

Machine Id **A-387** Component **Diesel Engine** Fluid **DURAMAX 15W40 (--- QTS)**

RECOMMENDATION	Test	UOM	Method	Limit/Abn	Current	History1	History2
	Sample Number		Client Info		DC0035301	DC0029728	DC0022365
Resample at the next service interval to monitor. Please specify the	Sample Date		Client Info		30 May 2024	12 Aug 2023	10 Apr 2023
component make and model with your next sample.	Machine Age	hrs	Client Info		14380	13513	12777
	Oil Age	hrs	Client Info		867	736	823
	Filter Age	hrs	Client Info		867	736	823
	Oil Changed		Client Info		Changed	Changed	Changed
	Filter Changed		Client Info		Changed	Changed	Changed
	Sample Status				NORMAL	NORMAL	NORMAL
WEAR	Iron	ppm	ASTM D5185m		15	19	21
All component wear rates are normal.	Chromium	ppm	ASTM D5185m		<1	1	1
	Nickel	ppm	ASTM D5185m	>4	0	<1	0
	Titanium	ppm	ASTM D5185m		0	<1	0
	Silver	ppm	ASTM D5185m		0	0	0
	Aluminum	ppm	ASTM D5185m		2	3	<1
	Lead	ppm	ASTM D5185m		<1	<1	0
	Copper	ppm	ASTM D5185m		1	2	2
	Tin	ppm		>15	0	<1	0
	Vanadium	ppm	ASTM D5185m	NONE	0	<1	0
	White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
	Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE
CONTAMINATION	Silicon	ppm	ASTM D5185m	>25	6	7	9
	Potassium	ppm	ASTM D5185m	>20	4	6	2
There is no indication of any contamination in the oil.	Fuel		WC Method	>5	<1.0	<1.0	<1.0
	Water		WC Method	>0.2	NEG	NEG	NEG
	Glycol		WC Method		NEG	NEG	NEG
	Soot %	%	*ASTM D7844	>3	0.6	0.6	0.9
	Nitration	Abs/cm	*ASTM D7624	>20	9.6	9.9	11.0
	Sulfation	Abs/.1mm	*ASTM D7415	>30	22.9	22.7	25.7
	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	scalar	*Visual	>0.2	NEG	NEG	NEG
	Cadium				04	40	~
FLUID CONDITION	Sodium	ppm	ASTM D5185m		21	40	7
The BN result indicates that there is suitable alkalinity remaining in the	Boron	ppm	ASTM D5185m		1	<1	0
oil. The condition of the oil is suitable for further service.	Barium	ppm	ASTM D5185m		0	11	0
	Molybdenum	ppm	ASTM D5185m		5	8	4
	Manganese	ppm	ASTM D5185m		0	<1	<1
	Magnesium	ppm	ASTM D5185m		51	62	57
	Calcium	ppm	ASTM D5185m		2451	2318	2445
	Phosphorus	ppm	ASTM D5185m		842	927	950
	Zinc Sulfur	ppm	ASTM D5185m ASTM D5185m		1172	1129 3705	1139 4465
	Oxidation	ppm Abs/.1mm	*ASTM D5165/11	> 25	3613 14.4	13.9	16.3
	Data Number (DN)		ASTM D7414	>20	14.4	13.9	16.3

Base Number (BN) mg KOH/g ASTM D2896

ASTM D445

Visc @ 100°C cSt

5.7

13.9

5.9

13.7

3.5

13.9

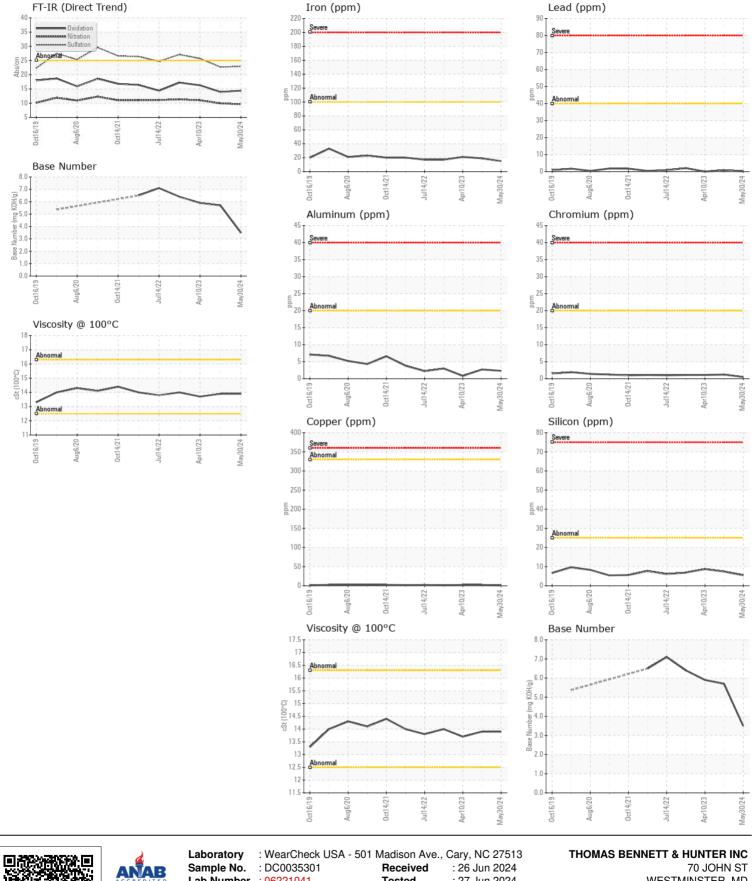
NORMAL

NORMAL

NORMAL

WEAR

CONTAMINATION FLUID CONDITION



Lab Number : 06221041 Tested WESTMINSTER, MD : 27 Jun 2024 : 27 Jun 2024 - Wes Davis US 21157 Unique Number : 11099238 Diagnosed Test Package : MOB 1 (Additional Tests: TBN) Contact: JOE STEPHAN Certificate L2367 To discuss this sample report, contact Customer Service at 1-800-237-1369. jstephan@tbhconcrete.com * - Denotes test methods that are outside of the ISO 17025 scope of accreditation. T: (410)848-9030 Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012) F: (410)848-9032

Contact/Location: JOE STEPHAN - THOWESMD Page 2 of 2