

## Machine Id **1786** Component **Diesel Engine** Fluid **DIESEL ENGINE OIL SAE 10W30 (--- 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		WC0886807	WC0886829	WC0886847
	Sample Date		Client Info		19 Jun 2024	19 Mar 2024	26 Dec 2023
	Machine Age	mls	Client Info		139413	106987	37072
	Oil Age	mls	Client Info		0	32130	37072
	Filter Age	mls	Client Info		0	32130	37072
	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	14	19	21
All component wear rates are normal.	Chromium	ppm	ASTM D5185m	>20	<1	<1	1
	Nickel	ppm	ASTM D5185m	>4	0	1	<1
	Titanium	ppm	ASTM D5185m		0	0	<1
	Silver	ppm	ASTM D5185m	>3	0	<1	0
	Aluminum	ppm	ASTM D5185m	>20	2	3	4
	Lead	ppm	ASTM D5185m	>40	1	3	2
	Copper	ppm	ASTM D5185m	>330	1	2	4
	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	>25	5	6	8
There is no indication of any contamination in the oil.	Potassium	ppm	ASTM D5185m	>20	4	8	10
	Fuel		WC Method	>5	<1.0	<1.0	<1.0
	Water		WC Method	>0.2	NEG	NEG	NEG
	Glycol		WC Method		NEG	NEG	NEG
	Soot %	%	*ASTM D7844	>3	0.2	0.3	0.9
	Nitration	Abs/cm	*ASTM D7624	>20	10.0	9.9	10.3
	Sulfation	Abs/.1mm	*ASTM D7415	>30	22.5	21.7	22.9
	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		2	2	2
	Boron	ppm	ASTM D5185m	250	4	5	7
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		0	0	0
	Molybdenum	ppm	ASTM D5185m		58	61	58
	Manganese	ppm	ASTM D5185m		<1	<1	<1
	Magnesium	ppm	ASTM D5185m	450	939	977	912
	Calcium	ppm	ASTM D5185m	3000	1157	1083	1068
	Phosphorus	ppm	ASTM D5185m		977	1058	1034
	Zinc	ppm	ASTM D5185m	1350	1243	1306	1184
	Sulfur	ppm	ASTM D5185m		3399	3364	2834
	Outstation	Alex/dama		05	10.0	10.7	10.5

Oxidation

Visc @ 100°C cSt

Abs/.1mm \*ASTM D7414 >25

ASTM D445 10.9

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

19.7

6.2

10.9

19.5

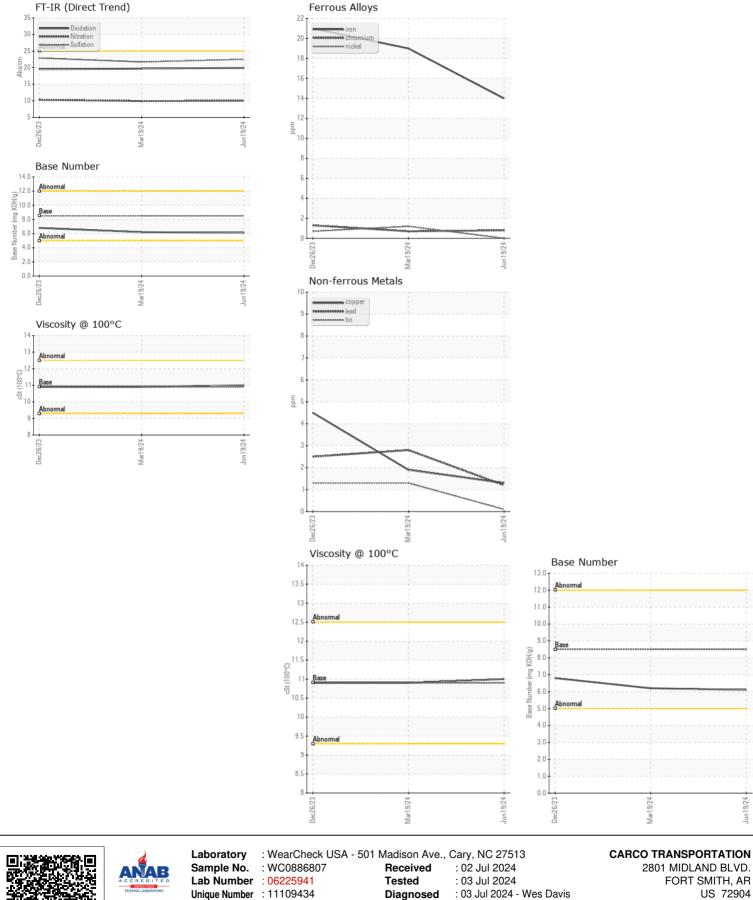
6.8

10.9

19.9

6.1

11.0



 Certificate L2367
 Test Package
 : FLEET

 To discuss this sample report, contact Customer Service at 1-800-237-1369.
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 \* - 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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