

Machine Id 6403 6403 Component Diesel Engine

MOBIL DELVAC 1300 SUPER 10W30 (10 GAL)

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Oil and filter change at the time of sampling has been noted. Resample at the next service interval to monitor.

WEAR

All component wear rates are normal.

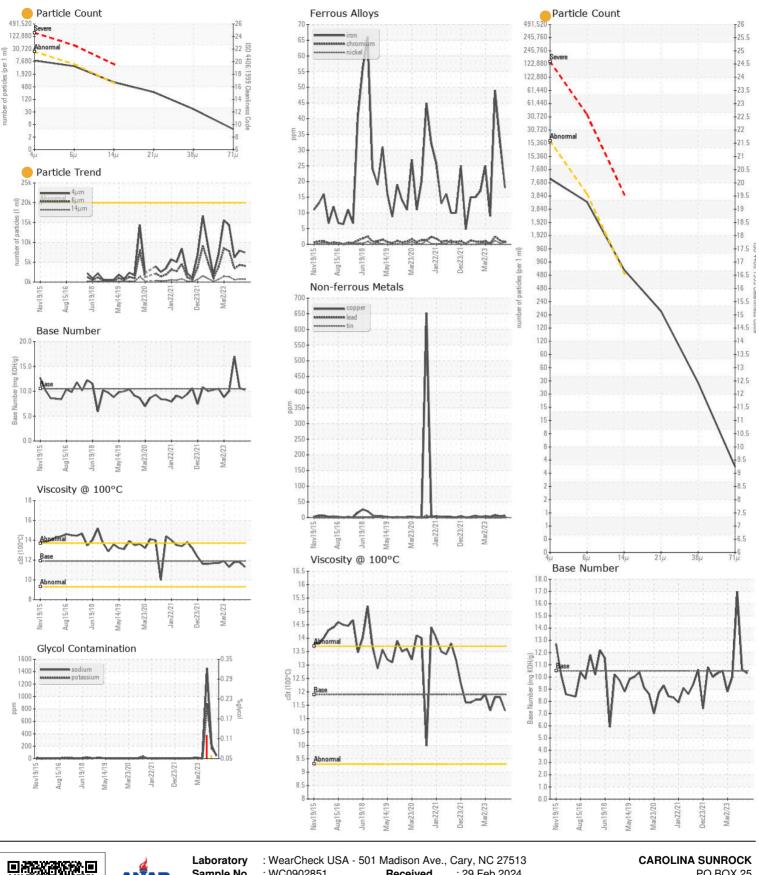
CONTAMINATION

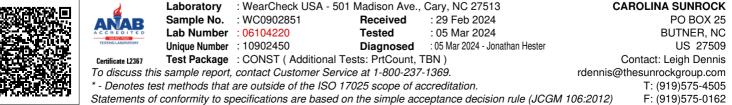
There is a moderate amount of particulates present in the oil. Sodium and/or potassium levels are high. Test for glycol is negative.

FLUID CONDITION

The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is acceptable for the time in service.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		WC0902851	WC0861742	WC0808818
Sample Date		Client Info		27 Feb 2024	20 Nov 2023	20 Jul 2023
Machine Age	hrs	Client Info		10476	10268	9631
Oil Age	hrs	Client Info		242	637	327
Filter Age	hrs	Client Info		242	637	327
Oil Changed	1110	Client Info		Changed	Changed	Changed
Filter Changed		Client Info		Changed	Changed	Changed
Sample Status		Ollent Into		ATTENTION	ABNORMAL	SEVERE
					ADNOTIMAL	SEVENE
Iron	ppm	ASTM D5185m	>100	18	33	49
Chromium	ppm	ASTM D5185m	>20	<1	1	2
Nickel	ppm	ASTM D5185m	>4	<1	<1	1
Titanium	ppm	ASTM D5185m	~7	0	0	0
Silver	ppm	ASTM D5185m	>3	0	0	0
Aluminum		ASTM D5185m	>20	7	9	14
	ppm		>20	-	0	0
Lead	ppm	ASTM D5185m	>40	<1 7	4	8
Copper	ppm	ASTM D5185m		-	-	
Tin	ppm	ASTM D5185m	>15	<1	<1	<1
Vanadium	ppm	ASTM D5185m	NONE	<1 NONE		
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Silicon	ppm	ASTM D5185m	>25	9	9	2
Potassium		ASTM D5185m	>20	6 2	▲ 161	<u> </u>
Fuel	ppm		>20	<1.0	<1.0	
		WC Method			<1.0 NEG	<1.0 NEG
Water	0/		>0.2	NEG		
Glycol	%	*ASTM D2982	0	NEG	▲ 0.06	▲ 0.12
Soot %	%	*ASTM D7844		0.1	1.1	0.5
Nitration	Abs/cm	*ASTM D7624	>20	5.5	9.9	12.5
Sulfation	Abs/.1mm	*ASTM D7415	>30	21.4	23.6	22.8
Particles >4µm		ASTM D7647	>20000	7447	7934	6177
Particles >6µm		ASTM D7647	>5000	4057	4322	3365
Particles >14µm		ASTM D7647	>640	690	736	573
Particles >21µm		ASTM D7647	>160	<u> </u>	248	193
Particles >38µm		ASTM D7647	>40	36	38	30
Particles >71µm		ASTM D7647	>10	4	4	3
Oil Cleanliness		ISO 4406 (c)	>21/19/16	0/19/17	20/19/17	20/19/16
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
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Sodium	ppm	ASTM D5185m		45	A 214	<u> </u>
Boron	ppm	ASTM D5185m		38	23	7
Barium	ppm	ASTM D5185m		0	0	3
Molybdenum	ppm	ASTM D5185m		55	77	239
Manganese	ppm	ASTM D5185m		<1	1	1
Magnesium	ppm	ASTM D5185m		590	520	462
Calcium	ppm	ASTM D5185m		1937	1642	1588
Phosphorus	ppm	ASTM D5185m		773	762	723
Zinc	ppm	ASTM D5185m		1122	939	888
Sulfur	ppm	ASTM D5185m		2893	2390	2615
Oxidation	Abs/.1mm	*ASTM D7414	>25	18.9	21.6	20.7
Base Number (BN)	mg KOH/g	ASTM D2896	10.5	10.3	10.6	17.0
Visc @ 100°C	cSt	ASTM D445	11.9	11.3	11.8	11.8
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