

WEAR	
CONTAMINATION	
FLUID CONDITION	NORMAL

## Machine Id **55829** Component **Diesel Engine** Fluid **DIESEL ENGINE OIL SAE 15W40 (--- GAL)**

RECOMMENDATION	Test	UOM	Method	Limit/Abn	Current	History1	History2
	Sample Number	0.0111	Client Info		DC0032794	,	DC0031625
Resample at the next service interval to monitor. Please specify the component make and model with your next sample.	Sample Date		Client Info		28 Dec 2023	30 Oct 2023	19 Sep 2023
	Machine Age	hrs	Client Info		765	923	412
	Oil Age	hrs	Client Info		150	150	150
	Filter Age	hrs	Client Info		0	0	0
	Oil Changed		Client Info		Changed	Changed	Changed
	Filter Changed		Client Info		Changed	Changed	Changed
	Sample Status				NORMAL	NORMAL	NORMAL
WEAD				. 100	4	E	0
WEAR Metal levels are typical for a new component breaking in.	Iron Chromium	ppm	ASTM D5185m ASTM D5185m		4 0	5 0	8
	Nickel	ppm ppm	ASTM D5185m		0	0	0
	Titanium	ppm	ASTM D5185m	>4	0	0	0
	Silver	ppm	ASTM D5185m	-3	0	0	0
	Aluminum	ppm	ASTM D5185m		<1	<1	3
	Lead	ppm	ASTM D5185m		0	<1	0
	Copper	ppm	ASTM D5185m		1	2	3
	Tin	ppm	ASTM D5185m		<1	0	<1
	Vanadium	ppm	ASTM D5185m	10	<1	0	0
	White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
	Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
CONTAMINATION	Silicon	ppm	ASTM D5185m		4	4	6
There is no indication of any contamination in the oil.	Potassium	ppm	ASTM D5185m		1	1	4
	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	0.1	0.1
	Nitration	Abs/cm	*ASTM D7624	>20	6.3	6.6	6.7
	Sulfation	Abs/.1mm	*ASTM D7415		15.9	16.3	16.6
	Silt	scalar	*Visual	NONE	NONE	NONE	NONE
	Debris	scalar	*Visual	NONE	NONE	NONE	NONE
	Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	NONE
	Appearance Odor	scalar scalar	*Visual *Visual	NORML NORML	NORML NORML	NORML NORML	NORML
	Emulsified Water		*Visual	>0.2	NEG	NEG	NEG
		Scalai	visuai	>0.2		NLG	NLQ
FLUID CONDITION	Sodium	ppm	ASTM D5185m	>158	<1	<1	1
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	250	2	3	4
	Barium	ppm	ASTM D5185m	10	0	0	0
	Molybdenum	ppm	ASTM D5185m	100	2	3	7
	Manganese	ppm	ASTM D5185m		0	<1	<1
	Magnesium	ppm	ASTM D5185m		49	56	88
	Calcium	ppm	ASTM D5185m		2207	2250	2249
	Phosphorus	ppm	ASTM D5185m		942	930	887
	Zinc	ppm	ASTM D5185m		1100	1116	1071
	Sulfur	ppm	ASTM D5185m		3792	3812	4253
	Oxidation	Abs/.1mm	*ASTM D7414	>25	9.5	9.9	10.8

7.2

13.7

7.2

13.5

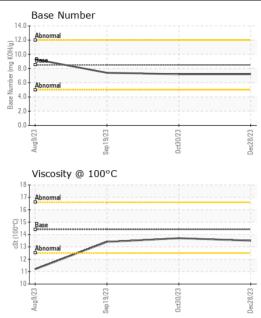
Base Number (BN) mg KOH/g ASTM D2896 8.5

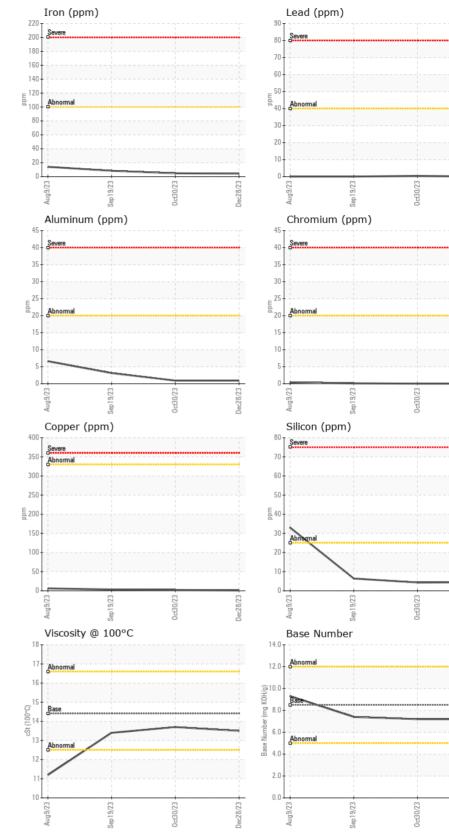
ASTM D445 14.4

Visc @ 100°C cSt

7.4

13.4





FRANCIS O DAY Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513 Sample No. : DC0032794 Recieved : 10 Jan 2024 14900 SOUTHLAWN LN Lab Number : 06056498 ROCKVILLE, MD Diagnosed : 11 Jan 2024 : 10822447 Diagnostician : Wes Davis US 20850 Unique Number Test Package : MOB 1 (Additional Tests: TBN) Contact: JAMIE FORESTER Certificate L2367 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. T: F: Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012)

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Contact/Location: JAMIE FORESTER - FRAROCDC

Dec28/23

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