

RECOMMENDATION	
DIESEL ENGINE OIL S	AE 10W30 (GAL)
Component Diesel Engine Fluid	
548	
Machine Id	

We advise that you check for the source of the coolant leak. Check for low coolant level. Oil and filter change at the time of sampling has been noted. We recommend an early resample to monitor this condition.

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WEAR

Sodium and/or potassium levels are high.

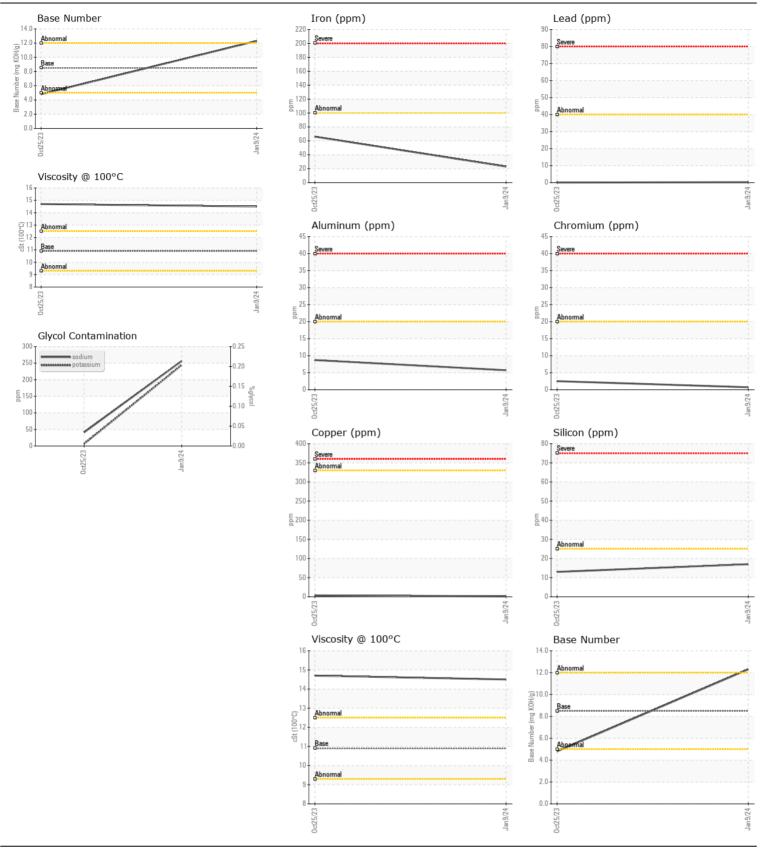
All component wear rates are normal.

FLUID CONDITION

The BN result indicates that there is suitable alkalinity remaining in the oil.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		DC0028106	DC0032633	
Sample Date		Client Info		09 Jan 2024	25 Oct 2023	
Machine Age	mls	Client Info		89918	87968	
Oil Age	mls	Client Info		0	0	
Filter Age	mls	Client Info		0	0	
Oil Changed		Client Info		Changed	N/A	
Filter Changed		Client Info		Changed	N/A	
Sample Status				ABNORMAL	NORMAL	
			400		~~~	
Iron	ppm	ASTM D5185m	>100	23	66	
Chromium	ppm	ASTM D5185m	>20	<1	2	
Nickel	ppm	ASTM D5185m	>4	1	<1	
Titanium	ppm	ASTM D5185m		<1	<1	
Silver	ppm	ASTM D5185m	>3	<1	<1	
Aluminum	ppm	ASTM D5185m	>20	6	9	
Lead	ppm	ASTM D5185m	>40	<1	0	
Copper	ppm	ASTM D5185m	>330	1	4	
Tin	ppm	ASTM D5185m	>15	<1	<1	
Vanadium	ppm	ASTM D5185m		<1	<1	
White Metal	scalar	*Visual	NONE	NONE	NONE	
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	
			~-			
Silicon	ppm	ASTM D5185m	>25	17	13	
Potassium	ppm	ASTM D5185m	>20	2 44	7	
Fuel		WC Method	>5	<1.0	<1.0	
Water			>0.2	NEG	NEG	
Glycol	%	*ASTM D2982		NEG	NEG	
Soot %	%	*ASTM D7844	>3	0.6	1.7	
Nitration	Abs/cm	*ASTM D7624	>20	14.2	17.7	
Sulfation	Abs/.1mm	*ASTM D7415	>30	19.4	33.3	
Silt	scalar	*Visual	NONE	NONE	NONE	
Debris	scalar	*Visual	NONE	NONE	NONE	
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	
Appearance	scalar	*Visual	NORML	NORML	NORML	
Odor	scalar	*Visual	NORML	NORML	NORML	
Emulsified Water	scalar	*Visual	>0.2	NEG	NEG	
Sodium	nnm	ASTM D5185m		2 56	41	
_	ppm	ASTM D5185m	250			
Boron Barium	ppm	ASTM D5185m	250	21 0	3	
	ppm	ASTM D5185m ASTM D5185m	10 100	50	0 11	
Molybdenum Manganese	ppm		100		<1	
Magnesium	ppm	ASTM D5185m ASTM D5185m	450	<1 72	142	
Calcium	ppm					
	ppm	ASTM D5185m	3000	2085	2173	
Phosphorus	ppm	ASTM D5185m	1150	879	893	
Zinc	ppm	ASTM D5185m	1350	1093	1096	
Sulfur	ppm	ASTM D5185m	4250	3674	3245	
Oxidation	Abs/.1mm	*ASTM D7414	>25	15.7	31.4	
Base Number (BN)	mg KOH/g	ASTM D2896	8.5	12.3	4.8	
Visc @ 100°C	cSt	ASTM D445	10.9	14.5	14.7	

NORMAL WEAR CONTAMINATION **ABNORMAL** FLUID CONDITION **ABNORMAL**



FRANCIS O DAY Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513 Sample No. : DC0028106 Recieved : 30 Jan 2024 14900 SOUTHLAWN LN Lab Number : 06074430 ROCKVILLE, MD Diagnosed :01 Feb 2024 : 10856521 Unique Number Diagnostician : Jonathan Hester US 20850 Test Package : MOB 1 (Additional Tests: Glycol, 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)