

WEAR	
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Machine Id **56919** Component **Diesel Engine** Fluid **DIESEL ENGINE OIL SAE 15W40 (--- GAL)**

RECOMMENDATION	Test	UOM	Method	Limit/Abn	Current	History1	History2
Descende static matter interval to marking Discourse if the	Sample Number		Client Info		DC0036030	DC0034864	DC0032679
Resample at the next service interval to monitor. Please specify the	Sample Date		Client Info		10 Apr 2024	30 Jan 2024	01 Nov 2023
component make and model with your next sample.	Machine Age	hrs	Client Info		3109	2865	2410
	Oil Age	hrs	Client Info		150	400	300
	Filter Age	hrs	Client Info		150	400	300
	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	3	4	2
All component wear rates are normal.	Chromium	ppm	ASTM D5185m		<1	<1	<1
	Nickel	ppm	ASTM D5185m		0	<1	0
	Titanium	ppm	ASTM D5185m	- 1	0	<1	0
	Silver	ppm	ASTM D5185m	>3	0	<1	0
	Aluminum	ppm	ASTM D5185m		<1	1	1
	Lead	ppm	ASTM D5185m		0	<1	0
	Copper	ppm	ASTM D5185m		<1	<1	<1
	Tin	ppm	ASTM D5185m		0	<1	<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		5	4	4
There is no indication of any contamination in the oil.	Potassium	ppm	ASTM D5185m		0	2	<1
	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		0.1	0.1	0.1
	Nitration	Abs/cm	*ASTM D7624	>20	5.7	6.4	5.8
	Sulfation	Abs/.1mm	*ASTM D7415		15.5	15.9	15.5
	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	*Visual *Visual	NORML	NORML NORML	NORML	NORML
		scalar		NORML	-	NORML	
	Emulsified Water	scalar	*Visual	>0.2	NEG	NEG	NEG
FLUID CONDITION	Sodium	ppm	ASTM D5185m	>158	0	0	<1
	Boron	ppm	ASTM D5185m	250	4	4	2
The BN result indicates that there is suitable alkalinity remaining in the	Barium	ppm	ASTM D5185m		0	0	0
oil. The condition of the oil is suitable for further service.	Molybdenum	ppm	ASTM D5185m		2	3	1
	Manganese	ppm	ASTM D5185m		<1	<1	<1
	Magnesium	ppm	ASTM D5185m	450	61	45	47
	Calcium	ppm	ASTM D5185m		2318	2197	2292
	Phosphorus	ppm	ASTM D5185m	1150	897	907	918
	Zinc	ppm	ASTM D5185m	1350	1048	1037	1079
	Sulfur	ppm	ASTM D5185m	4250	4115	4099	3738
	Oxidation	Abs/.1mm	*ASTM D7414		9.6	9.8	9.4
	Deep North and (DNI)			0.5	7.0	74	7.0

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

ASTM D445 14.4

Visc @ 100°C cSt

7.1

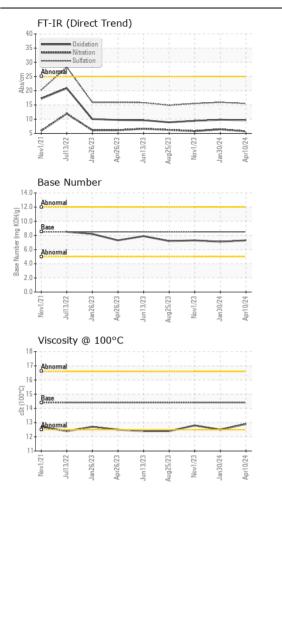
12.5

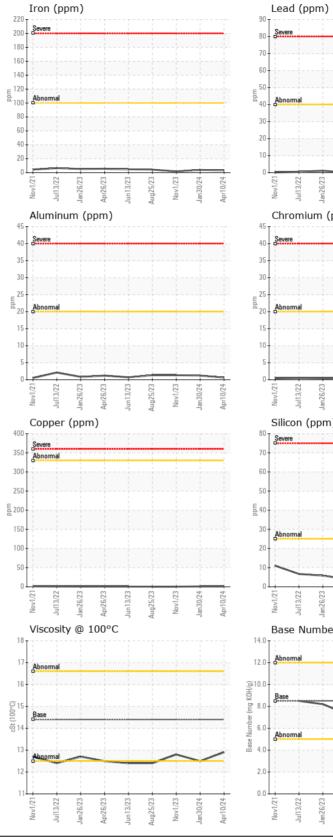
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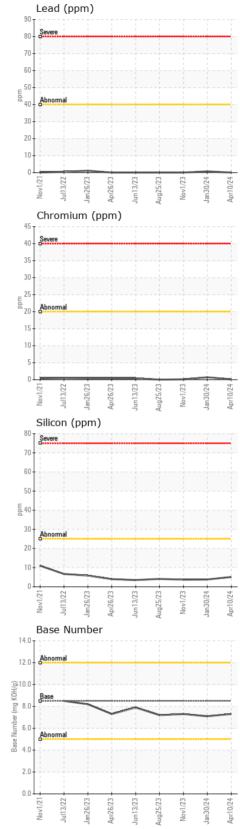
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12.9







FRANCIS O DAY Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513 Sample No. : DC0036030 Received 14900 SOUTHLAWN LN : 23 Apr 2024 ROCKVILLE, MD Lab Number : 06158317 Tested : 24 Apr 2024 Unique Number : 10993740 Diagnosed : 24 Apr 2024 - Wes Davis US 20850 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)

Contact/Location: JAMIE FORESTER - FRAROCDC Page 2 of 2