

WEAR NORMAL CONTAMINATION ABNORMAL FLUID CONDITION ABNORMAL

Machine Id **142128** Component **Diesel Engine** Fluid **{not provided} (---- QTS)**

RECOMMENDATION	Test	UOM	Method	Limit/Abn	Current	History1	History2
We advise that you check the fuel injection system. Resample at the next service interval to monitor.	Sample Number		Client Info		IL06217718	IL06101389	IL06035577
	Sample Date		Client Info		01 May 2024	12 Feb 2024	20 Nov 2023
	Machine Age	hrs	Client Info		5672	5365	5045
	Oil Age	hrs	Client Info		0	0	0
	Filter Age	hrs	Client Info		0	0	0
	Oil Changed		Client Info		N/A	N/A	N/A
	Filter Changed		Client Info		N/A	N/A	N/A
	Sample Status				ABNORMAL	ABNORMAL	NORMAL
WEAR All component wear rates are normal.	Iron	ppm	ASTM D5185m	>100	11	34	39
	Chromium	ppm	ASTM D5185m	>20	<1	2	1
	Nickel	ppm	ASTM D5185m		0	<1	<1
	Titanium	ppm	ASTM D5185m		0	<1	<1
	Silver	ppm	ASTM D5185m	>3	0	0	0
	Aluminum	ppm	ASTM D5185m		7	13	8
	Lead	ppm	ASTM D5185m		0	<1	0
	Copper	ppm	ASTM D5185m		2	2	2
	Tin	ppm	ASTM D5185m		0	<1	<1
	Vanadium	ppm	ASTM D5185m		<1	<1	0
	White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
	Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
CONTAMINATION	Silicon	ppm	ASTM D5185m	>25	3	7	5
There is a moderate amount of fuel present in the oil.	Potassium	ppm	ASTM D5185m	>20	13	17	13
	Fuel	%	ASTM D3524	>5	6 .0	6 .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	0.5
	Nitration	Abs/cm	*ASTM D7624	>20	11.5	12.0	14.4
	Sulfation	Abs/.1mm	*ASTM D7415	>30	23.3	23.5	30.9
	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		<1	3	0
Fuel is present in the oil and is lowering the viscosity. The BN result indicates that there is suitable alkalinity remaining in the oil.	Boron	ppm	ASTM D5185m		8	6	<1
	Barium	ppm	ASTM D5185m		0	2	12
	Molybdenum	ppm	ASTM D5185m		65	91	65
	Manganese	ppm	ASTM D5185m		<1	1	<1
	Magnesium	ppm	ASTM D5185m		983	1306	996
	Calcium	ppm	ASTM D5185m		1233	1467	1201
	Phosphorus	ppm	ASTM D5185m		1050	1436	980
	Zinc	ppm	ASTM D5185m		1336	1804	1299
	Sulfur	ppm	ASTM D5185m		3730	4985	3467
	Oxidation	Abs/.1mm	*ASTM D7414	>25	25.2	25.4	35.2
		1/011/				0.0	0.0

Base Number (BN) mg KOH/g ASTM D2896

ASTM D445

Visc @ 100°C cSt

6.6

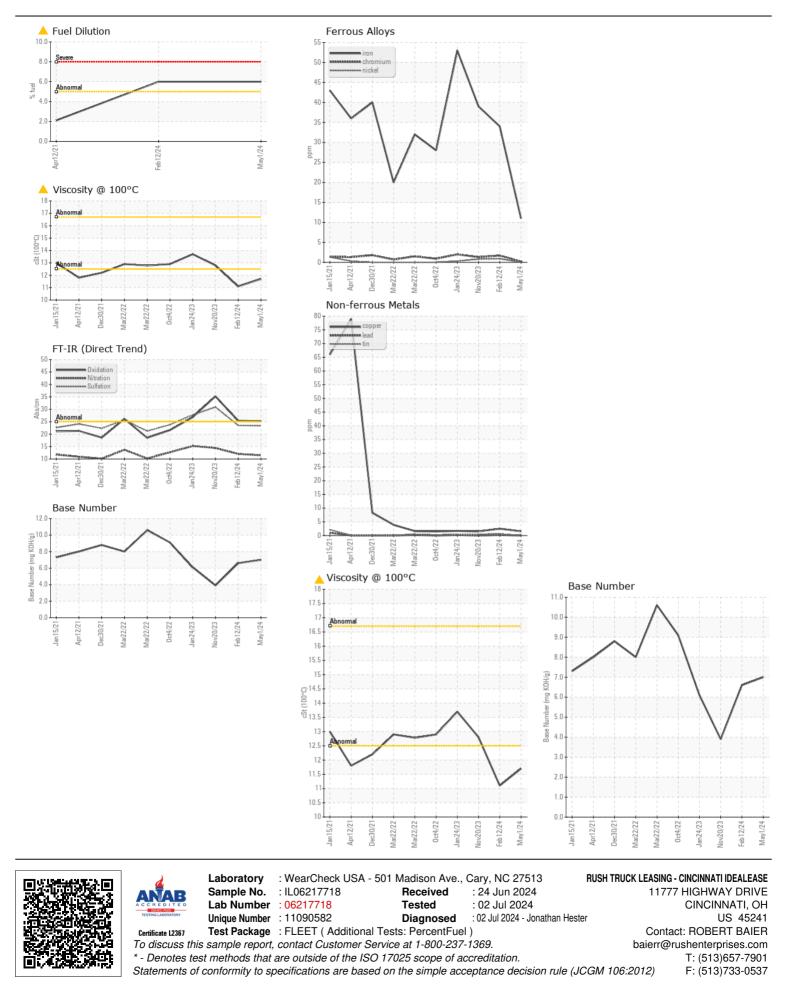
11.1

3.9

12.8

7.0

11.7



Contact/Location: ROBERT BAIER - IDECIN Page 2 of 2