

## Machine Id 6296 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 brand, type, and viscosity of the oil on your next sample.	Sample Number		Client Info		WC0883241	WC0796064	WC0722900
	Sample Date		Client Info		29 Jan 2024	03 Aug 2023	23 Aug 2022
	Machine Age	mls	Client Info		0	202032	0
	Oil Age	mls	Client Info		10000	10000	0
	Filter Age	mls	Client Info		0	0	0
	Oil Changed		Client Info		Changed	Changed	N/A
	Filter Changed		Client Info		Changed	Changed	N/A
	Sample Status				NORMAL	NORMAL	SEVERE
WEAR All component wear rates are normal.	Iron	ppm	ASTM D5185m	>90	7	7	13
	Chromium	ppm	ASTM D5185m	>20	<1	<1	<1
	Nickel	ppm	ASTM D5185m	>2	0	<1	0
	Titanium	ppm	ASTM D5185m	>2	0	0	0
	Silver	ppm	ASTM D5185m	>2	0	0	<1
	Aluminum	ppm	ASTM D5185m	>20	3	3	5
	Lead	ppm	ASTM D5185m	>40	0	0	0
	Copper	ppm	ASTM D5185m	>330	<1	3	<b>2</b> 01
	Tin	ppm	ASTM D5185m		<1	0	<1
	Vanadium	ppm	ASTM D5185m		0	<1	0
	White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
	Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
CONTAMINATION	Silicon	ppm	ASTM D5185m	>25	2	3	4
CONTAMINATION	Potassium	ppm	ASTM D5185m		0	5	<u>▲</u> 628
There is no indication of any contamination in the oil.	Fuel	ppiii	WC Method		<1.0	<1.0	<1.0
	Water		WC Method		NEG	NEG	NEG
	Glycol		WC Method		NEG	NEG	0.10
	Soot %	%	*ASTM D7844	>6	0.2	0.2	0.3
	Nitration	Abs/cm	*ASTM D7624	>20	6.6	6.6	10.0
	Sulfation	Abs/.1mm	*ASTM D7415	>30	18.9	18.1	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	Sodium	ppm	ASTM D5185m	<158	2	3	<b>9</b> 2
	Boron		ASTM D5185m		27	2	3
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.	Barium		ASTM D5185m		0	1	0
	Molybdenum	ppm ppm	ASTM D5185m		65	57	66
	Manganese	ppm	ASTM D5185m	100	<1	<1	1
	Magnesium	ppm	ASTM D5185m	450	793	898	844
	Calcium	ppm	ASTM D5185m		1103	1003	1018
	Phosphorus	ppm	ASTM D5185m		931	953	990
	Zinc	ppm	ASTM D5185m		986	1146	1209
	Sulfur	ppm	ASTM D5185m		2901	3288	3012
	Oxidation		*ASTM D3103111		14.8	13.9	16.2
			AUTW D/414	~LJ	14.0	10.0	10.2

9.1

12.5

9.5

12.4

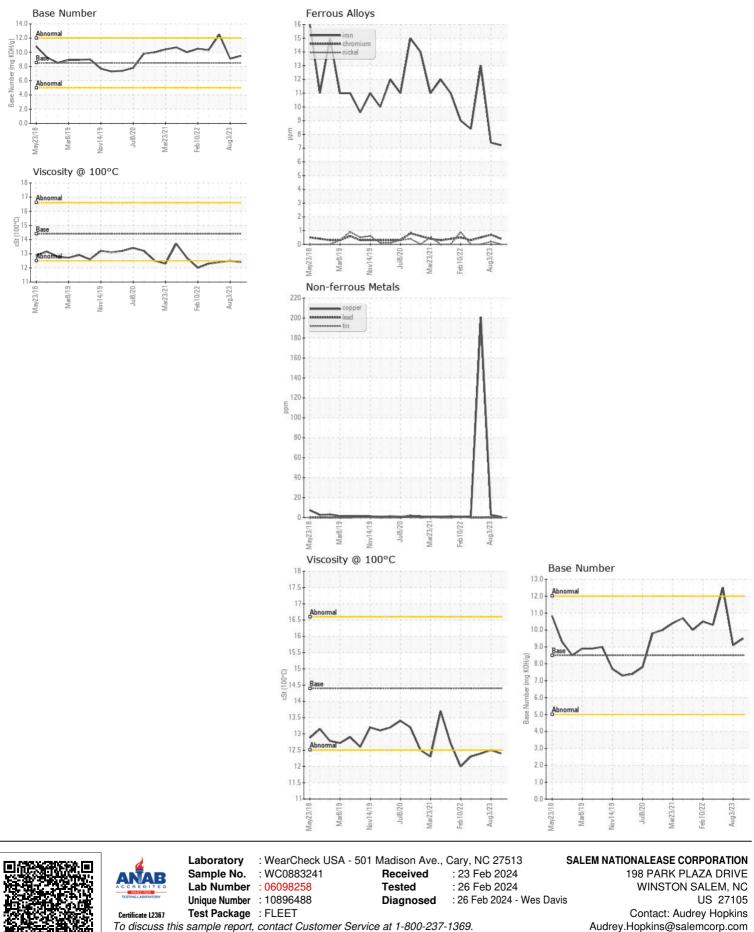
ASTM D445 14.4

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

Visc @ 100°C cSt

12.4

12.5



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.

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

Contact/Location: Audrey Hopkins - SALWIN

F: x:

T: (336)767-9642