

WEAR NORMAL CONTAMINATION NORMAL FLUID CONDITION NORMAL

Machine Id MCI 2402 Component Diesel Engine Fluid UNITED OIL DURALENE (--- QTS)

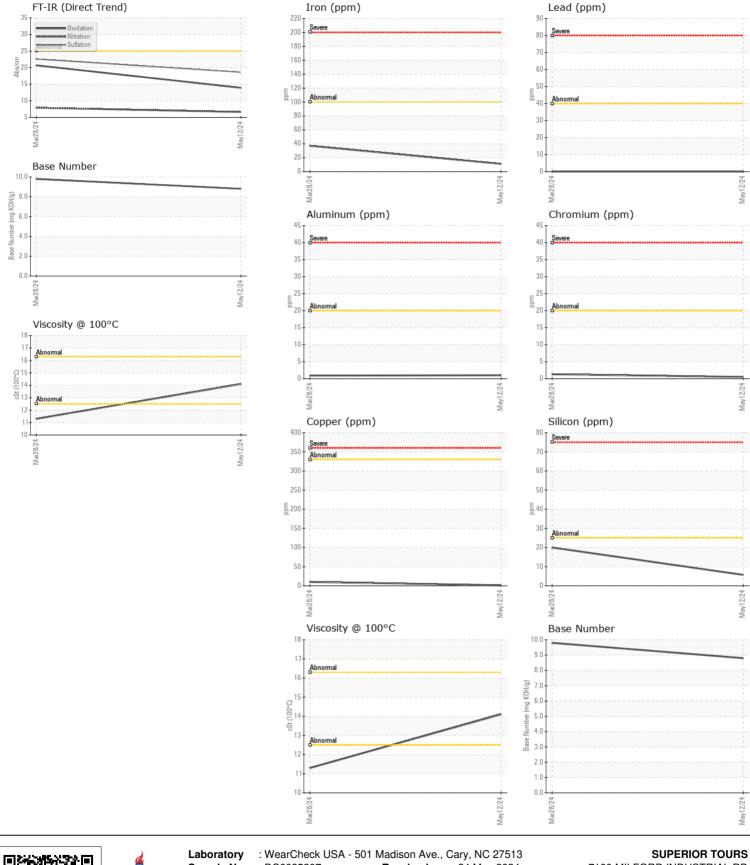
RECOMMENDATION	Test	UOM	Method	Limit/Abn	Current	History1	History2
Resample at the next service interval to monitor.	Sample Number		Client Info		DC0035307	DC0030741	
	Sample Date		Client Info		12 May 2024	28 Mar 2024	
	Machine Age	mls	Client Info		1974	10610	
	Oil Age	mls	Client Info		0	0	
	Filter Age	mls	Client Info		0	0	
	Oil Changed		Client Info		Changed	Changed	
	Filter Changed		Client Info		Changed	Changed	
	Sample Status				NORMAL	ATTENTION	
WEAR Metal levels are typical for a new component breaking in.	Iron	ppm	ASTM D5185m	>100	11	37	
	Chromium	ppm	ASTM D5185m		<1	1	
	Nickel	ppm	ASTM D5185m		0	0	
	Titanium	ppm	ASTM D5185m	21	<1	0	
	Silver	ppm	ASTM D5185m	>3	<1	0	
	Aluminum	ppm	ASTM D5185m		1	<1	
	Lead	ppm	ASTM D5185m		0	0	
	Copper	ppm	ASTM D5185m		1	10	
	Tin	ppm	ASTM D5185m		0	<1	
	Vanadium	ppm	ASTM D5185m	210	<1	0	
	White Metal	scalar	*Visual	NONE	NONE	NONE	
	Yellow Metal	scalar	*Visual	NONE	NONE	NONE	
		304141	Visual	NONE		NONE	
CONTAMINATION	Silicon	ppm	ASTM D5185m	>25	6	20	
There is no indication of any contamination in the oil.	Potassium	ppm	ASTM D5185m	>20	2	2	
	Fuel		WC Method	>5	<1.0	0.3	
	Water		WC Method	>0.2	NEG	NEG	
	Glycol		WC Method		NEG	NEG	
	Soot %	%	*ASTM D7844	>3	0.3	0.4	
	Nitration	Abs/cm	*ASTM D7624	>20	6.6	7.9	
	Sulfation	Abs/.1mm	*ASTM D7415	>30	18.6	22.6	
	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	
FLUID CONDITION	Sodium	ppm	ASTM D5185m		1	5	
	Boron	ppm	ASTM D5185m		6	53	
The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.	Barium	ppm	ASTM D5185m		0	7	
	Molybdenum	ppm	ASTM D5185m		54	41	
	Manganese	ppm	ASTM D5185m		<1	3	
	Magnesium	ppm	ASTM D5185m		888	549	
	Calcium	ppm	ASTM D5185m		1270	1646	
	Phosphorus	ppm	ASTM D5185m		1052	764	
	Zinc	ppm	ASTM D5185m		1228	898	
	Sulfur	ppm	ASTM D5185m		3762	2735	
	Oxidation	Abs/.1mm	*ASTM D7414	>25	13.9	20.7	
	Base Number (BN)			-	8.8	9.8	
		0					

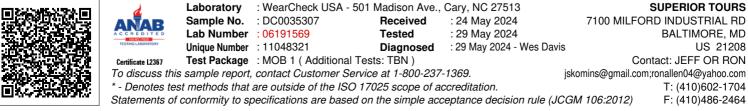
Visc @ 100°C cSt

ASTM D445

11.3

14.1





Contact/Location: JEFF OR RON ? - SUPBALMD Page 2 of 2