

## Machine Id INTERNATIONAL 7600 A-371 Component Diesel Engine

## DURAMAX 15W40 (40 QTS)

RECOMMENDATION	Test	UOM	Method	Limit/Abn	Current	History1	History2
RECOMMENDATION		UOIVI	Client Info	LIMI/ADD	DC0020732	,	,
Resample at the next service interval to monitor.	Sample Number Sample Date		Client Info		16 Jan 2024	DC0029733	DC0021272
	Machine Age	hrs	Client Info		18864	15 Aug 2023 17835	30 Sep 2022 16346
	Oil Age		Client Info		1029	671	1247
	Filter Age	hrs hrs	Client Info		1029	671	1247
	Oil Changed	1115	Client Info				
	-				Changed	Changed	Changed
	Filter Changed Sample Status		Client Info		Changed NORMAL	Changed NORMAL	Changed NORMAL
WEAR	Iron	ppm	ASTM D5185m	>127	40	61	19
	Chromium	ppm	ASTM D5185m	>3	2	5	<1
All component wear rates are normal.	Nickel	ppm	ASTM D5185m	>30	2	13	0
	Titanium	ppm	ASTM D5185m	>2	0	<1	0
	Silver	ppm	ASTM D5185m	>2	0	0	0
	Aluminum	ppm	ASTM D5185m	>59	7	17	11
	Lead	ppm	ASTM D5185m	>29	5	7	<1
	Copper	ppm	ASTM D5185m	>135	5	5	2
	Tin	ppm	ASTM D5185m	>2	1	2	<1
	Vanadium	ppm	ASTM D5185m		0	<1	0
	White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
	Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
CONTAMINATION There is no indication of any contamination in the oil.	Silicon		ASTM D5185m	< 1Q	13	19	10
	Potassium	ppm ppm	ASTM D5185m		15	38	26
	Fuel	ррш	WC Method		<1.0	<1.0	<1.0
	Water		WC Method		NEG	NEG	NEG
	Glycol		WC Method	20.2	NEG	NEG	NEG
	Soot %	%	*ASTM D7844	<u>`3</u>	1.5	1.8	0.8
	Nitration	Abs/cm	*ASTM D7624		12.5	14.8	11.2
	Sulfation	Abs/.1mm	*ASTM D7415		25.8	29.6	23.7
	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		*Visual	>0.2	NEG	NEG	NEG
FLUID CONDITION	Sodium	ppm	ASTM D5185m		21	15	2
The BN result indicates that there is suitable alkalinity remaining in the	Boron	ppm	ASTM D5185m		6	52	2
oil. The condition of the oil is suitable for further service.	Barium	ppm	ASTM D5185m		0	12	0
	Molybdenum	ppm	ASTM D5185m		14	113	4
	Manganese	ppm	ASTM D5185m		1	1	<1
	Magnesium	ppm	ASTM D5185m		100	590	54
	Calcium	ppm	ASTM D5185m		2669	1829	2610
	Phosphorus	ppm	ASTM D5185m		1077	739	974
	Zinc	ppm	ASTM D5185m		1238	931	1160
	Sulfur	ppm	ASTM D5185m		4591	2826	4614
	Oxidation	Abs/.1mm	*ASTM D7414	>25	18.3	25.9	15.7
	Base Number (BN)	mg KOH/g	ASTM D2896		8.3	7.7	8.1
	Vian @ 10000	- 0+			440	110	107

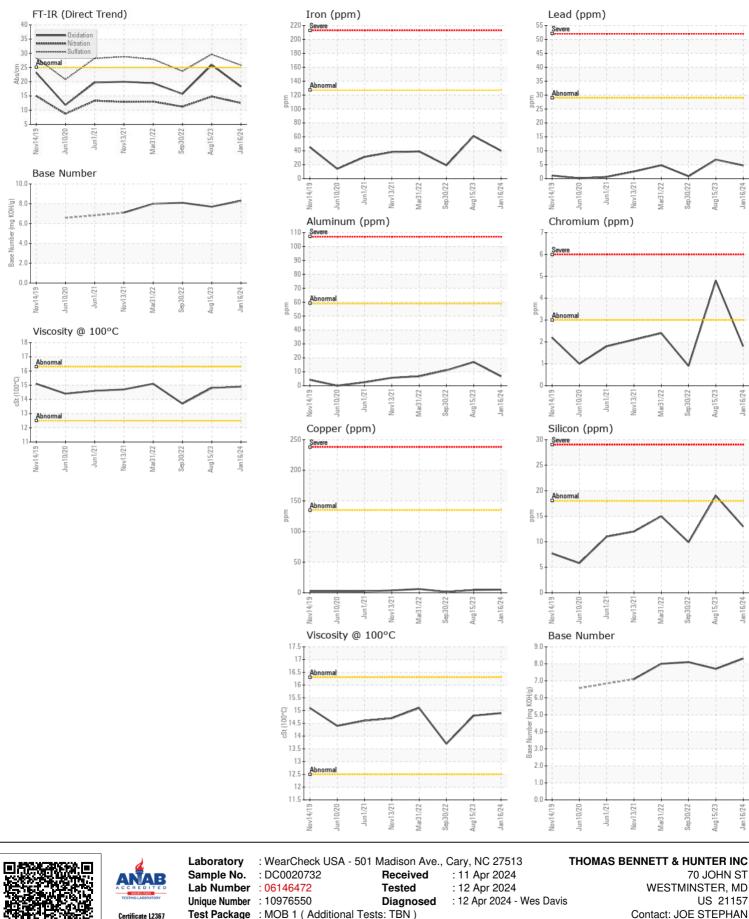
Visc @ 100°C cSt

ASTM D445

14.8

13.7

14.9



Certificate 12367 Test Package : MOB 1 (Additional Tests: TBN) 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.

Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012)

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