

Machine Id 17809

Diesel Engine Fluid DIESEL ENGINE OIL SAE 15W40 (--- GAL)

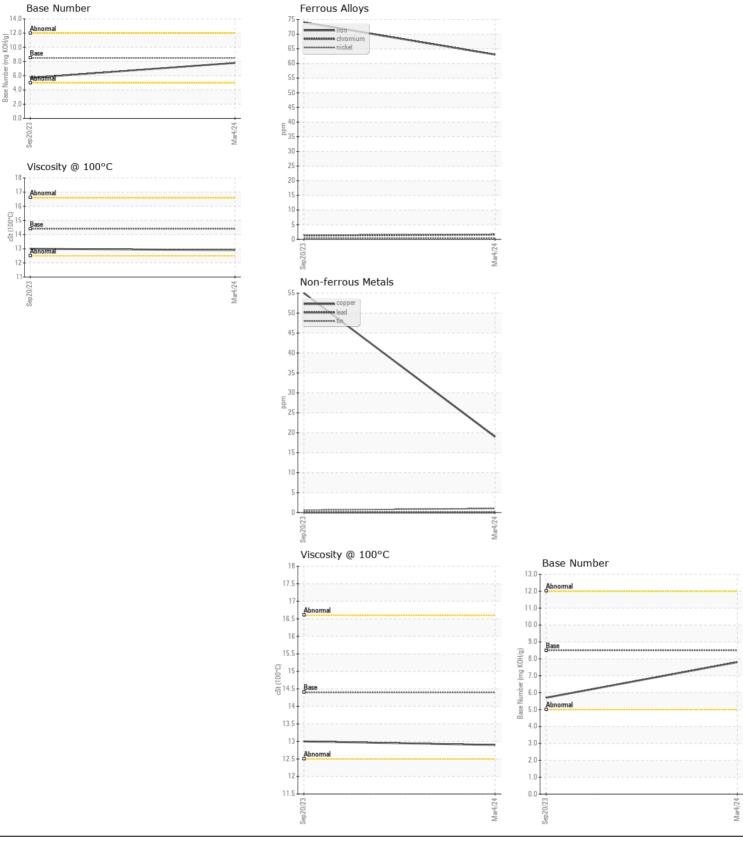
RECOMMENDATION	Test	UOM	Method	Limit/Abn	Current	History1	History2
Resample at the next service interval to monitor.	Sample Number		Client Info		WC0867019	WC0798077	
	Sample Date		Client Info		04 Mar 2024	20 Sep 2023	
	Machine Age	mls	Client Info		19867	10574	
	Oil Age	mls	Client Info		9293	10574	
	Filter Age	mls	Client Info		9293	10574	
	Oil Changed		Client Info		Changed	Changed	
	Filter Changed		Client Info		Changed	Changed	
	Sample Status				NORMAL	NORMAL	
WEAR	Iron	ppm	ASTM D5185m	>100	63	74	
All component wear rates are normal.	Chromium	ppm	ASTM D5185m		2	1	
	Nickel	ppm	ASTM D5185m		- <1	<1	
	Titanium	ppm	ASTM D5185m		<1	0	
	Silver	ppm	ASTM D5185m	>3	<1	0	
	Aluminum	ppm	ASTM D5185m		10	8	
	Lead	ppm	ASTM D5185m		0	0	
	Copper	ppm	ASTM D5185m		19	55	
	Tin	ppm	ASTM D5185m		1	<1	
	Vanadium	ppm	ASTM D5185m	1.0	<1	0	
	White Metal	scalar	*Visual	NONE	NONE	NONE	
	Yellow Metal	scalar	*Visual	NONE	NONE	NONE	
CONTAMINATION	Silicon		ASTM D5185m		13	27	
	Potassium	ppm	ASTM D5185m		22	21	
There is no indication of any contamination in the oil.	Fuel	ppm	WC Method			<1.0	
	Water		WC Method		<1.0 NEG	NEG	
	Glycol		WC Method	>0.2		NEG	
	Soot %	%	*ASTM D7844	. 0	NEG 0.9	0.8	
	Nitration	Abs/cm		>3 >20	10.2	10.7	
	Sulfation	Abs/.1mm	*ASTM D7624		21.3	22.9	
	Silt		*Visual	NONE	NONE	NONE	
	Debris	scalar	*Visual	NONE	NONE	NONE	
	Sand/Dirt	scalar	*Visual		NONE	NONE	
		scalar scalar	*Visual	NONE NORML	NORML	NORML	
	Appearance Odor	scalar	*Visual	NORIVIL	NORML	NORML	
	Emulsified Water		*Visual	>0.2	NEG	NEG	
FLUID CONDITION							
	Sodium	ppm	ASTM D5185m		2	5	
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		7	29	
	Barium	ppm	ASTM D5185m		2	4	
	Molybdenum	ppm	ASTM D5185m	100	96	39	
	Manganese	ppm	ASTM D5185m	1 - 1	2	7	
	Magnesium	ppm	ASTM D5185m		1393	529	
	Calcium	ppm	ASTM D5185m		1771	1588	
	Phosphorus	ppm	ASTM D5185m		1387	662	
	Zinc	ppm	ASTM D5185m		1850	879	
	Sulfur	ppm	ASTM D5185m		4995	2051	
	Oxidation	Abs/.1mm	*ASTM D7414		17.8	23.1	
	Base Number (BN)	mg KOH/g	ASTM D2896	8.5	7.8	5.7	
	V/ 0 40000	- 0+		444	40.0	100	

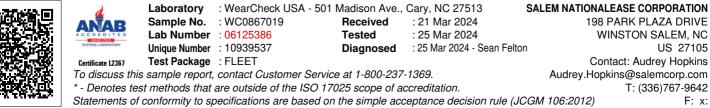
Visc @ 100°C cSt

ASTM D445 14.4

13.0

12.9





Contact/Location: Audrey Hopkins - SALWIN