

#### Machine Id **F90209** Component **Diesel Engine** Fluid **DIESEL ENGINE OIL SAE 15W40 (--- GAL)**

### RECOMMENDATION

We advise that you check for the source of the coolant leak. We recommend that you drain the oil from the component if this has not already been done. We advise that you flush the component thoroughly before re-filling with oil. We recommend an early resample to monitor this condition. Please specify the component make and model with your next sample.

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### **WEAR**

All component wear rates are normal.

### CONTAMINATION

Test for glycol is positive. There is a light concentration of glycol present in the oil. There is a moderate concentration of water present in the oil.

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Т	「est	UOM	Method	Limit/Abn	Current	History1	History2
S	Sample Number		Client Info		PC0064486	PC0053129	PC0037873
	Sample Date		Client Info		26 Feb 2024	09 Nov 2021	28 Jul 2021
	Machine Age	hrs	Client Info		1113	790	702
	Dil Age	hrs	Client Info		0	0	0
	Filter Age	hrs	Client Info		0	0	0
	Dil Changed		Client Info		N/A	N/A	N/A
	Filter Changed		Client Info		N/A	N/A	N/A
	Sample Status				ABNORMAL	NORMAL	NORMAL
h	ron	ppm	ASTM D5185(m)	>100	20	12	45
C	Chromium	ppm	ASTM D5185(m)	>20	<1	<1	<1
Ν	Nickel	ppm	ASTM D5185(m)	>4	<1	<1	<1
Т	Fitanium	ppm	ASTM D5185(m)		0	0	<1
S	Silver	ppm	ASTM D5185(m)	>3	0	<1	0
A	Aluminum	ppm	ASTM D5185(m)	>20	3	2	4
	_ead	ppm	ASTM D5185(m)	>40	<1	_ <1	2
	Copper	ppm	ASTM D5185(m)	>330	1	<1	2
	Fin	ppm	ASTM D5185(m)	>15	0	<1	<1
	/anadium	ppm	ASTM D5185(m)		0	0	0
	White Metal	scalar	Visual*	NONE	NONE		
	fellow Metal	scalar	Visual*	NONE	NONE		
		Jouran					
5	Silicon	ppm	ASTM D5185(m)	>25	3	3	3
F	Potassium	ppm	ASTM D5185(m)	>20	2	<1	1
F	uel		WC Method	>5	<1.0	<1.0	<1.0
۷	Vater	%	ASTM D6304*	>0.2	NEG	0.051	NEG
p	opm Water	ppm	ASTM D6304*	>2000		514.8	
Ċ	Glycol	%	ASTM D7922*		<b>A</b> 0.016	0.0	NEG
S	Soot %	%	ASTM D7844*	>3	0.4	0.2	0.6
Ν	Vitration	Abs/cm	ASTM D7624*	>20	5.4	5.3	6.4
S	Sulfation	Abs/.1mm	ASTM D7415*	>30	18.3	19.0	19.2
S	Silt	scalar	Visual*	NONE	NONE		
C	Debris	scalar	Visual*	NONE	NONE		
S	Sand/Dirt	scalar	Visual*	NONE	NONE		
A	Appearance	scalar	Visual*	NORML	NORML		
C	Ddor	scalar	Visual*	NORML	NORML	NORML	
E	Emulsified Water	scalar	Visual*	>0.2	<b>.</b> 2%	.1%	NEG
S	Sodium	ppm	ASTM D5185(m)	>158	5	2	4
	Boron	ppm	ASTM D5185(m)	250	3	2	5
	Barium	ppm	ASTM D5185(m)	10	0	0	0
	Molybdenum	ppm	ASTM D5185(m)	100	58	59	59
	Manganese	ppm	ASTM D5185(m)		0	<1	<1
Ν	Magnesium	ppm	ASTM D5185(m)	450	938	1017	980
C	Calcium	ppm	ASTM D5185(m)	3000	1106	1053	1137
F	Phosphorus	ppm	ASTM D5185(m)	1150	995	1072	1085
Z	Zinc	ppm	ASTM D5185(m)	1350	1151	1222	1229
S	Sulfur	ppm	ASTM D5185(m)	4250	2729	2695	2689
C	Dxidation	Abs/.1mm	ASTM D7414*	>25	13.2	13.2	13.8
1	/isc @ 40°C	cSt	ASTM D7279(m)	115	99.3	103	103
١	/isc @ 100°C	cSt	ASTM D7279(m)	14.4	14.4	14.8	14.9
۷	iscosity Index (VI)	Scale	ASTM D2270*	126	149	149	150
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# FLUID CONDITION

The oil is no longer serviceable due to the presence of contaminants.

# WEAR NORMAL CONTAMINATION ABNORMAL FLUID CONDITION NORMAL



