BN result indicates that there is suitable alkalinity remaining in the oil. Confirm oil type.	Sodium	ppm	ASTM D5185m	>158	7		
	Boron	ppm	ASTM D5185m	250	25		
	Barium	ppm	ASTM D5185m	10	0		
	Molybdenum	ppm	ASTM D5185m	100	45		
	Manganese	ppm	ASTM D5185m		6		
	Magnesium	ppm	ASTM D5185m	450	505		
	Calcium	ppm	ASTM D5185m	3000	1684		
	Phosphorus	ppm	ASTM D5185m	1150	766		
	Zinc	ppm	ASTM D5185m	1350	887		
	Sulfur	ppm	ASTM D5185m	4250	2624		
	Oxidation	Abs/.1mm	*ASTM D7414	>25	20.9		
	Base Number (BN)	• •	ASTM D2896	8.5	8.6		
	Vier @ 10000	- 0+		- 4 4	- 10 1		

Visc @ 100°C cSt

ASTM D445 14.4

10.1



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513 SALEM NATIONALEASE CORPORATION Sample No. Received 198 PARK PLAZA DRIVE : WC0952700 : 15 Jul 2024 ĕ Lab Number : 06237260 WINSTON SALEM, NC Tested : 18 Jul 2024 : 18 Jul 2024 - Jonathan Hester US 27105 Unique Number : 11126094 Diagnosed Test Package : FLEET ( Additional Tests: FuelDilution, PercentFuel ) **Contact: Audrey Hopkins** Certificate L2367 Audrey.Hopkins@salemcorp.com 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. T: (336)767-9642 F: x: Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012)

Contact/Location: Audrey Hopkins - SALWIN Page 2 of 2