

Machine Id **283033** Component **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. Please specify the component make and model with your next sample. Please specify the brand, type, and viscosity of the oil on your next sample.	Sample Number		Client Info		WC0829775	WC0829909	WC0710977
	Sample Date		Client Info		21 May 2024	21 Dec 2023	22 Dec 2022
	Machine Age	mls	Client Info		0	88243	59524
brand, type, and viscosity of the on on your next sample.	Oil Age	mls	Client Info		0	0	0
	Filter Age	mls	Client Info		0	0	0
	Oil Changed		Client Info		Changed	Changed	Changed
	Filter Changed		Client Info		Changed	Changed	Changed
	Sample Status				NORMAL	NORMAL	NORMAL
WEAR	Iron	ppm	ASTM D5185m	>100	8	8	12
All component wear rates are normal.	Chromium	ppm	ASTM D5185m	>20	0	0	0
	Nickel	ppm	ASTM D5185m		<1	<1	0
	Titanium	ppm	ASTM D5185m		1	0	0
	Silver	ppm	ASTM D5185m	>3	<1	0	0
	Aluminum	ppm	ASTM D5185m	>20	6	3	5
	Lead	ppm	ASTM D5185m	>40	<1	<1	0
	Copper	ppm	ASTM D5185m	>330	3	6	10
	Tin	ppm	ASTM D5185m	>15	1	1	<1
	Vanadium	ppm	ASTM D5185m		0	0	0
	White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
	Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
CONTAMINATION	Silicon	ppm	ASTM D5185m		6	4	5
There is no indication of any contamination in the oil.	Potassium	ppm	ASTM D5185m		8	6	15
	Fuel		WC Method		<1.0	<1.0	<1.0
	Water		WC Method	>0.2	NEG	NEG	NEG
	Glycol		WC Method		NEG	NEG	NEG
	Soot %	%	*ASTM D7844		0.2	0.3	0.3
	Nitration	Abs/cm	*ASTM D7624	>20	9.7	7.9	9.0
	Sulfation	Abs/.1mm	*ASTM D7415		23.2	19.8	19.1
	Silt	scalar	*Visual	NONE	NONE	NONE	NONE
	Debris	scalar	*Visual	NONE	NONE	NONE	NONE
	Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	NONE
	Appearance	scalar	*Visual	NORML	NORML	NORML	NORML
	Odor	scalar	*Visual	NORML	NORML	NORML	NORML
	Emulsified Water	scalar	*Visual	>0.2	NEG	NEG	NEG
FLUID CONDITION	Sodium	ppm	ASTM D5185m	>158	2	<1	<1
The DNI we and the Product dependence in a side bid on the Product second in the side of the second side of the side of the second seco	Boron	ppm	ASTM D5185m	250	162	9	0
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	10	0	0	0
	Molybdenum	ppm	ASTM D5185m	100	108	66	62
	Manganese	ppm	ASTM D5185m		1	<1	<1
	Magnesium	ppm	ASTM D5185m	450	799	1061	1029
	Calcium	ppm	ASTM D5185m	3000	1505	1172	1292
	Phosphorus	ppm	ASTM D5185m		844	1081	1078
	Zinc	ppm	ASTM D5185m	1350	979	1330	1380
	0.16.17		AOTH DELOF	1050		0050	0.001

Sulfur

Oxidation

Visc @ 100°C cSt

ppm ASTM D5185m 4250

Abs/.1mm *ASTM D7414 >25

ASTM D445 14.4

Base Number (BN) mg KOH/g ASTM D2896 8.5

3356

15.6

8.8

13.0

3691

15.6

6.8

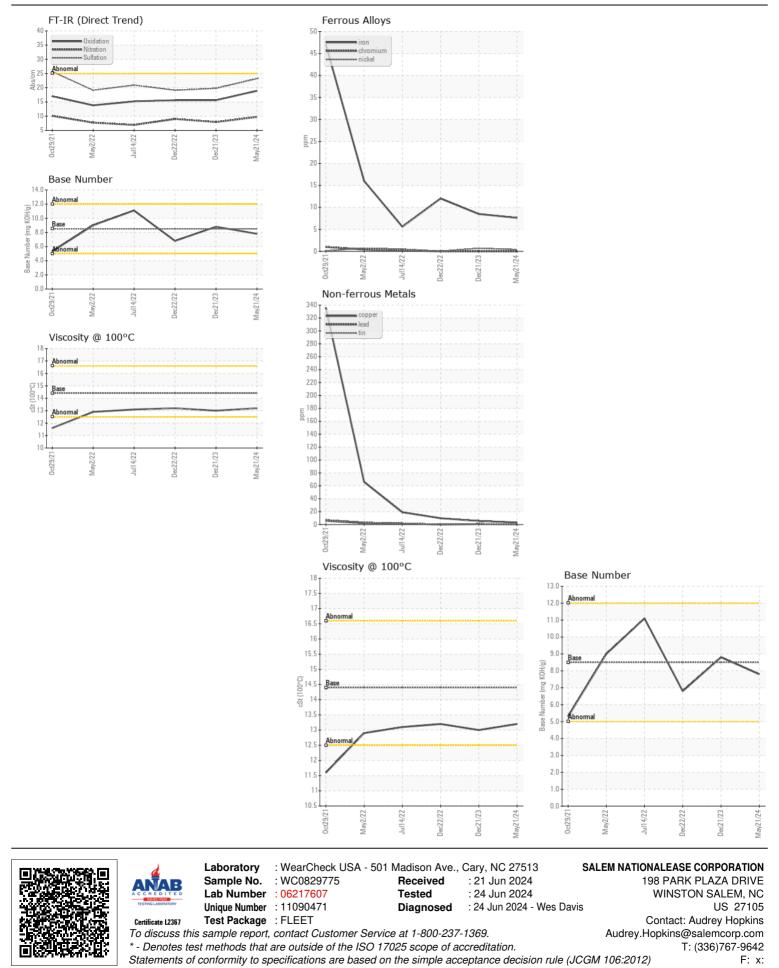
13.2

3302

18.9

7.8

13.2



Report Id: SALWIN [WUSCAR] 06217607 (Generated: 06/24/2024 22:28:05) Rev: 1