

978

1122

1009

1250

3170

16.8

8.0

14.4

987

1105

995

1257

3514

16.2

8.6

14.0

534

1278

1064

1267

3094

15.7

7.2

14.2

Machine Id 59223 Component Diesel Engine DIESEL ENGINE OIL SAE 15W40 (--- QTS)

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		WC0841957	WC0842004	WC0742319
	Sample Date		Client Info		22 Jan 2024	30 Nov 2023	10 Jul 2023
	Machine Age	mls	Client Info		554987	538865	495535
	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	16	18	23
	Chromium	ppm	ASTM D5185m	>20	<1	<1	1
All component wear rates are normal.	Nickel	ppm	ASTM D5185m	>4	<1	0	0
	Titanium	ppm	ASTM D5185m		0	0	<1
	Silver	ppm	ASTM D5185m	>3	0	0	0
	Aluminum	ppm	ASTM D5185m	>20	8	6	8
	Lead	ppm	ASTM D5185m	>40	1	0	0
	Copper	ppm	ASTM D5185m	>330	2	2	4
	Tin	ppm	ASTM D5185m	>15	<1	0	<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		ACTM DE10Em	. 25	E	5	5
There is no indication of any contamination in the oil.	Potassium	ppm ppm	ASTM D5185m ASTM D5185m		5 3	3	5
	Fuel	ρριι	WC Method			<1.0	<1.0
	Water		WC Method		NEG	NEG	NEG
	Glycol		WC Method	20.2	NEG	NEG	NEG
	Soot %	%	*ASTM D7844	>3	0.5	0.7	0.9
	Nitration	Abs/cm	*ASTM D7624	>20	7.4	8.3	9.3
	Sulfation	Abs/.1mm	*ASTM D7415		21.7	20.5	21.0
	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 The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.	Sodium	ppm	ASTM D5185m	>158	1	0	0
	Boron	ppm	ASTM D5185m		257	2	0
	Barium	ppm		10	0	0	0
	Molybdenum	ppm	ASTM D5185m	-	81	66	65
	Manganese	ppm	ASTM D5185m		<1	0	<1

Magnesium

Phosphorus

Calcium

Zinc

Sulfur

Oxidation

Visc @ 100°C cSt

ppm

ppm

ppm

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

ASTM D5185m 450

ASTM D5185m 1350

3000

14.4

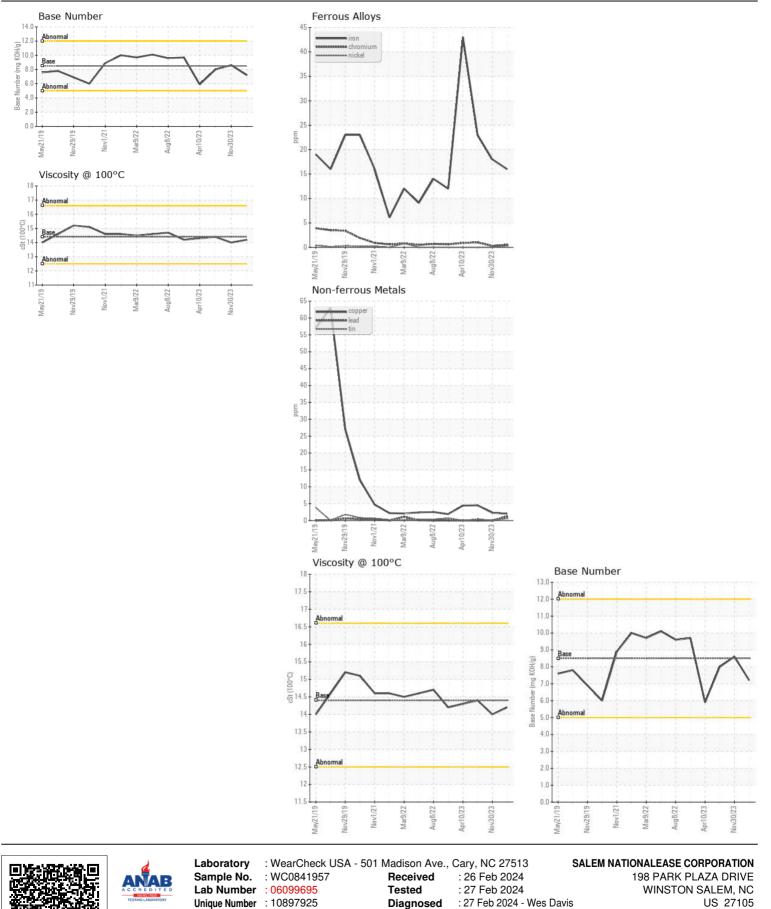
ASTM D5185m

ppm ASTM D5185m 1150

ppm ASTM D5185m 4250

Abs/.1mm *ASTM D7414 >25

ASTM D445



Test Package : FLEET **Contact: Audrey Hopkins** Certificate L2367 To discuss this sample report, contact Customer Service at 1-800-237-1369. Audrey.Hopkins@salemcorp.com * - Denotes test methods that are outside of the ISO 17025 scope of accreditation. Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012)

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